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31 August 2016

Ref. FOI2016/07873

Dear [REDACTED]

Thank you for your email of 17 August 2016 requesting the following information:

"I am writing to enquire as to whether you have records of the activities carried out at Chalgrove Airfield during and after the Second World War in relation to the recycling and reclamation of aircraft parts and ammunition.

Specifically, I am interested in whether there is a possibility of contamination of the land due to the dumping of quantities of live ammunition which are now buried beneath the surface.

I have reports from residents of Chalgrove Village that quantities of live ammunition have been discovered on the edge of the airfield that is adjacent to the B480, where the allotments are located, and also from residents who gained access to the airfield in the 1970s who also discovered live ammunition at various points around the site.

I would also like to know if there is ammunition buried on the site, if there are estimates of the quantity, and indications of the specific locations. "

I am treating your correspondence as a request for information under the Freedom of Information Act 2000 (FOIA).

A search for the information has now been completed within the Ministry of Defence (MOD) and I can confirm that all the information in scope of your request is held.

The information you have requested can be found within the Land Quality Assessment, Phase 1 Desk Study, Chalgrove Airfield Final report which has been attached at Annex A, but some of the information falls entirely within the scope of the absolute exemptions provided for at Section 40 (Personal Data) FOIA and has been redacted.

Section 40(2) has been applied to some of the information in order to protect personal information as governed by the Data Protection Act 1998. Section 40 is an absolute exemption and there is therefore no requirement to consider the public interest in making a decision to withhold the information.

Yours sincerely,

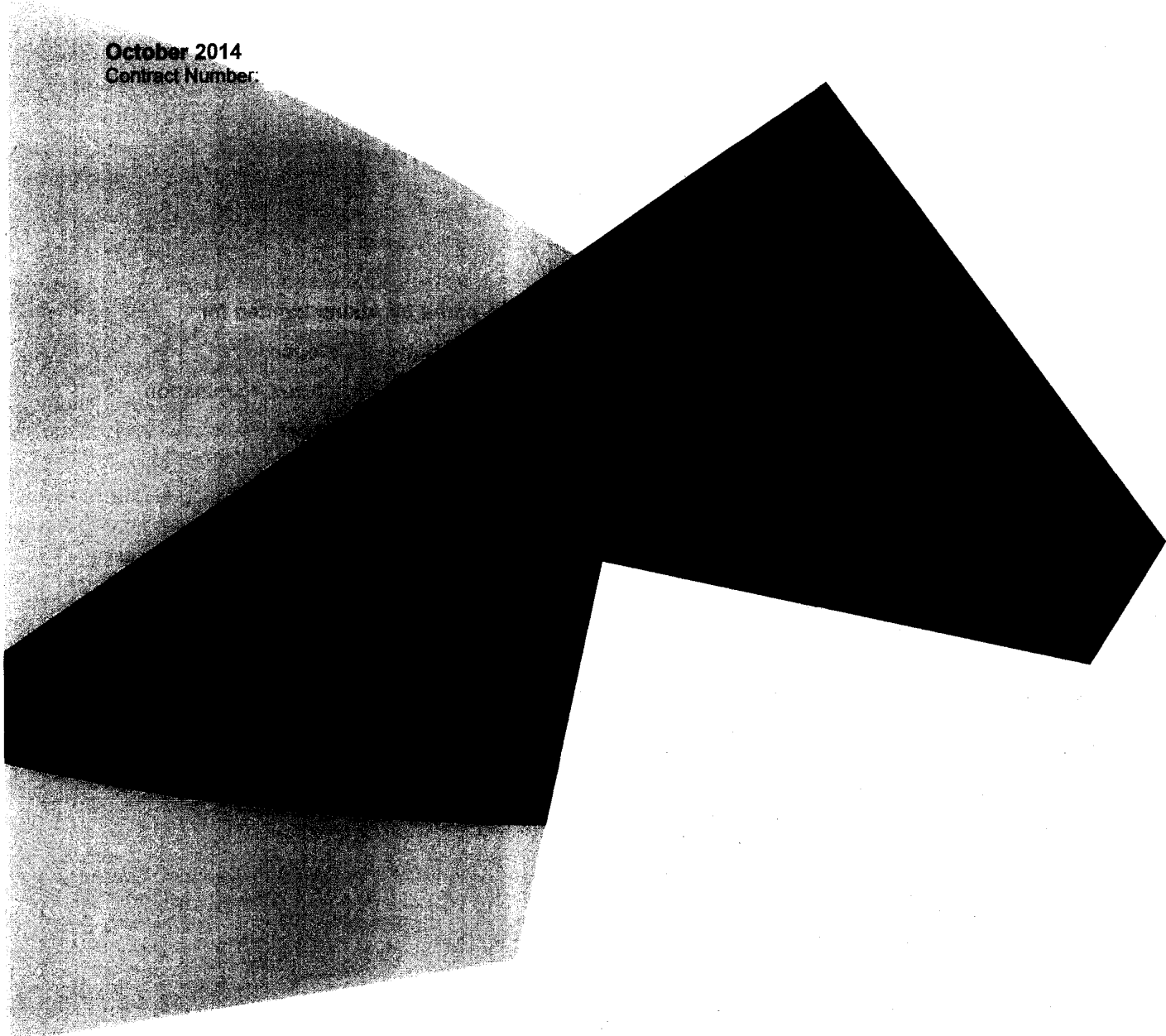
DIO Secretariat

If you are not satisfied with this response or you wish to complain about any aspect of the handling of your request, then you should contact me in the first instance. If informal resolution is not possible and you are still dissatisfied then you may apply for an independent internal review by contacting the Information Rights Compliance team, 2nd Floor, Zone N, MOD Main Building, Whitehall, SW1A 2HB (e-mail CIO-FOI-IR@mod.uk). Please note that any request for an internal review must be made within 40 working days of the date on which the attempt to reach informal resolution has come to an end.

If you remain dissatisfied following an internal review, you may take your complaint to the Information Commissioner under the provisions of Section 50 of the Freedom of Information Act. Please note that the Information Commissioner will not investigate your case until the MOD internal review process has been completed. Further details of the role and powers of the Information Commissioner can be found on the Commissioner's website, <http://www.ico.org.uk>.

Defence Infrastructure Organisation
Land Quality Assessment
Phase 1 Desk Study
Chalgrove Airfield, Chalgrove
Final

October 2014
Contract Number:





**Defence
Infrastructure
Organisation**

**Land Quality Assessment
Phase 1 Desk Study
Chalgrove Airfield, Chalgrove
Final**

**Defence Infrastructure Organisation
Estates Management Central**

**Prepared by
The Ministry of Defence
Defence Infrastructure Organisation
under contract number**

This document and its contents have been prepared and are intended solely for the Defence Infrastructure Organisation's information and use in relation to the Phase 1 Land Quality Assessment for Chalgrove Airfield in Chalgrove

Document History

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TASK OFFICER

PROJECT SPONSOR

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Land Quality Statement

Introduction and Terms of Reference

was instructed by the Defence Infrastructure Organisation (DIO) branch of the Ministry of Defence (MOD) to carry out a Phase 1 Land Quality Assessment (LQA) of Chalgrove Airfield near Chalgrove in Oxfordshire (the Site) under contract between ; and DIO. This Phase 1 LQA is required to assess the environmental quality of the Site and evaluate potential environmental/contamination liabilities associated with the Site.

Site Location and Surrounding Land Use

The Site is located directly to the north of Chalgrove village and approximately 2km to the east of Stadhampton in South Oxfordshire. The Site occupies approximately 240-hectares, comprising the main airfield, associated runways and perimeter track, together with operational buildings in the east and southeast.

Surrounding land is predominantly open farmland (agricultural) and residential.

Site Description

The Site is leased from the MOD by ! and used as an ejection seat test facility, together with packaging and warehousing. The Site also has two Meteor aircraft (1948 and 1952) which are serviced on-site. Operational areas are in the east (offices, storage, minor spray painting and machining, seat testing and cartridge testing/filing) with the airfield occupying the majority of the Site and used for static testing and seasonal grazing of sheep.

Site History

Historical maps show that the Site was fields until developed as a WW2 Airfield in 1943, becoming operational in 1944, predominantly for photographic and meteorological reconnaissance. The Site was vacated by the end of 1945 and then leased by ejection seat testing and storage.

Environmental Setting

Published geological information indicates that the Site is underlain by Superficial Deposits of the Pleistocene age Summertown-Radley Sand and Gravel Member to 2.6 and 6.6m below ground level resting on Lower Cretaceous age Gault Formation (clay or mudstone).

Site Sensitivity

Receptors	Sensitivity	Summary Description
Groundwater	Moderate	The underlying bedrock is classified a Secondary A Aquifer and shallow groundwater is present at 1.7 to 3.5m below ground level.
Surface Waters	Moderate	There are surface watercourses on and adjacent to the Site
Flora/Fauna	Low	No designated ecological receptors have been identified within 1 km

Potential Sources of Contamination

Based on the information reviewed as part of Phase 1 LQA, potential sources of contamination or areas of potential concern (APCs) were identified and a preliminary conceptual site model (CSM) developed, together with potential contaminant linkages (PCLs) or source-receptor-pathway linkages. Based on the data reviewed, potential on-site sources of contamination and 13 APCs have been identified from past activities including potential past accidental releases of fuels, oils, lubricants and solvents (hydrocarbons) from the tanks, fuel compound, petrol store, lubricant/inflammables store, motor transport sheds and store and below ground pipework, potential past, unknown accidental releases of photographic chemicals and photographic waste from the WW2 photographic block, potential presence of explosives residues/explosives from the former storage of

explosives and burning grounds (69-70 and 89 to 107) during WW2 and potential for residual contaminants (hydrocarbons, photographic chemical waste, x-ray processing waste) in the former below ground drums present during WW2.

Environmental Risk Assessment

An environmental risk assessment has been carried out for the 13 APCs identified and is summarised below

1. A moderate risk has been identified to current/future construction/maintenance workers from contaminants in soil and groundwater because they may be in direct contact with contaminants when they are required to excavate and handle soil. However, this will be reduced to low risk if robust risk assessments are carried out to identify appropriate personal protective equipment and suitable working methods to protect these receptors, in accordance with current guidance and recommended good working practices.
2. A moderate/low risk has been identified to current/future on-site humans (workers/visitors) from all 13 APCs.
3. A low risk has been identified to current/future off-site humans (farm workers/public/occupants of/visitors to Rofford Hall, Rofford Manor/houses to the south and southwest of the B480) from all 13 APCs.
4. A low risk has been identified to groundwater in the Superficial Secondary Aquifer from all 13 APCs.
5. A low risk has been identified to surface water (on-site drains and Haseley Brook and Chalgrove Brook) from all 13 APCs.
6. A low risk has been identified to on-site livestock from APC7 and APC11 (the only APCs that apply to these receptors).
7. A negligible risk has been identified to on-/off-site property (buildings/infrastructure) from all the 13 APCs.

Overall Land Quality and Suitability for Use

Based on the assessment carried out, the Site is considered suitable for current and continued use, although it should be noted that moderate/low risks have been identified to on-site human receptors. In addition, ordnance has been used and stored on the Site in the past but no explosive ordnance clearance or risk assessment reports are available.

1. Introduction

1.1. Terms of Reference

was instructed by the Defence Infrastructure Organisation (DIO) branch of the Ministry of Defence (MOD) to carry out a Phase 1 Land Quality Assessment (LQA) of Chalgrove Airfield in Chalgrove, Oxfordshire (the Site) under contract between and DIO.

1.2. Objectives

It is MOD policy to undertake a voluntary programme to 'assess land quality across the defence estate' to 'provide a proper knowledge of the condition of the estate and ensure that it is 'suitable for use' and not causing harm to the environment. Where it is identified that unacceptable risk is posed by the presence of contamination, action must be taken to reduce and control the risks to an acceptable level'. The MOD has implemented the LQA process to achieve this aim and undertakes phased investigations where potential risks are identified to human and environmental receptors from contamination. This process is described in the DIO Practitioner Guide 07/12¹.

Objectives of this LQA are to assess the environmental quality and identify potential environmental/land contamination liabilities associated with the Site which is to be retained.

1.3. Methodology

The initial phase of the LQA process is the Phase 1 LQA (Desk Study) which develops a preliminary conceptual site model (CSM). This describes the relationships between contaminants, pathways and receptors and identifies potential contaminant linkages (PCLs) where a source, pathway and receptor linkage is considered to exist. Based on the preliminary CSM and PCLs, potential unacceptable contamination risks associated with the Site can be identified.

This LQA Report sets out the factual information and other evidence gathered through a desk study assessment relating to the environmental condition of the Site. The report establishes the overall Site condition by identifying PCLs, providing an appraisal of the environmental risks posed and the interaction of those risks with the surrounding environment. This has informed potential environmental liabilities from contamination associated with the Site assuming current and continued commercial/industrial end-use.

1.4. Scope of Work and Sources of Information

The following has been carried out:

- Data Review comprising:
 - Report² from the which included historical maps. Historical maps are presented in Appendix A and the Report in Appendix B;
 - current topographic Ordnance Survey (OS) map;
 - Geology Datasheet included with the Report in Appendix B which is based on the British Geological Survey (BGS) geology maps of Henley-on-Thames³;
 - BGS website⁴. Archive borehole records are presented in Appendix C;

¹Contaminated Land Management: Land Quality Assessment (LQA) Management Guide, 07/12, Estates Strategy and Policy Group, January 2013

⁴<http://bgs.ac.uk>

- Environment Agency⁵, South Oxfordshire Council⁶ and Chalgrove⁷ websites;
 - Multi-Agency Geographic Information for the Countryside (MAGIC) website⁸;
 - aerial photographs from 1942 to 2000 held by the National Monuments Records Centre (NMC);
 - request for information from and discussion with DIO and the Site Liaison Officer (SLO) regarding prior/current land use, past and current activities carried out, building layout and use, motor transport (MT) areas, workshops, below and aboveground tanks and pipework, drums storage areas (including chemical/hazardous materials, petrol, oil and lubricant stores, etc.), waste arisings, handling and storage, water source and use, wastewater streams, treatment (for example, interceptors) and discharges, asbestos containing material, polychlorinated biphenyls in equipment, drainage and service plans, explosives ordnance disposal (EOD), clearance and assessment records and past pollution incidents. It should be noted that no existing environmental reports (LQA, site investigation, environmental audits) were available for review; and
 - Defence Radiation Protection Services (DRPS) Radiological Record Contamination Search (RRCS), included as Appendix D;
- Site Reconnaissance carried out by [redacted] with the SLO on 29 January 2014. It should be noted that because of Site security, no photographs were allowed or taken;
 - Environmental Risk Assessment; and
 - reporting.

1.5. Structure of this Report

This report has been structured as follows:

- Chapter 2 presents the description and setting of the Site, including location and surrounding area, layout, activities and history;
- Chapter 3 presents the environmental setting and Site sensitivity, including the geology, hydrogeology, hydrology and ecological (conservation) designations;
- Chapter 4 describes potential sources of contamination identified;
- Chapter 5 summarises the potential sources of contamination, potential receptors and pathways and presents the preliminary CSM and the Tier 1 Preliminary Qualitative Risk Assessment is also presented; and
- Chapter 6 presents the overall land quality and suitability for use.

⁵<http://environment-agency.gov.uk>
⁶<http://www.southoxon.gov.uk>
⁷<http://www.chalgrove.info>
⁸<http://www.magic.gov.uk>

2. Site Description and Setting

2.1. Site Location

The Site is located directly to the north of Chalgrove village and approximately 2km to the east of Stadhampton in South Oxfordshire. The Site occupies approximately 240-hectares, comprising the main airfield, associated runways and perimeter track, together with operational buildings in the east and southeast. The approximate centre of the Site is at approximate National Grid Reference (NGR) 463580, 197890 and the Site location is shown on Figure 1.

2.2. Surrounding Area

Surrounding land is predominantly open farmland (agricultural) and residential and described below:

- North: Chalgrove Common is adjacent to the north which includes grassland with copse and scrub. Haseley Brook is approximately 300m to the north and 500m to the northeast;
- East: Fields are adjacent to the east with Warpsgrove approximately 400m and Warpsgrove sewage works approximately 600m to the northeast, Hitchcox Poultry Farm and depot approximately 400m to the east and Hampden Monument Industrial Park approximately 200m to the southeast. Monument Road is approximately 400m to the east and 200m to the southeast;
- South: The B480 is adjacent to the south and southwest with Chalgrove Village beyond the B480. This includes residential properties adjacent to the B480 and a primary school and cricket ground approximately 400m to the southwest; and
- West: The B480 is adjacent to the west with fields beyond to the west. Rofford Manor and Rofford Hall and associated grounds are adjacent to the northwest, surrounded by fields and small areas of woodland, including Cowleaze Copse, approximately 700m to the northwest.

No statutory Contaminated Land Register entries or notices are recorded on or within 1km of the Site. There are no landfills shown on or within 1km of the Site

2.3. Site Description

The Site description below has been based on review of the data listed in Chapter 1, discussion with the DIO/SLO and Site Reconnaissance.

2.3.1. Site Activities

This Site is leased from the MOD by [redacted] and used as an ejection seat test facility, together with small scale machining/metal working (since 2012), minor spray painting, packaging and warehousing. The Site also has two Meteor aircraft (1948 and 1952) which are serviced on-site.

2.3.2. Site Layout

2.3.2.1. Current Site Layout

Currently, the Site is surrounded by high fences and access is via an unnamed road to the southeast. Current Site layout is shown on Figure 2 and summarised as follows:

- gatehouse at the Site entrance in the southeast and constructed prior to 1970, originally a bungalow;
- Hangar 1 to the north of the gatehouse. This was constructed prior to 1970 and comprises two storey frontage and a single storey area to the rear (north). The building was originally used for long term storage with a colour printing facility for technical illustrating on the first floor, although these operations ceased circa 1993/1994. Current activities include offices on the first floor and

office, canteen and meeting room on the ground floor. Warehousing, packaging and small scale metal working and spray painting take place in the single storey area to the rear (north);

- substation to the east of Hangar 1 which dates from WW2;
- Hangar 2 to the east of Hangar 1 which includes the seat test bay area, offices and miscellaneous storage. Hangar 2 is from WW2 and single storey with a solid concrete floor;
- Building 3 to the north of Hangar 1 constructed in the late 1960s, this was the canteen and is now a store;
- Pyro North and Pyro South to the north of Hangar 1/Building 3, constructed in 1985/86, used for rocket cartridge filling and testing. There was an x-ray facility in Pyro South until circa 1993/1994;
- test bunker to the east of Pyro North/South, constructed in 1985/86;
- Building 5 (maintenance, paint store and compressor), Building 6 (store), Building 7 (store), Building 8 (magazine store with surrounding earth bunds), Building 8A (sundries store) and Building 10 (store) to the north of Pyro North and South. Buildings 5, 6, 7, 8 and 8A were constructed in WW2. The date of construction of Building 10 is not known;
- scrap metal storage area to the north of Buildings 6, 7 and 10;
- magazine compound to the north of the scrap metal storage area and constructed in the 1980s;
- water tank and magazine (A/B) to the west of Pyro North and South with the drop test ring (located in the vicinity of the former WW2 control tower) further to the east;
- bulk fuel installation (BFI) to the north of Building 8, constructed in the 1960s;
- airfield to the west which includes a tarmac perimeter road and runways and is used for static seat tests and seasonal grazing of sheep; and
- burning ground/fire fighting practice area by the northwest Site boundary.

No visual or olfactory indications of contamination or surface staining were noted during Site Reconnaissance.

2.3.2.2. Historical Site Layout

Figure 3 shows the Site layout in WW2 and the building details are summarised in Table 1. All, apart from those noted in Table 1 have been demolished, although fragmented relic infrastructure is still present in the southeast, northwest and east.

Table 1. Schedule of Buildings 1940-1944

Building Number	Details/Commentary
1 and 2	Hangars. Hangar 1 is still present (current Hangar 2)
5 to 12	GP Huts (30-feet x 18-feet) temporary brick buildings
15 to 21	Latrines to GP huts – temporary brick buildings
22	Armoury – Nissen hutting
23-24	BFI – 3,500 gallons
25	Fire tender house - temporary brick building
26-28	Caravan standings
29	Floodlight trailer/tractor - temporary brick buildings
30	Fuel compound - 72-feet x 54 feet (southwest of current magazine compound)
31	Gas defence centre - temporary brick building (now Pyro South)
32	Gas clothing and respirator - temporary brick building (current Building 5)

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33	Gas chamber - temporary brick building
34	Guard and fire party house - temporary brick building
35	Two link trainers - temporary brick building (now magazine compound)
36-40	M&E Plinths
41	RM bombing teacher - temporary brick building (now magazine compound)
42	Lubricant/inflammable store – Nissen hutting
43	Main stores – Romney hutting (current Building 6)
44	Store, workshop, office block – Nissen hutting
45	Rubber store – Nissen hutting
46	Main workshops – Romney hutting (current Buildings 7 and 8)
47	MT sheds (four bays) - temporary brick building (now magazine compound)
48	MT office – Seco hutting (now magazine compound)
49	MFE store - temporary brick building
50	MT petrol – 5,000 gallons (now magazine compound)
51	Aviation petrol – 72,000-gallons (now gatehouse)
52	Aviation petrol – 78,000-gallons
53	Wind sock
54	Parachute and dinghy store - temporary brick building (now Pyro South)
55-56	Squadron and flight offices - temporary brick buildings
57-58	Technical latrines (RAF) - temporary brick buildings
59	Shooting-in butt
60	Works service building and yard - temporary brick building
61	Flying control - temporary brick building
62-63	Crew rest, locker and drying rooms – Seco hutting
64-65	Squadron armoury – Nissen Hutting (now Hangar 1)
66-67	Maintenance blocks – Nissen hutting (now Hangar 1)
68	Photographic block – Nissen hutting
69-70	RU pyro store – Nissen hutting
71-72	Stores – Nissen hutting (now Hangar 1)
73	Speech broadcasting building - temporary brick building (now magazine compound)
74	Substation – brick building (still present)
75	Radar workshop - temporary brick building
76-78	Armament equipment stores - temporary brick buildings
79-80	Picket posts - temporary brick buildings (now gatehouse)
81-83	Car parks (current magazine compound)
84-85	Technical latrines (RAF) - temporary brick buildings (81 is now magazine compound)
Bomb Store Area	
89-92	Bomb store (92 is now burning ground/fire fighting practice area)
93	Fused and spare bomb area
94-95	Components store – Nissen hutting
96-99	Incendiary stores
100-102	Fusing point (incomplete) – Nissen hutting

103	Pyro store
104	Flame float stores – Nissen hutting
105-106	Small arms stores – Nissen hutting
107	RU small bomb container stores (four and incomplete) – Nissen hutting

2.3.3. Underground Storage Tanks and Pipework

There are no underground storage tanks (USTs) currently in use. However, underground pipework is present and in use and includes:

- underground pipe from the heating oil aboveground storage tank (AST) in the west which supplies the oil space heaters and boilers in Hangar 1 and two boilers in Hangar 2; and
- underground pipe from the heating oil AST in the west which supplies the oil space heaters and boilers in Buildings 5, 6, 7, 8 and 10.

The underground pipework is tested every five years, most recently in 2012 when it was reported as satisfactory.

There is a former underground petrol storage tank, located adjacent to the BFI. The UST was decommissioned and filled with concrete in the mid 1980s but the associated aboveground petrol pumphouse (small, brick building) is still present.

No visual or olfactory indications of contamination or surface staining were noted around the former petrol pumphouse during Atkins' Site Reconnaissance.

Historical layout plans of RAF Chalgrove during WW2 indicate a number of BFIs as described in Table 1. It is not known whether these included USTs or ASTs or where underground pipework was located. A corroded underground pipe was encountered in the vicinity of Buildings 5, 6, 7 and 10 in the past. The pipe was not in use and presumed to be a relic from WW2 or later.

2.3.4. Aboveground Storage Tanks and Pipework

There are a number of ASTs currently in use:

- BFI to the north of Building 8. This comprises two sets of ASTs, each located within a low (approximately 0.5m high) bund wall and on a solid concrete floor. Fill pipes are located inside the bund wall. Surrounding land adjacent to the bund wall is soft surfacing. There are two steel, horizontal, cylindrical ASTs in the west, both on concrete supports, each of approximately 15,000-litres capacity. These were installed in 1975 for the storage of heating oil but never used and whilst reportedly filled originally, were subsequently emptied. This array of two ASTs is separated from the array of four ASTs by the former petrol pumphouse. The four steel, cylindrical, steel ASTs in the east are all on concrete supports. These were installed in the 1960s and cleaned in 1985. They include from west to east i) empty AST (original contents not known); ii) aviation fuel (13,600-litres) in use; iii) aviation fuel (22,700-litres) in use; and iv) road diesel (approximately 10,000-litres) in use. The pumping equipment is located within a low (0.5m high) bund wall and over a solid concrete floor to the south of the set of four ASTs. The aviation fuel is transferred to the planes via a portable bowser which fills up by the ASTs;
- Heating Oil AST of 54,500–litres capacity which supplies heating oil to Hangar 1 and Hangar 2. The AST, installed in the 1960s, is located in a 1m high brick bund with a solid concrete floor. Surrounding areas are hardstanding. Fill points are internal and heating oil distributed by underground pipe (see above) via a small pump house; and
- Heating Oil AST of 63,600-litres capacity which supplies heating oil to Buildings 5, 6, 7 and 10. The AST, also installed in the 1960s, is located in a brick bund with a solid concrete floor. Surrounding areas are hardstanding. Fill points are internal and heating oil distributed by underground pipe (see above).

No visual or olfactory indications of contamination or surface staining were noted in these areas during Site Reconnaissance.

Historical layout plans of RAF Chalgrove during WW2 indicate a number of BFIs as described earlier in Table 1. It is not known whether these included USTs or ASTs.

2.3.5. Drum/Chemical Storage Areas

Only small quantities of liquids are stored in drums. Machine oils are stored in 205-litres/45-litres drums inside Hangar 1 and Hangar 2 on drip trays and in dedicated internal stores. Paints are stored in a dedicated store in Building 5. Inks and solvents were also stored in a similar manner when the Site had a technical illustrating facility although this ceased in 1993/94.

No visual or olfactory indications of contamination or surface staining were noted from the drum/chemical storage areas during Site Reconnaissance.

2.3.6. Waste

Principal current waste arisings include:

- domestic/office type (municipal) waste which is collected in lidded skips and removed by an authorised contractor;
- metals scrap/swarf which is collected in a skip by the machine and removed for recycling;
- glues/solvents/waste oils which are used/produced in relatively small quantities and sent to Head Office for disposal; and
- pyrotechnic waste which is/has been subject to controlled burning in the Burning Ground in the north, at least since 1985.

Historical waste arisings during use by are likely to be similar other than waste inks/fluids produced when the technical illustrating and x ray facilities were present. Waste arisings during WW2 are not known. No visual or olfactory indications of contamination or surface staining were noted in these areas during Site Reconnaissance.

2.3.7. Water

Water is provided from the municipal supply and used for domestic, sanitary and washing.

2.3.8. Wastewater, Interceptors and Sumps

Sanitary/domestic/household type wastewater is discharged either to the municipal sewer or three soakaways (consented) which are located by the gatehouse, to the rear of the maintenance building and by Building 2a/b.

Historically, the majority of the wastewater generated during occupancy (and possibly WW2), included sanitary and domestic effluent, colour printing wastewater and ink (when the Site had a technical illustrating facility) and x-ray wastewater which was discharged into a fibre glass tank and thence to herringbone land drains in the east of the Site to the east of the test bunker/Hangar 1. The herringbone land drain system was replaced by a drain connected to the main sewer circa 1998.

A redundant drain was discovered when the Pyro North and Pyro South buildings were constructed in 1985/86. WW2 plans showed that the drain comprised a 9-inch porous pipe running from Hangar 2 in northeast direction, along the existing WW2 track to the Technical site and thence in open cut to the existing ditch along the northeast and north boundaries. A new ditch has been constructed from the test bunker to the ditch on the Site boundary and the ditch by the magazine store in the north has also been enlarged.

In addition, a WW2 drain enters the Site by the gatehouse in the southeast.

Sealed sumps are located at the Burning Ground and collect firewater used during practices. The water is tested prior to pumping out and disposal.

Surface water and roof runoff either discharges to the ground or is collected by storm drains and existing ditches.

There are no interceptors on the Site.

No visual or olfactory indications of contamination or surface staining were noted in these areas during Atkins' Site Reconnaissance.

2.3.9. Cooling/Heating/Power

Heating on-site is either oil or electricity from mains supply. There is no requirement for cooling. Oil fired heaters/boilers are located inside on solid concrete floors and serviced regularly under contract.

2.3.10. Asbestos and Polychlorinated Biphenyls

An electricity substation is located to the east of Hangar 1 and dates from WW2. The substation is of brick construction and has a flat roof. A transformer may have been located adjacent to the substation at some stage in the past because there is relic infrastructure on the external substation wall. This and oils in the equipment were removed/replaced and given the age (WW2) of the substation/transformer, they are unlikely to have contained polychlorinated biphenyls (PCBs).

Buildings have been subjected to asbestos surveys and information on the location and condition of the asbestos is contained within the Asbestos Register held by the Site, together with management and mitigation procedures.

2.3.11. Radiological Issues

There is no record of a radiological desk study by DSTL and no evidence that radiological items or issues are present. However, a RRCS has been commissioned and this indicates that DSTL did not identify any records of radioactive sources being held on the Site or radioactive contamination issues.

2.3.12. Explosive Ordnance

There are magazines for explosives to the north of Hangar 2 (A/B) and to the north of the scrap metal storage area because of the solid propellant that is used in the ejection seat mechanism. This is stored, handled and managed under strict protocols and procedures.

Explosives ordnance is not held at the Site but as presented in Table 1, explosive ordnance was stored and used during WW2, located predominantly in the northwest as shown on Figure 3. There are no records of explosives disposal clearance having been carried out. There were historical burning grounds located in the north during WW2 which is the location of the controlled burning carried out currently.

2.3.13. Potential and Reported Pollution Incidents

Wastewater generated during WW2 included sanitary and domestic effluent and photographic wastewater which was discharged to herringbone land drains in the east of the Site to the east of the test bunker/Hangar 1. The soil in the herringbone land drain area was tested in 1993 and found to be contaminated by inks and x-ray fluids, specifically silver and boron. The contaminated soil in the area was excavated and removed off-site to the satisfaction of the Environment Agency and a main sewer connection constructed to take wastewater instead.

Hydrocarbon contaminated soil was encountered when the gatehouse (Bungalow) was constructed, possibly residual contamination from the WW2 BFI (51). No contamination was detected when Pyro North and Pyro South were constructed circa 1986/86.

2.4. Site History

Historical maps are presented in Appendix A. The earliest available map dated 1884 shows the Site was divided into fields with buildings located adjacent to the centre northwest boundary. A northwest to southeast running road (Oxford to Watlington) crossed the south part of the Site, joined by Rofford Lane running from northwest to southeast across the west part of the Site, a track running from the buildings on the centre northwest Site boundary towards and joining the road, a road running south to Chalgrove Village and two footpaths running north from the road across the east part of the Site

towards Chalgrove Common and Warpsgrove. 'Rises' were shown along the north boundary and by the building on the centre northwest Site boundary, with the resultant streams flowing to the west.

Historical maps show no change in 1922 and 1947 but buildings on the centre northwest Site boundary and footpaths were not shown by 1960 and the northwest to southeast running road had been diverted to beyond the south boundary, becoming the current B480. Chalgrove Airfield was shown on maps from 1978.

However, readily available historical information indicates that Chalgrove Airfield was allocated to the United States Army Air Force (USAAF) by the Air Ministry on 1 November 1942. Rofford Lane was blocked off and the northwest to southeast running road which crossed the south part of the Site realigned to run along the south, southwest and west Site boundaries as the B480. Airfield construction took place during 1943, as indicated by aerial photographs from August to December 1943 which show construction work, runways and perimeter roads with 'final' layout visible by March 1944.

There were over 11 'sites' associated with RAF Chalgrove. The Site was described as 'Site 1' and comprised the airfield which was equipped with three concrete and tarmac runways and two aircraft hangars (type T2), together with ancillary buildings. Sites 2, 3 and 4 were to the east, 7, 8 and 9 to the northeast and 10 and 12 to the southeast, variously associated with accommodation, infirmary, technical operations, messing, etc.

The Site was designated Station 465 and used as a combat reconnaissance airfield, with Photo Reconnaissance Groups (PRG) arriving from January 1944, tasked with photographing all areas of the occupied countries that were to become potential invasion sites and recording results of raids on important targets.

The PRGs transferred to airfields in France in August 1944 and RAF Chalgrove was then used by the 25th Bombardment Group who obtained meteorological data and weather information, together with Pathfinder Paratroops of the 101st Airborne Division. This period, around the end of 1944, was the Airfield's busiest during its 18-months of operation. All Squadrons and Troops had departed from the Airfield by March 1945 with the 7th PRG USAAF arriving in April 1945 for a short stay and all USAAF personnel having left by October 1945.

RAF Chalgrove then became a satellite of RAF Benson with a small contingent of airmen based here for a few months but from 1946 onwards. received MOD permission to use the airfield for aircraft ejection seat trials, although a scaffolding firm was on the Site in the 1960s before r took over the lease of all the Site.

2.4.1. Surrounding Area

Chalgrove Common was adjacent to the north in 1884, with a building approximately 200m from the Site boundary. Fields were adjacent to the east with Warpsgrove and associated buildings approximately 400m to the northeast. Chalgrove Village was adjacent to the south Site boundary and Rofford Hall and grounds were adjacent to the northwest, together with a residential property (later shown as Rofford Farm and recently as Rofford Manor) and grounds.

The B480 was realigned to form the south, southwest and west Site boundaries in 1942/43. Chalgrove Village had expanded up to the B480 by 1960 and Warpsgrove sewage works was approximately 600m to the northeast. Hitchcox Poultry Farm approximately 400m to the east, three properties along Monument Road approximately 300m and Monument Farm and buildings approximately 200m to the southeast were present by 1978.

Monument Road Industrial Estate was present at the location of Monument Farm by 2006 and additional buildings had been constructed. Chalgrove Village had undergone more residential development, particularly adjacent to the south Site boundary. Two large ponds were adjacent to Rofford Manor (formerly Rofford Farm), approximately 160m to the northwest of the Site by 2013.

3. Environmental Setting and Sensitivity

3.1. Topography

Topographically, the Site is generally flat at an approximate elevation of 70m above ordnance datum (AOD) with a slight slope down to the northwest.

3.2. Geology

The Geology Report, included with the [redacted] Report, is presented in Appendix B and this, together with published geological information indicates that the Site is underlain by:

- Superficial Deposits: Pleistocene age Summertown-Radley Sand and Gravel Member, with the exception of the far north of the Site; resting on
- Bedrock: Lower Cretaceous age Gault Formation comprising pale to dark grey or blue-grey clay or mudstone, glauconitic in part, with a sandy base.

Published geology does not show Made Ground to be present under the Site. Information provided by the SLO during [redacted] Site Reconnaissance and based on previous ground investigations carried out at the Site during building work indicates that the shallow geology comprises up to 1.2m of soil resting on sand with clay at 4 to 5m below ground level (bgl).

Three borehole records available on the BGS website, reference SU69NW/62929788 (west), SU69NW6/63979784 (east) and SU68NW7/64339730 (south) and drilled on the Site in 1971 indicate the shallow geology to comprise:

- soil to 0.1mbgl;
- sandy clay to 0.9 and 1.3mbgl;
- clayey, pebbly sand to 2.6mbgl in the west, 5.1mbgl in the south and 6.6mbgl in the east; and
- clay, dark grey, blue and brown: Gault.

These records are presented in Appendix C.

3.3. Hydrogeology

3.3.1. Aquifer and Soil Classification

Superficial Deposits are classified as a Secondary A Aquifer and the underlying bedrock as Unproductive Strata, overlain by soil of intermediate leaching potential.

Three borehole records available on the BGS website, reference SU69NW/62929788 (west), SU69NW6/63979784 (east) and SU68NW7/643397 indicate shallow groundwater at 1.7 to 3.5mbgl (70.8 to 66.5mAOD) with a very approximate flow direction to the northwest.

3.3.2. Abstractions, Discharges and Groundwater Source Protection Zones

There are no current, licensed groundwater abstractions on or within 500m of the Site but three current, licensed consents to discharge to ground, all located in the east part of the Site by the buildings and held by [redacted] as follows:

- sewage discharge – final/treated effluent – not water company, 9th January 1987 – 31st March 2019 to River Terrace Deposits, reference Ctwc.1387;
- sewage discharge – final/treated effluent – not water company, 23rd March 1988 – 31st March 2019 to River Terrace Gravels, reference Ctwc.2317; and
- sewage discharge – final/treated effluent – not water company, 13th July 2006 – 31st March 2019, Groundwater via sub irrigation, reference Ctcu.1835.

The Site does not lie within a groundwater source protection zone (SPZ).

3.3.3. Pollution Incidents to Groundwater

No pollution incidents to groundwater are recorded on or within 500m of the Site since at least 1999.

3.4. Hydrology

3.4.1. Surface Watercourses and Flooding

Two drains rise in the east of the Site and flow from southeast to northwest along the northeast Site boundary, joining Haseley Brook which is approximately 350m to the northeast. A second drain rises in the northwest of the Site and also flows to the northwest to join Haseley Brook. Chalgrove Brook is approximately 100m to the southwest of the Site and flows to the northwest. Haseley Brook and Chalgrove Brook are identified as having moderate ecology quality by the Environment Agency but are not considered to require chemical quality assessment.

The Site does not lie in an area identified as being at risk from flooding.

3.4.2. Abstractions and Discharges

There are no current, licensed surface water abstractions on or within 500m of the Site.

3.4.3. Pollution Incidents to Surface Water

There are no recorded pollution incidents to surface water on or within 500m of the Site at least since 1999.

3.5. Other Environmental Information

Data searches indicate that the Site is not located on or within 1km of statutory or non-statutory conservation designations. The Site is within a nitrate vulnerable zone.

The Report indicates that the Site is in a lower probability radon area and less than 1% of homes are stated to be above the action level.

3.6. Site Sensitivity

3.6.1. Groundwater

Groundwater sensitivity is considered moderate because the underlying Superficial Deposits are classified as a Secondary A Aquifer with shallow groundwater recorded at 1.7 to 3.5mbgl and overlying soils are classified as being of intermediate leaching potential.

3.6.2. Surface Water

Surface water sensitivity is considered high because the closest surface watercourses are within the Site and flow into Haseley Brook. In addition, Chalgrove Brook is located 100m to the south of the Site.

3.6.3. Ecological Systems

Ecological sensitivity is considered low because no designated ecological receptors have been identified on or within 1km of the Site.

4. Potential Sources of Contamination

4.1. Current On-site Activities/Operations

Potentially polluting materials, specifically heating oil, diesel, aviation fuel, paints, oils and small quantities of solvents are stored appropriately and an environmental management system is in place to prevent and mitigate accidental release of potentially polluting materials to land. The burning ground and fire fighting practice areas in the northwest are well managed and these activities are controlled well, mitigating potential accidental releases to land. Therefore, no potential current on-site sources of contamination have been identified from current on-site activities/operations.

4.2. Historical On-site Activities/Operations

There is no documentary information to confirm that accidental release has taken place and residual contamination is present from these potential sources, apart from hydrocarbon contamination in soil which was identified when the gatehouse (Bungalow) was constructed and the soil contamination in the herringbone land drain area. However, a number of historical, on-site, potentially contaminative activities have been identified:

1. Potential past, unknown accidental releases of heating oil (hydrocarbons) from the two current heating oil ASTs and associated below ground pipework during filling/distribution.
2. Potential past, unknown accidental releases of aviation fuel and diesel fuel (hydrocarbons) from the current BFI during filling/dispensing.
3. Potential past, unknown accidental releases of petrol (hydrocarbons) from the former petrol UST and dispensing area adjacent to the current BFI.
4. Potential past, unknown accidental releases of fuel oil (hydrocarbons) from the WW2 BFIs (23 and 24) and associated pipework during filling, storage and dispensing and before these areas were redeveloped or removed.
5. Potential past, unknown accidental releases of fuel (hydrocarbons) from the WW2 Fuel Compound (30) during filling, storage and dispensing and before this area was redeveloped or removed.
6. Potential past, unknown accidental releases of fuel oil (hydrocarbons) from the WW2 MT petrol store (50) and associated pipework during filling, storage and dispensing and before this area was redeveloped or removed.
7. Potential past, unknown accidental releases of aviation petrol/gas (hydrocarbons) from the WW2 BFIs (51 and 52) and associated pipework during filling, storage and dispensing and before these areas were redeveloped or removed.
8. Potential past, unknown accidental releases of fuels and oils and chemicals (hydrocarbons) from the WW2 lubricant/inflammables store (42) during filling, storage and dispensing and before this area was redeveloped or removed.
9. Potential past, unknown accidental releases of fuels, oils and lubricants (hydrocarbons) from the WW2 MT Shed (47) and MFE Store (49) during maintenance and storage before these areas were redeveloped or removed.
10. Potential past, unknown accidental releases of photographic chemicals and photographic waste from the WW2 photographic block (68) during operations/disposal and before these areas were redeveloped or removed.
11. Potential presence of explosives residues/explosives from the former storage of explosives (pyro stores, bomb store, fused, incendiary and small arms stores) and burning grounds (69-70 and 89 to 107) during WW2.
12. Potential presence of explosives residues from the former shooting in butt (59).
13. Potential for residual contamination (hydrocarbons, photographic chemical waste, x-ray processing waste) in the former below ground drains present from WW2.

These 13 areas of potential concern (APC) sources are shown on Figure 4.

4.3. Current Off-site Activities/Operations

Surrounding land is predominantly agricultural with farms and residential areas within 100m. These are not considered to be potentially contaminative activities which could give rise to contaminants in, on or under the land at the Site.

4.4. Historical Off-site Activities/Operations

Historical surrounding land was predominantly fields, farms and houses. These are not considered to be potentially contaminative historical activities which could have given rise to contaminants in, on or under the land at the Site.

5. Preliminary Conceptual Site Model and Tier 1 Risk Assessment

5.1. Summary of Potential Contaminant Sources

Potential sources of contamination/APCs are shown on Figure 4 and are summarised as follows:

- potential past accidental releases of fuels, oils, lubricants and solvents (hydrocarbons) from the BFIs including USTs, ASTs, fuel compound, petrol store, lubricant/inflammables store, MT sheds and store and below ground pipework;
- potential past, unknown accidental releases of photographic chemicals and photographic waste from the WW2 photographic block (68);
- potential presence of explosives residues/explosives from the former storage of explosives and burning grounds (69-70 and 89 to 107) during WW2; and
- potential for residual contamination (hydrocarbons, photographic chemical waste, x-ray processing waste) in the former below ground drains present from WW2.

5.2. Potential Receptors

5.2.1. Human Receptors

Current and future on-site human receptors include workers at and visitors to the Site, including construction workers involved in development activities.

The current and future off-site human receptors include farm workers/members of the public who may access adjacent land and residents of/visitors to Rofford Hall, Rofford Manor and the houses to the south and southwest of the B480.

5.2.2. Controlled Waters Receptors

Controlled waters receptors comprise groundwater in the Superficial Deposits and the two on-site drains, Chalgrove Brook and Haseley Brook.

5.2.3. Ecological Receptors

No designated ecological receptors have been identified on or within 1km of Site.

5.2.4. Property Receptors

Current/future on-site property receptors include the existing building/infrastructure. The buildings and infrastructure associated with Rofford Hall, Rofford Manor and houses to the south and southwest of the B480 are current/future off-site property (building/infrastructure) receptors.

5.2.5. Other Receptors

Other receptors include livestock who graze across parts of the Site.

5.3. Potential Pathways

5.3.1. Human Receptors

Potential, current and future on-site human receptors (workers at/visitors to the Site, including construction workers) could be exposed to the potential contamination by the following pathways:

- dermal contact with contaminants in soil, soil-derived dust and entrained in surface water run-off from areas where soil (and contaminant) is exposed and in shallow groundwater if excavation takes place below the groundwater table;

- ingestion of contaminants in soil, soil-derived dust and entrained in surface water run-off from areas where soil (and contaminant) is exposed and in shallow groundwater if excavation takes place below the groundwater table;
- inhalation of contaminants in soil-derived dust from areas where soil (and contaminant) is exposed; and
- inhalation of soil-/water-derived vapours (volatile contaminants in soil/groundwater which volatilise to the surface).

The potential current/future off-site human receptors (farm workers, public, occupants of/visitors to Rofford Hall, Rofford Manor and houses to the south and southwest of the B480) could be exposed to the potential contamination by the following pathways:

- dermal contact with contaminants in windblown, soil-derived dust and entrained in surface water run-off from areas where soil (and contaminant) is exposed and in migrating groundwater if off-site excavation takes place below the groundwater table;
- ingestion of contaminants in windblown, soil-derived dust and entrained in surface water run-off from areas where soil (and contaminant) is exposed and in migrating groundwater if off-site excavation takes place below the groundwater table;
- inhalation of contaminants in windblown, soil-derived dust from areas where soil (and contaminant) is exposed; and
- inhalation of migrating soil-/water-derived vapours.

5.3.2. Controlled Waters Receptors

Migration pathways to groundwater in the Superficial Deposits include leaching of contaminants from the unsaturated soil zone to groundwater and migration of non aqueous phase liquid (NAPL).

Pathways to two on-site drains, Haseley Brook and Chalgrove Brook include discharge of contaminants in surface water runoff, in baseflow and as migrating LNAPL. Discharge in drains is a potential pathway but considered to fall under current operational and environmental management control.

5.3.3. Ecological Receptors

No designated ecological receptors have been identified on or within 1km of Site.

5.3.4. Property Receptors

Pathways to on-site property (buildings/infrastructure) include direct contact of foundations and infrastructure with contaminants in soil and shallow groundwater. Pathways to off-site property (buildings/infrastructure) include direct contact of foundations and infrastructure with contaminants in migrating shallow groundwater.

5.3.5. Other Receptors

Potential, current and future on-site livestock could be exposed to the potential contamination by the following pathways:

- dermal contact with contaminants in soil, soil-derived dust and entrained in surface water run-off from areas where soil (and contaminant) is exposed;
- ingestion of contaminants in soil, soil-derived dust, in grass and entrained in surface water run-off from areas where soil (and contaminant) is exposed; and
- inhalation of contaminants in soil-derived dust from areas where soil (and contaminant) is exposed.

5.4. Tier 1 Preliminary Qualitative Risk Assessment

The preliminary CSM is summarised in Table 2.. A preliminary qualitative environmental risk assessment of the PCLs identified at the Site has been carried out based solely on readily available desk study information and Site Reconnaissance, which did not include collection of empirical data. Therefore, professional judgement has been used to carry out the preliminary qualitative environmental risk assessment of potential risks from the PCLs identified.

The environmental risk assessment has been carried out following current best practice and industry guidance. Definitions of probability and consequence have been based on guidance in the DIO Practitioners Guide 07/12 and are summarised in Appendix E. A combination of probability and consequence produces a risk level based on the risk evaluation and likely action required. The DIO Practitioners Guide 07/12 provides seven categories of risk as shown in Appendix E. The land contamination risk, which is a function of the probability and the consequence, can then defined using the risk matrix in Appendix E.

A preliminary qualitative environmental risk assessment of the PCLs identified in the preliminary CSM is summarised in Table 2.

Table 2. Land Quality Assessment Environmental Risk Assessment Summary Table

Source	Potential Contaminant	Potential Receptor	Potential Pathway	Associated Hazard	Potential Consequence	Likelihood (Probability) of the Consequence	Potential Significance
Contaminants in shallow groundwater across the Site	Range of organic/inorganic contaminants	Current/Future Construction/maintenance Workers	Dermal Contact Ingestion	Health risk	Medium	Low	Moderate Risk reduced to Low Risk
1. Potential past, unknown accidental releases of heating oil from the two current heating oil ASTs and associated below ground pipework. 2. Potential past, unknown accidental releases of aviation fuel and diesel fuel from the current BFI. 3. Potential past, unknown accidental releases of petrol from the former period UST and dispersing area adjacent to the current BFI. 4. Potential past, unknown accidental releases of fuel oil from the WWZ BFFs (23 and 24). 5. Potential past, unknown accidental releases of fuel from the WWZ Fuel Compound (30). 6. Potential past, unknown accidental releases of fuel oil from the WWZ period store (50). 8. Potential past, unknown accidental releases of fuels and oils and chemicals from the WWZ Lubricant/Inflammables store (42). 9. Potential past, unknown accidental releases of fuels, oils and lubricants from the WWZ MT Shed and Store (47 and 49).	Hydrocarbons Hydrocarbon vapours	Humans On-site (Current/Future) (Visitors/Workers)	Dermal contact Ingestion Inhalation	Health Risk	Medium	Low	Moderate/Low Risk
		Humans Off-site (Current/Future) (Farm workers/public/occupants of/visitors to Rofford Hall, Rofford Manor/houses to the south and southwest of the B480)	Dermal contact Ingestion Inhalation	Health Risk	Mild	Low	Low Risk
		Groundwater in the Superficial Secondary A Aquifer	Leaching Migration of NAPL	Contamination of Secondary A Aquifer	Mild	Low	Low Risk
		Surface Watercourses (On-site drains, Haseley Brook, Chalgrove Brook)	Discharge via surface water run-off and baseflow	Contamination of non-sensitive surface watercourse	Mild	Low	Low Risk
		Property On-site (Current/Future) (Buildings/Infrastructure)	Direct Contact	Damage to buildings	Minor	Low	Negligible Risk
		Property Off-site (Current/Future) (Buildings/Infrastructure)	Direct contact	Damage to buildings	Minor	Low	Negligible Risk

Source	Potential Contaminant	Potential Receptor	Potential Pathway	Associated Hazard	Potential Consequence	Likelihood (Probability) of the Consequence	Potential Significance
7. Potential past, unknown accidental releases of aviation fuel/period from the WWZ BFs (51 and 52).	Hydrocarbons vapours	Humans On-site (Current/Future) (Visitors/Workers)	Dermal contact Inhalation	Health Risk	Medium	Low There is no evidence that past accidental releases have taken place from BF 52, although hydrocarbon contamination was detected during construction of the gatehouse (Bungallow) in the vicinity of BF 51, which was removed. Site surfaces in these areas are hardstanding (BF 51) or well vegetated (BF 52), mitigating direct contact. Generation of vapours from the more volatile hydrocarbons (petrol, aviation fuel) is considered unlikely given the age that the WWZ contaminative activities took place. The area around BF 52 is outside, where vapours would dissipate and these areas are not frequented regularly during normal work activities. In addition, attenuation of contaminants in any residual soil/groundwater source is expected because the potential sources are from WWZ.	Moderate/Low Risk
		Humans Off-site (Current/Future) (Farm workers/public/occupants of/visitors to Rofford Hall, Rofford Manor/houses to the south and southwest of the B440)	Dermal contact Ingestion Inhalation	Health Risk	Mild	Low There is no evidence that past accidental releases have taken place from BF 52, although hydrocarbon contamination was detected during construction of the gatehouse (Bungallow) in the vicinity of BF 51, which was removed. Site surfaces in these areas are hardstanding (BF 51) or well vegetated (BF 52), mitigating generation of windblown, soil-derived dust or entrainment in surface water run-off. Generation of vapours from the more volatile hydrocarbons (petrol, aviation fuel) is considered unlikely given the age that the WWZ contaminative activities took place. The area around BF 52 is outside, where vapours would dissipate and the potential for migration of vapours to off-site human receptors is considered low given the distances from the potential source and vapours would dissipate. Groundwater flows to the northwest and there are no off-site human receptors within 500m and down hydraulic gradient from BF 52. In addition, attenuation of contaminants is expected because the potential source dates from WWZ.	Low Risk
		Groundwater in the Superficial Secondary Aquifer	Leaching Migration of NAPL	Contamination of Secondary Aquifer	Mild	Low There is no evidence that past accidental releases have taken place from BF 52, although hydrocarbon contamination was detected during construction of the gatehouse (Bungallow) in the vicinity of BF 51, which was removed. However, leaching from a residual soil source could occur, with vertical migration to groundwater, although attenuation of contaminants is expected because the potential sources are from WWZ.	Low Risk
		Surface Watercourses (On-site drains, Hasleley Brook, Chalgrove Brook)	Discharge via surface water run-off and baseflow	Contamination of non-sensitive surface watercourse	Mild	Low There is no evidence that past accidental releases have taken place from BF 52, although hydrocarbon contamination was detected during construction of the gatehouse (Bungallow) in the vicinity of BF 51, which was removed. Site surfaces in these areas are hardstanding or well vegetated, mitigating entrainment in surface water run-off. Hasleley Brook and Chalgrove Brook are over 100m from the Site and too far for discharge of contaminants entrained in surface water run-off. However, leaching from a residual soil source could occur, with vertical migration to groundwater and lateral discharge in base flow, although attenuation of contaminants is expected because the potential sources date from WWZ.	Low Risk
		Property On-site (Current/Future) (Buildings/Infrastructure)	Direct Contact	Damage to buildings	Minor	Low There is no evidence that past accidental releases have taken place from BF 52 and no buildings/infrastructure are located in this area. Hydrocarbon contamination was detected during construction of the gatehouse (Bungallow) in the vicinity of BF 51, which was removed.	Negligible Risk
		Property Off-site (Current/Future) (Buildings/Infrastructure)	Direct contact	Damage to buildings	Minor	Low There is no evidence that past accidental releases have taken place from BF 52, although hydrocarbon contamination was detected during construction of the gatehouse (Bungallow) in the vicinity of BF 51, which was removed. Attenuation of contaminants in any residual soil/groundwater source is expected because the potential sources are from WWZ and migrating groundwater is most likely below foundation depth.	Negligible Risk
		Livestock On-site (Current/Future)	Dermal contact Ingestion Inhalation	Health Risk	Mild	Low There is no evidence that past accidental releases have taken place from BF 52 where livestock may be grazed. Generation of vapours from the more volatile hydrocarbons (petrol, aviation fuel) is considered unlikely given the age that the WWZ contaminative activities took place. The area around BF 52 is outside, where vapours would dissipate. However, direct pathways may be present although attenuation of contaminants is expected because the potential sources date from WWZ.	Low Risk
		Humans On-site (Current/Future) (Visitors/Workers)	Dermal contact Ingestion Inhalation	Health Risk	Medium	Low There is no evidence that past accidental releases have taken place in this area or that residual soil/groundwater contamination is present. Site surfaces are hardstanding or well vegetated, mitigating direct contact. The area is not frequented regularly during normal work activities.	Moderate/Low Risk
		Humans Off-site (Current/Future) (Farm workers/public/occupants of/visitors to Rofford Hall, Rofford Manor/houses to the south and southwest of the B440)	Dermal contact Ingestion Inhalation	Health Risk	Mild	Low There is no evidence that past accidental releases have taken place in this area or that residual soil/groundwater contamination is present. Site surfaces are hardstanding or well vegetated, mitigating generation of windblown, soil-derived dust or entrainment in surface water run-off. Groundwater flows to the northwest and there are no off-site human receptors within 500m and down hydraulic gradient of this potential source area.	Low Risk
		Groundwater in the Superficial Secondary Aquifer	Leaching Migration of NAPL	Contamination of Secondary Aquifer	Mild	Low There is no evidence that past accidental releases have taken place in this area or that residual soil/groundwater contamination is present. However, leaching from a residual soil source could occur, with vertical migration to groundwater, although attenuation of contaminants is expected because the potential source dates from WWZ.	Low Risk
		Surface Watercourses (On-site drains, Hasleley Brook, Chalgrove Brook)	Discharge via surface water run-off and baseflow	Contamination of non-sensitive surface watercourse	Mild	Low There is no evidence that past accidental releases have taken place in this area or that residual soil/groundwater contamination is present. However, leaching from a residual soil source could occur, with vertical migration to groundwater and lateral discharge in base flow, although attenuation of contaminants is expected because the potential source dates from WWZ.	Low Risk
10. Potential past, unknown accidental releases of photographic chemicals and photographic waste from the WWZ photographic block (66)	Inorganic contaminants/metals						

Source	Potential Contaminant	Potential Receptor	Potential Pathway	Associated Hazard	Potential Consequences	Likelihood (Probability) of the Consequence	Potential Significance		
11. Potential presence of explosives/explosives from the former storage of explosives and burning grounds (69 to 70 and 89 to 107) during WW2. 12. Potential presence of explosives residues from the former shooting in butt (69).	Explosives residues	Property On-site (Future) (Buildings/Infrastructure)	Direct Contact	Damage to buildings	Minor	Low There is no evidence that past accidental releases have taken place in this area or that residual soil/groundwater contamination is present. There is no property in this area currently and mitigation would be carried out (if required) during any future construction work.	Negligible Risk		
		Property Off-site (Current/Future) (Buildings/Infrastructure)	Direct contact	Damage to buildings	Minor	Low There is no evidence that past accidental releases have taken place in this area or that residual soil/groundwater contamination is present and migrating groundwater is most likely below foundation depth. Groundwater flows to the northwest and there are no off-site property receptors within 500m and down hydraulic gradient of this potential source area.	Negligible Risk		
		Humans On-site (Current/Future) (Visitors/Workers)	Dermal contact Ingestion Inhalation	Health Risk	Medium	Low Site surfaces in these areas are well vegetated, mitigating direct contact, and they are also outside the normal working areas. Therefore the potential for exposure is low during normal work activities.	Moderate/Low Risk		
		Humans Off-site (Current/Future) (Farm workers/public occupants of houses to Roford Hall, Roford Manor/houses to the south and southwest of the B480)	Dermal contact Ingestion Inhalation	Health Risk	Mild	Low Site surfaces in these areas are well vegetated, mitigating generation of windblown, soil-derived dust or entrainment in surface water run-off. Groundwater flows to the northwest towards Roford Hall and Manor but exposure would only occur if excavation took place over the groundwater table, so unlikely during normal activities. In addition, these contaminants are readily attenuated and attenuation of contaminants in any migrating groundwater is expected because the potential sources are from WW2.	Low Risk		
		Groundwater in the Superficial Secondary Aquifer	Leaching Migration of NAPL	Contamination of Secondary Aquifer	Mild	Low Leaching from a residual soil source could occur if present, with vertical migration to groundwater, although these contaminants are recalcitrant and/or attenuation of contaminants in any residual soil/groundwater source is expected because the potential sources are from WW2.	Low Risk		
		Surface Watercourses (On-site drains, Haseley Brook, Chalgrove Brook)	Discharge via surface water run-off and baseflow	Contamination of non-sensitive watercourse	Mild	Low Site surfaces in these areas are well vegetated, mitigating entrainment in surface water run-off. Haseley Brook and Chalgrove Brook are over 100m from the Site and too far for discharge of contaminants entrained in surface water run-off. However, leaching from a residual soil source could occur, with vertical migration to groundwater and lateral discharge in base flow, although soil removal was carried out in this area in 1993.	Low Risk		
		Property On-site (Future) (Buildings/Infrastructure)	Direct Contact	Damage to buildings	Minor	Low There is no on-site property in this area currently and mitigation would be carried out (if required) during any future construction work.	Negligible Risk		
		Property Off-site (Current/Future) (Buildings/Infrastructure)	Direct contact	Damage to buildings	Minor	Low Attenuation of contaminants in any residual soil/groundwater source is expected because the potential sources are from WW2. Groundwater flows to the northwest and there are no off-site property receptors within 500m and down hydraulic gradient of this potential source area and migrating groundwater is most likely and below foundation depth.	Negligible Risk		
		13. Potential for residual contamination in former below ground drains present from WW2	Hydrocarbons Inorganic contaminants/metals	Humans On-site (Current/Future) (Visitors/Workers)	Dermal contact Ingestion Inhalation	Health Risk	Medium	Low Site surfaces in these areas are well vegetated, mitigating direct contact and are also outside the normal working areas. Therefore the potential for exposure is low during normal work activities. In addition, soil removal was carried out in this area in 1993.	Moderate/Low Risk
				Humans Off-site (Current/Future) (Farm workers/public occupants of houses to Roford Hall, Roford Manor/houses to the south and southwest of the B480)	Dermal contact Ingestion Inhalation	Health Risk	Mild	Low Site surfaces in these areas are well vegetated, mitigating generation of windblown, soil-derived dust or entrainment in surface water run-off. Groundwater flows to the northwest and there are no off-site human receptors within 500m and down hydraulic gradient of these potential source areas. In addition, soil removal was carried out in this area in 1993.	Low Risk
				Groundwater in the Superficial Secondary Aquifer	Leaching Migration of NAPL	Contamination of Secondary Aquifer	Mild	Low Leaching from a residual soil source could occur if present, with vertical migration to groundwater, although soil removal was carried out in this area in 1993.	Low Risk
Surface Watercourses (On-site drains, Haseley Brook, Chalgrove Brook)	Discharge via surface water run-off and baseflow			Contamination of non-sensitive watercourse	Mild	Low Site surfaces in these areas are well vegetated, mitigating entrainment in surface water run-off. Haseley Brook and Chalgrove Brook are over 100m from the Site and too far for discharge of contaminants entrained in surface water run-off. However, leaching from a residual soil source could occur, with vertical migration to groundwater and lateral discharge in base flow, although soil removal was carried out in this area in 1993.	Low Risk		
Property On-site (Future) (Buildings/Infrastructure)	Direct Contact			Damage to buildings	Minor	Low There is no on-site property in this area currently and mitigation would be carried out (if required) during any future construction work.	Negligible Risk		

6. Conclusions

6.1. Overall Land Quality

The Site was developed as a WW2 Airfield in 1943, becoming operational in 1944, predominantly for photographic and meteorological reconnaissance. The Site was vacated by the end of 1945 and then leased by [redacted] for ejection seat testing and seat storage.

Based on the data reviewed, potential on-site sources of contamination and 13 APCs have been identified from past activities:

- potential past accidental releases of fuels, oils, lubricants and solvents (hydrocarbons) from the BFIs including USTs, ASTs, fuel compound, petrol store, lubricant/inflammables store, MT sheds and store and below ground pipework;
- potential past, unknown accidental releases of photographic chemicals and photographic waste from the WW2 photographic block (68);
- potential presence of explosives residues/explosives from the former storage of explosives and burning grounds (69-70 and 89 to 107) during WW2; and
- potential for residual contamination (hydrocarbons, photographic chemical waste, x-ray processing waste) in the former below ground drains present during WW2.

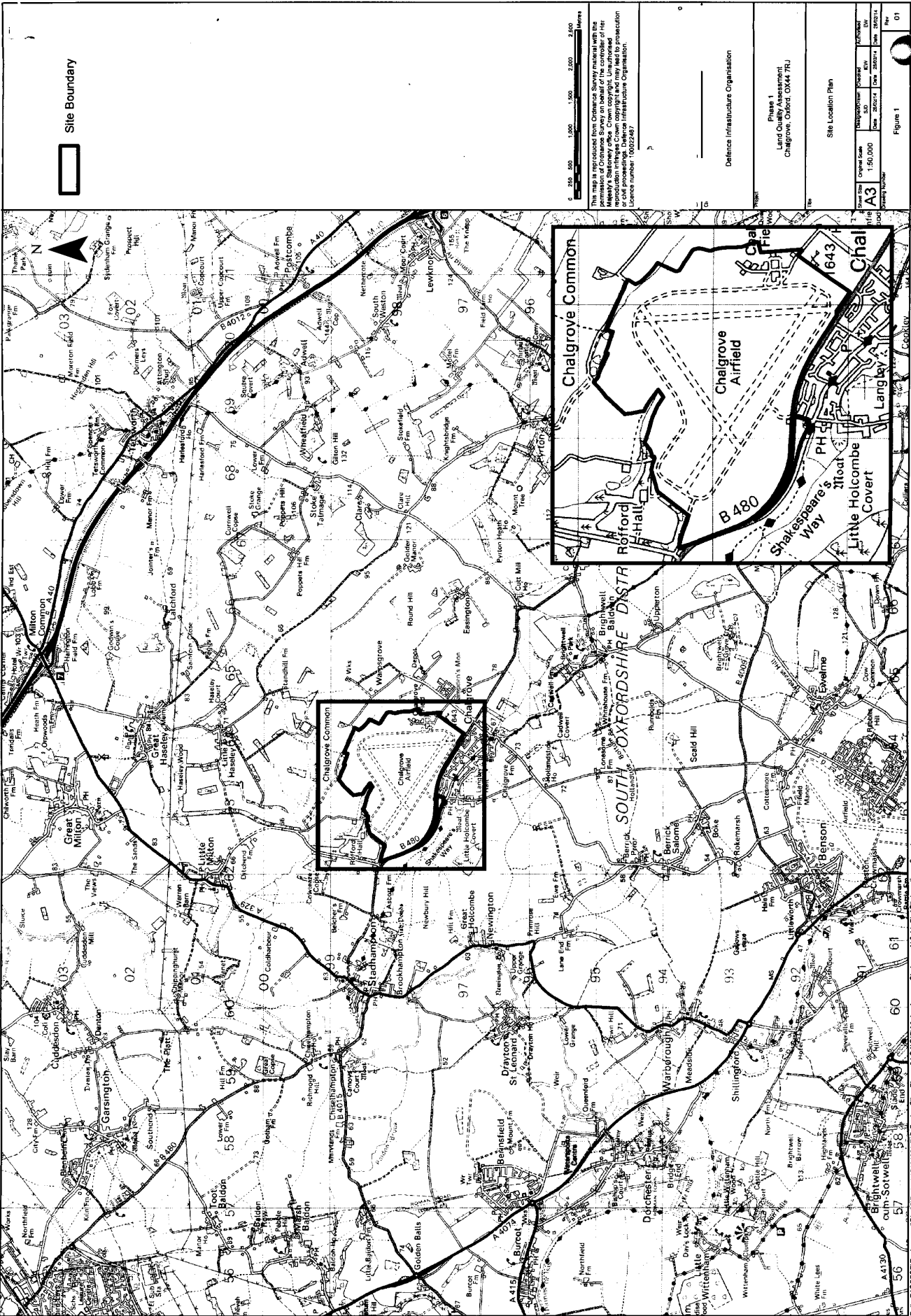
An environmental risk assessment has been carried out for these APCs and is summarised below:

- a moderate risk has been identified to current/future construction/maintenance workers from contaminants in soil and groundwater because they may be in direct contact with contaminants when they are required to excavate and handle soil. However, this will be reduced to low risk if robust risk assessments are carried out to identify appropriate personnel protective equipment and suitable working methods to protect these receptors, in accordance with current guidance and recommended good working practices;
- a moderate/low risk has been identified to current/future on-site humans (workers/visitors) from all 13 APCs;
- a low risk has been identified to current/future off-site humans (farm workers/public/occupants of/visitors to Rofford Hall, Rofford Manor/houses to the south and southwest of the B480) from all 13 APCs;
- a low risk has been identified to groundwater in the Superficial Secondary Aquifer from all 13 APCs;
- a low risk has been identified to surface water (on-site drains and Haseley Brook and Chalgrove Brook) from all 13 APCs;
- a low risk has been identified to on-site livestock from APC7 and APC11, the only APCs applicable to these receptors; and
- a negligible risk has been identified to on-/off-site property (buildings/infrastructure) from all the 13 APCs.

6.2. Suitability for Use

Based on the assessment carried out, the Site is considered suitable for current and continued use, although it should be noted that moderate/low risks have been identified to on-site human receptors. In addition, ordnance has been used and stored on the Site in the past but no explosive ordnance clearance or risk assessments reports are available.

FIGURES



Site Boundary

0 250 500 1,000 1,500 2,000 2,500
Metres

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Defence Infrastructure Organisation

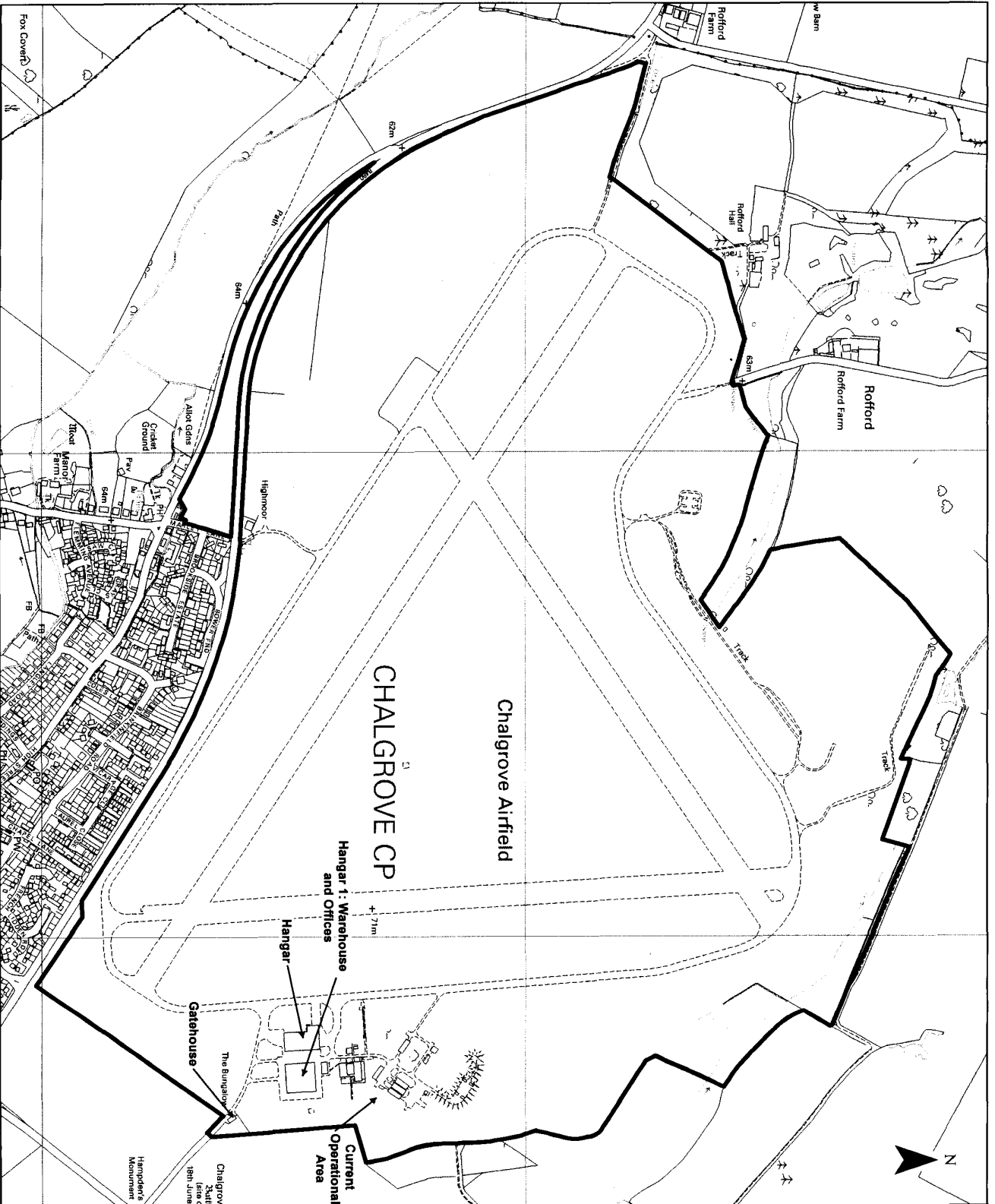
Phase 1
Land Quality Assessment
Chalgrove, Oxford, OX44 7RU

Site Location Plan

Drawing No.	A3	Scale	1:50,000	Date	20/04/2014
Revision	01				

Figure 1

Path: P:\GIS\BIBS\Environment\DWI\BDDP\GIS\A3\174851 DIO Sneyay Sites Phase 1\QA\GIS\A3_174851_01\QA\GIS\A3_174851_01_SiteLocation_V2.mxd



Site Boundary



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Chalgrove
 18th June
 Hampton's
 Monuments

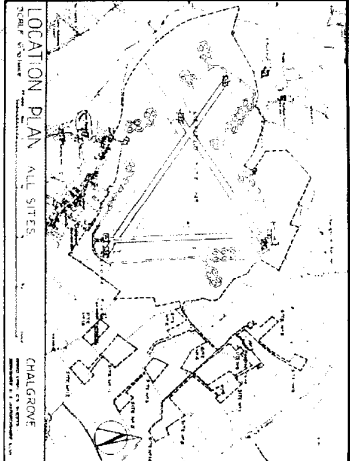
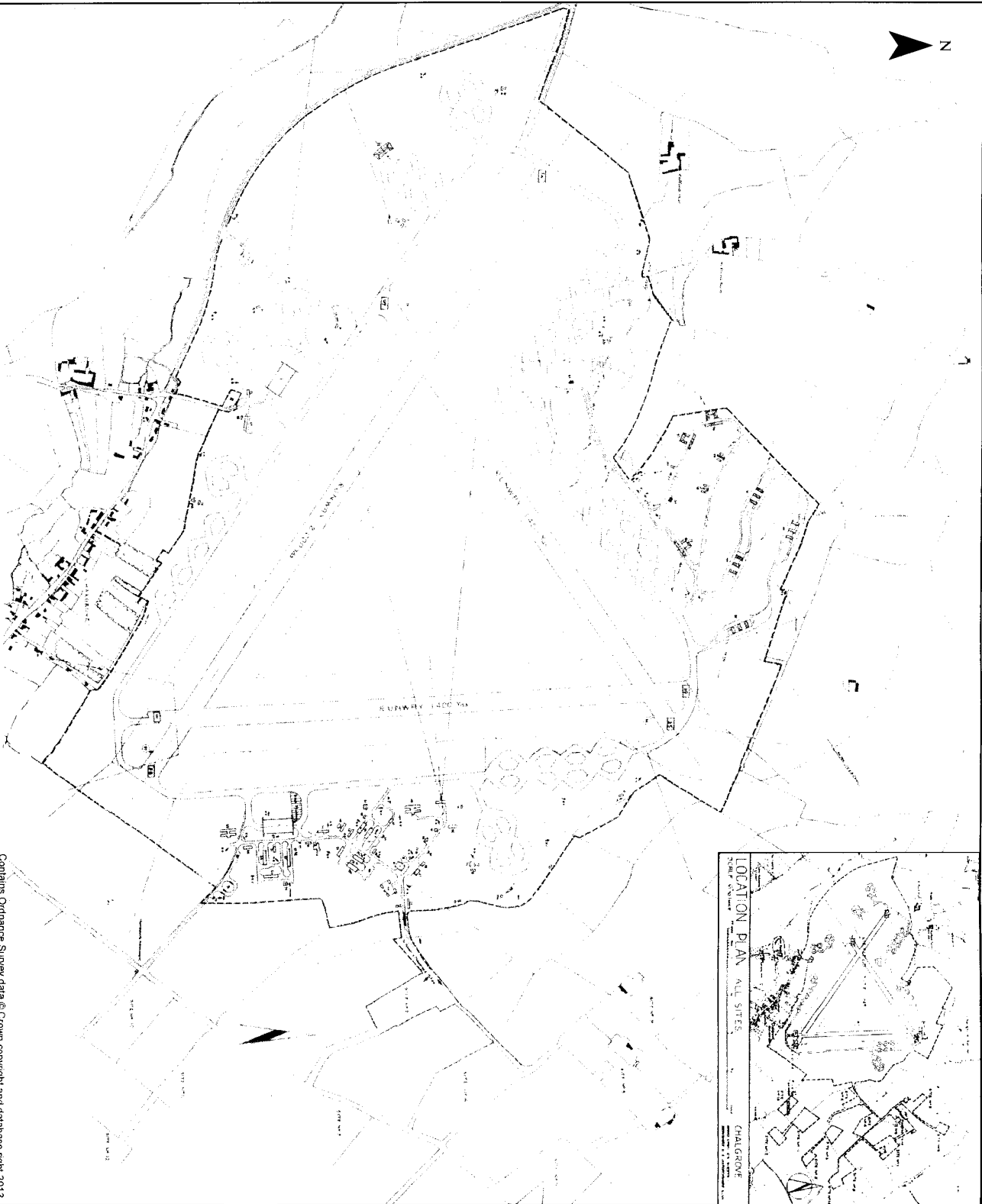
Phase 1
 Land Quality Assessment
 Chalgrove, Oxford, OX44 7TU

Defence Infrastructure Organisation

Sheet	Scale	Revision	Date	Author	Checker
A3	1:7,500	1	20/07/14	20/07/14	20/07/14

Figure 2a

01



SCHEDULE OF EQUIPMENTS

NO.	DESCRIPTION	QUANTITY	REMARKS
1
2
3
4
5
6
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8
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100

0 100 200 300 400 Metres

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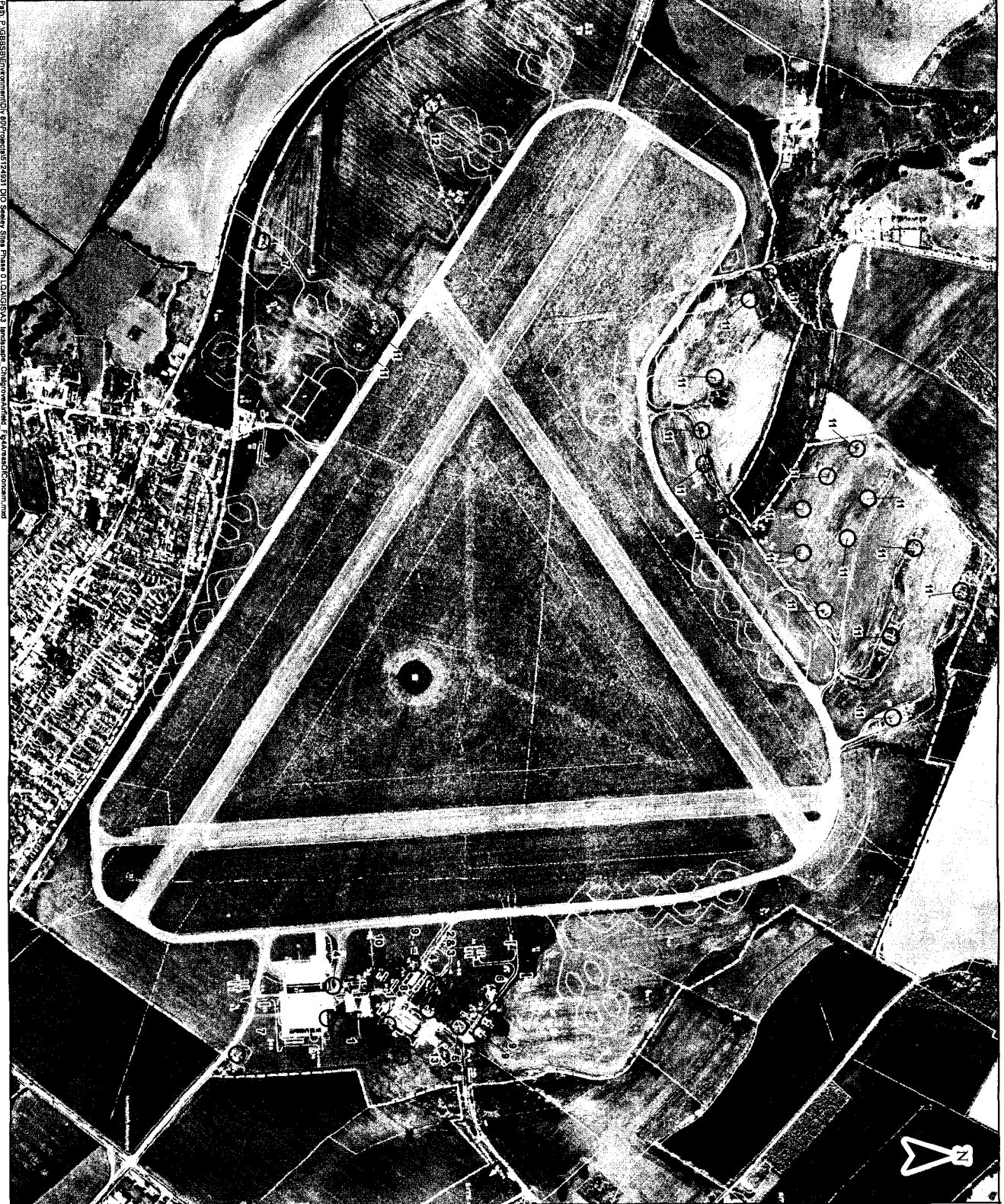
Defence Infrastructure Organisation

Phase 1
Land Quality Assessment
Chalgrove, Oxford OX44 7SU

World War 2 Site Layout Plan

Figure 3

01



1. Two current heating oil tanks and associated below ground pipework
2. Current bulk fuel installation
3. Former petrol tanks and dispensing pump
4. WW2 bulk oil installations (23 & 24)
5. WW2 fuel compound (30)
6. WW2 petrol store (50)
7. WW2 bulk fuel installations (51 & 52)
8. WW2 lubricant/flammables store (42)
9. WW2 motor transport shed (47) and store (49)
10. WW2 photographic block (68)
11. WW2 explosives stores and burning grounds (69-70 & 88-107)
12. WW2 shooting in butt (59)
13. WW2 below ground drains



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Defence Infrastructure Organisation

Phase 1
Land Quality Assessment
Chalgrove, Oxford, OX44 7RU

Areas of Potential Contam

Project	Phase	Scale	Drawn	Checked	Approved
A3	1.1	1:1,000	2007/11	2007/11	2007/11

Figure 4

APPENDICES

APPENDIX A



Historical Mapping Legends

Ordnance Survey County Series 1:10,560

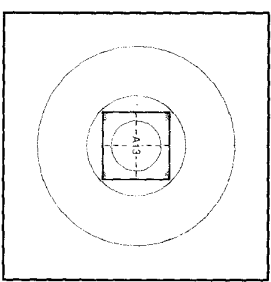
Ordnance Survey Plan 1:10,000

1:10,000 Raster Mapping

Historical Mapping & Photography Included:

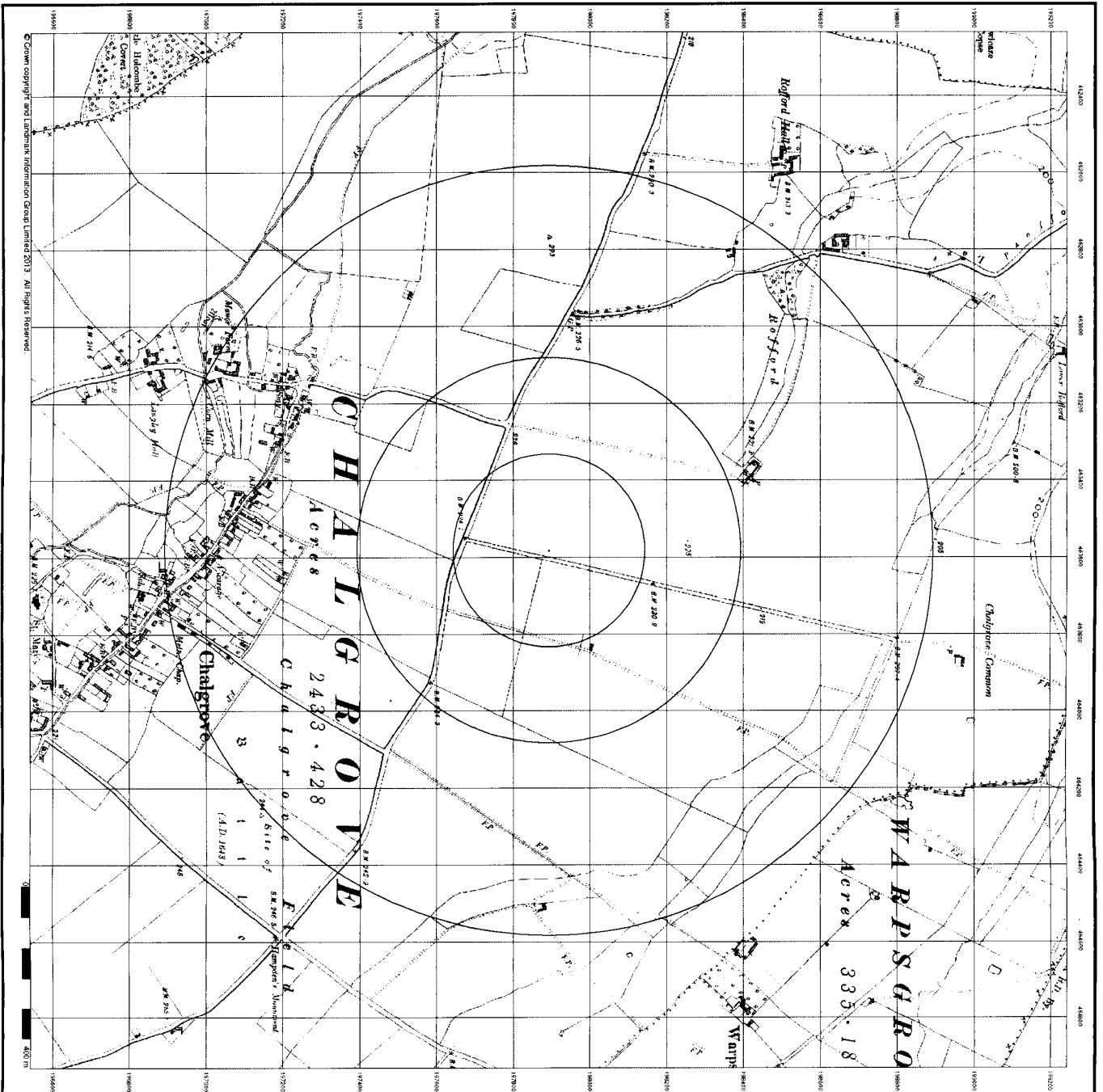
Mapping Type	Scale	Date	Pg
Ordnance	1:10,560	1884	2
Ordnance	1:10,560	1890	3
Ordnance	1:10,560	1892	4
Historical Aerial Photography	1:10,560	1947	5
Ordnance Survey Plan	1:10,000	1948	6
Ordnance Survey Plan	1:10,000	1978	7
10K Raster Mapping	1:10,000	2006	8
10K Raster Mapping	1:10,000	2013	9

Historical Map - Slice A



Order Details
 Order Number: 52320904_1_1
 Customer Ref: 5128002
 National Grid Reference: 463580, 197890
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 Site Area (Ha): 0.01
 Search Buffer (m): 1000

Site Details
 Site at 463500, 197800

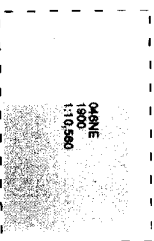


**Oxfordshire
Published 1900**

Source map scale - 1:10,560

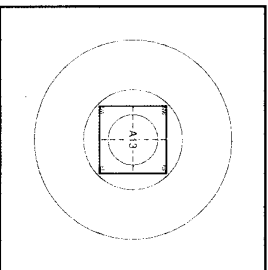
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2500 scale was adopted for mapping urban areas, these maps were used to update the 1:10,560 maps. The published date given the OS map is 1900, but the 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 overlaid with the National Grid. In 1970, the first revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



OSINE
1900
1:10,560

Historical Map - Slice A

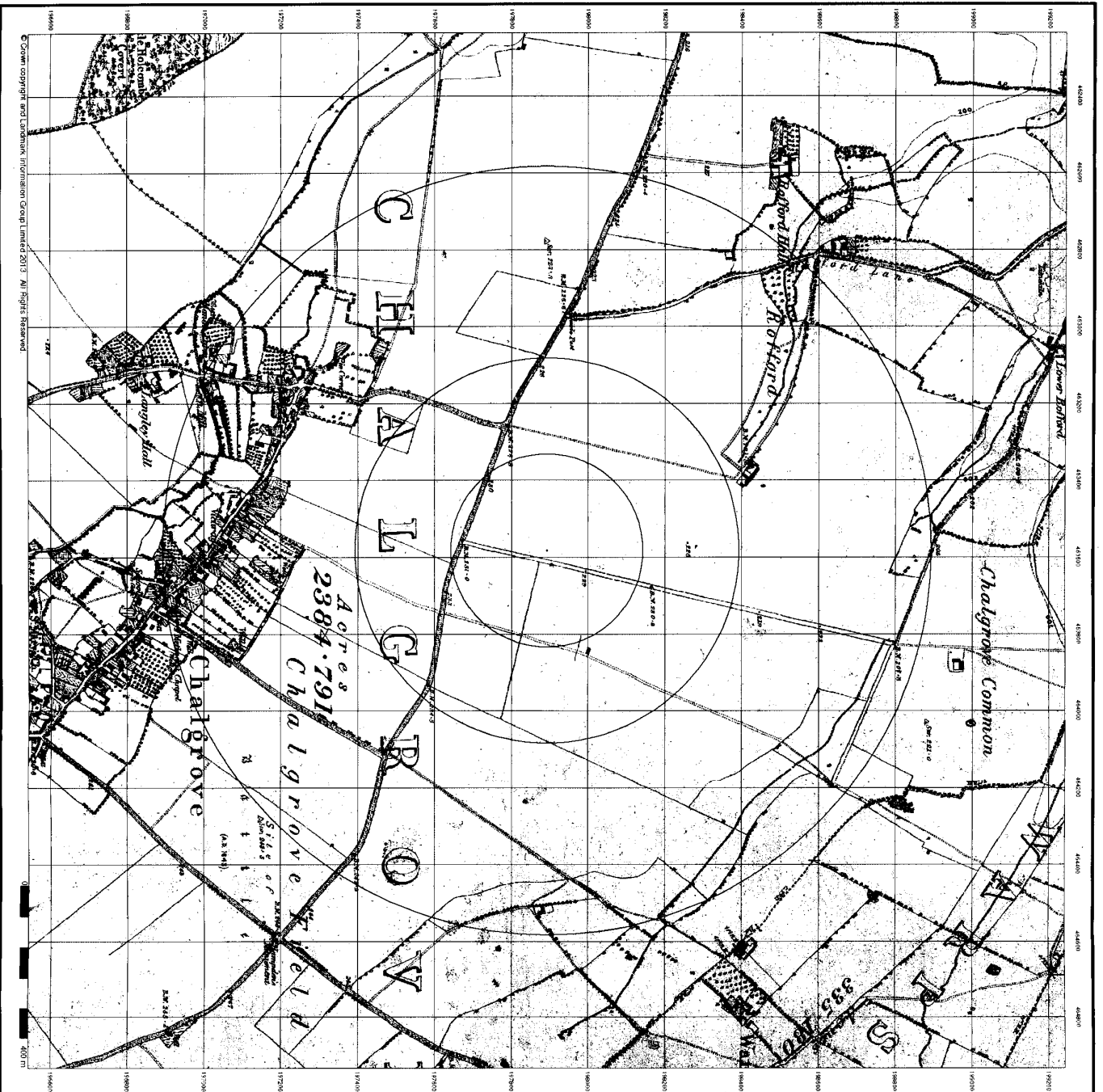


Order Details

Order Number:
Customer Ref:
National Grid Reference:
Slice:
Site Area (Ha):
Search Buffer (m):
Site at 463500, 197800

0.01

1000



Oxfordshire

Published 1884

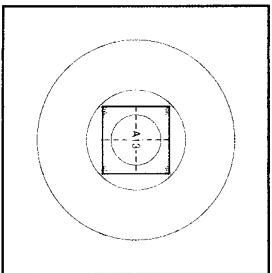
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1954 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 area 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)

04500	1884
1:10,560	

Historical Map - Slice A



Order Details

Order Number:
Customer Ref:
National Grid Reference:
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Site Details
Site at 483300, 197800

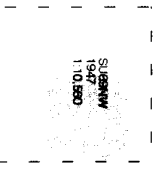


Historical Aerial Photography Published 1947

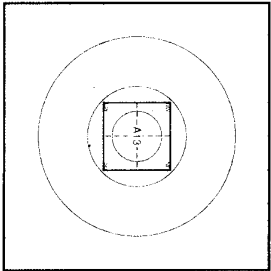
Source map scale - 1:10,560

The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1980's meant that every photograph was the subject of a security check. Some of the original editions were withdrawn or edited after a period of fifty years although due to the accuracy of the editing, without viewing both editions it is not easy to spot the edits. Where available, Landmark have included both revisions.

Map Name(s) and Date(s)

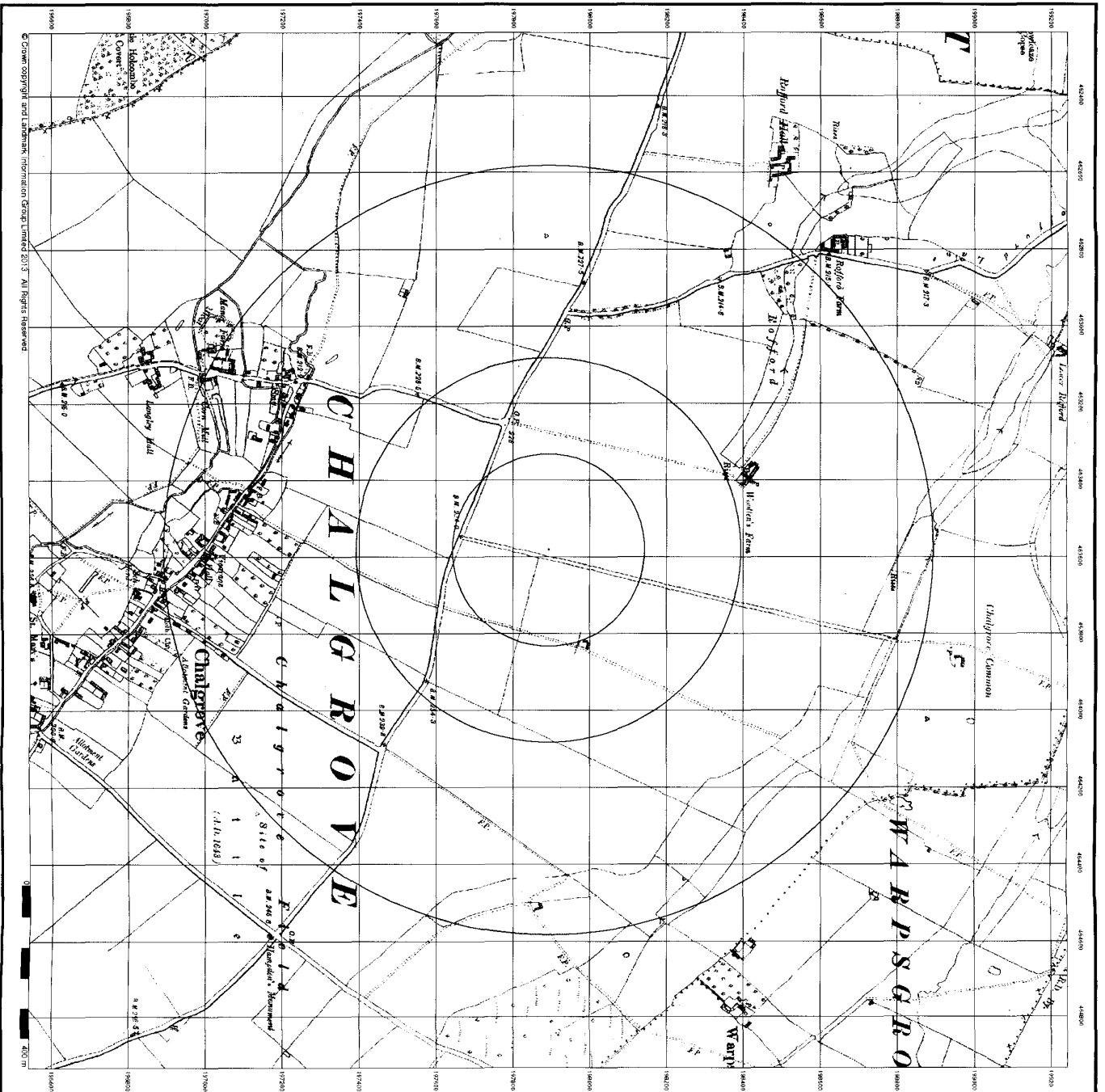


Historical Aerial Photography - Slice A



Order Details

Order Number: /
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 Slice: A
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 Site Details
 Site at 483500, 197800



**Berkshire
Published 1922**

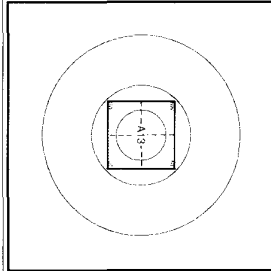
Source map scale - 1:10,560

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 printed on a separate sheet to specific parishes or civil parishes or groups of parishes. Operations to update the maps of urban 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 revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

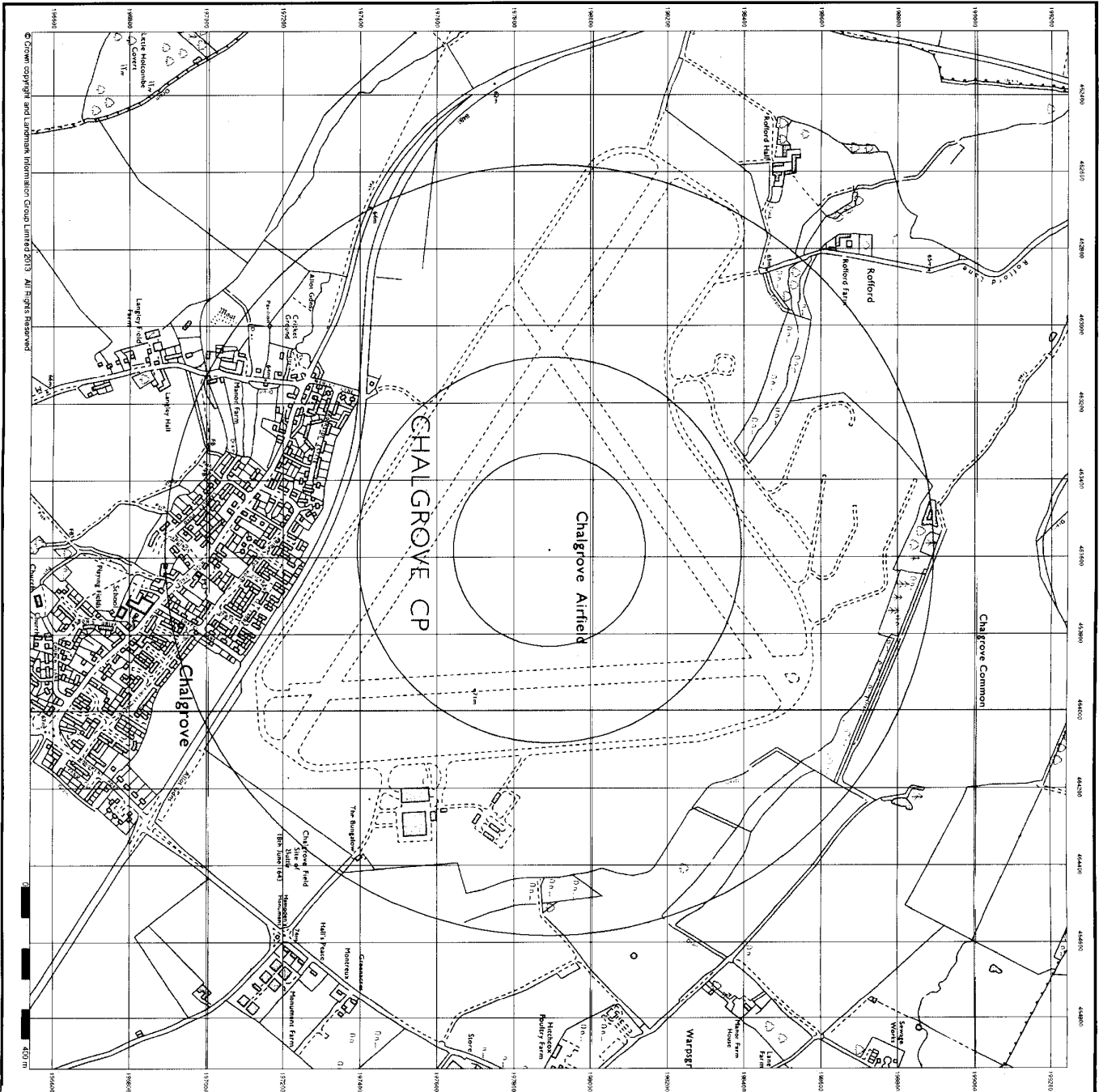
01100
1922
1:10,560

Historical Map - Slice A



Order Details

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Site Area (Ha): 0.01
Search Buffer (m): 1000
Site Details
Site at 463300, 197800



Ordnance Survey Plan Published 1978

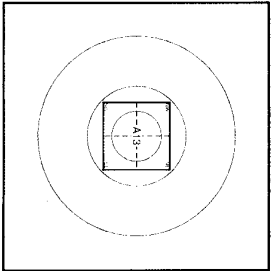
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1940's. In 1954 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,000 maps. The published date given therefore is based on the 1:10,000 maps. The maps were produced from 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 1:10,000 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overlaid with the National Grid. In 1970, the first of the 1:10,000 maps was reissued, with the Provisional Edition removed. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

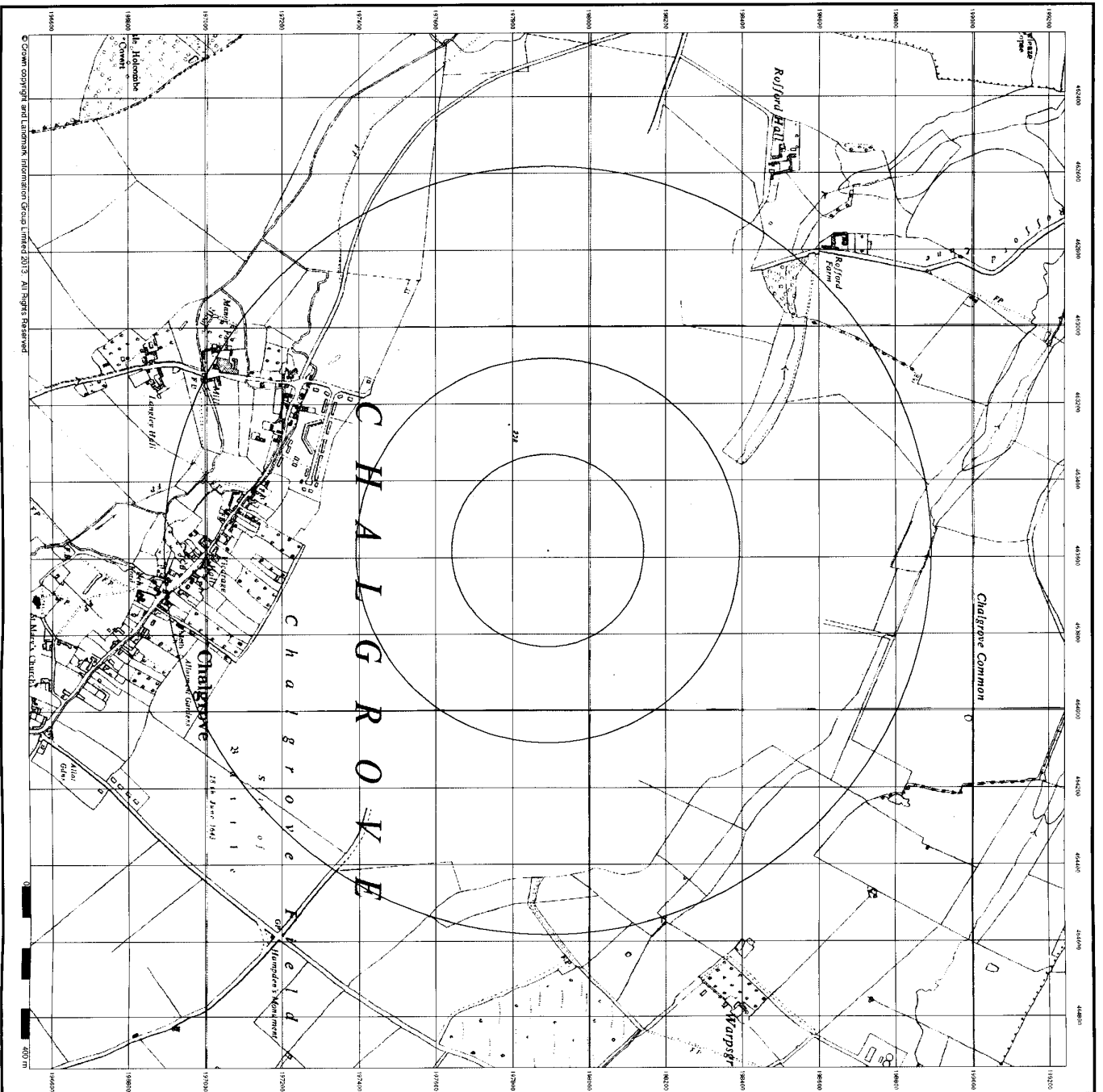
Map Name(s) and Date(s)

SUS9NW	1978
	1:10,000

Historical Map - Slice A



Order Details
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 Slice:
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 Search Buffer (m): 1000
Site Details
 Site at 463500, 197800



Ordnance Survey Plan Published 1960

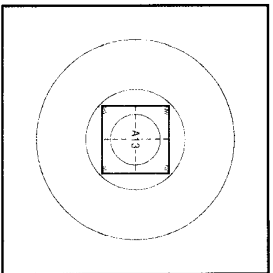
Source map scale - 1:10,000

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 survey date. Since 1950, the publication 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 1:10,000 maps were produced using the Transverse Mercator Projection. The 10 years or so for urban areas.

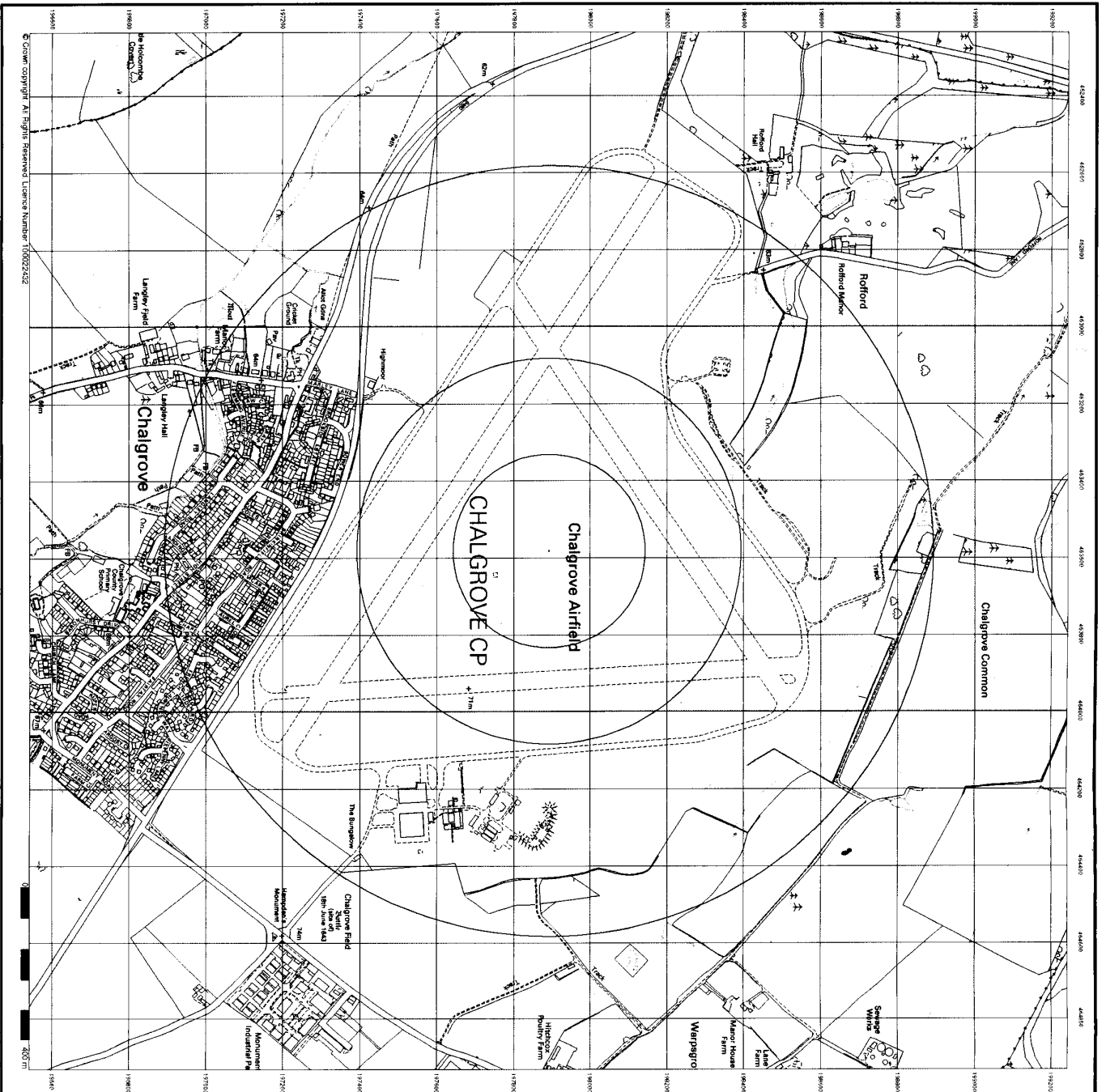
Map Name(s) and Date(s)

SLUGNW	1960
1:10,560	

Historical Map - Slice A



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 Customer Ref:
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 Search Buffer (m): 1000
Site Details
 Site at 483500, 197800



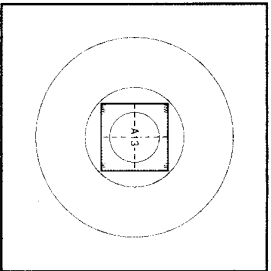
10k Raster Mapping
Published 2013
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all relevant road and paths. Road classification, Railway Information (depiction includes county, unitary authority, district, civil parish and constituency).

Map Name(s) and Date(s)

SURSWW
 2013
 1:10,000

Historical Map - Slice A



Order Details
 Order Number:
 Customer Ref:
 National Grid Reference:
 Slice:
 Site Area (Ha):
 Search Buffer (m):
 Site at 483500, 197800

10k Raster Mapping Published 2006

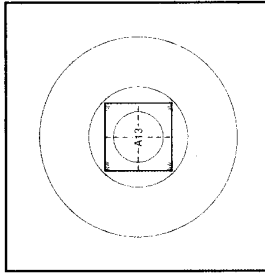
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the names of all buildings. The map data is georeferenced to the datum and includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

SUB9NW
2006
1:10,000

Historical Map - Slice A

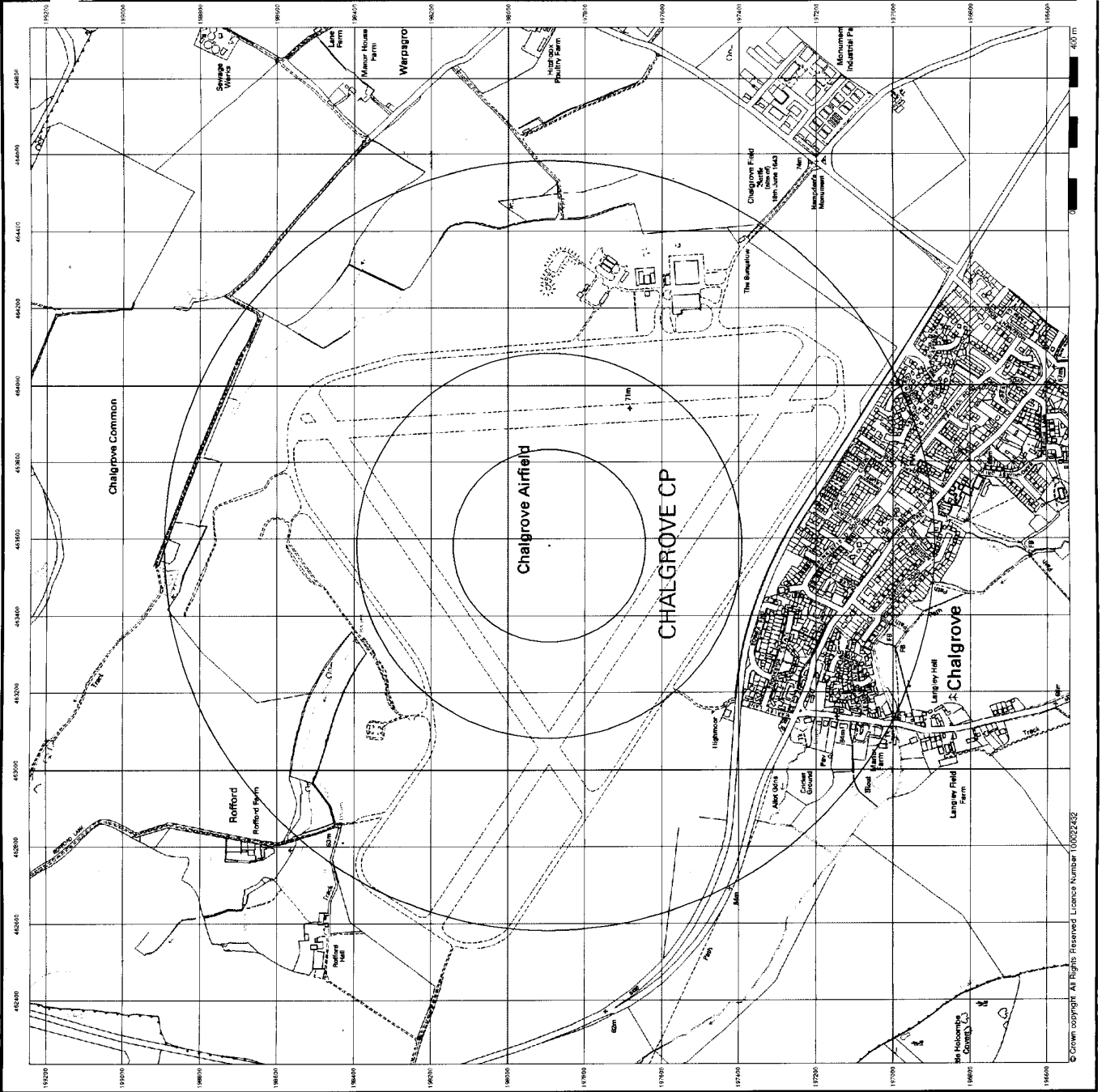


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National Grid Reference
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Slice: 0.01
Site Area (Ha): 1000
Search Buffer (m):

Site Details

Site at 463500, 197800



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APPENDIX B

Datasheet

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Order Number:

Customer Reference:

National Grid Reference:

Slice:

A

Site Area (Ha):

0.01

Search Buffer (m):

1000

Site Details:

Site at 463500, 197800

Client Details:

Order Number:

Date: 14-Jan-2014

rpr_ec_datasheet v47.0

A

Contents

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	8
Hazardous Substances	9
Geological	10
Industrial Land Use	15
Sensitive Land Use	16
Data Currency	17
Data Suppliers	21
Useful Contacts	22

Introduction

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

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

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Radon Potential dataset Copyright Notice

Information supplied from a joint dataset compiled by The British Geological Survey and Public Health England.

Report Version v47.0

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1				11
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls					
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 3				Yes
Pollution Incidents to Controlled Waters	pg 3				11
Prosecutions Relating to Authorised Processes					
Prosecutions Relating to Controlled Waters					
Registered Radioactive Substances					
River Quality	pg 5				1
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 5				(*5)
Water Industry Act Referrals					
Groundwater Vulnerability	pg 6	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 6	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 7	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				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
Detailed River Network Lines					n/a
Detailed River Network Offline Drainage					n/a

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Recorded Landfill Sites					
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)	pg 9				1
Explosive Sites	pg 9				1
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS 1:625,000 Solid Geology	pg 10	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 10	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites					
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
Brine Compensation Area			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				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 14	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 14	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 14	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 14	Yes		n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Industrial Land Use					
Contemporary Trade Directory Entries	pg 15				4
Fuel Station Entries	pg 15				1
Sensitive Land Use					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 16	1			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					

Agency & Hydrological

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	<p>Discharge Consents</p> <p>Operator: Property Type: Domestic Property (Single) Location: Chalgrove Airfield, Chalgrove, Oxford, Ox44 7rj Authority: Environment Agency, Thames Region Catchment Area: Not Given Reference: CTWC.1387 Permit Version: 1 Effective Date: 9th January 1987 Issued Date: 9th January 1987 Revocation Date: 18th August 2006 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Irrigation Area Receiving Water: River Terraces Status: Transferred from COPA 1974 Positional Accuracy: Located by supplier to within 100m</p>	A14SW (SE)	683	1	464200 197600
1	<p>Discharge Consents</p> <p>Operator: Property Type: Domestic Property (Single) Location: Chalgrove Airfield, Chalgrove, Oxford, Ox44 7rj Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Ctwc.1387 Permit Version: 2 Effective Date: 18th July 2006 Issued Date: 9th January 1987 Revocation Date: 31st March 2019 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Into Land Receiving Water: River Terraces Status: Transferred from COPA 1974 Positional Accuracy: Located by supplier to within 100m</p>	A14SW (SE)	683	1	464200 197600
2	<p>Discharge Consents</p> <p>Operator: Property Type: Domestic Property (Single) Location: Chalgrove Airfield, Chalgrove, Oxford, Ox44 7rj Authority: Environment Agency, Thames Region Catchment Area: Not Given Reference: CTWC.2317 Permit Version: 1 Effective Date: 23rd March 1988 Issued Date: 23rd March 1988 Revocation Date: 18th August 2006 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Irrigation Area Receiving Water: River Terrace Gravels Status: Transferred from COPA 1974 Positional Accuracy: Located by supplier to within 10m</p>	A9NW (SE)	702	1	464190 197540
2	<p>Discharge Consents</p> <p>Operator: Property Type: Domestic Property (Single) Location: Chalgrove Airfield, Chalgrove, Oxford, Ox44 7rj Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Ctwc.2317 Permit Version: 2 Effective Date: 18th July 2006 Issued Date: 23rd March 1988 Revocation Date: 31st March 2019 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Into Land Receiving Water: River Terrace Gravels Status: Transferred from COPA 1974 Positional Accuracy: Located by supplier to within 10m</p>	A9NW (SE)	702	1	464190 197540

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	<p>Discharge Consents</p> <p>Operator: Property Type: Domestic Property (Single) Location: Chalgrove Airfield, Chalgrove, Oxford, Ox44 7rj Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Ctwc.2316 Permit Version: 1 Effective Date: 23rd March 1988 Issued Date: 23rd March 1988 Revocation Date: 22nd July 1994 Discharge Type: Trade Effluent Discharge: Land/Soakaway Environment: Receiving Water: River Terrace Gravels Status: Authorisation revoked/Revoked Positional Accuracy: Located by supplier to within 10m</p>	A9NW (SE)	702	1	464190 197540
3	<p>Discharge Consents</p> <p>Operator: Property Type: Domestic Property (Single) Location: Chalgrove Airfield, Chalgrove, Oxford, Ox44 7rj Authority: Environment Agency, Thames Region Catchment Area: Not Given Reference: CTCU.1835 Permit Version: 1 Effective Date: 12th October 1984 Issued Date: 12th October 1984 Revocation Date: 12th July 2006 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Into Land Environment: Receiving Water: Valley Gravel Strata Status: Transferred from Water Resources Act 1963 Positional Accuracy: Located by supplier to within 100m</p>	A9NE (SE)	818	1	464300 197500
4	<p>Discharge Consents</p> <p>Operator: Property Type: Sewerage Network - Pumping Station - Water Company Location: Brookside Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Temp.0552 Permit Version: 2 Effective Date: 3rd September 2010 Issued Date: 3rd September 2010 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Brightwell Brook Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 100m</p>	A7SE (SW)	844	1	463100 197200
4	<p>Discharge Consents</p> <p>Operator: Property Type: Sewerage Network - Pumping Station - Water Company Location: Brookside Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Temp.0552 Permit Version: 1 Effective Date: 2nd November 1989 Issued Date: 2nd November 1989 Revocation Date: 2nd September 2010 Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Brightwell Brook Status: Temporary Consents (Water Act 1989, Section 113) Positional Accuracy: Located by supplier to within 100m</p>	A7SE (SW)	844	1	463100 197200

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	<p>Discharge Consents</p> <p>Operator: [Blank] Property Type: Undefined Or Other Location: [Blank] Authority: [Blank] Catchment Area: Not Supplied Reference: Cawm.0486 Permit Version: 1 Effective Date: 31st May 2002 Issued Date: 31st July 2002 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: [Blank] Receiving Water: Chalgrove Brook Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p>	A7NE (SW)	854	1	463020 197250
6	<p>Discharge Consents</p> <p>Operator: [Blank] Property Type: Domestic Property (Single) Location: Chalgrove Airfield, Chalgrove, Oxford, Ox44 7rj Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Ctcu.1835 Permit Version: 2 Effective Date: 13th July 2006 Issued Date: 12th July 2006 Revocation Date: 31st March 2019 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Underground Water Environment: [Blank] Receiving Water: Groundwater Via Sub Irrigation Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p>	A9NE (SE)	912	1	464350 197400
7	<p>Discharge Consents</p> <p>Operator: [Blank] Property Type: Domestic Property (Single) Location: Chalgrove Airfield, Chalgrove, Oxford, Ox44 7rj Authority: Environment Agency, Thames Region Catchment Area: Not Given Reference: Ctwc.1936 Permit Version: 1 Effective Date: 8th October 1987 Issued Date: 8th October 1987 Revocation Date: 12th August 1996 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Irrigation Area Environment: [Blank] Receiving Water: River Terraces Status: Authorisation revokedRevoked Positional Accuracy: Located by supplier to within 100m</p>	A14SE (E)	963	1	464500 197600
	<p>Nearest Surface Water Feature</p>	A18SW (NW)	548	-	463349 198387
8	<p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Not Given Location: High Street, CHALGROVE Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Confirmed As A Pollution Incident Incident Date: Not Supplied Incident Reference: W1910302 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p>	A8NW (SW)	656	1	463300 197300

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	Pollution Incidents to Controlled Waters Property Type: Not Given Location: CHALGROVE Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Confirmed incident Incident Date: 6th January 1999 Incident Reference: THWE1999041524 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m	A8SW (S)	748	1	463300 197200
10	Pollution Incidents to Controlled Waters Property Type: Not Given Location: CHALGROVE Authority: Environment Agency, Thames Region Pollutant: General Note: Not Supplied Incident Date: 16th May 1997 Incident Reference: THWE1997029322 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8SE (SE)	761	1	463900 197200
11	Pollution Incidents to Controlled Waters Property Type: Not Given Location: High Street, CHALGROVE Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Confirmed As A Pollution Incident Incident Date: Not Supplied Incident Reference: W1920029 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8SW (S)	797	1	463500 197100
12	Pollution Incidents to Controlled Waters Property Type: Not Given Location: CHALGROVE Authority: Environment Agency, Thames-Region Pollutant: Oils - Unknown Note: Confirmed As A Pollution Incident Incident Date: 10th October 1995 Incident Reference: W1950545 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8SE (S)	801	1	463700 197100
13	Pollution Incidents to Controlled Waters Property Type: Not Given Location: CHALGROVE Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Confirmed As A Pollution Incident Incident Date: 14th February 1990 Incident Reference: W1900070 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8SW (S)	813	1	463400 197100
14	Pollution Incidents to Controlled Waters Property Type: Not Given Location: CHALGROVE Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Confirmed incident Incident Date: 7th January 1999 Incident Reference: THWE1999041554 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m	A8SW (S)	841	1	463300 197100

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	<p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Not Given Location: CHALGROVE Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Confirmed As A Pollution Incident Incident Date: 10th February 1992 Incident Reference: W1920011 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p>	A8SE (S)	892	1	463600 197000
15	<p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Not Given Location: CHALGROVE Authority: Environment Agency, Thames Region Pollutant: Storm Sewage Note: Not Supplied Incident Date: 8th December 1998 Incident Reference: THWE1998040023 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p>	A8SE (S)	897	1	463600 196995
16	<p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Not Given Location: CHALGROVE Authority: Environment Agency, Thames Region Pollutant: Unknown Sewage Note: Confirmed As A Pollution Incident Incident Date: 10th May 1992 Incident Reference: W1920259 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p>	A8SW (S)	896	1	463500 197000
17	<p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Not Given Location: CHALGROVE Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Confirmed As A Pollution Incident Incident Date: 22nd June 1994 Incident Reference: W1940326 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m</p>	A7SE (SW)	928	1	463100 197100
	<p>River Quality</p> <p>Name: Chalgrove Bk GQA Grade: River Quality A Reach: Source - Thame Estimated Distance (km): 12.1 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000</p>	A7SE (SW)	931	1	463179 197053
	<p>Water Abstractions</p> <p>Operator: Licence Number: Permit Version: Location: Authority: Environment Agency, Thames Region Abstraction: General Agriculture: Spray Irigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 1091 Yearly Rate (m3): 77282 Details: Not Supplied Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 1st April 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A24NW (N)	1690	1	464100 199500

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>Water Abstractions</p> <p>Operator: Chalgrove Farm Ltd Licence Number: 28/39/19/0072 Permit Version: 400 Location: Chalgrove Farm, Oxon Authority: Environment Agency, Thames Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): 227 Yearly Rate (m3): 9092 Details: Not Supplied Authorised Start: 01 May Authorised End: 30 September Permit Start Date: 16th July 1968 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A22NW (NW)	1748	1	462700 199400
	<p>Water Abstractions</p> <p>Operator: Chalgrove Farm Ltd Licence Number: 28/39/19/0024 Permit Version: 400 Location: Chalgrove Farm, Oxon Authority: Environment Agency, Thames Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Chalgrove, Oxon Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 29th November 2010 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A22NW (NW)	1765	1	462650 199390
	<p>Water Abstractions</p> <p>Operator: Chalgrove Farm Ltd Licence Number: 28/39/19/0024 Permit Version: 400 Location: Chalgrove Farm, Oxon Authority: Environment Agency, Thames Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Chalgrove, Oxon Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 13th December 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A22NW (NW)	1765	1	462650 199390
	<p>Water Abstractions</p> <p>Operator: Chalgrove Farm Ltd Licence Number: 28/39/19/0024 Permit Version: 400 Location: Chalgrove Farm, Oxon Authority: Environment Agency, Thames Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): 600 Yearly Rate (m3): 8637 Details: Chalgrove, Oxon Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 17th May 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A22NW (NW)	1765	1	462650 199390
	<p>Groundwater Vulnerability</p> <p>Soil Classification: Soils of Intermediate Leaching Potential (I1) - Soils which can possibly transmit a wide range of pollutants Map Sheet: Sheet 38 Upper Thames & Bedfordshire Scale: 1:100,000</p>	A13NE (N)	0	1	463583 197892
	<p>Drift Deposits</p> <p>None</p>				
	<p>Bedrock Aquifer Designations</p> <p>Aquifer Designation: Unproductive Strata</p>	A13NE (N)	0	2	463583 197892

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13NE (N)	0	2	463583 197892
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
	Detailed River Network Lines None				
	Detailed River Network Offline Drainage None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Landfill Coverage Name: Oxfordshire County Council - Has supplied landfill data		0	7	463583 197892
	Local Authority Landfill Coverage Name: South Oxfordshire District Council - Landfill data has been supplied by another authority		0	6	463583 197892

Hazardous Substances

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	Control of Major Accident Hazards Sites (COMAH) Name: The Airfield, Chalgrove, Oxford, OX44 7RJ Location: Not Supplied Reference: Lower Tier Type: Active Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (SE)	757	3	464273 197581
19	Explosive Sites Name: Chalgrove/ Location: The Airfield, Chalgrove, Oxford, Oxfordshire, OX44 7RJ Reference: Active Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (SE)	757	3	464273 197581

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>BGS 1:625,000 Solid Geology Description: Upper Greensand and Gault</p>	A13NE (N)	0	2	463583 197892
	<p>BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic: <15 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel: 15 - 30 mg/kg Concentration:</p>	A13NE (N)	0	4	463583 197892
	<p>BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic: 15 - 25 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel: 15 - 30 mg/kg Concentration:</p>	A13NE (N)	109	4	463583 198000
	<p>BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic: <15 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel: 15 - 30 mg/kg Concentration:</p>	A14NW (E)	418	4	464000 197892
	<p>BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic: 15 - 25 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel: 15 - 30 mg/kg Concentration:</p>	A14NW (E)	432	4	464000 198000
	<p>BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic: 15 - 25 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel: 15 - 30 mg/kg Concentration:</p>	A18SW (NW)	553	4	463339 198388
	<p>BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic: <15 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: <150 mg/kg Nickel: 15 - 30 mg/kg Concentration:</p>	A7NE (SW)	576	4	463187 197474

Geological

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A12NE (W)	583	4	463000 197892
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A12NE (W)	593	4	463000 198000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A18SE (N)	663	4	463751 198532
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A7NE (SW)	707	4	463000 197492
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A8NW (SW)	712	4	463288 197244
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A19SW (NE)	726	4	464066 198433

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>BGS Estimated Soil Chemistry</p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic Concentration: <15 mg/kg</p> <p>Cadmium Concentration: <1.8 mg/kg</p> <p>Chromium Concentration: 60 - 90 mg/kg</p> <p>Lead Concentration: <150 mg/kg</p> <p>Nickel Concentration: 15 - 30 mg/kg</p>	A7NE (SW)	799	4	463000 197345
	<p>BGS Estimated Soil Chemistry</p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic Concentration: 15 - 25 mg/kg</p> <p>Cadmium Concentration: <1.8 mg/kg</p> <p>Chromium Concentration: 60 - 90 mg/kg</p> <p>Lead Concentration: <150 mg/kg</p> <p>Nickel Concentration: 15 - 30 mg/kg</p>	A17SE (NW)	822	4	463000 198471
	<p>BGS Estimated Soil Chemistry</p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic Concentration: <15 mg/kg</p> <p>Cadmium Concentration: <1.8 mg/kg</p> <p>Chromium Concentration: 60 - 90 mg/kg</p> <p>Lead Concentration: <150 mg/kg</p> <p>Nickel Concentration: 15 - 30 mg/kg</p>	A17NE (NW)	866	4	463042 198567
	<p>BGS Estimated Soil Chemistry</p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic Concentration: <15 mg/kg</p> <p>Cadmium Concentration: <1.8 mg/kg</p> <p>Chromium Concentration: 60 - 90 mg/kg</p> <p>Lead Concentration: <150 mg/kg</p> <p>Nickel Concentration: 15 - 30 mg/kg</p>	A17SE (NW)	890	4	463000 198563
	<p>BGS Estimated Soil Chemistry</p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic Concentration: <15 mg/kg</p> <p>Cadmium Concentration: <1.8 mg/kg</p> <p>Chromium Concentration: 60 - 90 mg/kg</p> <p>Lead Concentration: <150 mg/kg</p> <p>Nickel Concentration: 15 - 30 mg/kg</p>	A8SE (S)	892	4	463583 197000
	<p>BGS Estimated Soil Chemistry</p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic Concentration: <15 mg/kg</p> <p>Cadmium Concentration: <1.8 mg/kg</p> <p>Chromium Concentration: 60 - 90 mg/kg</p> <p>Lead Concentration: <150 mg/kg</p> <p>Nickel Concentration: 15 - 30 mg/kg</p>	A8SE (S)	894	4	463645 197000

Geological

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A17NE (NW)	900	4	463000 198576
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14NE (E)	923	4	464499 198000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A8SE (S)	923	4	463820 197000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A8SW (S)	951	4	463302 196984
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A19NW (NE)	982	4	464100 198726
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <150 mg/kg Nickel Concentration: 15 - 30 mg/kg	A9SW (SE)	985	4	464000 197000
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	0	2	463583 197892
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	0	2	463583 197892
	Potential for Ground Dissolution Stability Hazards No Hazard				
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	0	2	463583 197892
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	0	2	463583 197892
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	0	2	463583 197892
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	62	2	463644 197882
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	0	2	463583 197892
	Radon Potential - Radon Affected Areas Affected Area: The property is in a lower probability radon area, as less than 1% of homes are above the action level Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	0	2	463583 197892

Industrial Land Use

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	Contemporary Trade Directory Entries Name: Location: Classification: Aviation Engineers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SE (SE)	757	-	464273 197581
21	Contemporary Trade Directory Entries Name: Location: S Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SW (S)	838	-	463456 197064
22	Contemporary Trade Directory Entries Name: Location: Classification: Car Body Repairs Status: Active Positional Accuracy: Automatically positioned to the address	A7SE (SW)	911	-	463196 197068
23	Contemporary Trade Directory Entries Name: Location: Classification: Leisure & Sportswear Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7SE (SW)	953	-	463149 197044
24	Fuel Station Entries Name: Location: SS Brand: Uk Premises Type: Not Applicable Status: Obsolete Positional Accuracy: Located by supplier to within 10m	A8SW (S)	853	-	463478 197046

Sensitive Land Use

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
25	Nitrate Vulnerable Zones Name: Not Supplied Description: NVZ Area Source: Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	A13NE (N)	0	5	463583 197892

Data Currency

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices South Oxfordshire District Council - Environmental Health Department	March 2013	Annual Rolling Update
Discharge Consents Environment Agency - Thames Region	October 2013	Quarterly
Enforcement and Prohibition Notices Environment Agency - Thames Region	March 2013	As notified
Integrated Pollution Controls Environment Agency - Thames Region	October 2008	Not Applicable
Integrated Pollution Prevention And Control Environment Agency - Thames Region	October 2013	Quarterly
Local Authority Integrated Pollution Prevention And Control South Oxfordshire District Council - Environmental Health Department	February 2013	Annual Rolling Update
Local Authority Pollution Prevention and Controls South Oxfordshire District Council - Environmental Health Department	February 2013	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements South Oxfordshire District Council - Environmental Health Department	February 2013	Annual Rolling Update
Nearest Surface Water Feature Ordnance Survey	July 2012	Quarterly
Pollution Incidents to Controlled Waters Environment Agency - Thames Region	September 1999	Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - Thames Region	March 2013	As notified
Prosecutions Relating to Controlled Waters Environment Agency - Thames Region	March 2013	As notified
Registered Radioactive Substances Environment Agency - Thames Region	October 2013	Quarterly
River Quality Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points Environment Agency - Head Office	July 2012	Annually
River Quality Chemistry Sampling Points Environment Agency - Head Office	July 2012	Annually
Substantiated Pollution Incident Register Environment Agency - Thames Region - West Area	October 2013	Quarterly
Water Abstractions Environment Agency - Thames Region	October 2013	Quarterly
Water Industry Act Referrals Environment Agency - Thames Region	October 2013	Quarterly
Groundwater Vulnerability Environment Agency - Head Office	January 2011	Not Applicable
Drift Deposits Environment Agency - Head Office	January 1999	Not Applicable
Bedrock Aquifer Designations British Geological Survey - National Geoscience Information Service	October 2012	Annually
Superficial Aquifer Designations British Geological Survey - National Geoscience Information Service	October 2012	Annually
Source Protection Zones Environment Agency - Head Office	October 2013	Quarterly
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	December 2013	Quarterly

Agency & Hydrological	Version	Update Cycle
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	December 2013	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	December 2013	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	December 2013	Quarterly
Flood Defences Environment Agency - Head Office	December 2013	Quarterly
Detailed River Network Lines Environment Agency - Head Office	March 2012	Annually
Detailed River Network Offline Drainage Environment Agency - Head Office	March 2012	Annually
Waste	Version	Update Cycle
BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites Environment Agency - South East Region - Kent & South London Area Environment Agency - South East Region - North East Thames Area Environment Agency - South East Region - Solent & South Downs Area Environment Agency - South East Region - West Thames Area Environment Agency - Thames Region - West Area	October 2013 October 2013 October 2013 October 2013 October 2013	Quarterly Quarterly Quarterly Quarterly Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - Thames Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency - South East Region - Kent & South London Area Environment Agency - South East Region - North East Thames Area Environment Agency - South East Region - Solent & South Downs Area Environment Agency - South East Region - West Thames Area Environment Agency - Thames Region - West Area	October 2013 October 2013 October 2013 October 2013 October 2013	Quarterly Quarterly Quarterly Quarterly Quarterly
Licensed Waste Management Facilities (Locations) Environment Agency - Thames Region - West Area	October 2013	Quarterly
Local Authority Landfill Coverage Oxfordshire County Council South Oxfordshire District Council - Environmental Health Department	May 2000 May 2000	Not Applicable Not Applicable
Local Authority Recorded Landfill Sites Oxfordshire County Council South Oxfordshire District Council - Environmental Health Department	May 2000 May 2000	Not Applicable Not Applicable
Registered Landfill Sites Environment Agency - Thames Region - West Area	March 2003	Not Applicable
Registered Waste Transfer Sites Environment Agency - Thames Region - West Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency - Thames Region - West Area	March 2003	Not Applicable


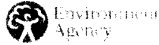








Data Currency

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive	August 2013	Bi-Annually
Explosive Sites Health and Safety Executive	November 2013	Bi-Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements South Oxfordshire District Council - Planning Department (West) Oxfordshire County Council	January 2013 November 2012	Annual Rolling Update Annual Rolling Update
Planning Hazardous Substance Consents South Oxfordshire District Council - Planning Department (West) Oxfordshire County Council	January 2013 November 2012	Annual Rolling Update Annual Rolling Update
Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	August 1996	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	January 2010	Variable
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	October 2013	Bi-Annually
Brine Compensation Area Cheshire Brine Subsidence Compensation Board	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Mining Report Service	January 2012	As notified
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	February 2011	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	October 2013	As notified
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	October 2013	As notified
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	October 2013	As notified
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	October 2013	As notified
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	October 2013	As notified
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	October 2013	As notified
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	As notified
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	As notified
Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	November 2013	Quarterly
Fuel Station Entries Experian	August 2013	Quarterly

Sensitive Land Use	Version	Update Cycle
Areas of Adopted Green Belt South Oxfordshire District Council	November 2013	As notified
Areas of Unadopted Green Belt South Oxfordshire District Council	November 2013	As notified
Areas of Outstanding Natural Beauty Natural England	January 2014	Bi-Annually
Environmentally Sensitive Areas Natural England	July 2013	Annually
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	July 2013	Bi-Annually
Marine Nature Reserves Natural England	July 2013	Bi-Annually
National Nature Reserves Natural England	July 2013	Bi-Annually
National Parks Natural England	January 2014	Bi-Annually
Nitrate Sensitive Areas Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	February 2012	Not Applicable
Nitrate Vulnerable Zones Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	February 2013	Annually
Ramsar Sites Natural England	July 2013	Bi-Annually
Sites of Special Scientific Interest Natural England	July 2013	Bi-Annually
Special Areas of Conservation Natural England	July 2013	Bi-Annually
Special Protection Areas Natural England	July 2013	Bi-Annually

Data Suppliers

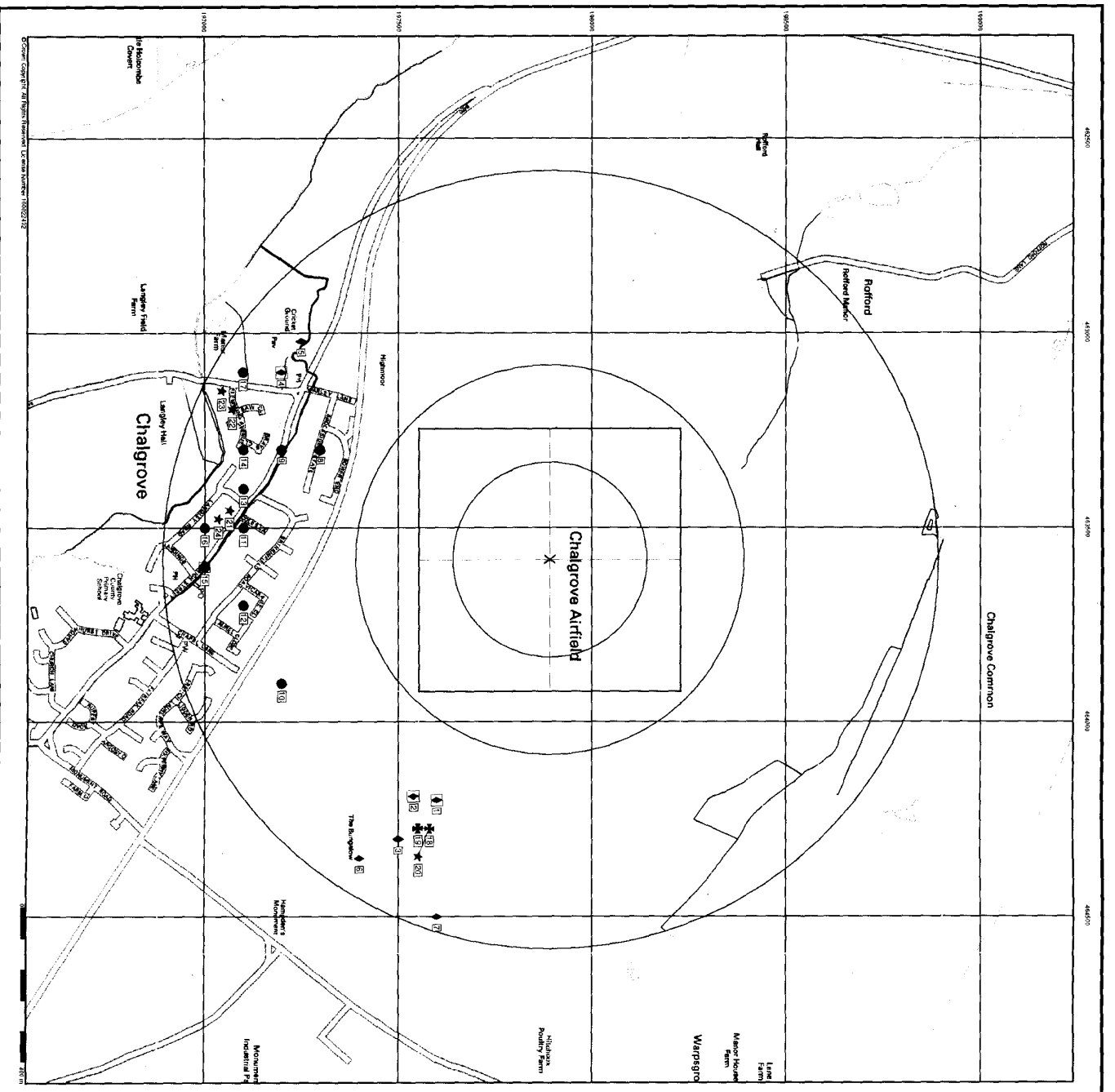
A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Countryside Council for Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	

Useful Contacts

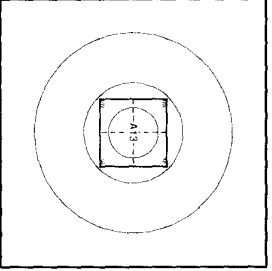
Contact	Name and Address	Contact Details
1	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 08708 506 506 Email: enquiries@environment-agency.gov.uk
2	British Geological Survey - Enquiry Service British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
3	Health and Safety Executive 5S.2 Redgrave Court, Merton Road, Bootle, L20 7HS	Website: www.hse.gov.uk
4		Telephone: Fax: Email: Website:
5	Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) Government Buildings, Otley Road, Lawnswood, Leeds, West Yorkshire, LS16 5QT	Telephone: 0113 2613333 Fax: 0113 230 0879
6	South Oxfordshire District Council - Environmental Health Department Council Offices, P O Box 92, Crowmarsh, Wallingford, Oxfordshire, OX10 8NY	Telephone: 01491 823000 Fax: 01491 823001 Email: env.health@southoxon.gov.uk Website: www.southoxon.gov.uk
7	Oxfordshire County Council County Hall, New Road, Oxford, Oxfordshire, OX1 1ND	Telephone: 01865 792422 Fax: 01865 810106 Email: environmental.services@oxfordshire.gov.uk Website: www.oxfordshire.gov.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-		Telephone: Fax: 0 Email: Website:

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



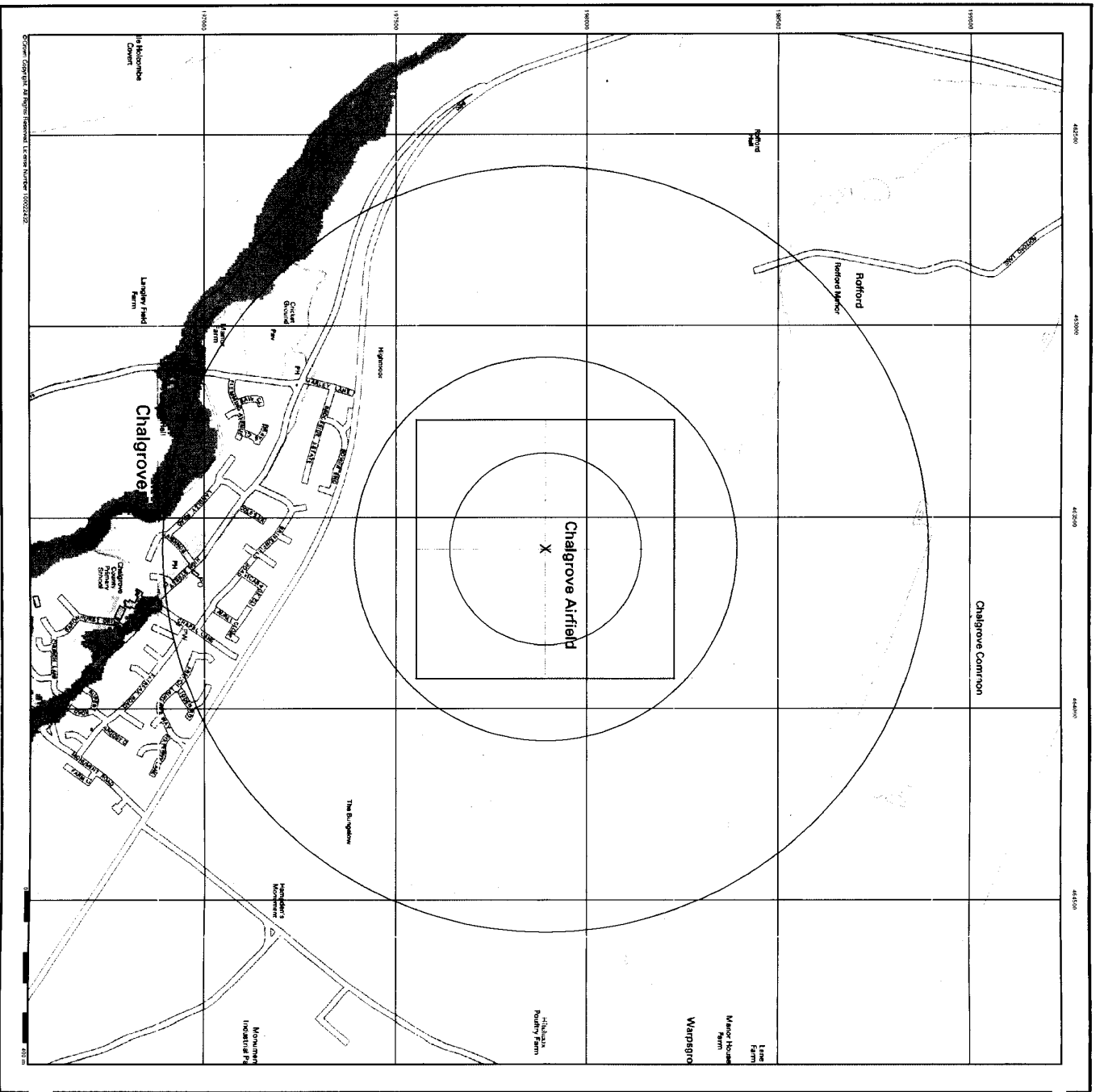
- General**
- Sensitive Site
 - Sensitive Buffer(s)
 - X Bearing Reference Point
 - B Map ID
- Agency and Hydrological**
- Contaminated Land Register Entry or Notice
 - Contaminated Land Register Entry or Notice
 - Drinking Consent
 - Environment or Protection Notice
 - Integrated Pollution Control
 - Integrated Pollution Prevention and Control
 - Local Authority Integrated Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control Enforcement
 - Pollution Incident to Controlled Waters
 - Pollution Relating to Authorised Processes
 - Pollution Relating to Controlled Waters
 - Registered Reducible Substance
 - River Network or Water Feature
 - Sewer
 - Sewer Quality Sampling Point
 - Statutory Pollution Incident Register
 - Water Abstraction
 - Water Industry Act Interim
- Waste**
- BGS Recorded Landfill Site (Location)
 - BGS Recorded Landfill Site
 - EA Historic Landfill (General Flow)
 - EA Historic Landfill (Special Flow)
 - EA Historic Landfill (Special Flow)
 - Licensed Waste Management Facility (Location)
 - Licensed Waste Management Facility (Location)
 - Local Authority Recorded Landfill Site (Location)
 - Local Authority Recorded Landfill Site
 - Registered Landfill Site
 - Registered Landfill Site (Location)
 - Registered Landfill Site (Flow Number in (Flow))
 - Registered Landfill Site (Flow Number in (Flow))
 - Registered Waste Transfer Site (Location)
- Geological**
- BGS Recorded Mineral Site
 - Explosive Site
 - IAHSS Site
 - Priority Hazardous Substance Consent
 - Priority Hazardous Substance Enforcement
 - Full Station Entry
- Industrial Land Use**
- Competency / Trade Secretary Entry
 - Full Station Entry
- Hazardous Substances**
- COMAH Site
 - IAHSS Site
 - Priority Hazardous Substance Consent
 - Priority Hazardous Substance Enforcement

Site Sensitivity Map - Slice A



Order Details

Order Number:
 Customer Ref:
 National Grid Reference:
 Site:
 Site Area (Ha):
 Search Buffer (m):
 Site Details
 Site at 463500, 197800



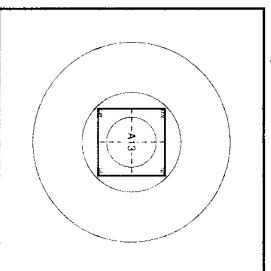
General

- Specified Site
- Specified Buffer(s)
- X Being Reference Point

Agency and Hydrological (Flood)

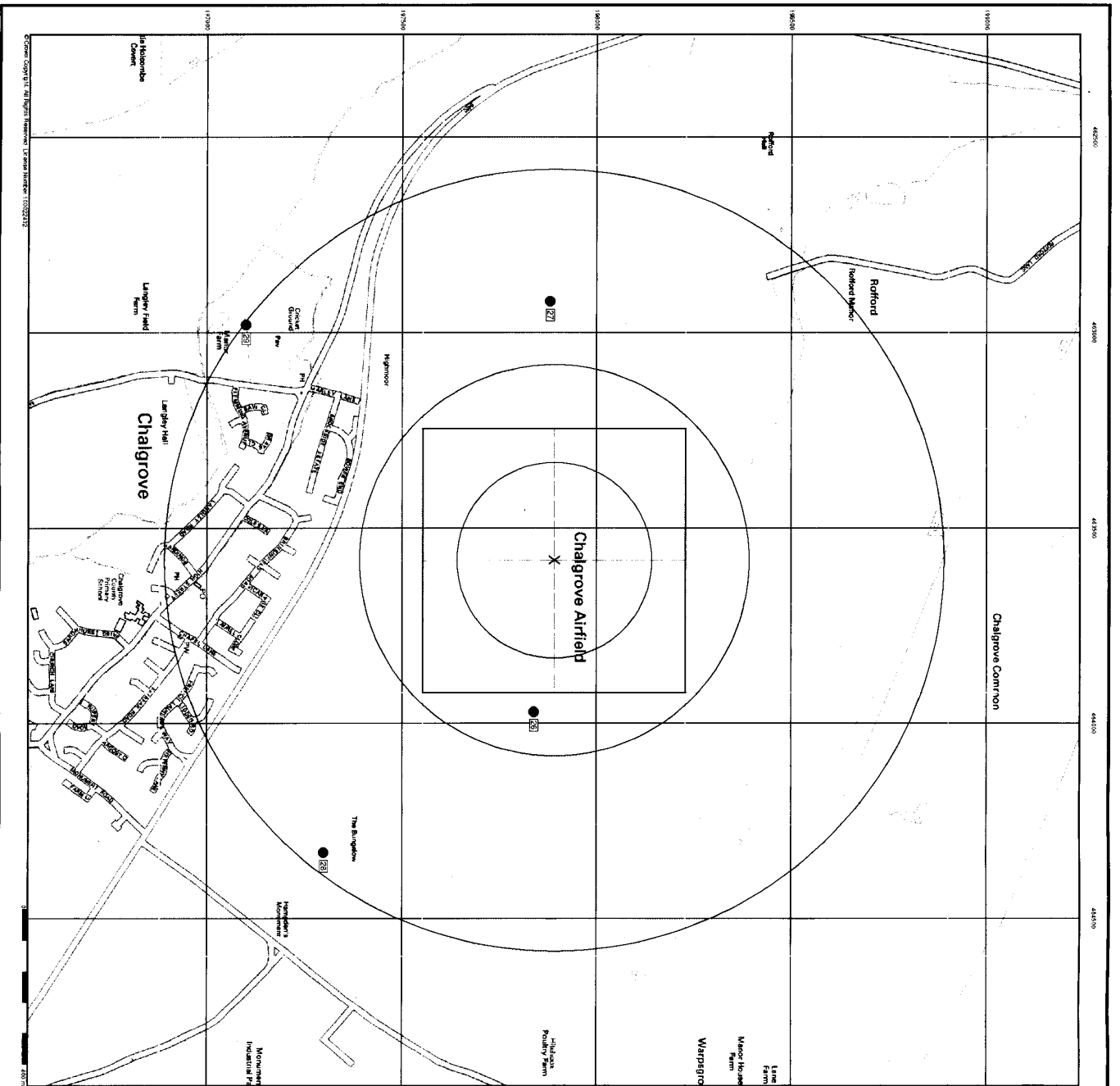
- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Areas Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Flood Map - Slice A



Order Details

Order Number: 10
 Customer Ref:
 National Grid Reference:
 Slice: A
 Site Area (Ha): 0.01
 Search Buffer (m): 1000
Site Details
 Site at 463500, 197800

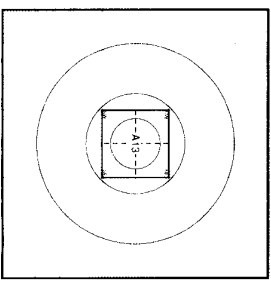


- General**
- Specified Site
 - Specified Buffer(s)
 - X Bearing Reference Point
 - Map ID
 - Symbol or Type at Location

- Agency and Hydrological (Boreholes)**
- BGS Borehole Depth 0 - 10m
 - BGS Borehole Depth 10 - 20m
 - BGS Borehole Depth 20m +
 - Commercial
 - Other

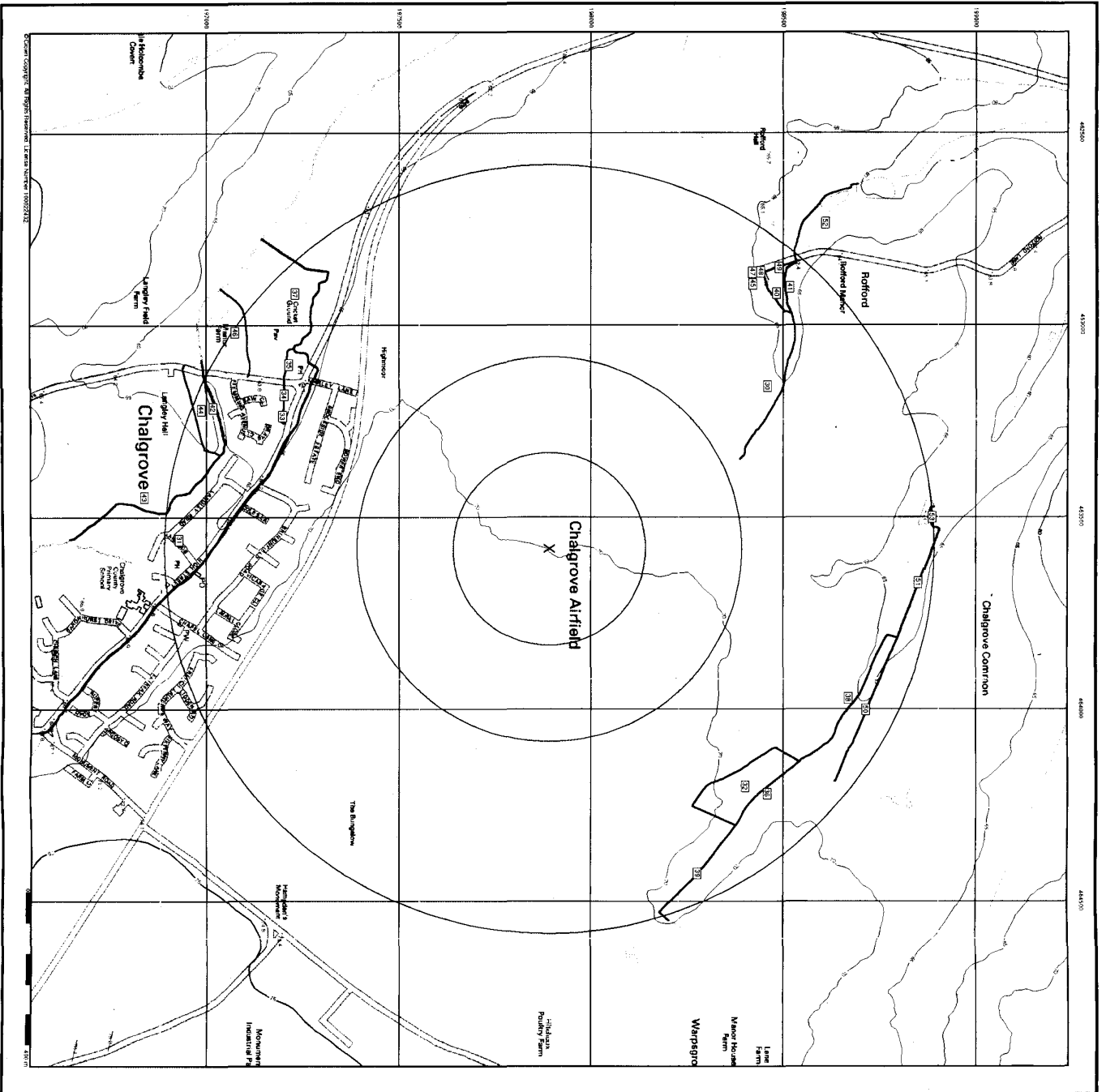
For Borehole information please refer to the Borehole .csv file which accompanied this slice.
 A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirotrack.co.uk.

Borehole Map - Slice A



Order Details
 Order Number:
 Customer Ref:
 National Grid Reference:
 Slice: A
 Site Area (Ha): 0.01
 Search Buffer (m): 1000

Site Details
 Site at 463500, 197800



- General**
- △ Sewer Site
 - Sewer Buffer(s)
 - X Bearing Reference Point
 - Map D

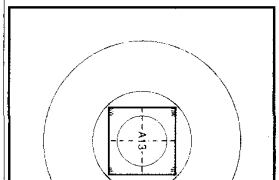
EA Detailed River Network Data

- Primary River
- Secondary River
- Tertiary River
- Canal
- Canal Tunnel
- Undefined River
- Likelihood
- Olline Drainage Feature
- Extended Culvert (greater than 50m)
- Underground River (Inferred)
- Underground River (Local Knowledge)
- Downstream of High Water Mark
- Downstream of Sward Extension
- Not assigned River feature

Contours (height in metres)

- Standard Contour — 15m
- Index Contour — 40m
- Spot Height — 16.7
- Air Height — 4.6

EA Detailed River Network Map - Slice A

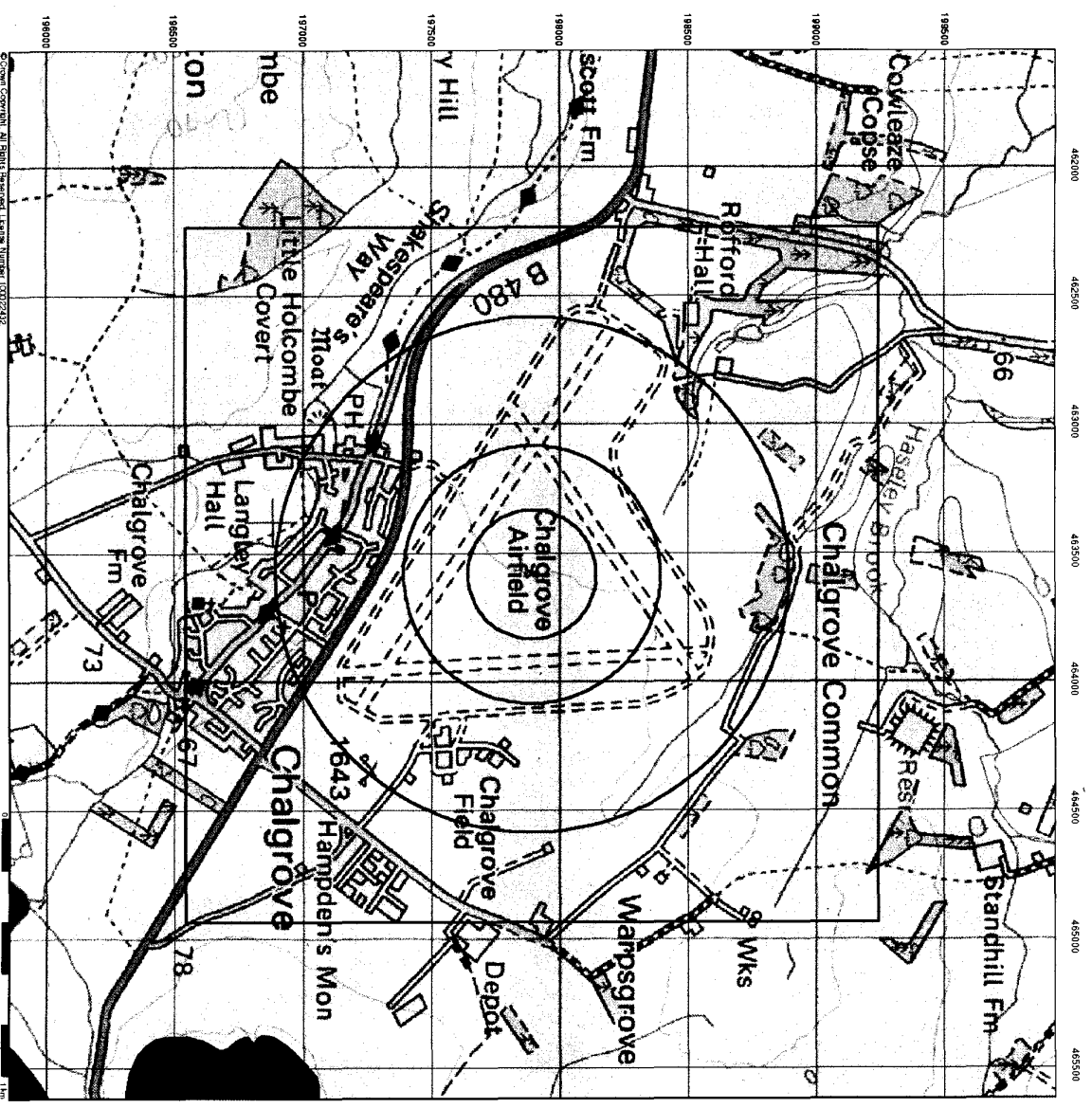


Order Details

Order Number:
Customer Ref:
National Grid Reference:
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 463500, 197800



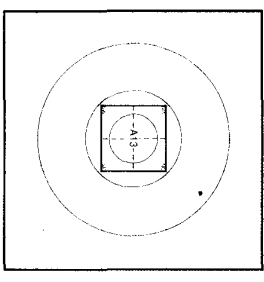
Bedrock Aquifer Designation

- General**
- ◊ Specified Site
 - ◊ Specified Buffer(s)
 - Site
 - ◻ Map ID
 - X Bearing Reference Point

Agency and Hydrological

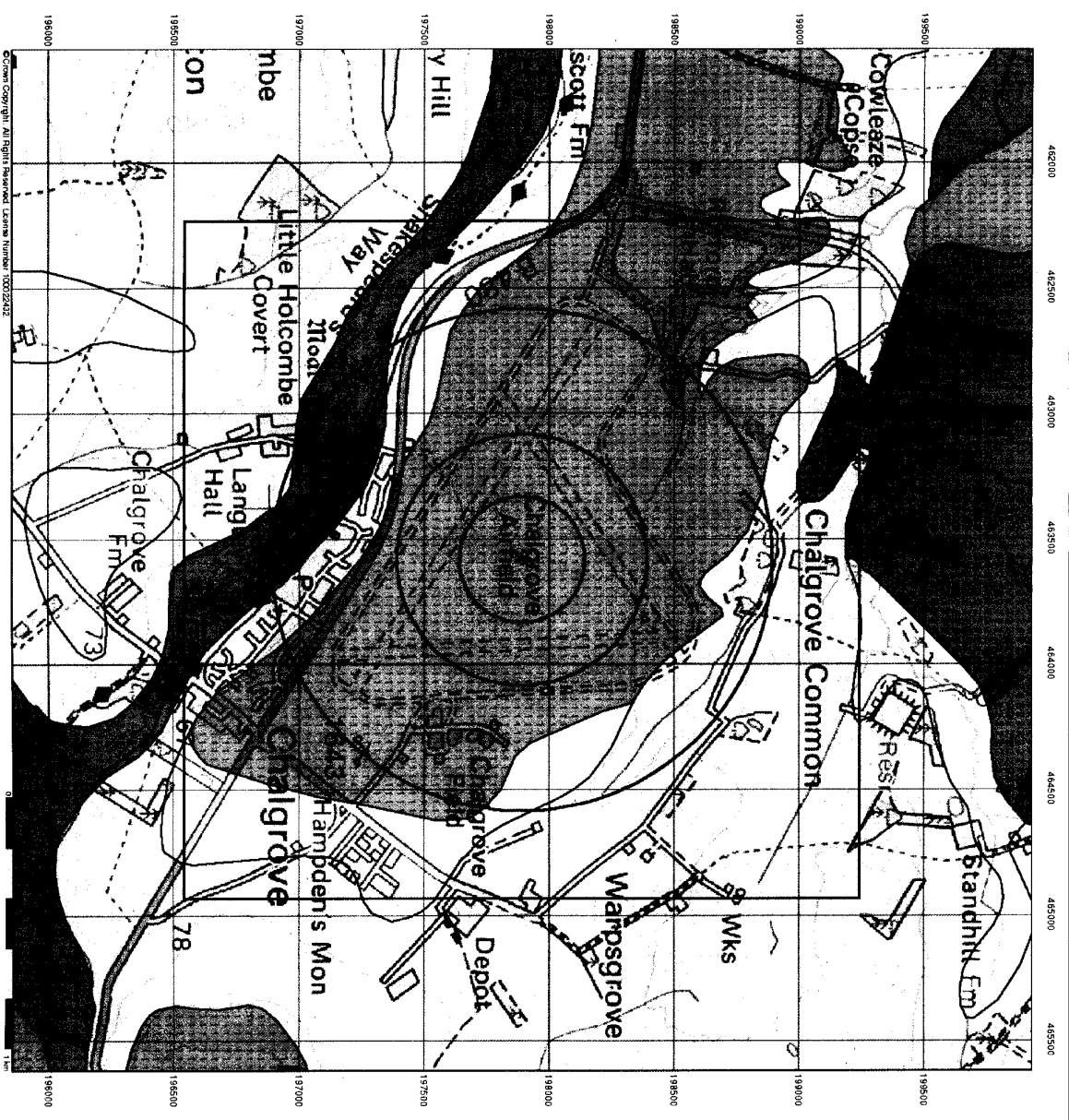
- Geological Classes**
- Principal Aquifer
 - Secondary A Aquifer
 - Secondary B Aquifer
 - Secondary Undifferentiated
 - Unproductive Strata
 - Unknown

Site Sensitivity Context Map - Slice A



Order Details

Order Number:
 Customer Ref:
 National Grid Reference:
 Site:
 Site Area (Ha):
 Search Buffer (m):
 Site at 463500, 197800



Groundwater Vulnerability

General

- Specified Site
- Specified Buffer(s)
- Map ID
- Bearing Reference Point

Agency and Hydrological

- Major Aquifer (Highly Permeable)
- Minor Aquifer (Variably Permeable)
- Non-Aquifer (Negligibly Permeable)
- Water or Sea
- Dirt Deposit

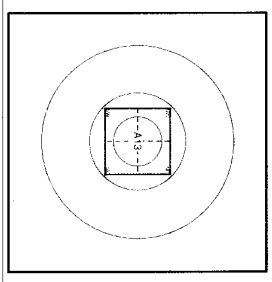
Geological Classes

- High (H) 1, 2, 3, U
- Intermediate (I) 1, 2
- Low

Soil Classes

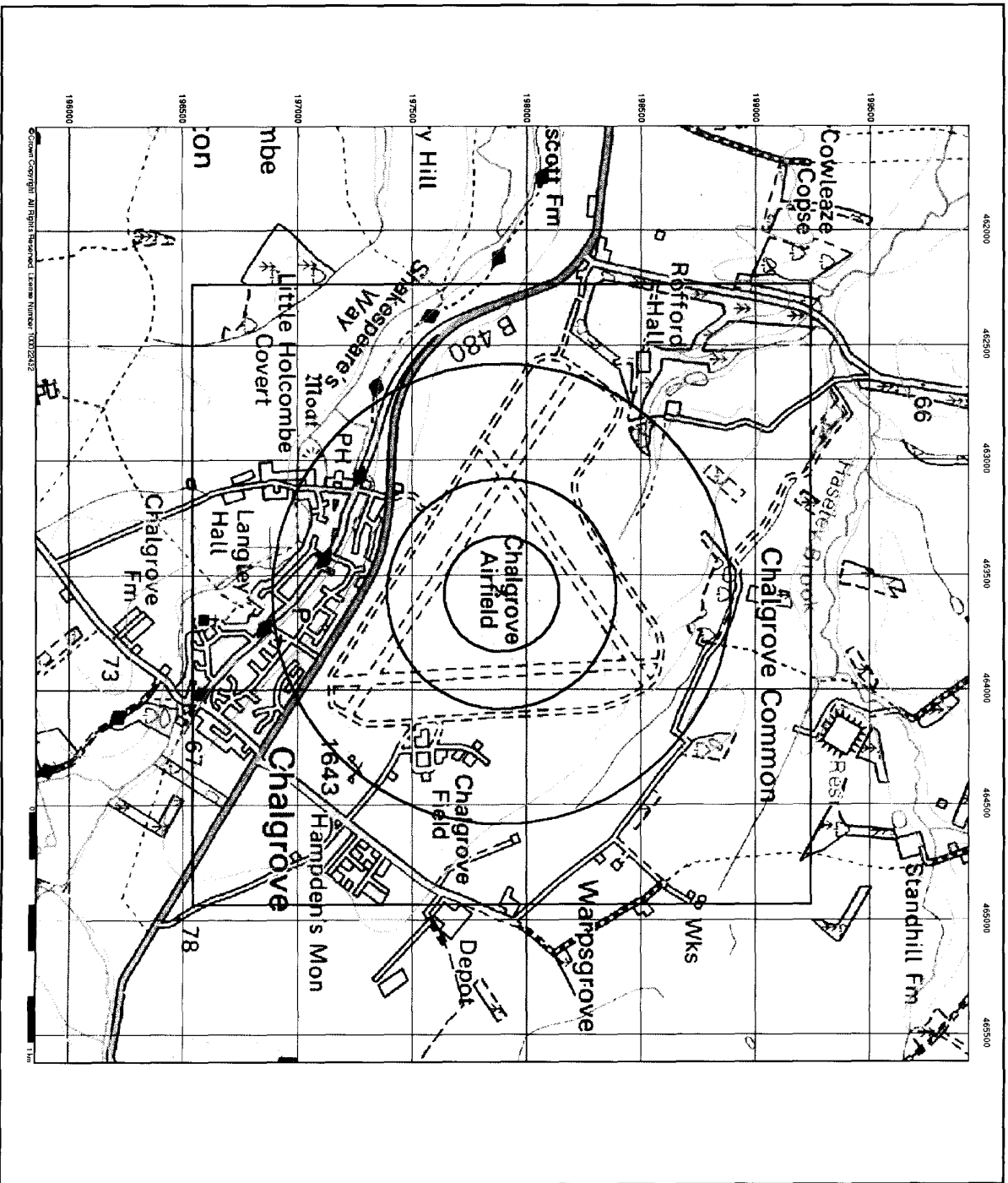
- High (H) 1, 2, 3, U
- Intermediate (I) 1, 2
- Low

Site Sensitivity Context Map - Slice A



Order Details

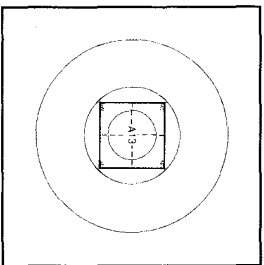
Order Number:
 Customer Ref:
 National Grid Reference:
 Slice:
 Site Area (Ha):
 Search Buffer (m):
 Site Details
 Site at 463500, 197800



Superficial Aquifer Designation

- General**
- ◊ Specified Site
 - Site
 - ◻ Specified Buffer(s)
 - ◻ Map ID
 - X Bearing Reference Point
- Agency and Hydrological Geological Classes**
- Principal Aquifer
 - Secondary A Aquifer
 - Secondary B Aquifer
 - Secondary Undifferentiated
 - Unproductive Strata
 - Unknown

Site Sensitivity Context Map - Slice A

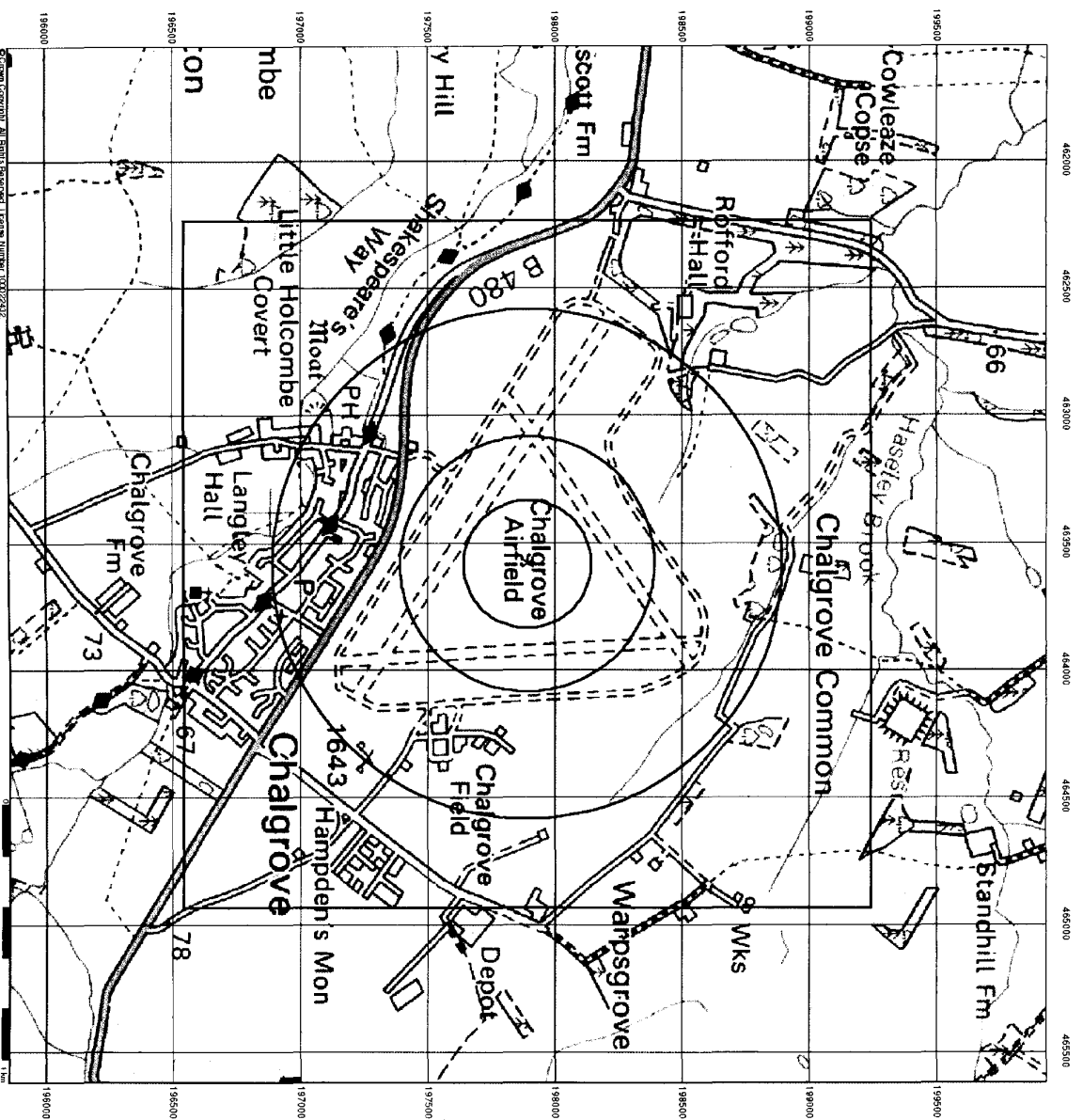


Order Details

Order Number:
 Customer Ref:
 National Grid Reference:
 Site: A
 Site Area (Ha): 0.01
 Search Buffer (m): 1000

Site Details

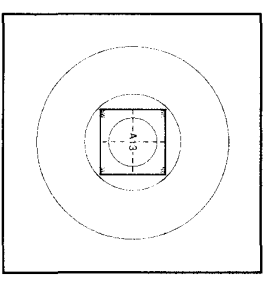
Site at 463500, 197800



Source Protection Zones

- General**
- ◊ Specified Site
 - ◊ Specified Entry(s)
 - X Bearing Reference Point
 - Site
 - ⊞ Map ID
- Agency and Hydrological**
- ▨ Source Protection Zone I
 - ▨ Source Protection Zone II
 - ▨ Source Protection Zone III
 - ▨ Zone of Special Interest
 - Source Protection Zone Boundary

Site Sensitivity Context Map - Slice A

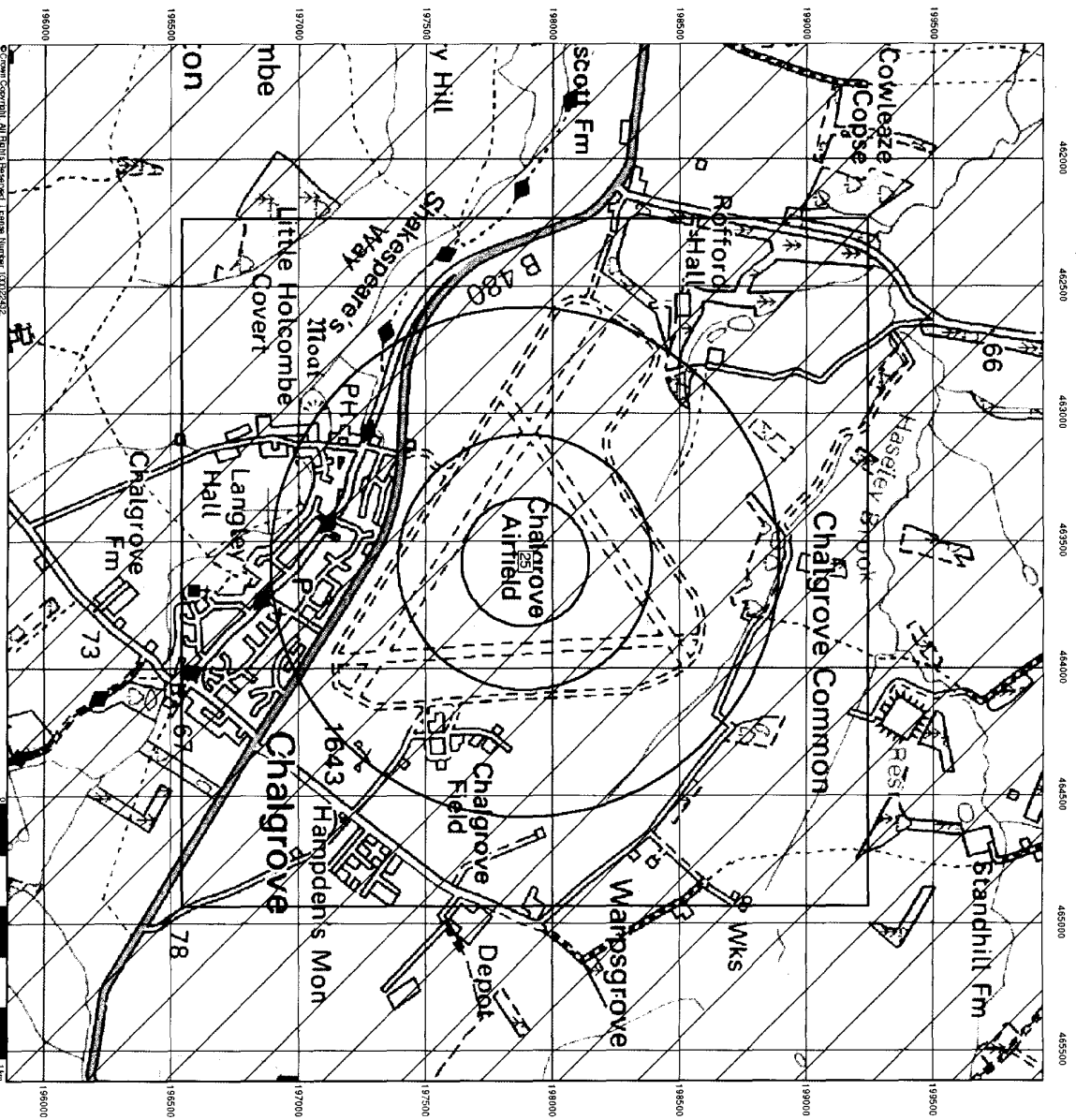


Order Details

Order Number:
 Customer Ref:
 National Grid Reference:
 Slice: A
 Site Area (Ha): 0.01
 Search Buffer (m): 1000

Site Details

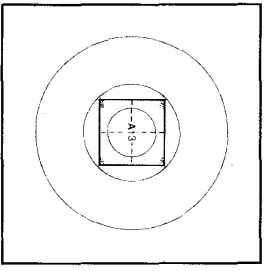
Site at 463500, 197800



Sensitive Land Uses

- General**
- ◊ Specified Site
 - Site
 - ◊ Specified Buffer(s)
 - ◻ Map ID
 - X Bearing Reference Point
- Sensitive Land Uses**
- ◻ Area of Adopted Green Belt
 - ◻ Area of Unadopted Green Belt
 - ◻ Area of Outstanding Natural Beauty
 - ◻ Environmentally Sensitive Area
 - ◻ Forest Park
 - ◻ Local Nature Reserve
 - ◻ Marine Nature Reserve
 - ◻ National Nature Reserve
 - ◻ National Park
 - ◻ Nitrate Sensitive Area
 - ◻ Nitrate Vulnerable Zone
 - ◻ Ramsar Site
 - ◻ Site of Special Scientific Interest
 - ◻ Special Area of Conservation
 - ◻ Special Protection Area

Site Sensitivity/Context Map - Slice A



Order Details

Order Number:
 Customer Ref:
 National Grid Reference:
 Slice:
 Site Area (Ha):
 Search Buffer (m):
 Site Details
 Site at 463500, 197600

Geology 1:50,000 Maps Legends

Superficial Geology

Map Colour	Lax Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Fluvial - Fluvial
	SUPA	Summerdown-Radley Sand and Gravel Member	Sand and Gravel	Pleistocene - Pleistocene
	WW	Wolvercote Sand and Gravel Member	Sand and Gravel	Pleistocene - Pleistocene
	RTD2	River Terrace Deposits, 2	Sand and Gravel	Quaternary - Quaternary
	NOVA	Northmoor Sand and Gravel Member, Lower Facit	Sand and Gravel	Quaternary - Quaternary

Bedrock and Faults

Map Colour	Lax Code	Rock Name	Rock Type	Min and Max Age
	GLT	Gault Formation	Mudstone	Albian - Albian
	UCSS	Upper Greensand Formation	Siltstone and Sandstone	Cenomanian - Albian
	PL	Portland Group	Limestone and Calcareous Sandstone	Portlandian - Portlandian
	KC	Kimmeridge Clay Formation	Siltstone and Sandstone	Kimmeridgian - Kimmeridgian
	KC	Kimmeridge Clay Formation	Siltstone and Sandstone	Kimmeridgian - Kimmeridgian
	KC	Kimmeridge Clay Formation	Mudstone	Kimmeridgian - Kimmeridgian
		Faults		

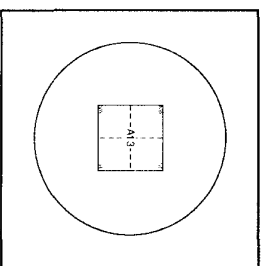
Geology 1:50,000 Maps

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 previously published paper maps. The various geological layers - artificial and landscape 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

Map ID:	1
Map Sheet No:	254
Map Name:	Hydon-Tam
Map Date:	1880
Map Geology:	Available
Superficial Geology:	Available
Artificial Geology:	Available
Faults:	Available
Rock Segments:	Not Available

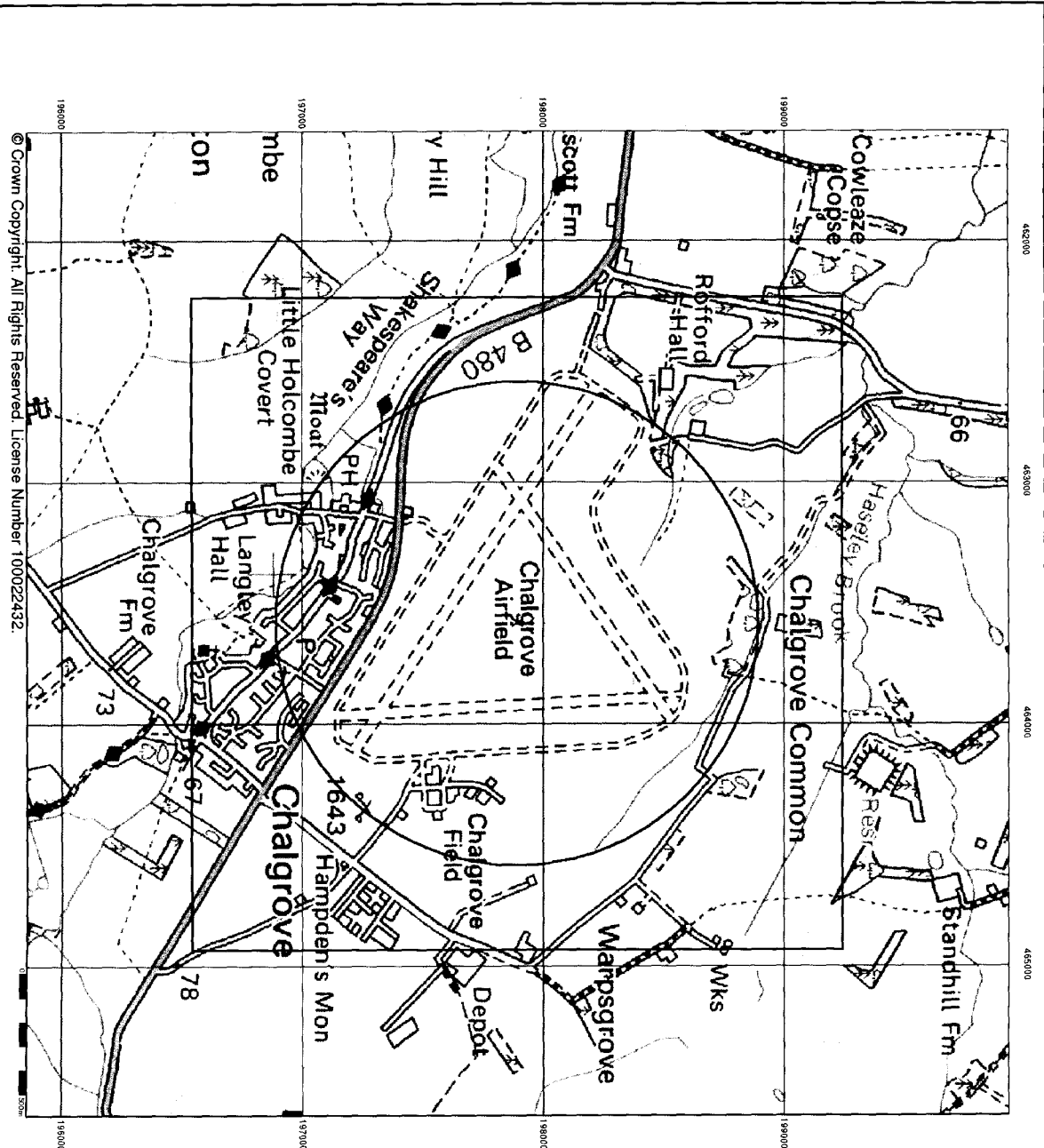
Geology 1:50,000 Maps - Slice A



Order Details:

Order Number:
Customer Reference:
National Grid Reference:
Site Area (Ha): A
Search Buffer (m): 1000
Site at 463500, 197800

Site Details:



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Artificial Ground and Landslip

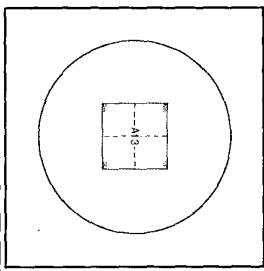
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions 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 quarries and road cuttings.
- Filled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Reshaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or deep surface material 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 faulted strata, where the ground has collapsed due to subsidence.

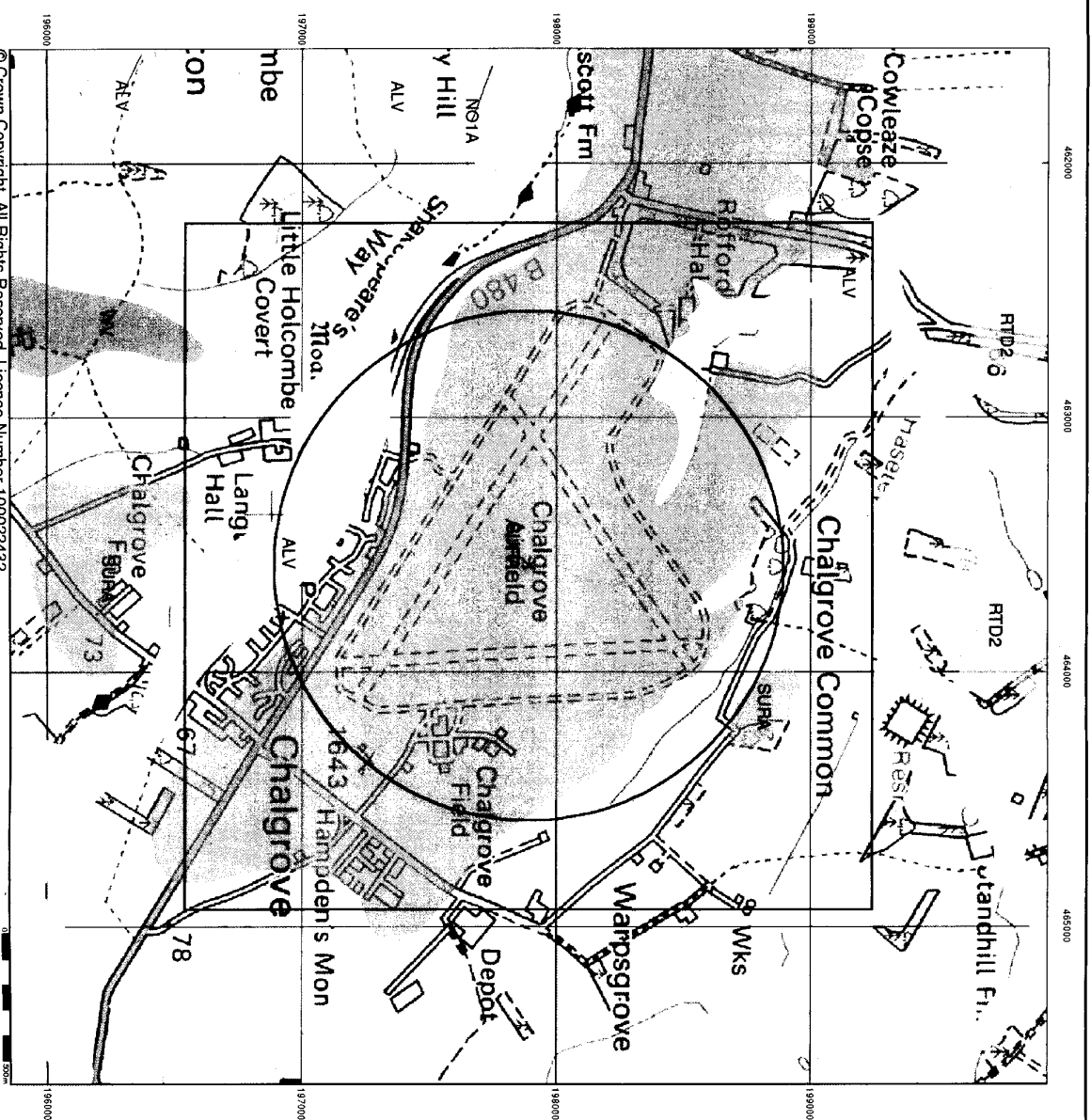
Artificial Ground and Landslip Map - Slice A



Order Details:

Order Number:
 Order Number Reference:
 National Grid Reference:
 Site:
 Site Area (ha):
 Search Buffer (m):
 Site Details:
 Site at 483500, 197900

A
 0.01
 1000

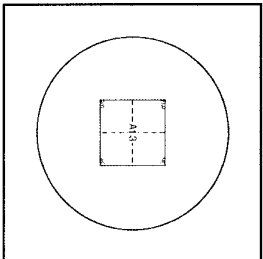


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Superficial Geology

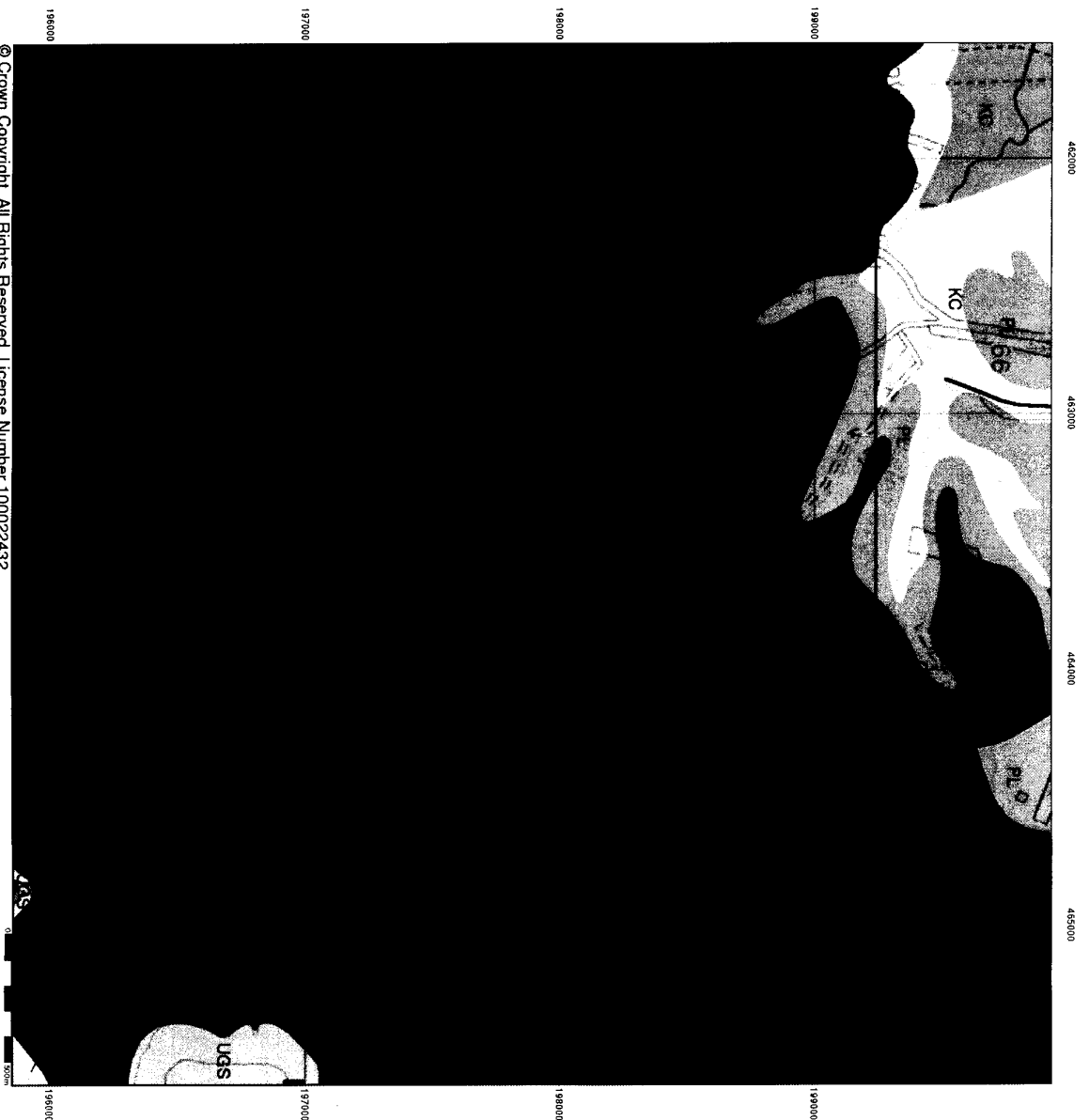
Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present. They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and in place. Other superficial strata may be read 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 clay, and on some they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A



Order Details:
 Order Number:
 Customer Reference:
 National Grid Reference:

Site Details:
 Site Area (Ha): A
 Search Buffer (m): 100
 Site at 463500, 197800



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Bedrock and Faults

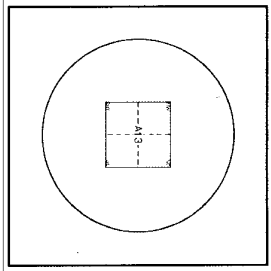
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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 Pleistocene, 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 sequences, 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:**
- Order Number: 1
 - Customer Reference:
 - National Grid Reference:
 - Site Area (Ha): 0.01
 - Search Buffer (m): 1000
- Site Details:**
- Site at 463500, 197800



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.

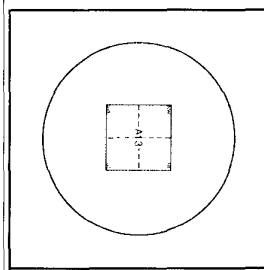
Additional Information

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, Durham Centre
 Keyworth
 Nottingham
 NG12 5GG
 Telephone: 0115 938 3143
 Fax: 0115 936 3276
 email: enquiries@bgs.ac.uk
 website: www.bgs.ac.uk

Combined Geology Map - Slice A



Order Details:

Order Number:
 National Reference:
 National Grid reference:
 Site Area (ha): A
 Search Buffer (m): 1000
Site Details:
 Site at 463500, 197800

Geology 1:10,000 Maps Legends

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Flandrian - Flandrian
	SUPA	Summerdown-Radley Sand and Gravel Member	Sand and Gravel	Pleistocene - Pleistocene
	WV	Wolvercote Sand and Gravel Member	Sand and Gravel	Pleistocene - Pleistocene

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	GLT	Gault Formation	Mudstone	Albian - Albian
	PL	Portland Group	INTERBEDDED LIMESTONE AND SUBEQUVAL/SUBO RDNATE SANDSTONE	Portlandian - Portlandian
	KC	Kimmeridge Clay Formation	Siltstone and Sandstone	Kimmeridgian - Kimmeridgian

Geology 1:10,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:10,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around a site. This mapping may be more up to date than previously published paper maps.

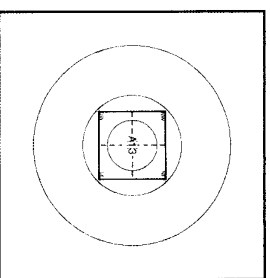
The various geological layers - artificial and landslide deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final Combed Surface Geology map. All map legends feature on this page.

Please Note: Not all of the layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:10,000 Maps Coverage

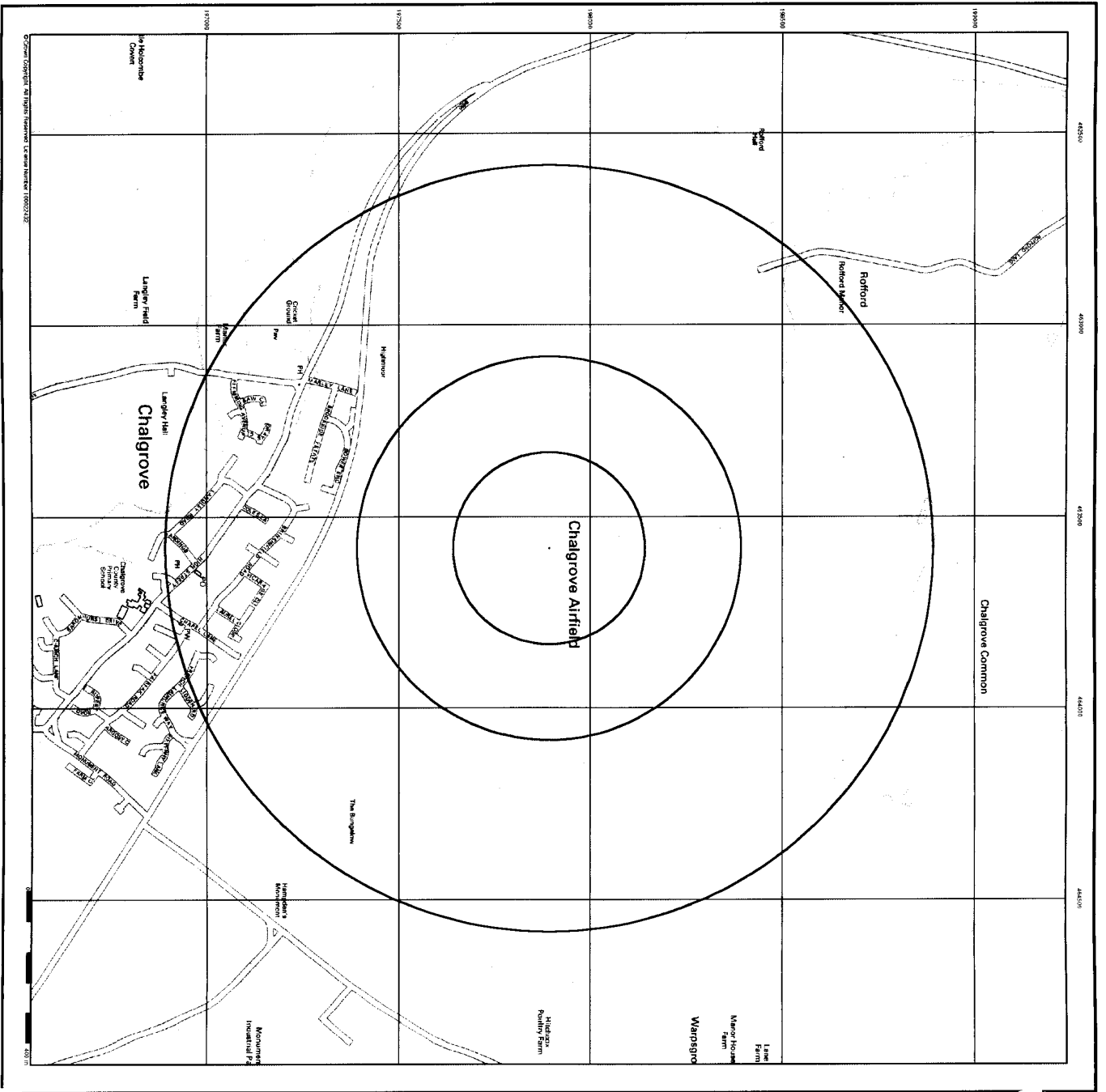
Map ID: 1
 Map Name: SU09NW
 Map Date: 1993
 Bedrock Geology: Available
 Superficial Geology: Not Available
 Artificial Geology: Available
 Faults: Not Available
 Landslip: Not Available
 Rock Segments: Not Available

Geology 1:10,000 Maps - Slice A



Order Details

Order Number: 1
 Customer Ref: 1
 National Grid Reference: A
 Site Area (Ha): 0.01
 Search Buffer (m): 1000
Site Details
 Site at 463500, 197800



Artificial Ground and Landslip

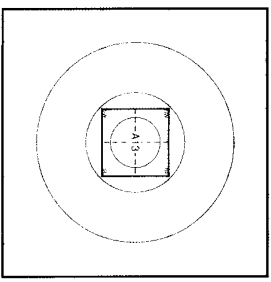
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- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- In-filled ground - areas where the ground has been 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 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 founded sites, where the ground has collapsed due to subsidence.

Artificial Ground and Landslip Map - Slice A



Order Details

Order Number:
 Customer Ref:
 National Grid Reference: A
 Slice: 0.01
 Site Area (Ha): 1000
 Search Buffer (m):

Site Details

Site at 463500, 197800

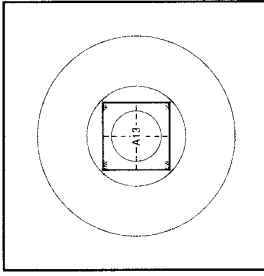
Superficial Geology

BGS 1:10,000 Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, 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 clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A

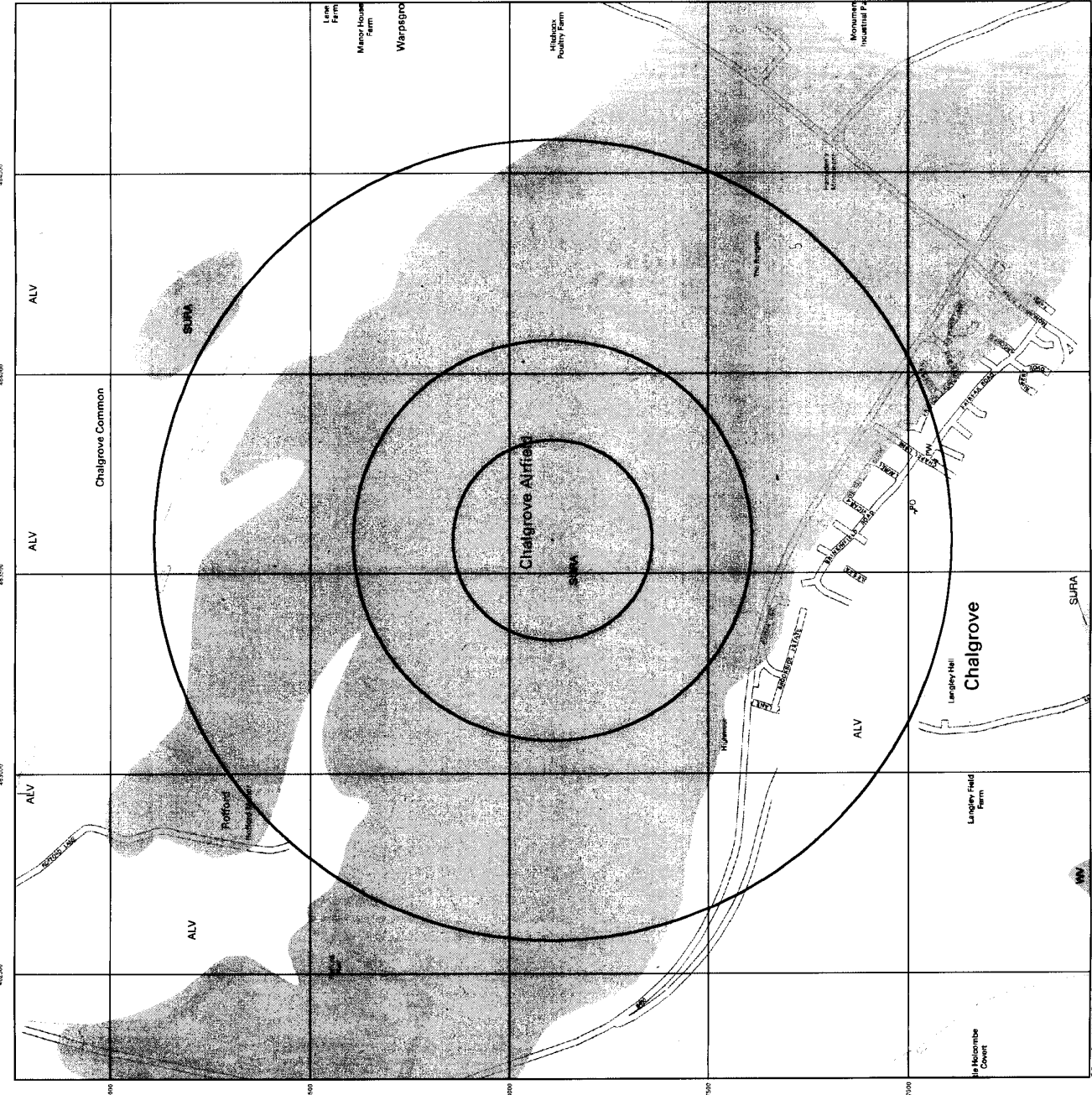


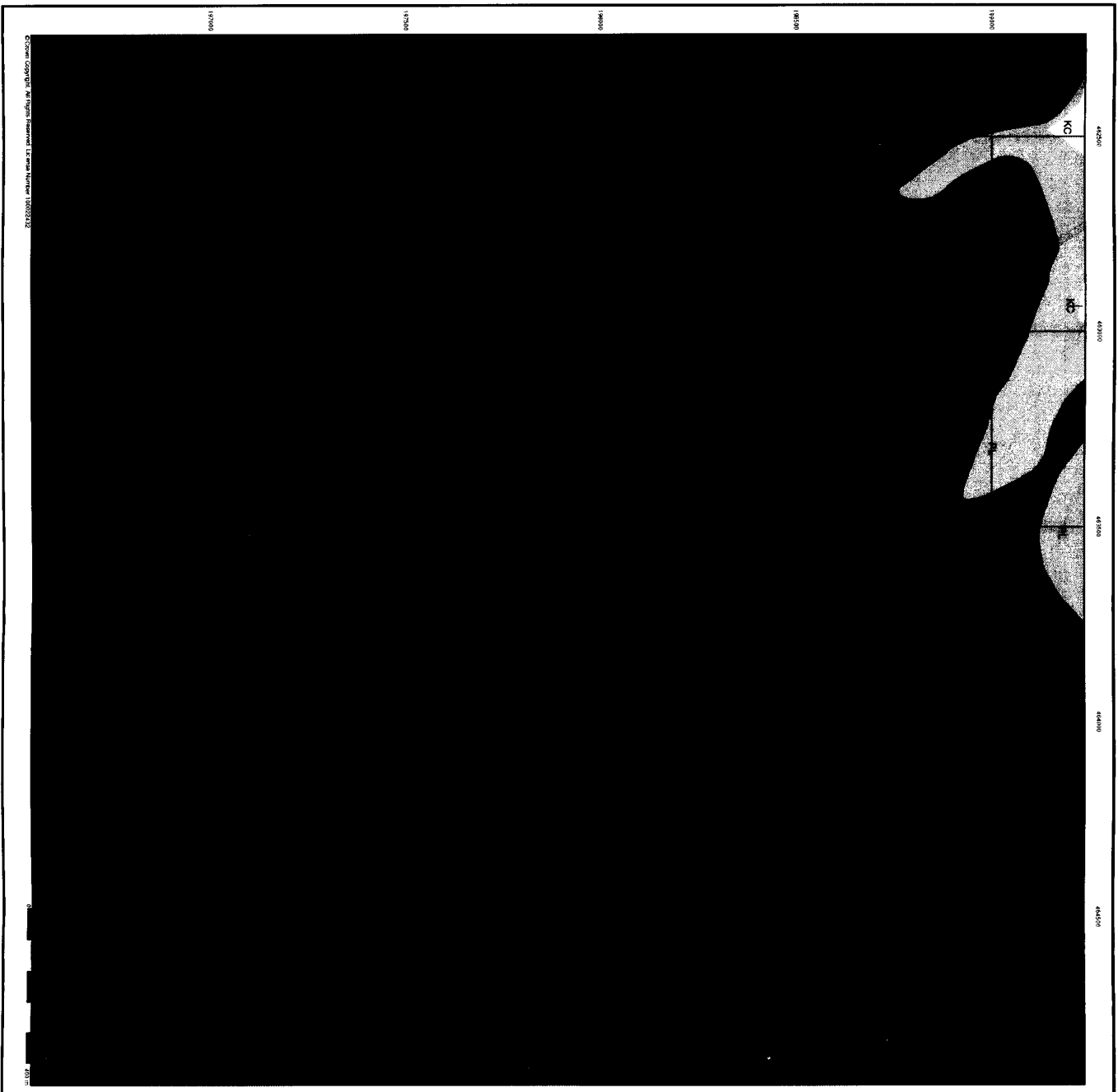
Order Details

Order Number:
Customer Ref:
National Grid Reference: A
Slice: 0.01
Site Area (Ha): 1000
Search Buffer (m): 1000

Site Details

Site at 463500, 197800





Bedrock and Faults

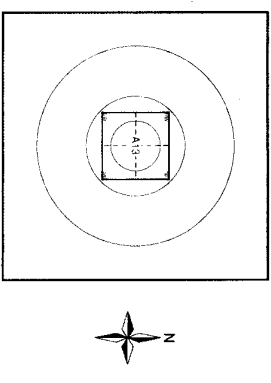
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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 Pliocene, 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 and thin beds mapped as lines such as coal seams and mineral veins. These are not restricted by age and could relate to features of any of the 1:10,000 geology datasets.

Bedrock and Faults Map - Slice A

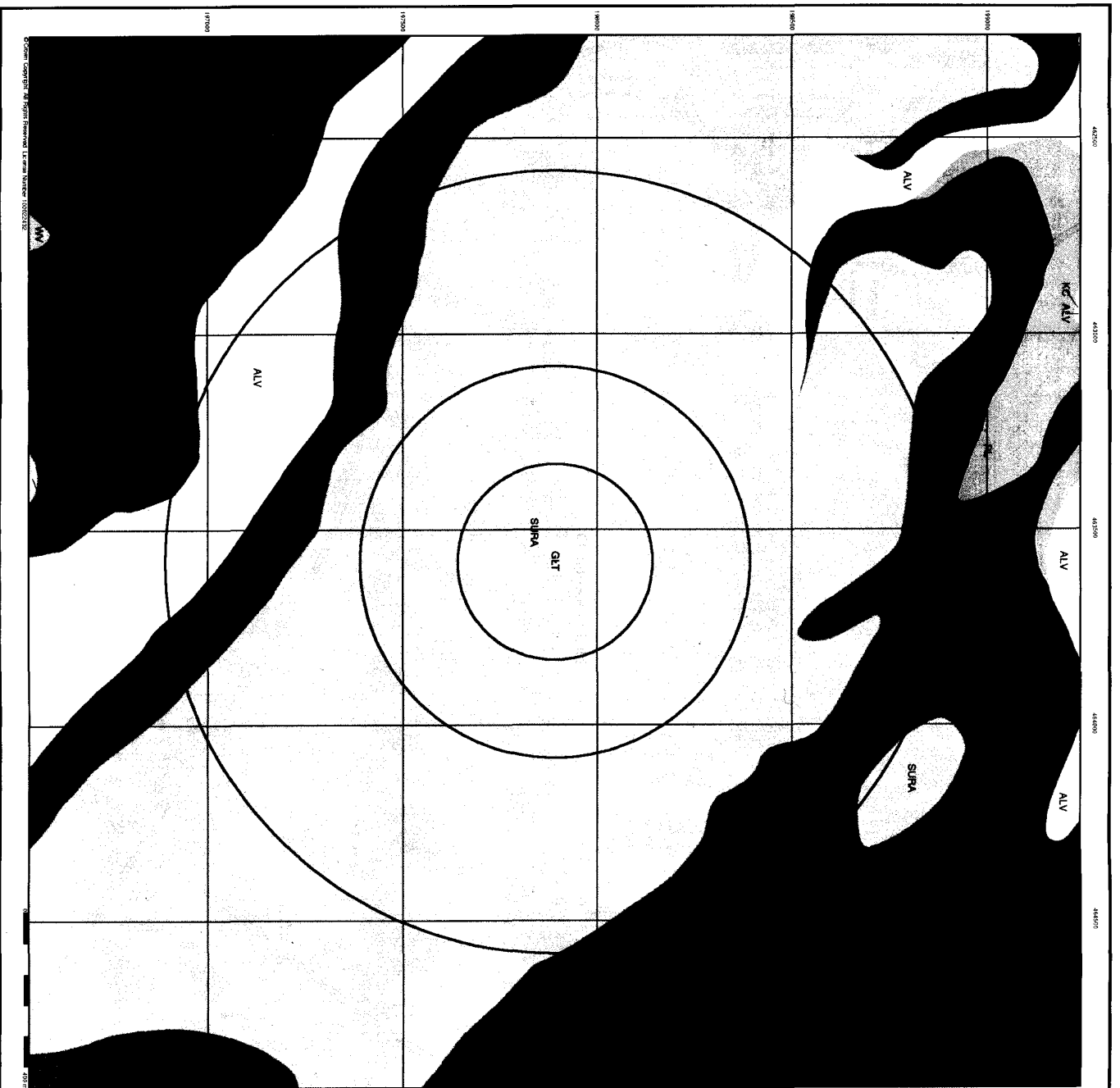


Order Details

Order Number:
 Customer Ref:
 National Grid Reference:
 Slice: A
 Site Area (ha): 0.01
 Search Buffer (m): 1000

Site Details

Site at 463500, 197800



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.

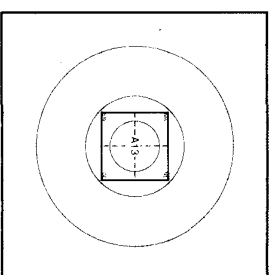
Additional Information

More information on 1:10,000 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 Lection 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 938 3143
 Fax: 0115 936 3276
 email: enquiries@bgs.ac.uk
 website: www.bgs.ac.uk

Combined Geology Map - Slice A



Order Details

Order Number:
 Customer Ref:
 National Grid Reference
 Slice: A
 Site Area (Ha): 0.01
 Search Buffer (m): 1000

Site Details

Site at 463500, 197800

APPENDIX C

SU 69 NW 7 6433 9730 Chalgrove Field, Chalgrove

Block E

Surface level (+72.5 m) +238 ft
 Water struck at (+70.8 m)
 Shell and auger (modified), 6 inch (152 mm) diam.
 November 1971

Overburden 0.9 m (3.0 ft)
 Mineral 4.2 m (14.0 ft)
 Bedrock 0.9 m+ (3.0 ft+)

LOG

Geological classification	Lithology	Thickness m	Depth m
River Terrace Deposits (Second Terrace)	Soil, dark brown	0.2	0.2
	Clay, very sandy with some fine to coarse subangular to subrounded flint pebbles, silty, becoming streaky in lower part: orange brown	0.7	0.9
	'Clayey' sandy gravel, with gravel content increasing towards base Gravel: fine to coarse with some cobble size dominantly subangular to subrounded flint with chalk pellets, occasional subrounded buff to brown limestone, trace of quartz and light grey glauconitic marl Sand: dominantly medium with some fine and coarse quartz with minor amounts of chalk and glauconite: light brown	4.2	5.1
Gault	Clay, greyish brown becoming bluish grey	0.9+	6.0

GRADING

Mean for deposit percentages					Depth below surface (m)	Bulk samples percentages			
Fines	Sand		Gravel			Fines	Sand	Gravel	
-1/16	+1/16-1/8	+1/8-1/4	+1/4-1/2	+1/2-3/4					
10	9	35	5	16	25	0.9-1.9*	15	79	6
10	49			41		1.9-2.9*	12	55	33
						2.9-3.9*	10	31	59
						3.9-5.1*	4	28	68

COMPOSITION

Depth below surface (m)	Percentage by weight in +4-16 mm fraction				
	Flint	Quartz and Quartzite	Limestone	Chalk	Ironstone
0.9-1.9	87	0	0	13	0
1.9-2.9	49	1	16	33	1
2.9-3.9	48	1	4	45	2
3.9-5.1	41	1	2	55	1
Mean	56	1	5	37	1

SU 69 NW 6 6397 9784

Chalgrove Airfield, East Chalgrove

Block E

Surface level (+71.3 m) +234 ft
 Water struck at (+68.8 m)
 Shell and auger (modified), 6 inch (152 mm) diam.
 November 1971

Overburden 1.0 m (3.5 ft)
 Mineral 5.6 m (18.5 ft)
 Bedrock 0.4 m+ (1.5 ft+)

LOG

Geological classification	Lithology	Thickness m	Depth m
	Soil, slightly sandy with occasional subangular to subrounded flint	0.1	0.1
River Terrace Deposits (Second Terrace)	Clay, very sandy with flint pebbles and ironstone concentrations; orange brown	0.9	1.0
	'Clayey' sandy gravel Gravel: fine to coarse with occasional cobbles dominantly subangular to subrounded flint with subrounded to rounded chalk and some limestone, trace of brownish black ironstone Sand: dominantly medium with some coarse and fine, quartz and ironstone with some chalk and traces of glauconitic grains; orange brown becoming light brown	5.6	6.6
Gault	Clay, brownish grey	0.4+	7.0

GRADING

Mean for deposit percentages						Depth below surface (m)	Bulk samples percentages		
Fines	Sand			Gravel			Fines	Sand	Gravel
-16	+16-4	+4-1	+1-4	+4-16	+16				
12	6	39	5	16	22	1.0-2.1	13	82	5
						2.1-3.1*	11	73	16
12	50		5	38		3.1-4.1*	21	52	27
						4.1-5.1*	2	15	83
						5.1-6.1*	18	43	39
						6.1-6.6*	2	15	83

COMPOSITION

Depth below surface (m)	Percentage by weight in +4-16 mm fraction					
	Flint	Quartz and Quartzite	Limestone	Chalk	Ironstone	Minor Constituents
1.0-2.1	100	0	0	0	0	0
2.1-3.1	90	0	0	10	0	0
3.1-4.1	51	0	0	49	0	0
4.1-5.1	58	0	4	35	3	0
5.1-6.1	65	0	6	26	3	0
6.1-6.6	68	0	2	27	1	2
Mean	65	0	2	30	2	1

SU 69 NW 4 6292 9788

Chalgrove Airfield, West Chalgrove

Block E

Surface level (+68.6 m) +225 ft
 Water struck at (+66.5 m)
 Shell and auger (modified), 6 inch (152 mm) diam.
 November 1971

Overburden 1.3 m (4.5 ft)
 Mineral 1.3 m (4.5 ft)
 Bedrock 1.1 m+ (3.5 ft+)

LOG

Geological classification	Lithology	Thickness m	Depth m
	Soil, brown	0.1	0.1
River Terrace Deposits (Second Terrace)	Clay, sandy, particularly in upper 0.6 m. with common fine to coarse subangular to rounded flint pebbles; light brown becoming orange brown	1.2	1.3
	'Clayey' pebbly sand Gravel: fine to coarse dominantly subangular to rounded flint with traces of quartz Sand: mainly medium with fine and a trace of coarse quartz and flint, slightly glauconitic, orange brown becoming greyish brown	1.3	2.6
Gault	Silt and clay: dark greyish blue	1.1+	3.7

GRADING

Mean for deposit percentages					Depth below surface (m)	Bulk samples percentages			
Fines	Sand		Gravel			Fines	Sand	Gravel	
-1/16	+1/16-1/4	+1/4-1	+1-4	+4-16	+16				
10	28	41	3	8	10	1.3-2.6*	10	72	18
10	72		18						

COMPOSITION

Depth below surface (m)	Percentage by weight in +4-16 mm fraction				
	Flint	Quartz and Quartzite	Limestone and Chalk	Ironstone	Minor Constituents
1.3-2.6	98	0	0	0	2

APPENDIX D



(For attention of

Our Ref: ESD/DE/490158/

Your Ref: Email from

dated 03 February 2014

Date: 25 February 2014

RADIOLOGICAL RECORDS SEARCH – CHALGROVE AIRFIELD

1. In response to your request, Dstl have conducted a search of records relating to any radiological contamination issues at Chalgrove Airfield. This records search will provide an input into the Phase One Land Quality Assessment of the site.

Desk Study Methodology

2. Dstl have searched a number of information sources including the MOD radioactive holdings database, archive records and published information. In addition, information was sought from members of the Dstl Radiation Protection Advisory Body and site personnel with respect to any known radiological issues and past advisory visits reports have also been scrutinised.

Results of Records Search

3. Findings of this desk study are summarised in Table 1 (Annex A), which includes full references for any information identified. It should be noted that Table 1 also indicates where a source of information was interrogated, but where no information was available.

4. Dstl did not identify any records of radioactive sources being held on the site or any radioactive contamination issues. The MOD is currently leasing the site to [redacted] who design and manufacture aircraft ejection seats and have been at Chalgrove Airfield for over 60 years.

5. It should be noted that the site was operated by the United States Air Force (USAF) between 1943 and 1945 but that Dstl do not hold radiological information regarding USAF operated sites.

6. Published sources stated that, historically, several different types of aircraft were located at Chalgrove Airfield but Dstl are unable to comment on whether these aircraft contained any radioactive material.

Summary

7. In conclusion, Dstl are not aware of any radioactive contamination issues at Chalgrove Airfield.

8. Under direction from DIO, the findings of this records search are purely factual and Dstl have not included any interpretation of the information relating to potential radioactive contamination.

9. Should you obtain additional information that you would like Dstl to comment upon, please do not hesitate to contact the undersigned.

Report Prepared by:

Table 1. Information Sources for Radiological Records Search of Chalgrove Airfield

INFORMATION SOURCE	COMMENTS	REFERENCE
MOD Radioactive Holdings Database	<p><i>Current units holding radioactive material:</i></p> <ul style="list-style-type: none"> • No MOD units are reported as holding radioactive materials. <p><i>Former units known to have held radioactive material:</i></p> <ul style="list-style-type: none"> • No MOD units are reported as holding radioactive materials. 	MOD Radioactive Holdings Database (maintained by Dstl) [date of search: 25/02/2014]
Environment Agency Notifications/Approvals	Dstl has no record of MOD units currently (or formerly) on the site requiring a notification or approval from the Environment Agency for the keeping of radioactive substances or the accumulation or disposal of radioactive waste (MOD parallel arrangements under the Environmental Permitting (England & Wales) Regulations 2011).	MOD Radioactive Holdings Database (maintained by Dstl) [date of search: 25/02/2014]
Dstl Records	Search of Dstl internal records did not identify any radioactive contamination issues at the site	Dstl internal records [date of search: 25/02/2014]
Site Monitoring Details	<p>There are no records of radiological contamination surveys or radon monitoring taking place on the site.</p> <p>Chalgrove Airfield is not located in a Radon affected area of the United Kingdom.</p>	Dstl internal records [date of search: 25/02/2014] Radon in England and Wales – H.P.A, November 2007

INFORMATION SOURCE	COMMENTS	REFERENCE
Published Information from the any information from the Internet/intranet)	<p>The station is listed in Action Stations Volume 6: Military Airfields of the Cotswolds and the Central Midlands by Michael J.F. Bowyer. It was stated however that several different types of aircraft were located at Chalgrove airfield. No reference is made therein to any historical radiological activities.</p> <p>An internet search regarding the site did not return any other relevant information regarding the site other than the MOD is currently leasing the site to who design and manufacture Ejection seats and have been at Chalgrove Airfield for over 60 years.</p> <p>A search of the MOD intranet did not return any relevant information regarding the site.</p>	<p>Michael J.F. Bowyer (1983) Action Stations Volume 6: Military Airfields of the Cotswolds and the Central Midlands. Published by Patrick Stephens Cambridge 1983 [date of search: 25/02/2014]</p> <p>Internet search [date of search: 25/02/2014]</p> <p>MOD Intranet search [date of search: 25/02/2014]</p>
Site Contacts (e.g. Radiation Safety Officer)	<p>There are no Site Officers/Radiation Safety Officers to contact as the MOD leases the site to a civilian company called Martin-Baker.</p>	
Information from Radiation Protection Adviser and previous advisory visits	<p>Personnel within the Dstl RPA Body were contacted requesting information on any known contamination issues. No information was known.</p> <p>No radiation protection advisory visit reports were available for the site.</p>	<p>Various emails from members of the Dstl Radiation Protection Advisory Body dated 25/02/2014</p> <p>Dstl Internal Records [date of search: 25/02/2014]</p>

APPENDIX E

Classification of Consequences and Probability

Classification of Consequences		Classification of Probability	
Classification	Definition	Classification	Definition
Severe	<p>Acute risk to human health.</p> <p>Short-term risk of pollution of controlled waters or significant impact on controlled waters, for example, large scale pollution of very high levels of contamination equivalent to EA Category 1 pollution incident including persistent and/or extensive effects on water quality, for example, leading to closure of a major abstraction point, major impact on operational effectiveness and/or amenity value or major damage to agriculture or commerce.</p> <p>Catastrophic damage to buildings or property, for example, explosion causing building collapse.</p> <p>Ecological system effects- immediate risk of major damage which is likely to result in: irreversible substantial adverse change in the functioning of the ecosystem or harm to a species of special interest that endangers the long-term maintenance of the population.</p>	High Likelihood	<p>There is a contaminant linkage and an event is High Likelihood to occur in the short term and is almost inevitable over the long term OR there is evidence at the receptor of harm or pollution.</p> <p>>95% Likelihood of Consequence occurring.</p>
Medium	<p>Chronic risk to human health.</p> <p>Pollution of sensitive water resources, for example, leaching of contaminants into controlled water that is equivalent to an EA category 2 pollution incident including significant effect on water quality, notification required to abstractors, reduction in amenity value or significant damage to site operations, agriculture or commerce.</p> <p>Ecological system effects – immediate risk of significant damage which may result in substantial, adverse changes to the ecosystem's functioning or harm to a species of special interest that may endanger the long-term maintenance of the population.</p> <p>Significant damage to buildings, structures and services, for example, damage rendering a building unsafe to occupy, such as foundation damage.</p>	Likely	<p>There is a contaminant linkage and it is probable that the event will occur. It is not inevitable, but possible in the short term and likely over the long term.</p> <p>50-95% likelihood of consequence occurring.</p>
Mild	<p>Non-permanent health effects to humans (exposure unlikely to lead to 'significant' harm).</p> <p>Pollution of controlled waters or non-sensitive water resources, for example, pollution of non-classified groundwater that is equivalent to an EA Category 3 pollution incident or short lived effect on water quality, marginal effect on operational capability, amenity value, agriculture or commerce.</p> <p>Minor damage to buildings, structures and services, for example, damage rendering a building unsafe to occupy, such as foundation damage.</p> <p>Ecological system effects – minor or short term damage which is unlikely to result in substantial adverse changes to the ecosystem's functioning or harm to a species of special interest that may endanger the long-term maintenance of the population.</p> <p>Substantial damage to non-sensitive environments, such as unprotected ecosystems, for example, crops.</p>	Low Likelihood	<p>There is a contaminant linkage and circumstances are possible under which an event could occur. It is by no means certain that even over a longer period such an event would take place and less likely in the short term.</p> <p>5-49% likelihood of consequence occurring.</p>
Minor/Negligible	<p>No measurable effects on human health including non-permanent health effects to humans that is easily preventable by appropriate use of personnel protective equipment.</p> <p>Minor pollution of controlled waters including non-sensitive water resource with no discernible effect on water quality or ecosystems.</p> <p>Minor damage to non-sensitive environments, such as unprotected ecosystems, for example, crops.</p> <p>Easily repairable effects of damage to buildings/structures/services/environment, for example, discolouration of concrete, loss of plants in a landscaping scheme.</p>	Unlikely	<p>There is a contaminant linkage and it is improbable that an event would occur even in the very long term.</p> <p><5% likelihood of consequence occurring.</p>

Definitions of Classified Risks/Risk Terms

Classification	Definition
Very High Risk	Severe harm to a receptor may already be occurring OR there is a high likelihood that severe harm will arise to a receptor unless immediate remediation works/mitigation measures are undertaken. Realisation of that risk is likely to present a substantial liability to the MoD.
High Risk	Harm is likely to arise to a receptor and it is likely to be severe unless appropriate remediation works/mitigation measures are undertaken. Remediation works may be required in the short term and are likely to be required in the long term. Realisation of that risk is likely to present a substantial liability to the MoD
Moderate Risk	It is possible that harm could arise to a receptor, but there is low likelihood that such harm would be severe. Harm is likely to be mild. Some remediation works may be required in the long term. Realisation of that risk is unlikely to present a substantial liability to the MoD but further work may be required to determine whether this is the case.
Moderate/Low Risk	It is possible that harm could arise to a receptor, but where a combination of likelihood and consequence results in a risk that is above low, but is not of sufficient concern to be classed as mild. It can be driven by cases where there is an acute risk which carries severe consequences, but where the exposure is unlikely. Such harm would at worst normally be mild. Unlikely to present a substantial liability to the MoD. Limited further investigation may be required to clarify the risk and liability. If necessary remediation works are likely to be limited in extent.
Low Risk	It is possible that harm could arise to a receptor. Such harm would at worst, normally be mild.
Negligible Risk	There is low likelihood that harm could arise to receptor. Such harm is unlikely to be any worse than mild. No liability.
No Potential risk	There is no potential risk where no contaminant linkage has been established. No liability.

Classification of Risk

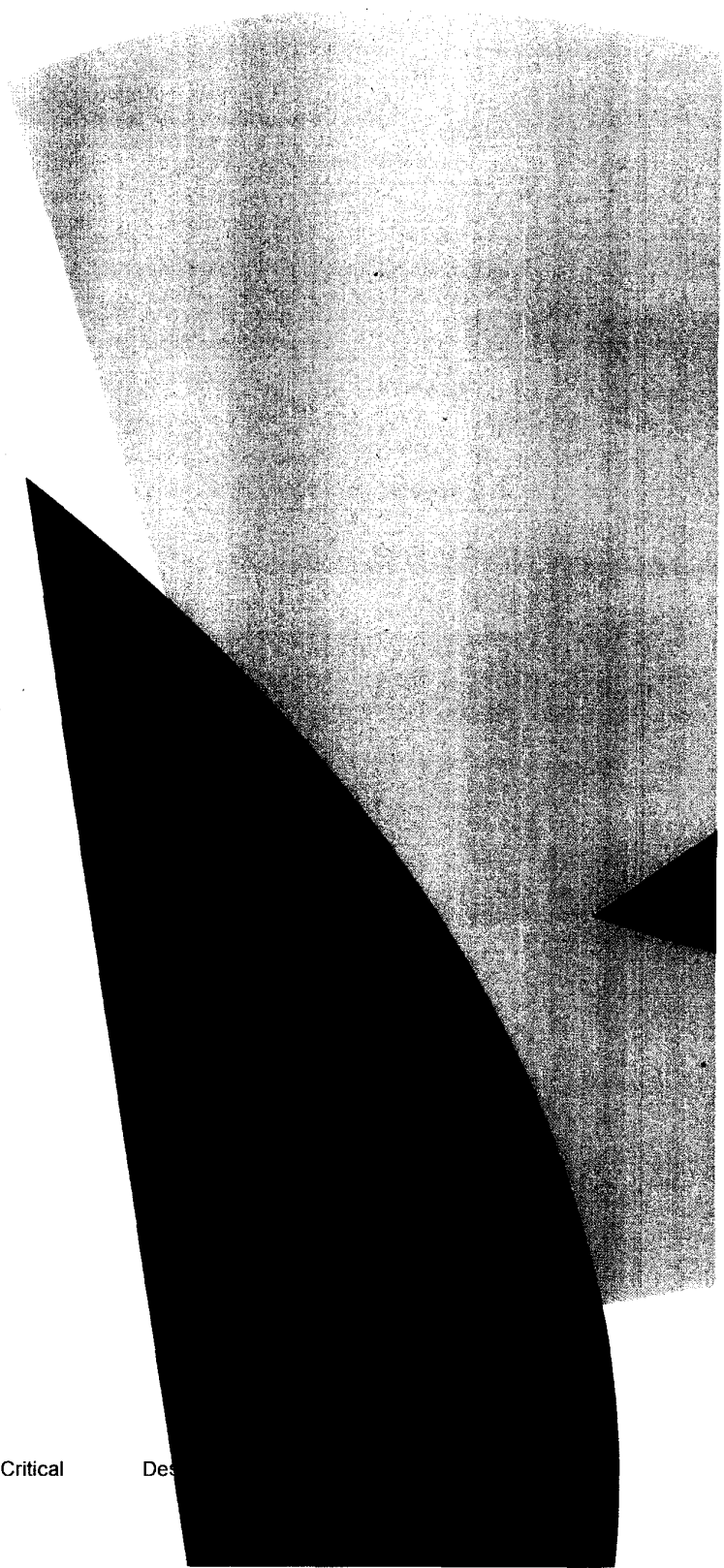
		Consequence			
		Severe	Medium	Mild	Minor
Probability	High Likelihood	Very High Risk	High Risk	Moderate Risk	Moderate/Low Risk
	Likely	High Risk	Moderate Risk	Moderate/Low Risk	Low Risk
	Low Likelihood	Moderate Risk	Moderate/Low Risk	Low Risk	Negligible Risk
	Unlikely	Moderate/Low Risk	Low Risk	Negligible Risk	Negligible Risk

Contact name:

/

Email:

Telephone:



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