# Zetica UXB Risk Maps

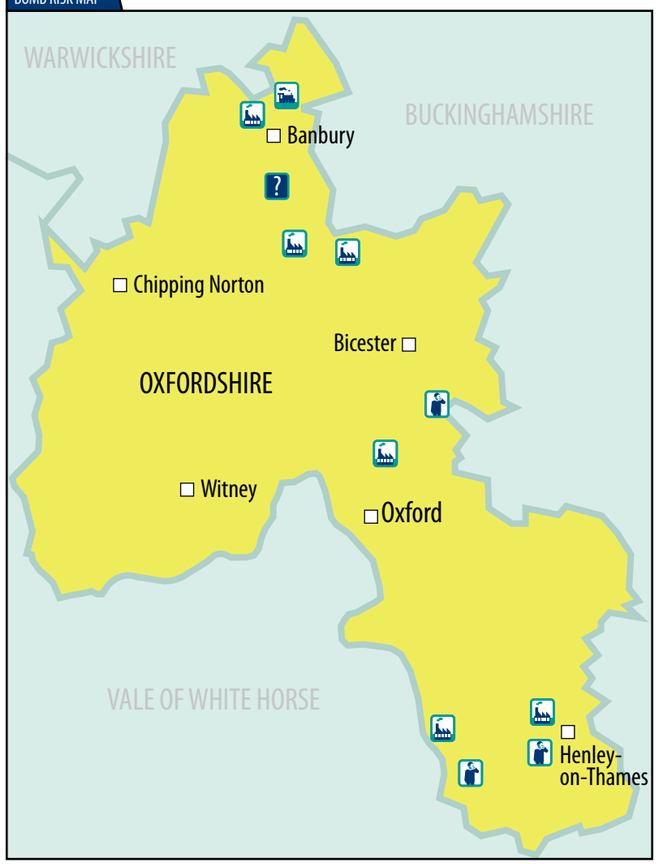
# REGIONAL UNEXPLODED BOMB RISK

## OXFORDSHIRE

DENSITY OF BOMBS PER BOROUGH

| Borough | High explosive | Anti-personnel | Incendiary |
|---|---|---|---|
| Oxford | 1 | 0 | 1 |
| Banbury | 105 | 0 | 4 |
| Witney | 124 | 0 | 4 |
| Bicester | 0 | 0 | 4 |
| Chipping Norton | 187 | 0 | 4 |
| Henley on Thames | 162 | 0 | 4 |

BOMB RISK MAP




OTHER WWII TARGETS
- military
- transport
- utilities
- industry
- docks
- other

BOMB TONNAGE
- >1000
- >500
- >100
- > 0
- unverified

BOMB RISK
- high
- moderate
- low

The information in this regional UXB risk map is derived from a number of sources and should be read in conjunction with the "Users' Guide" (printed overleaf). Zetica cannot guarantee the accuracy or completeness of the information or data.

This map covers regions of coast with beaches, estuaries and alike. Further consideration of the bomb risk is required in these areas. The often inaccessible nature and changing ground conditions (e.g. movement of silt that may contain ordnance) means that historical bombing records for these areas are often poor or inaccurate and further assessment of the bomb risk may be required as part of a site specific study.

### A FOUR-STEP PROCESS

Risk assessment and method statement from a qualified explosive ordnance clearance (EOC) operative.

Surface geophysical survey to allow shallow groundwork.

MAGCONE detects UXBs and obstructions on piling layout to the no-risk depth.

Detected UXBs can be dealt with by our EOC engineers and a Clearance Certificate issued for the site.

# BOMB MAP USERS' GUIDE

## Sources of information and explanation of bomb risk

### Why?

Unexploded bombs (UXB) still present a risk to construction projects long after the end of the Second World War (WWII). UXBs often entered the ground unnoticed at high velocity and penetrated to a depth of several metres. Here they remain – vulnerable to disturbances from construction work. Beyond the depth of shallow excavation work, the greatest risk is to piling, drilling and probing crews. A piling rig could repeatedly hit a UXBs with considerable force before the crew realises an obstruction has been impacted. It could then be up to 72 hours before the detonator activates.

### Who?

The responsibility for avoiding UXB risk usually lies with construction companies or house builders particularly those who are redeveloping urban sites. In addition, project engineering or environmental consultants are expected to advise their clients of a site's history. Other interested parties include those organisations whose employees are physically at most risk from intrusive works, normally piling companies, drillers or probing operators.

### How?

UXB risk should be assessed for every site, but especially those in known heavily bombed areas or those situated near war-time strategic installations that were priority targets for enemy aircraft, for example, airfields. Zetica's regional bomb risk map is therefore a first point of reference from which the relative, potential abundance of UXBs can be judged. Consultants then advise their clients that an ordnance-risk desk study is required, which they may obtain from external sources. Construction companies or house builders who assess their own risk could choose to come direct to Zetica.

### When?

Do not wait for the piling or drilling company to be on site before thinking about UXB risk – it will inevitably cause delays and higher costs. Request the regional bomb risk map from Zetica as soon as a site is being considered, and then use it to help you or your clients to decide if an ordnance-risk desk study is required.

### Where?

Maps can be obtained for any county in England, Scotland, Wales or Northern Ireland – or for any London borough. They can help determine the areas that were most heavily bombed – but no part of the country should be considered 100% safe from UXB risk. Even remote rural areas can have a high risk if, for example, they were locations for decoy airfields or beacons that were lit to fool enemy pilots into thinking they had located a burning city that had been successfully hit by others in the raid.

### How to use this regional map

This map is designed to give you an indication of the potential risk from UXBs in your area. If you are conducting work that involves excavation, piling or other disturbance of the ground, then you should use the map to identify the category of risk for your site.

The risk boundaries are a guide, compiled from data based on the political areas for which records are held; being just outside a high-risk area does not mean there is no UXB risk. You should use the map to assist in your decision of whether to investigate the UXB risk further.

### Information on the regional risk remaining from UXBs in the UK

Zetica has built the largest UXB database of its kind in the UK. It includes a unique digital library of bomb census data, and maps showing key strategic points and bombing densities from the First and Second World Wars. The main sources of information include records from central government (Public Records Office), the Ministry of Defence, and the German Luftwaffe.

Using information from this database, Zetica has published maps of UXB risk on a regional, county and borough scale. The maps indicate relative degrees of UXB risk based on available records for bombing densities and known targeted areas for regions within the UK. The risk is broken down into individual boroughs, towns or cities. The data are based on the historical boroughs and are then overlaid onto the modern map. It is important to note that more-detailed research may be required for individual sites, particularly where proximity to a potential WWII target means the local risk may be higher.

### High risk

Areas designated as high risk are those that show a high density of bombing hits (50+ bombs per 1000 acres) and abundant potential WWII targets. In high-risk regions, further action to mitigate UXB risk is considered essential.

### Moderate risk

Moderate-risk regions are those that show a bomb density of between 11 and 50 bombs per 1000 acres and that may contain potential WWII targets. Action to mitigate the risk is considered essential, albeit more likely that a reduced scope of work is required compared with that needed for high-risk regions.

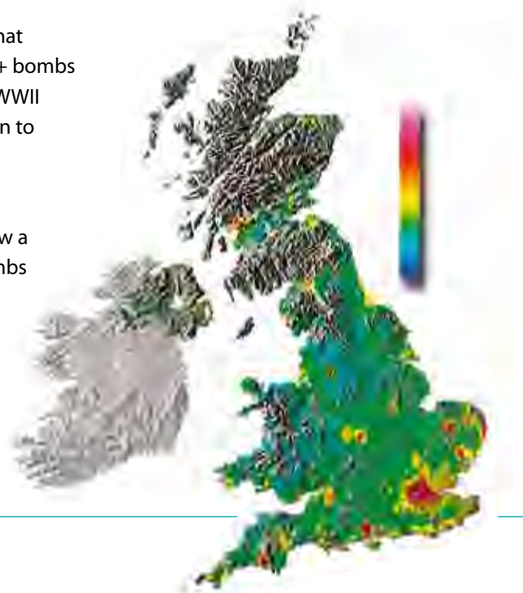
### Low risk

Low-risk regions are those with a bombing density of up to 10 bombs per 1000 acres. These areas are considered to have a significant but low UXB risk. In general, further action to mitigate the risk is considered prudent, although not essential. Care is required when assessing the risk for specific sites where the risk may be higher because of local wartime activity.

### Other WWII targets

Other regions with the risk of UXBs are key strategic points as defined by the government during WWII as representing potential enemy targets. Where these exist outside areas mapped as high, moderate or low risk, a site-specific assessment of the UXB risk may be required.

### Relative UXB risk across UK



### What to do if…

### …you have a site that has a potential UXB risk

In the absence of current legislation requiring you to address the risk from UXBs, your responsibilities under health and safety legislation and regulations such as construction design and management require that you address all identified risks. The first stage is to request further advice from a professional adviser such as Zetica, or to gain more site-specific information by commissioning an ordnance-risk desk study. Then a strategy to deal with the risk can be established that is tailored to your proposed work.

### …you find a suspect item or require advice

If during site works you find a suspect (ordnance-related) item, it is very important that you do not touch or move it (even if it has already been moved by an excavator). If it is clearly ordnance related, then dial 999 and ask for the police. Ensure that the area around the item is kept as clear as possible without placing yourself at risk. If you are unsure and do not wish to cause undue alarm, or you just require some advice, then you can call Zetica. We have experienced qualified UXB specialists on hand who can offer support and advice during any site works.

More-detailed procedures should be established in advance if you are in an area where the risk of finding a UXB is shown to be significant (moderate to high).

### Site-specific desktop studies

Zetica is able to provide high-quality, site-specific UXB risk information for any residential, industrial or commercial property in the UK. These desktop studies provide details of the bombing density within an area and for the site itself, in order to indicate the risks of UXBs still being present. A risk assessment is provided to facilitate informed decision making on whether any further risk mitigation measures are required.

# Reports prepared by others

P3Eco (Bicester) Ltd and A2Dominion Group

# NW Bicester Eco Development

## DESK STUDY - Masterplan Site

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# NW Bicester Eco Development

## DESK STUDY - Masterplan Site

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# EXECUTIVE SUMMARY

| | |
|---|---|
| **Site Location** | The town of Bicester lies approximately 24km to the north east of Oxford and 28km to the south east of Banbury. The M40 motorway lies 2km to the south west, with ready access to the town from Junction 9. The south-east of the proposed NW Bicester eco development Site terminates against the outer limits of Bicester at the A4095; while to the north-west and north-east lie the villages of Bucknell and Caversfield. |
| **Current Site Use** | The Site is predominantly used for agriculture, with the land having an agricultural land value Grade of 3 (good to moderate quality). The principal land uses on Site are for arable cropping and rotational grassland. On the eastern Site boundary, there is a small business park and a police transport base. |
| **Site and Surrounding Area History** | Since the earliest available historical map of 1881, the Site has been dominated by agriculture. The only major change from 1881 to the present day was the construction of the NW to SE trending Great Western Railway in 1910, through the centre of the Site. Since then, there has been no significant change in land use.<br>Meanwhile, the town of Bicester expanded outwards from a small centre 1.5km SE of the Site in 1881, to bordering the eastern Site boundary at the present day. The expansion has been overwhelmingly residential and there has been no industrial activity in proximity to the Site. |
| **Environmental Setting** | The landscape character of the Site is defined by its gently falling topography from the north-west to south-east. There are three streams on Site; two minor, unnamed streams (flowing in a NW to SE direction), which feed the N to S flowing River Bure in the north-eastern corner of the Site.<br>Geologically, the Site is underlain by a thin cover of superficial deposits, before the solid geology is encountered. At rock head, this is represented by the Cornbrash Formation, which primarily comprises bioclastic limestone. This is underlain by the Forest Marble Formation, which comprises grey calcareous mudstone with lenticular beds of bioclastic limestone. Deeper (older) geological units are not represented in outcrop on Site. |
| **Conceptual Site Model** | Possible contaminants relate to agricultural chemicals and fuels as well as rail-derived contaminants. A former small landfill has also been identified in the east of the Site at the location of the business park; however information available suggests this was filled with inert material. Likewise, small offsite quarries identified within the Envirocheck Report appear to have been infilled and now contain trees/other vegetation. |
| **Qualitative Risk Assessment** | If contamination is present on Site, it is not expected to be widespread or significant; therefore the qualitative risks to humans and groundwater are, at this stage, considered to be low. However, the risk to surface water due to agricultural chemical runoff (particularly nitrates) is considered to be moderate to high (as the Site is within a Nitrate Vulnerable Zone). Additionally, basic radon protection measures will be required for new dwellings and extensions. |
| **Geotechnical Considerations** | Bedrock is expected to be close to the surface, which should prove to be an adequate founding material. However, the limestone may be affected by dissolution features, although there is no evidence of this from the (limited) borehole logs obtained for the Site. |
| **Recommendations** | A targeted, intrusive ground investigation is recommended in order to confirm or refute the environmental and geotechnical conclusions presented in this report. This will increase confidence in our understanding of the nature of the Site and any possible constraints to the future development of the eco development. |

# 1 INTRODUCTION

## 1.1 Terms of Reference

Hyder Consulting (UK) Ltd. (Hyder) has been instructed by P3Eco Ltd. (P3Eco) and A2Dominion Group Ltd. (A2Dominion) to undertake a Desk Study for a proposed new eco development on the north-western periphery of the town of Bicester, Oxfordshire. The study has been undertaken to assess the potential Geo-Environmental and Geotechnical risks in relation to the proposed development of the Masterplan Site.

## 1.2 Scope of Works

The purpose of this report is to identify the environmental, geological, hydrogeological and hydrological conditions present at the Site, and together with knowledge of the historic land use, develop an understanding of any potential contamination risks that might arise from current or potential future use of the Site. This report also lists the potential Geotechnical constraints to the proposed development which warrant consideration.

## 1.3 Sources of Information

Public register information relating to the Site and the surrounding area has been obtained mainly from the Landmark Information Group Ltd. Envirocheck Report, a copy of which is included in Appendices A and B of this report. A drawing entitled “Envirocheck Information” is also included within Appendix A, which shows information relevant to the Site, in a concise manner. The references assigned to each symbol match those in the Envirocheck Datasheets.

Reference is also made where applicable to a draft concept study report produced by Halcrow in February 2009 (Ref. 1) and “a vision for the future of Bicester” report prepared by Farrels in June 2009 (Ref. 2).

## 1.4 Basis of Environmental Risk Assessment

This environmental assessment has been undertaken with due regard to Contaminated Land Guidance Documents issued by the Department of the Environment Food and Rural Affairs (DEFRA). The Guidance requires a risk-based approach, with the potential environmental risk assessed qualitatively; using the ‘source-pathway-target’ pollutant linkage concept contained in Part IIA of the Environment Protection Act (Ref. 3).

Specific comment is made regarding the Site’s status in the Contaminated Land Regime implemented on 1st April 2000 as Part IIA of the Environmental Protection Act 1990 (as amended), and the actual or potential designation of the Site as ‘Contaminated Land’ as defined in section 78A(2) of the Act. Unless specifically stated as relating to this definition, references to ‘contamination’ and ‘contaminants’ relate in general terms to the presence of potentially hazardous substances, in, on, or under the Site.

References to risk classifications are made according to the definitions negligible to very high, which are described in Appendix C.

## 1.5 Limitations and Expectations

This report has been compiled from a number of sources, including historical maps and records from regulatory and statutory bodies procured through the Landmark Information Group Ltd., Envirocheck Report, which Hyder believes to be trustworthy. However, Hyder is unable to guarantee the accuracy of information provided by others. The report is based on information available at the time, and as such, the potential exists for further information to become available, which may change this report's conclusion and for which Hyder cannot be responsible.

# 2 SITE SETTING

## 2.1 Location

The town of Bicester lies approximately 24km to the north east of Oxford and 28km to the south east of Banbury. The M40 motorway lies 2km to the south west, with ready access to the town from Junction 9.

The proposed eco development Site will comprise approximately 5,000 homes with supporting employment and education infrastructure, and will be situated on the north-western periphery of Bicester, beyond the A4095 (which forms part of the Bicester Ring Road), approximately 1.5km from the town centre. The Site covers an area of approximately 416ha and at present, comprises Grade 3 agricultural land with a number of farmhouses and other buildings, as well as a small commercial area on the western side of Howes Lane (A4095). Immediately beyond the Site to the north-west is the village of Bucknell, with Caversfield located on the north-eastern Site boundary, beyond the B4100 highway.

The location of the Site is presented in Figure 1. At the time of writing, a definitive Site layout plan is not available; therefore a drawing is not included.

## 2.2 Topography

The 1:25,000 scale Ordnance Survey map of the area shows that the topography of the Site falls gently by approximately 10m from the north-western boundary to the south-eastern boundary (from ~95m AOD to ~85m AOD). This topography is typical of the gently rolling nature of this part of Oxfordshire.

## 2.3 Site Description

A Site walkover survey was undertaken by two Hyder Geotechnical and Geo-Environmental Engineers between 30th June and 2nd July 2010. The aim of the survey was to attempt to identify and target potential Site constraints to the development that may not have been apparent from the desktop study review of available documents alone.

The agricultural land value is Grade 3 (good to moderate quality). As characterised by Grade 3 land, the principal land uses on Site are for arable cropping and rotational grassland, e.g. cereals or as grass leys for dairy cows, beef and sheep. Fields are bounded either by post and wire fences or by dense hedges with some large trees. Most fields were surrounded by drainage ditches approximately 0.5m to 0.75m deep, though all were dry at the time of the Site walkover.

Existing buildings within the Site boundary include those at Himley Farm, Aldershot Farm and Gowell Farm, located to the south of the railway line, and Hawkwell Farm, Lord's Farm and Home Farm located to the north. Home Farm and Himley Farm contain Grade II Listed Buildings.

The Site is dissected through its centre by the north-west to south-east trending Birmingham Snow Hill to London Marylebone railway, with the Bucknell/Bicester Road running roughly parallel to its east. In the north-west of the Site, the railway lies in a cutting, which rises to an embankment of around 5 metres height in the south-east.

The employment land on the western side of Howes Lane comprises a Thames Valley Police Traffic Base and the Avonbury Business Park, with a range of small business units.

A small number of photographs from the Site walkover survey are included in Appendix D for reference.

## 2.4 Surrounding Land Uses

For the purposes of this report, the Masterplan Site comprises the area contained within the pink line shown in Figure 1.

The surrounding land uses are predominantly residential to the south-east within Bicester town, while agricultural land dominates in all other directions.

The current surrounding land uses are summarised in Table 2.1 below.

**Table 2.1: Surrounding Land Uses**

| Direction | Location | Land Use | Comments |
|---|---|---|---|
| North, north-west and west | Adjacent | Agricultural land/some woodland and hedgerows | Land dominated by fields and associated farms |
| South | Adjacent and beyond | B4030 highway and Bignell Park (woodland and mainly open, undeveloped land) | Bignell Park is a privately-owned estate with hotel and grounds |
| East and south-east | Adjacent and beyond | A4095 ring road with the town of Bicester on its eastern side | Area dominated by the residential properties of north-west Bicester |
| North-west | Approximately 800m from Site boundary | Small village of Bicknell | None |
| North-east | Adjacent | Small village of Caversfield beyond B4100 highway | None |

## 2.5 Unexploded Ordnance

Information pertaining to the risk of unexploded ordnance for the Site has been obtained from Zetica. Their 'Regional Unexploded Bomb Risk Map' indicates that the Site is located within an area of 'low risk'. Low risk regions are those with a bombing density of up to 10 bombs per 1,000 acres (See datasheet in Appendix E). The "Density of Bombs per Borough" table records 0 for both high explosive and anti-personnel ordnance and 4 for incendiary devices.

# 3 ENVIRONMENTAL SETTING

## 3.1 Hydrology

There are three main watercourses on Site; two streams flow in a north-westerly to south-easterly direction through the centre and northern parts of the Site, with both discharging into a third stream (the River Bure) in the centre and north-east of the Site area. The River Bure flows off-Site in a roughly north-easterly to south-westerly direction.

The principal drainage direction on Site is likely to follow the topography and dip of the underlying geology, which very gently slopes to the south-east.

## 3.2 Geology

The following section contains extracts and information obtained from the 1:50,000 scale British Geological Survey (BGS) Map of Buckingham (Ref. 4), BGS borehole logs from holes drilled on and near to the Site (Appendix F) and from a BGS detailed Geological Assessment of the Site area (also contained within Appendix F). Refer to the drawing entitled “Envirocheck Information” in Appendix A for a location plan of the BGS boreholes and their corresponding reference numbers.

### 3.2.1 Superficial Deposits

Late Quaternary age superficial deposits of Alluvium flank the three streams in narrow tracts, typically some 20m wide (locally up to 80m wide) and some 1m to 3m in thickness. The Alluvium typically comprises sandy, calcareous clay overlying gravelly clay with limestone clasts and may locally include highly compressible, organic-rich (peaty) layers.

Head deposits may be present near the streams where the erosive action of the water has carved small valleys. These deposits are formed by soil creep or hill wash and their composition reflects that of the local materials from which they were derived, either the bedrock or other types of superficial deposits (or both). They are typically poorly stratified and poorly sorted and are not expected to be present in thicknesses much greater than 1m.

Beneath the topsoil, the remainder of the Site has only a thin cover (approximately 1m) of superficial deposits, mainly derived from the partial to complete weathering of the underlying solid geology.

### 3.2.2 Solid Geology

The landscape of the Site follows the underlying geology, which dips in a south-easterly direction at a very gentle ~0.7°. The Site area is underlain at rockhead by various formations and members of the Great Oolite Group, of Mid-Jurassic age, which are dominated by limestones with subordinate mudstone beds.

There are no geological faults shown on Site; however some minor faults have been mapped to the north-east of Bucknell village, with ground displacements of up to some 5m. Faults are planes of movement, along which, adjacent blocks of rock strata have moved relative to each other. They commonly consist of zones, perhaps up to several tens of metres wide, containing several to many fractures. The portrayal of such faults as a single line on the geological map is therefore a generalisation. The geological faults in the Bicester area are ancient in origin and

are today mainly inactive, therefore are not thought to present a threat to the proposed development.

### Sequence of Strata

The Cornbrash Formation (CB) is the youngest bedrock unit represented and dominates the outcrop within the Site area. It comprises approximately 5m of thick grey to brown, bioclastic, rubbly-bedded limestone with thin subordinate beds of grey mudstone.

The older, underlying Forest Marble Formation (FMB) is exposed as a narrow outcrop on the flanks of the three stream valleys where the Cornbrash Formation has been eroded. The FMB comprises approximately 5m to 10m of grey calcareous mudstone with lenticular beds of bioclastic, ooidal limestone (particularly common at the base).

Although not represented in outcrop on Site, the FMB is underlain at an erosive contact by the White Limestone Formation (WHL), which crops approximately 2km to the north-west. The WHL comprises up to 25m of white to yellow, bedded, peloidal and bioclastic limestone (see Additional Geological Considerations below).

The White Limestone Formation is underlain by four further formations of the Great Oolite Group: in ascending order the Horsehay Sand, the mudstone-dominated Sharp's Hill, the Taynton Limestone and the mudstone-dominated Rutland formations, totalling approximately 20m in thickness. These are then underlain by 2m to 6m of the ferruginous sandstones of the Northampton Sand Formation before the 100m+ of the mudstone-dominated Lias Group is encountered.

The geological ground profile for the Site is expected to be confirmed in more detail following completion of an initial ground investigation.

## 3.3 Hydrogeology

With the exception of the Forest Marble Formation cropping out in the floors and sides of the valleys, the whole of the Site area is underlain by the Cornbrash Formation. This is a local aquifer and water strikes have been recorded in shallow boreholes drilled within the Site area (Appendix F). The standing water levels are generally between 0.5m and 4.0m below the ground surface.

The Forest Marble Formation may hold small quantities of water in any limestone bands present, but the upper part generally acts as an aquiclude, i.e. an essentially impermeable barrier between the Cornbrash Formation and the underlying White Limestone Formation. None of the boreholes drilled through the Forest Marble Formation in the Site area recorded water strikes within this Formation.

The White Limestone Formation constitutes a major aquifer in the area, which provides some sources of public supply. There are several boreholes in the wider area, some within the Site area, that penetrate this formation:

- A 34m deep borehole at Gowell Farm (SP52/19 at SP 5709 2384), drilled pre-1909 to supply Bicester with water. This penetrated the complete 25m thickness of the White Limestone Formation, underlying about 7.2m of Forest Marble Formation and terminating in the underlying Rutland Formation. Water was struck at 28m and 32m below the ground level in the White Limestone Formation. The rest water level rose to

the surface after the first strike, and was artesian, with a rest water level about 1m above ground level (about 88m AOD) after the second strike. The yield was over 7 l/s.

- An 80 m deep borehole at Lords Farm (SP52/18 at SP 5746 2424), drilled in 1941, was drilled through a similar sequence and terminated in the Lias. It struck water in the Cornbrash Formation, which was cased out, and at two levels below the White Limestone Formation. The rest water level was at 11m below ground level (about 68m AOD) and it yielded 1.7 l/s.

Other records of water levels at Lords Farm (SP52/17A, B and C at about SP 569 245) show that the water level was at approximately 3.6m of ground level (about 76m AOD).

In addition to the available geological information, the Environment Agency (EA) Groundwater Vulnerability Map on the EA website (Ref. 5) has been reviewed to determine the vulnerability of the groundwater underlying the Site with the following conclusions:

- The superficial deposits are not classified as an aquifer. The underlying Cornbrash Formation is classified as a Secondary 'A' Aquifer, which comprises "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."

This designation corresponds with the geological interpretation given above.

There are insufficient data to determine a groundwater flow direction, but locally it will probably be towards the nearest stream and regionally, down-dip towards the south-east.

### 3.3.1 Groundwater Source Protection Zones

The Environment Agency (EA) has defined Source Protection Zones (SPZs) for groundwater sources such as wells, boreholes and springs used for public drinking water supply. The SPZs show the risk of contamination from any activities that might cause pollution in the area.

Source protection zones are defined as follows:

A Source Protection Zone III is the total area needed to support removal of water from a borehole, and to support any discharge from the protected borehole/well/spring used for public drinking water supply.

A Source Protection Zone II (outer protection zone) covers pollution that takes up to 400 days to travel to the abstraction point, or 25% of the total catchment area – whichever area is the biggest.

A Source Protection Zone I (inner protection zone) defines an area where pollution can travel from the source to the extraction point within 50 days. A Source Protection Zone I also has a minimum 50m protection radius around a public supply borehole.

According to the EA website (Ref. 5), the Site does not lie within a SPZ.

## 3.4 Flooding

According to the Environment Agency Flood Maps included within the Envirocheck Report (Appendix A), the Site does not generally lie within a zone susceptible to flooding; however, the River Bure that flows off-Site in a roughly north-easterly to south-westerly direction is shown to

present a risk of “Flooding from Rivers or Sea without Defences (Zone 3)” to an area confined to the stream’s valley (i.e. its natural floodplain).

Note that EA flood maps are based upon coarse DTM and JFLOW modelling and are not considered suitable to delineate the flood plain to support a planning application. Note also that the two, north-west to south-east flowing streams that discharge to the River Bure, have not been modelled by the EA, as they are too small. As such, a separate, Site-specific hydraulic model should be developed in order to confirm the flood plain extents across the Site.

## 3.5 Drainage Soakaways

As part of the development, the suitability of the ground for accepting soakaways for surface water drainage will need to be considered. Based on the available documented evidence on the geology and visual evidence from the Site walkover (where the superficial deposits were typically loamy and all field drainage ditches and the northernmost of the two streams that feed the Bure River were dry), it is considered at this stage that the ground will likely be suitable for some form of soakaway. This assumption should be proved or disproved during an intrusive ground investigation.

## 3.6 Cemeteries

A Tier 1 hydrological risk assessment of land being considered for development as a new cemetery was undertaken for the Site area in 2008 by Peter Mitchell Associates, on behalf of TurfTrax Ground Management Systems Ltd. (Appendix G). A brief summary on the preliminary Risk Rating (prior to an intrusive ground investigation) in the report is as follows:

”The vulnerability ranking assigned to this site is ‘Moderate’, and the numbers of anticipated annual burials gives a Risk Rating of ‘High’. The site characteristics that raised the vulnerability score were:

- Absence of superficial deposits
- High water table
- Aquifer – the area is underlain by a minor aquifer”

## 3.7 Archaeology and Heritage

There are no archaeological constraints highlighted from the Envirocheck Report and Historical Maps, however this information is not exhaustive and it is required that a County Archaeologist completes a field evaluation prior to the determination of any planning application.

Home Farm and Himley Farm are listed buildings that reside within the Site and the Church of St Lawrence in Caversfield, adjacent to the Site, is a Grade II* listed building. In all cases, sympathetic design will be a priority for developments in close proximity to these buildings.

## 3.8 Other Considerations

Four mobile telecommunications masts were identified within land belonging to Messrs. Malins. It is presumed that these are permanent features and any future development would need to be worked around them.

Overhead 33kv electrical cables enter the Site area in the south-eastern corner, before forming a junction near the south-western corner, with one branch continuing off-Site to the west and another branch continuing through the Site in a north-easterly direction, before exiting just north of Bucknell Road. Safe clearances must be maintained from buildings constructed under or adjacent to overhead lines. Safe clearances must also be maintained for trees and structures such as street lighting.

Former quarries and other former mineral sites as noted in the Envirocheck Report were investigated; however these appear to have been re-vegetated by now, with the extracted material presumably used in nearby buildings and stone walls.

# 4 HISTORICAL INFORMATION

## 4.1 Historical Mapping

Historical Ordnance Survey maps, included as part of the Envirocheck Report have been obtained for the NW Bicester eco development Site, with significant observations summarised in Table 4.1.

The historical Ordnance Survey maps are included for reference within Appendix B.

**Table 4.1: Historical Mapping Summary**

| Map Date | Map Scale | Site Land Use | Surrounding Area Land Use |
|---|---|---|---|
| 1881 | 1:2,500 | The Site is occupied by agricultural land, with seven farms/small holdings, and various connecting access tracks. The Site is dissected through its centre by the north-west to south-east trending Bucknell/Bicester Road | The centre of the village of Bucknell is shown 800m to the north-west of the Site boundary and the parish of Caversfield is shown on the north-eastern Site boundary. Bignell House is shown 600m south of the Site. All other surrounding land is agricultural/undeveloped land, containing some woodland and a number of streams and ditches |
| 1884-1885 | 1:10,560 | No significant change in land use of Site since 1881 | No significant change in land use since 1881 |
| 1899 | 1:2,500 | No significant change in land use of Site since 1881 | Between 1881 and 1899, trees were introduced below the southern Site boundary, called the Bignell Belt, with Bignell Park now established in the grounds to the south |
| 1900 | 1:10,560 | No significant change in land use of Site since 1881 | No significant change in land use since 1899 |
| 1922 | 1:2,500 | The north-west to south-east trending Great Western Railway (Ashendon & Aynho branch) was constructed in 1910, which runs through the centre of the Site, (west and) parallel to the Bucknell/Bicester Road | The Great Western Railway (Ashendon & Aynho branch), constructed in 1910, services Bicester to the south. At this time Bicester is a small town, with its boundary located approximately 1.4km to the south-east |
| 1923 | 1:10,560 | A lime kiln and small quarry are shown on the Site's south-eastern boundary, adjacent to the railway line and Gowell Farm | The shallow bedrock in the area is suggested by three old off-Site quarries located between 700m and 1.2km south-east of the Site towards Bicester |
| 1938 | 1:10,560 | No significant change in land use of Site since 1910 | Bicester is slowly expanding north-westwards |
| 1952 | 1:10,560 | No significant change in land use of Site since 1910 | Continued small-scale expansion of Bicester |
| 1955 | 1:10,000 | No significant change in land use of Site since 1910 | No significant change in land use since 1955 |
| 1966 | 1:10,000 | No significant change in land use of Site since 1910 | No significant change in land use since 1955 |
| 1967 | 1:1,250 | No significant change in land use of Site since 1910 | No significant change in land use since 1955 |
| 1970 | 1:10,000 | The lime kiln and quarry shown on the Site's south-eastern boundary, adjacent to the railway line and Gowell Farm are no longer shown | Rapid and large scale expansion of Bicester has occurred to the north-west, towards the Site. The town boundary is now only 500m away from the Site. Caversfield has also expanded south-eastward by this time |

**Table 4.1: Historical Mapping Summary (Contd.)**

| Map Date | Map Scale | Site Land Use | Surrounding Area Land Use |
|---|---|---|---|
| 1971 | 1:2,500 | No significant change in land use of Site since 1970 | On the southern side of the railway, Bicester town has now reached the Site boundary at the A4095 (Howes Lane) |
| 1982 | 1:10,000 | No significant change in land use of Site since 1970 | No significant change in land use since 1971 |
| 1988 | 1:10,000 | A depot is shown on the site of the old quarry on the Site's south-eastern boundary, adjacent to the railway line and Gowell Farm | Bicester has rapidly expanded to its north |
| 1993 | 1:10,000 | No significant change in land use of Site since 1988 | The M40 motorway was opened in 1990. At its closest to the Site, the motorway lies 300m to the west of the south-western corner |
| 1996 | 1:10,000 | More structures (Thames Valley Police Traffic Base) are shown adjacent to the depot on the Site's south-eastern boundary | Further expansion of Bicester to its north |
| 1999 | 1:10,000 | No significant change in land use of Site since 1996 | No significant change in land use since 1996 |
| 2006 | 1:10,000 | The depot adjacent to the police base has been replaced by four new square structures and presumably now form the Avonbury Business Park, though this is not named on the historical maps | Bicester has now fully expanded to the north-west and has reached the A4095. The Site's south-eastern boundary is now fully bordered by Bicester beyond the A4095 |
| 2010 | 1:10,000 | No significant change in land use of Site since 2006 | No significant change in land use since 2006 |

# 5 REGULATORY INFORMATION

## 5.1 Envirocheck Report

Information on environmental data for the Site and general surrounding area (up to a 500m search distance from the Site boundary) has been obtained from the Envirocheck Report and from the UK Government's MAGIC website (Multi-Agency Geographic Information for the Countryside). The search findings are summarised in Table 5.1.

**Table 5.1: Summary of Findings from Envirocheck Report**

| Environmental Factor | Distance to Closest Site Boundary | | | | Details |
|---|---|---|---|---|---|
| | On Site | 0-250m | 251-500m | 501–1000m | |
| Active Discharge Consents | 3 | 0 | 1 | 0 | All on Site consents relate to effluent discharges from farms to a surface water |
| Surface Water Abstractions | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Groundwater Abstractions | 3 | 0 | 0 | 0 | All are registered to boreholes at Lord's Farm for general farming and domestic purposes. Two abstractions are shown on the map at Hawkwell Farm in the centre of the Site, but these are not recorded in the Envirocheck Datasheets. One water abstraction point was identified during the walkover in Lord's Farm between two mobile telecommunications masts (see Point B3 in the "Envirocheck Information" drawing in Appendix A). |
| Active Integrated Pollution Controls | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Integrated Pollution Prevention and Control | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Active Local Authority Pollution Prevention and Controls | 0 | 1 | 0 | 0 | There is one pending Air Pollution Control application for waste oil burners at Teslayne Engineering, Caversfield |
| Local Authority Pollution Prevention and Control Enforcements | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Pollution Incidents to Controlled Waters | 0 | 0 | 1 | 0 | An incident occurred on an unknown property in Bicester town involving a general pollutant on the 16th of December 1997. The incident was classified as "minor" |
| River Quality | 0 | 0 | 0 | 0 | No sampling points recorded within 500m of Site |
| River Quality Biological Sampling Points | 0 | 0 | 0 | 0 | No sampling points recorded within 500m of Site |
| River Quality Chemistry Sampling Points | 0 | 0 | 0 | 0 | No sampling points recorded within 500m of Site |

**Table 5.1: Summary of Findings from Envirocheck Report (Contd.)**

| Environmental Factor | Distance to Closest Site Boundary | | | | Details |
|---|---|---|---|---|---|
| | On Site | 0-250m | 251-500m | 501–1000m | |
| Substantiated Pollution Incident Register | 0 | 0 | 0 | 0 | No incidents recorded within 500m of Site |
| Water Industry Act Referrals | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Historical Landfill Sites | 1 | 0 | 0 | 0 | The land now occupied by the police base and other commercial units on the Avonbury Business Park is classified as a former landfill (Gowell Farm Landfill). Local Authority records contained within the Envirocheck Report state the deposited waste as being “ash, glass, brick, pottery”, which was likely used as fill for the old quarry on Site.<br>Having visited the area, there is no evidence of a landfill having existed due to the development comprising hard standing and paving stones and there are no landfill gas vents visible. |
| Licensed Waste Management Facilities (Locations) | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Registered Active Landfill Sites | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| BGS Recorded Landfill Sites | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Registered Waste Treatment or Disposal Sites | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| BGS Recorded Mineral Sites | 2 | 2 | 0 | 0 | All four recorded sites relate to opencast quarrying of limestone within the Cornbrash Formation. None of these were found during the Site walkover and have presumably been filled. |
| Natural and Mining Cavities | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Shallow Mining Hazards | 0 | 0 | 0 | 0 | No history of mining within 500m of the Site - only quarrying has occurred |
| Control of Major Hazards Sites (COMAH) | 0 | 0 | 0 | 0 | None recorded within 500m of Site |

**Table 5.1: Summary of Findings from Envirocheck Report (Contd.)**

| Environmental Factor | Distance to Closest Site Boundary | | | | Details |
|---|---|---|---|---|---|
| | On Site | 0-250m | 251-500m | 501–1000m | |
| Notification of Installations Handling Hazardous Substances (NIHHS) | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Planning Hazardous Substance Consents | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Active Contemporary Trade Directory Entries | 7 | 1 | 0 | 0 | From the Site walkover undertaken between 30th June and 2nd July 2010, the units within the Avonbury Business Park are occupied by Ravensburger Ltd; Fleet Claims; Tiffen; Imaging Associates Ltd; Rationel (UK) Ltd and Biotronik UK Ltd.<br>Turney Agriforce operates an agricultural vehicle sales and service business from Lord's Farm. |
| Fuel Station Entries | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Radon Potential – Radon Affected Areas | Yes | n/a | n/a | n/a | Basic Radon Protective Measures are required for the report area as the estimated probability of a property being above the radon Action Level is 3 to 5%. See BGS BR211 Radon Report in Appendix H |
| Nitrate Vulnerable Zone | | | | | The Site is located within a Surface Water Nitrate Vulnerable Zone. These are areas where nitrate pollution from agricultural activities to surface water is a recognised problem |
| Areas of Adopted Green Belt | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Areas of Unadopted Green Belt | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Ramsar Sites | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Special Areas of Conservation | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| Special Protection Areas | 0 | 0 | 0 | 0 | None recorded within 500m of Site |
| National Nature Reserves | 0 | 0 | 0 | 0 | None recorded within 500m of Site |

**Table 5.1: Summary of Findings from Envirocheck Report (Contd.)**

| Environmental Factor | Distance to Closest Site Boundary | | | | Details |
|---|---|---|---|---|---|
| | On Site | 0-250m | 251-500m | 501–1000m | |
| Local Nature Reserves | 0 | 1 | 0 | 0 | Bure Park, at its closest, is located immediately within the A4095 on the Bicester side and is fed by the River Bure |
| Sites of Special Scientific Interest (SSSI) | 0 | 0 | 1 | 0 | 1. Ardley Cutting and Quarry (3 Units), designated for Geological Conservation Review and as a Local Wildlife Trust Reserve. Located 400m north-west of Site along the railway line. This is adjacent to the Ardley Trackways Geological SSSI (Unit 1)<br>2. Ardley Trackways Geological SSSI (Unit 2) is located 1.3km north-west of the nearest Site boundary (beyond the M40 Motorway) |
| Areas of Archaeological/Heritage importance | 0 | 0 | 0 | 0 | None recorded within 500m of Site |

# 6 CONCEPTUAL MODEL

## 6.1 General

The aim of this initial conceptual model and risk assessment is to provide a preliminary identification of the risks to the Site, site users and the surrounding area posed by any contamination present on Site. The assessment is based on identification of "pollution linkages", i.e., source-pathway-receptor relationships. This approach is in accordance with the guidance that accompanies Part IIA of the Environmental Protection Act of 1990, where land is considered to be contaminated when "significant harm" is occurring, or where there is the "significant possibility of significant harm" or where pollution of controlled waters is being, or is likely to be caused. In such cases the pollution linkage itself is defined as "significant".

The source and pathway to receptors must be present for there to be a risk. The preliminary risk assessment assesses the strength of the link between the source, the pathway and the receptor.

- Source – Contaminant that has potential to cause harm to environmental receptors. In a wider sense, sources can include particular ground conditions, for example the existence of redundant footings, which have the potential to impact on re-development proposals.
- Pathway – The route by which the source is brought into contact with the receptor. This can include the transport of contamination via groundwater, wind-blown dust, vapours, excavation and deposition etc.
- Receptor – Human beings, other living organisms, physical systems and built structures that could be affected by the source. A receptor will only be affected if a pathway from the source to the receptor is present. Groundwater and surface water systems can be considered as receptors in their own right as their quality is regulated by the statutory bodies, as well as being pathways for contaminant migration to other receptors.

## 6.2 Potential Sources of Contamination

Following a review of available information, including a Site walkover survey, the following potential current and historical contamination sources have been identified on Site.

It is not considered that there are viable contaminant sources off Site (within 500m) that would currently be causing "significant harm" to the Site, or presenting the "significant possibility of significant harm".

## On Site

As summarised in Table 4.1, the historical maps show that the Site area has essentially been uninfluenced by industrial activity until the present day, having been mainly concerned with agricultural production. The only historical non-agricultural activities relate to a small quarry and limekiln near Gowell Farm (now replaced by the Avonbury Business Park and Thames Valley Police Traffic Base, following landfilling of the area) and the construction of the Great Western Railway line in 1910.

The principal contaminant sources are therefore considered to be as follows:

- Treated final and trade effluent as well as surface water drainages from the farms as indicated by the discharge consents;
- Old filter bed within the grounds of Home Farm (west of the access road to the farm from the B4100);
- Railway line (Ref. 6);
- Former landfill in old quarry near Gowell Farm at the Avonbury Business Park and police base;
- Former/existing vehicle depots at the Avonbury Business Park and police base (Ref. 7);
- Pesticides, herbicides and fertilisers from agricultural activities;
- Above ground fuel tanks at farms;
- Asbestos cement sheeting within the fabric of farm buildings; and
- Soil underlying the Site that may be locally contaminated by materials stored on Site (e.g. private farm diesel/fuel oil and agricultural chemicals).

# 6.3 Potential Receptors

Potential receptors of any contamination from the above sources on the Site are identified below:

- Existing Site users;
- Future construction workers;
- Future Site users of the proposed development;
- Surface water features i.e. the three streams on Site;
- Groundwater within the Secondary 'A' Aquifer underlying the Site; and
- Current buildings/proposed buildings and associated services.

## 6.4 Potential Pathways

Potential pathways of any contamination from the above sources to the identified receptors on the Site are identified below:

- Direct dermal contact by humans with soil and/or groundwater;
- Ingestion of soil and/or groundwater by humans;
- Inhalation of toxic gas and volatile organic compounds;
- Leaching of contaminants from soil into groundwater;
- Groundwater migration to surface waters;
- Lateral groundwater migration off Site;
- Lateral migration of groundwater on Site;
- Lateral/ horizontal movement of liquid contaminants through soil pores;
- Surface water run-off via drains to surface waters; and
- Direct contact of chemically aggressive soil and groundwater with proposed buried structures and services.

# 7 QUALITATIVE HUMAN HEALTH and ENVIRONMENTAL RISK ASSESSMENT

## 7.1 Qualitative Methodology

The risk assessment considers the potential sources, receptors and pathways identified in Section 6, and the linkages are summarised in Table 7.1. This assessment takes account of specific chemicals of concern or groups of similar contaminants of concern (COC).

**Table 7.1 Pollutant Linkages for Site**

| Contaminant | Source | Pathway | Receptor | Linkage Number |
|---|---|---|---|---|
| Metals and metalloids, hydrocarbons (oil/ fuel), solvents, phenols, pesticides/ herbicides/ fertilisers, pathogens | Soil underlying Site | -Direct contact with soils;<br>-Ingestion of soils/dust;<br>-Inhalation of soils/dust;<br>-Indoor/outdoor inhalation of ground; gases and/or vapours | Current Site users | 1 |
| | Storage & spillage of oils/fuels/chemicals/ solvents at farms | | Construction Workers | 2 |
| | Handling of hazardous substances inc. asbestos at farms | | Future Site Users (post development) | 3 |
| | Above ground fuel tanks and agricultural chemical containers | | Buildings & Services | 4 |
| Metals and metalloids, hydrocarbons (oil/ fuel), solvents, phenols, pesticides/ herbicides/ fertilisers, pathogens | Leaching from contaminants on and within the soil | -Surface water runoff to streams;<br>-Leaching of contaminants from soils to groundwater;<br>-Groundwater flow | Secondary 'A' Aquifer | 5 |
| | | | On-Site Surface Water Features | 6 |
| Metals and metalloids, hydrocarbons (oil/ fuel), solvents, phenols, herbicides | Spills within on-Site railway (hydrocarbons, solvents and herbicides leaching directly to groundwater) | Leaching of contaminants from soils to groundwater | Secondary 'A ' Aquifer | 7 |

**Table 7.1 Pollutant Linkages for Site (Contd.)**

| Contaminant | Source | Pathway | Receptor | Linkage Number |
|---|---|---|---|---|
| Metals and metalloids, hydrocarbons (oil/ fuel), solvents, phenols, pesticides/ herbicides/ fertiliser | Made Ground at former landfill | -Direct contact with soils;<br>-Ingestion of soils/dust;<br>-Inhalation of soils/dust;<br>-Indoor/outdoor inhalation of ground; gases and/or vapours | Current Site users | 8 |
| | | | Secondary 'A' Aquifer | 9 |
| Ground Gases ($CH_4$/$CO_2$) | Made Ground at former landfill | Diffusion of gas from landfill | Current Site users | 10 |
| | | | Secondary 'A' Aquifer | 11 |
| | | | Buildings & Services | 12 |
| Ground Gas | Radon | Diffusion of gas from geological strata | Future Site Users (post development) | 13 |

The pollutant linkages are considered further in Table 7.2. This table assesses the probability and consequence of the selected sources and receptors being linked by the identified pathways. Based on the assessed probability and consequence, an overall risk classification is assigned to each potential pollutant linkage. The definitions of the ratings given in this table (Probability, Consequence and Risk) are given in Appendix C.

**Table 7.2 Initial Pollutant Linkages and Risk Assessment**

| Linkage Number | Probability | Consequence | Risk | Hazard Assessment* |
|---|---|---|---|---|
| 1 to 3 | Possible, as contact with soil will occur during farming then construction and post-construction (in gardens) | Mild - Site is mainly occupied by agricultural land with no previous contaminative industrial uses. Insoluble pollutants from agriculture are likely to remain localised to the source.<br>Therefore, contact with soil is unlikely to result in long-term adverse health effects | Low | SI |
| 4 | Likely as buildings will be in contact with the soil | Negligible | Low | NA |

*Definitions:
SI – Site Investigation recommended
NA – No Action required

**Table 7.2 Initial Pollutant Linkages and Risk Assessment (Contd.)**

| Linkage Number | Probability | Consequence | Risk | Hazard Assessment* |
|---|---|---|---|---|
| 5 | Possible as a groundwater table is present beneath the Site within the Cornbrash Formation | Mild – Should contaminants be present within the soil on Site, these are likely to be in small volumes and cause localised pollution only | Low | SI |
| 6 | Likely – Pesticides, herbicides and fertilisers are soluble and are likely to drain with surface water runoff into the nearest surface water feature | Moderate – The Site area lies within a Nitrate Vulnerable Zone. These are areas where nitrate pollution from agricultural activities to surface water is a recognised problem.<br>Any pathogens from treated final/ trade effluent discharges to localised surface water features are likely to cause localised pollution of the receiving watercourse only | Moderate to High | SI |
| 7 | Possible as a groundwater table is present beneath the Site within the Cornbrash Formation | Mild – Wile contaminants are likely to be present at the railway, these are likely to be in small volumes (as the Site does not contain a station or storage sidings) and cause localised pollution only | Low | NA – No development on railway land will occur |
| 8 | Very unlikely – The site is capped by paving stones and provides no pathway for site users to come into contact with the underlying landfill | Mild – The information available in the Envirocheck report states that the deposited waste comprised “ash, glass, brick, pottery” | Negligible | NA |
| 9 | Possible – If landfill is not lined or liner is not intact | Mild – The information available in the Envirocheck report states that the deposited waste comprised “ash, glass, brick, pottery”, which should not pose a significant threat to groundwater | Low | NA |

*Definitions:
SI – Site Investigation recommended
NA – No Action required

**Table 7.2 Initial Pollutant Linkages and Risk Assessment (Contd.)**

| Linkage Number | Probability | Consequence | Risk | Hazard Assessment* |
|---|---|---|---|---|
| 10 | Very unlikely – The information available in the Envirocheck report states that the deposited waste comprised "ash, glass, brick, pottery", which would not be expected to generate significant volumes of gas. Additionally, no gas vents were observed during the Site walkover | Severe – A build-up of typical landfill gases ($CH_4$ and $CO_2$) could cause explosion and asphyxiation respectively. | Low | NA |
| 11 | Very unlikely – See linkage no. 10 above | Moderate – While landfill gas typically contains organic compounds, which could cause pollution of groundwater, it is not expected that significant volumes of gas will be produced by the on-Site landfill, therefore the consequences to the Secondary 'A' Aquifer are not likely to be severe | Negligible to Low | NA |
| 12 | Very unlikely – See linkage no. 10 above | Severe, but only in the case of a build-up of landfill gas within a confined space, which could lead to ignition and explosion | Low | NA |
| 13 | Likely | Moderate | Moderate to High | AR |

*Definitions:
SI – Site Investigation recommended
NA – No Action required
AR – Action Required

## 7.2 Risk Assessment

Following review of the available information undertaken as part of this study, and consideration of the relevant pollutant linkages, a **Low risk to human health** is considered to be currently associated with the Site. This is due to the unindustrialised history of the Site and its use as primarily agricultural land, where crops/animals for human consumption are grown/reared. However, the natural geology of the area is such that there is a possibility of some radon gas accumulation in dwellings, therefore basic radon protective measures are required. See BGS BR211 Radon Report in Appendix H.

During the Site walkover survey, a farm building (approximate dimensions of 30m x 20m x 10m) was noted adjacent to the south-western side of Bucknell Road, some 950m NW of the junction (roundabout) with the A4095 (Lord's Lane). The roof and front of the building appears to be

constructed from corrugated asbestos cement sheeting, which will require special precautions if part of the proposed redevelopment.

There is considered to be a **Negligible to Low risk to the underlying groundwater** within the Secondary 'A' Aquifer of the Cornbrash Formation. The aquifer is not used to supply public drinking water; however it may be important for small-scale localised supply. Additionally, the Site does not lie within a drinking water Source Protection Zone.

Due to the agricultural nature of the Site, where much of the land is used for growing crops, there is considered to be a **Moderate to High risk** of surface water pollution from pesticides/herbicides and nitrate fertilisers. The Site lies within a Nitrate Vulnerable Zone, which is an area where nitrogen loss from agriculture to water is recognised as a problem and needs to be reduced.

Assuming the redevelopment of the Site for residential purposes, which will involve the introduction of soft landscaping, it is considered that a **Low risk to future Site users** would exist, due to the Site's unindustrialised past and its current use as primarily agricultural land, where crops/animals for human consumption are grown/reared.

The risks to humans and the environment from the former landfill on the land now occupied by the Thames Valley Police Traffic Base and the Avonbury Business Park are classified as **Low**. This is based on the information available in the Envirocheck Report, which states that deposited waste comprised "ash, glass, brick, pottery". This material was likely used as fill for the old quarry on Site in order to enable the redevelopment of the area. Additionally, no gas vents were observed within the Avonbury Business Park or the police base during the Site walkover, which indicates that there may be no gas-venting issues.

# 8 GEOTECHNICAL CONSIDERATIONS

The main geotechnical considerations are listed in Table 8.1 below, which highlights the natural geological hazards identified within the Envirocheck Report (as sourced from the British Geological Survey), with additional comments added to reflect observations noted during the Site walkover survey.

Whilst not a hazard, available borehole information and observations during the Site walkover survey, suggest that bedrock is present across the Site at a relatively shallow depth (some 1m to 2m), which may cause some difficulty if deeper excavations are necessary, e.g. for basements or deep utility services runs.

**Table 8.1 Summary of Potential Natural Geological Hazards Relevant to the Site**

| Hazard | Hazard Potential |
|---|---|
| Compressible Ground | Low – Any soft, cohesive/organic rich material which may be present within the alluvial sediments flanking the three on-Site streams may be susceptible to compression under loading. However, these sediments are not expected to be present in appreciable thicknesses, therefore the effect of compressible material would be lessened.<br>Away from the streams and Alluvium, the hazard potential is Very Low as bedrock is close to the surface and should provide an adequate founding material. |
| Ground Dissolution | Low – Borehole logs for the Site do not show evidence of dissolution related features and there were no unusual depressions noted in the landscape during the Site walkover. However, the limestone-dominated units of the Cornbrash Formation, as well as the underlying Forest Marble and White Limestone Formations, may be affected by dissolution leading to the widening of joints and the formation of linear vertical voids, which are likely to fill with rubble and soil. Therefore, an appropriate ground investigation should be undertaken before the detailed design stage of the development. |
| Landslide | Very Low – The Site is not located in an area prone to landslides, however, mudstone beds in the Forest Marble Formation may be unstable in excavations. |
| Running Sand | Very Low – Available borehole information shows a thin cover of non-susceptible superficial deposits above bedrock. |
| Shrinking or Swelling Clay | Very Low – Available borehole information shows a thin cover of non-susceptible superficial deposits above bedrock |

At this stage, no significant geotechnical hazards have been identified that would be expected to cause excessive difficulties in the development of the Site. However, an intrusive ground investigation will be required in order to achieve accurate information on the ground properties for preliminary design purposes.

# 9 CONCLUSIONS

This desk study report has been written in order to highlight potential constraints to the development of the proposed Bicester eco development, based on the history and current land use of the Site and surrounding area (for contamination assessment purposes) as well as potential environmental issues such as topography, the presence of watercourses, geological hazards and sensitive land uses.

The history of the Site is a rural one dominated by agriculture, which continues to be the case at present. While the town of Bicester has expanded rapidly from a small centre located 1.5km south-east of the Site some 150 years ago, to a large town which borders the south-eastern Site boundary at present, the Site itself has remained essentially unchanged during this time.

As such, if contamination is present on Site, it is not expected to be widespread or significant, therefore the corresponding qualitative risks to humans and groundwater are, at this stage, considered to be low. However, the risk to surface water due to agricultural chemical runoff (particularly nitrates) is considered to be moderate to high (as the Site is within a Nitrate Vulnerable Zone). Additionally, basic radon protection measures will be necessary in the construction of new dwellings and extensions.

In terms of topography, the Site is gently sloping from the north-west to the south-east with no significant changes in ground levels across short distances. The geological information available suggests that bedrock is close to the surface, which should prove to be an adequate founding material, although it may cause difficulty in deeper excavations (for example in basements). Additionally, the limestone-dominated units of the Cornbrash Formation and the underlying Forest Marble and White Limestone Formations may be affected by dissolution features, although there is no evidence of this from the (limited) borehole logs obtained for the Site.

In summary, the desk study has not highlighted any significant constraints to the proposed development in terms of possible contaminants or natural geological hazards; however, this is only a preliminary desktop assessment and should be verified by means of an appropriately targeted ground investigation.

# 10 RECOMMENDATIONS

It is recommended that an intrusive ground investigation be undertaken to confirm the potential presence or absence of contamination within soils and groundwater and to determine the geotechnical properties of the ground for the proposed eco development layout. The ground investigation can also be targeted at those areas that may be outlined for a cemetery (see Section 3.6), where information relating to leachability and permeability of the ground will be particularly important.

The ground investigation should include:

- Coring of near surface rock, with associated strength testing for foundation design purposes;
- Trial pits for targeted contamination sampling e.g. near fuel and agricultural chemical storage areas and near the railway; and
- Trial pits for rock excavatability analysis and for soakaway testing.

While covered in brief, detailed information on other issues relating to flood modelling, ecology, archaeology and heritage are outside of the scope of this report and reference should be made to accompanying reports produced by Hyder.

# 11 REFERENCES


1. Halcrow Group Ltd., 2009. NW Bicester Eco-Town Concept Study. DRAFT Report.

2. Terry Farrell & Partners Ltd., 2009. A Vision for the Future of Bicester: NW Bicester Eco-development report.

3. Government of Great Britain, 1990. Environmental Protection Act 1990 (as amended) (inserted by the Environment Act 1995). HMSO, London.

4. British Geological Survey, 2002. Solid and Drift Geological Map of Buckingham, Sheet P219.

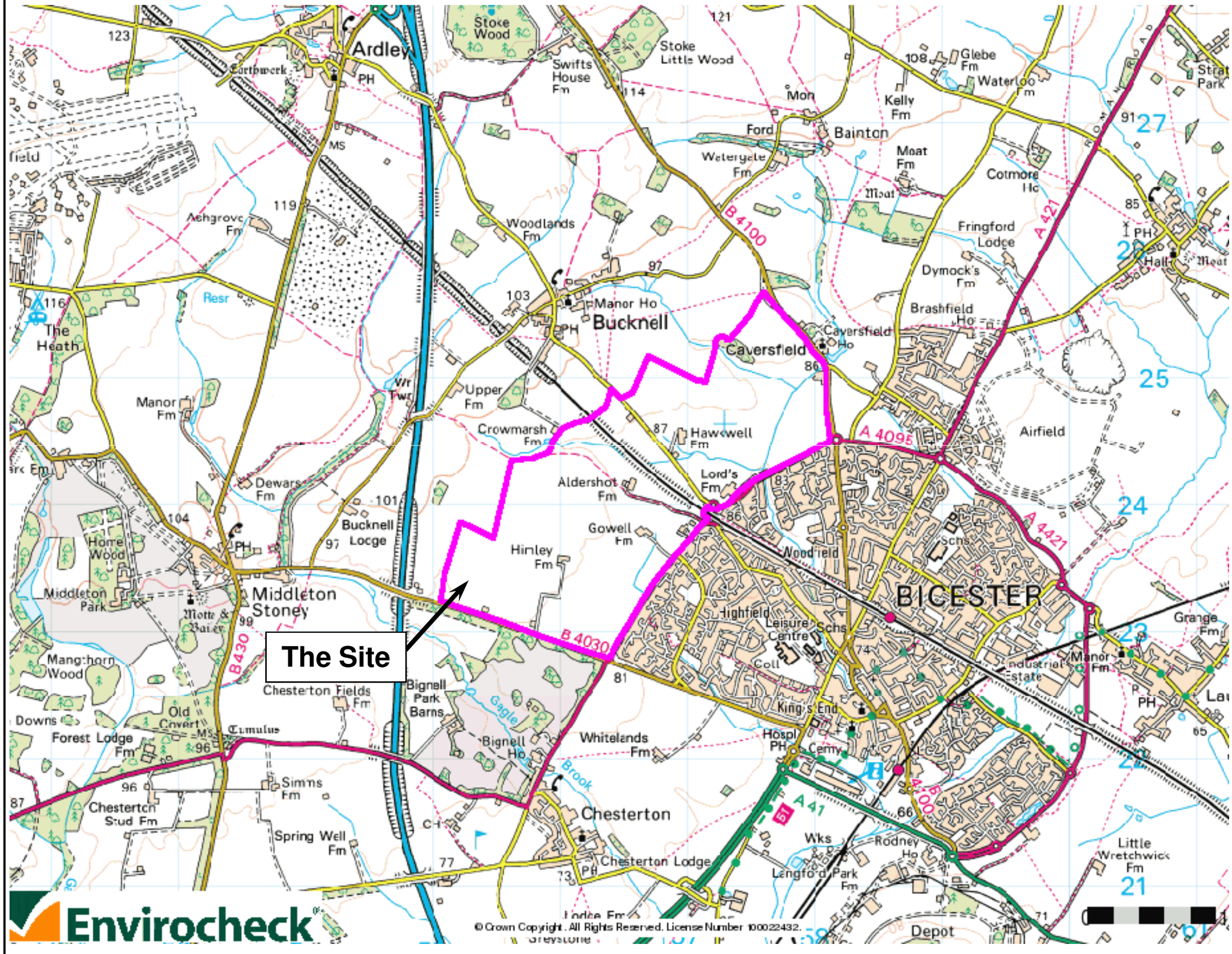
5. Environment Agency Website (Groundwater), 2010. http://maps.environment-agency.gov.uk (accessed 05 July 2010)

6. Department of the Environment, 1995. Industry Profile: Railway Land. DoE.

7. Department of the Environment, 1996. Road vehicle fuelling, service and repair: transport and haulage centres. DoE.

Figures

# Figure 1 – Site Location Plan




Client

a2dominion

P3Eco Ltd

Project

**NW Bicester Eco-Town**

Title

**Site Location Plan**

| Scale | Datum |
|---|---|
| NTS | N/A |

Hyder

Hyder Consulting Ltd
HCL House
Fortran Road
Cardiff CF3 0EY

Tel: 029 20925000
Fax: 029 20925222

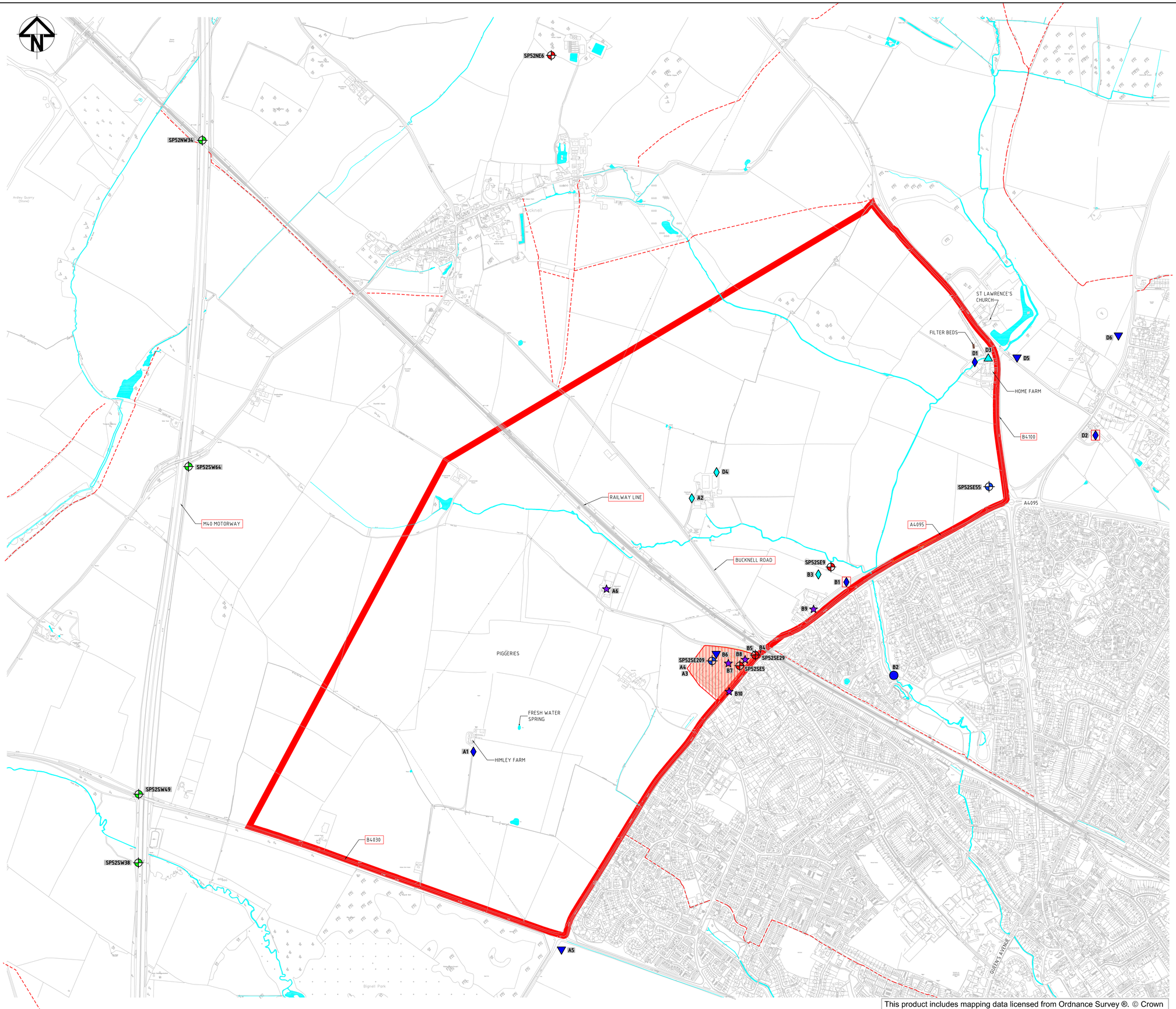
Project Code

**UA001881**

| Drawing No. | Issue |
|---|---|
| **Figure 1** | 1 |

Appendix A

# Landmark Envirocheck Report Datasheets




KEY

- OVERALL SITE BOUNDARY
- PUBLIC BRIDLEWAY
- PUBLIC FOOTPATH
- HEDGEROW
- WOODLAND
- WATER COURSE
- B8 — MAP ID – B=SLICE B, 8= ITEM No.
- DISCHARGE CONSENT
- POLLUTION INCIDENT TO CONTROLLED WATERS
- WATER ABSTRACTION
- TRADE DIRECTORY ENTRY
- BGS RECORDED MINERAL SITE
- LOCAL AUTHORITY POLLUTION PREVENTION AND CONTROL
- MORE THAN ONE OF TYPE AT LOCATION
- LOCAL AUTHORITY RECORDED LANDFILL SITE
- EA HISTORIC LANDFILL (POLYGON)
- BGS BOREHOLE DEPTH 0-10m
- BGS BOREHOLE DEPTH 10-30m
- BGS BOREHOLE DEPTH 30m +
- A4095 — POTENTAIL NOISE SOURCES – LOCAL ROAD NETWORK (INC. M40/ A4095/ B4100/ B4030/ BUCKNELL ROAD) AND RAILWAY LINE.

| Issue | Description | Date |
|---|---|---|
| 01 | FIRST ISSUE | 11/06/10 |

Status: DRAFT

| | | |
|---|---|---|
| Scales | 1:5000 | Current Issue Signatures |
| Original Size | A0 | Author P.SWEENEY |
| Height Datum | NEWLYN | Checker S.A. DAVIES |
| Grid | O.S. | Approver S.A. DAVIES |
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Project: BICESTER ECO TOWN

Title: ENVIROCHECK INFORMATION

| Drawing No. | Project No. | Issue |
|---|---|---|
| 7015 | UA001881 | 01 |

# Envirocheck® Report:

## Datasheet

### Order Details:

**Order Number:**
31544761_1_1

**Customer Reference:**
UA001881

**National Grid Reference:**
455870, 223500

**Slice:**
A

**Site Area (Ha):**
395.55

**Search Buffer (m):**
500

### Site Details:

Site at
Bicester
Oxfordshire

### Client Details:

Mr D Thomas
Hyder Consulting Ltd
HCL House
St. Mellons Business Park
St Mellons
Cardiff
CF3 0EY

# Contents



**Introduction**

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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**Natural England Copyright Notice**



**Ove Arup Copyright Notice**



**Peter Brett Associates Copyright Notice**



**Radon Potential dataset Copyright Notice**



**Report Version v47.0**

Envirocheck®

# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m (*up to 1000m) |
|---|---|---|---|---|
| **Agency & Hydrological** | | | | |
| Contaminated Land Register Entries and Notices | | | | |
| Discharge Consents | pg 1 | 1 | | |
| Enforcement and Prohibition Notices | | | | |
| Integrated Pollution Controls | | | | |
| Integrated Pollution Prevention And Control | | | | |
| Local Authority Integrated Pollution Prevention And Control | | | | |
| Local Authority Pollution Prevention and Controls | | | | |
| Local Authority Pollution Prevention and Control Enforcements | | | | |
| Nearest Surface Water Feature | pg 1 | Yes | | |
| Pollution Incidents to Controlled Waters | | | | |
| Prosecutions Relating to Authorised Processes | | | | |
| Prosecutions Relating to Controlled Waters | | | | |
| Registered Radioactive Substances | | | | |
| River Quality | | | | |
| River Quality Biology Sampling Points | | | | |
| River Quality Chemistry Sampling Points | | | | |
| Substantiated Pollution Incident Register | | | | |
| Water Abstractions | pg 1 | 1 | | (*1) |
| Water Industry Act Referrals | | | | |
| Groundwater Vulnerability | pg 1 | Yes | n/a | n/a |
| Source Protection Zones | | | | |
| Extreme Flooding from Rivers or Sea without Defences | pg 2 | Yes | | n/a |
| Flooding from Rivers or Sea without Defences | pg 2 | Yes | | n/a |
| Areas Benefiting from Flood Defences | | | | n/a |
| Flood Water Storage Areas | | | | n/a |
| Flood Defences | | | | n/a |
| **Waste** | | | | |
| BGS Recorded Landfill Sites | | | | |
| Historical Landfill Sites | pg 3 | 1 | | |
| Integrated Pollution Control Registered Waste Sites | | | | |
| Licensed Waste Management Facilities (Landfill Boundaries) | | | | |
| Licensed Waste Management Facilities (Locations) | | | | |
| Local Authority Recorded Landfill Sites | pg 3 | 1 | | |
| Registered Landfill Sites | | | | |
| Registered Waste Transfer Sites | | | | |
| Registered Waste Treatment or Disposal Sites | | | | |

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# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m (*up to 1000m) |
|---|---|---|---|---|
| **Hazardous Substances** | | | | |
| Control of Major Accident Hazards Sites (COMAH) | | | | |
| Explosive Sites | | | | |
| Notification of Installations Handling Hazardous Substances (NIHHS) | | | | |
| Planning Hazardous Substance Consents | | | | |
| Planning Hazardous Substance Enforcements | | | | |
| **Geological** | | | | |
| BGS Recorded Mineral Sites | pg 4 | | 1 | |
| BGS 1:625,000 Solid Geology | pg 4 | Yes | n/a | n/a |
| Brine Compensation Area | | | n/a | n/a |
| Coal Mining Affected Areas | | | n/a | n/a |
| Mining Instability | | | n/a | n/a |
| Natural and Mining Cavities | | | | |
| Potential for Collapsible Ground Stability Hazards | | | | n/a |
| Potential for Compressible Ground Stability Hazards | pg 4 | Yes | Yes | n/a |
| Potential for Ground Dissolution Stability Hazards | pg 4 | Yes | Yes | n/a |
| Potential for Landslide Ground Stability Hazards | pg 4 | Yes | Yes | n/a |
| Potential for Running Sand Ground Stability Hazards | pg 5 | Yes | Yes | n/a |
| Potential for Shrinking or Swelling Clay Ground Stability Hazards | pg 5 | Yes | Yes | n/a |
| Radon Potential - Radon Affected Areas | pg 6 | Yes | n/a | n/a |
| Radon Potential - Radon Protection Measures | pg 6 | Yes | n/a | n/a |
| Shallow Mining Hazards | | | | n/a |
| **Industrial Land Use** | | | | |
| Contemporary Trade Directory Entries (50m) | pg 7 | 1 | | n/a |
| Fuel Station Entries | | | | |

Envirocheck®

# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m (*up to 1000m) |
|---|---|---|---|---|
| **Sensitive Land Use** | | | | |
| Areas of Adopted Green Belt | | | | |
| Areas of Unadopted Green Belt | | | | |
| Areas of Outstanding Natural Beauty | | | | |
| Environmentally Sensitive Areas | | | | |
| Forest Parks | | | | |
| Local Nature Reserves | pg 8 | | 1 | |
| Marine Nature Reserves | | | | |
| National Nature Reserves | | | | |
| National Parks | | | | |
| Nitrate Sensitive Areas | | | | |
| Nitrate Vulnerable Zones | pg 8 | 1 | | |
| Ramsar Sites | | | | |
| Sites of Special Scientific Interest | pg 8 | | | 1 |
| Special Areas of Conservation | | | | |
| Special Protection Areas | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 1 | **Discharge Consents**<br>Operator: Catharine Murfitt<br>Property Type: Domestic Property (Single)<br>Location: Himley Barns Middleton Stoney Road Chesterton Bicester Oxfordshire Ox26 1rt<br>Authority: Environment Agency, Thames Region<br>Catchment Area: Cherwell and Ray (Oxon)<br>Reference: Npswqd005893<br>Permit Version: 1<br>Effective Date: 16th December 2008<br>Issued Date: 15th December 2008<br>Revocation Date: Not Supplied<br>Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company<br>Discharge Environment: Freshwater Stream/River<br>Receiving Water: Tributary Of Pingle Stream<br>**Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)**<br>Positional Accuracy: Located by supplier to within 10m | A11SE (E) | 0 | 1 | 456035 223498 |
| | **Nearest Surface Water Feature** | A12NE (E) | 0 | - | 456908 223635 |
| 2 | **Water Abstractions**<br>Operator: W & W Malins<br>Licence Number: 28/39/14/0214<br>Permit Version: 100<br>Location: Lords Farm, Bicester (A)<br>Authority: Environment Agency, Thames Region<br>Abstraction: General Farming And Domestic<br>Abstraction Type: Water may be abstracted from a single point<br>Source: Groundwater<br>Daily Rate (m3): 10<br>Yearly Rate (m3): 1763<br>Details: Great Oolite<br>Authorised Start: 01 January<br>Authorised End: 31 December<br>Permit Start Date: 8th May 1967<br>Permit End Date: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m | A16NE (NE) | 0 | 1 | 456900 224500 |
| | **Water Abstractions**<br>Operator: A D Woodley Ltd<br>Licence Number: 28/39/14/0123<br>Permit Version: 100<br>Location: Whitelands, Bicester (A)<br>Authority: Environment Agency, Thames Region<br>Abstraction: General Farming And Domestic<br>Abstraction Type: Water may be abstracted from a single point<br>Source: Groundwater<br>Daily Rate (m3): 20<br>Yearly Rate (m3): 1818<br>Details: Great & Inferior Oolite<br>Authorised Start: 01 January<br>Authorised End: 31 December<br>Permit Start Date: 9th January 1967<br>Permit End Date: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m | A4SE (SE) | 754 | 1 | 456700 222100 |
| | **Groundwater Vulnerability**<br>Geological Classification: Minor Aquifer (Variably permeable) - These can be fractured or potentially fractured rocks, which do not have a high primary permeability, or other formations of variable permeability including unconsolidated deposits. Although not producing large quantities of water for abstraction, they are important for local supplies and in supplying base flow to rivers<br>Soil Classification: Soils of High Leaching Potential (H3)- Coarse textured or moderately shallow soils which readily transmit non-absorbed pollutants and liquid discharges but which have some ability to attenuate absorbed pollutants because of their large clay or organic matter contents<br>Map Sheet: Sheet 30 Northern Cotswolds<br>Scale: 1:100,000 | A12SE (E) | 0 | 1 | 456817 223520 |
| | **Groundwater Vulnerability**<br>Geological Classification: Minor Aquifer (Variably permeable) - These can be fractured or potentially fractured rocks, which do not have a high primary permeability, or other formations of variable permeability including unconsolidated deposits. Although not producing large quantities of water for abstraction, they are important for local supplies and in supplying base flow to rivers<br>Soil Classification: Soils of High Leaching Potential (U) - Soil information for restored mineral workings and urban areas is based on fewer observations than elsewhere. A worst case vulnerability classification (H) assumed, until proved otherwise<br>Map Sheet: Sheet 30 Northern Cotswolds<br>Scale: 1:100,000 | A12SE (E) | 0 | 1 | 456817 223520 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **Drift Deposits**<br>None | | | | |
| | **Extreme Flooding from Rivers or Sea without Defences**<br>Flood Plain Type: Fluvial<br>Boundary Accuracy: As Supplied | A6SW (SW) | 0 | 1 | 455215 222840 |
| | **Flooding from Rivers or Sea without Defences**<br>Flood Plain Type: Fluvial<br>Boundary Accuracy: As Supplied | A6SW (SW) | 0 | 1 | 455220 222835 |
| | **Areas Benefiting from Flood Defences**<br>None | | | | |
| | **Flood Water Storage Areas**<br>None | | | | |
| | **Flood Defences**<br>None | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 3 | **Historical Landfill Sites**<br>Licence Holder: Not Supplied<br>Location: Bicester, Oxfordshire<br>Name: Gowell Farm<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD13573<br>First Input Date: Not Supplied<br>Last Input Date: Not Supplied<br>Specified Waste Type: Deposited Waste included Inert, Industrial, Commercial and Household Waste<br>EA Waste Ref: -9999<br>Regis Ref: Not Supplied<br>WRC Ref: 3100/0027<br>BGS Ref: Not Supplied<br>Other Ref: 13.6.5723, TP0230 | A12NE (E) | 0 | 1 | 456880 223813 |
| | **Local Authority Landfill Coverage**<br>Name: Cherwell District Council - Has supplied landfill data | | 0 | 2 | 462471 222097 |
| | **Local Authority Landfill Coverage**<br>Name: Oxfordshire County Council - Has supplied landfill data | | 0 | 6 | 462471 222097 |
| 4 | **Local Authority Recorded Landfill Sites**<br>Location: Gowell Farm, Bicester<br>Reference: 14<br>Authority: Cherwell District Council, Environmental Health Department<br>**Last Reported Status:** **Unknown**<br>Types of Waste: Ash, Glass, Brick, Pottery<br>Date of Closure: Not Supplied<br>Positional Accuracy: Positioned by the supplier<br>Boundary Quality: Good | A12NE (E) | 0 | 2 | 456879 223829 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 5 | **BGS Recorded Mineral Sites**<br>Site Name: King'S End Farm<br>Location: Chesterton, Oxford, Oxfordshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 57408<br>Type: Opencast<br>**Status: Ceased**<br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Jurassic<br>Geology: Cornbrash Formation<br>Commodity: Limestone<br>Positional Accuracy: Located by supplier to within 10m | A8SW (SE) | 68 | 3 | 456381 222717 |
| | **BGS 1:625,000 Solid Geology**<br>Description: Cornbrash | A2NW (SW) | 0 | 3 | 454963 222531 |
| | **Coal Mining Affected Areas**<br>In an area which may not be affected by coal mining | | | | |
| | **Potential for Collapsible Ground Stability Hazards**<br>No Hazard | | | | |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A10SW (W) | 0 | 3 | 455000 223499 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | A15NE (N) | 0 | 3 | 455975 224475 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | A15NE (N) | 0 | 3 | 456000 224450 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | A16NE (NE) | 0 | 3 | 456900 224350 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | A15NE (N) | 0 | 3 | 456050 224475 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A10SW (W) | 69 | 3 | 455000 223499 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | A6NW (SW) | 249 | 3 | 455000 222975 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A10NE (W) | 0 | 3 | 455275 223600 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A10NE (W) | 0 | 3 | 455275 223600 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A15SW (N) | 0 | 3 | 455650 224225 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A10SW (W) | 69 | 3 | 455000 223225 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A10SW (W) | 69 | 3 | 455000 223499 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A8NE (E) | 193 | 3 | 456850 223175 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A6NW (SW) | 228 | 3 | 454975 223025 |
| | **Potential for Landslide Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | A16NW (NE) | 0 | 3 | 456475 224425 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **Potential for Landslide Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | A16NW (NE) | 0 | 3 | 456500 224400 |
| | **Potential for Landslide Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | A16NW (NE) | 0 | 3 | 456525 224375 |
| | **Potential for Landslide Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | A16NW (NE) | 0 | 3 | 456550 224350 |
| | **Potential for Landslide Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | A16NE (NE) | 0 | 3 | 456675 224300 |
| | **Potential for Landslide Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A10SW (W) | 0 | 3 | 455000 223499 |
| | **Potential for Landslide Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A10SW (W) | 69 | 3 | 455000 223499 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A10SW (W) | 0 | 3 | 455000 223499 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | A15NE (N) | 0 | 3 | 455975 224475 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | A15NE (N) | 0 | 3 | 456000 224450 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | A16NE (NE) | 0 | 3 | 456900 224350 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | A15NE (N) | 0 | 3 | 456050 224475 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A10SW (W) | 69 | 3 | 455000 223499 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | A6NW (SW) | 249 | 3 | 455000 222975 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A10SW (W) | 0 | 3 | 455000 223499 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A15NE (N) | 0 | 3 | 455975 224475 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A15NE (N) | 0 | 3 | 456000 224450 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A15NE (N) | 0 | 3 | 456050 224475 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A16NE (NE) | 0 | 3 | 456900 224350 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A10SW (W) | 69 | 3 | 455000 223499 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A6NW (SW) | 249 | 3 | 455000 222975 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 3 and 5% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | A15NE (N) | 0 | 3 | 456000 224375 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is not in a radon affected area, as less than 1% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | A15NW (N) | 0 | 3 | 455725 224550 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | A15SW (N) | 0 | 3 | 455675 224150 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | A10NE (W) | 0 | 3 | 455350 223600 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is not in a radon affected area, as less than 1% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | A10NE (W) | 0 | 3 | 455350 223600 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: Basic radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | A15NE (N) | 0 | 3 | 456000 224375 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | A15NW (N) | 0 | 3 | 455725 224550 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | A15SW (N) | 0 | 3 | 455675 224150 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | A10NE (W) | 0 | 3 | 455350 223600 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | A10NE (W) | 0 | 3 | 455350 223600 |
| | **Shallow Mining Hazards**<br>No Hazard | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 6 | **Contemporary Trade Directory Entries**<br>Name: D Ricketts<br>Location: Howes Lane, Bicester, Oxfordshire, OX26 2UA<br>Classification: Commercial Vehicle Dealers<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A16SW (NE) | 0 | - | 456562 224139 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 7 | **Local Nature Reserves**<br>Name: Bure Park<br>Multiple Area: N<br>Area (m2): 83957.83<br>Source: Natural England<br>Designation Date: 5th December 2005 | (E) | 53 | 4 | 457486<br>223771 |
| 8 | **Nitrate Vulnerable Zones**<br>Name: Not Supplied<br>Description: Surface Water - Designated 2006<br>Source: Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | (W) | 0 | 5 | 453163<br>223499 |
| 9 | **Sites of Special Scientific Interest**<br>Name: Ardley Cutting & Quarry<br>Multiple Areas: N<br>Total Area (m2): 401251.72<br>Source: Natural England<br>Reference: 1000903<br>Designation Details: Geological Conservation Review<br>Designation Date: 12th May 1988<br>Date Type: Notified<br>Designation Details: Local Wildlife Trust Reserve<br>Designation Date: 12th May 1988<br>Date Type: Notified | (N) | 407 | 4 | 455898<br>224997 |

| Agency & Hydrological | Version | Update Cycle |
|---|---|---|
| **Contaminated Land Register Entries and Notices**<br>Cherwell District Council - Environmental Health Department | February 2010 | Annual Rolling Update |
| **Discharge Consents**<br>Environment Agency - Thames Region | April 2010 | Quarterly |
| **Enforcement and Prohibition Notices**<br>Environment Agency - Thames Region | May 2010 | Quarterly |
| **Integrated Pollution Controls**<br>Environment Agency - Thames Region | October 2008 | Not Applicable |
| **Integrated Pollution Prevention And Control**<br>Environment Agency - Thames Region | April 2010 | Quarterly |
| **Local Authority Integrated Pollution Prevention And Control**<br>Cherwell District Council - Environmental Health Department | April 2009 | Annual Rolling Update |
| **Local Authority Pollution Prevention and Controls**<br>Cherwell District Council - Environmental Health Department | April 2009 | Annual Rolling Update |
| **Local Authority Pollution Prevention and Control Enforcements**<br>Cherwell District Council - Environmental Health Department | April 2009 | Annual Rolling Update |
| **Nearest Surface Water Feature**<br>Ordnance Survey | February 2010 | Quarterly |
| **Pollution Incidents to Controlled Waters**<br>Environment Agency - Thames Region | September 1999 | Not Applicable |
| **Prosecutions Relating to Authorised Processes**<br>Environment Agency - Thames Region | March 2010 | Monthly |
| **Prosecutions Relating to Controlled Waters**<br>Environment Agency - Thames Region | May 2010 | Monthly |
| **Registered Radioactive Substances**<br>Environment Agency - Thames Region | April 2010 | Quarterly |
| **River Quality**<br>Environment Agency - Head Office | November 2001 | Not Applicable |
| **River Quality Biology Sampling Points**<br>Environment Agency - Head Office | January 2010 | Annually |
| **River Quality Chemistry Sampling Points**<br>Environment Agency - Head Office | January 2010 | Annually |
| **Substantiated Pollution Incident Register**<br>Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Water Abstractions**<br>Environment Agency - Thames Region | April 2010 | Quarterly |
| **Water Industry Act Referrals**<br>Environment Agency - Thames Region | January 2010 | Quarterly |
| **Groundwater Vulnerability**<br>Environment Agency - Head Office | January 1999 | Not Applicable |
| **Drift Deposits**<br>Environment Agency - Head Office | January 1999 | Not Applicable |
| **Source Protection Zones**<br>Environment Agency - Head Office | April 2010 | Quarterly |
| **Extreme Flooding from Rivers or Sea without Defences**<br>Environment Agency - Head Office | March 2010 | Quarterly |
| **Flooding from Rivers or Sea without Defences**<br>Environment Agency - Head Office | March 2010 | Quarterly |
| **Areas Benefiting from Flood Defences**<br>Environment Agency - Head Office | March 2010 | Quarterly |

| Agency & Hydrological | Version | Update Cycle |
|---|---|---|
| **Flood Water Storage Areas** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |
| **Flood Defences** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |
| **Waste** | **Version** | **Update Cycle** |
| **BGS Recorded Landfill Sites** | | |
| British Geological Survey - National Geoscience Information Service | June 1996 | Not Applicable |
| **Historical Landfill Sites** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Integrated Pollution Control Registered Waste Sites** | | |
| Environment Agency - Thames Region | October 2008 | Not Applicable |
| **Licensed Waste Management Facilities (Landfill Boundaries)** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Licensed Waste Management Facilities (Locations)** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Local Authority Landfill Coverage** | | |
| Cherwell District Council - Environmental Health Department | May 2000 | Not Applicable |
| Oxfordshire County Council | May 2000 | Not Applicable |
| **Local Authority Recorded Landfill Sites** | | |
| Cherwell District Council - Environmental Health Department | May 2000 | Not Applicable |
| Oxfordshire County Council | May 2000 | Not Applicable |
| **Registered Landfill Sites** | | |
| Environment Agency - Thames Region - West Area | March 2003 | Not Applicable |
| **Registered Waste Transfer Sites** | | |
| Environment Agency - Thames Region - West Area | March 2003 | Not Applicable |
| **Registered Waste Treatment or Disposal Sites** | | |
| Environment Agency - Thames Region - West Area | March 2003 | Not Applicable |
| **Hazardous Substances** | **Version** | **Update Cycle** |
| **Control of Major Accident Hazards Sites (COMAH)** | | |
| Health and Safety Executive | May 2010 | Bi-Annually |
| **Explosive Sites** | | |
| Health and Safety Executive | January 2009 | Bi-Annually |
| **Notification of Installations Handling Hazardous Substances (NIHHS)** | | |
| Health and Safety Executive | November 2000 | Not Applicable |
| **Planning Hazardous Substance Enforcements** | | |
| Cherwell District Council | July 2009 | Annual Rolling Update |
| Oxfordshire County Council | October 2009 | Annual Rolling Update |
| **Planning Hazardous Substance Consents** | | |
| Cherwell District Council | July 2009 | Annual Rolling Update |
| Oxfordshire County Council | October 2009 | Annual Rolling Update |

| Geological | Version | Update Cycle |
|---|---|---|
| **BGS Recorded Mineral Sites**<br>British Geological Survey - National Geoscience Information Service | April 2010 | Bi-Annually |
| **BGS 1:625,000 Solid Geology**<br>British Geological Survey - National Geoscience Information Service | August 1996 | Not Applicable |
| **Brine Compensation Area**<br>Cheshire Brine Subsidence Compensation Board | November 2002 | Not Applicable |
| **Coal Mining Affected Areas**<br>The Coal Authority - Mining Report Service | January 2006 | As notified |
| **Mining Instability**<br>Ove Arup & Partners | October 2000 | Not Applicable |
| **Natural and Mining Cavities**<br>Peter Brett Associates | November 2009 | Bi-Annually |
| **Potential for Collapsible Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Compressible Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Ground Dissolution Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Landslide Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Running Sand Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Radon Potential - Radon Affected Areas**<br>British Geological Survey - National Geoscience Information Service | May 2007 | As notified |
| **Radon Potential - Radon Protection Measures**<br>British Geological Survey - National Geoscience Information Service | May 2007 | As notified |
| **Shallow Mining Hazards**<br>British Geological Survey - National Geoscience Information Service | August 2002 | Not Applicable |
| **Industrial Land Use** | **Version** | **Update Cycle** |
| **Contemporary Trade Directory Entries**<br>Thomson Directories | March 2010 | Quarterly |
| **Fuel Station Entries**<br>Catalist Ltd - Experian Catalist | February 2010 | Quarterly |

| Sensitive Land Use | Version | Update Cycle |
|---|---|---|
| **Areas of Adopted Green Belt**<br>Cherwell District Council | March 2010 | As notified |
| **Areas of Unadopted Green Belt**<br>Cherwell District Council | March 2010 | As notified |
| **Areas of Outstanding Natural Beauty**<br>Natural England | December 2009 | Bi-Annually |
| **Environmentally Sensitive Areas**<br>Natural England | December 2009 | Annually |
| **Forest Parks**<br>Forestry Commission | April 1997 | Not Applicable |
| **Local Nature Reserves**<br>Natural England | December 2009 | Bi-Annually |
| **Marine Nature Reserves**<br>Natural England | September 2009 | Bi-Annually |
| **National Nature Reserves**<br>Natural England | December 2009 | Bi-Annually |
| **National Parks**<br>Natural England | December 2009 | Bi-Annually |
| **Nitrate Sensitive Areas**<br>Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | December 2009 | Not Applicable |
| **Nitrate Vulnerable Zones**<br>Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | February 2009 | Annually |
| **Ramsar Sites**<br>Natural England | December 2009 | Bi-Annually |
| **Sites of Special Scientific Interest**<br>Natural England | December 2009 | Bi-Annually |
| **Special Areas of Conservation**<br>Natural England | December 2009 | Bi-Annually |
| **Special Protection Areas**<br>Natural England | December 2009 | Bi-Annually |

# Data Suppliers

A selection of organisations who provide data within this report

| Data Supplier | Data Supplier Logo |
|---|---|
| Ordnance Survey | |
| Environment Agency | |
| Scottish Environment Protection Agency | |
| The Coal Authority | |
| British Geological Survey | |
| Centre for Ecology and Hydrology | |
| Countryside Council for Wales | |
| Scottish Natural Heritage | |
| Natural England | |
| Health Protection Agency | |
| Ove Arup | |
| Peter Brett Associates | |

# Useful Contacts

| Contact | Name and Address | Contact Details |
|---|---|---|
| 1 | **Environment Agency - National Customer Contact Centre (NCCC)**<br>PO Box 544, Templeborough, Rotherham, S60 1BY | Telephone: 08708 506 506<br>Email: enquiries@environment-agency.gov.uk |
| 2 | **Cherwell District Council - Environmental Health Department**<br>Bodicote House, Bodicote, Banbury, Oxfordshire, OX15 4AA | Telephone: 01295 252535 extn 4511<br>Fax: 01295 270028<br>Website: www.cherwell-dc.gov.uk |
| 3 | **British Geological Survey - Enquiry Service**<br>British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG | Telephone: 0115 936 3143<br>Fax: 0115 936 3276<br>Email: enquiries@bgs.ac.uk<br>Website: www.bgs.ac.uk |
| 4 | **Natural England**<br>Northminster House, Northminster Road, Peterborough, Cambridgeshire, PE1 1UA | Telephone: 0845 600 3078<br>Fax: 01733 455103<br>Email: enquiries@naturalengland.org.uk<br>Website: www.naturalengland.org.uk |
| 5 | **Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)**<br>Government Buildings, Otley Road, Lawnswood, Leeds, West Yorkshire, LS16 5QT | Telephone: 0113 2613333<br>Fax: 0113 230 0879 |
| 6 | **Oxfordshire County Council**<br>County Hall, New Road, Oxford, Oxfordshire, OX1 1ND | Telephone: 01865 792422<br>Fax: 01865 810106<br>Email: environmental.services@oxfordshire.gov.uk<br>Website: www.oxfordshire.gov.uk |
| - | **Health Protection Agency - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards**<br>Chilton, Didcot, Oxfordshire, OX11 0RQ | Telephone: 01235 822622<br>Fax: 01235 833891<br>Email: radon@hpa.org.uk<br>Website: www.hpa.org.uk |
| - | **Landmark Information Group Limited**<br>The Smith Centre, Henley On Thames, Oxfordshire, RG9 6AB | Telephone: 0844 844 9952<br>Fax: 0844 844 9951<br>Email: customerservices@landmarkinfo.co.uk<br>Website: www.landmarkinfo.co.uk |

Please note that the Environment Agency / SEPA have a charging policy in place for enquiries.

# Envirocheck® Report:

## Datasheet

### Order Details:

**Order Number:**
31544761_1_1

**Customer Reference:**
UA001881

**National Grid Reference:**
457570, 224010

**Slice:**
B

**Site Area (Ha):**
395.55

**Search Buffer (m):**
500

### Site Details:

Site at
Bicester
Oxfordshire

### Client Details:

Mr D Thomas
Hyder Consulting Ltd
HCL House
St. Mellons Business Park
St Mellons
Cardiff
CF3 0EY

# Contents



**Introduction**

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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**Ove Arup Copyright Notice**



**Peter Brett Associates Copyright Notice**



**Radon Potential dataset Copyright Notice**



**Report Version v47.0**

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# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m (*up to 1000m) |
|---|---|---|---|---|
| **Agency & Hydrological** | | | | |
| Contaminated Land Register Entries and Notices | | | | |
| Discharge Consents | pg 1 | 2 | | |
| Enforcement and Prohibition Notices | | | | |
| Integrated Pollution Controls | | | | |
| Integrated Pollution Prevention And Control | | | | |
| Local Authority Integrated Pollution Prevention And Control | | | | |
| Local Authority Pollution Prevention and Controls | | | | |
| Local Authority Pollution Prevention and Control Enforcements | | | | |
| Nearest Surface Water Feature | pg 1 | Yes | | |
| Pollution Incidents to Controlled Waters | pg 1 | | | 1 |
| Prosecutions Relating to Authorised Processes | | | | |
| Prosecutions Relating to Controlled Waters | | | | |
| Registered Radioactive Substances | | | | |
| River Quality | | | | |
| River Quality Biology Sampling Points | | | | |
| River Quality Chemistry Sampling Points | | | | |
| Substantiated Pollution Incident Register | | | | |
| Water Abstractions | pg 1 | 1 | | |
| Water Industry Act Referrals | | | | |
| Groundwater Vulnerability | pg 2 | Yes | n/a | n/a |
| Source Protection Zones | | | | |
| Extreme Flooding from Rivers or Sea without Defences | pg 2 | Yes | | n/a |
| Flooding from Rivers or Sea without Defences | pg 2 | Yes | | n/a |
| Areas Benefiting from Flood Defences | | | | n/a |
| Flood Water Storage Areas | | | | n/a |
| Flood Defences | | | | n/a |
| **Waste** | | | | |
| BGS Recorded Landfill Sites | | | | |
| Historical Landfill Sites | pg 3 | 1 | | |
| Integrated Pollution Control Registered Waste Sites | | | | |
| Licensed Waste Management Facilities (Landfill Boundaries) | | | | |
| Licensed Waste Management Facilities (Locations) | | | | |
| Local Authority Recorded Landfill Sites | pg 3 | 1 | | |
| Registered Landfill Sites | | | | |
| Registered Waste Transfer Sites | | | | |
| Registered Waste Treatment or Disposal Sites | | | | |

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# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m (*up to 1000m) |
|---|---|---|---|---|
| **Hazardous Substances** | | | | |
| Control of Major Accident Hazards Sites (COMAH) | | | | |
| Explosive Sites | | | | |
| Notification of Installations Handling Hazardous Substances (NIHHS) | | | | |
| Planning Hazardous Substance Consents | | | | |
| Planning Hazardous Substance Enforcements | | | | |
| **Geological** | | | | |
| BGS Recorded Mineral Sites | pg 4 | 1 | | |
| BGS 1:625,000 Solid Geology | pg 4 | Yes | n/a | n/a |
| Brine Compensation Area | | | n/a | n/a |
| Coal Mining Affected Areas | | | n/a | n/a |
| Mining Instability | | | n/a | n/a |
| Natural and Mining Cavities | | | | |
| Potential for Collapsible Ground Stability Hazards | | | | n/a |
| Potential for Compressible Ground Stability Hazards | pg 4 | Yes | | n/a |
| Potential for Ground Dissolution Stability Hazards | pg 4 | Yes | | n/a |
| Potential for Landslide Ground Stability Hazards | pg 4 | Yes | | n/a |
| Potential for Running Sand Ground Stability Hazards | pg 4 | Yes | | n/a |
| Potential for Shrinking or Swelling Clay Ground Stability Hazards | pg 5 | Yes | | n/a |
| Radon Potential - Radon Affected Areas | pg 5 | Yes | n/a | n/a |
| Radon Potential - Radon Protection Measures | pg 5 | Yes | n/a | n/a |
| Shallow Mining Hazards | | | | n/a |
| **Industrial Land Use** | | | | |
| Contemporary Trade Directory Entries (50m) | pg 7 | 3 | 1 | n/a |
| Fuel Station Entries | | | | |

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m (*up to 1000m) |
|---|---|---|---|---|
| **Sensitive Land Use** | | | | |
| Areas of Adopted Green Belt | | | | |
| Areas of Unadopted Green Belt | | | | |
| Areas of Outstanding Natural Beauty | | | | |
| Environmentally Sensitive Areas | | | | |
| Forest Parks | | | | |
| Local Nature Reserves | pg 8 | | 1 | |
| Marine Nature Reserves | | | | |
| National Nature Reserves | | | | |
| National Parks | | | | |
| Nitrate Sensitive Areas | | | | |
| Nitrate Vulnerable Zones | pg 8 | 1 | | |
| Ramsar Sites | | | | |
| Sites of Special Scientific Interest | | | | |
| Special Areas of Conservation | | | | |
| Special Protection Areas | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 1 | **Discharge Consents**<br>Operator: Messrs Wej & Tmf Malins<br>Property Type: Domestic Property (Single)<br>Location: Lords Farm Lords Lane Bicester Oxfordshire Ox27 7hl<br>Authority: Environment Agency, Thames Region<br>Catchment Area: Not Supplied<br>Reference: Cawm.0876<br>Permit Version: 1<br>Effective Date: 16th September 2004<br>Issued Date: 16th November 2004<br>Revocation Date: Not Supplied<br>Discharge Type: Trade Effluent Discharge-Site Drainage<br>Discharge Environment: Freshwater Stream/River<br>Receiving Water: Trib Of The Town Brook<br>**Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)**<br>Positional Accuracy: Located by supplier to within 10m | B13SE (N) | 0 | 1 | 457510 224170 |
| 1 | **Discharge Consents**<br>Operator: Messrs Wej & Tmf Malins<br>Property Type: Domestic Property (Single)<br>Location: Lords Farm Lords Lane Bicester Oxfordshire Ox27 7hl<br>Authority: Environment Agency, Thames Region<br>Catchment Area: Not Supplied<br>Reference: Cawm.0877<br>Permit Version: 1<br>Effective Date: 16th September 2004<br>Issued Date: 16th November 2004<br>Revocation Date: Not Supplied<br>Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company<br>Discharge Environment: Freshwater Stream/River<br>Receiving Water: Trib Of The Town Brook<br>**Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)**<br>Positional Accuracy: Located by supplier to within 10m | B13SE (N) | 0 | 1 | 457520 224180 |
| | **Nearest Surface Water Feature** | B13SE (N) | 0 | - | 457583 224208 |
| 2 | **Pollution Incidents to Controlled Waters**<br>Property Type: Not Given<br>Location: BICESTER<br>Authority: Environment Agency, Thames Region<br>Pollutant: General<br>Note: Not Supplied<br>Incident Date: 16th December 1997<br>Incident Reference: 37374<br>Catchment Area: Not Given<br>Receiving Water: Not Given<br>Cause of Incident: Not Given<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m | B10NW (SE) | 405 | 1 | 457700 223800 |
| 3 | **Water Abstractions**<br>Operator: W V Malins & Son<br>Licence Number: 28/39/14/0348<br>Permit Version: 1<br>Location: Lords Farm - Borehole<br>Authority: Environment Agency, Thames Region<br>Abstraction: General Farming And Domestic<br>Abstraction Type: Water may be abstracted from a single point<br>Source: Groundwater<br>Daily Rate (m3): Not Supplied<br>Yearly Rate (m3): Not Supplied<br>Details: Underground Strata At Lords Farm, Bicester.<br>Authorised Start: 01 January<br>Authorised End: 31 December<br>Permit Start Date: 1st April 2008<br>Permit End Date: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m | B13SE (NW) | 0 | 1 | 457400 224200 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **Groundwater Vulnerability**<br>Geological Classification: Minor Aquifer (Variably permeable) - These can be fractured or potentially fractured rocks, which do not have a high primary permeability, or other formations of variable permeability including unconsolidated deposits. Although not producing large quantities of water for abstraction, they are important for local supplies and in supplying base flow to rivers<br>Soil Classification: Soils of High Leaching Potential (H3)- Coarse textured or moderately shallow soils which readily transmit non-absorbed pollutants and liquid discharges but which have some ability to attenuate absorbed pollutants because of their large clay or organic matter contents<br>Map Sheet: Sheet 30 Northern Cotswolds<br>Scale: 1:100,000 | B9NE (SW) | 0 | 1 | 457432 223751 |
| | **Groundwater Vulnerability**<br>Geological Classification: Minor Aquifer (Variably permeable) - These can be fractured or potentially fractured rocks, which do not have a high primary permeability, or other formations of variable permeability including unconsolidated deposits. Although not producing large quantities of water for abstraction, they are important for local supplies and in supplying base flow to rivers<br>Soil Classification: Soils of High Leaching Potential (U) - Soil information for restored mineral workings and urban areas is based on fewer observations than elsewhere. A worst case vulnerability classification (H) assumed, until proved otherwise<br>Map Sheet: Sheet 30 Northern Cotswolds<br>Scale: 1:100,000 | B9NE (SW) | 0 | 1 | 457432 223751 |
| | **Drift Deposits**<br>None | | | | |
| | **Extreme Flooding from Rivers or Sea without Defences**<br>Flood Plain Type: Fluvial<br>Boundary Accuracy: As Supplied | B14SW (E) | 0 | 1 | 457625 224025 |
| | **Flooding from Rivers or Sea without Defences**<br>Flood Plain Type: Fluvial<br>Boundary Accuracy: As Supplied | B14SW (NE) | 0 | 1 | 457625 224035 |
| | **Areas Benefiting from Flood Defences**<br>None | | | | |
| | **Flood Water Storage Areas**<br>None | | | | |
| | **Flood Defences**<br>None | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 4 | **Historical Landfill Sites**<br>Licence Holder: Not Supplied<br>Location: Bicester, Oxfordshire<br>Name: Gowell Farm<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD13573<br>First Input Date: Not Supplied<br>Last Input Date: Not Supplied<br>Specified Waste Type: Deposited Waste included Inert, Industrial, Commercial and Household Waste<br>EA Waste Ref: -9999<br>Regis Ref: Not Supplied<br>WRC Ref: 3100/0027<br>BGS Ref: Not Supplied<br>Other Ref: 13.6.5723, TP0230 | B9NW (W) | 0 | 1 | 457155 223885 |
| | **Local Authority Landfill Coverage**<br>Name: Cherwell District Council - Has supplied landfill data | | 0 | 2 | 462510 222289 |
| | **Local Authority Landfill Coverage**<br>Name: Oxfordshire County Council - Has supplied landfill data | | 0 | 6 | 462510 222289 |
| 5 | **Local Authority Recorded Landfill Sites**<br>Location: Gowell Farm, Bicester<br>Reference: 14<br>Authority: Cherwell District Council, Environmental Health Department<br>**Last Reported Status:** **Unknown**<br>Types of Waste: Ash, Glass, Brick, Pottery<br>Date of Closure: Not Supplied<br>Positional Accuracy: Positioned by the supplier<br>Boundary Quality: Good | B9NW (W) | 0 | 2 | 457154 223881 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 6 | **BGS Recorded Mineral Sites**<br>Site Name: Gowell Farm<br>Location: Bicester, Oxford, Oxfordshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 57413<br>Type: Opencast<br>**Status: Ceased**<br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Jurassic<br>Geology: Cornbrash Formation<br>Commodity: Limestone<br>Positional Accuracy: Located by supplier to within 10m | B9NW (W) | 0 | 3 | 456996 223880 |
| | **BGS 1:625,000 Solid Geology**<br>Description: Cornbrash | (NW) | 0 | 3 | 456217 225693 |
| | **Coal Mining Affected Areas**<br>In an area which may not be affected by coal mining | | | | |
| | **Potential for Collapsible Ground Stability Hazards**<br>No Hazard | | | | |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | B14SW (E) | 0 | 3 | 457625 224012 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | B14NW (N) | 0 | 3 | 457650 224425 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | B13NW (NW) | 0 | 3 | 457275 224350 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | B13NE (NW) | 0 | 3 | 457325 224325 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | B14SW (E) | 0 | 3 | 457625 224012 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | B14NW (N) | 0 | 3 | 457675 224550 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | B13SE (N) | 0 | 3 | 457575 224025 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | B13SE (N) | 0 | 3 | 457575 224025 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | B14SW (E) | 0 | 3 | 457700 224012 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | (SW) | 193 | 3 | 456900 223175 |
| | **Potential for Landslide Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | (W) | 0 | 3 | 456700 224300 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | B14SW (E) | 0 | 3 | 457625 224012 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | B14NW (N) | 0 | 3 | 457675 224550 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | B14NW (N) | 0 | 3 | 457650 224425 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | B13NW (NW) | 0 | 3 | 457275 224350 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | B13NE (NW) | 0 | 3 | 457325 224325 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | B14SW (E) | 0 | 3 | 457625 224012 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | B14SW (E) | 0 | 3 | 457625 224012 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | B14NW (N) | 0 | 3 | 457675 224550 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | B14NW (N) | 0 | 3 | 457650 224425 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | B13NE (NW) | 0 | 3 | 457325 224325 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | B14SW (E) | 0 | 3 | 457625 224012 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | B13NW (NW) | 0 | 3 | 457275 224350 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 3 and 5% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | B13SE (W) | 0 | 3 | 457550 224012 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | B14SW (E) | 0 | 3 | 457725 224075 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is not in a radon affected area, as less than 1% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | B13NE (N) | 0 | 3 | 457500 224375 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | B13NE (N) | 0 | 3 | 457550 224350 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | B13SE (W) | 0 | 3 | 457550 224012 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | B13NE (N) | 0 | 3 | 457475 224375 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is not in a radon affected area, as less than 1% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | B13SE (W) | 0 | 3 | 457525 224000 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: Basic radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | B13SE (W) | 0 | 3 | 457550 224012 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | B14SW (E) | 0 | 3 | 457725 224075 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | B13NE (N) | 0 | 3 | 457500 224375 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | B13NE (N) | 0 | 3 | 457550 224350 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | B13SE (W) | 0 | 3 | 457550 224012 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | B13NE (N) | 0 | 3 | 457475 224375 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | B13SE (W) | 0 | 3 | 457525 224000 |
| | **Shallow Mining Hazards**<br>No Hazard | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 7 | **Contemporary Trade Directory Entries**<br>Name: Rationel Windows (Uk) Ltd<br>Location: Unit 7, Avonbury Business Park, Howes Lane, Bicester, Oxfordshire, OX26 2UA<br>Classification: Window Frame Manufacturers<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | B9NW (W) | 0 | - | 457044 223845 |
| 8 | **Contemporary Trade Directory Entries**<br>Name: Ravensburger Ltd<br>Location: Unit 1, Avonbury Business Park, Howes Lane, Bicester, Oxfordshire, OX26 2UB<br>Classification: Toys, Games & Sporting Goods - Manufacturers<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | B9NW (W) | 0 | - | 457107 223855 |
| 9 | **Contemporary Trade Directory Entries**<br>Name: Turney-Agriforce<br>Location: Bicester, Oxfordshire, OX27 7HL<br>Classification: Agricultural Engineers<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | B13SE (W) | 0 | - | 457382 224060 |
| 10 | **Contemporary Trade Directory Entries**<br>Name: Microm Uk Ltd<br>Location: Unit 6,Avonbury Business Park,Howes La, Bicester, Oxfordshire, OX26 2UA<br>Classification: Medical Instruments - Manufacturers<br>**Status: Active**<br>Positional Accuracy: Manually positioned to the road within the address or location | B9NW (SW) | 1 | - | 457046 223733 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 11 | **Local Nature Reserves**<br>Name: Bure Park<br>Multiple Area: N<br>Area (m2): 83957.83<br>Source: Natural England<br>Designation Date: 5th December 2005 | B13SE (E) | 53 | 4 | 457610 224017 |
| 12 | **Nitrate Vulnerable Zones**<br>Name: Not Supplied<br>Description: Surface Water - Designated 2006<br>Source: Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | (N) | 0 | 5 | 456600 227750 |

| Agency & Hydrological | Version | Update Cycle |
|---|---|---|
| **Contaminated Land Register Entries and Notices**<br>Cherwell District Council - Environmental Health Department | February 2010 | Annual Rolling Update |
| **Discharge Consents**<br>Environment Agency - Thames Region | April 2010 | Quarterly |
| **Enforcement and Prohibition Notices**<br>Environment Agency - Thames Region | May 2010 | Quarterly |
| **Integrated Pollution Controls**<br>Environment Agency - Thames Region | October 2008 | Not Applicable |
| **Integrated Pollution Prevention And Control**<br>Environment Agency - Thames Region | April 2010 | Quarterly |
| **Local Authority Integrated Pollution Prevention And Control**<br>Cherwell District Council - Environmental Health Department | April 2009 | Annual Rolling Update |
| **Local Authority Pollution Prevention and Controls**<br>Cherwell District Council - Environmental Health Department | April 2009 | Annual Rolling Update |
| **Local Authority Pollution Prevention and Control Enforcements**<br>Cherwell District Council - Environmental Health Department | April 2009 | Annual Rolling Update |
| **Nearest Surface Water Feature**<br>Ordnance Survey | February 2010 | Quarterly |
| **Pollution Incidents to Controlled Waters**<br>Environment Agency - Thames Region | September 1999 | Not Applicable |
| **Prosecutions Relating to Authorised Processes**<br>Environment Agency - Thames Region | March 2010 | Monthly |
| **Prosecutions Relating to Controlled Waters**<br>Environment Agency - Thames Region | May 2010 | Monthly |
| **Registered Radioactive Substances**<br>Environment Agency - Thames Region | April 2010 | Quarterly |
| **River Quality**<br>Environment Agency - Head Office | November 2001 | Not Applicable |
| **River Quality Biology Sampling Points**<br>Environment Agency - Head Office | January 2010 | Annually |
| **River Quality Chemistry Sampling Points**<br>Environment Agency - Head Office | January 2010 | Annually |
| **Substantiated Pollution Incident Register**<br>Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Water Abstractions**<br>Environment Agency - Thames Region | April 2010 | Quarterly |
| **Water Industry Act Referrals**<br>Environment Agency - Thames Region | January 2010 | Quarterly |
| **Groundwater Vulnerability**<br>Environment Agency - Head Office | January 1999 | Not Applicable |
| **Drift Deposits**<br>Environment Agency - Head Office | January 1999 | Not Applicable |
| **Source Protection Zones**<br>Environment Agency - Head Office | April 2010 | Quarterly |
| **Extreme Flooding from Rivers or Sea without Defences**<br>Environment Agency - Head Office | March 2010 | Quarterly |
| **Flooding from Rivers or Sea without Defences**<br>Environment Agency - Head Office | March 2010 | Quarterly |
| **Areas Benefiting from Flood Defences**<br>Environment Agency - Head Office | March 2010 | Quarterly |

| Agency & Hydrological | Version | Update Cycle |
|---|---|---|
| **Flood Water Storage Areas** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |
| **Flood Defences** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |
| **Waste** | **Version** | **Update Cycle** |
| **BGS Recorded Landfill Sites** | | |
| British Geological Survey - National Geoscience Information Service | June 1996 | Not Applicable |
| **Historical Landfill Sites** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Integrated Pollution Control Registered Waste Sites** | | |
| Environment Agency - Thames Region | October 2008 | Not Applicable |
| **Licensed Waste Management Facilities (Landfill Boundaries)** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Licensed Waste Management Facilities (Locations)** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Local Authority Landfill Coverage** | | |
| Cherwell District Council - Environmental Health Department | May 2000 | Not Applicable |
| Oxfordshire County Council | May 2000 | Not Applicable |
| **Local Authority Recorded Landfill Sites** | | |
| Cherwell District Council - Environmental Health Department | May 2000 | Not Applicable |
| Oxfordshire County Council | May 2000 | Not Applicable |
| **Registered Landfill Sites** | | |
| Environment Agency - Thames Region - West Area | March 2003 | Not Applicable |
| **Registered Waste Transfer Sites** | | |
| Environment Agency - Thames Region - West Area | March 2003 | Not Applicable |
| **Registered Waste Treatment or Disposal Sites** | | |
| Environment Agency - Thames Region - West Area | March 2003 | Not Applicable |
| **Hazardous Substances** | **Version** | **Update Cycle** |
| **Control of Major Accident Hazards Sites (COMAH)** | | |
| Health and Safety Executive | May 2010 | Bi-Annually |
| **Explosive Sites** | | |
| Health and Safety Executive | January 2009 | Bi-Annually |
| **Notification of Installations Handling Hazardous Substances (NIHHS)** | | |
| Health and Safety Executive | November 2000 | Not Applicable |
| **Planning Hazardous Substance Enforcements** | | |
| Cherwell District Council | July 2009 | Annual Rolling Update |
| Oxfordshire County Council | October 2009 | Annual Rolling Update |
| **Planning Hazardous Substance Consents** | | |
| Cherwell District Council | July 2009 | Annual Rolling Update |
| Oxfordshire County Council | October 2009 | Annual Rolling Update |

| Geological | Version | Update Cycle |
|---|---|---|
| **BGS Recorded Mineral Sites**<br>British Geological Survey - National Geoscience Information Service | April 2010 | Bi-Annually |
| **BGS 1:625,000 Solid Geology**<br>British Geological Survey - National Geoscience Information Service | August 1996 | Not Applicable |
| **Brine Compensation Area**<br>Cheshire Brine Subsidence Compensation Board | November 2002 | Not Applicable |
| **Coal Mining Affected Areas**<br>The Coal Authority - Mining Report Service | January 2006 | As notified |
| **Mining Instability**<br>Ove Arup & Partners | October 2000 | Not Applicable |
| **Natural and Mining Cavities**<br>Peter Brett Associates | November 2009 | Bi-Annually |
| **Potential for Collapsible Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Compressible Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Ground Dissolution Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Landslide Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Running Sand Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Radon Potential - Radon Affected Areas**<br>British Geological Survey - National Geoscience Information Service | May 2007 | As notified |
| **Radon Potential - Radon Protection Measures**<br>British Geological Survey - National Geoscience Information Service | May 2007 | As notified |
| **Shallow Mining Hazards**<br>British Geological Survey - National Geoscience Information Service | August 2002 | Not Applicable |
| **Industrial Land Use** | **Version** | **Update Cycle** |
| **Contemporary Trade Directory Entries**<br>Thomson Directories | March 2010 | Quarterly |
| **Fuel Station Entries**<br>Catalist Ltd - Experian Catalist | February 2010 | Quarterly |

| Sensitive Land Use | Version | Update Cycle |
|---|---|---|
| **Areas of Adopted Green Belt**<br>Cherwell District Council | March 2010 | As notified |
| **Areas of Unadopted Green Belt**<br>Cherwell District Council | March 2010 | As notified |
| **Areas of Outstanding Natural Beauty**<br>Natural England | December 2009 | Bi-Annually |
| **Environmentally Sensitive Areas**<br>Natural England | December 2009 | Annually |
| **Forest Parks**<br>Forestry Commission | April 1997 | Not Applicable |
| **Local Nature Reserves**<br>Natural England | December 2009 | Bi-Annually |
| **Marine Nature Reserves**<br>Natural England | September 2009 | Bi-Annually |
| **National Nature Reserves**<br>Natural England | December 2009 | Bi-Annually |
| **National Parks**<br>Natural England | December 2009 | Bi-Annually |
| **Nitrate Sensitive Areas**<br>Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | December 2009 | Not Applicable |
| **Nitrate Vulnerable Zones**<br>Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | February 2009 | Annually |
| **Ramsar Sites**<br>Natural England | December 2009 | Bi-Annually |
| **Sites of Special Scientific Interest**<br>Natural England | December 2009 | Bi-Annually |
| **Special Areas of Conservation**<br>Natural England | December 2009 | Bi-Annually |
| **Special Protection Areas**<br>Natural England | December 2009 | Bi-Annually |

# Data Suppliers

A selection of organisations who provide data within this report

| Data Supplier | Data Supplier Logo |
|---|---|
| Ordnance Survey | |
| Environment Agency | |
| Scottish Environment Protection Agency | |
| The Coal Authority | |
| British Geological Survey | |
| Centre for Ecology and Hydrology | |
| Countryside Council for Wales | |
| Scottish Natural Heritage | |
| Natural England | |
| Health Protection Agency | |
| Ove Arup | |
| Peter Brett Associates | |

# Useful Contacts

| Contact | Name and Address | Contact Details |
|---|---|---|
| 1 | **Environment Agency - National Customer Contact Centre (NCCC)**<br>PO Box 544, Templeborough, Rotherham, S60 1BY | Telephone: 08708 506 506<br>Email: enquiries@environment-agency.gov.uk |
| 2 | **Cherwell District Council - Environmental Health Department**<br>Bodicote House, Bodicote, Banbury, Oxfordshire, OX15 4AA | Telephone: 01295 252535 extn 4511<br>Fax: 01295 270028<br>Website: www.cherwell-dc.gov.uk |
| 3 | **British Geological Survey - Enquiry Service**<br>British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG | Telephone: 0115 936 3143<br>Fax: 0115 936 3276<br>Email: enquiries@bgs.ac.uk<br>Website: www.bgs.ac.uk |
| 4 | **Natural England**<br>Northminster House, Northminster Road, Peterborough, Cambridgeshire, PE1 1UA | Telephone: 0845 600 3078<br>Fax: 01733 455103<br>Email: enquiries@naturalengland.org.uk<br>Website: www.naturalengland.org.uk |
| 5 | **Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)**<br>Government Buildings, Otley Road, Lawnswood, Leeds, West Yorkshire, LS16 5QT | Telephone: 0113 2613333<br>Fax: 0113 230 0879 |
| 6 | **Oxfordshire County Council**<br>County Hall, New Road, Oxford, Oxfordshire, OX1 1ND | Telephone: 01865 792422<br>Fax: 01865 810106<br>Email: environmental.services@oxfordshire.gov.uk<br>Website: www.oxfordshire.gov.uk |
| - | **Health Protection Agency - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards**<br>Chilton, Didcot, Oxfordshire, OX11 0RQ | Telephone: 01235 822622<br>Fax: 01235 833891<br>Email: radon@hpa.org.uk<br>Website: www.hpa.org.uk |
| - | **Landmark Information Group Limited**<br>The Smith Centre, Henley On Thames, Oxfordshire, RG9 6AB | Telephone: 0844 844 9952<br>Fax: 0844 844 9951<br>Email: customerservices@landmarkinfo.co.uk<br>Website: www.landmarkinfo.co.uk |

Please note that the Environment Agency / SEPA have a charging policy in place for enquiries.

# Envirocheck® Report:

## Datasheet

### Order Details:

**Order Number:**
31544761_1_1

**Customer Reference:**
UA001881

**National Grid Reference:**
456330, 224990

**Slice:**
C

**Site Area (Ha):**
395.55

**Search Buffer (m):**
500

### Site Details:

Site at
Bicester
Oxfordshire

### Client Details:

Mr D Thomas
Hyder Consulting Ltd
HCL House
St. Mellons Business Park
St Mellons
Cardiff
CF3 0EY

# Contents



**Introduction**

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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**Natural England Copyright Notice**



**Ove Arup Copyright Notice**



**Peter Brett Associates Copyright Notice**



**Radon Potential dataset Copyright Notice**



**Report Version v47.0**

Envirocheck®

# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m (*up to 1000m) |
|---|---|---|---|---|
| **Agency & Hydrological** | | | | |
| Contaminated Land Register Entries and Notices | | | | |
| Discharge Consents | | | | |
| Enforcement and Prohibition Notices | | | | |
| Integrated Pollution Controls | | | | |
| Integrated Pollution Prevention And Control | | | | |
| Local Authority Integrated Pollution Prevention And Control | | | | |
| Local Authority Pollution Prevention and Controls | | | | |
| Local Authority Pollution Prevention and Control Enforcements | | | | |
| Nearest Surface Water Feature | pg 1 | Yes | | |
| Pollution Incidents to Controlled Waters | | | | |
| Prosecutions Relating to Authorised Processes | | | | |
| Prosecutions Relating to Controlled Waters | | | | |
| Registered Radioactive Substances | | | | |
| River Quality | | | | |
| River Quality Biology Sampling Points | | | | |
| River Quality Chemistry Sampling Points | | | | |
| Substantiated Pollution Incident Register | | | | |
| Water Abstractions | | | | |
| Water Industry Act Referrals | | | | |
| Groundwater Vulnerability | pg 1 | Yes | n/a | n/a |
| Source Protection Zones | | | | |
| Extreme Flooding from Rivers or Sea without Defences | | | | n/a |
| Flooding from Rivers or Sea without Defences | | | | n/a |
| Areas Benefiting from Flood Defences | | | | n/a |
| Flood Water Storage Areas | | | | n/a |
| Flood Defences | | | | n/a |
| **Waste** | | | | |
| BGS Recorded Landfill Sites | | | | |
| Historical Landfill Sites | | | | |
| Integrated Pollution Control Registered Waste Sites | | | | |
| Licensed Waste Management Facilities (Landfill Boundaries) | | | | |
| Licensed Waste Management Facilities (Locations) | | | | |
| Local Authority Recorded Landfill Sites | | | | |
| Registered Landfill Sites | | | | |
| Registered Waste Transfer Sites | | | | |
| Registered Waste Treatment or Disposal Sites | | | | |

Envirocheck®

# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m (*up to 1000m) |
|---|---|---|---|---|
| **Hazardous Substances** | | | | |
| Control of Major Accident Hazards Sites (COMAH) | | | | |
| Explosive Sites | | | | |
| Notification of Installations Handling Hazardous Substances (NIHHS) | | | | |
| Planning Hazardous Substance Consents | | | | |
| Planning Hazardous Substance Enforcements | | | | |
| **Geological** | | | | |
| BGS Recorded Mineral Sites | | | | |
| BGS 1:625,000 Solid Geology | pg 3 | Yes | n/a | n/a |
| Brine Compensation Area | | | n/a | n/a |
| Coal Mining Affected Areas | | | n/a | n/a |
| Mining Instability | | | n/a | n/a |
| Natural and Mining Cavities | | | | |
| Potential for Collapsible Ground Stability Hazards | | | | n/a |
| Potential for Compressible Ground Stability Hazards | | | | n/a |
| Potential for Ground Dissolution Stability Hazards | pg 3 | Yes | | n/a |
| Potential for Landslide Ground Stability Hazards | pg 3 | Yes | | n/a |
| Potential for Running Sand Ground Stability Hazards | | | | n/a |
| Potential for Shrinking or Swelling Clay Ground Stability Hazards | | | | n/a |
| Radon Potential - Radon Affected Areas | pg 4 | Yes | n/a | n/a |
| Radon Potential - Radon Protection Measures | pg 4 | Yes | n/a | n/a |
| Shallow Mining Hazards | | | | n/a |
| **Industrial Land Use** | | | | |
| Contemporary Trade Directory Entries (50m) | | | | n/a |
| Fuel Station Entries | | | | |

# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m (*up to 1000m) |
|---|---|---|---|---|
| **Sensitive Land Use** | | | | |
| Areas of Adopted Green Belt | | | | |
| Areas of Unadopted Green Belt | | | | |
| Areas of Outstanding Natural Beauty | | | | |
| Environmentally Sensitive Areas | | | | |
| Forest Parks | | | | |
| Local Nature Reserves | pg 5 | | 1 | |
| Marine Nature Reserves | | | | |
| National Nature Reserves | | | | |
| National Parks | | | | |
| Nitrate Sensitive Areas | | | | |
| Nitrate Vulnerable Zones | pg 5 | 1 | | |
| Ramsar Sites | | | | |
| Sites of Special Scientific Interest | pg 5 | | | 1 |
| Special Areas of Conservation | | | | |
| Special Protection Areas | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **Nearest Surface Water Feature** | C4SE (SE) | 0 | - | 456801 224793 |
| | **Groundwater Vulnerability**<br>Geological Classification: Minor Aquifer (Variably permeable) - These can be fractured or potentially fractured rocks, which do not have a high primary permeability, or other formations of variable permeability including unconsolidated deposits. Although not producing large quantities of water for abstraction, they are important for local supplies and in supplying base flow to rivers<br>Soil Classification: Soils of High Leaching Potential (H3)- Coarse textured or moderately shallow soils which readily transmit non-absorbed pollutants and liquid discharges but which have some ability to attenuate absorbed pollutants because of their large clay or organic matter contents<br>Map Sheet: Sheet 30 Northern Cotswolds<br>Scale: 1:100,000 | C7NE (NW) | 0 | 1 | 455986 225635 |
| | **Groundwater Vulnerability**<br>Geological Classification: Minor Aquifer (Variably permeable) - These can be fractured or potentially fractured rocks, which do not have a high primary permeability, or other formations of variable permeability including unconsolidated deposits. Although not producing large quantities of water for abstraction, they are important for local supplies and in supplying base flow to rivers<br>Soil Classification: Soils of High Leaching Potential (U) - Soil information for restored mineral workings and urban areas is based on fewer observations than elsewhere. A worst case vulnerability classification (H) assumed, until proved otherwise<br>Map Sheet: Sheet 30 Northern Cotswolds<br>Scale: 1:100,000 | (SE) | 0 | 1 | 457083 223950 |
| | **Drift Deposits**<br>None | | | | |
| | **Extreme Flooding from Rivers or Sea without Defences**<br>None | | | | |
| | **Flooding from Rivers or Sea without Defences**<br>None | | | | |
| | **Areas Benefiting from Flood Defences**<br>None | | | | |
| | **Flood Water Storage Areas**<br>None | | | | |
| | **Flood Defences**<br>None | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **Local Authority Landfill Coverage**<br>Name: Cherwell District Council<br>- Has supplied landfill data | | 0 | 6 | 455303<br>231299 |
| | **Local Authority Landfill Coverage**<br>Name: Oxfordshire County Council<br>- Has supplied landfill data | | 0 | 5 | 455303<br>231299 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **BGS 1:625,000 Solid Geology**<br>Description: Cornbrash | C7SE (NW) | 0 | 2 | 455965 225521 |
| | **Coal Mining Affected Areas**<br>In an area which may not be affected by coal mining | | | | |
| | **Potential for Collapsible Ground Stability Hazards**<br>No Hazard | | | | |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | C3NW (W) | 0 | 2 | 455900 225000 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | (NE) | 0 | 2 | 456950 225300 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | C3SE (S) | 0 | 2 | 456200 224625 |
| | **Potential for Landslide Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Potential for Landslide Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 3 and 5% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | C4SW (S) | 0 | 2 | 456328 224575 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is not in a radon affected area, as less than 1% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | C3SE (S) | 0 | 2 | 456225 224700 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | C8SE (NE) | 0 | 2 | 456875 225275 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is not in a radon affected area, as less than 1% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: Basic radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | C4SW (S) | 0 | 2 | 456328 224575 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | C3SE (S) | 0 | 2 | 456225 224700 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | C8SE (NE) | 0 | 2 | 456875 225275 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | C4NW (N) | 0 | 2 | 456328 225000 |
| | **Shallow Mining Hazards**<br>No Hazard | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 1 | **Local Nature Reserves**<br>Name: Bure Park<br>Multiple Area: N<br>Area (m2): 83957.83<br>Source: Natural England<br>Designation Date: 5th December 2005 | (SE) | 53 | 3 | 457592<br>224148 |
| 2 | **Nitrate Vulnerable Zones**<br>Name: Not Supplied<br>Description: Surface Water - Designated 2006<br>Source: Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | (N) | 0 | 4 | 455900<br>227700 |
| 3 | **Sites of Special Scientific Interest**<br>Name: Ardley Cutting & Quarry<br>Multiple Areas: N<br>Total Area (m2): 401251.72<br>Source: Natural England<br>Reference: 1000903<br>Designation Details: Geological Conservation Review<br>Designation Date: 12th May 1988<br>Date Type: Notified<br>Designation Details: Local Wildlife Trust Reserve<br>Designation Date: 12th May 1988<br>Date Type: Notified | C3NE<br>(W) | 407 | 3 | 455933<br>224998 |

| Agency & Hydrological | Version | Update Cycle |
|---|---|---|
| **Contaminated Land Register Entries and Notices** | | |
| Cherwell District Council - Environmental Health Department | February 2010 | Annual Rolling Update |
| **Discharge Consents** | | |
| Environment Agency - Anglian Region | April 2010 | Quarterly |
| Environment Agency - Thames Region | April 2010 | Quarterly |
| **Enforcement and Prohibition Notices** | | |
| Environment Agency - Thames Region | May 2010 | Quarterly |
| **Integrated Pollution Controls** | | |
| Environment Agency - Thames Region | October 2008 | Not Applicable |
| **Integrated Pollution Prevention And Control** | | |
| Environment Agency - Thames Region | April 2010 | Quarterly |
| **Local Authority Integrated Pollution Prevention And Control** | | |
| Cherwell District Council - Environmental Health Department | April 2009 | Annual Rolling Update |
| **Local Authority Pollution Prevention and Controls** | | |
| Cherwell District Council - Environmental Health Department | April 2009 | Annual Rolling Update |
| **Local Authority Pollution Prevention and Control Enforcements** | | |
| Cherwell District Council - Environmental Health Department | April 2009 | Annual Rolling Update |
| **Nearest Surface Water Feature** | | |
| Ordnance Survey | February 2010 | Quarterly |
| **Pollution Incidents to Controlled Waters** | | |
| Environment Agency - Anglian Region | September 1999 | Not Applicable |
| Environment Agency - Thames Region | September 1999 | Not Applicable |
| **Prosecutions Relating to Authorised Processes** | | |
| Environment Agency - Thames Region | March 2010 | Monthly |
| **Prosecutions Relating to Controlled Waters** | | |
| Environment Agency - Thames Region | May 2010 | Monthly |
| **Registered Radioactive Substances** | | |
| Environment Agency - Thames Region | April 2010 | Quarterly |
| **River Quality** | | |
| Environment Agency - Head Office | November 2001 | Not Applicable |
| **River Quality Biology Sampling Points** | | |
| Environment Agency - Head Office | January 2010 | Annually |
| **River Quality Chemistry Sampling Points** | | |
| Environment Agency - Head Office | January 2010 | Annually |
| **Substantiated Pollution Incident Register** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Water Abstractions** | | |
| Environment Agency - Anglian Region | April 2010 | Quarterly |
| Environment Agency - Thames Region | April 2010 | Quarterly |
| **Water Industry Act Referrals** | | |
| Environment Agency - Thames Region | January 2010 | Quarterly |
| **Groundwater Vulnerability** | | |
| Environment Agency - Head Office | January 1999 | Not Applicable |
| **Drift Deposits** | | |
| Environment Agency - Head Office | January 1999 | Not Applicable |
| **Source Protection Zones** | | |
| Environment Agency - Head Office | April 2010 | Quarterly |
| **Extreme Flooding from Rivers or Sea without Defences** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |
| **Flooding from Rivers or Sea without Defences** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |

| Agency & Hydrological | Version | Update Cycle |
|---|---|---|
| **Areas Benefiting from Flood Defences** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |
| **Flood Water Storage Areas** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |
| **Flood Defences** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |
| **Waste** | **Version** | **Update Cycle** |
| **BGS Recorded Landfill Sites** | | |
| British Geological Survey - National Geoscience Information Service | June 1996 | Not Applicable |
| **Historical Landfill Sites** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Integrated Pollution Control Registered Waste Sites** | | |
| Environment Agency - Thames Region | October 2008 | Not Applicable |
| **Licensed Waste Management Facilities (Landfill Boundaries)** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Licensed Waste Management Facilities (Locations)** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Local Authority Landfill Coverage** | | |
| Cherwell District Council - Environmental Health Department | May 2000 | Not Applicable |
| Oxfordshire County Council | May 2000 | Not Applicable |
| **Local Authority Recorded Landfill Sites** | | |
| Cherwell District Council - Environmental Health Department | May 2000 | Not Applicable |
| Oxfordshire County Council | May 2000 | Not Applicable |
| **Registered Landfill Sites** | | |
| Environment Agency - Thames Region - West Area | March 2003 | Not Applicable |
| **Registered Waste Transfer Sites** | | |
| Environment Agency - Thames Region - West Area | March 2003 | Not Applicable |
| **Registered Waste Treatment or Disposal Sites** | | |
| Environment Agency - Thames Region - West Area | March 2003 | Not Applicable |
| **Hazardous Substances** | **Version** | **Update Cycle** |
| **Control of Major Accident Hazards Sites (COMAH)** | | |
| Health and Safety Executive | May 2010 | Bi-Annually |
| **Explosive Sites** | | |
| Health and Safety Executive | January 2009 | Bi-Annually |
| **Notification of Installations Handling Hazardous Substances (NIHHS)** | | |
| Health and Safety Executive | November 2000 | Not Applicable |
| **Planning Hazardous Substance Enforcements** | | |
| Cherwell District Council | July 2009 | Annual Rolling Update |
| Oxfordshire County Council | October 2009 | Annual Rolling Update |
| **Planning Hazardous Substance Consents** | | |
| Cherwell District Council | July 2009 | Annual Rolling Update |
| Oxfordshire County Council | October 2009 | Annual Rolling Update |

| Geological | Version | Update Cycle |
|---|---|---|
| **BGS Recorded Mineral Sites**<br>British Geological Survey - National Geoscience Information Service | April 2010 | Bi-Annually |
| **BGS 1:625,000 Solid Geology**<br>British Geological Survey - National Geoscience Information Service | August 1996 | Not Applicable |
| **Brine Compensation Area**<br>Cheshire Brine Subsidence Compensation Board | November 2002 | Not Applicable |
| **Coal Mining Affected Areas**<br>The Coal Authority - Mining Report Service | January 2006 | As notified |
| **Mining Instability**<br>Ove Arup & Partners | October 2000 | Not Applicable |
| **Natural and Mining Cavities**<br>Peter Brett Associates | November 2009 | Bi-Annually |
| **Potential for Collapsible Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Compressible Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Ground Dissolution Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Landslide Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Running Sand Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Radon Potential - Radon Affected Areas**<br>British Geological Survey - National Geoscience Information Service | May 2007 | As notified |
| **Radon Potential - Radon Protection Measures**<br>British Geological Survey - National Geoscience Information Service | May 2007 | As notified |
| **Shallow Mining Hazards**<br>British Geological Survey - National Geoscience Information Service | August 2002 | Not Applicable |
| **Industrial Land Use** | **Version** | **Update Cycle** |
| **Contemporary Trade Directory Entries**<br>Thomson Directories | March 2010 | Quarterly |
| **Fuel Station Entries**<br>Catalist Ltd - Experian Catalist | February 2010 | Quarterly |

| Sensitive Land Use | Version | Update Cycle |
|---|---|---|
| **Areas of Adopted Green Belt**<br>Cherwell District Council | March 2010 | As notified |
| **Areas of Unadopted Green Belt**<br>Cherwell District Council | March 2010 | As notified |
| **Areas of Outstanding Natural Beauty**<br>Natural England | December 2009 | Bi-Annually |
| **Environmentally Sensitive Areas**<br>Natural England | December 2009 | Annually |
| **Forest Parks**<br>Forestry Commission | April 1997 | Not Applicable |
| **Local Nature Reserves**<br>Natural England | December 2009 | Bi-Annually |
| **Marine Nature Reserves**<br>Natural England | September 2009 | Bi-Annually |
| **National Nature Reserves**<br>Natural England | December 2009 | Bi-Annually |
| **National Parks**<br>Natural England | December 2009 | Bi-Annually |
| **Nitrate Sensitive Areas**<br>Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | December 2009 | Not Applicable |
| **Nitrate Vulnerable Zones**<br>Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | February 2009 | Annually |
| **Ramsar Sites**<br>Natural England | December 2009 | Bi-Annually |
| **Sites of Special Scientific Interest**<br>Natural England | December 2009 | Bi-Annually |
| **Special Areas of Conservation**<br>Natural England | December 2009 | Bi-Annually |
| **Special Protection Areas**<br>Natural England | December 2009 | Bi-Annually |

# Data Suppliers

A selection of organisations who provide data within this report

| Data Supplier | Data Supplier Logo |
|---|---|
| Ordnance Survey | |
| Environment Agency | |
| Scottish Environment Protection Agency | |
| The Coal Authority | |
| British Geological Survey | |
| Centre for Ecology and Hydrology | |
| Countryside Council for Wales | |
| Scottish Natural Heritage | |
| Natural England | |
| Health Protection Agency | |
| Ove Arup | |
| Peter Brett Associates | |

# Useful Contacts

| Contact | Name and Address | Contact Details |
|---|---|---|
| 1 | **Environment Agency - National Customer Contact Centre (NCCC)**<br>PO Box 544, Templeborough, Rotherham, S60 1BY | Telephone: 08708 506 506<br>Email: enquiries@environment-agency.gov.uk |
| 2 | **British Geological Survey - Enquiry Service**<br>British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG | Telephone: 0115 936 3143<br>Fax: 0115 936 3276<br>Email: enquiries@bgs.ac.uk<br>Website: www.bgs.ac.uk |
| 3 | **Natural England**<br>Northminster House, Northminster Road, Peterborough, Cambridgeshire, PE1 1UA | Telephone: 0845 600 3078<br>Fax: 01733 455103<br>Email: enquiries@naturalengland.org.uk<br>Website: www.naturalengland.org.uk |
| 4 | **Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)**<br>Government Buildings, Otley Road, Lawnswood, Leeds, West Yorkshire, LS16 5QT | Telephone: 0113 2613333<br>Fax: 0113 230 0879 |
| 5 | **Oxfordshire County Council**<br>County Hall, New Road, Oxford, Oxfordshire, OX1 1ND | Telephone: 01865 792422<br>Fax: 01865 810106<br>Email: environmental.services@oxfordshire.gov.uk<br>Website: www.oxfordshire.gov.uk |
| 6 | **Cherwell District Council - Environmental Health Department**<br>Bodicote House, Bodicote, Banbury, Oxfordshire, OX15 4AA | Telephone: 01295 252535 extn 4511<br>Fax: 01295 270028<br>Website: www.cherwell-dc.gov.uk |
| - | **Health Protection Agency - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards**<br>Chilton, Didcot, Oxfordshire, OX11 0RQ | Telephone: 01235 822622<br>Fax: 01235 833891<br>Email: radon@hpa.org.uk<br>Website: www.hpa.org.uk |
| - | **Landmark Information Group Limited**<br>The Smith Centre, Henley On Thames, Oxfordshire, RG9 6AB | Telephone: 0844 844 9952<br>Fax: 0844 844 9951<br>Email: customerservices@landmarkinfo.co.uk<br>Website: www.landmarkinfo.co.uk |

Please note that the Environment Agency / SEPA have a charging policy in place for enquiries.

# Envirocheck® Report:

## Datasheet

### Order Details:

**Order Number:**
31544761_1_1

**Customer Reference:**
UA001881

**National Grid Reference:**
457720, 225250

**Slice:**
D

**Site Area (Ha):**
395.55

**Search Buffer (m):**
500

### Site Details:

Site at
Bicester
Oxfordshire

### Client Details:

Mr D Thomas
Hyder Consulting Ltd
HCL House
St. Mellons Business Park
St Mellons
Cardiff
CF3 0EY

# Contents



**Introduction**

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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**Ove Arup Copyright Notice**



**Peter Brett Associates Copyright Notice**



**Radon Potential dataset Copyright Notice**



**Report Version v47.0**

Envirocheck®

# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m (*up to 1000m) |
|---|---|---|---|---|
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| Integrated Pollution Prevention And Control | | | | |
| Local Authority Integrated Pollution Prevention And Control | | | | |
| Local Authority Pollution Prevention and Controls | pg 1 | 1 | | |
| Local Authority Pollution Prevention and Control Enforcements | | | | |
| Nearest Surface Water Feature | pg 1 | Yes | | |
| Pollution Incidents to Controlled Waters | | | | |
| Prosecutions Relating to Authorised Processes | | | | |
| Prosecutions Relating to Controlled Waters | | | | |
| Registered Radioactive Substances | | | | |
| River Quality | | | | |
| River Quality Biology Sampling Points | | | | |
| River Quality Chemistry Sampling Points | | | | |
| Substantiated Pollution Incident Register | | | | |
| Water Abstractions | pg 2 | 1 | | |
| Water Industry Act Referrals | | | | |
| Groundwater Vulnerability | pg 2 | Yes | n/a | n/a |
| Source Protection Zones | | | | |
| Extreme Flooding from Rivers or Sea without Defences | pg 2 | Yes | | n/a |
| Flooding from Rivers or Sea without Defences | pg 2 | Yes | | n/a |
| Areas Benefiting from Flood Defences | | | | n/a |
| Flood Water Storage Areas | | | | n/a |
| Flood Defences | | | | n/a |
| **Waste** | | | | |
| BGS Recorded Landfill Sites | | | | |
| Historical Landfill Sites | | | | |
| Integrated Pollution Control Registered Waste Sites | | | | |
| Licensed Waste Management Facilities (Landfill Boundaries) | | | | |
| Licensed Waste Management Facilities (Locations) | | | | |
| Local Authority Recorded Landfill Sites | | | | |
| Registered Landfill Sites | | | | |
| Registered Waste Transfer Sites | | | | |
| Registered Waste Treatment or Disposal Sites | | | | |

Envirocheck®

# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m (*up to 1000m) |
|---|---|---|---|---|
| **Hazardous Substances** | | | | |
| Control of Major Accident Hazards Sites (COMAH) | | | | |
| Explosive Sites | | | | |
| Notification of Installations Handling Hazardous Substances (NIHHS) | | | | |
| Planning Hazardous Substance Consents | | | | |
| Planning Hazardous Substance Enforcements | | | | |
| **Geological** | | | | |
| BGS Recorded Mineral Sites | pg 4 | | 1 | 1 |
| BGS 1:625,000 Solid Geology | pg 4 | Yes | n/a | n/a |
| Brine Compensation Area | | | n/a | n/a |
| Coal Mining Affected Areas | | | n/a | n/a |
| Mining Instability | | | n/a | n/a |
| Natural and Mining Cavities | | | | |
| Potential for Collapsible Ground Stability Hazards | | | | n/a |
| Potential for Compressible Ground Stability Hazards | pg 4 | Yes | Yes | n/a |
| Potential for Ground Dissolution Stability Hazards | pg 5 | Yes | Yes | n/a |
| Potential for Landslide Ground Stability Hazards | pg 5 | Yes | | n/a |
| Potential for Running Sand Ground Stability Hazards | pg 5 | Yes | Yes | n/a |
| Potential for Shrinking or Swelling Clay Ground Stability Hazards | pg 6 | Yes | Yes | n/a |
| Radon Potential - Radon Affected Areas | pg 7 | Yes | n/a | n/a |
| Radon Potential - Radon Protection Measures | pg 7 | Yes | n/a | n/a |
| Shallow Mining Hazards | | | | n/a |
| **Industrial Land Use** | | | | |
| Contemporary Trade Directory Entries (50m) | | | | n/a |
| Fuel Station Entries | | | | |

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m (*up to 1000m) |
|---|---|---|---|---|
| **Sensitive Land Use** | | | | |
| Areas of Adopted Green Belt | | | | |
| Areas of Unadopted Green Belt | | | | |
| Areas of Outstanding Natural Beauty | | | | |
| Environmentally Sensitive Areas | | | | |
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| Marine Nature Reserves | | | | |
| National Nature Reserves | | | | |
| National Parks | | | | |
| Nitrate Sensitive Areas | | | | |
| Nitrate Vulnerable Zones | pg 9 | 1 | | |
| Ramsar Sites | | | | |
| Sites of Special Scientific Interest | | | | |
| Special Areas of Conservation | | | | |
| Special Protection Areas | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 1 | **Discharge Consents**<br>Operator: A G Phipps, Esq.<br>Property Type: Domestic Property (Multiple)<br>Location: Home Farm Complex Home Farm Banbury Road Caversfield, Bicester Oxfordshire Ox27 0tg<br>Authority: Environment Agency, Thames Region<br>Catchment Area: Not Supplied<br>Reference: Cawm.0566<br>Permit Version: 1<br>Effective Date: 19th November 2002<br>Issued Date: 16th January 2003<br>Revocation Date: Not Supplied<br>Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company<br>Discharge Environment: Freshwater Stream/River<br>Receiving Water: The Town Brook<br>**Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)**<br>Positional Accuracy: Located by supplier to within 10m | D2NE (SE) | 0 | 1 | 458020 225040 |
| 2 | **Discharge Consents**<br>Operator: Mr. M.S. Purewal<br>Property Type: Domestic Property (Single)<br>Location: The Old Vicarage, Caversfield, Near Bicester, Oxon<br>Authority: Environment Agency, Thames Region<br>Catchment Area: Not Supplied<br>Reference: Ctwc.1546<br>Permit Version: 2<br>Effective Date: 30th January 2007<br>Issued Date: 30th January 2007<br>Revocation Date: 31st March 2019<br>Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company<br>Discharge Environment: Irrigation Area<br>Receiving Water: Cornbrash<br>**Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)**<br>Positional Accuracy: Located by supplier to within 10m | D3SW (SE) | 389 | 1 | 458500 224750 |
| 2 | **Discharge Consents**<br>Operator: Mr. M.S. Purewal<br>Property Type: Domestic Property (Single)<br>Location: The Old Vicarage, Caversfield, Near Bicester, Oxon<br>Authority: Environment Agency, Thames Region<br>Catchment Area: Not Given<br>Reference: CTWC.1546<br>Permit Version: 1<br>Effective Date: 27th March 1987<br>Issued Date: 27th March 1987<br>Revocation Date: 30th January 2007<br>Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company<br>Discharge Environment: Irrigation Area<br>Receiving Water: Cornbrash<br>**Status: Transferred from COPA 1974**<br>Positional Accuracy: Located by supplier to within 100m | D3SW (SE) | 389 | 1 | 458500 224750 |
| 3 | **Local Authority Pollution Prevention and Controls**<br>Name: Teslayne Engineering<br>Location: Unit 4 The Courtyard, Caversfield, Bicester, Ox27 8tg<br>Authority: Cherwell District Council, Environmental Health Department<br>Permit Reference: CDC P/WOB/011<br>Dated: Not Supplied<br>Process Type: Local Authority Air Pollution Control<br>Description: PG1/1Waste oil burners, less than 0.4MW net rated thermal input<br>**Status: Application Not Yet Authorised**<br>Positional Accuracy: Manually positioned to the address or location | D2NE (SE) | 0 | 2 | 458065 225047 |
| | **Nearest Surface Water Feature** | D1NE (W) | 0 | - | 457282 225207 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 4 | **Water Abstractions**<br>Operator: W & W Malins<br>Licence Number: 28/39/14/0214<br>Permit Version: 100<br>Location: Lords Farm, Bicester (B)<br>Authority: Environment Agency, Thames Region<br>Abstraction: General Farming And Domestic<br>Abstraction Type: Water may be abstracted from a single point<br>Source: Groundwater<br>Daily Rate (m3): Not Supplied<br>Yearly Rate (m3): Not Supplied<br>Details: Not Supplied<br>Authorised Start: 01 January<br>Authorised End: 31 December<br>Permit Start Date: 8th May 1967<br>Permit End Date: Not Supplied<br>Positional Accuracy: Located by supplier to within 10m | D1SW (SW) | 0 | 1 | 457000 224600 |
| | **Groundwater Vulnerability**<br>Geological Classification: Minor Aquifer (Variably permeable) - These can be fractured or potentially fractured rocks, which do not have a high primary permeability, or other formations of variable permeability including unconsolidated deposits. Although not producing large quantities of water for abstraction, they are important for local supplies and in supplying base flow to rivers<br>Soil Classification: Soils of High Leaching Potential (H3)- Coarse textured or moderately shallow soils which readily transmit non-absorbed pollutants and liquid discharges but which have some ability to attenuate absorbed pollutants because of their large clay or organic matter contents<br>Map Sheet: Sheet 30 Northern Cotswolds<br>Scale: 1:100,000 | D9SW (NW) | 0 | 1 | 457095 225971 |
| | **Groundwater Vulnerability**<br>Geological Classification: Minor Aquifer (Variably permeable) - These can be fractured or potentially fractured rocks, which do not have a high primary permeability, or other formations of variable permeability including unconsolidated deposits. Although not producing large quantities of water for abstraction, they are important for local supplies and in supplying base flow to rivers<br>Soil Classification: Soils of High Leaching Potential (U) - Soil information for restored mineral workings and urban areas is based on fewer observations than elsewhere. A worst case vulnerability classification (H) assumed, until proved otherwise<br>Map Sheet: Sheet 30 Northern Cotswolds<br>Scale: 1:100,000 | (SW) | 0 | 1 | 457122 223946 |
| | **Drift Deposits**<br>None | | | | |
| | **Extreme Flooding from Rivers or Sea without Defences**<br>Flood Plain Type: Fluvial<br>Boundary Accuracy: As Supplied | D2NW (S) | 0 | 1 | 457755 224970 |
| | **Flooding from Rivers or Sea without Defences**<br>Flood Plain Type: Fluvial<br>Boundary Accuracy: As Supplied | D2NW (S) | 0 | 1 | 457765 224965 |
| | **Areas Benefiting from Flood Defences**<br>None | | | | |
| | **Flood Water Storage Areas**<br>None | | | | |
| | **Flood Defences**<br>None | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **Local Authority Landfill Coverage**<br>Name: Cherwell District Council<br>- Has supplied landfill data | | 0 | 2 | 462905<br>225299 |
| | **Local Authority Landfill Coverage**<br>Name: Oxfordshire County Council<br>- Has supplied landfill data | | 0 | 6 | 462905<br>225299 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 5 | **BGS Recorded Mineral Sites**<br>Site Name: Home Farm<br>Location: Caversfield, Oxford, Oxfordshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 57403<br>Type: Opencast<br>**Status: Ceased**<br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Jurassic<br>Geology: Cornbrash Formation<br>Commodity: Limestone<br>Positional Accuracy: Located by supplier to within 10m | D2NE (SE) | 78 | 3 | 458187 225056 |
| 6 | **BGS Recorded Mineral Sites**<br>Site Name: Vicarage House<br>Location: Caversfield, Oxford, Oxfordshire<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 57411<br>Type: Opencast<br>**Status: Ceased**<br>Operator: Unknown Operator<br>Operator Location: Not Supplied<br>Periodic Type: Jurassic<br>Geology: Cornbrash Formation<br>Commodity: Limestone<br>Positional Accuracy: Located by supplier to within 10m | D3NW (E) | 489 | 3 | 458589 225144 |
| | **BGS 1:625,000 Solid Geology**<br>Description: Cornbrash | D10NW (N) | 0 | 3 | 457764 226276 |
| | **Coal Mining Affected Areas**<br>In an area which may not be affected by coal mining | | | | |
| | **Potential for Collapsible Ground Stability Hazards**<br>No Hazard | | | | |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457719 225000 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457719 225000 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SE) | 0 | 3 | 457950 225025 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SE) | 0 | 3 | 457925 225000 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SE) | 0 | 3 | 457900 224975 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457825 224950 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457775 224825 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457750 224775 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457725 224725 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457719 224675 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457700 224625 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | D6NW (N) | 158 | 3 | 457750 225750 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Moderate<br>Source: British Geological Survey, National Geoscience Information Service | D6NW (NE) | 247 | 3 | 457950 225650 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457650 225075 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D1NE (SW) | 0 | 3 | 457600 224975 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SE) | 0 | 3 | 457950 225100 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457650 225075 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457719 225000 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2NE (SE) | 0 | 3 | 458100 225025 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2NE (SE) | 0 | 3 | 458025 224950 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | D6NW (N) | 189 | 3 | 457750 225800 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | D6SE (NE) | 214 | 3 | 457975 225575 |
| | **Potential for Landslide Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457719 225000 |
| | **Potential for Landslide Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457719 225000 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457719 225000 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457719 225000 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SE) | 0 | 3 | 457950 225025 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SE) | 0 | 3 | 457925 225000 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SE) | 0 | 3 | 457900 224975 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457825 224950 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457775 224825 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457750 224775 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457725 224725 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457700 224625 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457719 224675 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | D6NW (N) | 158 | 3 | 457750 225750 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | D6NW (NE) | 247 | 3 | 457950 225650 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | D2NE (SE) | 0 | 3 | 458000 225025 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457719 225000 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457719 225000 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SE) | 0 | 3 | 457950 225025 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SE) | 0 | 3 | 457925 225000 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SE) | 0 | 3 | 457900 224975 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457825 224950 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457775 224825 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457750 224775 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457725 224725 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457700 224625 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457719 224675 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D6NW (N) | 158 | 3 | 457750 225750 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | D6NW (NE) | 247 | 3 | 457950 225650 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 3 and 5% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457775 225025 |

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|---|---|---|---|---|---|
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 3 and 5% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457750 225000 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (SE) | 0 | 3 | 457950 224900 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is not in a radon affected area, as less than 1% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | D1SE (S) | 0 | 3 | 457575 224900 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457675 224800 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | (SW) | 0 | 3 | 457325 224475 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SW) | 0 | 3 | 457675 225150 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457719 225000 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a radon affected area, as between 1 and 3% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457700 224825 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is not in a radon affected area, as less than 1% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SW) | 0 | 3 | 457675 225150 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is not in a radon affected area, as less than 1% of homes are above the action level<br>Source: British Geological Survey, National Geoscience Information Service | D2NE (SE) | 0 | 3 | 458100 224925 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: Basic radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457775 225025 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: Basic radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457750 225000 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (SE) | 0 | 3 | 457950 224900 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | D1SE (S) | 0 | 3 | 457575 224900 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457675 224800 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | (SW) | 0 | 3 | 457325 224475 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SW) | 0 | 3 | 457675 225150 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (S) | 0 | 3 | 457719 225000 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | D2SW (S) | 0 | 3 | 457700 224825 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | D2NW (SW) | 0 | 3 | 457675 225150 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | D2NE (SE) | 0 | 3 | 458100 224925 |
| | **Shallow Mining Hazards**<br>No Hazard | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 7 | **Local Nature Reserves**<br>Name: Bure Park<br>Multiple Area: N<br>Area (m2): 83957.83<br>Source: Natural England<br>Designation Date: 5th December 2005 | (S) | 53 | 4 | 457632<br>224175 |
| 8 | **Nitrate Vulnerable Zones**<br>Name: Not Supplied<br>Description: Surface Water - Designated 2006<br>Source: Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | (N) | 0 | 5 | 458282<br>227852 |

| Agency & Hydrological | Version | Update Cycle |
|---|---|---|
| **Contaminated Land Register Entries and Notices** | | |
| Cherwell District Council - Environmental Health Department | February 2010 | Annual Rolling Update |
| **Discharge Consents** | | |
| Environment Agency - Anglian Region | April 2010 | Quarterly |
| Environment Agency - Thames Region | April 2010 | Quarterly |
| **Enforcement and Prohibition Notices** | | |
| Environment Agency - Thames Region | May 2010 | Quarterly |
| **Integrated Pollution Controls** | | |
| Environment Agency - Thames Region | October 2008 | Not Applicable |
| **Integrated Pollution Prevention And Control** | | |
| Environment Agency - Thames Region | April 2010 | Quarterly |
| **Local Authority Integrated Pollution Prevention And Control** | | |
| Cherwell District Council - Environmental Health Department | April 2009 | Annual Rolling Update |
| **Local Authority Pollution Prevention and Controls** | | |
| Cherwell District Council - Environmental Health Department | April 2009 | Annual Rolling Update |
| **Local Authority Pollution Prevention and Control Enforcements** | | |
| Cherwell District Council - Environmental Health Department | April 2009 | Annual Rolling Update |
| **Nearest Surface Water Feature** | | |
| Ordnance Survey | February 2010 | Quarterly |
| **Pollution Incidents to Controlled Waters** | | |
| Environment Agency - Anglian Region | September 1999 | Not Applicable |
| Environment Agency - Thames Region | September 1999 | Not Applicable |
| **Prosecutions Relating to Authorised Processes** | | |
| Environment Agency - Thames Region | March 2010 | Monthly |
| **Prosecutions Relating to Controlled Waters** | | |
| Environment Agency - Thames Region | May 2010 | Monthly |
| **Registered Radioactive Substances** | | |
| Environment Agency - Thames Region | April 2010 | Quarterly |
| **River Quality** | | |
| Environment Agency - Head Office | November 2001 | Not Applicable |
| **River Quality Biology Sampling Points** | | |
| Environment Agency - Head Office | January 2010 | Annually |
| **River Quality Chemistry Sampling Points** | | |
| Environment Agency - Head Office | January 2010 | Annually |
| **Substantiated Pollution Incident Register** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Water Abstractions** | | |
| Environment Agency - Anglian Region | April 2010 | Quarterly |
| Environment Agency - Thames Region | April 2010 | Quarterly |
| **Water Industry Act Referrals** | | |
| Environment Agency - Thames Region | January 2010 | Quarterly |
| **Groundwater Vulnerability** | | |
| Environment Agency - Head Office | January 1999 | Not Applicable |
| **Drift Deposits** | | |
| Environment Agency - Head Office | January 1999 | Not Applicable |
| **Source Protection Zones** | | |
| Environment Agency - Head Office | April 2010 | Quarterly |
| **Extreme Flooding from Rivers or Sea without Defences** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |
| **Flooding from Rivers or Sea without Defences** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |

| Agency & Hydrological | Version | Update Cycle |
|---|---|---|
| **Areas Benefiting from Flood Defences** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |
| **Flood Water Storage Areas** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |
| **Flood Defences** | | |
| Environment Agency - Head Office | March 2010 | Quarterly |
| **Waste** | **Version** | **Update Cycle** |
| **BGS Recorded Landfill Sites** | | |
| British Geological Survey - National Geoscience Information Service | June 1996 | Not Applicable |
| **Historical Landfill Sites** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Integrated Pollution Control Registered Waste Sites** | | |
| Environment Agency - Thames Region | October 2008 | Not Applicable |
| **Licensed Waste Management Facilities (Landfill Boundaries)** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Licensed Waste Management Facilities (Locations)** | | |
| Environment Agency - Thames Region - West Area | April 2010 | Quarterly |
| **Local Authority Landfill Coverage** | | |
| Cherwell District Council - Environmental Health Department | May 2000 | Not Applicable |
| Oxfordshire County Council | May 2000 | Not Applicable |
| **Local Authority Recorded Landfill Sites** | | |
| Cherwell District Council - Environmental Health Department | May 2000 | Not Applicable |
| Oxfordshire County Council | May 2000 | Not Applicable |
| **Registered Landfill Sites** | | |
| Environment Agency - Thames Region - West Area | March 2003 | Not Applicable |
| **Registered Waste Transfer Sites** | | |
| Environment Agency - Thames Region - West Area | March 2003 | Not Applicable |
| **Registered Waste Treatment or Disposal Sites** | | |
| Environment Agency - Thames Region - West Area | March 2003 | Not Applicable |
| **Hazardous Substances** | **Version** | **Update Cycle** |
| **Control of Major Accident Hazards Sites (COMAH)** | | |
| Health and Safety Executive | May 2010 | Bi-Annually |
| **Explosive Sites** | | |
| Health and Safety Executive | January 2009 | Bi-Annually |
| **Notification of Installations Handling Hazardous Substances (NIHHS)** | | |
| Health and Safety Executive | November 2000 | Not Applicable |
| **Planning Hazardous Substance Enforcements** | | |
| Cherwell District Council | July 2009 | Annual Rolling Update |
| Oxfordshire County Council | October 2009 | Annual Rolling Update |
| **Planning Hazardous Substance Consents** | | |
| Cherwell District Council | July 2009 | Annual Rolling Update |
| Oxfordshire County Council | October 2009 | Annual Rolling Update |

| Geological | Version | Update Cycle |
|---|---|---|
| **BGS Recorded Mineral Sites**<br>British Geological Survey - National Geoscience Information Service | April 2010 | Bi-Annually |
| **BGS 1:625,000 Solid Geology**<br>British Geological Survey - National Geoscience Information Service | August 1996 | Not Applicable |
| **Brine Compensation Area**<br>Cheshire Brine Subsidence Compensation Board | November 2002 | Not Applicable |
| **Coal Mining Affected Areas**<br>The Coal Authority - Mining Report Service | January 2006 | As notified |
| **Mining Instability**<br>Ove Arup & Partners | October 2000 | Not Applicable |
| **Natural and Mining Cavities**<br>Peter Brett Associates | November 2009 | Bi-Annually |
| **Potential for Collapsible Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Compressible Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Ground Dissolution Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Landslide Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Running Sand Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>British Geological Survey - National Geoscience Information Service | January 2009 | Annually |
| **Radon Potential - Radon Affected Areas**<br>British Geological Survey - National Geoscience Information Service | May 2007 | As notified |
| **Radon Potential - Radon Protection Measures**<br>British Geological Survey - National Geoscience Information Service | May 2007 | As notified |
| **Shallow Mining Hazards**<br>British Geological Survey - National Geoscience Information Service | August 2002 | Not Applicable |
| **Industrial Land Use** | **Version** | **Update Cycle** |
| **Contemporary Trade Directory Entries**<br>Thomson Directories | March 2010 | Quarterly |
| **Fuel Station Entries**<br>Catalist Ltd - Experian Catalist | February 2010 | Quarterly |

| Sensitive Land Use | Version | Update Cycle |
|---|---|---|
| **Areas of Adopted Green Belt**<br>Cherwell District Council | March 2010 | As notified |
| **Areas of Unadopted Green Belt**<br>Cherwell District Council | March 2010 | As notified |
| **Areas of Outstanding Natural Beauty**<br>Natural England | December 2009 | Bi-Annually |
| **Environmentally Sensitive Areas**<br>Natural England | December 2009 | Annually |
| **Forest Parks**<br>Forestry Commission | April 1997 | Not Applicable |
| **Local Nature Reserves**<br>Natural England | December 2009 | Bi-Annually |
| **Marine Nature Reserves**<br>Natural England | September 2009 | Bi-Annually |
| **National Nature Reserves**<br>Natural England | December 2009 | Bi-Annually |
| **National Parks**<br>Natural England | December 2009 | Bi-Annually |
| **Nitrate Sensitive Areas**<br>Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | December 2009 | Not Applicable |
| **Nitrate Vulnerable Zones**<br>Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | February 2009 | Annually |
| **Ramsar Sites**<br>Natural England | December 2009 | Bi-Annually |
| **Sites of Special Scientific Interest**<br>Natural England | December 2009 | Bi-Annually |
| **Special Areas of Conservation**<br>Natural England | December 2009 | Bi-Annually |
| **Special Protection Areas**<br>Natural England | December 2009 | Bi-Annually |

A selection of organisations who provide data within this report

| Data Supplier | Data Supplier Logo |
|---|---|
| Ordnance Survey | |
| Environment Agency | |
| Scottish Environment Protection Agency | |
| The Coal Authority | |
| British Geological Survey | |
| Centre for Ecology and Hydrology | |
| Countryside Council for Wales | |
| Scottish Natural Heritage | |
| Natural England | |
| Health Protection Agency | |
| Ove Arup | |
| Peter Brett Associates | |

# Useful Contacts

| Contact | Name and Address | Contact Details |
|---|---|---|
| 1 | **Environment Agency - National Customer Contact Centre (NCCC)**<br>PO Box 544, Templeborough, Rotherham, S60 1BY | Telephone: 08708 506 506<br>Email: enquiries@environment-agency.gov.uk |
| 2 | **Cherwell District Council - Environmental Health Department**<br>Bodicote House, Bodicote, Banbury, Oxfordshire, OX15 4AA | Telephone: 01295 252535 extn 4511<br>Fax: 01295 270028<br>Website: www.cherwell-dc.gov.uk |
| 3 | **British Geological Survey - Enquiry Service**<br>British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG | Telephone: 0115 936 3143<br>Fax: 0115 936 3276<br>Email: enquiries@bgs.ac.uk<br>Website: www.bgs.ac.uk |
| 4 | **Natural England**<br>Northminster House, Northminster Road, Peterborough, Cambridgeshire, PE1 1UA | Telephone: 0845 600 3078<br>Fax: 01733 455103<br>Email: enquiries@naturalengland.org.uk<br>Website: www.naturalengland.org.uk |
| 5 | **Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)**<br>Government Buildings, Otley Road, Lawnswood, Leeds, West Yorkshire, LS16 5QT | Telephone: 0113 2613333<br>Fax: 0113 230 0879 |
| 6 | **Oxfordshire County Council**<br>County Hall, New Road, Oxford, Oxfordshire, OX1 1ND | Telephone: 01865 792422<br>Fax: 01865 810106<br>Email: environmental.services@oxfordshire.gov.uk<br>Website: www.oxfordshire.gov.uk |
| - | **Health Protection Agency - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards**<br>Chilton, Didcot, Oxfordshire, OX11 0RQ | Telephone: 01235 822622<br>Fax: 01235 833891<br>Email: radon@hpa.org.uk<br>Website: www.hpa.org.uk |
| - | **Landmark Information Group Limited**<br>The Smith Centre, Henley On Thames, Oxfordshire, RG9 6AB | Telephone: 0844 844 9952<br>Fax: 0844 844 9951<br>Email: customerservices@landmarkinfo.co.uk<br>Website: www.landmarkinfo.co.uk |

Please note that the Environment Agency / SEPA have a charging policy in place for enquiries.