

# Hereford Enterprise Zone – North Magazine, Rotherwas Industrial Estate, Hereford HR2 6ST Phase 1 Geo-Environmental Desk Study Report Skylon Park



Environmental Management Solutions - EMS Geotech

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# Hereford Enterprise Zone – North Magazine, Rotherwas Industrial Estate, Hereford HR2 6ST Phase 1 Geo-Environmental Desk Study Report Skylon Park

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# **SUMMARY REPORT**

| SUBJECT                                  | COMMENTS   |  |
|--|--|--|
| CURRENT USE & DESCRIPTION                | Irregular in plan, the site is relatively flat, covers roughly 8.19 hectares and is generally covered in undergrowth, rough vegetation, and bare ground. Historically the site formed part of the Hereford Royal Ordnance Factory (Hereford ROF) northern (Lyddite) factory. It is devoid of historical buildings and structures apart from a recently constructed access road and the former munitions barn floor slab. Various sporadic stockpiles of soil, broken concrete and tree remains are located across the site.  |  |
|  | Skylon Bund No. 3, trees and rough vegetation containing old blast walls, roadways and railway buildings delineate the north-eastern boundary with open fields beyond. Trees and rough vegetation with Fir Tree Lane, a sewage works and units forming the Skylon Park development bound the site to the east / southeast. Trees and Skylon Bund No. 1 partially delineate the southwest boundary beyond which is Festival Way, Plot N26 and various commercial / light-industrial units. To the northwest the site is delineated by Skylon Park Bunds No.1 and No. 2, beyond which are the Hereford Shell Store and Plot N24 sites, a large pool, and open fields.  |  |
| PROPOSED USE                             | It is proposed to divide the site into several plots (Plots 1 to 12) and develop each individually for commercial / light industrial use. The proposed development will include raising existing ground levels for future drainage purposes.   |  |
| HISTORICAL<br>SUMMARY                    | Prior to 1912 the site and surrounding area comprised open ground and tree covered areas belonging to the Lubienski-Bodenham family, Rotherwas Estate. Between 1916 and 1967 the site and immediate surrounding area operated as the Hereford Royal Ordnance Factory (Hereford ROF) northern (Lyddite) factory filling artillery shells for the war effort. In 1975, Herefordshire County Council bought 93 hectares of the former ROF facility, including the site, to develop into the Rotherwas Industrial Estate. Clearance works to remove historical structures and buildings were undertaken from 2008 to 2011 and flood alleviation works to raise on-site ground levels were undertaken in 2012. The site has remained undeveloped since this time. |  |
| PUBLISHED<br>GEOLOGY                     | Published maps show superficial granular primary River Terrace Deposits directly underlying the site, which in turn overlie Raglan Mudstone Formation bedrock.   |  |
| COAL MINING<br>AND MINERAL<br>EXTRACTION | The site is not situated within an area of coal mining or mineral extraction   |  |

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| GROUND                        | The site is unlikely to be affected by ground instability hazards.   |  |
|-------------------------------|--|--|
| STABILITY                     | , , , , , , , , , , , , , , , , , , ,  |  |
| RADON GAS                     | No radon protection measures are required in the proposed development.   |  |
| HYDROGEOLOGY                  | The underlying superficial River Terrace Deposits and the Raglan Mudstone Bedrock are classed as Secondary A Aquifers.   |  |
|                               | The site is not located within a Groundwater Source Protection Zone (SPZ).   |  |
| HYDROLOGY                     | A natural pool is present on-site, and the nearest recorded surface water body is the pond located approximately 100m northwest and associated with the Shell Store site.  |  |
|                               | The site is identified as being in a medium to high (Flood Zone 2 to 3) area. However, site levels were raised in 2012 as part of flood alleviation works and on-site observations indicate that the flood risk is low.  |  |
| PREVIOUS<br>GROUND<br>REPORTS | Previous investigation works conducted on-site, by Geotechnics in 2012, and for the munitions barn floor slab, by EMS, in 2020. Previous investigation works have been undertaken for Plots N24, N26 and the Shell Store situated immediately south and northwest of the site by EMS and third parties. These investigation findings were presented in separate individual reports that should be read in conjunction with this report. Previous investigation reports undertaken on-site are referenced as: |  |
|                               | 'Soil Contamination and Concrete Investigation: Hereford<br>Enterprise Zone – Plot N1, Munitions Barn Slab, Rotherwas<br>Industrial Estate, Hereford HR2 6JT', EMS Letter Report E16889,<br>dated 26th March 2020.   |  |
|                               | 'Ground Investigation at North Magazine Site, Rotherwas' Factual and Interpretative Report, Geotechnics Project Number: PC125103, dated February 2013.   |  |



#### PRELIMINARY CONTAMINATION RISK ASSESSMENT

A potentially moderate / low risk has been highlighted from this assessment associated with the presence of contaminated Made Ground from the historical use of the site as part of the former Hereford ROF facility. A variable moderate to high risk has also been identified towards human health, particularly construction workers, from low asbestos levels on-site. A potentially moderate / low risk for ground gases has been identified for the North Magazine site, potentially associated with the infilled pond located within the south-eastern site corner.

#### PRELIMINARY GEOTECHNICAL ASSESSMENT

The design and construction of shallow foundations at this site is likely to be complicated due to disturbed ground, potentially deep Made Ground; compressible soils; variations of soil type, i.e. clay rich to granular and shallow groundwater. Aggressive ground conditions may also lead to the attack of buried concrete. Foundation design will also depend on how much existing ground levels are raised as part of future flood alleviation works. Where geotechnical constraints complicate foundation design and construction, consideration will be required to adopting a deep solution such as ground improvement or piles. It is anticipated that ground conditions are likely to vary across the site and, therefore, it is recommended that foundation designs are considered on a plot-by-plot basis.

| RECOMMENDATIONS   |   |  |
|---|---|--|
| Phase 2 Contamination Assessment  It is recommended to undertake Phase 2 Intrusive investigation wo the order to assess the presence, nature, and contamination potent this site. |   |  |
| Geotechnical<br>Ground<br>Investigation   | As part of any future intrusive works, it is recommended that geotechnical testing of on-site soils is undertaken to characterise the underlying ground conditions and to aid with foundation design. |  |



# 1. Introduction

#### 1.1 General

Environmental Management Solutions Limited (EMS) has been commissioned to undertake a Phase 1 Geo-Environmental Desk Study for the former North Magazine site, located within the northern part of the Skylon Park development. North Magazine is situated on the developments' northern periphery at Rotherwas Industrial Estate, Hereford HR2 6ST. Hereafter, referred to as 'the site'. The works have been commissioned directly by Skylon Park (the Client).

It is understood that the client intends to develop the site for commercial / light industrial purposes.

The purpose of this Phase 1 Geo-Environmental desk study is to assess the likely contamination constraints associated with the proposed development in order to meet with likely planning conditions. The report also provides a preliminary assessment of ground conditions in terms of likely geotechnical constraints that could impact on the proposed development.

As part of the ongoing Rotherwas Industrial Estate development the site and immediate surrounding area (including the neighbouring Shell Store, Plot N24 and N26), have been subjected to previous investigation works. Two previous investigations were previously undertaken for the site itself by Geotechnics Limited, in November / December 2012, and EMS in February 2020. The findings were presented in a ground investigation and letter report that should be read in conjunction with this report and are referenced as:

- 'Soil Contamination and Concrete Investigation: Hereford Enterprise Zone Plot N1, Munitions Barn Slab, Rotherwas Industrial Estate, Hereford HR2 6JT', EMS Letter Report E16889, dated 26<sup>th</sup> March 2020.
- 'Ground Investigation at North Magazine Site, Rotherwas' Factual and Interpretative Report, Geotechnics Project Number: PC125103, dated February 2013.

# 1.2 Scope of Works

The agreed scope of work was:

- Purchase of a Landmark Envirocheck report and historical Ordnance Survey Maps.
- Interpretation of the geological, hydrogeological, hydrological and environmental site setting.
- Undertaking a site walkover by a suitably experienced Geo-Environmental Engineer involving the inspection of the site and the surrounding area for indications of contamination and other ground related issues.
- Provide information relating to the past and current uses of the site and surrounding area and the nature of any related hazards and physical constraints.



- Identification of current and likely future receptors, potential sources of contamination and likely pathways, and any features of immediate concern, including those that could be introduced in future.
- Production of a preliminary conceptual model for the site along with a preliminary contamination risk assessment in accordance with the Environment Agency and Department for Environment Food and Rural Affairs (DEFRA) document 'Model Procedures for the Management of Land Contamination' Contaminated Land Report (CLR) 11, dated 2004.
- Assessment of likely geotechnical ground that could potentially impact the proposed development.

This report represents the findings of the first stage of the site investigation process for the works commissioned by the Client. Recommendations for follow-on Phase 2 intrusive investigation works where required are provided within this report. The findings of all Phase 2 investigation works will be reported separately.

## 1.3 Management Limitations

- This report has been prepared under the express instructions and solely for the use of the Client and the Client's agents in performance of EMS's duties under its contract with the Client. Should the Client wish to release this report to a Third Party for that party's reliance, EMS agree to such release provided that EMS assumes no duties, liabilities or obligations to the Third Party, that the Third Party does not acquire any rights whatsoever against EMS, and EMS accepts no responsibility for any loss incurred by the Client through the Client's release of the report to the Third Party.
- Copyright of this report is held by EMS.
- The findings of this report represent the professional opinion of experienced contaminated land consultants. EMS relied on the accuracy of Third Party documentary information contained in the consulted and is in no circumstances responsible for the accuracy of such information or data supplied. When considering this report due regard should be given to the terms and conditions of EMS's contract with the Client under which the report was prepared.
- EMS does not provide legal advice and the advice of legal professionals may also be required.
   All advice, opinions or recommendations within this report should be read and relied upon
   only in the context of the report as a whole. The advice within the report is based upon the
   information made available to EMS within the financial and timeframe constraints imposed.
- All work carried out in preparing this report has utilised and is based upon EMS's current
  professional knowledge and understanding of current relevant UK standards and codes,
  technology and legislation. Changes in this legislation and guidance may occur at any time
  in the future and cause any conclusions to become inappropriate or incorrect. EMS does not
  accept responsibility for advising the Client or other interested parties of the facts or
  implications of any such changes.



- The report is limited to the site boundaries identified by the Client and confirmed within this
  report. All boundary lines depicted on plans included within this report are approximate only
  and do not imply legal land ownership.
- The extent of the investigation was designed in-line with the Client's budget, which is considered suitable, and not limiting, for the proposed development.
- The recommendations, interpretations and conclusions within this report are based solely on desk study information and a site walkover. This report represents the conditions and findings on the date of desk study. Over time, site conditions may alter.
- All observations relating to tree species, asbestos containing materials within structures or
  invasive weeds, such as Japanese Knotweed, does not constitute a formal survey of such
  features. The identification of such features is therefore tentative only. The report does not
  consider whether sensitive ecology or archaeology is present as these require consideration
  by professionals specialising in these matters. It should be recognised that the collection of
  desk study information may not be exhaustive and that other information pertinent to the site
  may be available.
- It is emphasised that a desk study and walkover can only indicate the potential for risks relating to on-site contamination, certain types of ground conditions and geotechnical hazards. This study aims to highlight potential pollutant linkages and / or ground related risks in line with current guidance.
- Only through undertaking intrusive investigation works can the plausibility of pollution linkages
  and other ground related risks be proven. The scope of this investigation excludes a formal
  slope stability study and any observations made regarding slopes are for information only.
- Following final issue of this report, EMS has no further obligation to advise the Client on any
  matters such as changes in legislation or codes of practice that may affect the advice
  contained within the report.



# 2. Land Use and Setting

#### 2.1 Site Location

The site is situated approximately 2km southwest of Hereford City Centre within the north-western comer of the Rotherwas Industrial Estate, Hereford HR2 6ST.

The National Grid Reference (NGR) for the site is E: 352710, N: 238500.

Plans showing the site location and it's location within the wider Skylon Park development are included in Appendix A.

### 2.2 Site Description

Irregular in plan, the North Magazine site is relatively flat, covers roughly 8.19 hectares and is generally covered in undergrowth, rough vegetation, and bare ground. Historically the site formed part of the northern (Lyddite) factory located within the northern section of the Hereford Royal Ordnance Factory (Hereford ROF) facility. However, it is currently devoid of historic buildings and structures. A recently constructed tarmac access road is situated centrally on-site running from northeast to southwest towards the southwest boundary. Immediately northwest of the access road is the remaining floor slab to the former munitions barn that formed part of the factory.

For development purposes the site has been split into several plots (Plots 1 to 12), which it is understood will be developed separately. Plots 1 to 3 cover the northeast quarter of the site and Plots 4 to 6 the southeast quarter. Plots 7 and 8 are located within the southwest quarter and Plots 9 to 12 cover the north-western quarter.

Trees, rough vegetation, and chain link fencing delineate the northeast and southeast site boundaries. The south-western boundary is partly open, delineated with some trees and bounded by festival way and the access road to the Hereford Shell Store development, located immediately northwest of the site. Skylon bunds - Southern Bund No.1, Central Bund No.2 and Northern Bund No.3, partially delineate the site along its southwest, northwest and north-eastern boundaries. Open fields and a sewage works bound the site immediately to the north and northeast. Fir tree Lane, leading to the sewage works, bounds the site to the east, beyond which are various as yet undeveloped Skylon Park Plots. Beyond Festival Way and the Shell Store access road is Skylon Park Plot N26 and various commercial and light-industrial units including P. J. E. Driver Training and Consultancy Services, 'CleanMy Ltd', ACL Metal Ltd and the Thorn Business Park. To the northwest the site is bounded by the Shell Store development and Skylon Park Plot N24.

The Rotherwas Industrial Estate is located on the southern edge of the River Wye floodplain. The site is elevated at just over 50m Above Ordnance Datum (AOD) with the local topography sloping very gently towards the north and the River Wye. To the east and south the ground is initially relatively flat before rising gently and eventually climbing steeply to 137m AOD and the summit of Dinedor Hill, situated approximately 1.2km to the southeast.

Plans showing the existing site and proposed plot layouts are included in Appendix A.



#### 2.3 Site Walkover

An EMS Geo-Environmental Engineer undertook a site walkover on 24<sup>th</sup> June 2020. During the walkover the following observations were made:

- The site was confirmed to be relatively flat, covered with rough vegetation and devoid of buildings.
- The existing access road was observed centrally on-site.
- The Skylon Bunds were observed along the southwest, northwest, and northern site peripheries and were covered with rough vegetation.
- At the toe of Skylon Bund Northern Bund No.3 a pool had formed and become naturally vegetated.
- Thick vegetation and tree cover was present immediately beyond the northeast site periphery
  and Northern Bund No.3. Within this area were various concrete and low red brick structures
  and old concrete trackways, with a bituminous surface dressing. These features are
  understood to represent former blast walls, perimeter railway buildings and roadways
  associated with the former factory.
- At the time of the walkover the southeast half of the site (Plots 1 to 6), were undergoing vegetation clearance and regrading works. A stockpile of broken up concrete and one containing tree branches / roots were situated within the northeast part of this area. Two soil stockpiles were situated towards to the southwest periphery. Sporadic mature trees were also dotted across this area. It is understood that all stockpiles in this area will be removed as part of the preliminary site clearance works once development commences.
- A disused pipe entry was observed immediately south of Northern Bund No. 3.
- A topsoil stockpile being stored for use on the Shell Store site was situated on the former munitions bam floor slab. It is understood that these soils will be removed for use elsewhere on the Rotherwas Industrial Estate development.
- A stockpile of soils sourced from the central Skylon Park Plots was positioned adjacent to the Skylon Bund – Southern Bund No.1 western site corner. Samples for chemical analysis were taken from this stockpile during the walkover and the results show no significantly elevated chemical concentrations for these soils. It is understood that these soils are earmarked for use elsewhere on the Skylon Park development and will be removed from site.
- Given the findings of investigation works on adjoining sites, such as Plot N24, the Shell Store and Plot N26, a sitewide Made Ground presence is anticipated.
- Subsequently walking the site with an EMS Asbestos engineer, in August 2020, revealed sporadic asbestos containing material, such as cement and bituminous material, fragments scattered sitewide. Asbestos Containing Materials (ACMs) were also observed associated with the stockpile containing broken up concrete in the north-eastern area of the site.



Photographs of the site and surrounding area taken during the walkover are included in Appendix B.

# 2.4 Site History

Copies of historical Ordnance Survey Maps contained within the Envirocheck Report, reference 247715231\_1\_1, are included in Appendix C. The maps have been used to determine the historical use of the site and surrounding area, which is summarized in the following table:

| MAPPED HISTORY |   |   |
|----------------|---|---|
| DATE RANGE     | ON-SITE   | SURROUNDING AREA  |
| 1886 to 1905   | The site was shown as open ground with a field boundary crossing through it centrally from east to west. The eastern periphery was shown as covered with trees that continued | Open ground surrounded the site on to the north, south and west and to the north it was labelled as 'Liable to Floods'. The River Wye being situated approximately 300m to the north.   |
|                | eastwards.  | Woodland was shown immediately east of the site and Rotherwas House, Chapel and an old gravel pit approximately 500m east. A long roughly northwest to southeast orientated pool, labelled 'Fish Pond', was present approximately 100m to the east.   |
|                |   | The Hereford, Ross and Gloucester (GWR) railway trended northwest to southeast parallel and approximately 50m from the southwest site boundary, where the existing Festival Way and Shell Store Access Road is located. Rotherwas Junction was located approximately 500m to the northwest. |



| MAPPED HISTORY |   |  |
|----------------|---|--|
| DATE RANGE     | ON-SITE   | SURROUNDING AREA   |
| 1928 to 1964   | The site was shown as blanked out, disguising the presence of military (former ROF Hereford) land. A large pool (or pond) was   | The Hereford, Ross and Gloucester (GWR) railway was relabelled the Grange Court & Hereford (GWR) Railway.  |
|                | shown within the southeast corner of the site.  | Rotherwas house was no longer shown on maps dated 1930 onwards and the chapel was shown as disused.  |
|                |   | Maps dated 1929 onwards show the 'Fish Pond' to the east as marshland and silted up. A small pool was shown to the north of the 'Fish Pond' approximately 250m east and a large pool / pit was shown approximately 300m southwest. A sewage disposal works was shown approximately 500m to the west. |
|                |   | The immediate surrounding area was generally blanked out to disguise the presence of military (former ROF Hereford) land.  |
| 1970 to 1973   | Various structures, including the former munitions barn (identified as a works), earth mounds associated with former bunkers, trackways, small buildings and structures understood to be blast walls, all associated with the Lyddite factory complex, were shown across the northern and | Open ground, a patrolling path, a perimeter railway and various unidentified structures associated with the former Lyddite factory were shown to the north, east and south of the site. Immediately to the northwest was the Shell Store site and structures formerly associated with Plot N24.      |
|                | central parts of the site.  | The Grange Court & Hereford (GWR) railway was identified as a mineral railway and a perimeter railway bounded the site to the north and east.  |
|                |   | The railway was shown as dismantled on maps dated 1972 onwards.  |



|              | MAPPED HISTORY   |   |  |
|--------------|--|---|--|
| DATE RANGE   | ON-SITE  | SURROUNDING AREA  |  |
| 1977 to 2006 | Earlier factory buildings had been removed and only the foundations / bases, blast walls and trackways were shown. The pond within the southeast corner was no longer shown on maps dated 1988 onwards.  The aerial image for 1999 shows the site covered with trees and rough vegetation. Traces of trackways, the former perimeter railways and foundations associated with the former factory are also visible. | From 1977 onwards the former ROF Hereford facility buildings and structures surrounding the site had been removed. The former mineral and perimeter railway was shown as dismantled. Newer light industrial units (works), a depot and car parking corresponding to the existing Thorn Business Park, were shown to the south and southwest. The Sewage works had been constructed to the east. The existing Fir Tree Lane is shown running parallel to the southeast site boundary, to the sewage works, from this time. |  |
|              |  | Maps dated 1985 onwards show the former 'Fish Pond' located to the east as reduced in size and filled with water.   |  |
|              |  | The 1999 aerial image shows traces of the former trackways, mineral railway and structures / building foundations associated with the former factory.   |  |
|              |  | The sewage works to the west was no longer shown on maps dated 2006 onwards.  |  |
| 2020         | The site was shown as cleared of all earlier features such as the trackways, blast walls old foundations and structures.   | Skylon View / Festival Way and the Shell Store access road was shown bounding the site to the southwest. Various existing light industrial units were shown to the east. To the northwest of the Shell Store, approximately 100m from the site, a large existing pool was shown.  |  |

Information published in a conservation statement (July 2013) and anecdotal evidence from online sources indicate that prior to 1912, the land that includes the site and surrounding Rotherwas Industrial Estate belonged to the Lubienski-Bodenham family, Rotherwas Estate. The Ministry of Munitions acquired 100 ha of the former estate in June 1916 and constructed the Hereford Royal Ordnance Factory (Hereford ROF) facility for filling artillery shells. The explosives



used to fill the shells included Lyddite (picric acid or 2,4,6-trinitrophenol) and Amatol (a mixture of trinitrotoluene and ammonium). In 1918, the facility was supplied with dichloroethyl sulphide to produce mustard gas to fill shells. Shell filling continued until 1926 and from the late 1930s the Royal Navy used the facility for filling sea mines. The facility continued to be used for shell filling through the second world war and with ever decreasing production it closed in 1967.

Documentary information contained within the Gifford & Partners Report (Gifford Report) and the JS Conservation Management & Town Planning, Conservation Statement, shows that the former ROF facility comprised 370 buildings and was split into three sections (North, Central and South). The northern section was situated north of the existing B4399, The Straight Mile and was used for filling shells with Picric Acid (Lyddite or 2,4,6 trinitrophenol). Hence it was also known as the Lyddite Factory. The southern section of the facility was to the south of the B4399, The Straight Mile and was used to fill shells with Amatol, hence it was known as the Amatol Factory. Between the Northern and Southern Sections was a Central (Administration) Section that was used for administration, welfare and various workshops including painting and joinery.

The site itself covered the central and eastern parts of the former Lyddite (Northern) Factory to the southeast of the Shell Store and Plot N24. Information contained within the Gifford Report indicates that whilst the site operated as part of the former Lyddite (Northern) Factory it was used for filling empty shells with explosive compounds and chemical warfare agents. Most on-site structures were small melting and filling sheds surrounded by blast walls, the remains of which were observed beyond the northwest site periphery during the walkover and served by a network of roadways called 'clean ways'. This section also included air raid shelters and bunkers. During the 1960s most associated railway lines were removed long with the melting and filling sheds within the concrete blast walls and other on-site structures.

The movement of materials around this part of the factory are not shown in the Gifford Report. However, it is anticipated that these processes and materials movements were similar to those at the Shell Store and on Plot N24. Empty shells being transported onto site from the former Munitions Bam building to the south, filled with explosives / chemical warfare agents and then moved to the transit sheds located within the northern parts of the site. The Picric Acid and mustard gas used to fill the shells was stored off-site to the northwest of the Shell Store and dispensed via an off-site expense store. From the expense store the chemicals were transported onto site via rail to the melting and filling sheds. The filled shells were finally transported via a perimeter railway from the transit sheds to Army Ordnance Department Stores located within the northeast comer of the Rotherwas industrial estate.

Plans showing the Hereford ROF Facility and former Lyddite (Northern) Factory layouts along with indicated movements of shells and chemicals across the site are included in Appendix A.

Following the closure of the former Hereford ROF Facility, Herefordshire County Council bought 93 hectares in 1975 and began redeveloping it into the Rotherwas Industrial Estate.

Between 2008 and 2011 it is understood that Owen Pell, on behalf of Amey, undertook on-site clearance works to initially remove trees but also all blast walls, buildings, bunkers, roadways, and pipework, associated with the former factory. These works are documented in a Materials Management Plan (MMP) undertaken by Peter Brett Associates, (Ref: 31077/3503, Rev 02), dated November 2017.



Between August 2009 and November 2011 EMS Asbestos undertook several site walkovers, on behalf of Owen Pell and during the site clearance works to identify potential on-site asbestos sources. The EMS surveys initially targeted buried and lagged pipework but also identified thermal insulation, millboard debris, bituminous felt and cement debris associated with on-site buildings and infrastructure. It is understood that the bituminous debris provided a surface dressing to a roadway network that carried trolleys between the melting and filling sheds behind the blast walls. The bituminous layer acting as an anti-sparking layer. The buried pipework was used to carry hot steam between the meting and filling sheds and so was thermally lagged. The EMS Asbestos survey findings were included in several reports EMS2027, EMS2049, EMS3035, EMS3132 and EMS3204.

According to Owen Pell, during the clearance works, Hereford Asbestos Services (HAS) were onsite to hand pick visible ACMs prior to removing them off-site. However, apart from targeting specifically identified structures and areas, the scope of these works is unknown. Whilst every effort was made to clear all ACMs off-site, it is understood that buried services / structures may be present outside unsurveyed areas and, at the time, were potentially obscured by thick vegetation. Therefore, it cannot be guaranteed that the site is free of all ACMs and pockets may still exist.

Following the clearance works, Owen Pell undertook flood alleviation works across the site in 2012. The works included excavating the existing pool to the northwest of the Shell Store building and placing the excavated soils across the site to build up the ground levels. It is understood that soils excavated from the Yazor Brook Flood Alleviation works, conducted around the same time, were also placed on-site. An e-mail and information from Owen Pell's website relating to these works are included in Appendix D.

The original flood alleviation works are referred to in the Peter Brett MMP. This document also indicates that soils removed as part of the earlier clearance works and left over from the flood alleviation works were stockpiled in the southeast corner of the site. Over the infilled former pond. The stockpile (identified as Mound A) was estimated to be 200m long and comprise 36,000m³ of soil. Chemical analysis indicated that the stockpile was relatively free of significant chemical contamination but did contain elevated quantities of asbestos. The MMP indicated that the stockpile soils would be removed off-site for placement elsewhere on the Skylon Park development. However, before being removed these soils would require treatment in the form of hand picking to removed visible asbestos fragments. It is understood that treatment and removal of this soil stockpile off-site was undertaken by Wye Valley Demolition Ltd between 2018 and 2020.

The earliest Google Earth images showing the site and surrounding area, dated between December 2001 and December 2006, show the site and surrounding area as disused and overgrown with trees and thick vegetation. Traces of the old roadways serving the blast walls, remaining blast walls and the former munitions bam floor slab are also visible. The outline to the former perimeter railway can also be made out. The existing sewage works is shown to the east of the site and accessed via Fir Tree Lane and the Thorn Industrial Estate can be seen to the south.

Images dated July and December 2009 show the southeast parts of the site cleared of vegetation and several structures within the eastern part of the site, and the munitions barn slab are exposed.



Images dated April to July 2017 show the site cleared of vegetation with several tracks crossing it. Blast walls and other structures on earlier images are no longer shown but the blast walls beyond northeast site periphery are just visible. A long tear-drop shaped grass covered area is shown along the eastern site periphery that is anticipated to correspond with the soil stockpile referred to in the Peter Brett MMP. Skylon View and the access road to the Shell Store are shown along the southwest site boundary and the existing access leading onto the site. The Skylon Bunds are shown along the southwest and northwest site perimeters. The large pool located to the northwest of the Shell Store building is also shown.

Images dated September 2018 to May 2020 show the existing topsoil stockpile for the Shell Store on the Munitions Barn floor slab, which is also being used for parking. The site generally looks as it currently appears with clearance / regrading works going on across the eastern half and several stockpiles across it. The image for 2018 shows works commencing to clear the stockpile on the eastern periphery. The stockpile being much reduced in size on the image dated May 2020.

### 2.5 Proposed Development

It is proposed to divide the site into several plots (Plots 1 to 12) and develop each individually for commercial / light industrial use with associated access and parking. It is understood that in order to aid with future on-site drainage, the preliminary site works will include raising existing sitewide ground levels by approximately 1.00m to 1.50m. The proposed layout for Plots 1 to 12 has yet to be finalised.

A plan showing the proposed plot locations is included in Appendix A.

# 2.6 Geology

Published geological and topographic information indicates the site to be situated within relatively flat, low-lying ground on the southern edge of the Wye Valley.

The BGS map (Sheet 215: Ross-on-Wye, solid and drift) shows the site to be immediately underlain by superficial Primary River Terrace Deposits forming the River Wye floodplain. These deposits are generally described by the BGS Lexicon as comprising 'sand and gravel, locally with lenses of silt, clay or peat'. A broad strip and area of Alluvial Deposits associated with the River Wye are shown approximately 120m north and 400m west of the site.

The presence of Made Ground on-site is not shown on the BGS map. However, given the site and surrounding area's historical use and third-party information Made Ground is known to be present.

The bedrock geology underlying these superficial deposits is shown as the Raglan Mudstone Formation, which is borderline Silurian / Devonian in age. This stratum is likely to have been derived from cyclic deposition over deltaic mudflats at the mouth of a river with periodic marine inundations. It is generally described by the BGS as 'Sandstones, generally silty or argillaceous, fine- to medium-grained, bright orange-red to dark brick-red, with subordinate siltstone and mudstone; pebbles rare'.

Numerous historical BGS borehole records are located between 10m and 370m east of the site. For the nearest records encountered, ground conditions included a thin topsoil layer, typically



0.10m thick, overlying superficial River Terrace Deposits and Raglan Mudstone Formation bedrock. The River Terrace Deposits included clay rich soils overlying granular soils. The clay rich soils, generally described as soft to stiff brown silty and sandy clay, were recorded to between 0.91m and 3.35m depth. The underlying granular deposits, generally described as sand or gravel with varying quantities of sand and clay, were recorded to between 5.13m and 6.99m depth. The underlying Raglan Mudstone Formation bedrock was generally described as dark brown, grey, and maroon micaceous mudstone, sandstone, and shale. This stratum, 2.60m was recorded to the maximum depth of the boreholes at 9.70m. Groundwater was recorded at between 2.20m and 2.60m depth associated with the granular River Terrace Deposits.

There are no recorded faults or other major geological structures present on-site or within 250m of the site.

A summary of the geological information presented within the Envirocheck Report is included in Appendix E.

# 2.7 Hydrogeology

A summary of the hydrogeological, hydrological, and environmental information for the site is contained within the Envirocheck Report included in Appendix F.

The site is situated on the southern edge of the Wye Valley floodplain. Ground elevations rising gently towards the south prior to rising sharply at Dinedor Hill. Based on the local hydrological conditions, topography of the area and published geological information it is anticipated that shallow / perched groundwater maybe present associated with the granular River Terrace Deposits. Otherwise groundwater is anticipated to occur at depth, flow towards the north and east in hydraulic continuity with the River Wye and is likely to be subjected to seasonal fluctuations.

Both the underlying superficial River Terrace Deposits and the Raglan Mudstone Bedrock have been classed by the Environment Agency as Secondary A Aquifers.

The site is not located within a Groundwater Source Protection Zone (SPZ).

There are no recorded groundwater abstraction entries within 250m of the site.

The underlying River Terrace Deposits are identified as being a high vulnerability, secondary aquifer. This is to be anticipated given their predominantly granular nature and, therefore, likely high permeability

# 2.8 Hydrology

The site is relatively flat and low lying with exterior areas generally comprising vegetated / bare ground. It is anticipated that drainage will be generally directed straight into the ground.

During the site walkover it was observed that a large pool had formed and become naturally vegetated at the toe of Skylon Bund – Northern Bund No.3. It is understood that this will remain intact as part of the proposed development. The nearest recorded surface water feature is the large pool situated approximately 100m northwest of the site and adjacent to the Shell Store



building. The River Wye is the nearest water course flowing eastwards approximately 370m north of the site.

There are no recorded surface water discharge consents or licensed surface water abstraction entries within or within 250m of the site.

Most of the site is identified as being located within an area designated by the Environment Agency as Flood Zone 1 and Flood Zone 2 (https://flood-map-for-planning.service.gov.uk). That is land and property with a low to medium potential risk from flooding. However, the northeast periphery is shown to be within a Flood Zone 3 designated area where there is a high potential risk from flooding.

Owen Pell undertook flood alleviation works, on behalf of Amey, across the North Magazine and adjacent Shell Store site in 2012. These works included excavating the pond to the northwest of the Shell Store building and elevating on-site ground levels using the soils from the pond. It should be noted that during the 2020 floods, the site was unaffected. It is understood that in for future drainage purposes, existing ground levels will be raised which will also help to protect the site from flooding.

# 2.9 Mining and Mineral Extraction

The site is not located within an area likely to have been affected by coal mining and there are no mineral extraction entries recorded either on-site or within 250m of the site.

### 2.10 Ground Stability

The potential risk for the site to be impacted by shrinking or swelling clays, ground dissolution, compressible ground is recorded as no hazard. For landslides, collapsible ground and running sands the recorded risk is very low.

#### 2.11 Radon

The site is situated within a lower probability radon area (where less than 1% of homes are estimated to be at or above the action Level). Therefore, no radon protection measures are required in the construction of new dwellings or extensions.

#### 2.12 Soil Geochemistry

The site is situated within an area where elevated natural background concentration of metals have been recorded for chromium (60 – 90 mg/kg) and nickel (15 – 30 mg/kg).

#### 2.13 Landfills and Infilled Land

No entries for historical or registered landfill sites are recorded on-site or within 250m of the site.

Two licensed waste management facility entries are recorded within 250m of the site. The nearest is located 35m southeast and associated with a waste reclamation centre operated by Beacon Waste, the status of which is shown as surrendered since 9th July 2012. The second entry is

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located 141m east and associated with Quickskip Hereford Limited, the status of which is given as issued.

A single entry for potentially infilled land (water) is recorded on site and a single entry is recorded within 250m of the site. The on-site entry is for unknown filled ground (Pond, marsh, river, stream, dock etc), which was last mapped in 1964. Included maps indicate that this entry is associated with the former large pond located within the south-eastern site comer and shown on historical maps dated 1928 to 1985. The second entry is for unknown filled ground (Pond, marsh, river, stream, dock etc) last mapped in 1890 and located approximately 94m southeast of the site. This entry coincides with the former elongate fishpond shown on historical maps dated 1886 onwards.

Two registered waste transfer site entries are recorded within 250m of the site. Both records are for the same entry located 60m to the southeast on Fir tree Lane and associated with Beacon Waste Ltd and Hereford and Worcester CC. Authorised waste includes bulky household waste, empty waste oil containers, liquid propane gas cylinders, oil contaminated materials, scrap batteries, unwanted household chemicals – pharmaceuticals, cosmetics and trade-named, and waste oil. The status given is operational as far as known / operational. Given the nature of the waste handled it is considered unlikely that it would impact on the proposed development.

### 2.14 Contemporary Trade Directories and Fuel Sites

There are 25 recorded contemporary trade directory entries within 250m of the site, of which ten are identified as being active and 15 as inactive. The contemporary trade directory entries identified and their distance / direction from the site are presented in the following table:

| Trade Entry   | Distance / Direction from the Site |
|---|------------------------------------|
| Active Entries:   |                                    |
| Commercial Vehicle Repairs - Commercial Vehicle Servicing, Repairs, Parts & Accessories | 107m S                             |
| Ski Tyres - Tyre Dealers  | 152m S                             |
| The Sash Restoration Co Hereford Ltd - Window Frame Manufacturers                       | 138m SW                            |
| Bishop & Smith - Stainless Steel Manufacturers  | 198m W                             |
| RSSACLtd - Refrigeration Equipment - Commercial   | 211m W                             |
| Hereford Rewinds Ltd - Engine Rebuilding & Reconditioning                               | 223m SW                            |
| West Mercia Air Conditioning Ltd - Air Conditioning & Refrigeration Contractors         | 233m W                             |
| West Mercian Lifting Specialists Ltd - Lifting Equipment                                | 237m W                             |
| H F T Forklifts - Fork Lift Trucks  | 243m S                             |
| Mike Brooks Transport Ltd - Road Haulage Services                                       | 245m W                             |
| Inactive Entries:   |                                    |
| Hereford Powder Coating - Powder Coatings   | 53m E                              |
| CSCS-Blast Cleaning   | 53m E                              |
| Severn Waste Services - Waste Disposal Services   | 82m S                              |
| A C L Sheet Metal Ltd - Sheet Metal Work  | 92m S                              |
| Arrowmight - Metal Products - Fabricated  | 103m S                             |

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| Modular Systems & Developments - Laboratory Equipment                 | 107m S  |
|---|---------|
| Jj'S Motorcycles Mot Station - Mot Testing Centres                    | 110m S  |
| Polyford (Plastics) Ltd - Polythene & Plastic Sheeting Supplies       | 152m S  |
| G P J - Sheet Metal Work  | 213m SW |
| Mike Brookes Transport Ltd - Road Haulage Services                    | 233m W  |
| D & T Engineering Ltd - Aluminium Fabricators                         | 237m W  |
| Priority Technical Services Ltd - Tool Design, Manufacturers & Makers | 248m SW |
| Brewery Plastics Ltd - Brewery Supplies                               | 250m S  |
| Money For Scrap Cars Vans Hereford - Salvage Dealers                  | 250m S  |

There are no recorded fuel station entries within 250m of the site.

By their nature these entries are likely to use potentially contaminative substances as part of their on-site operations that could potentially be subjected to leakages and spillages. However, any spills and leaks are likely to be small scale and localised. Therefore, given their distance from the site it is considered unlikely that these entries would pose a risk to the proposed development.

## 2.15 Registered Hazardous Sites

A single registered hazardous sites entry is recorded within 250m of the site. Associated with North Site on Fir Tree Lane the entry is situated approximately 18m southeast of the site and recorded as an explosive site. The entry status is given as not active.

#### 2.16 Pollution Incidents to Controlled Waters

There are two recorded pollution incidents to controlled water entries within 250m of the site. The entries are located 9m and 13m southeast and associated with Polyford Plastics and Confluence With, Down Ditch, respectively. The pollutant for both entries is unknown, the receiving water not given, and the incident severity is Category 3 – Minor Incident.

#### 2.17 Ecologically Sensitive Land Uses

There are no recorded ecologically sensitive land-use entries either on-site or within 250m of the site.

## 2.18 Unexploded Ordnance

According to the ZeticaUXO website (https://zeticauxo.com) the site is located within an area identified as a Luftwaffe Target. However, it is recorded as being at low risk (15 bombs per 1000 acres or less) from unexploded ordnance.

According to the Conservation Statement (July 2013), the southern section of the munition's factory suffered serious damage following a bombing raid in 1942. However, the northern section of the facility that includes the site remained untouched.



#### 2.19 Previous Investigations

Two previous intrusive investigations have been undertaken for the site itself and several within the surrounding area, including the Shell Store, Plot N24 and Plot N26). The two investigations most pertinent to the site were undertaken by Geotechnics Limited, in November / December 2012, and EMS in February 2020. The findings were presented in a ground investigation and letter report that should be read in conjunction with this report and are referenced as:

- 'Soil Contamination and Concrete Investigation: Hereford Enterprise Zone Plot N1, Munitions Barn Slab, Rotherwas Industrial Estate, Hereford HR2 6JT', EMS Letter Report E16889, dated 26<sup>th</sup> March 2020.
- 'Ground Investigation at North Magazine Site, Rotherwas' Factual and Interpretative Report, Geotechnics Project Number: PC125103, dated February 2013.

# 2.19.1 EMS Hereford Enterprise Zone – Plot N1, Munitions Bam Slab Soil Contamination and Concrete Investigation February 2020.

Localized investigation works for the munitions barn floor slab were undertaken by EMS between 12<sup>th</sup> and 13<sup>th</sup> February 2020.

The investigation works included 6No. trial pits (TP01 to TP06) using a mechanical excavator, to between 1.90m and 3.10m depth, around the floor slab and 6 No. concrete cores from the floor slab itself. During excavation of the trial pits soil samples were collected for logging purposes and laboratory analysis.

Encountered ground conditions included a Made Ground / Made Ground Topsoil cover, to between 0.85m and 2.20m depth, overlying clay rich and granular River Terrace Deposits. The Made Ground / Made Ground Topsoil was generally described as soft brown and dark brown gravelly clay and clayey / silty gravel, which also included brick, concrete, plastic liner, linoleum, a metal wheel / coil, plant remains, wood, clinker, fabric, coal, cement, metal and pipe fragments, tiles and bottles. The underlying clay rich River Terrace Deposits, encountered to between 1.90m and 3.10m depth, were generally described as soft light brown gravelly clay. The underlying granular River Terrace Deposits were generally described as reddish brown very sandy gravel and encountered to the full investigation depth at 3.10m. The underlying Raglan Mudstone bedrock and groundwater were not encountered during the investigation works.

Five selected Made Ground samples were subjected to chemical analysis for heavy metals, total cyanide, phenols, organic matter content, water soluble, sulphate, total sulphate, total sulphur and pH, speciated polycyclic aromatic, hydrocarbons (PAH), banded total petroleum hydrocarbons (TPH) and asbestos in soils / quantification, explosive compounds and chemical warfare agents (CWAs).

During the investigation works no significant heavy metal, inorganic, hydrocarbon, explosive compounds or CWA concentrations were recorded. However, moderate to large quantities of asbestos (loose Chrysotile fibres, Chrysotile and Amosite insulation and Chrysotile cement), between 0.052% wt/wt and 0.121% wt/wt were recorded in three Made Ground samples.



Extracts of the Plot N1 Munitions Barn investigation works, including an exploratory hole location plan, logs and chemical analytical results are included in Appendix G.

# 2.19.2 Geotechnics Ltd North Magazine Site, Rotherwas Ground Investigation February 2013.

Geotechnics Ltd undertook sitewide ground investigation works between 26th November and 13th December 2012. The investigation included 14 No. deep boreholes (BH1 to BH13 and BH13A) using cable percussion and rotary methods. It should be noted that four boreholes were undertaken on next door sites that included Plot N24 (BH1 and BH2) and Plot N26 (BH11 and BH12). The boreholes undertaken on-site were sunk to between 15.07m and 20.46m depth. During drilling samples were taken for logging purposes and laboratory chemical analysis and geotechnical testing. Upon completion, four boreholes (BH3, BH5, BH8 and BH9) were installed with groundwater and ground gas monitoring standpipes to between 6.00m and 20.30m depth. All other boreholes on-site were backfilled with arisings on completion.

Encountered ground conditions included a general site wide Made Ground cover overlying clay rich and granular superficial River Terrace Deposits. In boreholes BH3 to BH10 recorded sitewide Made Ground depths were between 1.20m and 3.00m. This material generally being described as firm brown sandy gravelly clay, clayey / silty sandy gravel, and gravelly sand with occasional fine gravel size organic pockets. The Made Ground also included roots, rootlets, brick, concrete, and clinker.

In boreholes BH13 and BH13A, Made Ground described as soft and firm brown mottled reddish and blackish brown sandy gravelly clay and clayey sandy gravel was encountered to 5.30m depth. This material also included brick, concrete, coal, plastic, wood, and glass fragments and coincides with the former pond within the south-eastern site comer was located. Underlying the Made Ground in boreholes BH5 and BH8, to between 1.65m and 1.80m depth, soils described as firm brown occasionally dark brown and black silty and slightly sandy slightly gravelly clay were encountered. These soils also contained roots and rootlets and are anticipated to represent a buried Topsoil layer, which would be anticipated where site levels were built up as part of the flood alleviation works.

Underlying the Made Ground and Buried Topsoil in boreholes BH5, BH9 and BH10, superficial clay rich River Terrace Deposits were encountered to between 1.90m and 3.00m depth. These deposits were generally described as firm to stiff dark brown and brown mottled greenish grey silty and sandy slightly gravelly clay. Granular River Terrace Deposits were encountered underlying the clay rich deposits and the Made Ground (BH13A) to between 5.80m and 7.00m depth. These deposits were generally described as dense grey and brown slightly clayey sandy to very sandy gravel.

Underlying the River Terrace Deposits, clay rich strata belonging to the Raglan Mudstone Formation bedrock was encountered to the maximum 20.46m borehole depth in boreholes BH3 to BH10 and BH13A. This stratum was generally described as Stiff reddish brown and light greenish grey clay with occasional lithorelicts grading into extremely weak to weak reddish brown mudstone.

Groundwater was encountered in boreholes BH5, BH6, BH8 and BH10 between 2.30m and 6.70m depth associated with the granular River Terrace Deposits. In boreholes BH13 and Rev: 1 Date 15th February 2021



BH13A, ground was recorded at 3.80m depth and associated with the Made Ground. Recorded groundwater depths during four follow-on monitoring visits of boreholes BH3, BH5, BH8 and BH9, were between 1.13m and 2.83m, associated with the Made Ground. Groundwater is likely to seasonally fluctuate with the River Wye and it is noted that levels were recorded during December and January when higher rainfall and river levels are likely. The report recommends that further monitoring is undertaken in order to better assess the long-term variation in groundwater levels across the site.

Selected Made Ground samples from eight on-site boreholes (BH3 to BH10) and a Made Ground sample from BH13 were subjected to laboratory chemical analysis. The chemicals analyzed for included heavy metals, including manganese and vanadium, organic matter, total organic carbon, pH, polycyclic aromatic hydrocarbons (PAH), extractable petroleum hydrocarbons (EPH), phenols and asbestos. The results were compared to in-house soil guideline values (SGVs) for an industrial land use.

The results indicating that, with the exception of Chromium VI, no excessively elevated concentrations were recorded above their respective SGVs. A single Chromium VI result (BH4 at 1.00m depth) recorded an elevated concentration (36 mg/kg) that just exceeded the SGV of 35 mg/kg. No asbestos was reported within the samples analyzed. However, given what is known about this and neighbouring sites, where elevated metal concentrations and asbestos have been recorded, it is considered questionable how representative these results are. It is also noted that no analysis was undertaken for explosive compounds or CWAs.

On-site boreholes BH3 to BH10 were monitored for ground gas (methane and carbon dioxide) on four occasions between 12<sup>th</sup> December 2012 and 11<sup>th</sup> January 2013. No elevated methane concentrations were recorded over the monitoring period and carbon dioxide varied between 0.1% and 1.6%. Recorded flow rates varied between 0.0 l/hr and 12.7 l/hr giving calculated Gas Screening Values (GSVs) equal to 0.000 l/hr (methane) and from 0.000 l/hr to 0.1270 l/hr (carbon dioxide). The recorded values corresponding to a very low to low gas risk and a Characteristic Gas Situation generally of CS1. However, for the highest carbon dioxide GSV (0.1270 l/hr) a characteristic situation of CS2 would be considered more appropriate. The report concluded that as no ground gas concentrations were above the threshold values for methane (1%) and carbon dioxide (5%) a characteristic situation of CS1 was appropriate for the site and no gas remediation would be required.

However, the report indicates a lack of permanently consistent flows over time and that monitoring was undertake at times of no significant atmospheric pressure drop below 1000mb. This combined with the time of year that monitoring was undertaken, and that the monitoring period was very short introduces a degree of uncertainty to the gas regime and the resulting building protection conclusions. It is also noted that the wells monitored are located within the central parts of the site and none are within the vicinity of the former pond located within the southeast corner.

Extracts of the Geotechnics Ltd North Magazine site investigation works, including an exploratory hole location plan, logs and chemical analytical results are included in Appendix H.



#### 2.19.3 Plots N24, N26 and the Hereford Shell Store

Several investigations have been undertaken for Plots N24, N26 and the Shell Store situated immediately south and northwest of the site by EMS and third parties. These findings of these investigations were presented in separate individual reports that should be read in conjunction with this report, referenced as:

- 'Phase 2 Geo-Environmental Site Investigation Report: Hereford Enterprise Zone Plot N24, Rotherwas Industrial Estate, Hereford HR2 6ST', EMS Report E16284-SI, dated 27<sup>th</sup> April 2020.
- 'Additional Contamination Investigation and Ground Gas Assessment Hereford Enterprise Zone, Plot N24. Rev 1', EMS Letter Report E16284, dated 16<sup>th</sup> July 2020.
- 'Phase 2 Contamination Site Investigation Report: Hereford Enterprise Zone Plot N26, Festival Way, Rotherwas, Hereford HR2 6ST', EMS Report E14453-SI, dated 9<sup>th</sup> March 2020.
- 'Phase 2 Contamination Site Investigation Report, Hereford Shell Store, Rotherwas Industrial Estate, Hereford HR2 6JT', EMS ref E12402-SI, dated 14<sup>th</sup> August 2019.
- 'Hereford Shell Store, Rotherwas Industrial Estate, Hereford HR2 6JT, Made Ground and Asbestos Investigation', EMS Letter Report ref E12402, dated 20th February 2019.
- 'Additional Site Investigation and Revised Contamination Risk Assessment Hereford Shell Store, Rotherwas, Hereford HR2 6JT', EMS Letter Report ref E12402, dated 11<sup>th</sup> December 2019.

The intrusive investigation works generally included machine excavated trial pits, windowless sample boreholes and deep boreholes using cable percussion and rotary techniques. Soil samples were collected for logging purposes and laboratory geotechnical testing and chemical analysis. Upon completion selected boreholes were installed with groundwater and ground gas monitoring standpipes. All other exploratory holes were backfilled with arisings on completion.

During the investigation works the encountered ground conditions include a variable Topsoil / Made Ground Topsoil and Made Ground cover to between 0.10m and 2.80m depth overlying clay rich and granular River Terrace Deposits. The clay rich River Terrace Deposits were generally encountered to between 0.30m and 3.00m. The base of the granular deposits was encountered in deep boreholes on Plot N24 only at 6.05m depth. The underlying Raglan Mudstone Bedrock was also encountered in deep boreholes on Plot N24 to the maximum depth of the investigation works at 15.70m. Groundwater was recorded at between 1.85m and 4.85m depth and associated with the granular River Terrace Deposits.

Selected Made Ground samples from each site were subjected to laboratory chemical analysis, which included heavy metals, various inorganic compounds (total cyanide, phenols, organic matter content, water soluble, sulphate, total sulphate, total sulphur and pH), speciated PAH, banded TPH and asbestos in soils / quantification. Chemical analysis also included explosive compounds and chemical warfare agents (CWAs).



For the Made Ground samples analyzed, elevated lead concentrations were recorded on the Shell Store site and very low asbestos levels were recorded on the Shell Store and plot N24 sites. Explosive residual concentrations for Picric Acid, TNT and Tetryl were also recorded for the Shell Store site. No elevated inorganic compounds, PAH, TPH of CWAs were recorded for the Made Ground samples analyzed from these three sites. Apart from a groundwater sample taken on Plot N24 (BH02) where elevated TPH (hydrocarbon chains C12 to C16) was recorded, no other chemical contamination was recorded for these three sites.

Ground gas monitoring results showed no elevated methane concentrations for Plot N26 and a maximum concentration of 0.1% for Plot N24. Measured carbon dioxide concentrations ranged from 0.1% to 6.4% (Plot N24) and 5.2 % to 11.3% (Plot N26). Flow rates ranged from -0.1 I/hr and 0.1 I/hr (Plot N24) and -0.1 I/hr and 4.0 I/hr (Plot N26). Calculated Gas Screening Values were 0.000 I/hr for methane on both sites and ranged from 0.000 I/hr to 0.004 I/hr (Plot N24) and from -0.005 I/hr to 0.032 I/hr (Plot N26). The results corresponding to a very low to low gas risk and Characteristic Gas Situation of CS1. However, given that recorded carbon dioxide concentrations exceeded the 5% threshold limit it was considered that the Characteristic Gas Situation should be raised to CS2.



# 3. Preliminary Contamination Risk Assessment

The methodology for undertaking the contamination risk assessment is included within the supplementary information at the back of this report.

#### 3.1 Potential Contamination Sources

#### 3.1.1 Invalid Sources

Several temporary soil stockpiles and a stockpile of cleared tress were observed during the site walkover. It is understood that these are either being stored ready for re-use elsewhere on the ongoing Skylon Park development or will be removed as part of preliminary site works.

Several active contemporary trade entries have been identified within 250m of the site that may act as potential contaminative sources. However, given that any contamination is likely to be relatively small scale and localised combined with their location and distance from the site, they are not considered to pose a significant risk to the proposed development.

The Skylon bunds delineating the southwest, northwest, and northern site peripheries contain soils from elsewhere on the Rotherwas Industrial Estate. These soils contain very low quantities of asbestos. In order to prevent these soils becoming mobile within the wider environment, the bunds have been remediated with an engineered cap comprising and orange marker membrane and 300mm of clean soils. Therefore, it is considered that the potential for these soils to pose a risk to the proposed development is very low.

#### 3.1.2 On-site Sources

Historically the site and surrounding area formed part of the Lyddite factory within the northern part of the Hereford ROF munitions facility. On-site operations included filling artillery shells, initially with picric acid (or 2,4,6 trinitrophenol) and later mustard gas (dichloroethyl sulphide), in melting and filling sheds contained within pairs of blast walls. Historical daily operations are also likely to have used and stored fuels, solvents, lubricants and other unknown chemicals, which may have been the subject of leaks and spillages, although potentially small scale and localised. Such potential contaminants may be sources of heavy metals, Polycyclic Aromatic Hydrocarbons (PAHs) and Petroleum Hydrocarbons that could have impacted shallow and near surface soils.

The factory complex ceased operating in 1967. Historical buildings and structures were cleared from the site in 2011 and on-site ground levels elevated as a part of flood alleviation works in 2012. Previous investigation works in 2013 and around the munitions barn floor slab indicate that Made Ground and potentially buried topsoil is still present on-site from the time when the factory was in operation. Within the site's southeast corner is a former infilled pond. Made Ground and buried Topsoil from when the factory was operating may have been impacted by spilled or leaked chemicals and substances used as part of the factory's daily operations. Therefore, it is considered that these soils could potentially act as contaminant source of heavy metals, inorganic compounds, PAHs and Petroleum Hydrocarbons, asbestos, explosive compounds, and / or chemical warfare agents (CWAs).



The melting and filling sheds were serviced by a network of roadways and buried pipelines that carried hot steam. The roadways were covered with a bituminous layer that contained asbestos to prevent sparking from the trolleys used to carry shells between the sheds. Asbestos lagging was also used around the pipelines for insulation purposes. ACMs also served many purposes within various buildings and bunkers on-site. Clearance works were conducted between 2008 and 2011 to remove old buildings, structures and asbestos associated with the former factory, offsite. However, it cannot be fully guaranteed that all ACMs were removed, and asbestos may occur as pockets, fibres and other microscopic particles on-site. Potentially ACMs may also have been trafficked across the site during follow-on groundworks. Sitewide fragmentary asbestos containing materials, such as cement and bituminous material, were observed at surface and associated with the stockpiled broken up concrete located within the north-eastern area of the site during recent siteworks. Low asbestos levels and ACMs have also been encountered within the Made Ground associated with the munitions barn floor slab and on neighbouring sites. Therefore, it is considered that low sitewide asbestos levels are present, which pose a variable risk across the site.

#### 3.1.3 Off-site Sources

Historically the site formed part of the larger former Northem (Lyddite) Factory complex. However, since the former Hereford ROF facility was decommissioned most historical buildings and structures have been removed. Some contamination to near surface soils may have occurred. However, it is considered very unlikely that significant potential off-site contaminative sources associated with the former factory complex would pose a risk to the proposed development.

Previous investigation works on the adjacent Shell Store and Plot N24 sites have identified low / residual concentrations of lead, asbestos and explosive compounds in shallow Made Ground. However, as part of their ongoing development these sites are either being covered with hardstanding or remediated with an engineered cap of clean soils. Therefore, it is considered that the potential for these soils to pose a risk to the proposed development is very low.

#### 3.1.4 Ground Gas

Historically a large pond was situated within the southeast corner of the site as shown on historical maps dated 1928 to 1985. This feature has since been infilled and boreholes undertaken during previous investigation works indicate that the infilling material includes soft and firm brown mottled reddish and blackish brown sandy gravelly clay and clayey sandy gravel that reaches up to 5.30m depth. This material also including brick, concrete, coal, plastic, wood, and glass fragments. It is unknown how much and what organic or other putrescible waste is contained with this infill material. Biodegradation of such waste means it is likely to act as a ground gas (methane and carbon dioxide) source with a low to moderate generation potential. Ground gas volumes and rates will likely be affected by the amount of organic material within the infilling material and the length of time since the last waste was deposited. According to the CIRIA C665 Guidance this is likely to reduce over time.

According to the CIRIA C665 guidance, pressure differences between the atmosphere and those in the ground will act as the main driving force to move ground gases from a source and along an identified pathway. This driving force being measured as a flow rate in I/hr. Winds crossing the ground surface can increase pressure differentials and encourage ground gas to migrate from soil to the atmosphere. Vegetation cover will reduce wind speeds across the ground surface,



therefore, reducing the likelihood of gas migrating from soils to air. Changes in atmospheric pressure will either increase emission rates (falling pressure), by increasing gas volumes due to air being removed, or reduce rates (rising pressure) by driving air into the ground and diluting gas volumes.

The CIRIA C665 guidance indicates that permeable soils, such as the granular River Terrace Deposits and fractured bedrock will form natural pathways through which ground gas can migrate. Clay rich soils and groundwater blocking pore spaces will inhibit ground gas migration. Rainfall can influence ground gas migration causing it to move laterally should the surface become saturated. Gases such as carbon dioxide are likely to be soluble in groundwater and the solubility influenced by pressure and temperature variations.

The CIRIA C665 guidance indicates that man-made constructions, such as service runs, drains, foundations and piles will also create pathways along which gases can migrate. Migrating ground gases will enter buildings through cracks and gaps in solid / suspended floors, through joints formed during construction, fractures in subsurface walls, service pipes, ducts, and wall cavities. Once inside the migrating gas can accumulate overtime in confined spaces such as inspection pits, basements, roof voids, space beneath suspended floors, settlement voids, drains, soakaways and other services. Accumulating ground gases posing a potential risk not only to end-users, but also construction workers.

Significant hazards associated with accumulating ground gases include physiological effects on human health and explosion. More minor hazards include issues associated with odours and vegetation die-back.

Physiological effects are generally influenced by gas toxicity and the degree, nature and length of exposure. Gases such as carbon dioxide that result from breaking down organic matter, or microbial methane digestion, can have toxic effects when present at high enough concentrations.

Under standard air pressures and mixtures, accumulating methane in a confined space will explode at concentrations in excess of the lower explosive limit (LEL) threshold of 5%. Air composition, i.e. oxygen volumes, temperature, pressure and the nature of the surroundings will all influence ground gas flammability.

On-site ground gas monitoring undertaken during previous investigation works recorded no elevated methane concentrations and carbon dioxide varying between 0.1% and 1.6%. Recorded flow rates varied between 0.0 l/hr and 12.7 l/hr giving calculated Gas Screening Values (GSVs) equal to 0.000 l/hr (methane) and from 0.000 l/hr to 0.1270 l/hr (carbon dioxide). However, no readings were undertaken within the vicinity of the buried pool and some doubt has been cast over the reliability of these results.

However, previous ground gas monitoring undertaken on adjacent sites (Plots N24 and N26) have recorded elevated carbon dioxide concentrations that exceed the 5% threshold limit.

Therefore, with the above in mind it is considered that there remains a potential ground gas risk to the proposed development.

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# 3.2 Potential Receptors

The assessed land use category for the site is commercial/light industrial.

The proposed development is currently in the early stages and as yet details relating to the site layout have yet to be finalized. However, it is understood that the site will be developed for commercial / light industrial purposes with associated access and parking.

#### 3.21 Human Health

The most sensitive receptors with respect to human health are likely to be:

- end-users using the completed development.
- construction workers during the site development.

Use of good hygiene practice and suitable PPE, i.e. gloves, will reduce the contamination risks posed to construction workers during development. However, fragmentary ACMs are likely to be present onsite training and adequate barrier protection,

#### 3.22 Controlled Waters

The underlying River Terrace Deposits and the Raglan Mudstone Bedrock have been identified as a Secondary A Aquifer. These deposits are classed as having a high potential for leaching. Potentially groundwater occurs at shallow depths within the granular River Terrace Deposits and may be subject to seasonal fluctuations. Given investigation findings on adjacent sites and the history of this plot contaminated Made Ground is likely to be present at surface that could pose a risk to groundwater.

A naturally former pool, at the toe of the Northern Skylon Bund, is present on-site which it is anticipated will remain as part of the proposed development. Therefore, given the potential for contaminated Made Ground to be present on-site, this feature is considered the most significant surface water receptor.

#### 3.23 Buildings, Buried Structures and Services

Buried water service pipes and concrete associated with building foundations will form part of the proposed development.

# 3.3 Potential Pathways

The following pathways should be considered as methods of transferring chemicals of concern from the source to receptors:

- Ingestion, inhalation, or direct contact with contaminated soils and dust.
- Vertical migration (leaching) of contaminants.
- Horizontal migration of contamination in surface water.

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Horizontal migration, ingress, accumulation, and inhalation of ground gas.

## 3.4 Preliminary Conceptual Site Model

The pollutant linkages are best presented in a diagrammatic form and therefore a preliminary conceptual site model plan is presented in Appendix A. The individual pollution linkages as numbered on the preliminary conceptual site model plan are described further in section 3.5.

The preliminary conceptual model has been developed based solely on desk-based research and assessment. The only way to conclusively determine the presence or absence of contamination is with intrusive site investigation.

## 3.5 Preliminary Contamination Risk Assessment

The following table identifies the potential risks that exist to the receptors through each of the identified pollutant linkages in the conceptual site model. It should be noted that the numbers referred to for each of the pathways refers to the numbered pollutant linkages from the Initial Conceptual Site Model Plan, as presented in Appendix A.

| Potential<br>Sources and<br>contaminants  | Pathways<br>(Reference<br>from Model)   | Receptors                                  | Hazard<br>Severity                      | Probability of<br>Occurrence   | Potential<br>Risk |
|---|---|--|---|--|-------------------|
| Made Ground on-site, associated with the former Hereford ROF factory facility: Heavy metals. Inorganic compounds. Polycyclic Aromatic Hydrocarbons (PAH). | Ingestion Inhalation Direct Contact (1) | Site endusers.  and  Construction Workers. | Human<br>health<br>effects.<br>[Medium] | Low probability of contaminants being present within Made Ground at concentrations that could cause significant harm to human health. Employing good hygiene practice, wearing suitable PPE and precautions during construction.  [Likely] | Moderate.         |



| Potential<br>Sources and<br>contaminants  | Pathways<br>(Reference<br>from Model)   | Receptors  | Hazard<br>Severity  | Probability of<br>Occurrence  | Potential<br>Risk    |
|---|---|--|---|---|----------------------|
| Petroleum hydrocarbons.  Acids / Alkalis.  Explosive Compounds & Chemical Warfare Agents.     | Vertical<br>migration<br>(leaching)     | Groundwater within the underlying granular River Terrace Deposits. | Secondary<br>A Aquifer<br>[Medium]  | Contaminants unlikely to be in a leachable form. Clay rich superficial layers and potentially hardstanding likely to impeded contaminant migration.  [Low likelihood] | Moderate /<br>Low.   |
|   | Horizontal migration (3)                | Surface water features.  | On-site<br>surface<br>water<br>features.<br>[Mild]                                  | Contaminants unlikely to be at significant concentrations.  [Low likelihood]  | Low.                 |
|   | Direct Contact (4)                      | Buildings,<br>Buried<br>Structures<br>and Services.                | Explosion, chemical attack of buried structures and tainted water supplies.  [Mild] | Contaminants unlikely to be at significant concentrations.  [Low likelihood]  | Low.                 |
| Asbestos<br>Containing<br>Materials at<br>surface and<br>within<br>underlying<br>Made Ground. | Ingestion Inhalation Direct Contact (5) | Site end-<br>users.<br>and<br>Construction<br>Workers.             | Human<br>health<br>effects.<br>[Medium]   | Low levels of<br>ACMs likely to be<br>present in Made<br>Ground sitewide.<br>[Likely to High]   | Moderate<br>to High. |



| Potential<br>Sources and<br>contaminants  | Pathways<br>(Reference<br>from Model)                                      | Receptors  | Hazard<br>Severity  | Probability of<br>Occurrence   | Potential<br>Risk  |
|---|--|--|---|--|--------------------|
| Infilled large pond within southeast comer of the site and degassing onsite soils.  Ground Gas (Methane / Carbon Dioxide) | Vertical and Horizontal migration, Ingress & Accumulation. Inhalation  (6) | Site end-<br>users and<br>Construction<br>Workers. | Human<br>health<br>effects.<br>[Medium]   | Potential for ground gases associated with the infilled pond and on-site soils to migrate and ingress / accumulate in buildings via foundations / services.  [Likely]                                  | Moderate.          |
|   | Vertical and Horizontal migration, Ingress & Accumulation.                 | Proposed<br>Buildings and<br>Structures.           | Structural<br>damage<br>from<br>explosions<br>caused by<br>build-up of<br>ground gas.<br>[Mild] | Potential for ground gases associated with the nearby infilled pond to migrate through the granular River Terrace Deposits and ingress / accumulate in buildings via foundations / services.  [Likely] | Moderate /<br>Low. |

#### 3.6 Recommendations

A potentially moderate / low risk has been highlighted from this assessment associated with the presence of contaminated Made Ground from the historical use of the site as part of the former Hereford ROF facility. A variably moderate to high risk has also been identified towards human health, particularly construction workers, from low asbestos levels on-site. A potentially moderate / low risk for ground gases has been identified for the North Magazine site, potentially associated with the infilled pond located within the south-eastern site corner.

Therefore, it is considered that Phase 2 Intrusive investigation works are required in order to better assess the presence, nature, and contamination potential of historical on-site Made Ground and



ACMs. Intrusive works will also aid with a better assessment of the ground gas risk and refine the preliminary contamination risk assessment.

It is recommended that this desk study report is passed to the relevant Environmental Health Department for comment as soon as possible.



# 4. Preliminary Geotechnical Assessment

# 4.1 Geotechnical Considerations

Several potential geotechnical hazards have been identified that are likely to have an impact upon the proposed development, including:

- The potential for sitewide disturbed ground associated with the removal of historical buried / on-site structures.
- Potentially deep Made Ground is anticipated particularly within the area of the infilled pond located within the south-eastern corner of the site, which is likely to vary in strength and nature.
- The upper clay rich River Terrace Deposits could be low bearing and may be subject to moisture content fluctuations resulting in shrinkage and swelling.
- The granular River Terrace Deposits are likely to include seasonally fluctuating shallow groundwater.
- Variations in soil type, i.e. clay rich to granular, over short distances could potentially lead to differential settlements when loaded.
- Aggressive chemical environments for concrete e.g. high sulphate soils, may affect the design and construction of sub-surface structures.

# 4.2 Preliminary Assessment of Geotechnical Risks

The design and construction of shallow foundations at this site is likely to be complicated due to disturbed ground, potentially deep Made Ground; compressible soils; variations of soil type, i.e. clay rich to granular and shallow groundwater. Aggressive ground conditions may also lead to the attack of buried concrete. Foundation design will also depend on how much existing ground levels are raised as part of drainage works. Where geotechnical constraints complicate foundation design and construction, consideration will be required to adopting a deep solution such as ground improvement or piles. It is anticipated that ground conditions are likely to vary across the site and, therefore, it is recommended that foundation designs are considered on a plot-by-plot basis.

Given the potential for contaminated and deep Made Ground, potentially clay rich superficial deposits and shallow groundwater at the site, soakaways are not considered feasible.

Therefore, it is recommended that an intrusive ground investigation is undertaken in order to confirm the nature and extent of the underlying ground conditions and to aid with foundation design for the proposed structures. Intrusive ground investigation works have been undertaken by EMS and the results will be reported separately.

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# 4.3 Construction Considerations

As with any construction site, if any anomalous or asbestos containing material is encountered during the redevelopment then expert environmental advice should be sought.

Historically ACMs have been used across the site associated with the former factory and clearance works to remove these materials were undertaken between 2008 and 2011. However, it cannot be guaranteed that all ACMs were removed off-site and pockets, fibres and fragments are likely to remain in on-site soils all be it at relatively low levels. Fragmentary ACMs have also been observed at surface across the site. Where present ACMS are most likely to pose a variable moderate to high risk to construction and maintenance depending on the friability of ACM discovered and the nature of the planned work activities. It is recommended that the quantity, type and form of asbestos present is evaluated and tested on a plot-by-plot basis.

During the development construction contractors will need to allow for dealing with asbestos impacted soils within their health and safety documents and incorporate appropriate measures for dealing with it accordingly.



# References

- British Geological Survey sheet 215 "Ross-on-Wye" Solid and Drift edition (1:50,000) published 2000.
- Gifford and Partners, 'Rotherwas Royal Ordnance Factory Management Study,' Volumes 1 and 2, Document No. B2664.R02 Rev B, dated April 2000.
- 'North Site, Rotherwas, Hereford, Asbestos Sampling', Letter Report, EMS 2027, dated 20th August 2009.
- 'Rotherwas Futures, North Site, Hereford, Asbestos Investigation Blast Walls 1 5', Letter Report, EMS 2049, dated 24<sup>th</sup> September 2009.
- 'Rotherwas Futures, North Site, Hereford, Asbestos Walk Over Survey Blast Walls 6 -14, Letter Report', EMS 2049, dated 24<sup>th</sup> September 2009.
- 'Type 3 Asbestos Survey of Blast Walls 1 19 Rotherwas Futures, Hereford', EMS 2050, dated October 2009.
- 'Demolition Asbestos Survey of 13 Specified Buildings at Rotherwas North Site, Hereford', EMS 3035, dated July 2011.
- 'Demolition Asbestos Survey of Rotherwas North Site, Hereford', EMS 3132, dated October 2011.
- 'Demolition Asbestos Survey of Bunker at Rotherwas North Site, Hereford', EMS 3204, dated November 2011.
- JS Conservation Management & Town Planning, 'Conservation Statement: Northern Shell Store, Former Munitions Factory, Hereford', dated July 2013.
- Amey, 'Rotherwas Flood Alleviation Scheme, Munitions Shell Store Structural Appraisal Report', Document reference: 551564-RP-0001 Revision 1 – Final, dated 01 February 2013.
- CL:AIRE, 'CAR-SOIL Control of Asbestos Regulations 2016, Interpretation for Managing and Working with Asbestos in Soil and Construction and Demolition Materials: Industry Guidance'. 2016.
- Peter Brett Associates, 'N3 Spoil Heap, Skylon Park, Hereford Enterprise Zone (Former Rotherwas ROF) Materials Management Plan', Doc Reference 31077/3503 MMP Rev 02 (Issue 03), dated November 2017.
- 'Soil Contamination and Concrete Investigation: Hereford Enterprise Zone Plot N1, Munitions Barn Slab, Rotherwas Industrial Estate, Hereford HR2 6JT', EMS Letter Report E16889, dated 26<sup>th</sup> March 2020.

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- 'Additional Contamination Investigation and Ground Gas Assessment Hereford Enterprise Zone, Plot N24. Rev 1', EMS Letter Report E16284, dated 16<sup>th</sup> July 2020.
- 'Phase 2 Geo-Environmental Site Investigation Report: Hereford Enterprise Zone Plot N24, Rotherwas Industrial Estate, Hereford HR2 6ST', EMS Report E16284-SI, dated 27<sup>th</sup> April 2020.
- 'Phase 2 Contamination Site Investigation Report: Hereford Enterprise Zone Plot N26, Festival Way, Rotherwas, Hereford HR2 6ST', EMS Report E14453-SI, dated 9<sup>th</sup> March 2020.
- 'Hereford Shell Store, Rotherwas Industrial Estate, Hereford HR2 6JT, Made Ground and Asbestos Investigation', EMS Letter Report E12402, dated 20<sup>th</sup> February 2019.
- 'Phase 2 Contamination Investigation Report Hereford Shell Store, Rotherwas Industrial Estate, Hereford', EMS Report E12402, dated 14th August 2019.
- 'Additional Site Investigation and Revised Contamination Risk Assessment Hereford Shell Store, Rotherwas, Hereford HR2 6JT', EMS Letter Report, EMS12402, dated 11<sup>th</sup> December 2019.

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# SUPPORTING INFORMATION

This section provides background details of a generic nature together with specific technical approaches adopted by EMS and details of the guidance documents that are commonly referenced in the report. The section also includes explanations of technical terms to assist non-specialist readers in understanding the Technical Report. It should be noted that not all the information within this section is necessarily applicable to this specific report.

# SITE CHARACTERISTICS

The site characteristics are collated from various information sources, including but not limited to Ordnance Survey, British Geological Survey (BGS), GOV.UK / DATA.GOV.UK websites and local authorities.

EMS generally commission the Landmark Information Group to produce an Envirocheck Report for study sites and where employed this is included in the Appendices. It should be noted that some of the data provided in the Envirocheck report is not considered within EMS's interpretation for the site characteristics as it is not relevant, including:

- Nitrate Sensitive Zones and Nitrate Vulnerable Zones are ignored as these are only applicable to agricultural activities relating to the application of manure and fertilisers to land.
- River Quality is ignored as at this preliminary stage of risk assessment as all surface water bodies are considered equally sensitive to contamination risks.

In assessing site characteristics, EMS also consider the area within a surrounding 250m buffer zone extending from the site boundary.

# **HISTORY**

# Mapped History

The site history summarises the changes in use or layout of the site over time and is largely developed from a study of available Ordnance Survey maps. It should be noted that changes to the site may have occurred between the editions of the maps employed to assess the history of the site. Historical information of relevance within the 250m surrounding the site is also discussed in a separate section. The historical plans referred to in the text are generally included in an Appendix.

# Aerial photography

As a minimum, current and historical aerial images of the site and surrounding areas are studied from the Google Earth program. Where additional historic aerial photographs have been purchased then these are referenced within the technical report.

# Internet Searches

A simple search of the internet for relevant material relating to the use or history of the site is made. Information obtained from internet searches has been accepted as fact without



validation by EMS except for ensuring the source is reputable. It should be recognised that due to programme and budgetary constraints the search conducted may not have revealed all the information available.

# **GEOLOGY**

The geology relating to the site is assessed using information contained within the Envirocheck report and / or reference to the relevant British Geological Survey (BGS) 1:50,000 scale sheet in Bedrock and Superficial (historically Solid and Drift) edition. Many of these geological maps are relatively old with superseded terminology and descriptions. EMS therefore employ the BGS Open Geoscience website to determine current nomenclature of strata and to assist in determining geological boundaries against current topographic features. EMS also employ BGS Regional Geology Guides to assist in understanding the geological context of the site.

# Ground Stability Hazards

Ground stability hazards caused by mining, ground dissolution, landslide potential, collapsible ground and natural cavities are identified by the Envirocheck database search of records held by The Coal Authority, British Geological Survey and studies completed by Ove Arup and Peter Brett Associates.

The Envirocheck database ground stability hazard entries for compressible ground, running sands and shrinking or swelling clays are not discussed directly. This is because these hazards are very common and are considered within the preliminary geotechnical assessment where necessary.

# Radon

Radon is a naturally occurring colourless and odourless gas that is radioactive. It is formed by the radioactive decay of radium which in turn is derived from the radioactive decay of uranium, both of which are minerals that can be found in many soil types. Whilst it is recognised that the air inside every house contains radon, some houses built in certain defined areas of the country might have unacceptably high concentrations and require special precautions to be taken during construction to reduce this risk.

Radon can move through cracks and fissures in the soil into the atmosphere or into dwellings via basements and/or underfloor voids. If radon enters the living space of dwellings its concentration can potentially increase and provide a risk to human health as the inhalation of the radioactive decay products of radon gas can increase the risk of developing lung cancer.

The maps contained within BRE211:2007 'Radon: guidance on protective measures for new buildings' identify areas where no radon protection measures are necessary or where higher concentrations are present that either basic or full radon protection measures are required to be fitted to all new dwellings. However, some local authorities have local bylaws, that EMS may not be aware of, that insist on radon protection to all new dwellings within their area regardless of the recommendations of the BRE211 Radon report.

Basic radon protection measures comprise incorporation of a continuous gas resistant membrane sealed at joints and around service entries into the floor construction and extended across the cavity tray.

Full radon protection measures comprise incorporating a continuous gas resistant membrane into the floor construction together with a ventilated sub-floor void through either the use of



suspended floor construction or a 'radon sump'. The membrane is sealed at joints and around service entries into the floor and extended across the cavity tray.

BRE211 should be referred to for detail on the construction of the protective measures.

# **HYDROGEOLOGY**

# Aquifer Designations

The Environment Agency's Groundwater Protection Policy uses designations that reflect the importance of aquifers in terms of groundwater as a drinking water resource, but also their role in supporting surface water flows and wetland ecosystems.

In defining groundwater vulnerability, both the superficial (drift) deposits and bedrock (solid) geology are considered separately with the following aguifer designations:

- Principal Aquifers: These are layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale.
- Secondary Aquifers: These include a wide range of rock layers or drift deposits with an equally wide range of water permeability and storage. Secondary aquifers are subdivided into two types:
  - Secondary A permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.
  - Secondary B predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering.
- Secondary Undifferentiated has been assigned in cases where it has not been possible to attribute either category A or B to a rock type.
- Unproductive Strata: These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.

# Source Protection Zones

The Environment Agency (EA) has defined Source Protection Zones for groundwater sources, such as boreholes and springs, that are used for public water supply. The EA uses the zones to target pollution prevention measures and monitor the activities of potential polluters within the affected area. There are three types Source Protection Zone:

- Zone 1(Inner Protection Zone) is the most sensitive area within which pollution could reach
  the borehole within 50 days. Alternatively it is defined by a minimum 50m radius around
  the borehole.
- Zone 2 (Outer Protection Zone) are defined by the area within which pollution could reach the borehole within 400 days or 25% of the total catchment area.



 Zone 3 (Total Catchment) are defined by the total area required to support the removal of water from the borehole.

## HYDROLOGY

# Flooding

The Environment Agency has zoned England and Wales in respect of the risk from flooding from 'highly unlikely' in Zone 1 to 'likely' in Zone 3. The zones ignore the presence of flood defences or certain other manmade structures and channel improvements.

National Planning Policy Framework, Department for Communities and Local Government, dated March 2012 states "A site-specific flood risk assessment is required for proposals of 1 hectare or greater in Flood Zone 1; all proposals for new development (including minor development and change of use) in Flood Zones 2 and 3, or in an area within Flood Zone 1 which has critical drainage problems (as notified to the local planning authority by the Environment Agency); and where proposed development or a change of use to a more vulnerable class may be subject to other sources of flooding".

# **ENVIRONMENTAL ASPECTS**

# Landfill

The database of the Environment Agency of active and historic landfills is searched for all sites. Sometimes additional historic landfill data is available from the British Geological Society and local authorities to identify nearby landfill sites. It should be noted that landfill sites that closed prior to 1974 and unlicensed disposal activities will not necessarily be revealed by this search.

# Pollution Incidents

The Environment Agency ceased recording 'Pollution Incidents to Controlled Waters' in 2000, when they commenced the replacement 'Substantiated Pollution Incident Register'. EMS do not consider any 'Category 3 – Minor Incident' on the 'Pollution Incidents to Controlled Waters' database as relevant to assessing the site due to the time elapsed and the low level of impact that occurred. Again, due to the time elapsed and the fact that remedial measures would have been undertaken at the time, 'Category 1 – Major Incident' and 'Category 2 – Significant Incident' are only considered relevant if the impacted controlled water was on or immediately adjacent to the site.

On the 'Substantiated Pollution Incident Register', EMS approach to this information in the following manner:

- Pollution incidents impacting 'air' only are not considered relevant.
- Pollution incidents to 'water' are only considered where the surface water impacted is either on, flows through or is immediately adjacent to the site.
- Pollution incidents to 'land' are only considered where these are on or immediately
  adjacent to the site unless there are grounds to consider that the incident had the potential
  to impact groundwater that may have migrated beneath the site.



 Category 4 potential pollutant incidents are recorded, but upon investigation were found to have had no impact and accordingly are not considered relevant.

# Ecologically Sensitive Land Use

The land uses that are identified as ecologically sensitive are those identified as Sites of Special Scientific Interest (SSSI), Special Areas of Conservation, Special Protection Areas, Ramsar sites, Natural Parks, Natural Nature Reserves, Marine Nature Reserves, Local Nature Reserves, Green Belt, Forest Parks, Environmentally Sensitive Areas, or Areas of Outstanding Natural Beauty.

# Unexploded Ordnance

Guidance in CIRIA C681 'Unexploded Ordnance, A Guide for the Construction Industry' recommends that a preliminary risk assessment, comprising desk-based consideration of factors that affect the potential for unexploded ordnance (UXO) to be present, is undertaken at all sites at an early stage. This assessment ascertains whether specialist advice is required prior to ground disturbing activities. The assessment involves consideration of the site's location, history and planned investigation activities. The aim of the assessment is principally to avoid loss of life or injury in the rare event that unexploded ordnance is encountered. However, it is also extremely useful to consider this issue at an early stage to avoid costly delays in construction programmes later down the line.

At the date of publication of this CIRIA document there have been no recorded deaths in the UK resulting from UXO in recent decades (although there have been some fatalities in Europe). However, it is estimated that 15,000 items of ordnance (5 % estimated to be live) were removed from UK construction sites between 2006 and 2008.



The following table summarises the risk factors for a site against the potential for UXO to be present:

|              |  | LOW                                       | Potential for ac  | erial deliv    | vered UXO to be p  | resent  | HIGH  |
|--------------|--|---|---|----------------|--|---|---|
| Indicators o | f potential aerial deliver                     | ed UXO hazards                            |   | 3413           |  | 2.  |   |
|              | Site location                                  | Rural                                     | Small towns   |                | Brownfield sites<br>Large towns  | Cit   | ies   |
| Data item    | Site description<br>and historical<br>land use | Greenfield site or agricultural land only | Near to wartime<br>of:<br>Previous military<br>Railway marsh<br>yard<br>Power station<br>Gas works<br>Port<br>Industrial centre | use<br>halling | Adjacent to ward<br>site of:<br>Previous military us<br>Railway marsha<br>yard<br>Power station<br>Gas works<br>Port<br>Industrial centre  | se Fo<br>lling Sit<br>mil<br>Ra<br>ya<br>Po<br>Ga<br>Po | litary use: rmer wartime e of previous litary use nilway marshalling rd nwer station as works |
|              | History of WWII                                | No history of                             | Near to area of k   | known          | Area of known W  | SELECTION TO SELECT                                     | ea of high intensity  |
|              | bombardment                                    | WWII bombing                              | WWII bombing  |                | bombing  | W   | WII bombing   |
| Post-war de  | evelopment and the pot                         | ential to remove aeria                    | l delivered UXO ha  | azards         |  |   |   |
|              | E  | Wholesale excavati                        | on  |                | The second secon |   |   |
|              | e of   | Significant post-war development          |   |                |  |   |   |
|              | Nature of<br>development                       | Moderate post-war development             |   |                |  |   |   |
|              | de N   |   |   |                | Minimal pos  | 58.0  | 51 W 22 C   |
|              |  |   |   |                | No evide   | nce of po   | st-war development  |
| Construction | n activities and the pote                      |   | nal delivered UXO   |                |  |   |   |
|              |  | Borehole drilling Shallow trial pits      |   |                |  |   |   |
|              |  | Excavations for services                  |   |                |  |   |   |
| 2            |  | Low density driven piles                  |   |                |  |   |   |
|              | Activity                                       | Shallow excavations over extended area    |   |                |  |   |   |
|              | ă  | Sheet piling                              |   |                |  |   |   |
|              |  |   |   | Deep e         | excavations over lin   | nited area  | G<br>E-G  |
|              |  |   |   |                | High density   | piles   |   |
|              |  |   |   |                | Deep e   | xcavation   | over extended area  |

Notes: 1. Adapted from CIRIA C681.

Reference to the ZeticaUXO website (<a href="https://zeticauxo.com">https://zeticauxo.com</a>) also provides additional information with respect to the risk of unexploded ordnance beneath a site.

# CONTAMINATION ASSESSMENT METHODOLOGY

# **UK Policy**

The UK Government's policy in relation to land affected by historic contamination is based on a 'suitable for use' approach. The approach recognises that the risks presented by any given level of contamination will vary greatly according to the use of the land and a wide range of other factors, such as the underlying geology of the site. Contamination risks therefore need to be assessed on a site-by-site basis. The 'suitable for use' approach limits requirements for



remediation to the work necessary to prevent unacceptable risks to human health or the environment in relation to either the current use or future use of the land.

The three main drivers for contamination assessment and remediation are:

- Voluntary action.
- Development as part of the planning regime.
- Regulatory action to mitigate unacceptable risks e.g. Part 2A of the Environmental Protection Act 1990.

# Pollutant Linkages

For a contamination risk to exist there must be a 'pollutant linkage' from the contaminant (source) via a pathway (the route from contaminant to receptor) to a receptor (the entity that could be harmed). The absence of a contaminant, pathway or receptor breaks the pollutant linkage and therefore no contamination risk exists.

Contamination is typically present at a site (in the ground and/or in the underlying groundwater) as a result of a historic or current industrial use, usually as a result of leaks, spills or disposal of residues, wastes and excess raw materials from the industrial processes. Contamination may also be present due to:

- The deliberate application of chemicals e.g. the spraying of herbicide/pesticide.
- Migration of pollutants from adjacent land.
- Naturally occurring processes e.g. elevated concentrations of particular heavy metals associated with specific geological strata.

# Conceptual Site Model

The conceptual site model can be defined as a textual or graphical representation of the identified pollutant linkages for a given site. The model forms the basis for designing the investigation as the aim will be to target all of the potential pollutant linkages to determine, through the subsequent phases of risk assessment, whether or not they pose an actual risk.

It is important that the conceptual site model is updated with new information as the various investigation, risk assessment and remediation works are completed.

#### Technical Guidance

The technical and legal framework for contamination assessment is complex. The process adopted through this report for assessing contamination risks is in general accordance with the following guidance, as listed below:

- 'Investigation of Potentially Contaminated Sites Code of Practice BS 10175: 2011+A2:2017', BSi, 2017.
- 'Model Procedures for the management of Land Contamination CLR Document No. 11', Environment Agency, 2004.



 'Guidance for the safe development of housing on land affected by contamination -R&D66: 2008', NHBC/Environment Agency, 2008.

# Risk Assessment Methodology

In line with the technical guidance, the contamination risk assessment follows a series of phased stages for each particular site:

| PHASE   | DESCRIPTION  | RISK ASSESSMENT STAGE  |
|---------|--|--|
| PHASE1  | Generally limited to desk<br>based research and a site<br>walkover survey to develop<br>an initial conceptual site<br>model and identify what<br>risks, if any, are likely to be<br>presented by the site. | Hazard Identification and Assessment  A preliminary stage of risk assessment concerned with identifying and characterising the hazards that may be associated with a particular site and identifying potential pollutant linkages.   |
| PHASE 2 | This phase is concerned with establishing whether contamination is present, usually through intrusive ground investigation, and then evaluating the degree and magnitude of the associated risks.          | Risk Estimation  A stage concerned with estimating the likelihood that receptors will suffer adverse effects if they come into contact with, or are otherwise affected by, a hazardous substance or agent under defined conditions.  Risk Evaluation  A stage of risk assessment concerned with evaluating the acceptability of estimated risks, taking into account the nature and scale of the risk estimates, any uncertainties associated with the assessment and the broad costs and benefits of taking action to mitigate risks. |
| PHASE 3 | The appraisal and selection of remediation techniques, their implementation and verification.  | Risk Management  The process whereby decisions are made to accept a known or assessed risk and/or the implementation of action to reduce the consequences or probabilities of occurrence.  |

# Risk Classification

The objective of risk assessment is to identify the nature and magnitude of the potential risks and should be based on a consideration of both:

- The likelihood/probability of an event [taking into account both the presence of the hazard and receptor and the integrity of the pathway].
- The severity of the potential consequence [taking into account both the potential severity of the hazard and the sensitivity of the receptor].



There is a need for a logical, transparent and repeatable system in defining the categories of severity of consequence and likelihood as well as for the risk itself and therefore the following risk rating matrix is employed:

|             |                    | SEVERITY OF CONSEQUENCE |                       |                       |                       |
|-------------|--------------------|-------------------------|-----------------------|-----------------------|-----------------------|
|             |                    | SEVERE                  | MEDIUM                | MILD                  | MINOR                 |
|             | HIGH<br>LIKELIHOOD | Very High<br>Risk       | High Risk             | Moderate<br>Risk      | Moderate/Lo<br>w Risk |
| BILITY      | LIKELY             | High Risk               | Moderate<br>Risk      | Moderate/Lo<br>w Risk | Low Risk              |
| PROBABILITY | LOW<br>LIKELIHOOD  | Moderate<br>Risk        | Moderate/Lo<br>w Risk | Low Risk              | Very Low<br>Risk      |
|             | UNLIKELY           | Moderate/Lo<br>w Risk   | Low Risk              | Very Low<br>Risk      | Very Low<br>Risk      |

These risk classifications are defined as follows:

- Very High Risk There is a high probability that severe harm could arise to a designated receptor from an identified hazard at the site without appropriate remediation action.
- High Risk Harm is likely to arise to a designated receptor from an identified hazard at the site without appropriate remediation action.
- Moderate Risk It is possible that without appropriate remediation action harm could arise
  to a designated receptor. It is relatively unlikely that any such harm would be severe, and
  if any harm were to occur it is more likely that such harm would be relatively mild.
- Low Risk It is possible that harm could arise to a designated receptor from an identified hazard. It is likely that, at worst if any harm was realised any effects would be mild.
- Negligible Risk The presence of an identified hazard does not give rise to the potential to cause harm to a designated receptor.

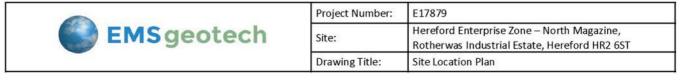
This preliminary risk assessment matrix and classification system is based on guidance produced by Department for Environment, Food and Rural Affairs (Defra) and the Environment Agency in connection with contaminated land assessment.

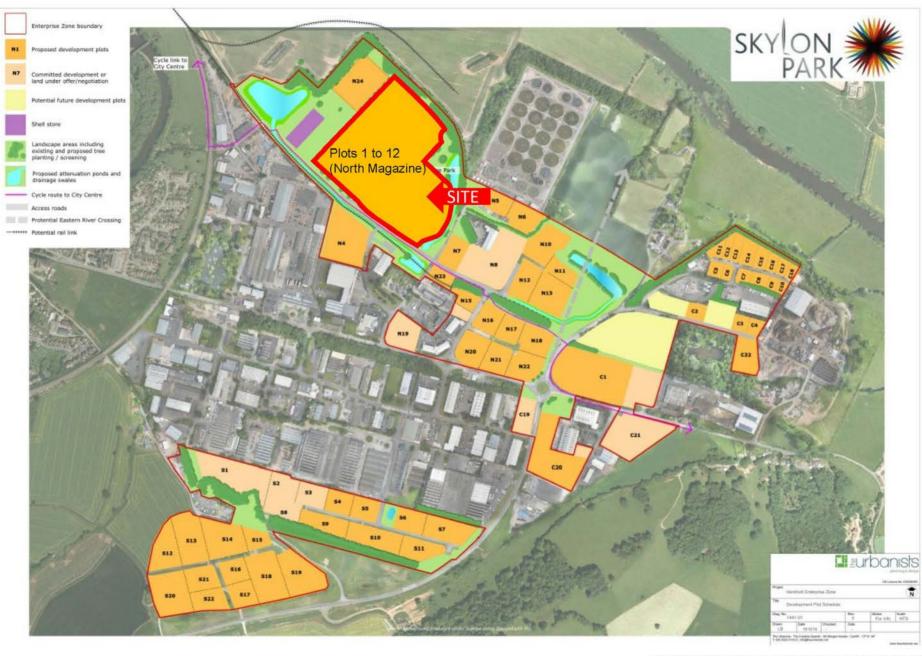
Appendix A – Drawings and Plans

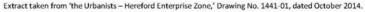




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| Project Number: | E17879   |
|-----------------|--|
| Site:           | Hereford Enterprise Zone – North Magazine, Rotherwas Industrial Estate, Hereford HR2 6ST |
| Drawing Title:  | Skylon Park Layout and Site Location Plan  |







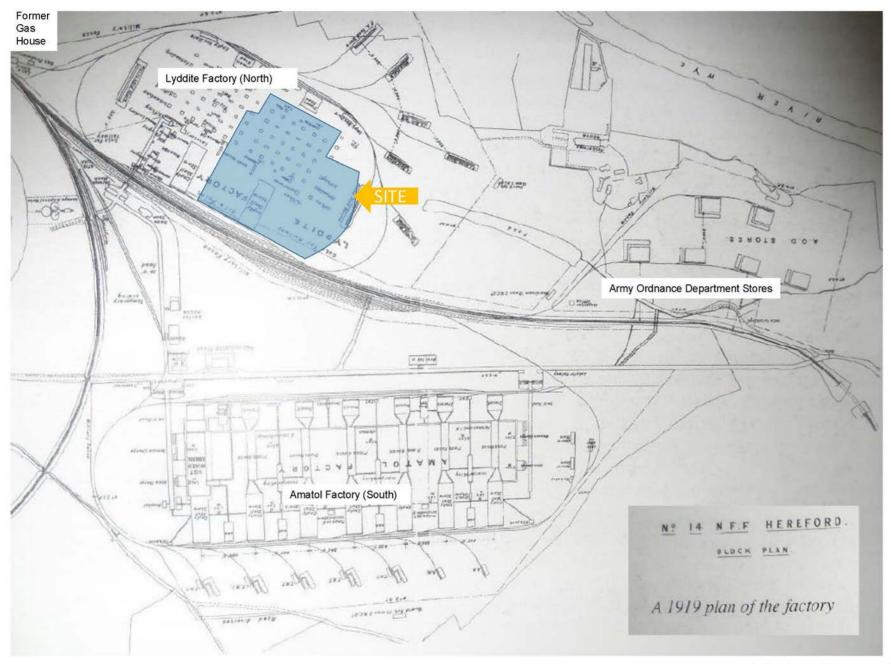


0 200m
Approximate Scale

Extract taken from Google Maps.



| Project Number: | E17879   |
|-----------------|--|
| Site:           | Hereford Enterprise Zone – North Magazine, Rotherwas Industrial Estate, Hereford HR2 6ST |
| Drawing Title:  | Existing Site Layout Plan  |

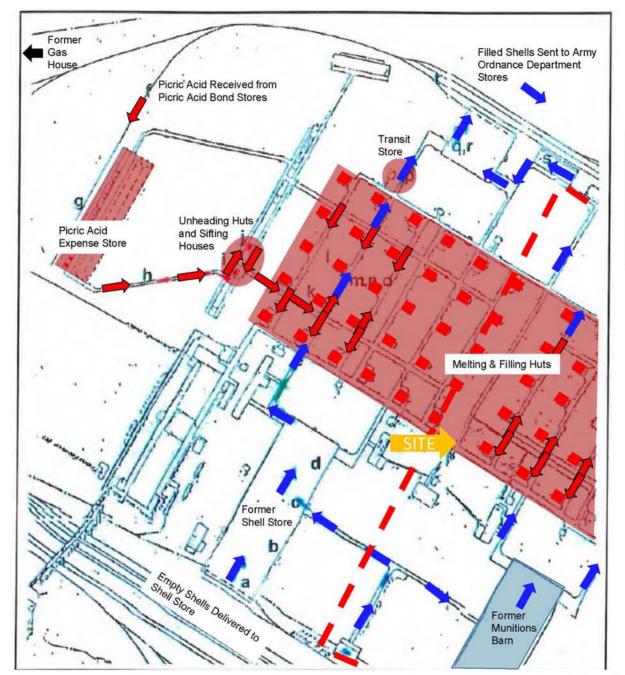




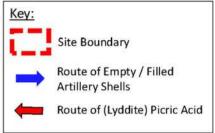
Extract taken from 'Conservation Statement: Northern Shell Store, Former Munitions Factory, Hereford,' JS Conservation Management & Town Planning, dated July 2013.



| Project Number: | E17879   |
|-----------------|--|
| Site:           | Hereford Enterprise Zone – North Magazine, Rotherwas Industrial Estate, Hereford HR2 6ST |
| Drawing Title:  | Former ROF Factory Layout  |







Extract taken from Rotherwas Royal Ordnance Factory Management Study, Volume 1, Gifford and Partners Document No. B2664.RO2 Rev B, Dated 23<sup>rd</sup> February 2000.



| Project Number: | E17879   |
|-----------------|--|
| Site:           | Hereford Enterprise Zone – North Magazine, Rotherwas Industrial Estate, Hereford HR2 6ST |
| Drawing Title:  | Flow Diagram of the Lyddite Factory  |



# Key:

North Magazine Site Boundary.

Plot Boundary (Plots 1 to 12).

Existing Hardstanding.

0 100m

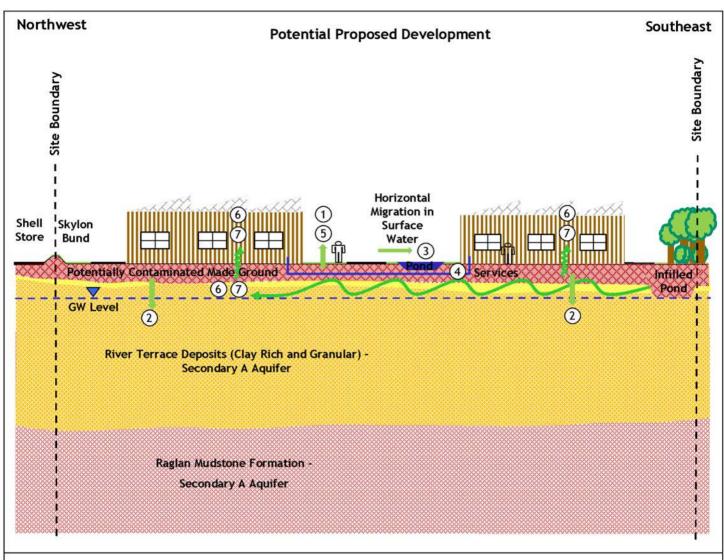
Approximate Scale

Extract taken from HCC Plot Configuration Drawing.



| Plot N24                  |            | States to de la constitución de |      |
|---------------------------|------------|---|------|
| Hereford Shell Store Site |            | In deliberation of the second   |      |
| PLOT 8                    | LOT 9 / 10 |   |      |
| · .                       |            | OT 1  |      |
| Reporto,                  | PLOT 6     |   |      |
|                           |            | PLC   | OT 3 |
| Rethereses                |            | PLOT 4  |      |
| My Industrial -           |            | 90 M  | 111  |

| Project Number: | E17879   |
|-----------------|--|
| Site:           | Hereford Enterprise Zone – North Magazine, Rotherwas Industrial Estate, Hereford HR2 6ST |
| Drawing Title:  | Proposed Plot Layout Plan  |





Job Title: Hereford Enterprise Zone - North Magazine,

Rotherwas Industrial Estate, Hereford HR2 6ST

Job Number: E17879

Drawing Title: Preliminary Conceptual Site Model



Appendix B – Photographic Record - Site Walkover





Photo 1: North Magazine looking north across Plots 7 to 12.



Photo 2: View east across Plots 11/12.





Photo 3: Skylon Bunds, Southern Bund (No.1) and Central Bund (No.2).



Photo 4: Skylon Bund - Northern Bund (No.3).





Photo 5: Munitions Barn floor slab and topsoil stockpile.



Photo 6: Soil stockpile on Plots 7 and 8.





Photo 7: Former blastwalls off northwest site perimeter



Photo 8: Former blast walls on northwest site periphery.





Photo 9: Overgrown old buildings off-site from northwest boundary.



Photo 10: Bituminous covered roadway adjacent to northwest site perimeter.





Photo 11: Bituminous ACM fragments used as roadway surface dressing.



Photo 12: Concrete rubble stockpile in northeast quarter of the site (Plots 2 / 3) for off-site removal.





Photo 13: Stockpile of tree, branch and plant debris fro removal off-site.



Photo 14: Pool at the toe of Skylon Bund - North Bund (No.3).





Photo 15: View southeast across Plots 1 to 6.



Photo 16: View east across Plots 4, 5 and 6.





Photo 17: Infilled former pond in southeast part of site (Plot 4).



Photo 18: Central part of site looking southwest.

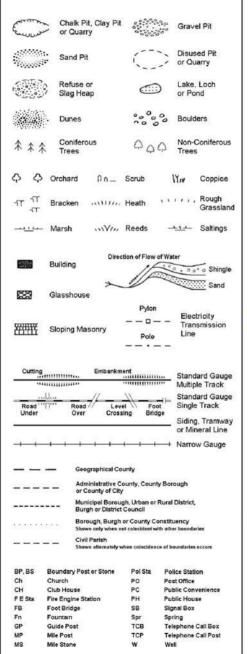
Appendix C – Envirocheck Report - Historical Maps

# **Historical Mapping Legends**

### Gravel Other Shingle Orchard Reeds Mixed Wood Brushwood Deciduous Rough Pasture Fir Furze Arrow denotes Trigonometrical Site of Antiquities Bench Mark Pump, Guide Post Well, Spring, Signal Post **Boundary Post** Surface Level Sketched Instrumental Contour Contour Fenced Main Roads Minor Roads Un-Fenced Raised Road Sunken Road Railway over Road over Railway River Railway over Level Crossing Road Road over Road over River or Canal Stream Road over County Boundary (Geographical) County & Civil Parish Boundary Administrative County & Civil Parish Boundary County Borough Boundary (England) Co. Boro, Bdy County Burgh Boundary (Scotland) Co. Burgh Bdy Rural District Boundary RD. Bdy. ..... Civil Parish Boundary

Ordnance Survey County Series 1:10.560

# Ordnance Survey Plan 1:10,000



#### 1:10.000 Raster Mapping



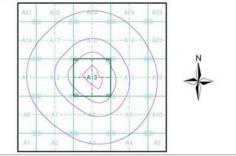
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# Historical Mapping & Photography included:

| Mapping Type         | Scale    | Date        | Pg |
|----------------------|----------|-------------|----|
| Herefordshire        | 1:10,560 | 1886 - 1887 | 2  |
| Herefordshire        | 1:10,560 | 1905        | 3  |
| Herefordshire        | 1:10,560 | 1930 - 1931 | 4  |
| Herefordshire        | 1:10,560 | 1938 - 1953 | 5  |
| Herefordshire        | 1:10,560 | 1952 - 1953 | 6  |
| Ordnance Survey Plan | 1:10,000 | 1964        | 7  |
| Ordnance Survey Plan | 1:10,000 | 1970        | 8  |
| Ordnance Survey Plan | 1:10,000 | 1985        | 9  |
| 10K Raster Mapping   | 1:10,000 | 2000        | 10 |
| 10K Raster Mapping   | 1:10,000 | 2006        | 11 |
| VectorMap Local      | 1:10,000 | 2020        | 12 |

## Historical Map - Slice A



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#### Site Details

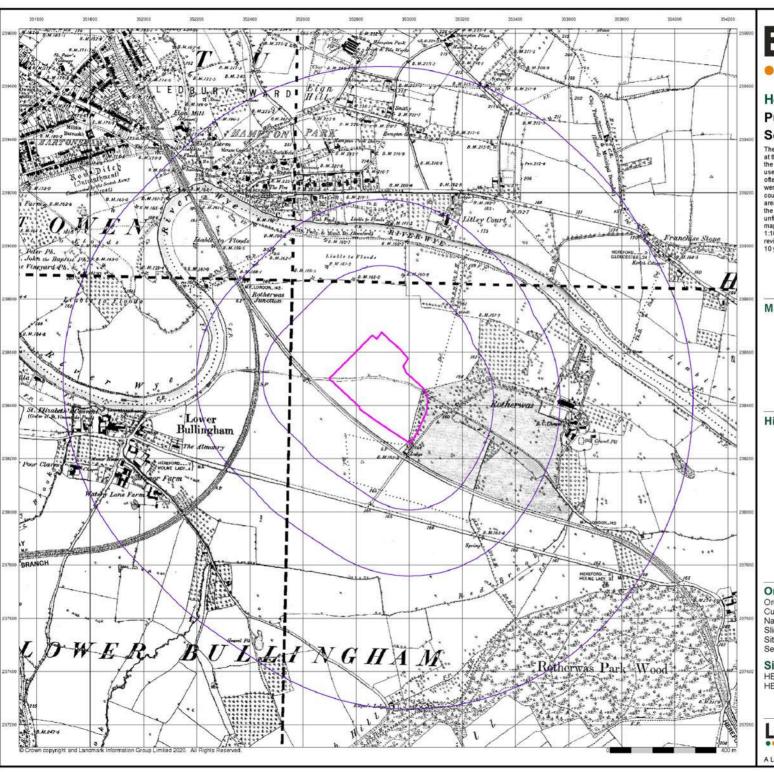
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#### Herefordshire

## Published 1886 - 1887

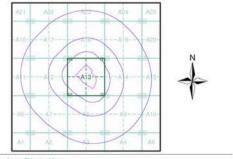
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## Map Name(s) and Date(s)



## Historical Map - Slice A



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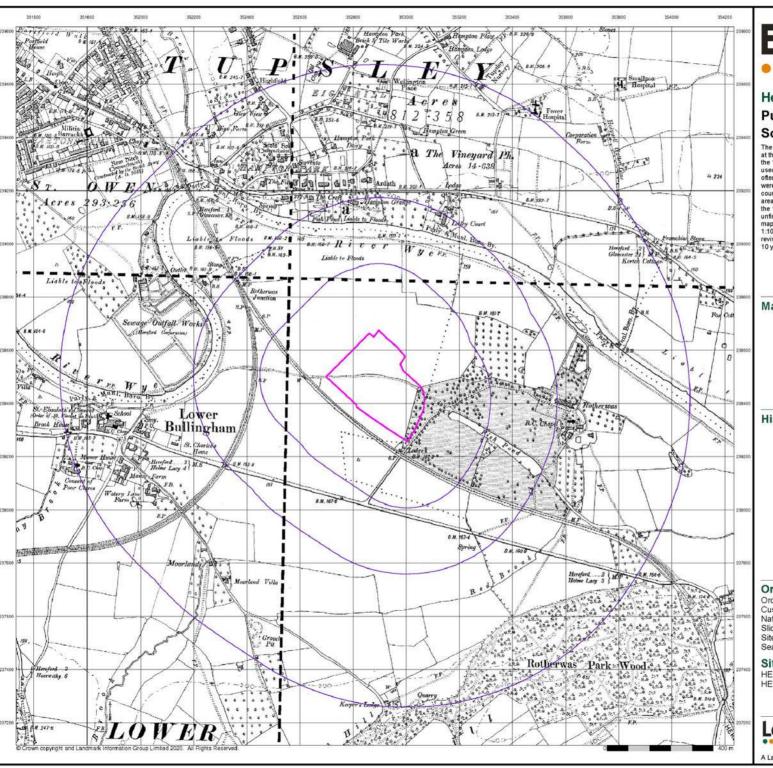
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#### Herefordshire

### Published 1905

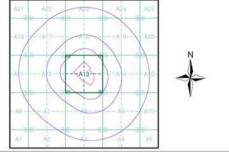
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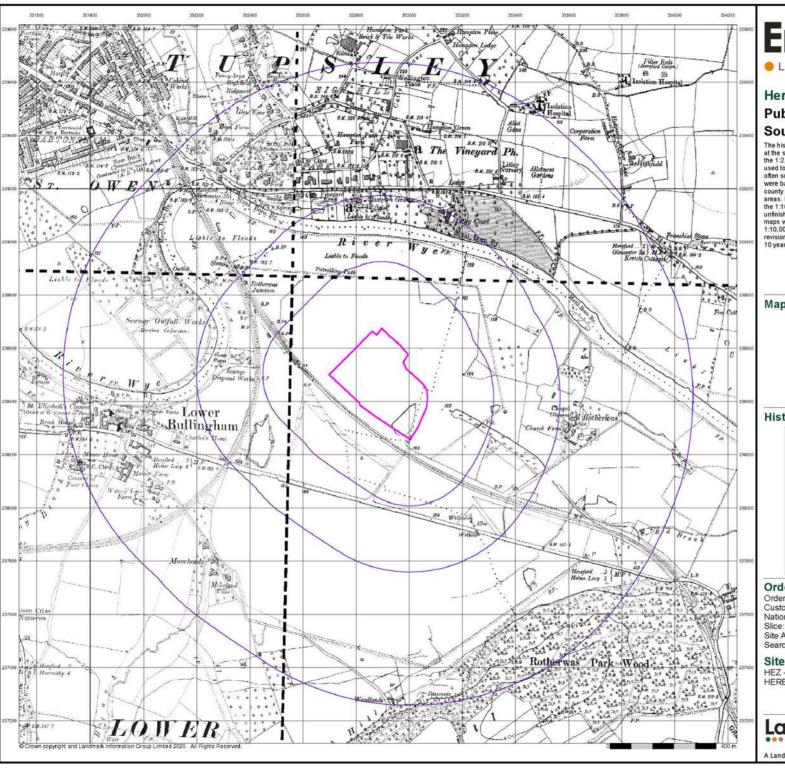
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# Published 1930 - 1931

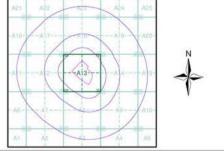
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#### Historical Map - Slice A



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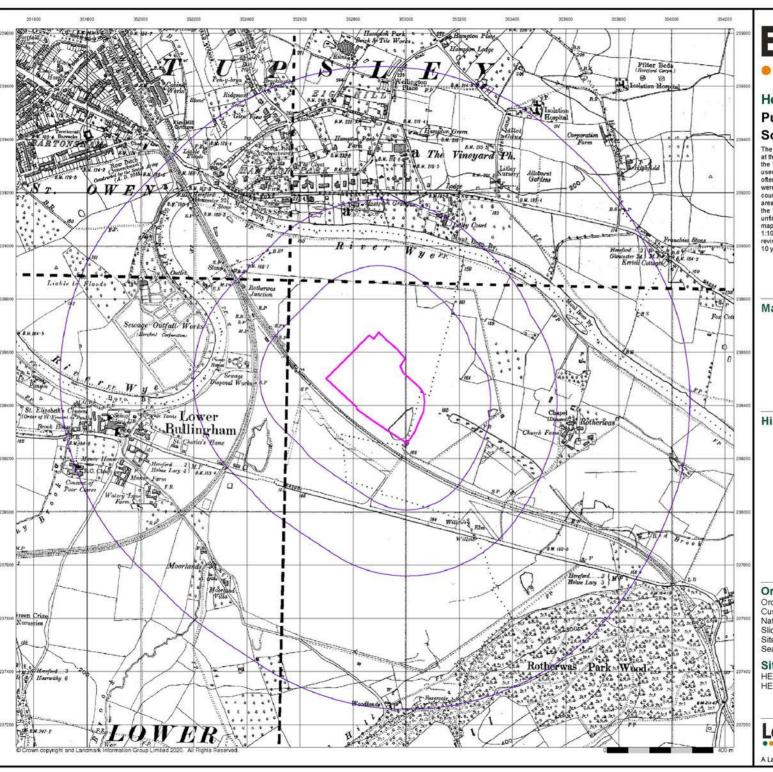
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#### Herefordshire

#### Published 1938 - 1953

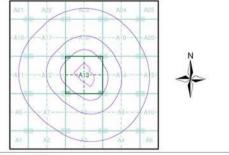
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#### Map Name(s) and Date(s)



#### Historical Map - Slice A



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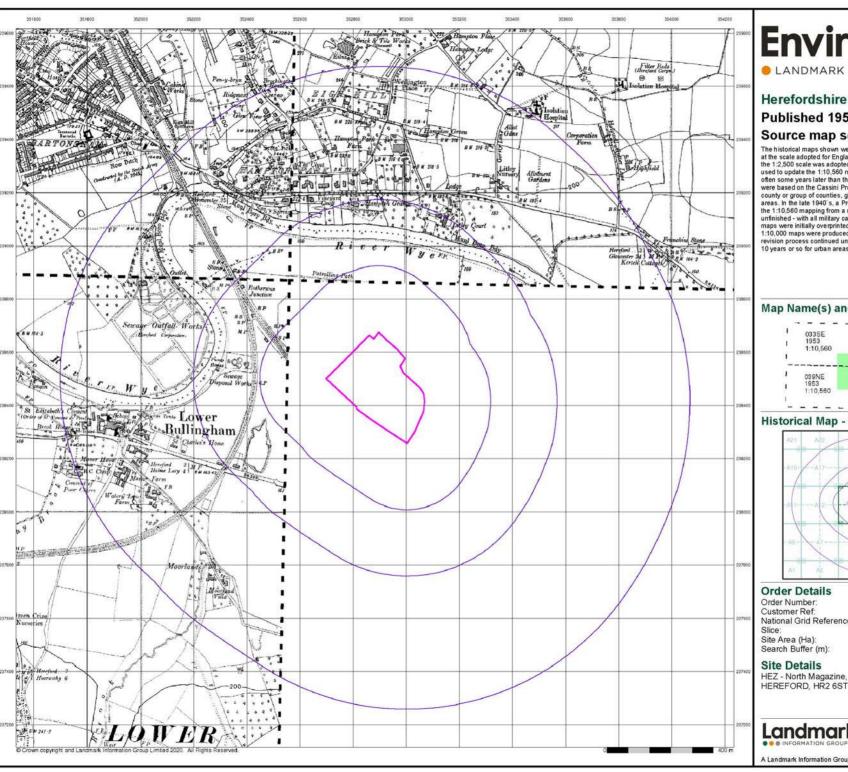
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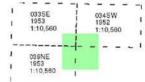
#### Herefordshire

#### Published 1952 - 1953

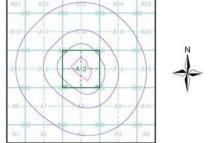
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#### Historical Map - Slice A



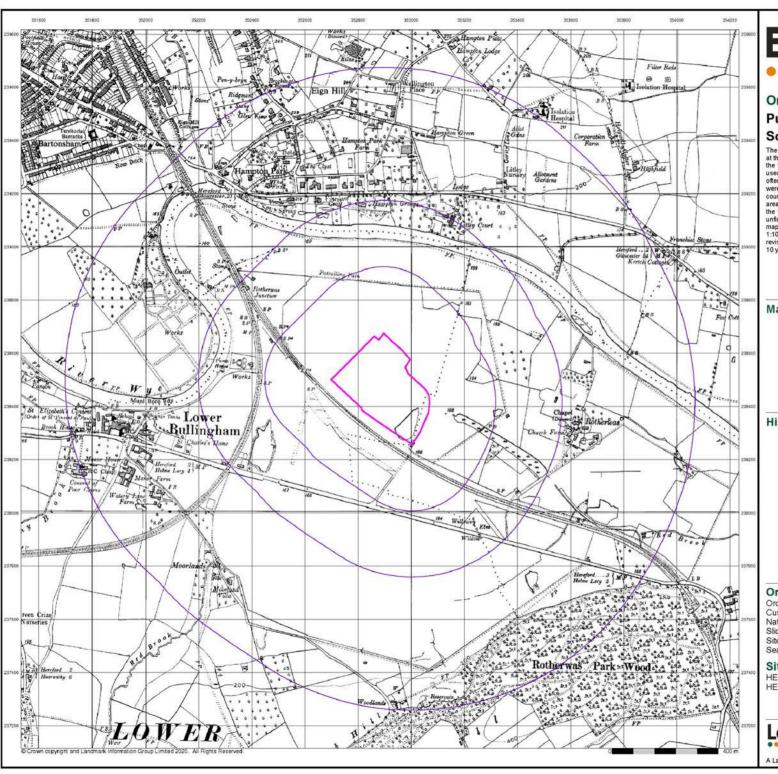
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### Ordnance Survey Plan Published 1964

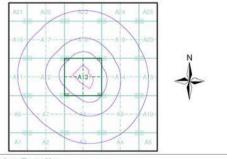
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#### Historical Map - Slice A



#### **Order Details**

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Customer Ref: E17879
National Grid Reference: 352900, 238470
Slice: A
Site Area (Ha): 8.19

Search Buffer (m): 1000

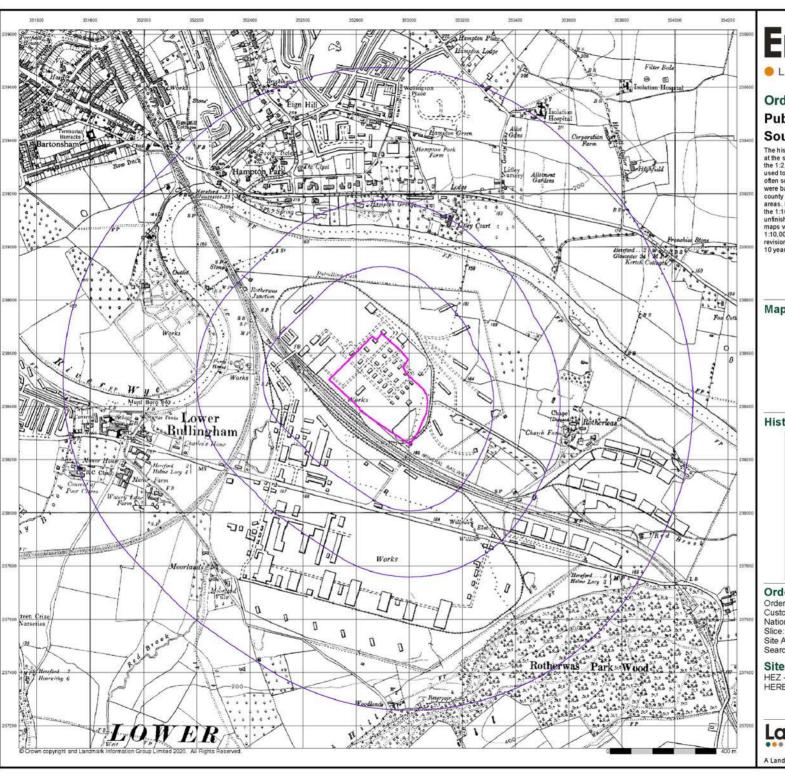
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### Ordnance Survey Plan Published 1970

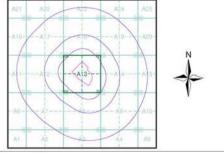
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#### Historical Map - Slice A



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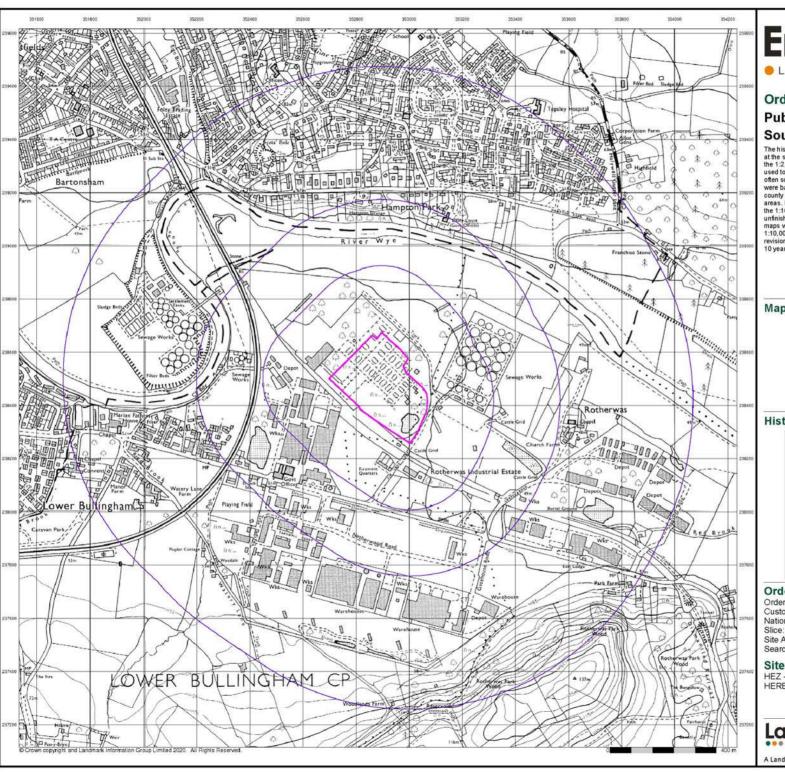
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### Ordnance Survey Plan Published 1985

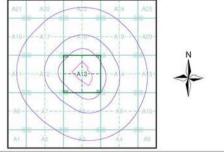
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

#### Map Name(s) and Date(s)



#### Historical Map - Slice A



#### **Order Details**

Order Number: 247715231\_1\_1
Customer Ref: E17879
National Grid Reference: 352900, 238470
Silice: A
Site Area (Ha): 8.19

Search Buffer (m): 1000

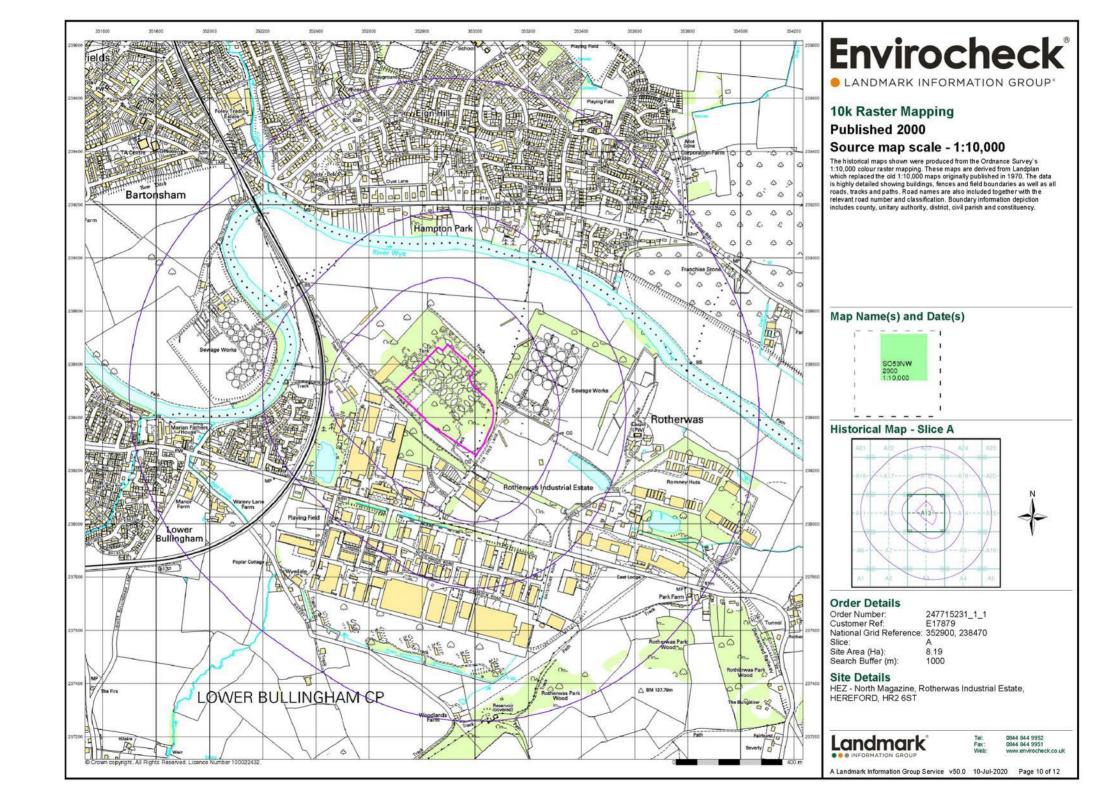
#### Site Details

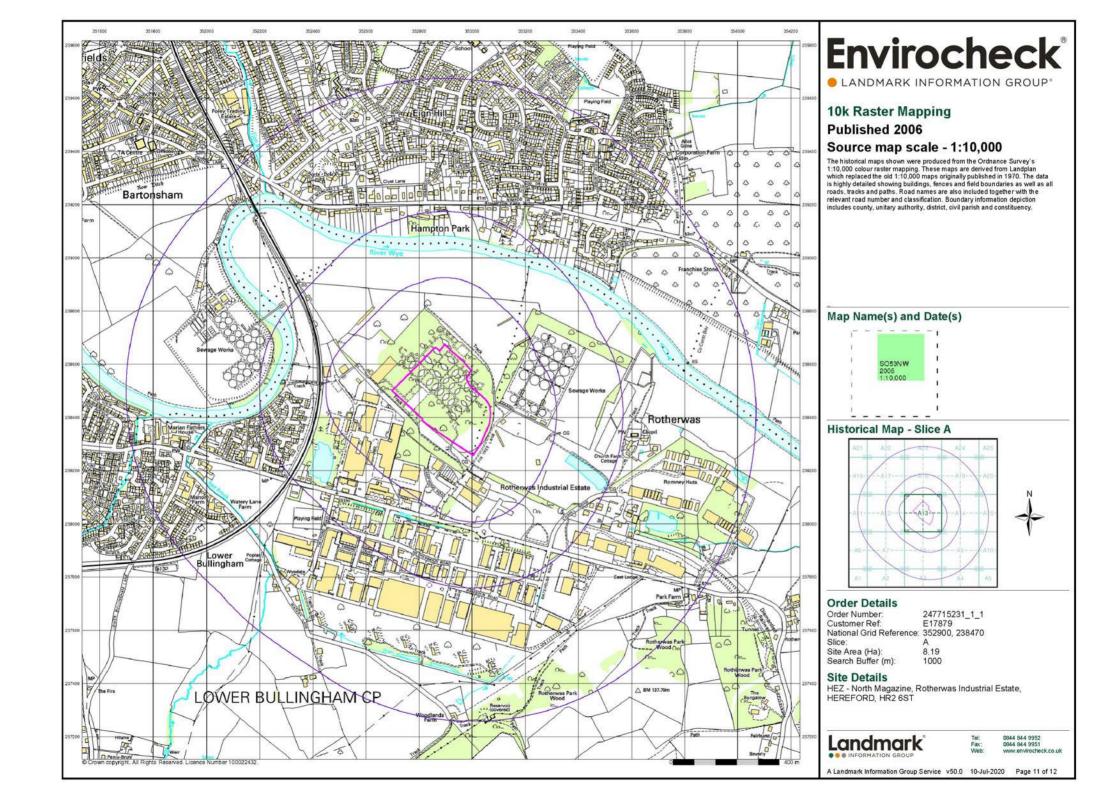
HEZ - North Magazine, Rotherwas Industrial Estate, HEREFORD, HR2 6ST

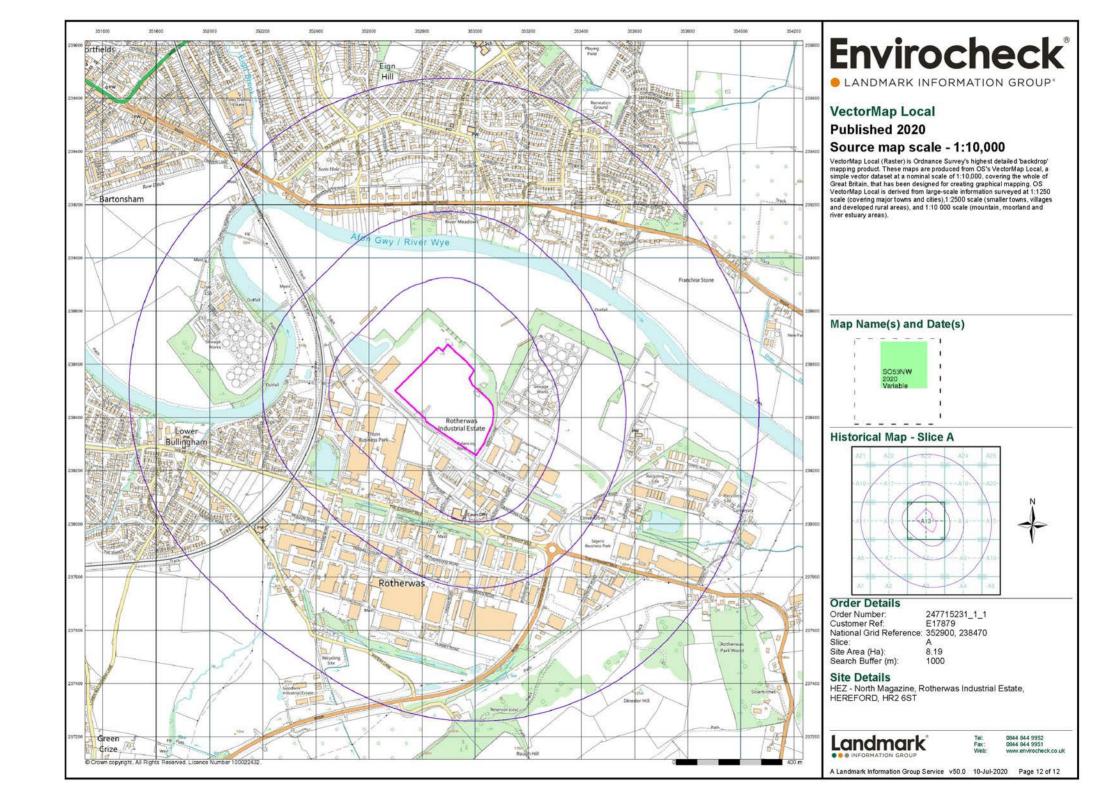


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A Landmark Information Group Service v50.0 10-Jul-2020 Page 9 of 12

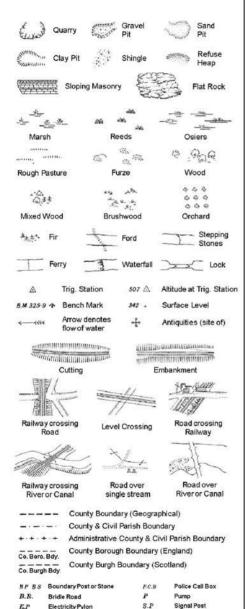






### **Historical Mapping Legends**

#### **Ordnance Survey County Series and** Ordnance Survey Plan 1:2,500



Foot Bridge

M.P M.R Mooring Post or Ring

Guide Post or Board

Foot Path

F.P.

54

TOB

Tr.

Sluice

Spring

Trough

Telephone Call Box

### Supply of Unpublished Survey Information 1:2,500 and 1:1,250



EIP

GP

LC

MS

Electricity Pillar or Post

Hydrant or Hydraulic

Fire Alarm Pillar

Level Crossing

Normal Tidal Limit

Foot Bridge

**Guide Post** 

Manhole

Mile Stone

SB. SB

TCB

Signal Box or Bridge

Signal Post or Light

Telephone Call Box

Telephone Call Post

Water Point, Water Tap

Tank or Track

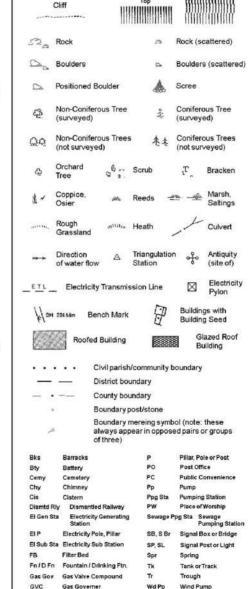
Trough

Wind Pump

Well

#### Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2.500 and 1:1,250

Slopes



Mile Post or Mile Stone

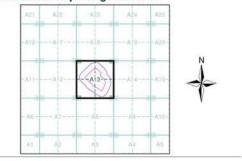
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#### Historical Mapping & Photography included:

| Mapping Type                   | Scale   | Date        | Pg |
|--------------------------------|---------|-------------|----|
| Herefordshire                  | 1:2,500 | 1888        | 2  |
| Herefordshire                  | 1:2,500 | 1904        | 3  |
| Herefordshire                  | 1:2,500 | 1928 - 1929 | 4  |
| Ordnance Survey Plan           | 1:2,500 | 1973        | 5  |
| Additional SIMs                | 1:2,500 | 1977 - 1983 | 6  |
| Ordnance Survey Plan           | 1:2,500 | 1988        | 7  |
| Additional SIMs                | 1:1,250 | 1992        | 8  |
| Large-Scale National Grid Data | 1:2,500 | 1993        | 9  |
| Large-Scale National Grid Data | 1:1,250 | 1993        | 10 |
| Large-Scale National Grid Data | 1:2,500 | 1996        | 11 |
| Historical Aerial Photography  | 1:2,500 | 1999        | 12 |

#### Historical Map - Segment A13



#### **Order Details**

Order Number: 247715231\_1\_1 Customer Ref: E17879 National Grid Reference: 352900, 238470 Slice:

Site Area (Ha): 8.19 Search Buffer (m): 100

#### Site Details

Water Point, Water Tap

Works (building or area)

Well

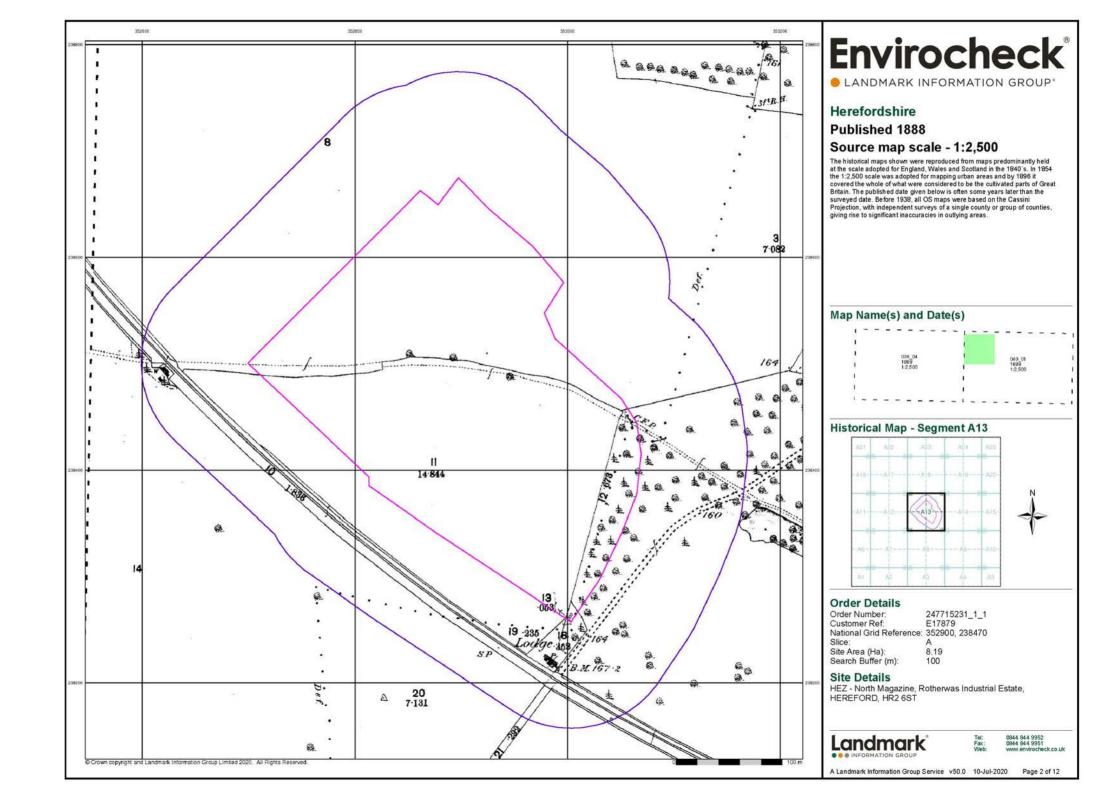
HEZ - North Magazine, Rotherwas Industrial Estate, HEREFORD, HR2 6ST

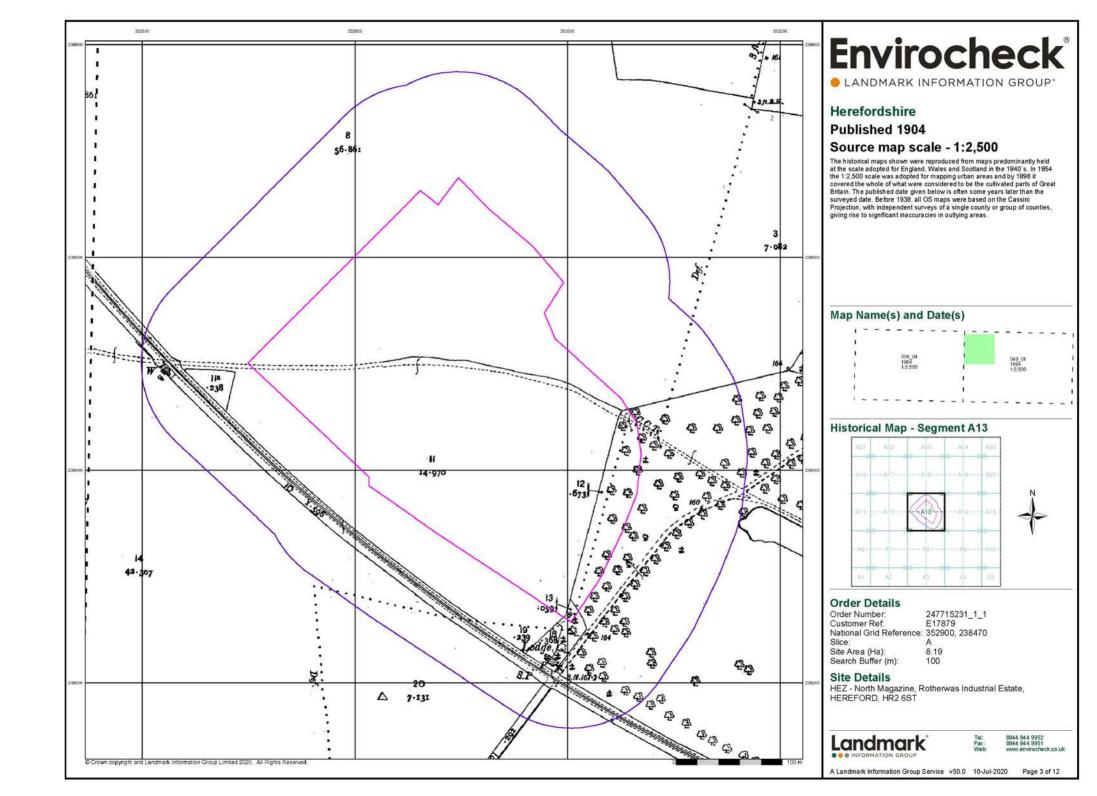


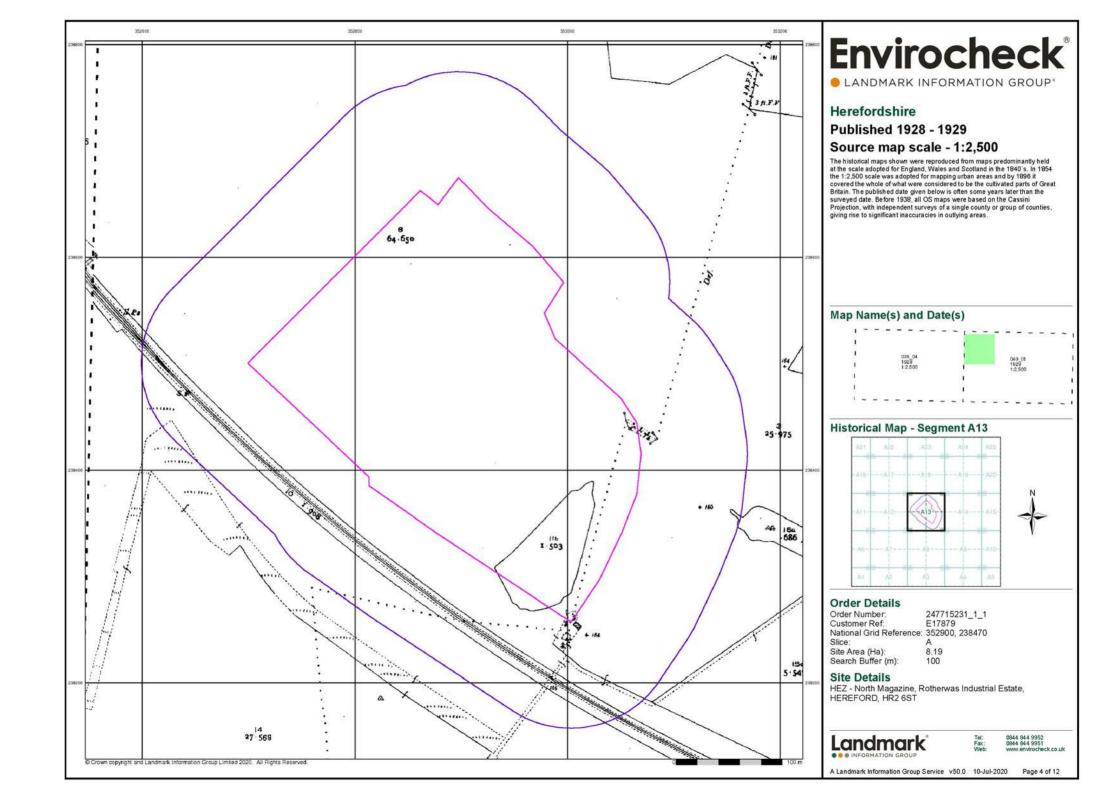


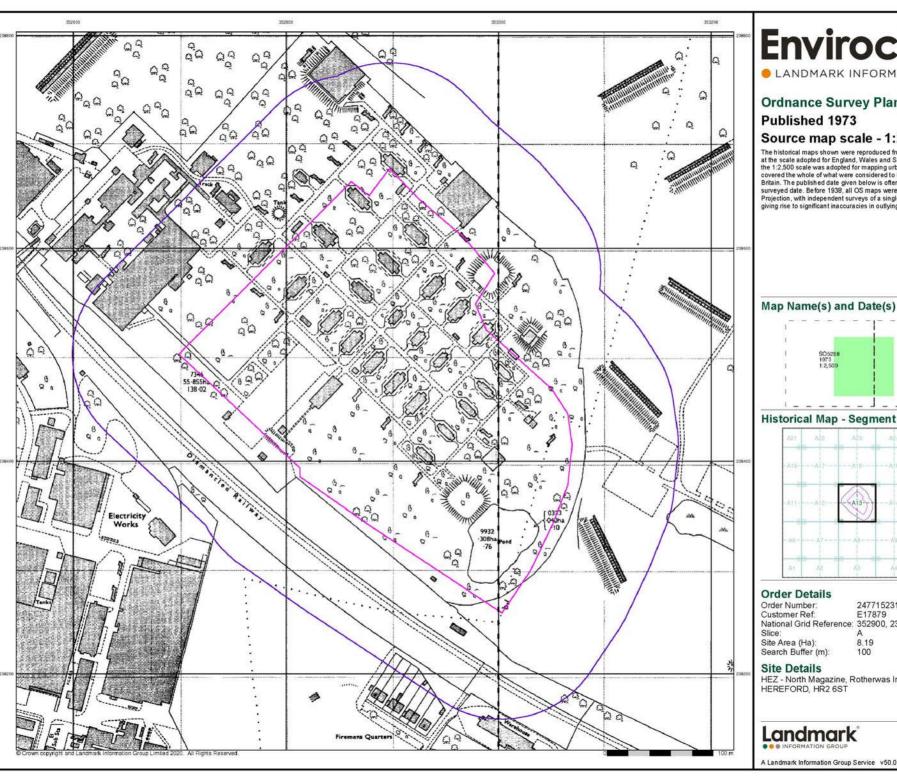
A Landmark Information Group Service v50.0 10-Jul-2020 Page 1 of 12

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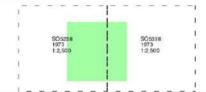


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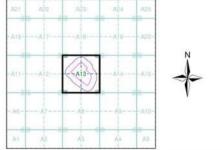
### **Ordnance Survey Plan**

#### Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's, in 1854 the 1.2,500 scale was adopted for mapping unbran areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties. giving rise to significant inaccuracies in outlying areas.



#### **Historical Map - Segment A13**

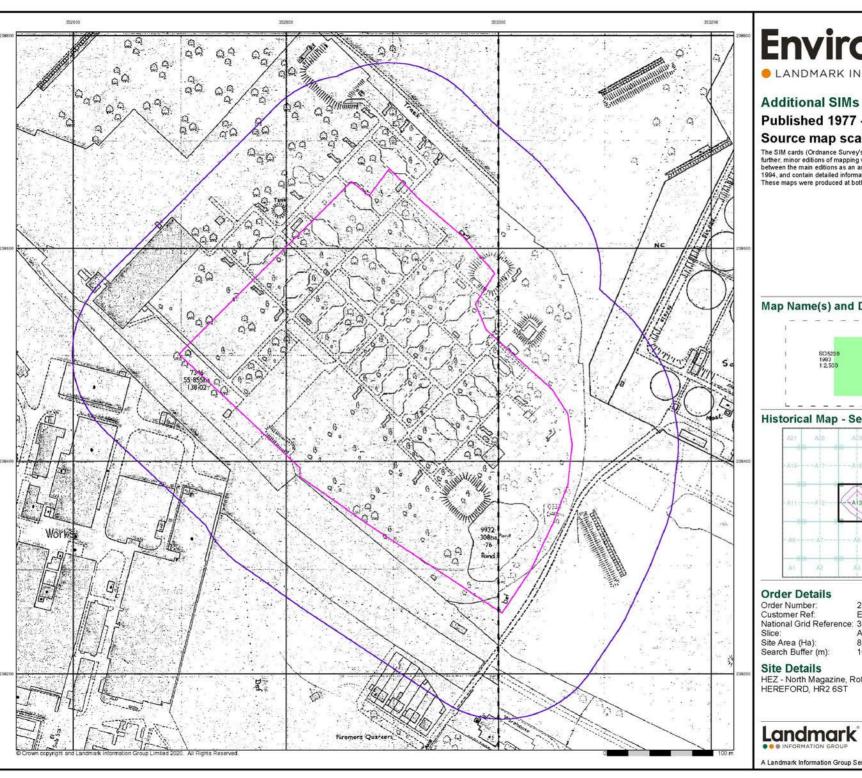


247715231\_1\_1 E17879 National Grid Reference: 352900, 238470 8.19

HEZ - North Magazine, Rotherwas Industrial Estate, HEREFORD, HR2 6ST

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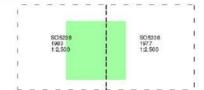
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Published 1977 - 1983

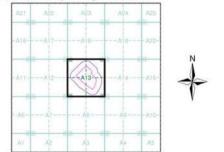
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

#### Map Name(s) and Date(s)



#### **Historical Map - Segment A13**



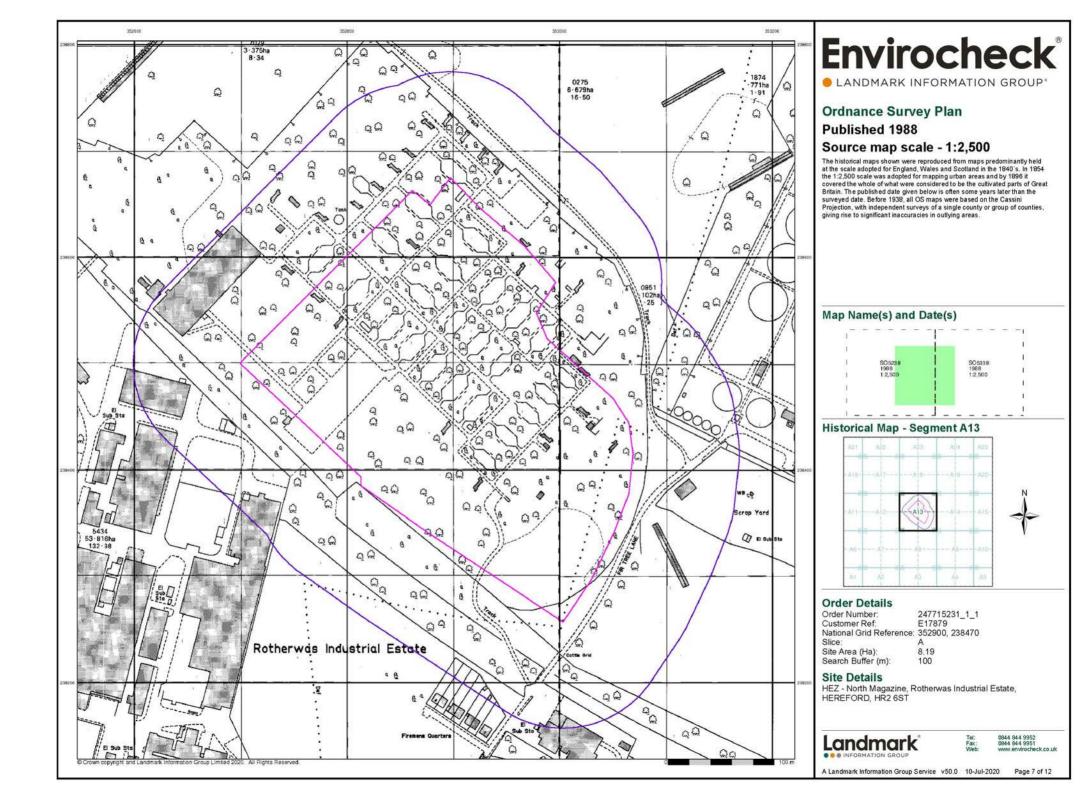
247715231\_1\_1 E17879 National Grid Reference: 352900, 238470 8.19

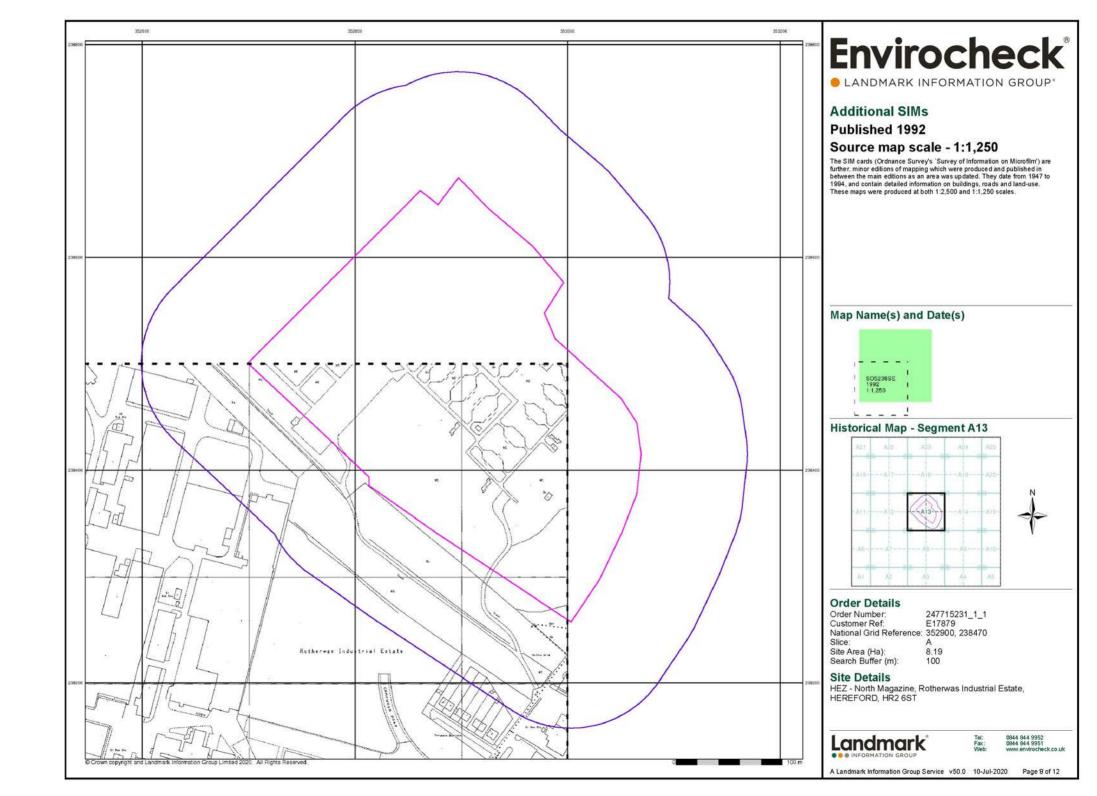
HEZ - North Magazine, Rotherwas Industrial Estate, HEREFORD, HR2 6ST

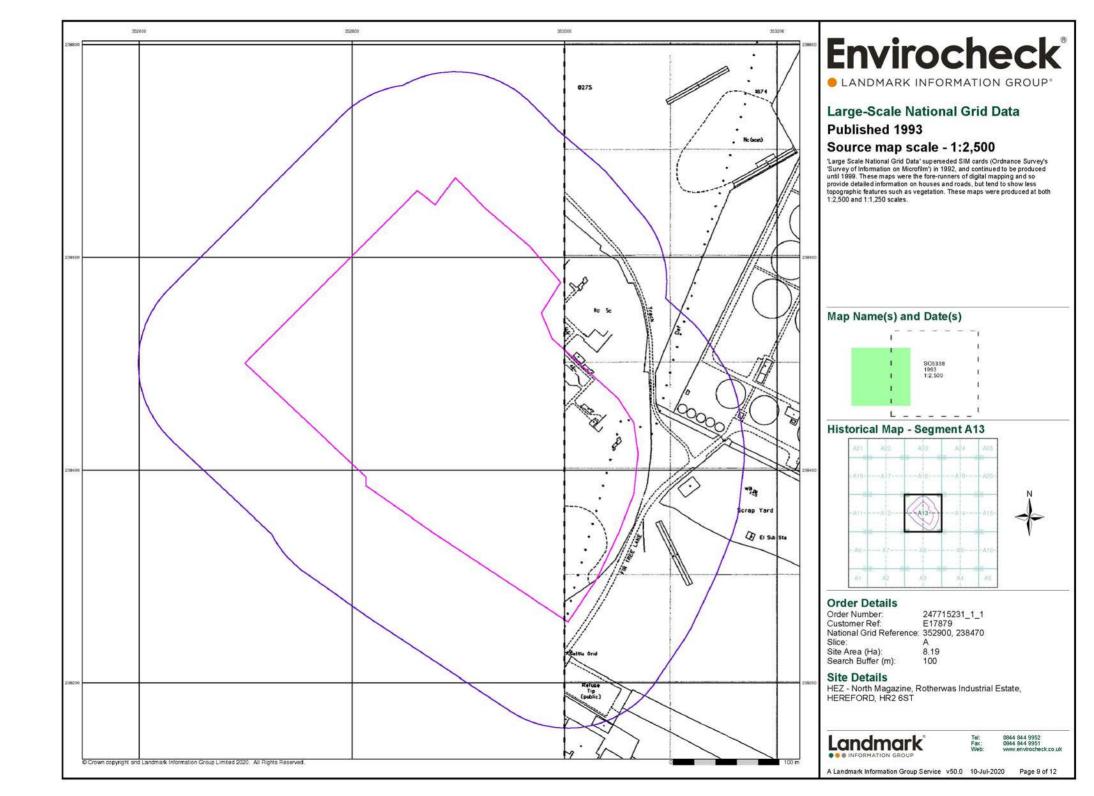


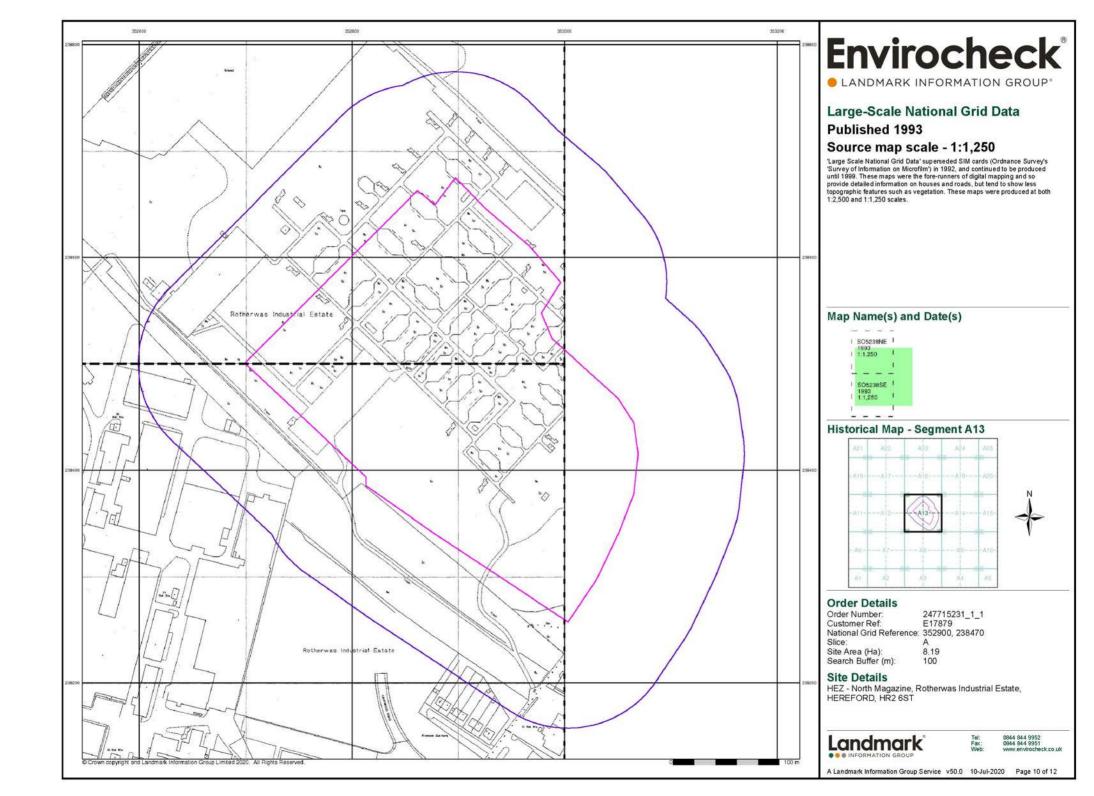
0844 844 9952 0844 844 9951

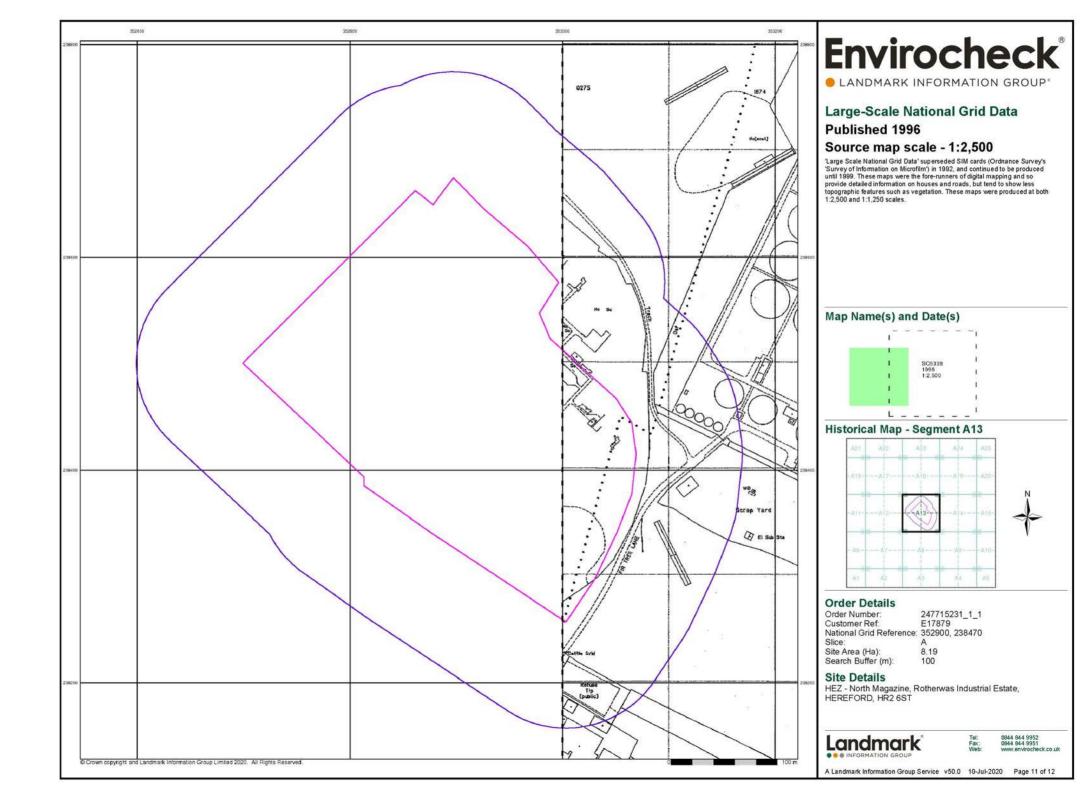
A Landmark Information Group Service v50.0 10-Jul-2020 Page 6 of 12

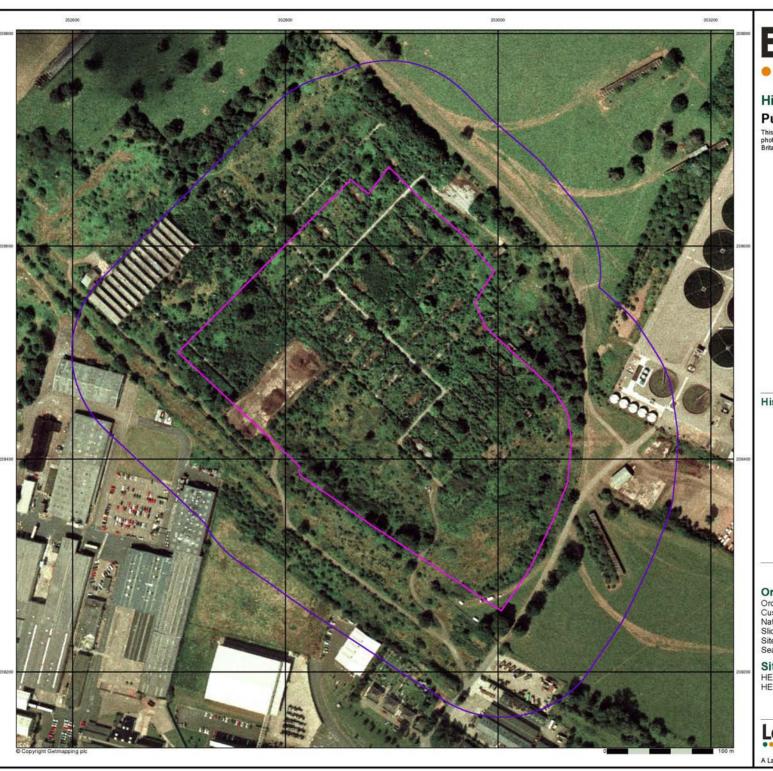










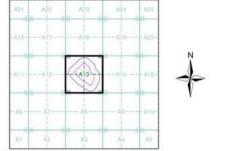


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### **Historical Aerial Photography** Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great

#### Historical Aerial Photography - Segment A13



#### **Order Details**

Order Number: 247715231\_1\_1
Customer Ref: E17879
National Grid Reference: 352900, 238470 8.19

Site Area (Ha): Search Buffer (m): 100

#### Site Details

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Appendix D – Owen Pell Information

andyprice@owenpell.co.uk From:

Andrew Harrison To: Andrew Palmer

Subject: RE: E17879 - HEZ N. Magazine 2011 Site Clearance and 2012 Flood Alleviation Works

Date: 28 January 2021 16:53:32

Attachments: image020.png

image021.png image013.png image014.png

Hi Andrew,

I really can't remember, however it must have been during the better weather, due to the amount of soil being moved.

Regards,

Andy

From: Andrew Harrison < Andrew.harrison@ems-geotech.co.uk>

Sent: 28 January 2021 16:51 To: andyprice@owenpell.co.uk

Cc: Andrew Palmer <apalmer@owenpell.co.uk>

Subject: RE: E17879 - HEZ N. Magazine 2011 Site Clearance and 2012 Flood Alleviation Works

Good afternoon Andy

Thank you for the information. That's great. I don't suppose you can remember roughly when in 2011 and 2012 you undertook the works?

Regards

Andrew

### Andrew Harrison BSc. MSc. FGS

Senior Geo-Environmental Engineer

(T) Hereford: 01432 263333 (T) Worcester: 01905 953 780

(M): 07584 209321

Email: andrew.harrison@ems-geotech.co.uk

(W): www.emsgroupuk.com

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From: andyprice@owenpell.co.uk <andyprice@owenpell.co.uk>

Sent: 28 January 2021 16:41

To: Andrew Harrison < Andrew.harrison@ems-geotech.co.uk >

Cc: Andrew Palmer <apalmer@owenpell.co.uk>

Subject: RE: E17879 - HEZ N. Magazine 2011 Site Clearance and 2012 Flood Alleviation Works

Hi Andrew,

After your surveys we undertook asbestos removal with Hereford Asbestos Services, who disposed of all of the hazardous material. We then built up the site levels with a mixture of excavated material from the pond, as you suggested, and imported material from the Council / Amey. I think the imported material came from the Yazor Brook Flood Alleviation scheme, undertaken by Dawnus/Amey/Herefordshire Council.

Andv

From: Andrew Palmer <apalmer@owenpell.co.uk>

**Sent:** 28 January 2021 16:08 **To:** andyprice@owenpell.co.uk

Subject: FW: E17879 - HEZ N. Magazine 2011 Site Clearance and 2012 Flood Alleviation Works

Andy,

Please see email from EMS below

Can you remember the detail?

Andrew

From: Andrew Harrison < Andrew.harrison@ems-geotech.co.uk >

**Sent:** 28 January 2021 15:28 **To:** apalmer@owenpell.co.uk

Subject: E17879 - HEZ N. Magazine 2011 Site Clearance and 2012 Flood Alleviation Works

Good afternoon Andrew

Hope you are well and had a good Christmas and Happy New Year.

I am in the process of pulling together our site investigation reports for the Skylon Park, North Magazine site, which I spoke to you about when we were on site last December doing the haul road / bund works.

I have some queries relating to the clearance and flood alleviation works undertaken by Owen Pell in 2011 and 2012 that hopefully you can answer.

Looking through our EMS Asbestos reports it is apparent that they attended site in August and September 2009 and between July and November 2011. During these visits various asbestos containing materials (ACMs) including pipe lagging, bituminous felt debris, cement debris, millboard debris and thermal insulation were identified. These were associated with the pipework serving the blast walls, roadways, various unidentified buildings and a bunker on-site.

It was recommended that the more serious ACMs, such as the thermal insulation, were removed by licensed specialist contractor and that surface hand picking was undertaken to remove ACM debris across the site.

Can you confirm when in 2011 Owen Pell undertook the site clearance works, whether ACMs were removed licensed contractors and what happened to the ACMs removed off-site?

It is understood that once the clearance works were completed in 2011, Owen Pell undertook flood Alleviation works in 2012 which included raising the sitewide ground levels.

I was speaking with one of your guys on-site during the haul road / bund works who was involved with the flood alleviation works. He informed me that the soil excavated to create the pond to the northwest of the Shell Store was used to raise the ground levels on North Magazine as part of the flood alleviation works.

Can you confirm that this was the case and weather any other soils were brought to site for this purpose? If so where were they sourced from?

| Can you also confirm when i | in 2012 Owen Pell unde | ertook the flood al | lleviation works? |
|-----------------------------|------------------------|---------------------|-------------------|
|-----------------------------|------------------------|---------------------|-------------------|

Hope to speak soon.

Regards

Andrew

#### Andrew Harrison BSc. MSc. FGS

Senior Geo-Environmental Engineer

(T) Hereford: 01432 263333 (T) Worcester: 01905 953 780

(M): 07584 209321

Email: andrew.harrison@ems-geotech.co.uk

(W): www.emsgroupuk.com

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### Clearance of Old Munitions Factory / Rotherwas Futures Enterprise Zone





Client: Herefordshire Council

Date: 2011 **Duration:** 3 Months Contract Value: £1.5M Demolition and clearance of WW1 and WW2 munitions factorybuildings and roadways including crushing/recycling, removal of metals and hazardous materials, bulk earthworks, tree clearance and asbestos removal.

#### Related Work



Flood Defences



Cycle and Foot Path



Industrial Estate Roads



Hereford Futures Access Roads

Contact Us

Owen Pell Ltd

**Building & Civil Engineering Contractors** 

Twyford Road, Rotherwas,

Hereford HR2 6JR

Telephone: 01432 353441 Fax: 01432 351051

E-mail: enquiries@owenpell.co.uk

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2/12/2021 Flood Alleviation



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#### Flood Alleviation/ Rotherwas



Client: Herefordshire Council Date: 2012 Contract Value: £500K Bulk earthworks, pond construction and swales to minimise flooding of new enterprise park in South Hereford.

### Related Work



Credenhill Ccycleway and Footway



**New Roads** 



**Holmer Cycleway** 



Greenway Foot and Cycle Path

Contact Us

Owen Pell Ltd

Building & Civil Engineering Contractors

Twyford Road, Rotherwas, Hereford HR2 6JR

Telephone: 01432 353441 Fax: 01432 351051

E-mail: enquiries@owenpell.co.uk

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> Industrial Buildings Refurbishment Ofiice Builds

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Footpaths Agricultural

Agricultural

Swales
Housing Estates
Factory Buildings
Eco Buildings

Hereford Builders

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Appendix E – Envirocheck Report - Geological Data

### Geology 1:50,000 Maps Legends

#### Artificial Ground and Landslip

| Map<br>Colour | Lex Code | Rock Name               | Rock Type          | Min and Max Age            |
|---------------|----------|-------------------------|--------------------|----------------------------|
| Z             | MGR      | Made Ground (Undivided) | Artificial Deposit | Not Supplied -<br>Holocene |

| Map<br>Colour | Lex Code | Rock Name                    | Rock Type | Min and Max Age           |
|---------------|----------|------------------------------|-----------|---------------------------|
|               | RG       | Raglan Mudstone<br>Formation | Sandstone | Not Supplied -<br>Pridoli |
| /             |          | Faults                       |           |                           |

#### Superficial Geology

| Map<br>Colour | Lex Code | Rock Name                                  | Rock Type                      | Min and Max Age              |
|---------------|----------|--|--------------------------------|------------------------------|
|               | ALV      | Alluvium                                   | Clay, Silt, Sand<br>and Gravel | Not Supplied -<br>Holocene   |
|               | GFSDD    | Glaciofluvial Sheet<br>Deposits, Devensian | Sand and Gravel                | Not Supplied -<br>Devensian  |
|               | RTD1     | River Terrace Deposits, 1                  | Sand and Gravel                | Not Supplied -<br>Quaternary |
|               | RTD2     | River Terrace Deposits, 2                  | Sand and Gravel                | Not Supplied -<br>Quaternary |
|               | RTD3     | River Terrace Deposits, 3                  | Sand and Gravel                | Not Supplied -<br>Quaternary |
|               | HEAD     | Head                                       | Clay, Silt, Sand<br>and Gravel | Not Supplied -<br>Quaternary |
|               | RTD4     | River Terrace Deposits, 4                  | Sand and Gravel                | Not Supplied -<br>Quaternary |
|               | LUG4     | River Terrace Deposits, 4<br>(Lugg)        | Sand and Gravel                | Not Supplied -<br>Quaternary |
|               | LUG3     | River Terrace Deposits, 3<br>(Lugg)        | Sand and Gravel                | Not Supplied -<br>Quaternary |
|               | LUG1     | River Terrace Deposits, 1<br>(Lugg)        | Sand and Gravel                | Not Supplied -<br>Quaternary |
|               | LUG2     | River Terrace Deposits, 2<br>(Lugg)        | Sand and Gravel                | Not Supplied -<br>Quaternary |
|               | ALF      | Alluvial Fan Deposits                      | Sand and Gravel                | Not Supplied -<br>Quaternary |

#### **Bedrock and Faults**

| Map<br>Colour | Lex Code | Rock Name                    | Rock Type   | Min and Max Age                  |
|---------------|----------|------------------------------|---|----------------------------------|
|               | SMG      | St Maughans Formation        | Sandstone   | Not Supplied - Early<br>Devonian |
|               | SMG      | St Maughans Formation        | Argillaceous Rocks<br>and<br>[Subequal/Subordi<br>nate] Sandstone,<br>Interbedded | Not Supplied - Early<br>Devonian |
|               | RG       | Raglan Mudstone<br>Formation | Siltstone and<br>Mudstone,<br>Interbedded   | Not Supplied -<br>Pridoli        |

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#### Geology 1:50,000 Maps

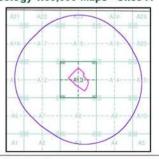
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than represents to published paper maps.

previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

#### Geology 1:50,000 Maps Coverage

#### Geology 1:50,000 Maps - Slice A





#### Order Details:

Order Number: 247715231\_1\_1
Customer Reference: B17879
National Grid Reference: 352900, 238470
Sice: A
Site Area (Ha): 8.19
Search Buffer (m): 1000

#### Site Details:

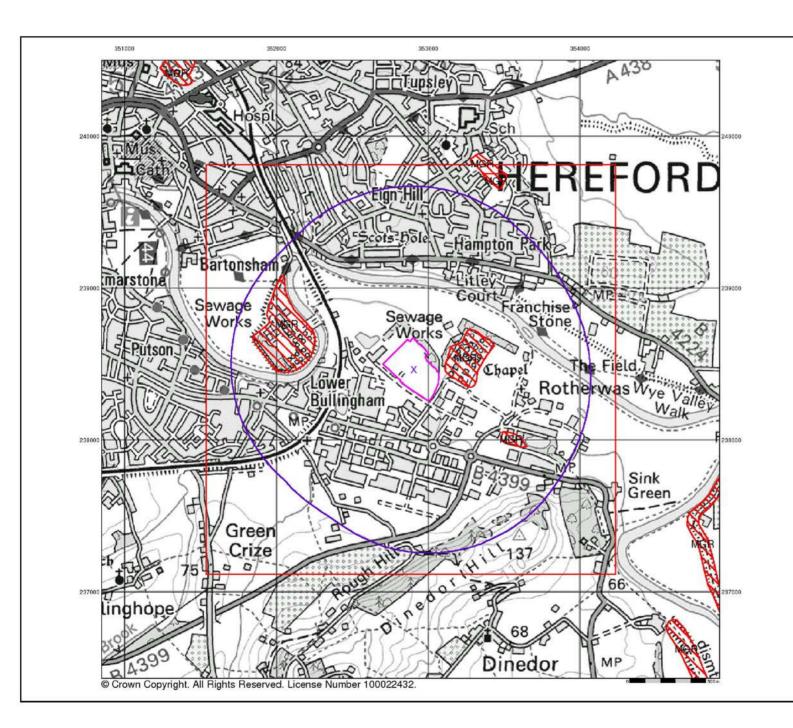
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#### Artificial Ground and Landslip

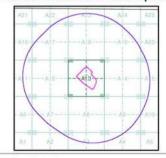
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground man-made deposits such as embankments and spoil heaps on the natural ground surface.
   - Worked ground - areas where the ground has been cut away such as
- Worked ground areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground areas where the surface has been reshaped.
   Disturbed ground areas of ill-defined shallow or near surface mineral
- Disturbed ground areas of ill-defined shallow or near surface minera workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

#### Artificial Ground and Landslip Map - Slice A





#### **Order Details:**

 Order Number:
 247715231\_1\_1

 Customer Reference:
 E17879

 National Grid Reference:
 352900, 238470

 Sice:
 A

 Site Area (Ha):
 8.19

 Search Buffer (m):
 1000

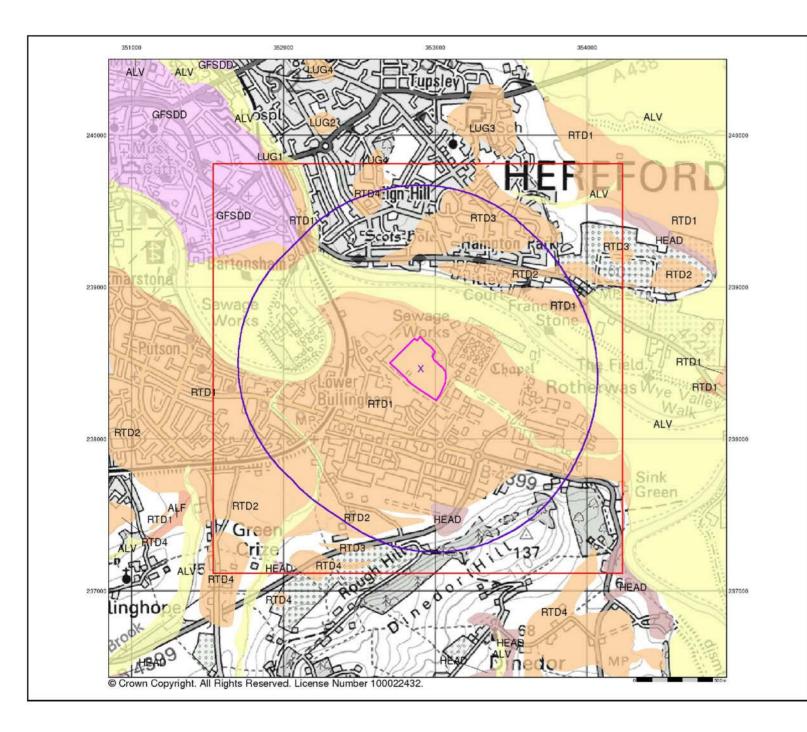
Site Details:

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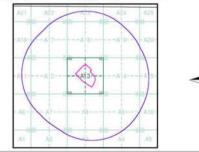
#### **Superficial Geology**

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and day, and onshore they form relatively thin, often discontinuous patches or larger spreads.

#### Superficial Geology Map - Slice A



#### **Order Details:**

247715231\_1\_1 E17879 352900, 238470 Order Number: Customer Reference: National Grid Reference: A 8.19 Site Area (Ha): Search Buffer (m): 1000

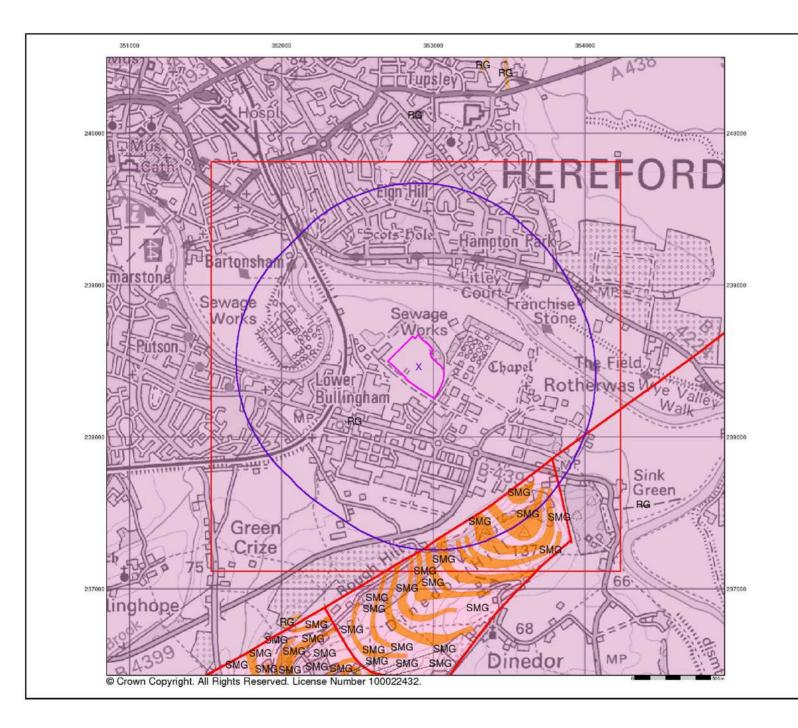
#### Site Details:

HEZ - North Magazine, Rotherwas Industrial Estate, HEREFORD, HR2



0844 844 9952 0844 844 9951

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LANDMARK INFORMATION GROUP

#### **Bedrock and Faults**

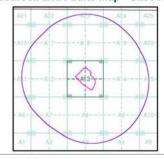
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pilocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

#### Bedrock and Faults Map - Slice A





#### **Order Details:**

247715231\_1\_1 E17879 Order Number: Customer Reference: National Grid Reference: 352900, 238470 A 8.19 Site Area (Ha): Search Buffer (m):

1000

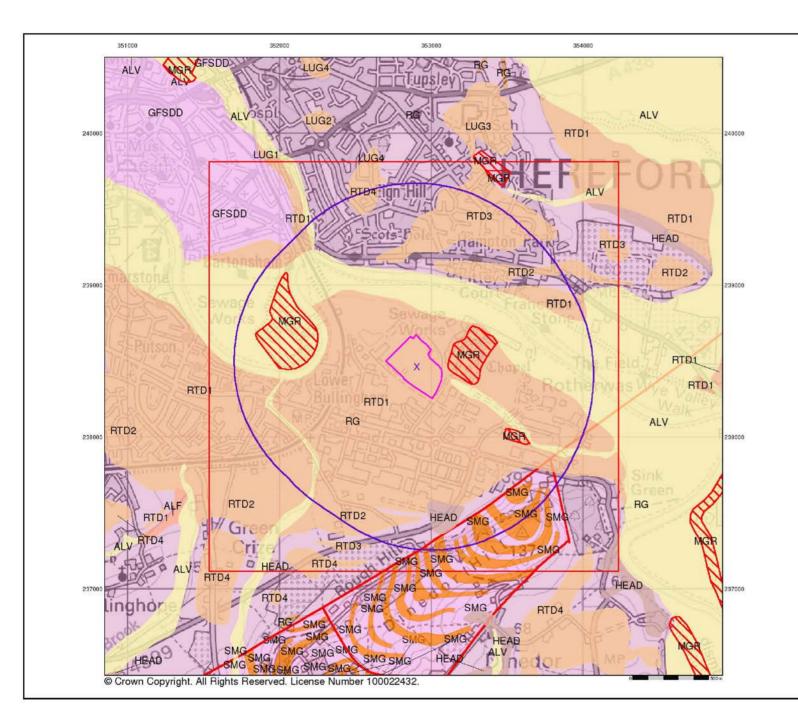
#### Site Details:

HEZ - North Magazine, Rotherwas Industrial Estate, HEREFORD, HR2



0844 844 9952 0844 844 9951

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#### Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

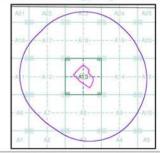
#### **Additional Information**

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

#### Contact

British Geological Survey Kingsley Dunham Centre Keyworth Nottingham NG12 5GG Telephone: 0115 936 3143 Fax: 0115 936 3276 email: enquiries@bgs.ac.uk website: www.bgs.ac.uk

#### Combined Geology Map - Slice A





#### **Order Details:**

 Order Number:
 247715231\_1\_1

 Customer Reference:
 E17879

 National Grid Reference:
 352900, 238470

 Slice:
 A

 Site Area (Ha):
 8.19

 Search Buffer (m):
 1000

#### Site Details:

HEZ - North Magazine, Rotherwas Industrial Estate, HEREFORD, HR2

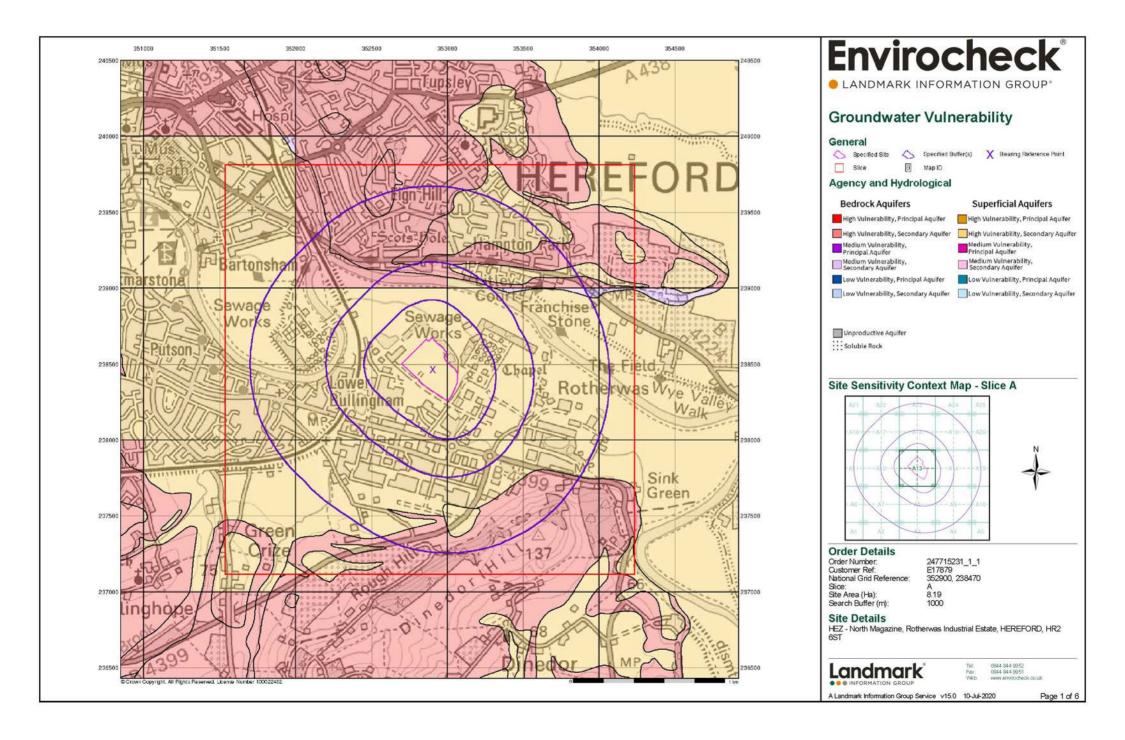


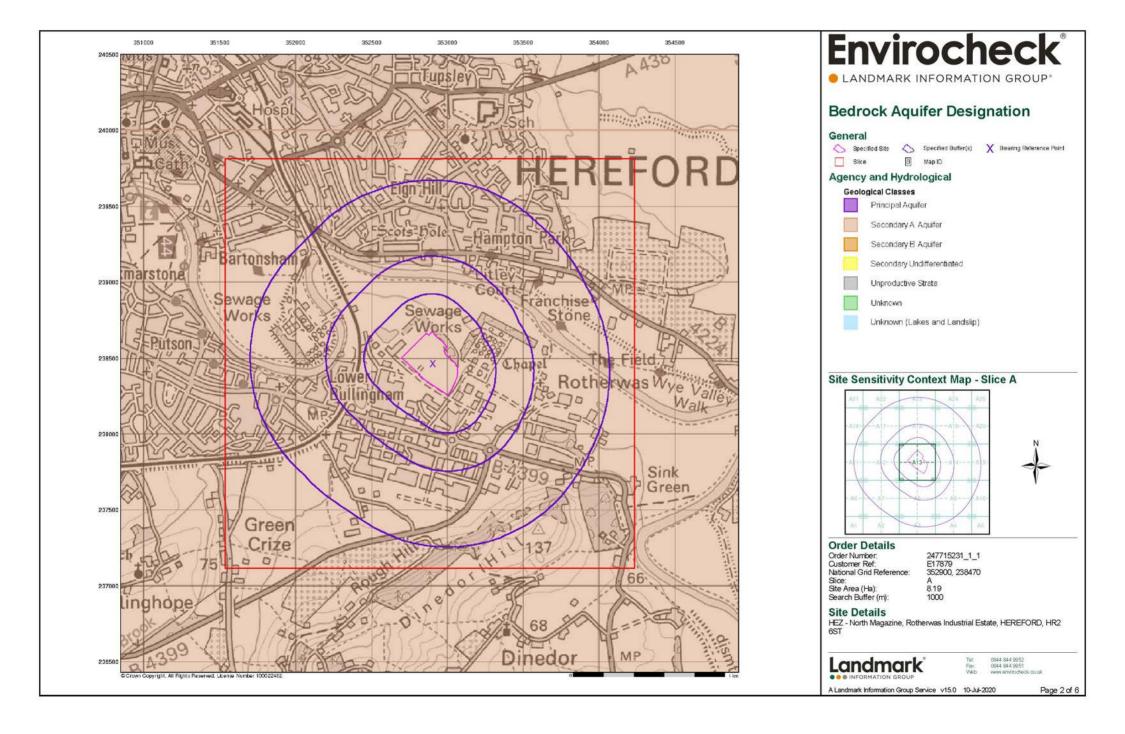
et. 0844-844-9952 ax 0844-844-9951 Veb www.em/rocheck.co

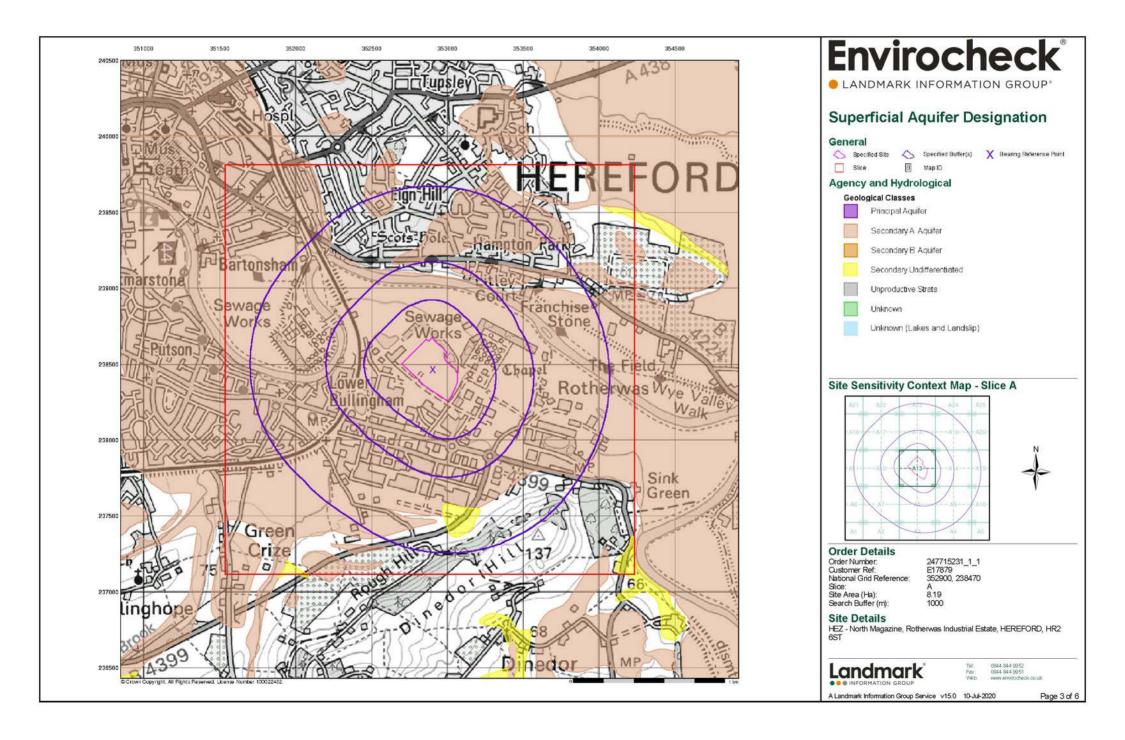
Page 5 of 5

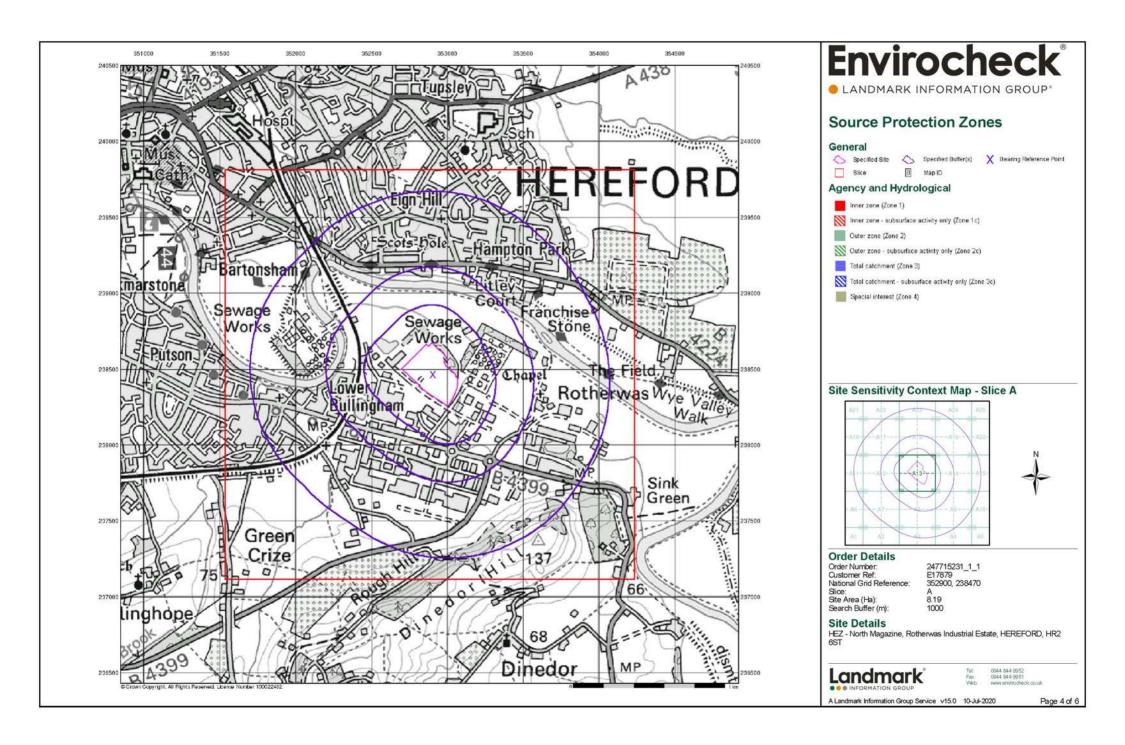
v15.0 10-Jul-2020

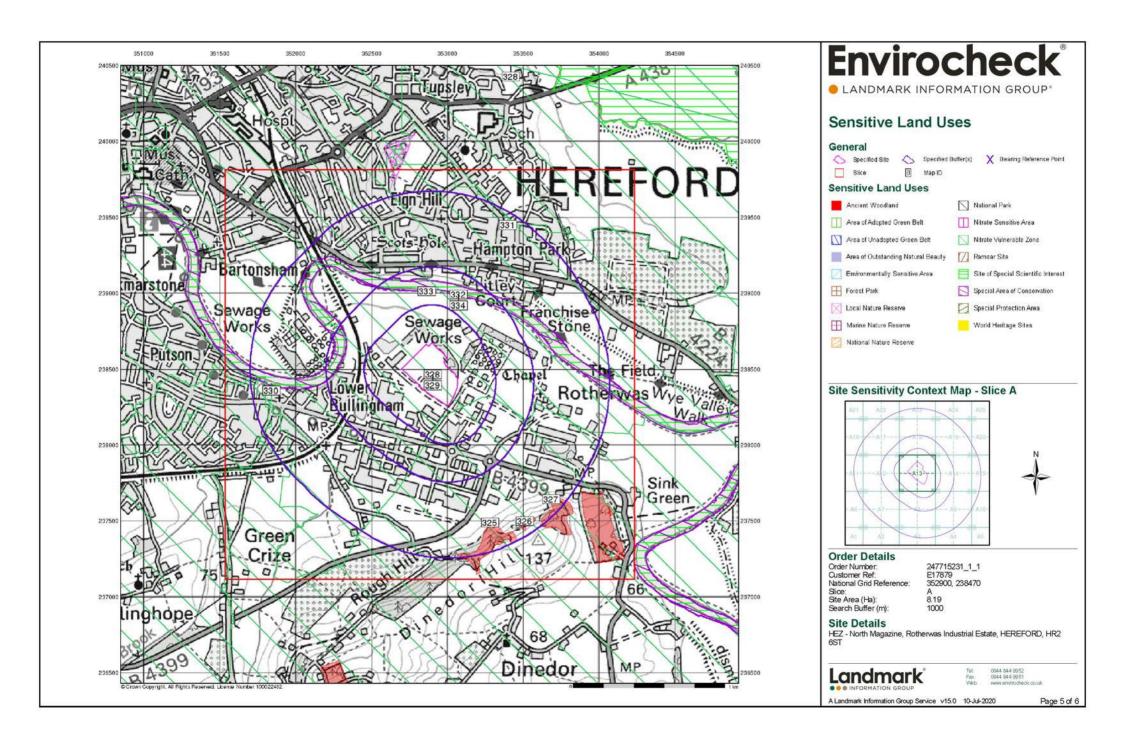
Appendix F – Envirocheck Report - Environmental Data

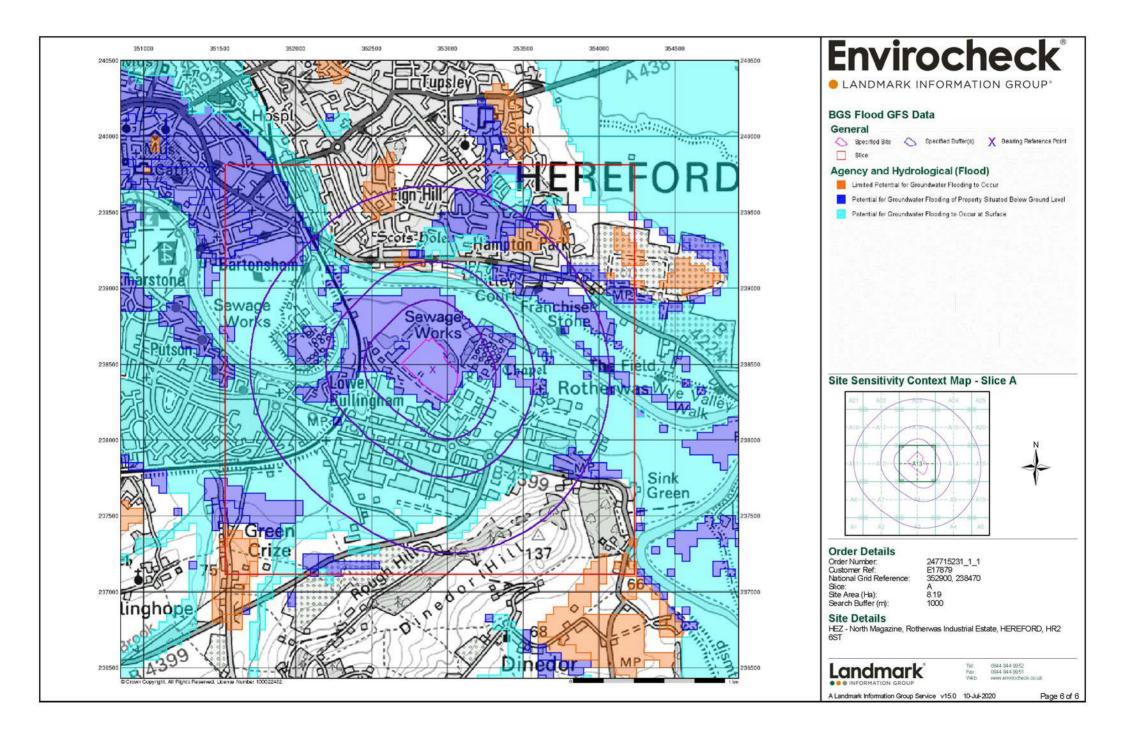














## Envirocheck® Report:

#### **Datasheet**

#### **Order Details:**

Order Number: 247715231\_1\_1

**Customer Reference:** 

E17879

National Grid Reference:

352900, 238470

Slice:

A

Site Area (Ha):

8.19

Search Buffer (m):

1000

#### Site Details:

HEZ - North Magazine Rotherwas Industrial Estate HEREFORD HR2 6ST

#### **Client Details:**

Mr J Perkins
EMS (Environmental Management Solutions)
Sigeric Business Park
Holme Lacy Road
Hereford
Herefordshire
HR2 6BQ



Order Number: 247715231\_1\_1 Date: 10-Jul-2020 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service





| Report Section        | Page Number |
|-----------------------|-------------|
| Summary               |             |
| Agency & Hydrological | 1           |
| Waste                 | 54          |
| Hazardous Substances  | 63          |
| Geological            | 64          |
| Industrial Land Use   | 67          |
| Sensitive Land Use    | 96          |
| Data Currency         | 97          |
| Data Suppliers        | 102         |
| Useful Contacts       | 103         |

#### 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/Natural Resources Wales 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 this 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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Report Version v53.0



| Data Type   | Page<br>Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m<br>(*up to 2000m) |
|---|----------------|---------|-----------|-------------|--------------------------------|
| Agency & Hydrological   |                |         |           |             |                                |
| BGS Groundwater Flooding Susceptibility                       | pg 1           | Yes     | Yes       | Yes         | n/a                            |
| Contaminated Land Register Entries and Notices                |                |         |           |             |                                |
| Discharge Consents  | pg 1           |         |           | 12          | 92                             |
| Prosecutions Relating to Controlled Waters                    |                |         | n/a       | n/a         | n/a                            |
| Enforcement and Prohibition Notices                           |                |         |           |             |                                |
| Integrated Pollution Controls                                 | pg 27          |         |           | 1           |                                |
| Integrated Pollution Prevention And Control                   | pg 27          |         |           |             | 5                              |
| Local Authority Integrated Pollution Prevention And Control   |                |         |           |             |                                |
| Local Authority Pollution Prevention and Controls             | pg 28          |         | 5         | 8           | 5                              |
| Local Authority Pollution Prevention and Control Enforcements |                |         |           |             |                                |
| Nearest Surface Water Feature                                 | pg 30          |         | Yes       |             |                                |
| Pollution Incidents to Controlled Waters                      | pg 31          |         | 2         | 1           | 40                             |
| Prosecutions Relating to Authorised Processes                 | Nation 1       |         |           |             |                                |
| Registered Radioactive Substances                             |                |         |           |             |                                |
| River Quality   | pg 38          |         |           | 2           | 1                              |
| River Quality Biology Sampling Points                         | pg 38          |         |           |             | 1                              |
| River Quality Chemistry Sampling Points                       |                |         |           |             |                                |
| Substantiated Pollution Incident Register                     | pg 38          | 1       |           | 1           | 4                              |
| Water Abstractions  | pg 39          |         |           | 1           | 1 (*20)                        |
| Water Industry Act Referrals                                  | Notices .      |         |           |             |                                |
| Groundwater Vulnerability Map                                 | pg 45          | Yes     | n/a       | n/a         | n/a                            |
| Groundwater Vulnerability - Soluble Rock Risk                 |                |         | n/a       | n/a         | n/a                            |
| Groundwater Vulnerability - Local Information                 |                |         | n/a       | n/a         | n/a                            |
| Bedrock Aquifer Designations                                  | pg 45          | Yes     | n/a       | n/a         | n/a                            |
| Superficial Aquifer Designations                              | pg 45          | Yes     | n/a       | n/a         | n/a                            |
| Source Protection Zones                                       |                |         |           |             |                                |
| Extreme Flooding from Rivers or Sea without Defences          | pg 45          | Yes     | Yes       | n/a         | n/a                            |
| Flooding from Rivers or Sea without Defences                  | pg 47          | Yes     |           | n/a         | n/a                            |
| Areas Benefiting from Flood Defences                          |                |         |           | n/a         | n/a                            |
| Flood Water Storage Areas                                     |                |         |           | n/a         | n/a                            |
| Flood Defences  |                |         |           | n/a         | n/a                            |
| OS Water Network Lines  | pg 47          |         |           | 5           | 48                             |



| Data Type   | Page<br>Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m<br>(*up to 2000m) |
|---|----------------|---------|-----------|-------------|--------------------------------|
| Waste   |                |         |           |             |                                |
| BGS Recorded Landfill Sites   |                |         |           |             |                                |
| Historical Landfill Sites   | pg 54          |         |           |             | 1                              |
| Integrated Pollution Control Registered Waste Sites                 |                |         |           |             |                                |
| Licensed Waste Management Facilities (Landfill Boundaries)          |                |         |           |             |                                |
| Licensed Waste Management Facilities (Locations)                    | pg 54          |         | 2         | 3           | 10                             |
| Local Authority Landfill Coverage                                   | pg 57          | 1       | n/a       | n/a         | n/a                            |
| Local Authority Recorded Landfill Sites                             |                |         |           |             |                                |
| Potentially Infilled Land (Non-Water)                               | pg 57          |         |           |             | 4                              |
| Potentially Infilled Land (Water)                                   | pg 58          | 1       | 1         | 1           | 7                              |
| Registered Landfill Sites   | pg 58          |         |           |             | 1                              |
| Registered Waste Transfer Sites                                     | pg 59          |         | 2         |             | 4                              |
| Registered Waste Treatment or Disposal Sites                        | pg 61          |         |           |             | 2                              |
| Hazardous Substances  |                |         |           |             |                                |
| Control of Major Accident Hazards Sites (COMAH)                     | pg 63          |         |           |             | 1                              |
| Explosive Sites   | pg 63          |         | 1         |             | 1                              |
| Notification of Installations Handling Hazardous Substances (NIHHS) | 1,20,000.03    |         |           |             |                                |
| Planning Hazardous Substance Consents                               |                |         |           |             |                                |
| Planning Hazardous Substance Enforcements                           |                |         |           |             |                                |

Order Number: 247715231\_1\_1 Date: 10-Jul-2020 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service



| Data Type   | Page<br>Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m<br>(*up to 2000m |
|---|----------------|---------|-----------|-------------|-------------------------------|
| Geological  |                |         |           |             |                               |
| BGS 1:625,000 Solid Geology                                       | pg 64          | Yes     | n/a       | n/a         | n/a                           |
| BGS Estimated Soil Chemistry                                      | pg 64          | Yes     |           |             | Yes                           |
| BGS Recorded Mineral Sites  | pg 64          |         |           | 1           | 3                             |
| BGS Urban Soil Chemistry  |                |         |           |             |                               |
| BGS Urban Soil Chemistry Averages                                 |                |         |           |             |                               |
| CBSCB Compensation District                                       |                |         | n/a       | n/a         | n/a                           |
| Coal Mining Affected Areas  |                |         | n/a       | n/a         | n/a                           |
| Mining Instability  |                |         | n/a       | n/a         | n/a                           |
| Man-Made Mining Cavities  |                |         |           |             |                               |
| Natural Cavities  |                |         |           |             |                               |
| Non Coal Mining Areas of Great Britain                            | pg 65          | Yes     |           | n/a         | n/a                           |
| Potential for Collapsible Ground Stability Hazards                | pg 65          | Yes     |           | n/a         | n/a                           |
| Potential for Compressible Ground Stability Hazards               | pg 65          |         | Yes       | n/a         | n/a                           |
| Potential for Ground Dissolution Stability Hazards                |                |         |           | n/a         | n/a                           |
| Potential for Landslide Ground Stability Hazards                  | pg 65          | Yes     |           | n/a         | n/a                           |
| Potential for Running Sand Ground Stability Hazards               | pg 65          | Yes     | Yes       | n/a         | n/a                           |
| Potential for Shrinking or Swelling Clay Ground Stability Hazards | pg 65          |         | Yes       | n/a         | n/a                           |
| Radon Potential - Radon Affected Areas                            | pg 66          | Yes     | n/a       | n/a         | n/a                           |
| Radon Potential - Radon Protection Measures                       |                |         | n/a       | n/a         | n/a                           |
| Industrial Land Use   |                |         |           |             |                               |
| Contemporary Trade Directory Entries                              | pg 67          |         | 25        | 60          | 123                           |
| Fuel Station Entries  | pg 85          |         |           | 1           |                               |
| Points of Interest - Commercial Services                          | pg 86          |         | 10        | 11          | 32                            |
| Points of Interest - Education and Health                         |                |         |           |             |                               |
| Points of Interest - Manufacturing and Production                 | pg 90          |         | 5         | 2           | 16                            |
| Points of Interest - Public Infrastructure                        | pg 92          |         | 3         | 8           | 18                            |
| Points of Interest - Recreational and Environmental               | pg 95          |         |           |             | 7                             |
| Gas Pipelines   | 1000           |         |           |             |                               |
| Underground Electrical Cables                                     |                |         |           |             |                               |



| Data Type                            | Page<br>Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m<br>(*up to 2000m) |
|--------------------------------------|----------------|---------|-----------|-------------|--------------------------------|
| Sensitive Land Use                   |                |         |           |             |                                |
| Ancient Woodland                     | pg 96          |         |           |             | 3                              |
| Areas of Adopted Green Belt          |                |         |           |             |                                |
| Areas of Unadopted Green Belt        |                |         |           |             |                                |
| Areas of Outstanding Natural Beauty  |                |         |           |             |                                |
| Environmentally Sensitive Areas      |                |         |           |             |                                |
| Forest Parks                         |                |         |           |             |                                |
| Local Nature Reserves                |                |         |           |             |                                |
| Marine Nature Reserves               |                |         |           |             |                                |
| National Nature Reserves             |                |         |           |             |                                |
| National Parks                       |                |         |           |             |                                |
| Nitrate Sensitive Areas              |                |         |           |             |                                |
| Nitrate Vulnerable Zones             | pg 96          | 2       |           |             | 2                              |
| Ramsar Sites                         |                |         |           |             |                                |
| Sites of Special Scientific Interest | pg 96          |         |           | Ĭ           |                                |
| Special Areas of Conservation        | pg 96          |         |           | 2           |                                |
| Special Protection Areas             |                |         |           |             |                                |
| World Heritage Sites                 |                |         |           |             |                                |



| Map<br>ID |  | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR                                       |
|-----------|--|--|---|------------------------------------|---------|---|
|           | BGS Groundwater F  | Flooding Susceptibility  |   |                                    |         |   |
|           | Flooding Type:   | Potential for Groundwater Flooding of Property Situated Below Ground Level   | A13SE<br>(SW)                                   | 0                                  | 1       | 352903<br>238465                          |
|           | BGS Groundwater F  | Flooding Susceptibility  |   |                                    |         |   |
|           | Flooding Type:   | Potential for Groundwater Flooding to Occur at Surface   | A13SE<br>(SE)                                   | 0                                  | 1       | 353050<br>238350                          |
|           | BGS Groundwater F  | Flooding Susceptibility  |   |                                    |         | 2274 5-1254                               |
|           | Flooding Type:   | Potential for Groundwater Flooding of Property Situated Below Ground Level   | A13NW<br>(NW)                                   | 35                                 | 1       | 352750<br>238600                          |
|           | BGS Groundwater F  | Flooding Susceptibility  |   |                                    |         |   |
|           | Flooding Type:   | Potential for Groundwater Flooding of Property Situated Below Ground Level   | A12NE<br>(W)                                    | 461                                | 1       | 352250<br>238600                          |
|           | BGS Groundwater F  | Flooding Susceptibility  | (/  |                                    |         |   |
|           | Flooding Type:   | Limited Potential for Groundwater Flooding to Occur  | A18NW<br>(N)                                    | 478                                | 1       | 352850<br>239150                          |
|           | Discharge Consents   | S  | (14)  |                                    |         | 200100                                    |
| 1         | Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:                | Thom Lighting Ltd Undefined Or Other Rotherwas Estate - Smart & Bro Environment Agency, Welsh Region River Wye Ah4005001 1 10th October 1975 10th October 1975 15th October 1992 Unspecified Freshwater Stream/River  Wye River Consent expired Located by supplier to within 100m   | A12SE<br>(SW)                                   | 356                                | 2       | 352500<br>238200                          |
|           | Discharge Consents   | S  |   |                                    |         |   |
| 1         |  | Thom Lighting Ltd Undefined Or Other Rotherwas Estate - Smart & Bro, Unknown, Unknown, Unknown Environment Agency, Midlands Region River Wye to River Lugg Ah4005001 1 10th October 1975 10th October 1975 15th October 1992 Unknown Freshwater Stream/River  Wye River Consent expired Located by supplier to within 100m                   | A12SE<br>(SW)                                   | 356                                | 2       | 352500<br>238200                          |
| 120       | Discharge Consents   |  | 2772-1  | CONTRACT.                          | 1960    | 72-20-02-02-02-02-02-02-02-02-02-02-02-02 |
| 2         | Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Property Type: Positional Accuracy: | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Rotherwas Ind Estate Stw Environment Agency, Welsh Region River Wye Ah1001301 1 30th January 1985 30th January 1985 5th April 1995 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River Wye River Consent expired Located by supplier to within 10m | A12NE<br>(W)                                    | 408                                | 2       | 352300<br>238580                          |



| Map<br>ID |   | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|---|---|------------------------------------|---------|------------------|
| 2         | Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Rotherwas Ind Estate Stw, Unknown, Unknown, Unknown Environment Agency, Midlands Region River Wye to River Lugg Ah1001301 1 30th January 1985 30th January 1985 5th April 1995 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  Wye River Consent expired Located by supplier to within 10m   | A12NE<br>(W)                                    | 408                                | 2       | 352300<br>238580 |
| 3         | Discharge Consents Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Mr And Mrs James A Griffith DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) 78 Hampton Park Road Hereford 78 Hampton Park Road, Hereford, Herefordshire, England, Hr1 1tj Environment Agency, Midlands Region River Wye to River Lugg An0365901 1 12th July 2004 12th July 2004 12th July 2004 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River River Wye New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A18SE<br>(N)                                    | 412                                | 2       | 353055<br>239055 |
| 3         | Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Mr And Mrs James A Griffith Domestic Property (Single) 78 Hampton Park Road Hereford, Herefordshire, England, Hr1 1tj Environment Agency, Welsh Region Not Supplied An0365901 1 12th July 2004 12th July 2004 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River  River Wye New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)  | A18SE<br>(N)                                    | 412                                | 2       | 353055<br>239055 |
| 4         | Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Dwr Cymru Cyfyngedig PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Nimrod Drive Pumping Station, Gortsy Lane, Hereford, Herefordshire, Hr1 1un Environment Agency, Midlands Region River Wye to River Lugg An0078301 3 26th July 2017 26th July 2017 13th March 2020 Sewage Discharges - Pumping Station - Water Company Freshwater Stream/River River Wye Surrendered under EPR 2010 Located by supplier to within 10m   | A19SW<br>(NE)                                   | 477                                | 2       | 353244<br>239001 |



# • LANDMARK INFORMATION GROUP\* Agency & Hydrological

| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
|           | Discharge Consents   | 5   |   |                                    |         |                  |
| 4         | Operator: Property Type: Location:  Authority: Catchment Area; Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Type: This man and the control of the  | Dwr Cymru Cyfyngedig STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Siddons Road Sewage Pumping Station Siddons Road, Hereford, ., Herefordshire, Hr1 1xd Environment Agency, Midlands Region River Wye to River Lugg An0078701 5 31st March 2020 27th March 2018 Not Supplied Public Sewage: Storm Sewage Overflow Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m    | A19SW<br>(NE)                                   | 478                                | 2       | 353246<br>239001 |
| 4         | NOS 50 0000 00   | Dwr Cymru Cyfyngedig STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Siddons Road Sewage Pumping Station Siddons Road, Hereford, ., Herefordshire, Hr1 1xd Environment Agency, Midlands Region River Wye to River Lugg An0078701 4 27th March 2018 27th March 2018 30th March 2020 Public Sewage: Storm Sewage Overflow Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m | A19SW<br>(NE)                                   | 478                                | 2       | 353246<br>239001 |
| 4         |  | Dwr Cymru Cyfyngedig STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Siddons Road Sewage Pumping Station Siddons Road, Hereford, ., Herefordshire, Hr1 1xd Environment Agency, Midlands Region River Wye to River Lugg An0078701 3 26th July 2017 26th July 2010 26th March 2018 Public Sewage: Storm Sewage Overflow Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m   | A19SW<br>(NE)                                   | 480                                | 2       | 353250<br>239000 |
| 4         | Discharge Consents Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Type: The Consent | Hereford City Council Livestock Production, Food Production The Park Hampton Park Road Herefor, Hampton Park Road Hereford Here, Hereford Herefordshire Environment Agency, Welsh Region River Wye An0012801 1 26th August 1986 26th August 1986 17th January 1995 Unspecified Freshwater Stream/River  Wye River Consent expired Located by supplier to within 10m   | A19SW<br>(NE)                                   | 500                                | 2       | 353280<br>239000 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
| 4         | Operator:<br>Property Type:<br>Location:   | Hereford City Council FARMS (NOT HOUSE)/CROP + ANIMAL REARING/PLANT NURSERY The Park Hampton Park Road Herefor The Park Hampton Park Road Here, Hampton Park Road Hereford Here, Hereford Herefordshire, Herefordshire,   | A19SW<br>(NE)                                   | 500                                | 2       | 353280<br>239000 |
|           |  | Environment Agency, Midlands Region River Wye to River Lugg An0012801 1 26th August 1986 26th August 1986 17th January 1995 Unknown Freshwater Stream/River  Wye River Consent expired Located by supplier to within 10m  |   |                                    |         |                  |
| 5         |  | Property Services Agency Undefined Or Other Property Services Agency Building 2, Building 214/215 Holme Lacy Road, Holme Lacy Road Rotherwas Herefo, Rotherwas Hereford Environment Agency, Welsh Region River Wye Ah4004801 1 1st April 1974 1st April 1974 1st April 1974 19th October 1992 Unspecified Into And/Or Watercourse Un Named Trib Consent expired Located by supplier to within 100m  | A8SE<br>(S)                                     | 558                                | 2       | 353000<br>237700 |
| 5         | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Property Services Agency Undefined Or Other Property Services Agency Building 2 Property Services Agency Buildin, Building 214/215 Holme Lacy Road, Holme Lacy Road Rotherwas Herefo, Rotherwas Hereford, Hereford Environment Agency, Midlands Region River Wye to River Lugg Ah4004801 1 1st April 1974 1st April 1974 19th October 1992 Unknown Freshwater Stream/River Un Named Trib Consent expired Located by supplier to within 100m               | A8SE<br>(S)                                     | 558                                | 2       | 353000<br>237700 |
| 6         | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Rotherwas Stw Fir Tree Lane Hfd Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Midlands Region River Wye to River Lugg Ah1001201 11 24th August 2010 24th August 2010 30th November 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825 |



| Map<br>ID |   | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|---|---|------------------------------------|---------|------------------|
|           | Discharge Consent   | S   |   |                                    |         |                  |
| 6         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Rotherwas Stw Fir Tree Lane Hfd Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Midlands Region River Wye to River Lugg Ah1001201 12 1st December 2010 24th August 2010 Not Supplied Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m  | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825 |
| 6         | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Type: The Consent | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Rotherwas Stw Fir Tree Lane Hfd, Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Welsh Region Not Supplied Ah1001201 11 24th August 2010 24th August 2010 30th November 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m              | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825 |
| 6         | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Rotherwas Stw Fir Tree Lane Hfd, Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Welsh Region Not Supplied Ah1001201 12 1st December 2010 24th August 2010 Not Supplied Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m                   | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825 |
| 6         | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:  Positional Accuracy:   | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Rotherwas Stw Fir Tree Lane Hfd Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Midlands Region River Wye to River Lugg Ah1001201 10 31st March 2010 31st March 2010 30th June 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR                   |
|-----------|--|---|---|------------------------------------|---------|-----------------------|
|           | Discharge Consent  | s   |   |                                    |         |                       |
| 6         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Rotherwas Stw Fir Tree Lane Hfd, Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Welsh Region Not Supplied Ah1001201 10 31st March 2010 31st March 2010 24th August 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m                  | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825      |
|           | Discharge Consent  | s   |   |                                    |         |                       |
| 6         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Rotherwas Stw Fir Tree Lane Hfd, Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Welsh Region Not Supplied Ah1001201 9 1st July 2010 30th March 2010 23rd August 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m                      | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825      |
| 6         | Operator:  | Dwr Cymru Cyfyngedig  | A19SW   | 567                                | 2       | 353505                |
|           | Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:           | WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Rotherwas Stw Fir Tree Lane Hfd Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Midlands Region River Wye to River Lugg Ah1001201 9 1st July 2010 17th November 2009 23rd August 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m                    | (NE)  |                                    |         | 238825                |
|           | Discharge Consent  | S   |   | 201020423                          | -       | 27.72. No1282 No178-2 |
| 6         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:                      | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Rotherwas Stw Fir Tree Lane Hfd Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Midlands Region River Wye to River Lugg Ah1001201 8 1st January 2010 26th June 2009 30th March 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825      |



| Map<br>ID |  | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
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|           | Discharge Consent  | S  |   |                                    |         |                  |
| 6         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:   | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Rotherwas Stw Fir Tree Lane Hfd, Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Welsh Region Not Supplied Ah1001201 8 1st January 2010 26th June 2009 30th March 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m   | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825 |
|           | Discharge Consent  |  |   |                                    |         |                  |
| 6         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:   | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Rotherwas Stw Fir Tree Lane Hfd Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Midlands Region River Wye to River Lugg Ah1001201 7 1st January 2007 1st January 2007 1st January 2007 31st December 2009 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825 |
|           | Discharge Consent  |  |   |                                    |         |                  |
| 6         |  | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Rotherwas Stw Fir Tree Lane Hfd, Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Welsh Region Not Supplied Ah1001201 7 1st January 2007 1st January 2007 31st December 2009 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m                                    | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825 |
|           | Discharge Consent  | s  |   |                                    |         |                  |
| 6         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discha | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Rotherwas Stw Fir Tree Lane Hfd Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Midlands Region River Wye to River Lugg Ah1001201 6 8th September 2006 8th September 2006 31st December 2006 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m             | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825 |



| Map<br>ID |  | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
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|           | Discharge Consent  | S  |   |                                    |         |                  |
| 6         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Rotherwas Stw Fir Tree Lane Hfd, Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Welsh Region Not Supplied Ah1001201 6 8th September 2006 8th September 2006 31st December 2006 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m  | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825 |
|           | Discharge Consent  | A STATE OF THE PROPERTY OF THE |   |                                    |         |                  |
| 6         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Rotherwas Stw Fir Tree Lane Hfd Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Midlands Region River Wye to River Lugg Ah1001201 5 28th April 2006 28th April 2006 8th September 2006 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m   | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825 |
|           | Discharge Consent  | Š  |   |                                    |         |                  |
| 6         | ,  | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Rotherwas Stw Fir Tree Lane Hfd, Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Welsh Region Not Supplied Ah1001201 5 28th April 2006 28th April 2006 8th September 2006 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m  | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825 |
|           | Discharge Consent  |  |   | 10/07/602                          |         |                  |
| 6         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Rotherwas Stw Fir Tree Lane Hfd Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Midlands Region River Wye to River Lugg Ah1001201 4 19th July 2002 18th July 2002 27th April 2006 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m   | A19SW<br>(NE)                                   | 567                                | 2       | 353505<br>238825 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
| 6         | Discharge Consent Operator:  | s<br>Dwr Cymru Cyfyngedig   | A19SW   | 567                                | 2       | 353505           |
|           | Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:                                | Sewage Disposal Works - Water Company Rotherwas Stw Fir Tree Lane Hfd, Rotherwas Sewage Treatment Works, Fir Tree Lane, Rotherwas, Hereford Environment Agency, Welsh Region Not Supplied Ah1001201 4 19th July 2002 18th July 2002 27th April 2006 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m                    | (NE)  |                                    |         | 238825           |
|           | Discharge Consent  | •   |   |                                    |         |                  |
| 6         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Rotherwas Stw Fir Tree Lane Rotherwas Stw, Fir Tree Lane, Rotherwas Hereford, , Environment Agency, Midlands Region River Wye to River Lugg Ah1001201 3 1st April 1998 31st March 1998 18th July 2002 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A19SW<br>(NE)                                   | 573                                | 2       | 353510<br>238830 |
|           | Discharge Consent  |   |   |                                    |         |                  |
| 6         | 1000 m seo   | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Rotherwas Stw Fir Tree Lane, Rotherwas Hereford Environment Agency, Welsh Region Not Supplied AH1001201 3 1st April 1998 31st March 1998 18th July 2002 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m   | A19SW<br>(NE)                                   | 573                                | 2       | 353510<br>238830 |
|           | Discharge Consent  | s   |   |                                    |         |                  |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 13 12th September 2017 12th September 2017 30th March 2018 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m   | A12NE<br>(NW)                                   | 568                                | 2       | 352214<br>238795 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
|           | Discharge Consent  | s   |   |                                    |         |                  |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:  | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 14 31st March 2018 12th September 2017 Not Supplied Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m  | A12NE<br>(NW)                                   | 568                                | 2       | 352214<br>238795 |
| 7         |  | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 11 24th August 2010 24th August 2010 30th November 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m         | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
| 7         | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 11 24th August 2010 24th August 2010 30th November 2010 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
| 7         | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 12 1st December 2010 24th August 2010 11th September 2017 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m  | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |



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| Map<br>ID |   | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|--|---|------------------------------------|---------|------------------|
|           | Discharge Consent   | s  |   |                                    |         |                  |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 12 1st December 2010 24th August 2010 11th September 2017 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m  | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
|           | Discharge Consent   | s  | (15000000000000000000000000000000000000         | peetr                              |         | 1245EE -         |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:  Positional Accuracy: | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Eign Stw Outfall Works Road Hfd, Eign Sewage Treatment Works, Outfall Works Road, Hereford, Herefordshire Environment Agency, Welsh Region Not Supplied Ah1001101 12 1st December 2010 24th August 2010 Not Supplied Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m      | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
|           |   | 7/ A.W   |   |                                    |         | -                |
| 7         | 1000 00 0000 00   | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Eign Stw Outfall Works Road Hfd, Eign Sewage Treatment Works, Outfall Works Road, Hereford, Herefordshire Environment Agency, Welsh Region Not Supplied Ah1001101 11 24th August 2010 24th August 2010 30th November 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
| -20       | Discharge Consent   |  | 121222000                                       | 12200                              | 628     | <u></u>          |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:                       | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 9 31st March 2010 31st March 2010 30th June 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)  | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |



| Map<br>ID |   | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|---|---|------------------------------------|---------|------------------|
|           | Discharge Consent   | s   |   |                                    |         |                  |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:                    | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Eign Stw Outfall Works Road Hfd, Eign Sewage Treatment Works, Outfall Works Road, Hereford, Herefordshire Environment Agency, Welsh Region Not Supplied Ah1001101 9 31st March 2010 31st March 2010 30th June 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m         | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
| 7         | -   | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 10 1st July 2010 25th March 2010 23rd August 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m        | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
| 7         | Discharge Consent: Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 10 1st July 2010 25th March 2010 23rd August 2010 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
| 7         | Discharge Consents Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Eign Stw Outfall Works Road Hfd, Eign Sewage Treatment Works, Outfall Works Road, Hereford, Herefordshire Environment Agency, Welsh Region Not Supplied Ah1001101 10 1st July 2010 25th March 2010 25th March 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m         | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
|           | Discharge Consent  | s   |   |                                    |         |                  |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:                   | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 8 1st January 2010 26th June 2009 30th March 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m      | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
| 7         |  | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Eign Stw Outfall Works Road Hfd, Eign Sewage Treatment Works, Outfall Works Road, Hereford, Herefordshire Environment Agency, Welsh Region Not Supplied Ah1001101 8 1st January 2010 26th June 2009 30th March 2010 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m      | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
| 7         | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 7 1st January 2007 1st January 2007 31st December 2009 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
| 7         | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Eign Stw Outfall Works Road Hfd, Eign Sewage Treatment Works, Outfall Works Road, Hereford, Herefordshire Environment Agency, Welsh Region Not Supplied Ah1001101 7 1st January 2007 1st January 2007 31st December 2009 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
|           | Discharge Consents   | s   |   |                                    |         |                  |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 6 8th September 2006 8th September 2006 31st December 2006 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
|           | Discharge Consents   | Š   |   |                                    |         |                  |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Eign Stw Outfall Works Road Hfd, Eign Sewage Treatment Works, Outfall Works Road, Hereford, Herefordshire Environment Agency, Welsh Region Not Supplied Ah1001101 6 8th September 2006 8th September 2006 31st December 2006 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
| -         | Discharge Consents   |   |   |                                    |         |                  |
| 7         | ,  | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 5 28th April 2006 28th April 2006 7th September 2006 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m       | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
|           | Discharge Consents   | S CONTRACTOR SOCI   | PLIANTIA HETTINI I FOR                          | 27.000.000                         |         | gara mesauranner |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Eign Stw Outfall Works Road Hfd, Eign Sewage Treatment Works, Outfall Works Road, Hereford, Herefordshire Environment Agency, Welsh Region Not Supplied Ah1001101 5 28th April 2006 28th April 2006 7th September 2006 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m       | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
|           | Discharge Consent  | s   |   |                                    |         |                  |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:                   | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 4 19th July 2002 18th July 2002 27th April 2006 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
|           | Discharge Consent  | S   |   |                                    |         |                  |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:                   | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Eign Stw Outfall Works Road Hfd, Eign Sewage Treatment Works, Outfall Works Road, Hereford, Herefordshire Environment Agency, Welsh Region Not Supplied Ah1001101 4 19th July 2002 18th July 2002 27th April 2006 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A12NW<br>(NW)                                   | 581                                | 2       | 352194<br>238786 |
| _         | Discharge Consent  |   |   |                                    |         |                  |
| 7         | Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: Discharge Consent: | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Stw Outfall Wks Road Hereford Eign Stw Outfall, Works Road, Hereford, Invironment Agency, Midlands Region River Wye to River Lugg Ah1001101 3 1st April 1998 31st March 1998 18th July 2002 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River River Wye Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m            | A12NW<br>(NW)                                   | 583                                | 2       | 352200<br>238800 |
| 7         | Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:   | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Eign Stw Outfall Wks Road Hereford, Works Road Environment Agency, Welsh Region Not Supplied AH1001101 3 1st April 1998 31st March 1998 18th July 2002 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m   | A12NW<br>(NW)                                   | 583                                | 2       | 352200<br>238800 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
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| -         | Discharge Consent  |   |   |                                    | 120     | 050000           |
| 7         | Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Type: This incomment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Eign Stw Outfall Wks Road Hereford, Works Road Environment Agency, Welsh Region River Wye Ah1001101 2 24th August 1989 24th August 1989 31st March 1998 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Authorisation revoked Located by supplier to within 100m   | A12NW<br>(NW)                                   | 583                                | 2       | 352200<br>238800 |
| 25278     | Discharge Consent  |   | 52.6222.5000                                    | W. Cherry                          | 59/3    | 52/2427 039070   |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: Discharge Consent       | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Stw Outfall Wks Road Hereford Eign Stw Outfall, Works Road, Hereford, Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 2 24th August 1989 24th August 1989 31st March 1998 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River River Wye Authorisation revoked Located by supplier to within 100m | A12NW<br>(NW)                                   | 583                                | 2       | 352200<br>238800 |
| 7         | Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:   | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Eign Stw Outfall Wks Road Hereford, Works Road Environment Agency, Welsh Region River Wye Ah1001101 1 21st April 1983 21st April 1983 23rd August 1989 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Authorisation revoked Located by supplier to within 100m  | A12NW<br>(NW)                                   | 583                                | 2       | 352200<br>238800 |
| 1235      | Discharge Consent  |   | (25060000)                                      | 22,000                             | 8       | Q2000F0          |
| 7         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:  | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Stw Outfall Wks Road Hereford Eign Stw Outfall, Works Road, Hereford, , Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 1 21st April 1983 21st April 1983 23rd August 1989 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River River Wye Authorisation revoked                                   | A12NW<br>(NW)                                   | 583                                | 2       | 352200<br>238800 |



| Map<br>ID |  | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site   | Contact | NGR              |
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|           | Discharge Consent  | s  |   |  |         |                  |
| 8         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Environment Quality Scientist PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Leymans Field Ps Braemar Gardens Leymans Field Ps Res Devmt, Braemar Gdns (Adj Hampton Pk Rd), Hereford, ,, , Environment Agency, Midlands Region River Wye to River Lugg An0270801 1 14th May 1997 14th May 1997 Not Supplied Public Sewage: Storm Sewage Overflow Freshwater Stream/River  River Wye New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A19SW<br>(NE)                                   | 615  | 2       | 353530<br>238880 |
|           | Discharge Consent  |  |   |  |         |                  |
| 8         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Water: Status: Positional Accuracy:        | Environment Quality Scientist Sewerage Network - Pumping Station - Water Company Leymans Field Ps Braemar Gardens, Leymans Field Ps Res Devmt, Braemar Gdns (Adj Hampton Pk Rd), Hereford Environment Agency, Welsh Region River Wye AN0270801 1 14th May 1997 14th May 1997 Not Supplied Public Sewage: Storm Sewage Overflow Freshwater Stream/River  River Wye New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m                       | A19SW<br>(NE)                                   | 615  | 2       | 353530<br>238880 |
|           | Discharge Consent  | s  |   |  |         |                  |
| 9         |  | Trevor Oakley Transport Ltd Undefined Or Other Trevor Oakley Transport Rotherwas E, Rotherwas Est Environment Agency, Welsh Region River Wye Ah4004901 1 25th July 1974 25th July 1974 8th April 1994 Unspecified Freshwater Stream/River Unnamed Trib Consent expired Located by supplier to within 100m  | A9SW<br>(SE)                                    | 632  | 2       | 353300<br>237700 |
|           | Discharge Consent  | s  | No. 12 or - 12 or -                             | CHANGE OF THE PARTY OF THE PART | 1977    |                  |
| 9         | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Trevor Oakley Transport Ltd Undefined Or Other Trevor Oakley Transport Rotherwas E Trevor Oakley Transport Rotherwa, Rotherwas Est, Unknown, Unknown Environment Agency, Midlands Region River Wye to River Lugg Ah4004901 1 25th July 1974 25th July 1974 8th April 1994 Unknown Freshwater Stream/River Unnamed Trib Consent expired Located by supplier to within 100m  | A9SW<br>(SE)                                    | 632  | 2       | 353300<br>237700 |



| Map<br>ID |  | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|--|---|------------------------------------|---------|------------------|
| 10        | Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Nimrod Drive Pumping Station, Gortsy Lane, Hereford, Herefordshire, Hr1 1un Environment Agency, Midlands Region River Wye to River Lugg An0078301 2 8th September 2010 8th September 2010 25th July 2017 Public Sewage: Storm Sewage Overflow Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m  | A19NW<br>(NE)                                   | 661                                | 2       | 353270<br>239220 |
| 10        | Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig Sewerage Network - Sewers - Water Company Nimrod Drive, Hereford, Hereford - Nimrod Drive, Hr1 1ug Environment Agency, Welsh Region River Wye An0078301 2 8th September 2010 8th September 2010 Not Supplied Public Sewage: Storm Sewage Overflow Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m  | A19NW<br>(NE)                                   | 661                                | 2       | 353270<br>239220 |
| 10        | Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Nimrod Drive Pumping Station, Gortsy Lane, Hereford, Herefordshire, Hr1 1un Environment Agency, Midlands Region River Wye to River Lugg An0078301 1 20th October 1989 20th October 1989 20th October 1989 7th September 2010 Public Sewage: Storm Sewage Overflow Freshwater Stream/River  Wye New Consent, by Application (Water Resources Act 1991, Section 88) Located by supplier to within 10m | A19NW<br>(NE)                                   | 661                                | 2       | 353270<br>239220 |
| 10        | Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig Sewerage Network - Sewers - Water Company Nimrod Drive, Hereford, Hereford - Nimrod Drive, Hr1 1ug Environment Agency, Welsh Region River Wye AN0078301 1 20th October 1989 20th October 1989 7th September 2010 Public Sewage: Storm Sewage Overflow Freshwater Stream/River  Wye New Consent, by Application (Water Resources Act 1991, Section 88) Located by supplier to within 100m  | A19NW<br>(NE)                                   | 661                                | 2       | 353270<br>239220 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
|           | Discharge Consent  | s   |   |                                    |         |                  |
| 11        | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:                   | Dwr Cymru Cyfyngedig STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Eign 1b Combined Sewer Overflow Eignsewage Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1tg Environment Agency, Midlands Region River Wye to River Lugg An0315201 2 9th August 2017 9th August 2017 Not Supplied Public Sewage: Storm Sewage Overflow Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m   | A17SW<br>(NW)                                   | 668                                | 2       | 352130<br>238850 |
| 11        | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Eign 1b Combined Sewer Overflow Eignsewage Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1tg Environment Agency, Midlands Region River Wye to River Lugg An0315201 1 20th December 2001 20th December 2001 20th December 2001 8th August 2017 Public Sewage: Storm Sewage Overflow Freshwater Stream/River  River Wye New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m | A17SW<br>(NW)                                   | 668                                | 2       | 352130<br>238850 |
|           | - ·  | D 250   |   |                                    |         |                  |
| 11        | 7 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2   | Dwr Cymru Cyfyngedig Sewerage Network - Sewers - Water Company Cso 1b Eign Stw Outfall Works Rd, Hereford, Herefordshire, Hr1 1tg Environment Agency, Welsh Region Not Supplied An0315201 1 20th December 2001 20th December 2001 Not Supplied Public Sewage: Storm Sewage Overflow Freshwater Stream/River  River Wye New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m  | A17SW<br>(NW)                                   | 668                                | 2       | 352130<br>238850 |
|           | Discharge Consent  | s   |   |                                    |         |                  |
| 11        | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:                   | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 13 12th September 2017 12th September 2017 30th March 2018 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m  | A17SW<br>(NW)                                   | 670                                | 2       | 352132<br>238857 |



| Map<br>ID | Details  |   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
| 11        | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Eign Wastewater Treatment Works, Outfall Works Road, Hereford, Herefordshire, Hr1 1ry Environment Agency, Midlands Region River Wye to River Lugg Ah1001101 14 31st March 2018 12th September 2017 Not Supplied Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m | A17SW<br>(NW)                                   | 670                                | 2       | 352132<br>238857 |
| 12        | Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Rotherwas Stw Fir Tree Lane, Rotherwas Hereford Environment Agency, Welsh Region Not Supplied Ah1001201 2 24th February 1989 24th February 1989 31st March 1998 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Authorisation revoked Located by supplier to within 10m  | A14NE<br>(NE)                                   | 668                                | 2       | 353630<br>238800 |
| 12        | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Rotherwas Stw Fir Tree Lane Rotherwas Stw, Fir Tree Lane, Rotherwas Hereford, , Environment Agency, Midlands Region River Wye to River Lugg Ah1001201 2 24th February 1989 24th February 1989 31st March 1998 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Authorisation revoked Located by supplier to within 10m          | A14NE<br>(NE)                                   | 668                                | 2       | 353630<br>238800 |
| 12        | Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Dwr Cymru Cyfyngedig Sewage Disposal Works - Water Company Rotherwas Stw Fir Tree Lane, Rotherwas Hereford Environment Agency, Welsh Region River Wye Ah1001201 1 21st April 1983 21st April 1983 23rd February 1989 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Authorisation revoked Located by supplier to within 10m  | A14NE<br>(NE)                                   | 668                                | 2       | 353630<br>238800 |



| Map<br>ID |   | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|--|---|------------------------------------|---------|------------------|
| 12        | Discharge Consents Operator: Dwr Cymru Cyfyngedig   |  | A14NE   | 668                                | 2       | 353630           |
|           | Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Type: This incomment: Receiving Water: Status: Positional Accuracy:                   | WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Rotherwas Stw Fir Tree Lane Rotherwas Stw, Fir Tree Lane, Rotherwas Hereford, Environment Agency, Midlands Region River Wye to River Lugg Ah1001201 1 21st April 1983 21st April 1983 23rd February 1989 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River  River Wye Authorisation revoked Located by supplier to within 10m   | (NE)  |                                    |         | 238800           |
| 13        | Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | 'The Occupier' Sewage Disposal Works - Water Company Lower Bullingham Stw Environment Agency, Welsh Region River Wye Ah2000601 1 15th May 1967 15th May 1967 1st May 1995 Unspecified Freshwater Stream/River  Wye River Consent expired Located by supplier to within 100m  | A12SW<br>(W)                                    | 707                                | 2       | 352000<br>238400 |
| 13        | Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:                 | 'The Occupier' WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Lower Bullingham Stw, Unknown, Unknown, Unknown Environment Agency, Midlands Region River Wye to River Lugg Ah2000601 1 15th May 1967 15th May 1967 1st May 1995 Unknown Freshwater Stream/River Wye River Consent expired  | A12SW<br>(W)                                    | 707                                | 2       | 352000<br>238400 |
|           | Discharge Consent   |  | 0.400184  | 700                                | _       | 252222           |
| 14        | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:   | Marian Fathers CHURCH/MONASTERY/ABBEY/RELIGIOUS RETREAT/ASSOCIATION HQ St Rafaels Church Lower Bullingham St Rafaels Church Lower Bullingh, Lower Bullingham Hereford Heref, Hereford Herefordshire, Hereford Herefordshire, Herefordsh Environment Agency, Midlands Region River Wye to River Lugg Ah5000101 1 10th April 1953 10th April 1953 13th February 2009 Unknown Land/Soakaway  To Land Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m | A12SW<br>(W)                                    | 728                                | 2       | 352000<br>238300 |



| Map<br>ID |  | Details  |              |     | Contact | NGR              |
|-----------|--|--|--------------|-----|---------|------------------|
|           | Discharge Consent  | s  |              |     |         |                  |
| 14        | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:                   | Marian Fathers Recreational & Cultural St Rafaels Church Lower Bullingham, Lower Bullingham Hereford Heref, Hereford Herefordshire Environment Agency, Welsh Region River Wye AH5000101 1 10th April 1953 10th April 1953 13th February 2009 Unspecified Onto Land To Land Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m  | A12SW<br>(W) | 728 | 2       | 352000<br>238300 |
|           | Discharge Consent  | The Control of the Co |              |     |         |                  |
| 15        | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:                   | Mr N Nauth DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) The Manor Rest Home Lower Bullingha The Manor Rest Home, Lower Bullingham Lane, Hereford, Herefordshire, Hr2 6ep Environment Agency, Midlands Region River Wye to River Lugg Aj0002001 1 11th August 1982 17th May 1982 Not Supplied Unknown Freshwater Stream/River  Red Brook New Consent, by Application (Water Resources Act 1991, Section 88) Located by supplier to within 100m   | A12SW<br>(W) | 762 | 2       | 352000<br>238200 |
| 15        | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Mr N Nauth Domestic Property (Multiple) The Manor Rest Home Lower Bullingha, Lower Bullingham Lane, Hereford, Herefordshire, Hr2 6ep Environment Agency, Welsh Region Not Given AJ0002001 1 11th August 1982 17th May 1982 Not Supplied Unspecified Freshwater Stream/River  Red Brook New Consent, by Application (Water Resources Act 1991, Section 88) Located by supplier to within 100m   | A12SW<br>(W) | 762 | 2       | 352000<br>238200 |
| 16        | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Elizabeth Cottages Management Co Ltd DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Elizabeth Cottages Lwr Bullingham Elizabeth Cottages, Lower Bullingham, Hereford, ,, Herefordsh Environment Agency, Midlands Region River Wye to River Lugg An0059201 2 22nd April 1993 22nd April 1993 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River  Red Brook New Consent, by Application (Water Resources Act 1991, Section 88) Located by supplier to within 100m  | A12SW<br>(W) | 824 | 2       | 351900<br>238300 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
| 16        | Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Elizabeth Cottages Management Co Ltd Domestic Property (Multiple) Elizabeth Cottages Lwr Bullingham, Lower Bullingham, Hereford, Herefordsh Environment Agency, Welsh Region River Wye AN0059201 2 22nd April 1993 22nd April 1993 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River  Red Brook New Consent, by Application (Water Resources Act 1991, Section 88) Located by supplier to within 100m                   | A12SW<br>(W)                                    | 824                                | 2       | 351900<br>238300 |
| 16        | Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Elizabeth Cottages Management Co Ltd Domestic Property (Multiple) Elizabeth Cottages Lwr Bullingham, Lower Bullingham, Hereford, Herefordsh Environment Agency, Welsh Region River Wye An0059201 1 8th February 1988 8th February 1988 21st April 1993 Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River  Red Brook Authorisation revoked Located by supplier to within 100m   | A12SW<br>(W)                                    | 824                                | 2       | 351900<br>238300 |
| 16        | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Elizabeth Cottages Management Co Ltd DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Elizabeth Cottages Lwr Bullingham Elizabeth Cottages, Lower Bullingham, Hereford, "Herefordsh Environment Agency, Midlands Region River Wye to River Lugg An0059201 1 8th February 1988 8th February 1988 21st April 1993 Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River  Red Brook Authorisation revoked Located by supplier to within 100m | A12SW<br>(W)                                    | 824                                | 2       | 351900<br>238300 |
| 17        | Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Dwr Cymru Cyfyngedig Undefined Or Other Rotherwas Ind Est (New Surface Environment Agency, Welsh Region River Wye Ah4004701 1 23rd May 1974 23rd May 1974 21st February 1994 Trade Effluent Freshwater Stream/River  Wye River Consent expired Located by supplier to within 100m   | A15SW<br>(E)                                    | 831                                | 2       | 353900<br>238400 |



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| Map<br>ID |   | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|---|---|------------------------------------|---------|------------------|
| 47        | Discharge Consent   |   | 445000  | 004                                |         | 252000           |
| 17        | Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:                   | Dwr Cymru Cyfyngedig Undefined Or Other Rotherwas Ind Est (New Surface, Unknown, Unknown, Unknown Environment Agency, Midlands Region River Wye to River Lugg Ah4004701 1 23rd May 1974 23rd May 1974 21st February 1994 Trade Effluent Freshwater Stream/River  Wye River Consent expired Located by supplier to within 100m   | A15SW<br>(E)                                    | 831                                | 2       | 353900<br>238400 |
| 18        | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Type: Status: Positional Accuracy:        | Mr Andrew Wood DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) 108 Hampton Park Road Hereford 108 Hampton Park Road, Hereford, Herefordshire, England, Hr1 1tl Environment Agency, Midlands Region River Wye to River Lugg An0256101 1 14th February 1995 14th February 1995 Not Supplied Unknown Freshwater Stream/River  River Wye New Consent, by Application (Water Resources Act 1991, Section 88) Located by supplier to within 100m | A19NW<br>(NE)                                   | 869                                | 2       | 353500<br>239300 |
| 18        | Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Mr Andrew Wood Domestic Property (Single) 108 Hampton Park Road Hereford, Herefordshire, England, Hr1 1tl Environment Agency, Welsh Region Not Given AN0256101 1 14th February 1995 14th February 1995 Not Supplied Unspecified Freshwater Stream/River  River Wye New Consent, by Application (Water Resources Act 1991, Section 88) Located by supplier to within 100m  | A19NW<br>(NE)                                   | 869                                | 2       | 353500<br>239300 |
| 19        | Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:                     | Dwr Cymru Cyfyngedig STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Siddons Road Sewage Pumping Station Siddons Road, Hereford, ., Herefordshire, Hr1 1xd Environment Agency, Midlands Region River Wye to River Lugg An0078701 2 8th September 2010 8th September 2010 25th July 2017 Public Sewage: Storm Sewage Overflow Freshwater Stream/River  River Wye Varied under EPR 2010  | A23SE<br>(N)                                    | 879                                | 2       | 353170<br>239510 |



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| Map<br>ID |   | Quadrant<br>Reference<br>(Compass<br>Direction)   | Estimated<br>Distance<br>From Site | Contact | NGR |                  |
|-----------|---|---|------------------------------------|---------|-----|------------------|
| 19        | Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Dwr Cymru Cyfyngedig Sewerage Network - Sewers - Water Company Siddons Road, Hereford, Hereford - Siddons Road, Hr1 1xd Environment Agency, Welsh Region River Wye An0078701 2 8th September 2010 8th September 2010 Not Supplied Public Sewage: Storm Sewage Overflow Freshwater Stream/River  River Wye Varied under EPR 2010 Located by supplier to within 10m   | A23SE<br>(N)                       | 879     | 2   | 353170<br>239510 |
| 19        | Discharge Consents Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | Dwr Cymru Cyfyngedig STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Siddons Road Sewage Pumping Station Siddons Road, Hereford, ., Herefordshire, Hr1 1xd Environment Agency, Midlands Region River Wye to River Lugg An0078701 1 20th October 1989 20th October 1989 7th September 2010 Public Sewage: Storm Sewage Overflow Freshwater Stream/River  Wye New Consent, by Application (Water Resources Act 1991, Section 88) Located by supplier to within 10m | A23SE<br>(N)                       | 879     | 2   | 353170<br>239510 |
| 19        | Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Dwr Cymru Cyfyngedig Sewerage Network - Sewers - Water Company Siddons Road, Hereford - Siddons Road, Hr1 1xd Environment Agency, Welsh Region River Wye AN0078701 1 20th October 1989 20th October 1989 7th September 2010 Public Sewage: Storm Sewage Overflow Freshwater Stream/River  Wye New Consent, by Application (Water Resources Act 1991, Section 88) Located by supplier to within 100m   | A23SE<br>(N)                       | 879     | 2   | 353170<br>239510 |
| 20        | Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Dwr Cymru Cyfyngedig Sewerage Network - Sewers - Water Company Hereford - Adjacent To Eign Ro Environment Agency, Welsh Region River Wye An0085601 1 20th October 1989 20th October 1988 4th March 1994 Unspecified Freshwater Stream/River Wye Consent expired Located by supplier to within 10m   | A17NW<br>(NW)                      | 884     | 2   | 352180<br>239230 |



| Map<br>ID |   | Details  |               | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|--|---------------|------------------------------------|---------|------------------|
| 20        | Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Dwr Cymru Cyfyngedig STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Hereford - Adjacent To Eign Ro, Unknown, Unknown, Unknown Environment Agency, Midlands Region River Wye to River Lugg An0085601 1 20th October 1989 20th October 1988 4th March 1994 Unknown Freshwater Stream/River  Wye Consent expired Located by supplier to within 10m  | A17NW<br>(NW) | 884                                | 2       | 352180<br>239230 |
| 21        | Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Texaco Service Station Undefined Or Other Hereford - Ledbury Rd Texaco S Environment Agency, Welsh Region River Wye Ah4003901 1 21st October 1967 21st October 1967 2nd May 1995 Unspecified Freshwater Stream/River  Eign Brook Consent expired Located by supplier to within 100m  | A17NW<br>(NW) | 919                                | 2       | 352200<br>239300 |
| 21        | Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:  | Texaco Service Station Undefined Or Other Hereford - Ledbury Rd Texaco S, Unknown, Unknown, Unknown Environment Agency, Midlands Region River Wye to River Lugg Ah4003901 1 21st October 1967 21st October 1967 2nd May 1995 Unknown Freshwater Stream/River  Eign Brook Consent expired Located by supplier to within 100m  | A17NW<br>(NW) | 919                                | 2       | 352200<br>239300 |
| 22        | Discharge Consents Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy: | The Wye Inn FOOD+BEVERAGE SERVICES/CAFE/RESTAURANT/PUB The Wye Inn Holme Lacy Road Lower B The Wye Inn Holme Lacy Road Lowe, Holme Lacy Road Lower Bullingham, Lower Bullingham Hereford Herefor, Hereford Herefordshire, Herefordsh Environment Agency, Midlands Region River Wye to River Lugg Ah2000701 1 3rd January 1978 3rd January 1978 Not Supplied Unknown Freshwater Stream/River  Withey Brook New Consent, by Application (Water Resources Act 1991, Section 88) Located by supplier to within 10m | A11SE<br>(W)  | 925                                | 2       | 351780<br>238400 |



| Map<br>ID |  | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|--|---|------------------------------------|---------|------------------|
|           | Discharge Consents   | s  |   |                                    |         |                  |
| 22        | Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Type: This in the control of the contr | The Wye Inn Public Houses & Bars The Wye Inn Holme Lacy Road Lower B, Holme Lacy Road Lower Bullingham, Lower Bullingham Hereford Hereford Herefordshire Environment Agency, Welsh Region River Wye AH2000701 1 3rd January 1978 3rd January 1978 Not Supplied Unspecified Freshwater Stream/River  Withey Brook New Consent, by Application (Water Resources Act 1991, Section 88) Located by supplier to within 100m | A11SE<br>(W)                                    | 925                                | 2       | 351780<br>238400 |
| 23        | Integrated Pollution Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:   | Thom Lighting Ltd Rotherwas, HEREFORD, HR2 6JS Environment Agency, Midlands Region AQ0513 8th February 1995 Provisional Application Not Given Application received by HMIP but is not yet authorised Automatically positioned to the address   | A13SW<br>(SW)                                   | 302                                | 2       | 352646<br>238134 |
| 24        | Name:<br>Location:<br>Authority:<br>Permit Reference:<br>Original Permit Ref:<br>Effective Date:<br>Status:<br>Application Type:<br>App. Sub Type:<br>Positional Accuracy:<br>Activity Code:   | Prevention And Control  Dwr Cymru (Welsh Water)  Eign Wwtw, Eign Waste Water Treatment Works, Outfall Works Road,,, Hereford, Herefordshire, HR1 1RY Environment Agency, Midlands Region RP3534ZD Up3735gh 27th March 2013  Effective Variation Minor Located by supplier to within 100m 0.0 Associated Process Associated Process Y   | A12NW<br>(W)                                    | 707                                | 2       | 352000<br>238600 |
| 25        | Integrated Pollution Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code: Activity Description: Primary Activity:  | 11th August 2009 Effective Application New Manually positioned to the address or location 1.1 A(1) (B) (III)   | A17SW<br>(W)                                    | 727                                | 2       | 352045<br>238816 |
| 25        | Name:<br>Location:<br>Authority:<br>Permit Reference:<br>Original Permit Ref:<br>Effective Date:<br>Status:<br>Application Type:<br>App. Sub Type:   | 11th August 2009 Superseded By Variation Application New Automatically positioned to the address 1.1 A(1) (B) (III)  | A17SW<br>(W)                                    | 727                                | 2       | 352045<br>238816 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
|           | Integrated Pollution   | Prevention And Control  |   |                                    |         |                  |
| 26        | Activity Code:   | Dragon Recycling Solutions Ltd Mercury Retort, Unit 4 & 5, Holme Lacy Road, Sigeric Business Park,, HEREFORD, Herefordshire, HR2 6BQ Environment Agency, Midlands Region RP3035HA Rp3035ha 28th January 2011 Superseded By Variation Application New Automatically positioned to the address 2.2 A(1) (F) Non-Ferrous Metals; Producing Etc Cadmium/Mercury And Alloys Containing Greater Than 0.05 Percent Y | A9NE<br>(SE)                                    | 824                                | 2       | 353720<br>237847 |
| 26        | Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code: | Prevention And Control  Dragon Recycling Solutions Limited Mercury Retort, Unit 4, Sigeric Business Park,,, Hereford, HR2 6BQ Environment Agency, Midlands Region PP3831VN Rp3035ha 3rd July 2014 Surrender Effective Surrender Whole Automatically positioned to the address 2.2 A(1) (F) Non-Ferrous Metals; Producing Etc Cadmium/Mercury And Alloys Containing Greater Than 0.05 Percent Y                | A9NE<br>(SE)                                    | 858                                | 2       | 353751<br>237833 |
| 27        | Name:<br>Location:<br>Authority:<br>Permit Reference:<br>Dated:<br>Process Type:<br>Description:<br>Status:  | Lution Prevention and Controls  Longma Bio Fuels Ltd  Yeld Farm, Lyonshall, Hr2 6jt  Herefordshire Council, Environmental Health Department  1.1/B.c/002  Not Supplied  Local Authority Pollution Prevention and Control  PG1/5 Compression ignition engines, 20-50MW net rated thermal input  Application exempt from APC  Located by supplier to within 10m   | A13SW<br>(SW)                                   | 123                                | 3       | 352705<br>238327 |
| 28        | Name:<br>Location:<br>Authority:<br>Permit Reference:<br>Dated:<br>Process Type:<br>Description:<br>Status:  | Bathgate Flooring Ltd Fir Tree Lane, Rotherwas Industrial Estate, Hereford, HR2 Herefordshire Council, Environmental Health Department 6.4/A/002 17th October 2006 Local Authority Pollution Prevention and Control PG6/32 Adhesive coating Permitted Manually positioned to the road within the address or location  | A13SE<br>(S)                                    | 132                                | 3       | 352941<br>238142 |
| 29        | Name:<br>Location:<br>Authority:<br>Permit Reference:<br>Dated:<br>Process Type:<br>Description:<br>Status:  | lution Prevention and Controls  Polyford Plastics Ltd Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, Herefordshire, HR2 6LA Herefordshire Council, Environmental Health Department 065 16th March 2000 Local Authority Air Pollution Control PG6/17 Printing of flexible packaging Site Closed Automatically positioned to the address   | A8NE<br>(S)                                     | 152                                | 3       | 352984<br>238107 |
| 29        | Name:<br>Location:<br>Authority:<br>Permit Reference:<br>Dated:<br>Process Type:<br>Description:<br>Status:  | Bathgate Flooring Ltd Fir Tree Lane, Rotherwas Industrial Estate, Rotherwas, HR2 Herefordshire Council, Environmental Health Department 6.2/007 17th October 2006 Local Authority Pollution Prevention and Control PG6/2 Manufacture of timber and wood-based products Permitted Manually positioned to the address or location   | A8NE<br>(S)                                     | 164                                | 3       | 353009<br>238094 |



| Map<br>ID |   | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|---|---|------------------------------------|---------|------------------|
| 30        | Name:<br>Location:<br>Authority:<br>Permit Reference:<br>Dated:<br>Process Type:<br>Description:<br>Status: | Quickskip Hereford Ltd Unit 18 Thorn Business Park, Rotherwas, Hereford, HR2 6JT Herefordshire Council, Environmental Health Department PPC/3.5/M4 10th September 2003 Local Authority Pollution Prevention and Control PG3/16 Mobile screening and crushing processes Permitted Manually positioned to the address or location | A12NE<br>(W)                                    | 199                                | 3       | 352518<br>238581 |
| 31        | Name:<br>Location:<br>Authority:<br>Permit Reference;<br>Dated:<br>Process Type:<br>Description:<br>Status: | Intion Prevention and Controls  Thorn Lighting Ltd Rotherwas, HEREFORD, HR2 6JS Herefordshire Council, Environmental Health Department 003 25th June 1993 Local Authority Air Pollution Control PG2/4 Iron, steel and non-ferrous metal foundry processes Site Closed Automatically positioned to the address                   | A13SW<br>(SW)                                   | 296                                | 3       | 352651<br>238139 |
| 31        | Name:<br>Location:<br>Authority:<br>Permit Reference:<br>Dated:<br>Process Type:<br>Description:<br>Status: | Intion Prevention and Controls Thorn Lighting Ltd Rotherwas, HEREFORD, HR2 6JS Herefordshire Council, Environmental Health Department 013 15th October 1993 Local Authority Air Pollution Control PG6/31 Powder coating processes (including sheradizing) Site Closed Automatically positioned to the address                   | A13SW<br>(SW)                                   | 304                                | 3       | 352651<br>238129 |
| 32        | Name:<br>Location:<br>Authority:<br>Permit Reference:<br>Dated:<br>Process Type:<br>Description:<br>Status: | Barton Aluminium Rotherwas, HEREFORD, Herefordshire, HR2 6JS Herefordshire Council, Environmental Health Department 003 25th June 1993 Local Authority Air Pollution Control PG2/6 Aluminium and aluminium alloy processes Authorised Manually positioned within the geographical locality                                      | A8NW<br>(SW)                                    | 336                                | 3       | 352691<br>238061 |
| 32        | Name:<br>Location:<br>Authority:<br>Permit Reference:<br>Dated:<br>Process Type:<br>Description:<br>Status: | Barton Aluminium Rotherwas, HEREFORD, Herefordshire, HR2 6JS Herefordshire Council, Environmental Health Department 003 25th June 1993 Local Authority Air Pollution Control PG2/4 Iron, steel and non-ferrous metal foundry processes Authorised Manually positioned within the geographical locality                          | A8NW<br>(SW)                                    | 346                                | 3       | 352666<br>238067 |
| 33        | Name:<br>Location:<br>Authority:<br>Permit Reference:<br>Dated:<br>Process Type:<br>Description:<br>Status: | Rotherwas Service Station Ltd Holme Lacy Road, HEREFORD, Herefordshire, HR2 6BQ Herefordshire Council, Environmental Health Department P33 14th November 2001 Local Authority Pollution Prevention and Control PG1/14 Petrol filling station Permitted Automatically positioned to the address                                  | A8NE<br>(S)                                     | 352                                | 3       | 353112<br>237923 |
| 34        | Name:<br>Location:<br>Authority:<br>Permit Reference:<br>Dated:<br>Process Type:<br>Description:<br>Status: | Intion Prevention and Controls  Thom Lighting Ltd Rotherwas, ROTHERWAS, HR2 6JS Herefordshire Council, Environmental Health Department 017 Not Supplied Local Authority Air Pollution Control PG2/9 Metal decontamination processes Authorisation revoked Manually positioned within the geographical locality                  | A8NW<br>(SW)                                    | 380                                | 3       | 352567<br>238096 |



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| Local Authority Pollution Prevention and Controls  Local Authority Pollution Processes Processes  Description:  Control Authority:  Description:  Application on an Controls  Authority:  Permit Reference:  Description:  Authority:  Permit Reference:  Description:  Control Control  Control  Control  Process Type:  Control  Control | Map<br>ID |  | Details  | Quadrant<br>Reference<br>(Compass<br>Direction)  | Estimated<br>Distance<br>From Site | Contact | NGR              |
|--|-----------|--|--|--|------------------------------------|---------|------------------|
| 38 Name: Netherwood Goal, Rotherwas Industrial Estate, HEREFORD, HR2 6JU Hereforeshire Council, Environmental Health Department (SE) Althority Hereforeshire Council, Environmental Health Department (SE) Althority Dated: Process Type: Council, Environmental Health Department (SE) Dated: Process Type: Council Authority Air Pollution Control (SE) Possible Accuracy: Manually positioned to the address or location  Local Authority Pollution Prevention and Controls  Not Supplied Pollution Council (Environmental Health Department (SE) Althority Pollution Prevention and Controls  Not Supplied (SE) Pollution (Council Environmental Health Department |           | Local Authority Pol  | lution Prevention and Controls   | (8)  |                                    |         |                  |
| Section   Sect   | 35        | Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: | Keg Services Ltd Netherwood Road, Rotherwas Industrial Estate, HEREFORD, HR2 6JU Herefordshire Council, Environmental Health Department 069 2nd April 2001 Local Authority Air Pollution Control PG6/35 Metal and other thermal spraying processes Site Closed                                   | A11200000000   | 432                                | 3       | 353166<br>237858 |
| Section   Name:   Location:   Netherwood Road, Rotherwas Industrial Estate, Hereford, Hr2 6ju   Location:   Netherwood Road, Rotherwas Industrial Estate, Hereford, Hr2 6ju   Location:   Netherwood Road, Rotherwas Industrial Estate, Hereford, Hr2 6ju   Permit Reference:   2,300      |           | Local Authority Pol  | lution Prevention and Controls   |  |                                    |         |                  |
| 37 Name: Adliss Access Flooring Ltd. Location: Tyvyford Road, ROTHERWAS, Hereford, HR2 6JR Authority. Herefordshire Council, Environmental Health Department Personal Council Council Council, Environmental Health Department Personal Council Counci | 36        | Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: | Kgd Industrial Services Netherwood Road, Rotherwas Industrial Estate, Hereford, Hr2 6ju Herefordshire Council, Environmental Health Department 2.3/001 Not Supplied Local Authority Air Pollution Control PG4/1 Processes for the surface treatment of metals Application exempt from APC        | 70000000   | 473                                | 3       | 352947<br>237788 |
| Local Cartion: Twyford Road, ROTHERWAS, Hereford, HRZ SUR Authority: Herefordshire Council, Environmental Health Department Office of the Cartion of the Car | 1         | Local Authority Pol  | lution Prevention and Controls   |  |                                    |         |                  |
| Name:   Hereford Car And Commercial Services   Location:   Repriard Close, Rollherwas Industrial Estate, Hereford, H/2 6jh   Authority:   Herefordshire Council, Environmental Health Department   Positional Accuracy:   Manually positioned to the address or location   Positional Accuracy:   Manually positioned to the address or location   Annually Council, Environmental Health Department   Positional Accuracy:   Manually positioned to the address or location   Annually Positional Accuracy:   Manually positioned to the address or location   Annually Positional Accuracy:   Manually positioned to the address or location   Annually Positional Accuracy:   Manually Po   |           | Location: Authority: Permit Reference: Dated: Process Type: Description: Status:       | Twyford Road, ROTHERWAS, Hereford, HR2 6JR Herefordshire Council, Environmental Health Department 072 1st July 2002 Local Authority Air Pollution Control PG6/2 Manufacture of timber and wood-based products Application Refused Or Cancelled   | F-60 40 60 60 60 60 60 60 60 60 60 60 60 60 60   | 556                                | 3       | 352439<br>237975 |
| Location: Reynard Close, Rotherwas Industrial Estate, Hereford, HZ 9jh Authority: Herefordshire Council, Environmental Health Department Permit Reference: 1/1/013 Dated: 26th January 2009 Process Type: Local Authority Pollution Prevention and Control Description: PG1/Waste oil burners, less than 0.4MW net rated thermal input Status: Permitted Positional Accuracy: Manually positioned to the address or location  Local Authority Pollution Prevention and Controls  Name: Elite Plastics Ltd Location: Twyford Road, Rotherwas Industrial Estate, HEREFORD, Herefordshire, HR2 GJR Authority: Herefordshire Council, Environmental Health Department Permit Reference: 6.4P/P002 Dated: 31st March 1994 Process Type: Local Authority Pollution Prevention and Control Description: PG6/17 Pirnting of flexible packaging Status: Authority: Authority and Council Counci | 1         | Local Authority Pol  | lution Prevention and Controls   |  |                                    |         |                  |
| Name:   Elite Plastics Ltd   Tuyford Road, Rotherwas Industrial Estate, HEREFORD, Herefordshire, HR2   S/R   Authority: Herefordshire Council, Environmental Health Department   Herefordshire, HR2 GLR   Herefordshire, H   |           | Location: Authority: Permit Reference: Datted: Process Type: Description: Status:      | Reynard Close, Rotherwas Industrial Estate, Hereford, Hr2 6jh<br>Herefordshire Council, Environmental Health Department<br>1/1/013<br>26th January 2009<br>Local Authority Pollution Prevention and Control<br>PG1/1/Waste oil burners, less than 0.4MW net rated thermal input<br>Permitted     | 1632(45737476)   | 609                                | 3       | 353558<br>237995 |
| Location: Twyford Road, Rotherwas Industrial Estate, HEREFORD, Herefordshire, HR2 6JR Authority: Herefordshire Council, Environmental Health Department Permit Reference: 8.4/P/002 Dated: 31st March 1994 Process Type: Local Authority Pollution Prevention and Control Description: P66/17 Printing of flexible packaging Status: Authorisation has varied Positional Accuracy: Manually positioned to the address or location  Local Authority Pollution Prevention and Controls Name: Altas Access Flooring Location: Twyford Road, Rotherwas Industrial Estate, Lower Bullingham, ROTHERWAS, Herefordshire, HR2 6JR Authority: Herefordshire Council, Environmental Health Department Permit Reference: 010 Dated: 15th October 1993 Process Type: Local Authority Air Pollution Control Description: PG6/32 Adhesive coating Status: Application Refused Or Cancelled Positional Accuracy: Manually positioned to the address or location  Local Authority Pollution Prevention and Controls Authority: Herefordshire, HR2 6JR Authority: Herefordshire, HR2 6JR Authority: Herefordshire Council, Environmental Health Department Permit Reference: IPPC/6,4/P/002 Dated: 16th October 1993 Process Type: Local Authority Pollution Prevention and Control Dated: 16th October 1993 Process Type: Local Authority Pollution Prevention and Control Dated: 16th October 1993 Process Type: Local Authority Pollution Prevention and Control Dated: 16th October 1993 Process Type: Local Authority Pollution Prevention and Control Description: P66/17 Printing of flexible packaging Status: Transferred to IPPC Positional Accuracy: Automatically positioned to the address  Nearest Surface Water Feature  A13SE 33 - 3529   |           | Local Authority Pol  | lution Prevention and Controls   |  |                                    |         |                  |
| Name: Atlas Access Flooring Location: Twyford Road, Rotherwas Industrial Estate, Lower Bullingham, ROTHERWAS, Herefordshire, HR2 6JR Authority: Herefordshire Council, Environmental Health Department Permit Reference: 010 Dated: 15th October 1993 Process Type: Local Authority Air Pollution Control Description: PG6/32 Adhesive coating Status: Application Refused Or Cancelled Positional Accuracy: Manually positioned to the address or location  Local Authority Pollution Prevention and Controls  Name: Alfaplas Ltd Location: Unit 1 Ramsden Road, Rotherwas Industrial Estate, HEREFORD, Herefordshire, HR2 6LR Authority: Herefordshire, HR2 6LR Authority: Herefordshire Council, Environmental Health Department Permit Reference: IPPC/6.4/P/002 Dated: 16th October 1993 Process Type: Local Authority Pollution Prevention and Control Description: PG6/17 Printing of flexible packaging Status: Transferred to IPPC Positional Accuracy: Automatically positioned to the address  Nearest Surface Water Feature  A13SE 33 - 3529   |           | Location: Authority: Permit Reference: Dated: Process Type: Description: Status:       | Twyford Road, Rotherwas Industrial Estate, HEREFORD, Herefordshire, HR2 6JR Herefordshire Council, Environmental Health Department 6.4/P/002 31st March 1994 Local Authority Pollution Prevention and Control PG6/17 Printing of flexible packaging Authorisation has varied                     | 2000 TO TO THE PARTY OF THE PAR | 609                                | 3       | 352407<br>237933 |
| Name: Atlas Access Flooring Location: Twyford Road, Rotherwas Industrial Estate, Lower Bullingham, ROTHERWAS, Herefordshire, HR2 6JR Authority: Herefordshire Council, Environmental Health Department Permit Reference: 010 Dated: 15th October 1993 Process Type: Local Authority Air Pollution Control Description: PG6/32 Adhesive coating Status: Application Refused Or Cancelled Positional Accuracy: Manually positioned to the address or location  Local Authority Pollution Prevention and Controls  Name: Alfaplas Ltd Location: Unit 1 Ramsden Road, Rotherwas Industrial Estate, HEREFORD, Herefordshire, HR2 6LR Authority: Herefordshire, HR2 6LR Authority: Herefordshire Council, Environmental Health Department Permit Reference: IPPC/6.4/P/002 Dated: 16th October 1993 Process Type: Local Authority Pollution Prevention and Control Description: PG6/17 Printing of flexible packaging Status: Transferred to IPPC Positional Accuracy: Automatically positioned to the address  Nearest Surface Water Feature  A13SE 33 - 3529   | _         |  |  |  |                                    |         |                  |
| Alfaplas Ltd Location: Unit 1 Ramsden Road, Rotherwas Industrial Estate, HEREFORD, Herefordshire, HR2 6LR Authority: Permit Reference: IPPC/6.4/P/002 Dated: 16th October 1993 Process Type: Local Authority Pollution Prevention and Control Description: Status: Transferred to IPPC Positional Accuracy: Automatically positioned to the address  Nearest Surface Water Feature  A13SE  3 3526  (S)  48SW (S)  (S)  624 3 3 3526  2377  A8SW (S)  48SW (S)  624 3 3 3526  2377  A8SW (S)  A8SW 624 3 3 3526  2377  A8SW (S)  A8SW 624 3 3 3526  2377  A8SW (S)  A8SW 624 3 3 3526  2377  A8SW (S)  A13SE 33 3526  A8SW 624 3 3 3526  A8SW 624 A8SW 624 A8SW 624 A8SW 624 A8SW 624 BROW 624  | 39        | Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: | Atlas Access Flooring Twyford Road, Rotherwas Industrial Estate, Lower Bullingham, ROTHERWAS, Herefordshire, HR2 6JR Herefordshire Council, Environmental Health Department 010 15th October 1993 Local Authority Air Pollution Control PG6/32 Adhesive coating Application Refused Or Cancelled | (1913) (1937)  | 638                                | 3       | 352400<br>237900 |
| Location: Unit 1 Ramsden Road, Rotherwas Industrial Estate, HEREFORD, Herefordshire, HR2 6LR Authority: Herefordshire Council, Environmental Health Department Permit Reference: IPPC/6.4/P/002 Dated: 16th October 1993 Process Type: Local Authority Pollution Prevention and Control Description: PG6/17 Printing of flexible packaging Status: Transferred to IPPC Positional Accuracy: Automatically positioned to the address  Nearest Surface Water Feature  A13SE 33 - 3529  |           | Local Authority Pol  | lution Prevention and Controls   |  |                                    |         |                  |
| A13SE 33 - 3529  |           | Location: Authority: Permit Reference: Dated: Process Type: Description: Status:       | Unit 1 Ramsden Road, Rotherwas Industrial Estate, HEREFORD, Herefordshire, HR2 6LR Herefordshire Council, Environmental Health Department IPPC/6.4/P/002 16th October 1993 Local Authority Pollution Prevention and Control PG6/17 Printing of flexible packaging Transferred to IPPC            | 71777777   | 624                                | 3       | 352663<br>237735 |
| CONTRACT OF THE PROPERTY OF TH | 1         | Nearest Surface Wa   | ter Feature  |  |                                    |         |                  |
| (S) 2382   |           |  |  | STATE OF THE PARTY | 33                                 | -       | 352963<br>238245 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
| 41        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given Polyford Plastics, ROTHERWAS Environment Agency, Welsh Region Unknown Not Supplied 3rd April 1992 3660 Not Given Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m   | A13SE<br>(SE)                                   | 9                                  | 2       | 353000<br>238250 |
| 41        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given Confluence With, Town Ditch Environment Agency, Welsh Region Unknown Not Supplied 3rd April 1992 3660 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m  | A13SE<br>(SE)                                   | 13                                 | 2       | 353000<br>238245 |
| 42        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Warehouses Rotherwas Industrial Estate, HEREFORD Environment Agency, Welsh Region Unknown Not Supplied 25th August 1994 21497 Not Given Not Given Runoff Category 3 - Minor Incident Located by supplier to within 100m   | A9NW<br>(SE)                                    | 496                                | 2       | 353460<br>238050 |
| 43        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given ROTHERWAS Environment Agency, Welsh Region Sewage - Treated Effluent Inadequate Design/Capacity 20th September 1996 30038 Not Given Not Given Spillage Category 3 - Minor Incident Located by supplier to within 100m                                     | A8NW<br>(SW)                                    | 521                                | 2       | 352600<br>237900 |
| 44        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given  Down Stream Of Sewage Treatment Works, Near Wye Invader Environment Agency, Welsh Region Sewage - Treated Effluent Not Supplied 4th May 1997 32609 Not Given Not Given Effluent Discharge Category 3 - Minor Incident Located by supplier to within 100m | A14NW<br>(NE)                                   | 552                                | 2       | 353500<br>238800 |
| 45        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given Near Rotherwas Sewage Treatment Works, Off B224 Road Environment Agency, Welsh Region Foam/Soap Suds River Wye; Effluent Quality 15th May 1998 35822 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m           | A14NE<br>(E)                                    | 557                                | 2       | 353600<br>238600 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
| 46        | Pollution Incidents Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:                       | to Controlled Waters  Water Company Sewage: Sewage Treatment Works Eign Environment Agency, Welsh Region Unknown Mechanical Failure 6th June 1991 1301 Not Given Not Given Burst Category 3 - Minor Incident  | A12NW<br>(NW)                                   | 576                                | 2       | 352205<br>238795 |
| 46        | Positional Accuracy:  Pollution Incidents Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | Located by supplier to within 100m  to Controlled Waters  Not Given Opposite Eign Outlet Environment Agency, Welsh Region Washery Effluent Not Supplied 5th May 1995 23748 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m             | A12NW<br>(NW)                                   | 580                                | 2       | 352200<br>238795 |
| 47        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:   | to Controlled Waters  Not Given Sewage Treatment Works Environment Agency, Welsh Region Farm Effluent/Slurry Not Supplied 9th April 1996 27862 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m   | A12NW<br>(W)                                    | 632                                | 2       | 352100<br>238700 |
| 48        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:   | to Controlled Waters  Waste Handling Facilities Rotherwas Industrial Estate, HEREFORD Environment Agency, Welsh Region Crude Sewage Poor Operational Practise 9th March 1992 3502 Not Given Not Given Runoff Category 2 - Significant Incident Located by supplier to within 100m | A8SE<br>(S)                                     | 639                                | 2       | 353200<br>237650 |
| 48        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:   | to Controlled Waters  Waste Handling Facilities Rotherwas Industrial Estate, HEREFORD Environment Agency, Welsh Region Light Oil Poor Operational Practise 9th March 1992 3502 Not Given Not Given Runoff Category 3 - Minor Incident Located by supplier to within 100m          | A8SE<br>(S)                                     | 641                                | 2       | 353205<br>237650 |
| 48        | Pollution Incidents Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:                       | Waste Handling Facilities Rotherwas Industrial Estate, HEREFORD Environment Agency, Welsh Region Oils - Diesel (Including Agricultural) Poor Operational Practise 9th March 1992 3502 Not Given Not Given Runoff Category 3 - Minor Incident Located by supplier to within 100m   | A8SE<br>(S)                                     | 644                                | 2       | 353200<br>237645 |



| Map<br>ID |  | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR                 |
|-----------|--|--|---|------------------------------------|---------|---------------------|
|           | Pollution Incidents  | to Controlled Waters   |   |                                    |         |                     |
| 48        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:   | Waste Handling Facilities Rotherwas Industrial Estate, HEREFORD Environment Agency, Welsh Region Oils - Other Oil Poor Operational Practise 9th March 1992 3502 Not Given Not Given Runoff Category 3 - Minor Incident Located by supplier to within 100m                  | A8SE<br>(S)                                     | 645                                | 2       | 353205<br>237645    |
|           | Parket Control of Artist Control Control   | to Controlled Waters   |   | 12.22                              |         |                     |
| 49        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Pate: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:                   | Not Given Rosemarket Stw Environment Agency, Welsh Region Sullage Poor Management Control 28th October 1996 30549 Not Given Not Given Spillage Category 3 - Minor Incident Located by supplier to within 100m  | A9NE<br>(SE)                                    | 643                                | 2       | 353600<br>238000    |
|           | STANSON OF A PARTY TO A STANSON IN   | to Controlled Waters   | 200000000000000000000000000000000000000         | onen                               | 2074    | x201000000000000000 |
| 50        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:                                  | Not Given Industrial Estate Drain Near Chapel, ROTHERWAS Environment Agency, Welsh Region Oils - Diesel (Including Agricultural) Not Supplied 9th March 1997 31517 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m              | A14NE<br>(E)                                    | 654                                | 2       | 353700<br>238600    |
| 51        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:   | to Controlled Waters  Not Given Jws Transport, Rotherwas Industrial Estate, HEREFORD Environment Agency, Welsh Region Unknown Not Supplied 20th June 1995 24497 Not Given Not Given Not Given Unknown Category 2 - Significant Incident Located by supplier to within 100m | A9SW<br>(SE)                                    | 722                                | 2       | 353300<br>237600    |
| 52        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:   | to Controlled Waters  Not Given Down Stream Of Rotherwas, Chapel Environment Agency, Welsh Region Oils - Diesel (Including Agricultural) Not Supplied 20th May 1996 28476 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m       | A14NE<br>(E)                                    | 736                                | 2       | 353800<br>238495    |
|           | Pollution Incidents  | to Controlled Waters   |   |                                    |         |                     |
| 52        | Property Type:<br>Location:<br>Authority:<br>Pollutant:<br>Note:<br>Incident Date:<br>Incident Reference:<br>Catchment Area:<br>Receiving Water:<br>Cause of Incident:<br>Incident Severity:<br>Positional Accuracy: | Not Given Bunch Of Carrots, HAMPTON BISHOP Environment Agency, Welsh Region Farm Effluent/Slurry Not Supplied 15th February 1996 27581 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m  | A14NE<br>(E)                                    | 736                                | 2       | 353800<br>238500    |



| Map<br>ID |  | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|--|---|------------------------------------|---------|------------------|
| 52        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given By Bunch Of Carrots, HAMPTON BISHOP Environment Agency, Welsh Region Farm Effluent/Slurry Not Supplied 15th February 1996 27581 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m   | A14NE<br>(E)                                    | 741                                | 2       | 353805<br>238495 |
| 53        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Water Company Sewage: Surface Water Outfall ROTHERWAS Environment Agency, Welsh Region Farm Effluent/Slurry Not Supplied 28th October 1994 21495 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m  | A15SW<br>(E)                                    | 831                                | 2       | 353900<br>238400 |
| 54        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given Opposite Sewage Works, WYE Environment Agency, Welsh Region Farm Effluent/Slurry Not Supplied 16th March 1991 265 Not Given Not Given Unknown Category 2 - Significant Incident Located by supplier to within 100m   | A17SW<br>(NW)                                   | 834                                | 2       | 352120<br>239100 |
| 55        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given Bottom Of Hampton Park Road Environment Agency, Welsh Region Oils - Diesel (Including Agricultural) Eign BI; Spillage 16th February 1998 34771 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m                                    | A17NW<br>(NW)                                   | 841                                | 2       | 352205<br>239195 |
| 55        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given Location Description Not Available Environment Agency, Welsh Region Oils - Diesel (Including Agricultural) Eign Brook; Spillage 6th March 1998 35038 Not Given Not Given Not Given Inadequate Design/Capacity Category 3 - Minor Incident Located by supplier to within 100m | A17NW<br>(NW)                                   | 845                                | 2       | 352195<br>239190 |
| 55        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given Near Hampton Bishop Environment Agency, Welsh Region Oils - Diesel (Including Agricultural) Eign BI; Spillage 16th February 1998 34771 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m  | A17NW<br>(NW)                                   | 845                                | 2       | 352200<br>239195 |



| Map<br>ID |                          | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--------------------------|---|---|------------------------------------|---------|------------------|
| 55        | Authority: Environment A | ription Not Available<br>sgency, Welsh Region<br>ncluding Agricultural)<br>ige<br>1998                              | A17NW<br>(NW)                                   | 845                                | 2       | 352205<br>239200 |
| 55        |                          | ogency, Welsh Region<br>ncluding Agricultural)<br>ige<br>1998<br>Iinor Incident                                     | A17NW<br>(NW)                                   | 848                                | 2       | 352200<br>239200 |
| 55        | Authority: Environment A | ampton Park Road, HEREFORD Agency, Welsh Region ncluding Agricultural) age 1998                                     | A17NW<br>(NW)                                   | 848                                | 2       | 352195<br>239195 |
| 55        | Authority: Environment A | way And, County Hospital Agency, Welsh Region Including Agricultural) Including Agricultural Including Agricultural | A17NW<br>(NW)                                   | 852                                | 2       | 352200<br>239205 |
| 55        | Authority: Environment A | pton Park Road, HEREFORD<br>kgency, Welsh Region<br>ncluding Agricultural)<br>ige<br>1998                           | A17NW<br>(NW)                                   | 852                                | 2       | 352195<br>239200 |
| 55        |                          | , HEREFORD<br>gency, Welsh Region<br>ncluding Agricultural)<br>general<br>1998                                      | A17NW<br>(NW)                                   | 855                                | 2       | 352195<br>239205 |



| Map<br>ID |  | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|--|---|------------------------------------|---------|------------------|
| 56        | Property Type:   | to Controlled Waters Private Sewage (Non-PLC): Other   | A11SE   | 905                                | 2       | 351800           |
|           | The second secon | 100 Yards On Left, After Wye Hotel Environment Agency, Welsh Region Unknown Neglect 6th September 1994 20933 Not Given Not Given Leakage Category 3 - Minor Incident Located by supplier to within 100m  | (W)   |                                    |         | 238400           |
| 57        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:  | to Controlled Waters  Not Given Works Environment Agency, Welsh Region Crude Sewage Not Supplied 2nd August 1991 587 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m  | A17NW<br>(NW)                                   | 912                                | 2       | 352105<br>239195 |
| 57        | Property Type:<br>Location:<br>Authority:  | to Controlled Waters  Not Given  Works  Environment Agency, Welsh Region   | A17NW<br>(NW)                                   | 915                                | 2       | 352100<br>239195 |
|           | Pollutant:<br>Note:<br>Incident Date:<br>Incident Reference:<br>Catchment Area:<br>Receiving Water:<br>Cause of Incident:<br>Incident Severity:<br>Positional Accuracy:  | Chemicals - Other Inorganic Not Supplied 2nd August 1991 587 Not Given Not Given Unknown Category 2 - Significant Incident Located by supplier to within 100m  |   |                                    |         |                  |
| 57        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:   | to Controlled Waters  Not Given Works Environment Agency, Welsh Region Miscellaneous - Vehicle Washings And De Waxing Not Supplied 2nd August 1991 587 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m  | A17NW<br>(NW)                                   | 915                                | 2       | 352105<br>239200 |
| 57        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:   | to Controlled Waters  Not Given Outfall Works Road, HEREFORD Environment Agency, Welsh Region Oils - Diesel (Including Agricultural) Wye 26th November 1997 34232 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m   | A17NW<br>(NW)                                   | 919                                | 2       | 352105<br>239205 |
| 57        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:   | to Controlled Waters  Water Company Sewage: Storm Overflow Hereford Down Stream Of, Eign Sewage Treatment Works Environment Agency, Welsh Region Stagnant Water Emergency Overflow 9th May 1992 4309 Not Given Not Given Not Given Overflow Category 2 - Significant Incident Located by supplier to within 100m | A17NW<br>(NW)                                   | 919                                | 2       | 352100<br>239200 |



| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
| 58        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given Confluence With River Wye Environment Agency, Welsh Region Farm Effluent/Slurry Not Supplied 14th January 1996 27106 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m   | A17NW<br>(NW)                                   | 915                                | 2       | 352200<br>239295 |
| 58        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given Confluence, With River Wye Environment Agency, Welsh Region Farm Effluent/Slurry Not Supplied 14th January 1996 27106 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m  | A17NW<br>(NW)                                   | 919                                | 2       | 352200<br>239300 |
| 59        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given Location Description Not Available Environment Agency, Welsh Region Light Oil River Wye; Overflow 20th August 1997 33390 Not Given Not Given Weather Category 3 - Minor Incident Located by supplier to within 100m   | A11NE<br>(W)                                    | 922                                | 2       | 351800<br>238700 |
| 60        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given  1 Mile Up Stream Of, Carrots Pub, HEREFORD Environment Agency, Welsh Region Oils - Diesel (Including Agricultural) Unknown; River Wye 21st October 1998 37003 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m             | A15NW<br>(E)                                    | 935                                | 2       | 354000<br>238500 |
| 61        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given Wye Inn, Rotherwas, HEREFORD Environment Agency, Welsh Region Unknown Not Supplied 29th April 1991 792 Not Given Not Given Unknown Category 3 - Minor Incident Located by supplier to within 100m   | A11NE<br>(W)                                    | 950                                | 2       | 351750<br>238470 |
| 62        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Not Given Rear Of Neils Plastic Company, Fluer De Lys, Eign Mill Environment Agency, Welsh Region Oils - Diesel (Including Agricultural) Poor Management Control 4th March 1996 27582 Not Given Not Given Runoff Category 3 - Minor Incident Located by supplier to within 100m | A17NW<br>(NW)                                   | 987                                | 2       | 352200<br>239395 |



| Map<br>ID |  | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|--|---|------------------------------------|---------|------------------|
| 62        | Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: | to Controlled Waters  Warehouses Neils Plastic Co, Foley Trading Environment Agency, Welsh Region Oils - Diesel (Including Agricultural) Poor Operational Practise 4th March 1996 27582 Not Given Not Given Runoff Category 3 - Minor Incident Located by supplier to within 100m      | A17NW<br>(NW)                                   | 991                                | 2       | 352200<br>239400 |
|           | River Quality Name: GQA Grade: Reach: Estimated Distance (km): Flow Rate: Flow Type: Year:   | Wye River Quality B Nr.Dinedor Court - Conf.Eign Bk 4.3  Flow less than 80 cumecs River 2000   | A18SE<br>(NE)                                   | 278                                | 2       | 353098<br>238887 |
|           | River Quality Name: GQA Grade: Reach: Estimated Distance (km): Flow Rate: Flow Type: Year:   | Wye River Quality A Conf.Eign Bk Conf.Cage Bk. 8.6  Flow less than 80 cumecs River 2000  | A12NE<br>(W)                                    | 497                                | 2       | 352210<br>238585 |
|           | River Quality Name: GQA Grade: Reach: Estimated Distance (km): Flow Rate: Flow Type: Year:   | Eign Bk River Quality C Conf.Wye - Above S.S.O .4  Flow less than 0.31 cumecs River 2000   | A17NW<br>(NW)                                   | 890                                | 2       | 352088<br>239147 |
| 63        | River Quality Biolog<br>Name:<br>Reach:<br>Estimated Distance:   | gy Sampling Points<br>Wye<br>Nriver Dinedor Court To Confluence Eign Brook   | A17NW<br>(NW)                                   | 848                                | 2       | 352200<br>239200 |
| 64        | Authority:<br>Incident Date:<br>Incident Reference:<br>Water Impact:<br>Air Impact:<br>Land Impact:  | tion Incident Register  Environment Agency - Midlands Region, West Area 1st December 2015 1407822 Category 3 - Minor Incident Category 3 - Minor Incident Category 2 - Significant Incident Located by supplier to within 10m Asbestos Waste Contaminated Material : Soils & Sub-soils | A13NW<br>(N)                                    | 0                                  | 2       | 352880<br>238557 |



|  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction)  | Estimated<br>Distance<br>From Site   | Contact  | NGR  |
|--|---|--|--|--|--|
| Substantiated Pollu  | tion Incident Register  |  |  |  |  |
| Authority:<br>Incident Date:<br>Incident Reference:<br>Water Impact:<br>Air Impact:<br>Land Impact:  | Environment Agency - Midlands Region, West Area<br>27th May 2015<br>1340243<br>Category 4 - No Impact<br>Category 3 - Minor Incident<br>Category 2 - Significant Incident   | A14SW<br>(E)   | 441  | 2  | 353507<br>238365   |
| Substantiated Pollu  | tion Incident Register  |  |  |  |  |
| Authority:<br>Incident Date:<br>Incident Reference:<br>Water Impact:<br>Air Impact:<br>Land Impact:  | Environment Agency - Midlands Region, West Area<br>26th May 2015<br>1339963<br>Category 4 - No Impact<br>Category 4 - No Impact<br>Category 2 - Significant Incident  | A14SE<br>(E)   | 732  | 2  | 353785<br>238248   |
| Substantiated Pollu  | tion Incident Register  |  |  |  |  |
| Authority: Incident Date: Incident Reference: Water Impact: Air Impact: Land Impact:   | Environment Agency - Midlands Region, West Area 15th August 2012 1026527 Category 4 - No Impact Category 1 - Major Incident Category 4 - No Impact  | A10NW<br>(E)   | 937  | 2  | 353964<br>238114   |
| Substantiated Pollu  | tion Incident Register  |  |  |  |  |
| Authority:<br>Incident Date:<br>Incident Reference:<br>Water Impact:<br>Air Impact:<br>Land Impact:  | Environment Agency - Midlands Region, West Area 28th May 2013 1116693 Category 3 - Minor Incident Category 3 - Minor Incident Category 2 - Significant Incident Located by supplier to within 10m Inert : Construction / Demolition Material  | A10NW<br>(SE)  | 949  | 2  | 353926<br>237974   |
| Substantiated Pollu  | tion Incident Register  |  |  |  |  |
| Authority:<br>Incident Date:<br>Incident Reference:<br>Water Impact:<br>Air Impact:<br>Land Impact:  | Environment Agency - Midlands Region, West Area 2nd December 2012 1064838 Category 4 - No Impact Category 2 - Significant Incident Category 3 - Minor Incident  | A10NW<br>(SE)  | 1000   | 2  | 353963<br>237931   |
| Water Abstractions   |   |  |  |  |  |
| Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: | Thorn Lighting Ltd 19/55/18/0391 100 River Wye At Rotherwas Industrial Estate Environment Agency, Welsh Region Other Industrial/Commercial/Public Services: General Use (Medium Loss) Water may be abstracted from a single point Surface Not Supplied Not Supplied R.Wye; Status: Revoked; Lapsed Or Cancelled 01 January 31 December 1st August 1989  | A12NE<br>(W)   | 422  | 2  | 352280<br>238540   |
|  | Authority: Incident Date: Incident Reference: Water Impact: Air Impact: Land Impact: Positional Accuracy: Pollutant:  Substantiated Pollutant: Authority: Incident Date: Incident Reference: Water Impact: Land Impact: Positional Accuracy: Pollutant:  Substantiated Pollutant: Substantiated Pollutant: Substantiated Pollutant: Authority: Incident Date: Incident Reference: Water Impact: Land Impact: Land Impact: Positional Accuracy: Pollutant: Substantiated Pollutant: Substantiated Pollutant: Substantiated Pollutant: Substantiated Pollutant: Substantiated Pollutant: Incident Reference: Water Impact: Land Impact: Land Impact: Land Impact: Positional Accuracy: Pollutant: Pollutant: Substantiated Pollutant: Vater Impact: Land Impact: Land Impact: Locational Accuracy: Pollutant: Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Yearly Rate (m3): Detalionsed Start: Authorised End: | Substantiated Pollution Incident Register Authority: Environment Agency - Midlands Region, West Area Incident Date: 1340243 Incident Reference: 1340243 Water Impact: Category 3 - Minor Incident Loard Impact: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 10m Specific Waste Materials: Contaminated Construction & Demolition Material & Waste  Substantiated Pollution Incident Register Authority: Environment Agency - Midlands Region, West Area Incident Pate: 26th May 2015 Incident Reference: 1339963 Water Impact: Category 4 - No Impact Land Impact: Category 5 - No Impact Land Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Land Impact: Category 5 - No Impact Land Impact: Category 5 - No Impact Land Impact: Category 6 - No Impact Land Impact: Category 8 - No Impact Land Impact: Category 9 - No Impact Incident Reference: 105857 Water Impact: Category 9 - No Impact Valter Impact: Category 1 - Major Incident Positional Accuracy: Category 1 - Major Incident Land Impact: Category 2 - Significant Incident Land Impact: Category 3 - Minor Incident Reference: 1116593 Water Impact: Category 3 - Minor Incident Land Impact: Category 3 - Minor Incident Category 3 - Minor Incident Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m Incident Reference: 1116593 Water Impact: Category 3 - Minor Incident Category 3 - Minor Incident Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m Incident Reference: 116593 Water Impact: Category 3 - Minor Incident Category 4 - No Impact Category 3 - Minor | Substantiated Pollution Incident Register Authority: Environment Agency - Midlands Region, West Area Incident Bate: 27th May 2015 cc, 4 No Impact Air Impact: Category 3 - Minor Incident Positional Accuracy: Decident Register Authority: Environment Agency - Midlands Region, West Area Positional Accuracy: Category 2 - Significant Incident Positional Accuracy: Category 2 - Significant Incident Positional Accuracy: Category 2 - Significant Incident Positional Accuracy: Decident Specific Waste Materials: Contaminated Construction & Demolition Material & Waste  Substantiated Pollution Incident Register Authority: Environment Agency - Midlands Region, West Area Incident Date: Incident Reference: 1339963 Water Impact: Category 4 - No Impact Category 4 - Significant Incident Positional Accuracy: Located by supplier to within 10m Incident Date: Incident Reference: 10x8527 Water Impact: Category 4 - No Impact Authority: Environment Agency - Midlands Region, West Area Incident Date: Incident Reference: 10x8527 Water Impact: Category 4 - No Impact Category 3 - Minor Incident Category 4 - No Impact Category 5 - Minor Incide | Substantiated Pollution Incident Register Authority Cartegory 4 - No Impact Authority Cartegory 4 - No Impact Authority Cartegory 4 - No Impact Air Impact: Category 4 - No Impact Category 4 - No Impact Category 5 - Significant Incident Positional Accuracy: Specific Waste Materials: Category 4 - No Impact Authority: Category 4 - No Impact Category 5 - Significant Incident Category 2 - Significant Incident Category 2 - Significant Incident Category 4 - No Impact Authority: Category 4 - No Impact Category 4 - No Impact Authority: Category 4 - No Impact Category 4 - No Impact Authority: Category 4 - No Impact Air Impact: Category 4 - No Impact Category 4 - No Impact Air Impact: Category 4 - No Impact Air Impact: Category 4 - No Impact Category 4 - No Impact Air Impact: Category 4 - No Impact Category 4 - No Impact Air Impact: Category 4 - No Impact Category 4 - No Impact Category 4 - No Impact Air Impact: Category 4 - No Impact Category 3 - No Impact Category 4 - No Impact Cate | Substantiated Pollution Incident Register Authority. Incident Date: Company of Midlands Region, West Area   A145W   A141   2   Positional Accuracy: Department of Positional Accuracy: Departme |



| Map<br>ID |   | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|---|---|------------------------------------|---------|------------------|
| *71       | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:                   | H P Bulmer & Co Ltd 19/55/18/0376 100 Reach On The River Wye Near Field Farm Environment Agency, Welsh Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from a river or stream reach, or a row of wellpoints Surface Not Supplied Not Supplied River Wye; Status: Revoked; Lapsed Or Cancelled 01 March 31 August 1st March 1989 Not Supplied Located by supplier to within 100m | A19SW<br>(NE)                                   | 614                                | 2       | 353540<br>238860 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date:  | **************************************  | A19NE<br>(NE)                                   | 1034                               | 2       | 353820<br>239200 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:                   | Bulmers 19/55/18/0321 101 Well Near Field Farm Environment Agency, Welsh Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied O1 January 31 December 31st March 1966 Not Supplied Located by supplier to within 10m   | A19NE<br>(NE)                                   | 1034                               | 2       | 353820<br>239200 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy: | Jones Bros 19/55/18/0110 100 Well At Sink Green Environment Agency, Welsh Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Status: Revoked; Lapsed Or Cancelled 01 January 31 December 31st March 1966 Not Supplied Located by supplier to within 100m   | A10SW<br>(SE)                                   | 1323                               | 2       | 354210<br>237700 |



| Map<br>ID |   | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|---|---|------------------------------------|---------|------------------|
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date:   | Mr E Peyton 19/55/18/0197 100 Well At Prospect House Environment Agency, Welsh Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Status: Revoked; Lapsed Or Cancelled 01 January 31 December 1st June 1993 Not Supplied                                       | A4SE<br>(SE)                                    | 1362                               | 2       | 353570<br>237020 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date:  | Located by supplier to within 100m  | A15NE<br>(E)                                    | 1433                               | 2       | 354490<br>238600 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy: | Bulmers 19/55/18/0321 101 Well At Field Farm Environment Agency, Welsh Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied 101 January 31 December 31st March 1966 Not Supplied Located by supplier to within 10m                                  | A15NE<br>(E)                                    | 1433                               | 2       | 354490<br>238600 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:                   | T S Matthews & Son 19/55/15/0001 100 Borehole At Bartonsham Farm Environment Agency, Welsh Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied Not Supplied 101 January 21 December 12th March 2008 Not Supplied Located by supplier to within 10m | A16NW<br>(NW)                                   | 1490                               | 2       | 351390<br>239210 |



| Map<br>ID |   | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact   | NGR              |
|-----------|---|--|---|------------------------------------|-----------|------------------|
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy: | T S Matthews & Son 19/55/15/0001 100 Borehole At Bartonsham Farm Natural Resources Wales General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Status: Revoked; Lapsed Or Cancelled 01 January 31 December 12th March 2008 Not Supplied Located by supplier to within 10m             | A16NW<br>(NW)                                   | 1490                               | 4         | 351390<br>239210 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:                                | T S Matthews & Son 19/55/15/0446 100 Borehole At Bartonsham Farm Natural Resources Wales Food And Drink: General Washing/Process Washing Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Licenced from 01-Jan to 31-Dec 01 January 31 December 1st April 2008 Not Supplied Located by supplier to within 10m | A16NW<br>(NW)                                   | 1496                               | <b>24</b> | 351360<br>239165 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:                                | T S Matthews & Son 19/55/15/0446 100 Borehole At Bartonsham Farm Environment Agency, Welsh Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied 10 January 31 December 1st April 2008 Not Supplied Located by supplier to within 10m                             | A16NW<br>(NW)                                   | 1498                               | 2         | 351360<br>239170 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:              | T S Matthews & Son 19/55/15/0446 100 Borehole At Bartonsham Farm Environment Agency, Welsh Region Food And Drink: General Washing/Process Washing Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied 01 January 31 December 1st April 2008 Not Supplied Located by supplier to within 10m          | A16NW<br>(NW)                                   | 1498                               | 2         | 351360<br>239170 |



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| Map<br>ID |   | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|--|---|------------------------------------|---------|------------------|
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:                   | T S Matthews & Son 19/55/15/0446 100 Borehole At Bartonsham Farm Natural Resources Wales General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Well Or Borehole; Status: Revoked; Lapsed Or Cancelled 01 January 31 December 1st April 2008 Not Supplied Located by supplier to within 100m | A16NW<br>(NW)                                   | 1498                               | 4       | 351360<br>239170 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date:  | A THE STANDARD WAS A FUNCTION OF THE TANDES OF THE STANDARD  | (S)   | 1613                               | 2       | 353420<br>236700 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy: | Mrs M Thomas 19/55/18/0131 100 Borehole At Pen-Y-Bryn Environment Agency, Welsh Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Status: Revoked; Lapsed Or Cancelled 01 January 31 December 31st March 1966 Not Supplied Located by supplier to within 100m                    | A1NE<br>(SW)                                    | 1706                               | 2       | 351670<br>237120 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:                   | Herefordshire Council 19/55/15/0352 101 River Wye At Victoria Bridge Environment Agency, Welsh Region Private Non-Industrial Amenity: Lake And Pond Throughflow Water may be abstracted from a single point Surface Not Supplied Not Supplied Not Supplied Ot January 31 December 12th March 2008 Not Supplied Located by supplier to within 10m     | A16NW<br>(NW)                                   | 1716                               | 2       | 351270<br>239450 |



| Map<br>ID |   | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|---|---|------------------------------------|---------|------------------|
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:                                | Herefordshire Council 19/55/15/0352 101 River Wye At Victoria Bridge Natural Resources Wales Private Non-Industrial Amenity: Lake And Pond Throughflow Water may be abstracted from a single point Surface Not Supplied Not Supplied River Wye At Victoria Bridge To Castle Pond; Status: Revoked; Lapsed Or Cancelled 01 January 31 December 12th March 2008 Not Supplied Located by supplier to within 100m | A16NW<br>(NW)                                   | 1716                               | 4       | 351270<br>239450 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:                                | H P Bulmer & Co Ltd 19/55/18/0376 Not Supplied Reach On The River Wye Near, Field Farm Environment Agency, Welsh Region General Agriculture: Spray Irrigation - Direct Not Supplied Surface 981 13638 Licenced from 01-Mar to 31-Aug Not Supplied Located by supplier to within 10m                                | (E)   | 1871                               | 2       | 354930<br>238230 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy: | Mr S Weir 19/55/15/0469 2 Borehole At 41 St Owen Street, Hereford. Environment Agency, Welsh Region Food And Drink: Water Bottling Water may be abstracted from a single point Groundwater Not Supplied Not Supplied The Property Named 41 St Owen Street, Hereford. 01 January 31 December 1st April 2008 Not Supplied Located by supplier to within 10m   | A21NW<br>(NW)                                   | 1944                               | 2       | 351320<br>239870 |
|           | Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:              | Mr S Weir 19/55/15/0469 2 Borehole At 41 St Owen Street, Hereford. Natural Resources Wales Food And Drink: Water Bottling Water may be abstracted from a single point Groundwater Not Supplied Not Supplied The Property Named 41 St Owen Street, Hereford. 01 January 31 December 1st April 2008 Not Supplied Located by supplier to within 10m  | A21NW<br>(NW)                                   | 1944                               | 4       | 351320<br>239870 |



| Map<br>ID |   | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
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|           | Water Abstractions  |   |   |                                    |         |                  |
|           | Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date:   | Mr T J Swindells 19/55/15/0469 1 Borehole At 41 St Owen Street, Hereford. Environment Agency, Welsh Region Food And Drink: Water Bottling Water may be abstracted from a single point Groundwater Not Supplied Not Supplied The property named 41 St Owen Street, Hereford. Licenced from 01-Jan to 31-Dec 01 January 31 December 26th November 1999 Not Supplied Located by supplier to within 10m | A21NW<br>(NW)                                   | 1944                               | 2       | 351320<br>239870 |
|           | Groundwater Vulne   | erability Map   |   |                                    |         |                  |
|           | Combined Classification: Combined Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness: Superficial Thickness: Superficial Recharge:  | Secondary Superficial Aquifer - High Vulnerability  High  Productive Bedrock Aquifer, Productive Superficial Aquifer High  Well Connected Fractures <300 mm/year >70% >90%  3-10m  High   | A13SE<br>(SW)                                   | 0                                  | 5       | 352903<br>238465 |
|           | Groundwater Vulne<br>Combined<br>Classification:<br>Combined<br>Vulnerability:<br>Combined Aquifer:<br>Pollutant Speed:<br>Bedrock Flow:<br>Dilution:<br>Baseflow Index:<br>Superficial<br>Patchiness:<br>Superficial<br>Thickness:<br>Superficial<br>Recharge: | Productive Bedrock Aquifer - High Vulnerability  High  Productive Bedrock Aquifer, Productive Superficial Aquifer High Well Connected Fractures <300 mm/year >70% >90%  3-10m  Medium   | A13SE<br>(E)                                    | 0                                  | 5       | 353000<br>238465 |
|           |   | erability - Soluble Rock Risk   |   |                                    |         |                  |
|           | None  | D4.865-46 - 3/550000 500.55500000   |   |                                    |         |                  |
|           | Bedrock Aquifer De<br>Aquifer Designation:  | esignations<br>Secondary Aquifer - A  | A13SE<br>(SW)                                   | 0                                  | 5       | 352903<br>238465 |
|           | Superficial Aquifer<br>Aquifer Designation:   | Designations Secondary Aquifer - A  | A13SE<br>(SW)                                   | 0                                  | 5       | 352903<br>238465 |
|           | Extreme Flooding f<br>Type:<br>Flood Plain Type:<br>Boundary Accuracy:  | rom Rivers or Sea without Defences  Extent of Extreme Flooding from Rivers or Sea without Defences Fluvial Events As Supplied   | A13SW<br>(W)                                    | 0                                  | 2       | 352809<br>238464 |
|           | Extreme Flooding f<br>Type:<br>Flood Plain Type:<br>Boundary Accuracy:  | rom Rivers or Sea without Defences  Extent of Extreme Flooding from Rivers or Sea without Defences Fluvial Events As Supplied   | A13SE<br>(SE)                                   | 0                                  | 2       | 353034<br>238294 |
|           | Extreme Flooding f<br>Type:<br>Flood Plain Type:<br>Boundary Accuracy:  | rom Rivers or Sea without Defences  Extent of Extreme Flooding from Rivers or Sea without Defences Fluvial Events As Supplied   | A13SE<br>(SE)                                   | 0                                  | 2       | 353039<br>238344 |
|           | Extreme Flooding f<br>Type:<br>Flood Plain Type:<br>Boundary Accuracy:  | from Rivers or Sea without Defences  Extent of Extreme Flooding from Rivers or Sea without Defences Fluvial Models As Supplied  | A13SE<br>(SW)                                   | 0                                  | 2       | 352903<br>238465 |



| Map<br>ID | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
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|           | Extreme Flooding from Rivers or Sea without Defences   |   |                                    |         |                  |
|           | Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events Boundary Accuracy: As Supplied  | A13NW<br>(W)                                    | 0                                  | 2       | 352798<br>238496 |
|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events Boundary Accuracy: As Supplied  | A13SE<br>(SE)                                   | 0                                  | 2       | 353018<br>238306 |
|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events  Boundary Accuracy: As Supplied | A13SW<br>(SW)                                   | 0                                  | 2       | 352795<br>238412 |
|           | Extreme Flooding from Rivers or Sea without Defences   |   |                                    |         |                  |
|           | Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied   | A13NE<br>(NE)                                   | 13                                 | 2       | 353012<br>238576 |
|           | Extreme Flooding from Rivers or Sea without Defences   |   |                                    |         |                  |
|           | Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied   | A13SW<br>(W)                                    | 21                                 | 2       | 352752<br>238420 |
|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied                     | A13SW<br>(SW)                                   | 35                                 | 2       | 352762<br>238394 |
|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied                     | A13SE<br>(SE)                                   | 56                                 | 2       | 353116<br>238356 |
|           | Extreme Flooding from Rivers or Sea without Defences   |   |                                    |         |                  |
|           | Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied   | A13SE<br>(SE)                                   | 64                                 | 2       | 353102<br>238300 |
|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied                     | A13NW<br>(N)                                    | 65                                 | 2       | 352864<br>238730 |
|           | Extreme Flooding from Rivers or Sea without Defences   |   |                                    |         |                  |
|           | Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied   | A13SE<br>(E)                                    | 70                                 | 2       | 353136<br>238442 |
|           | Extreme Flooding from Rivers or Sea without Defences   |   |                                    |         |                  |
|           | Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied   | A13NE<br>(E)                                    | 83                                 | 2       | 353112<br>238522 |
|           | Extreme Flooding from Rivers or Sea without Defences   |   |                                    |         |                  |
|           | Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied   | A13NE<br>(E)                                    | 103                                | 2       | 353148<br>238506 |
|           | Extreme Flooding from Rivers or Sea without Defences   |   |                                    |         |                  |
|           | Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied   | A13SW<br>(SW)                                   | 109                                | 2       | 352682<br>238368 |
|           | Extreme Flooding from Rivers or Sea without Defences   |   |                                    |         |                  |
|           | Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied   | A13NW<br>(NW)                                   | 116                                | 2       | 352680<br>238644 |
|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied                     | A13SE<br>(SE)                                   | 130                                | 2       | 353048<br>238136 |
|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events Boundary Accuracy: As Supplied  | A8NE<br>(S)                                     | 157                                | 2       | 353044<br>238106 |



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|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied           | A13NW<br>(NW)                                   | 166                                | 2       | 352614<br>238660 |
|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied           | A13NW<br>(W)                                    | 174                                | 2       | 352550<br>238588 |
|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied           | A13NE<br>(NE)                                   | 185                                | 2       | 353106<br>238732 |
|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied           | A14SW<br>(E)                                    | 196                                | 2       | 353264<br>238392 |
|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied           | A8NE<br>(SE)                                    | 204                                | 2       | 353144<br>238110 |
|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied           | A8NE<br>(SE)                                    | 223                                | 2       | 353116<br>238066 |
|           | Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied           | A14SW<br>(E)                                    | 239                                | 2       | 353304<br>238370 |
|           | Flooding from Rivers or Sea without Defences  Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied                           | A13SE<br>(E)                                    | 0                                  | 2       | 352962<br>238465 |
|           | Areas Benefiting from Flood Defences None  |   |                                    |         |                  |
|           | Flood Water Storage Areas<br>None  |   |                                    |         |                  |
|           | Flood Defences<br>None   |   |                                    |         |                  |
| 72        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 112.3  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1 | A8NW<br>(S)                                     | 294                                | 6       | 352788<br>238013 |
| 73        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 244.4  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1 | A8NW<br>(S)                                     | 323                                | 6       | 352778<br>238016 |
| 74        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 1599.0  Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Gwy Catchment Name: Wye Primacy: 1    | A18SE<br>(N)                                    | 382                                | 6       | 353084<br>239022 |



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| 75        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 414.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1    | A8NW<br>(SW)                                    | 403                                | 6       | 352553<br>238079 |
| 76        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 1083.6  Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Gwy Catchment Name: Wye Primacy: 1 | A12NE<br>(W)                                    | 421                                | 6       | 352297<br>238622 |
| 77        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 272.6 Watercourse Level: Not Supplied True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1               | A9SW<br>(SE)                                    | 569                                | 6       | 353262<br>237752 |
| 78        | OS Water Network Lines  Watercourse Form: Inland river  Watercourse Length: 40.1  Watercourse Level: On ground surface True  Watercourse Name: Not Supplied  Catchment Name: Wye  Primacy: 1      | A12SW<br>(W)                                    | 610                                | 6       | 352095<br>238412 |
| 79        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 74.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Gwy Catchment Name: Wye Primacy: 1    | A12SW<br>(W)                                    | 611                                | 6       | 352095<br>238412 |
| 80        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 146.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Gwy Catchment Name: Wye Primacy: 2   | A14NE<br>(E)                                    | 667                                | 6       | 353687<br>238684 |
| 81        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 164.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Gwy Catchment Name: Wye Primacy: 1   | A14NE<br>(E)                                    | 670                                | 6       | 353685<br>238696 |
| 82        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 144.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Red Brook Catchment Name: Wye Primacy: 1  | A12SW<br>(W)                                    | 685                                | 6       | 352021<br>238403 |
| 83        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 217.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Gwy Catchment Name: Wye Primacy: 1   | A12SW<br>(W)                                    | 685                                | 6       | 352021<br>238403 |

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| 84        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 1248.7  Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Gwy Catchment Name: Wye Primacy: 1   | A14NE<br>(E)                                    | 725                                | 6       | 353775<br>238591 |
| 85        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 326.7  Watercourse Level: On ground surface Permanent: True Watercourse Name: Red Brook Catchment Name: Wye Primacy: 1   | A7NW<br>(SW)                                    | 746                                | 6       | 352145<br>237998 |
| 86        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 57.8  Watercourse Level: Permanent: True Watercourse Name: Red Brook Catchment Name: Wye Primacy: 1                      | A7NW<br>(SW)                                    | 748                                | 6       | 352182<br>237953 |
| 87        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 10.0 Watercourse Level: Underground Permanent: True Watercourse Name: Red Brook Catchment Name: Wye Primacy: 1           | A7NW<br>(SW)                                    | 753                                | 6       | 352189<br>237946 |
| 88        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 152.5  Watercourse Level: On ground surface Permanent: True Watercourse Name: Red Brook Catchment Name: Wye Primacy: 1   | A7NW<br>(SW)                                    | 754                                | 6       | 352189<br>237946 |
| 89        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 76.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1  | A8SE<br>(S)                                     | 770                                | 6       | 353153<br>237503 |
| 90        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 9.7 Watercourse Level: Underground Permanent: True Watercourse Name: Red Brook Catchment Name: Wye Primacy: 1            | A12SW<br>(W)                                    | 784                                | 6       | 351947<br>238284 |
| 91        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 111.0 Watercourse Level: Not Supplied True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1                 | A7SE<br>(SW)                                    | 786                                | 6       | 352352<br>237749 |
| 92        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 114.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1 | A7SE<br>(SW)                                    | 786                                | 6       | 352352<br>237749 |



| Map<br>ID | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
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| 93        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Red Brook Catchment Name: Wye Primacy: 1                              | A12SW<br>(W)                                    | 791                                | 6       | 351941<br>238276 |
| 94        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 6.6 Watercourse Level: Underground True Watercourse Name: Red Brook Catchment Name: Wye Primacy: 1                       | A7NE<br>(SW)                                    | 794                                | 6       | 352262<br>237814 |
| 95        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 12.2 Watercourse Level: Underground True Watercourse Name: Red Brook Catchment Name: Wye Primacy: 1                      | A12SW<br>(W)                                    | 796                                | 6       | 351939<br>238269 |
| 96        | OS Water Network Lines  Watercourse Form: Lake Watercourse Length: 47.5 Watercourse Level: On ground surface True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1                     | A8SW<br>(S)                                     | 798                                | 6       | 352721<br>237510 |
| 97        | OS Water Network Lines  Watercourse Form: Lake Watercourse Length: 7.3 Watercourse Level: On ground surface True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1                      | A8SW<br>(S)                                     | 798                                | 6       | 352766<br>237496 |
| 98        | OS Water Network Lines  Watercourse Form: Lake Watercourse Length: 20.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1          | A8SW<br>(S)                                     | 798                                | 6       | 352766<br>237496 |
| 99        | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 869.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Red Brook Catchment Name: Wye Primacy: 1    | A7NE<br>(SW)                                    | 800                                | 6       | 352256<br>237812 |
| 100       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 23.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Red Brook Catchment Name: Wye Primacy: 1     | A12SW<br>(W)                                    | 802                                | 6       | 351935<br>238257 |
| 101       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 70.4  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1 | A8SW<br>(S)                                     | 805                                | 6       | 352783<br>237484 |



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| 102       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 271.3  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1 | A7SE<br>(SW)                                    | 806                                | 6       | 352507<br>237574 |
| 103       | OS Water Network Lines  Watercourse Form: Lake Watercourse Length: 104.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1          | A8SW<br>(S)                                     | 807                                | 6       | 352850<br>237465 |
| 104       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 3.2  Watercourse Level: Underground True Watercourse Name: Red Brook Catchment Name: Wye Primacy: 1                       | A12SW<br>(W)                                    | 816                                | 6       | 351929<br>238235 |
| 105       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 179.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1  | A3NE<br>(S)                                     | 821                                | 6       | 352950<br>237439 |
| 106       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 16.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1   | A3NE<br>(S)                                     | 824                                | 6       | 353115<br>237442 |
| 107       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 49.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1   | A3NE<br>(S)                                     | 839                                | 6       | 353121<br>237427 |
| 108       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 11.0  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1  | A3NE<br>(S)                                     | 839                                | 6       | 353121<br>237427 |
| 109       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 939.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Eign Brook Catchment Name: Wye Primacy: 1    | A17NE<br>(NW)                                   | 840                                | 6       | 352226<br>239215 |
| 110       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 67.8  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1  | A7SE<br>(SW)                                    | 844                                | 6       | 352486<br>237585 |



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| 111       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 26.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1   | A7SE<br>(SW)                                    | 844                                | 6       | 352507<br>237574 |
| 112       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 76.0  Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1       | A7SE<br>(SW)                                    | 853                                | 6       | 352447<br>237603 |
| 113       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 21.0  Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1        | A3NE<br>(S)                                     | 860                                | 6       | 353079<br>237401 |
| 114       | OS Water Network Lines  Watercourse Form: Inland river  Watercourse Length: 61.9  Watercourse Level: On ground surface  True  Watercourse Name: Not Supplied  Catchment Name: Wye  Primacy: 1        | A3NE<br>(S)                                     | 863                                | 6       | 353059<br>237396 |
| 115       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 8.4  Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1         | A7SE<br>(SW)                                    | 864                                | 6       | 352511<br>237548 |
| 116       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 244.6  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1 | A7SE<br>(SW)                                    | 870                                | 6       | 352512<br>237539 |
| 117       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 148.6  Watercourse Level: On ground surface Permanent: True Watercourse Name: Red Brook Catchment Name: Wye Primacy: 1    | A9NE<br>(SE)                                    | 892                                | 6       | 353840<br>237926 |
| 118       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 1743.4  Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Gwy Catchment Name: Wye Primacy: 1    | A11SE<br>(W)                                    | 893                                | 6       | 351809<br>238437 |
| 119       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 34.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Withy Brook Catchment Name: Wye Primacy: 1    | A11SE<br>(W)                                    | 893                                | 6       | 351809<br>238437 |

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| Map<br>ID | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|------------------------------------|---------|------------------|
| 120       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 2.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Withy Brook Catchment Name: Wye Primacy: 1     | A11SE<br>(W)                                    | 911                                | 6       | 351794<br>238407 |
| 121       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 156.8  Watercourse Level: On ground surface Permanent: True Watercourse Name: Withy Brook Catchment Name: Wye Primacy: 1  | A11SE<br>(W)                                    | 913                                | 6       | 351792<br>238406 |
| 122       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 133.8  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wye Primacy: 1 | A9NE<br>(SE)                                    | 939                                | 6       | 353864<br>237867 |
| 123       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 10.2 Watercourse Level: Underground Permanent: True Watercourse Name: Withy Brook Catchment Name: Wye Primacy: 1          | A11SE<br>(W)                                    | 988                                | 6       | 351734<br>238291 |
| 124       | OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 680.7  Watercourse Level: On ground surface Permanent: True Watercourse Name: Withy Brook Catchment Name: Wye Primacy: 1  | A11SE<br>(W)                                    | 992                                | 6       | 351732<br>238281 |

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| Map<br>ID |   | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|--|---|------------------------------------|---------|------------------|
|           | Historical Landfill S   | ites   |   |                                    |         |                  |
| 125       | Licence Holder: Location: Name: Operator Location: Boundary Accuracy: Provider Reference: First Input Date: Last Input Date: Last Input Date: Specified Waste Type: EA Waste Ref: Regis Ref: WRC Ref: BGS Ref: Other Ref: |  | A6NE<br>(W)                                     | 991                                | 2       | 351821<br>238040 |
|           | Licensed Waste Ma   | nagement Facilities (Locations)  |   |                                    |         |                  |
| 126       | Licence Number: Location:  Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered: IPPC Reference: Positional Accuracy:              | 30085 Waste Reclamation Centre, Fir Tree Lane, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6LA Beacon Waste Ltd Not Supplied Environment Agency - Midlands Region, West Area Household, Commercial And Industrial Transfer Stations Surrendered 2nd March 1993 17th May 2010 Not Supplied Not Supplied Not Supplied Not Supplied Su | A13SE<br>(SE)                                   | 35                                 | 2       | 353099<br>238370 |
|           | Licensed Waste Ma   | nagement Facilities (Locations)  |   |                                    |         |                  |
| 127       | Positional Accuracy:  | 401273 Unit 285, Fir Tree Lane, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6LA Quickskip Hereford Limited Not Supplied Environment Agency - Midlands Region, West Area Treatment of waste to produce soil <75,000 tpy Issued 17th April 2014 Not Supplied  | A13SE<br>(E)                                    | 141                                | 2       | 353204<br>238359 |
|           | Licensed Waste Ma   | nagement Facilities (Locations)  |   |                                    |         |                  |
| 128       | Licence Number: Location: Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered: IPPC Reference: Positional Accuracy:               | 30271 Unit 18, Thorn Business Park, Rotherwas, Hereford, Herefordshire, HR2 6JT Lively Joseph Henry Not Supplied Environment Agency - Midlands Region, West Area Special Waste Transfer Stations Modified 15th October 2002 13th August 2014 Not Supplied Located by supplier to within 10m   | A13SW<br>(SW)                                   | 295                                | 2       | 352648<br>238142 |





#### Quadrant Estimated Мар Reference Details Distance Contact NGR (Compass ID From Site Direction) Licensed Waste Management Facilities (Locations) 129 Licence Number: A12NE 300 2 352400 Land Adjacent To Unit 3, Thorn Business Park, Rotherwas Ind Estate, (W) 238500 Location: Hereford, Herefordshire, HR2 6JT Operator Name: Balfour Beatty Living Places Ltd Operator Location: Not Supplied Environment Agency - Midlands Region, West Area Authority: Physical Treatment Facilities Site Category: Licence Status: Tránsferred Issued: 30th June 2009 Last Modified: 28th July 2011 Not Supplied Expires: Not Supplied Suspended: Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m Licensed Waste Management Facilities (Locations) A9NW 130 Licence Number: 30203 476 2 353429 Rotherwas Transfer Facility, Chapel Road, Hereford, Herefordshire, HR2 6LD 238039 Location: (SE) Operator Name: Beacon Waste Ltd Operator Location: Not Supplied Environment Agency - Midlands Region, West Area Household, Commercial And Industrial Transfer Stations Authority: Site Category: Licence Status: Modified Issued: 13th January 1998 Last Modified: 7th March 2003 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m Licensed Waste Management Facilities (Locations) 131 Licence Number: 30233 A9NW 504 2 353356 Location: Rotherwas Household Waste Stn, Chapel Road, Rotherwas Ind Est, Hereford, (SE) 237898 Herefordshire, HR2 6LD Mercia Waste Management Ltd Operator Name: Operator Location: Not Supplied Environment Agency - Midlands Region, West Area Special Waste Transfer Stations Authority: Site Category: Licence Status: Modified 20th July 2000 Issued: Last Modified: 12th May 2012 Expires: Not Supplied Suspended: Not Supplied Not Supplied Revoked: Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m Licensed Waste Management Facilities (Locations) 132 Licence Number: 30026 A9NW 604 353557 2 Quickskip Transfer Stn, Reynard Close, Rotherwas Ind Est, Hereford, (SE) 238002 Location: Herefordshire, HR2 6JH Operator Name: Lively Joseph Henry Operator Location: Not Supplied Environment Agency - Midlands Region, West Area Authority: Household, Commercial And Industrial Transfer Stations Site Category: Licence Status: Modified 28th April 1989 Issued: Last Modified: 1st February 2005 Expires: Not Supplied Suspended: Revoked: Not Supplied Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m





#### LANDMARK INFORMATION GROUP\*

| Map<br>ID |   | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|--|---|------------------------------------|---------|------------------|
| 133       | Licence Number: Location:  Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended; Revoked: Surrendered: IPPC Reference: | nagement Facilities (Locations) 30129 Eign Waste Treatment Centre, Outfall Road, Hereford, Herefordshire, HR1 1TG Welsh Water Organic Waste Limited Not Supplied Environment Agency - Midlands Region, West Area Treatment - Biological Transferred 26th May 1994 9th April 2015 Not Supplied Located by supplier to within 10m  | A12NW<br>(W)                                    | 643                                | 2       | 352090<br>238704 |
| 134       | Licence Number: Location: Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered: IPPC Reference:  | nagement Facilities (Locations)  400043  Outfall Works Road, Hereford, Herefordshire, HR1 1RY Dwr Cymru (Welsh Water) Not Supplied Environment Agency - Midlands Region, West Area Landfill Gas Engine (<3 mW) Issued 27th March 2013 Not Supplied Located by supplier to within 100m  | A12NW<br>(W)                                    | 707                                | 2       | 352000<br>238600 |
| 135       | Licence Number: Location:  Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered: IPPC Reference: | nagement Facilities (Locations) 30129 Eign Waste Management Centre, Outfall Road, Hereford, Herefordshire, HR1 1TG Welsh Water Industrial Services Alexandra Gate, P O Box 295, Rover Way, Cardiff, CF24 5UE Environment Agency Wales, South East Area Treatment - Biological Issued 26th May 1994 Not Supplied Located by supplier to within 10m   | A12NW<br>(W)                                    | 715                                | 2       | 352028<br>238746 |
| 136       | Licence Number: Location:  Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered: IPPC Reference: | Augument Facilities (Locations) 402983 Quickskip Hereford Limited, Land Off Chapel Road, Rotherwas Industrial Est, Hereford, Herefordshire, HR2 6LD Quickskip Hereford Ltd Not Supplied Environment Agency - Midlands Region, West Area Treatment of waste to produce soil <75,000 tpy Issued 9th March 2016 Not Supplied | A14SE<br>(E)                                    | 837                                | 2       | 353882<br>238197 |





| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
| 137       | Licensed Waste Ma<br>Licence Number:<br>Location:  | nagement Facilities (Locations) 30137 City Spares, Watery Lane, Lower Bullingham, Herefordshire, HR2 6JW  | A7SE<br>(SW)                                    | 934                                | 2       | 352425<br>237521 |
|           | Table Common of the  | Hardman Clive Not Supplied Environment Agency - Midlands Region, West Area Metal Recycling Sites (Vehicle Dismantlers) Transferred 6th July 1994 Not Supplied Located by supplier to within 10m   | 27 27   |                                    |         |                  |
|           |  | nagement Facilities (Locations)   |   |                                    | 2       |                  |
| 138       | Licence Number: Location:  Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered:                                      | 400738 Eastside Recycling Facility, Fordshill Road, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6NS Avalon Metals Limited Not Supplied Environment Agency - Midlands Region, West Area Metal Recycling Sites (Vehicle Dismantlers) Issued 28th January 2014 Not Supplied  | A10NW<br>(SE)                                   | 973                                | 2       | 353950<br>237970 |
|           | IPPC Reference:<br>Positional Accuracy:  | Not Supplied Located by supplier to within 10m  |   |                                    |         |                  |
|           |  |   |   |                                    |         |                  |
| 138       | Licence Number: Location:  Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered: IPPC Reference: Positional Accuracy: | nagement Facilities (Locations) 30391 Lloyd George House, Fordshill Road, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6NS Eastside 2000 Limited Not Supplied Environment Agency - Midlands Region, West Area Special Waste Transfer Stations Modified 1st December 2006 17th June 2016 Not Supplied Located by supplier to within 10m  | A10NW<br>(SE)                                   | 973                                | 2       | 353950<br>237970 |
| 139       | Licence Number: Location:  Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered: IPPC Reference: Positional Accuracy: | nagement Facilities (Locations) 30109 Greenapple Sludge, Fordshill Road, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6NS Greenapple Sludge Ltd Not Supplied Environment Agency - Midlands Region, West Area Household, Commercial And Industrial Transfer Stations Surrendered 14th September 1993 Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied 27th May 2011 Not Supplied Located by supplier to within 10m  | A10NW<br>(SE)                                   | 988                                | 2       | 353935<br>237901 |
|           | Local Authority Lan  |   |   | =                                  |         | WW.              |
|           | Name:  | Herefordshire Council - Has not been able to supply Landfill data   |   | 0                                  | 7       | 352903<br>238465 |
|           | Potentially Infilled I   | ACCEPTANCE OF THE CONTRACT OF |   |                                    |         | 230403           |
| 140       | Potentially Infilled L<br>Bearing Ref:<br>Use:<br>Date of Mapping:   | _and (Non-Water) E Unknown Filled Ground (Pit, quarry etc) 1985   | A14SE<br>(E)                                    | 587                                | *)      | 353642<br>238268 |
| 141       | Potentially Infilled L<br>Bearing Ref:<br>Use:<br>Date of Mapping:   | and (Non-Water) SW Unknown Filled Ground (Pit, quarry etc) 1985   | A7SE<br>(SW)                                    | 875                                | æ1      | 352451<br>237574 |





#### Quadrant **Estimated** Мар Reference Details Distance Contact NGR (Compass ID From Site Direction) Potentially Infilled Land (Non-Water) 142 Bearing Ref: A23SW 955 352662 Unknown Filled Ground (Pit, quarry etc) (N) 239600 Date of Mapping: 1985 Potentially Infilled Land (Non-Water) Bearing Ref: A3NE 989 353055 143 Unknown Filled Ground (Pit, quarry etc) Use: (S) 237270 Date of Mapping: Potentially Infilled Land (Water) A13SE 144 Use Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 0 353004 Date of Mapping: (SE) 238374 Potentially Infilled Land (Water) 145 Unknown Filled Ground (Pond, marsh, river, stream, dock etc) A13SE 94 353156 Use Date of Mapping: (SE) 238356 Potentially Infilled Land (Water) A18SW 146 Use Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 490 352669 Date of Mapping: 1964 (N) 239113 Potentially Infilled Land (Water) 147 Unknown Filled Ground (Pond, marsh, river, stream, dock etc) A8SW 520 352879 Date of Mapping: (S) 237753 Potentially Infilled Land (Water) 148 Unknown Filled Ground (Pond, marsh, river, stream, dock etc) A185W 541 352585 Date of Mapping: 1964 (NW) 239127 Potentially Infilled Land (Water) 149 Unknown Filled Ground (Pond, marsh, river, stream, dock etc) A8SE 625 353058 Use Date of Mapping: 237636 1890 (S) Potentially Infilled Land (Water) Unknown Filled Ground (Pond, marsh, river, stream, dock etc) A9NF 150 Use 641 353581 Date of Mapping: 1890 (SE) 237950 Potentially Infilled Land (Water) 151 Unknown Filled Ground (Pond, marsh, river, stream, dock etc) A19NW 654 353270 Date of Mapping: (NE) 239211 Potentially Infilled Land (Water) A9SW 152 Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 679 353448 Date of Mapping: (SE) 237746 Potentially Infilled Land (Water) 153 Unknown Filled Ground (Pond, marsh, river, stream, dock etc) A23SE 852 353082 Date of Mapping: 239505 (N) Registered Landfill Sites 154 Licence Holder: Welsh Water Authority A12NW 707 2 352000 Licence Reference: 1/052/01 (W) 238600 Hereford Sewage Works, Eign, Hereford, Herefordshire Site Location: Licence Easting: 352000 Licence Northing: 238600 Operator Location: Reay House, 49 Bodenham Road, HEREFORD, Herefordshire, HR1 2T Authority: Environment Agency Wales, South East Area Site Category: Max Input Rate: Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year) Waste Source No known restriction on source of waste Restrictions: Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st February 1982 Preceded By Not Given Licence: Superseded By Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable **Authorised Waste Excavated Natural Materials \$** Hardcore And Rubble





#### LANDMARK INFORMATION GROUP\*

| Map<br>ID |  | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|--|---|------------------------------------|---------|------------------|
|           | Registered Waste T   | ransfer Sites  |   |                                    |         |                  |
| 155       | Licence Holder: Licence Reference: Site Location: Operator Location: Authority: Site Category: Max Input Rate: Waste Source Restrictions: Licence Status: Dated:   | Beacon Waste Ltd 1.056.38 Fir Tree Lane W.R.C, Rotherwas.Industrial Estate, Hereford, Herefordshire 106 High Street, EVESHAM, Worcestershire, WR11 4EZ Environment Agency Wales, South East Area Civic Amenity Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) No known restriction on source of waste  Operational as far as is knownOperational 2nd March 1993  | A13SE<br>(SE)                                   | 60                                 | 2       | 353020<br>238200 |
|           | Preceded By<br>Licence:<br>Superseded By   | R. 3<br>Not Given  |   |                                    |         |                  |
|           | Licence:<br>Positional Accuracy:<br>Boundary Quality:<br>Authorised Waste  | Manually positioned to the address or location Not Supplied Bulky Houshold Waste Empty Waste Oil Containers Liquid Propane Gas Cylinders Oil Contaminated Materials Scrap Batteries Unwanted H'Hld Chems = Pharms/Cosmetic   |   |                                    |         |                  |
|           | Prohibited Waste   | Unwanted H'Hld Chems = Trade-Named  Waste Oil Clinical Wastes Difficult Waste N.O.S. As In W.M.P.26 Food Waste Liquid/Sludge Waste N.O.S. Obnoxious Wastes Trade Or Business Waste   |   |                                    |         |                  |
|           | Registered Waste T   | ransfer Sites  |   |                                    |         |                  |
| 155       | Licence Holder: Licence Reference: Site Location: Operator Location: Authority: Site Category: Max Input Rate: Waste Source Restrictions: Licence Status: Dated: Preceded By Licence: Superseded By Licence: Positional Accuracy: Boundary Quality: Authorised Waste | Hereford & Worcs C.C. R. 3 Fir Tree Lane, Rotherwas, Hereford, Herefordshire County Hall, Spetchley Road, WORCESTER, Worcestershire, WR5 2NP Environment Agency Wales, South East Area Civic Amenity Undefined No known restriction on source of waste  Record supersededSuperseded Not Supplied Not Given  1.056.38  Manually positioned to the address or location Not Supplied Awkward/Bulky Houshold Waste   | A13SE<br>(SE)                                   | 60                                 | 2       | 353020<br>238200 |
|           |  | Waste Engine Oil   |   |                                    |         |                  |
| 156       |  | Cunliffe & Lively T/A Quickskip Ltd 1.056.22 Reynard Close, Rotherwas Industrial Estate, HEREFORD, Herefordshire, HR2 6JH Reynard Close, Rotherwas Industrial Estate, HEREFORD, Herefordshire, HR2 6JH Environment Agency Wales, South East Area Transfer Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) No known restriction on source of waste  Operational as far as is knownOperational 28th April 1989 Not Given  Positioned by the supplier |   | 597                                | 2       | 353573<br>238049 |
|           | Boundary Quality:<br>Authorised Waste<br>Prohibited Waste  | Good Construction Ind. Wastes Household Waste Ind. Non-Haz. Waste Max.Waste Permitted By Licence-Stated Clinical Wastes Difficult Wastes (As In Wmp.26) Obnoxious Wastes   |   |                                    |         |                  |





#### Quadrant Estimated Мар Reference Details Distance Contact NGR (Compass ID From Site Direction) Registered Waste Transfer Sites 157 Licence Holder: Mercia Waste Management Ltd A14SE 624 2 353650 Licence Reference: EAWML30233 238160 (E) Rotherwas H.W.Station, Chapel Road, Rotherwas Industrial Estate, Site Location: HEREFORD, Herefordshire, HR2 6LD Brook House, Oldham Road, Middleton, MANCHESTER, Greater Manchester, Operator Location: M24 1AY Authority: Environment Agency Wales, South East Area Site Category: Transfer Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per Waste Source No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational 20th July 2000 1.056.55 Dated: Preceded By Licence: Superseded By Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Quality: Authorised Waste Not Supplied Maximum Waste Permitted By Licence Newlicence, Wastes Not To Hand Ukw 21.00.00 Inert Materials Ukw 22.00.00 General & Biodegradable Waste Ukw 23.00.00 Metals & Discarded/Scrap Composite Equipment Ukw 26.00.00 Asbestos Waste Registered Waste Transfer Sites 157 Licence Holder: Beacon Waste Ltd A14SE 624 2 353650 icence Reference: 1.056.55 (E) 238160 Site Location: Rotherwas Transfer Station, Chapel Road, Rotherwas Industrial Estate, Hereford, Herefordshire, Hr2 6ld 106 High Street, EVESHAM, Worcestershire, WR11 4EZ Environment Agency Wales, South East Area Operator Location: Authority: Site Category: Transfer Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per Waste Source No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational 13th January 1998 Dated: Preceded By Not Given Licence: Superseded By Not Given Licence: Positional Accuracy: Manually positioned to the address or location Not Supplied Animal Bedding Difficult Wastes (As In Wmp.26) Only Comprising Boundary Quality: Authorised Waste Drain/Interceptor Wastes **Drained Road Sweepings** Empty Used Containers Excavated Materials Food Processing Wastes/Starch Household & Commercial Waste Including Ind. Non-Haz. Waste Inert Waste Including Max.Waste Permitted By Licence Scrap Rubber (Including Tyres) **Prohibited Waste** Any Sealed Containers Clinical Wastes Contaminated Materials Difficult Waste N.O.S. Explosive/Similar Waste Flammable Waste Liquid Wastes Other Obnoxious Wastes Oxidising Waste Sludge Wastes With Moisture Content > 80%W/W Waste In Pressurised Containers Waste N.O.S. Waste Reactive With Air Or Water Waste With Ph < 4 Waste With Ph > 11.5





Other Organic Compounds

Paint Waste

Prohibited Waste

Soaps & Detergents

Special Wastes

Oxygen Containing Organic Compounds

Water (Contaminated)
Difficult Waste As In W.M.P.26 -N.O.S.

Pharmaceutical/Cosmetic Products Phenols, Analogues/Derivatives Polymeric Material, Products/Scrap

#### Quadrant **Estimated** Reference Мар Details Distance Contact NGR (Compass ID From Site Direction) Registered Waste Transfer Sites 158 Licence Holder: Greenapple Sludge Ltd A10NW 988 2 353935 Licence Reference: 1.056.45 (SE) 237900 Fordshill Road, Rotherwas Industrial Estate, HEREFORD, Herefordshire, HR2 Site Location: 6NS Operator Location: As Site Address Environment Agency Wales, South East Area Authority: Site Category: Transfer Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per Waste Source No known restriction on source of waste Restrictions Licence Status: Operational as far as is knownOperational 14th September 1993 Dated: Preceded By Not Given Licence: Superseded By Not Given Licence: Positional Accuracy: Located by supplier to within 100m Boundary Quality: Authorised Waste Not Supplied Domestic Septic Tank & Cesspool Wastes Max.Storage In Licence **Prohibited Waste** Difficult Wastes (As In Wmp.26) Waste N.O.S. Registered Waste Treatment or Disposal Sites Welsh Water Industrial Services Ltd A12NW 159 Licence Holder 670 352100 2 Licence Reference: 1.052.07 (NW) 238800 Eign Sewage Treatment Works, Outfall Road, Hereford, Herefordshire Site Location: Operator Location: PO 295, Alexandra Gate, Rover Way, CARDIFF, South Glamorgan, CF2 2UE Authority: Environment Agency Wales, South East Area Site Category: Treatment Max Input Rate: Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year) Waste Source No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational Dated: 26th May 1994 Preceded By Not Given Licence: Superseded By Not Given Licence: Positional Accuracy: Manually positioned to the address or location **Boundary Quality:** Not Supplied **Authorised Waste Animal Processing Wastes** Cellulose Wastes (Natural/Synth.) Fats, Waxes And Greases Food Processing Wastes/Starch Glue Wastes Ion-Exchange Resin Wastes Latex, Latex/Rubber Sol'Ns/Susp'Ns Max.Waste Permitted By Licence Mixed Inorganic Compounds Mixed Organic Compounds



# **Envirocheck**®

#### LANDMARK INFORMATION GROUP\*

| Map<br>ID |   | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|--|---|------------------------------------|---------|------------------|
|           | Registered Waste T  | reatment or Disposal Sites   |   |                                    |         |                  |
| 160       | Licence Holder: Licence Reference: Site Location: Operator Location: Authority: Site Category: Max Input Rate: Waste Source Restrictions: Licence Status: Dated: Preceded By Licence: Superseded By Licence: Positional Accuracy: Boundary Quality: Authorised Waste Prohibited Waste | Watery Lane, Lower Bullingham, HEREFORD, Herefordshire, HR2 6JW As Site Address Environment Agency Wales, South East Area Scrapyard Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) No known restriction on source of waste  Operational as far as is knownOperational 6th July 1994 Not Given | A7SE<br>(SW)                                    | 940                                | 2       | 352430<br>237510 |



#### **Hazardous Substances**

| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
|           | Control of Major Ac  | cident Hazards Sites (COMAH)  |   |                                    |         |                  |
| 161       | Name:<br>Location:<br>Reference:<br>Type:<br>Status:<br>Positional Accuracy: | Sandling Fireworks Rotherwas Industrial, HEREFORD, Hereford & Worcester, HR Not Supplied Lower Tier Record Ceased To Be Supplied Under COMAH Regulations Manually positioned within the geographical locality | A9NW<br>(SE)                                    | 614                                | 8       | 353552<br>237974 |
| 162       | Explosive Sites Name: Location: Status: Positional Accuracy:                 | North Site, Fir Tree Lane/G E Lundegaard T/A Sandl<br>North Site, Fir Tree Lane, Rotherwas, Hereford, Hr2 6la<br>Not Active<br>Manually positioned to the road within the address or location                 | A13SE<br>(SE)                                   | 18                                 | 8       | 353073<br>238348 |
| 163       | Explosive Sites Name: Location: Status: Positional Accuracy:                 | Sandling Fireworks 14 Romney Huts, Chapel Road, Rotherwas Industrial Estate, Hereford, HR2 6LD Not Active Automatically positioned to the address   | A9NE<br>(SE)                                    | 686                                | 8       | 353696<br>238106 |

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| Map<br>ID |   | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|---|---|------------------------------------|---------|------------------|
|           | BGS 1:625,000 Solid   | d Geology   |   |                                    |         |                  |
|           | Description:  | Pridoli Rocks (Undifferentiated)  | A13SE<br>(SW)                                   | 0                                  | 1       | 352903<br>238465 |
|           | BGS Estimated Soil<br>Source:<br>Soil Sample Type:<br>Arsenic<br>Concentration:<br>Cadmium<br>Concentration:<br>Chromium<br>Concentration:<br>Lead Concentration:<br>Nickel<br>Concentration: | British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg <1.8 mg/kg 60 - 90 mg/kg  | A13SE<br>(SW)                                   | 0                                  | 1       | 352903<br>238465 |
|           | BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:                                  | British Geological Survey, National Geoscience Information Service<br>Sediment<br><15 mg/kg<br><1.8 mg/kg<br>90 - 120 mg/kg   | A19SW<br>(NE)                                   | 518                                | 1       | 353308<br>239000 |
|           | BGS Estimated Soil<br>Source:<br>Soil Sample Type:<br>Arsenic<br>Concentration:<br>Cadmium<br>Concentration:<br>Chromium<br>Concentration:<br>Lead Concentration:<br>Nickel<br>Concentration: | British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg <1.8 mg/kg 90 - 120 mg/kg   | A9SW<br>(SE)                                    | 704                                | 1       | 353452<br>237716 |
|           | BGS Estimated Soil<br>Source:<br>Soil Sample Type:<br>Arsenic<br>Concentration:<br>Cadmium<br>Concentration:<br>Chromium<br>Concentration:<br>Lead Concentration:<br>Nickel<br>Concentration: | British Geological Survey, National Geoscience Information Service<br>Sediment<br><15 mg/kg<br><1.8 mg/kg<br>90 - 120 mg/kg   | A7NW<br>(SW)                                    | 738                                | ì       | 352186<br>237967 |
| 164       | BGS Recorded Mines Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:                                 | Lower Bullingham Gravel Pit Lower Bullingham, Hereford, Herefordshire British Geological Survey, National Geoscience Information Service 27655 Opencast Ceased Hereford Washed Sand & Gravel Co., Ltd. Not Supplied Quatemary River Terrace Deposits, 1 Sand and Gravel Located by supplier to within 10m | A12SE<br>(SW)                                   | 368                                | 1       | 352440<br>238240 |
| 165       | BGS Recorded Mines Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:                                 | Rotherwas Rotherwas, Hereford, Herefordshire British Geological Survey, National Geoscience Information Service 44505 Opencast Ceased Unknown Operator Not Supplied Silurian Raglan Mudstone Formation Sand and Gravel Located by supplier to within 10m  | A14SE<br>(E)                                    | 593                                | 1       | 353647<br>238266 |





| Map<br>ID |  | Details   | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|--|---|---|------------------------------------|---------|------------------|
|           | BGS Recorded Mine  | eral Sites  |   |                                    |         |                  |
| 166       | Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy: | Church Farm Lower Bullingham, Hereford, Hereford, Herefordshire British Geological Survey, National Geoscience Information Service 44556 Opencast Ceased Unknown Operator Not Supplied Quaternary River Terrace Deposits, 2 Sand and Gravel Located by supplier to within 10m | A7SE<br>(SW)                                    | 939                                | 1       | 352433<br>237509 |
|           | BGS Recorded Min   | eral Sites  |   |                                    |         |                  |
| 167       | Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy: | Dinedor Dinedor, Hereford, Herefordshire British Geological Survey, National Geoscience Information Service 44506 Opencast Ceased Unknown Operator Not Supplied Devonian St Maughans Formation Sandstone Located by supplier to within 10m                                    | A3NE<br>(S)                                     | 990                                | 1       | 353059<br>237270 |
|           | BGS Measured Urb No data available   | an Soil Chemistry   |   |                                    |         |                  |
|           | BGS Urban Soil Ch  | emistry Averages  |   |                                    |         |                  |
|           | No data available  |   |   |                                    |         |                  |
|           | Coal Mining Affecte  | ed Areas  |   |                                    |         |                  |
|           | 1000 2000 2000 000 000 00  | reas of Great Britain   |   |                                    |         |                  |
|           | Risk:<br>Source:   | Highly Unlikely British Geological Survey, National Geoscience Information Service  | A13SE<br>(SW)                                   | 0                                  | 1       | 352903<br>238465 |
|           | Potential for Collap<br>Hazard Potential:<br>Source:   | sible Ground Stability Hazards<br>Very Low<br>British Geological Survey, National Geoscience Information Service  | A13SE<br>(SW)                                   | 0                                  | 1       | 352903<br>238465 |
|           | Potential for Collap<br>Hazard Potential:<br>Source:   | sible Ground Stability Hazards<br>No Hazard<br>British Geological Survey, National Geoscience Information Service   | A13SE<br>(E)                                    | 58                                 | 1       | 353123<br>238375 |
|           | Potential for Compi<br>Hazard Potential:<br>Source:  | ressible Ground Stability Hazards<br>No Hazard<br>British Geological Survey, National Geoscience Information Service  | A13SE<br>(SW)                                   | 0                                  | 1       | 352903<br>238465 |
|           | Potential for Compi<br>Hazard Potential:<br>Source:  | ressible Ground Stability Hazards<br>Very Low<br>British Geological Survey, National Geoscience Information Service   | A13SE<br>(E)                                    | 48                                 | 1       | 353109<br>238465 |
|           | Potential for Compi<br>Hazard Potential:<br>Source:  | ressible Ground Stability Hazards<br>Moderate<br>British Geological Survey, National Geoscience Information Service   | A13SE<br>(E)                                    | 58                                 |         | 353123<br>238375 |
|           | Potential for Groun<br>Hazard Potential:<br>Source:  | d Dissolution Stability Hazards<br>No Hazard<br>British Geological Survey, National Geoscience Information Service  | A13SE<br>(SW)                                   | 0                                  | 1       | 352903<br>238465 |
|           | Potential for Lands<br>Hazard Potential:<br>Source:  | lide Ground Stability Hazards<br>Very Low<br>British Geological Survey, National Geoscience Information Service   | A13SE<br>(SW)                                   | 0                                  | 1       | 352903<br>238465 |
|           | Potential for Runnii<br>Hazard Potential:<br>Source:   | ng Sand Ground Stability Hazards<br>Very Low<br>British Geological Survey, National Geoscience Information Service  | A13SE<br>(SW)                                   | 0                                  | 1       | 352903<br>238465 |
|           | Potential for Runnii<br>Hazard Potential:<br>Source:   | ng Sand Ground Stability Hazards<br>Low<br>British Geological Survey, National Geoscience Information Service   | A13SE<br>(E)                                    | 58                                 | 1       | 353123<br>238375 |
|           | Potential for Shrink<br>Hazard Potential:<br>Source:   | ing or Swelling Clay Ground Stability Hazards<br>No Hazard<br>British Geological Survey, National Geoscience Information Service  | A13SE<br>(SW)                                   | 0                                  | 1       | 352903<br>238465 |



# Geological

| Map<br>ID |   | Details  | Quadrant<br>Reference<br>(Compass<br>Direction) | Estimated<br>Distance<br>From Site | Contact | NGR              |
|-----------|---|--|---|------------------------------------|---------|------------------|
|           | Potential for Shrinking or Swelling Clay Ground Stability Hazards |  |   |                                    |         |                  |
|           | Hazard Potential:<br>Source:                                      | Very Low<br>British Geological Survey, National Geoscience Information Service   | A13SE<br>(E)                                    | 58                                 | 1       | 353123<br>238375 |
|           | Radon Potential - R   | adon Affected Areas  |   |                                    |         |                  |
|           | Affected Area: Source:  | The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level).  British Geological Survey, National Geoscience Information Service | A13SE<br>(E)                                    | 0                                  | 1       | 353050<br>238426 |
|           | Radon Potential - R   | adon Affected Areas  |   |                                    |         |                  |
|           | Affected Area:<br>Source:   | The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level).  British Geological Survey, National Geoscience Information Service    | A13SE<br>(SW)                                   | 0                                  | 1       | 352903<br>238465 |
|           | Radon Potential - R   | adon Protection Measures   |   |                                    |         |                  |
|           | Protection Measure:<br>Source:                                    | No radon protective measures are necessary in the construction of new<br>dwellings or extensions<br>British Geological Survey, National Geoscience Information Service                             | A13SE<br>(E)                                    | 0                                  | 1       | 353050<br>238426 |
|           | Radon Potential - R   | adon Protection Measures   |   |                                    |         |                  |
|           | Protection Measure:<br>Source:                                    | No radon protective measures are necessary in the construction of new<br>dwellings or extensions<br>British Geological Survey, National Geoscience Information Service                             | A13SE<br>(SW)                                   | 0                                  | 1       | 352903<br>238465 |

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