

Report Title:

Project

Name:

Phase 1 Geo-Environmental Desk Study

Land East of Knowle Lane, Cranleigh



Report BRD3528-OR1-A Reference:

Date: October 2022

BRD Environmental Ltd

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REPORT CONTROL SHEET

REPORT TITLE	PHASE 1 GEO-ENVIRONMENTAL DESK STUDY
PROJECT	LAND EAST OF KNOWLE LANE, CRANLEIGH
CLIENT	GLEESON LAND

REPORT REFERENCE	ISSUE DETAIL	DATE	PREPARED BY	CHECKED BY
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BRD Environmental Limited

Geotechnical and Environmental Services

- Ground Investigation
- Japanese Knotweed Removal
- Soil, Water and Gas Testing

- Contamination Assessment
- Geotechnical Advice
- Remediation Solutions

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Phase 1 Geo-Environmental Desk Study Land East of Knowle Lane, Cranleigh BRD3528-OR1-A Cranleigh DS

REPORT LAYOUT

This report is divided into the following four sections: Summary Report, Technical Report, Supporting Information and Appendices.

SUMMARY REPORT

This expanded executive summary provides the main findings of the work undertaken in brief non-technical language. This section provides an overview of the key outcomes for the benefit of non-specialists and concludes with the main recommendations. This section should only be relied upon in the context of the whole report and the Technical Report should be referred to with respect to any design decisions.

TECHNICAL REPORT

The main report section is intended to provide the technical detail of the investigation and is intended to provide the level of information required by current guidance documents and practice. The Technical Report is written in a language that, in part, assumes knowledge of subject matter so that it can be written in as concise a form as possible. Its intended audience is peers, regulators and other professionals in related disciplines.

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SUPPORTING INFORMATION

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

APPENDICES

The final section of the report presents the factual data collected and employed as part of the investigation.

APPENDIX 1	SITE PLANS & PHOTOGRAPHS	
	Site Location Plan	Ref. BRD3528-OP2-A
	Walkover Photographs	Ref. BRD3528-OP3-A
	Site Layout Plan	Ref. 'Illustrative Masterplan', drawing ref: 1321.04, dated 18/05/2022.
	Initial Conceptual Site Model	Ref. BRD3528-OP4-A
APPENDIX 2	HISTORICAL PLANS	
	Order No. 301569175_1_1	39 x A3 pages
APPENDIX 3	ENVIROCHECK REPORT	
	Order No. 301569175_1_1	120 x A4 pages & 21 x A3 pages



SUMMARY REPORT

SUBJECT	COMMENTS
CURRENT SITE CONDITION	The site currently comprises a number of grazed and a further arable field currently being used to grow Christmas trees. There is also a hay barn, two shipping containers and a shared driveway / access road in the centre west of the site and a residential dwelling and associated private garden, basketball court and driveway in the centre east of the site.
PROPOSED DEVELOPMENT	It is proposed that the site will be developed as a residential housing estate in the centre and south of the site. It is proposed the north of the site will be developed as an area of informal public open space.
HISTORICAL SUMMARY	The site is mostly shown as fields throughout its mapped history. By 1915 a small likely agricultural building is shown in the centre west of the site, which was replaced with additional buildings by 1962, one of which had been extended by 1971. A further barn had also been built in the centre east of the site by 1971 which was converted into a residential dwelling by 2005. A Christmas tree crop had been planted in the southern most field by 2012 and remains to the present day.
PUBLISHED GEOLOGY	The site is shown to be devoid of superficial deposits. The shallowest bedrock unit is shown to be the Weald Clay Formation with an outcrop of sandstone within the Weald Clay Formation shown running from east to west across the centre of the site.
RADON GAS	Radon gas protection measures are not required.
HYDROGEOLOGY	The site is shown to be devoid of superficial deposits. The Weald Clay Formation is designated as Unproductive Strata. The sandstone beds within the Weald Clay Formation are designated a Secondary A aquifer. The site is not located within a groundwater Source Protection Zone.
HYDROLOGY	The closest water feature to the site is a small pond bounding the site to the north west. Two unnamed streams are present approximately 105m to the south of the site and approximately 120m to the north of the site. The site is not in an area indicated to be at risk of flooding.
PREVIOUS GROUND REPORTS	BRD is not aware of any previous ground investigations having been conducted at the site.
PRELIMINARY CON	TAMINATION RISK ASSESSMENT

The majority of the site is unlikely to be significantly contaminated given its use as agricultural and open land. The hay barn in the centre west of the site may have led to localised contamination. This potential contamination may be a cause for concern to human health, the water environment and water supply pipes. In addition to this, there is the potential for landfill gasses to migrate to the site from the various surrounding infilled former ponds, located close to the proposed development areas.



PRELIMINARY GEOTECHNICAL ASSESSMENT

The anticipated ground conditions at the site would typically support shallow spread foundations. Some local reinforcement may be required at the boundary between any sands and sandstone band and the clays in the rest of Weald Clay Formation to guard against differential settlement, however, this would be expected to be minimal.

Tree influence around the site boundary and within the field containing the Christmas tree crop may mean that foundations close to these boundaries or within the field will need to be deepened, potentially requiring piled foundations in some areas depending on the nature of the soils.

RECOMMENDATIONS

PHASE 2 CONTAMINATION ASSESSMENT	Potential contamination risks have been identified by this Phase 1 Desk Study and therefore a Phase 2 Contamination Assessment is necessary to assess the significance of these potential pollutant linkages.
	It is recommended that this next phase of assessment includes localised testing around the hay barn and boreholes with monitoring wells installed across the site, along with follow-on gas monitoring visits. These intrusive elements of the Phase 2 Contamination assessment are considered to be relatively limited in extent and could easily be incorporated into a geotechnical ground investigation (see below).
GEOTECHNICAL GROUND INVESTIGATION	An intrusive ground investigation incorporating a geotechnical assessment is being undertaken by BRD and shall be reported separately. This investigation will look to establish the ground conditions and enable the preliminary design of the new structures.



1. INTRODUCTION TO TECHNICAL REPORT

1.1. CONTRACT DETAILS

CLIENT	Gleeson Strategic Land Limited trading as Gleeson Land.
SITE	Land situated at Knowle Lane in the village of Cranleigh, Surrey.
CLIENT'S ADVISORS	BRD Environmental Limited (BRD) has been commissioned directly by the Client.
REPORT CONTEXT	It is understood that the Client intends to market the site for residential redevelopment.
REPORT TYPE	Factual and interpretative geo-environmental desk study.
REPORT OBJECTIVES	The purpose of this report is to undertake a preliminary geo-environmental assessment of the site to supplement the marketing information for selling the site.

1.2. SCOPE OF WORKS

The agreed scope of works was:

- Desk based research through the purchase of an Envirocheck report, including:
 - Environmental database search.
 - Environment Agency data.
 - BGS radon maps.
 - Mining and natural cavities database search.
 - Available historical Ordnance Survey plans.
- Interpretation of the geological, hydrogeological and hydrology setting of the site from published sources.
- A site walkover will be undertaken to identify any potential sources of contamination or indication of other ground related hazards at the site and its surroundings.
- Prepare a Phase 1 desk study report including copies of the purchased information, interpretation of the collected data to identify and assess contamination hazards together with any other environmental/geotechnical issues.

1.3. **REPORT LIMITATIONS**

Any site boundary lines depicted on plans included within this report are approximate only and do not imply legal ownership of land. Any observations of tree species, asbestos containing materials within structures or invasive weeds, does not constitute a formal survey of such features. The identification of such features is therefore tentative only. In the case of Japanese Knotweed, BRD can undertake separate surveys for this plant undertaken by a Property Care Association qualified surveyor.

The report does not consider whether sensitive ecology or archaeology is present as these require consideration by professionals specialising in these matters. It should be recognised that the



collection of desk study information may not be exhaustive and that other information pertinent to the site may be available.

It is emphasised that a desk study and walkover can only indicate the potential for contamination on the site. This study aims to highlight potential pollutant linkages in line with current guidance. The plausibility of these linkages can only be proved by an intrusive ground investigation.

It should be noted that a desk study and walkover can only reveal the potential for certain types of ground conditions and geotechnical hazards. For any form development an intrusive ground investigation is recommended. The scope of this investigation excludes a formal slope stability study and any observations made regarding slopes are for information only.



2. SITE CHARACTERISTICS

2.1. SITE SETTING

SITE ADDRESS AND POST CODE	Land East of Knowle Lane, Cranleigh, Guildford, Surrey, GU6 8JN.
NATIONAL GRID REFERENCE	505850E, 138020N.

2.2. SITE DESCRIPTION

INSPECTION DATE	23 rd September 2022.
CURRENT USE	The site currently comprises 5No. fields currently being used for growing hay and a further field currently being used to grow Christmas trees. There is also a hay barn, two shipping containers and a shared driveway / access road in the centre west of the site and a residential dwelling and associated private garden, basketball court and driveway in the centre east of the site.
AREA	Approximately 12.23 hectares.
SHAPE	Irregular in shape.
ACCESS	The site is currently accessed via the shared driveway / access road from Knowle Lane in the west.
BOUNDARIES	The site boundaries predominately comprise mature mixed deciduous hedgerows with some boundaries also marked by either post and rail wooden fencing or stock proof fencing. Some parts of the site boundaries are also not currently marked.
TOPOGRAPHY	The site slopes gently from a high point in the centre of the site down to the south and north by approximately 7m. Two approximately 1.0m to 1.5m high grassed soil bunds are present in the centre east and centre of the site. Shallow dry ditches surround the three northern most fields on the site with a further ditch present along the side of part of the shared driveway / access road. The shared driveway / access road in the centre west of the site is set into the hill side slightly with an earth embankment present to the south.
SURFACING	The majority of site comprises grassed fields, although the southern most field is covered by long grass and the Christmas tree crop. The shared driveway / access road and the basketball court are surfaced in tarmac. The private garden area is surfaced in decorative gravel and paving slabs. There is also a small garden path in the centre east of the site and a small area of hardstanding by the hay barn and shipping containers in the centre west of the site both surfaced in tarmac chippings.



BUILDINGS	The hay barn in the centre west of the site is of steel portal frame construction clad in corrugated metal cladding. The residential dwelling in the centre east of the site is one and a half stories high and is constructed of brick with a pitched tiled roof.
VEGETATION	There are numerous mature trees on the site boundaries surrounding the site and within the mature hedgerows marking the field boundaries, with species including oak, beech, ash, hawthorn, chestnut, pine, maple, birch. There is also a group of 5No. mature chestnut trees in the centre east of the site and numerous young Christmas trees in the southern most field.
NOTABLE FEATURES AND OBSERVATIONS	There is an area of bonfire ash in the centre of the site where a bonfire has recently been lit. It would appear from the ash that the bonfire was used to burn domestic garden waste such as prunings. There is a small pile of stacked corrugated asbestos cement sheets and fragments is present beside the shipping containers present in the centre west of the site.
	The soils exposed within the ditches in the north of the site and the soil embankment in the centre west of the site appeared to be natural clay soils. The two grassed soil bunds or stockpiles appeared to contain topsoil or natural clay soils.
	The southern most field containing the Christmas trees contains several grass access tracks around the Christmas tree planation, some of which are rutted suggesting the soils at the site may be prone to becoming soft and wet in winter.
	The hay barn in the centre west of the site is currently being used to store hay and hay making equipment.
	Three manhole covers are present in the north of the site, marking the position of a sewer. An overhead high voltage electricity line crosses the north of the site and an overhead BT line crosses the centre west of the site.
	With reference to the historical mapping, two ponds formerly bounded the site to the north west and two further ponds formerly present approximately 30m to the south of the site and approximately 150m to the north. All of these ponds appear to have been infilled.

SURROUNDING LAND USE	The site is set on the edge of the mainly residential area of Cranleigh and the surrounding rural countryside.
TO THE NORTH	The site is bounded to the north by a football ground, houses and their associated private gardens, driveways and garages, and a pond.
TO THE EAST	A disused railway bounds the site to the east, now used as a public bridleway with sports pitches and residential housing estates beyond.
TO THE SOUTH	The site is bounded to the south by a shared driveway / access road, houses and their associated private gardens, driveways and garages, and a field.
TO THE WEST	Knowle Lane, houses and their associated private gardens, driveways and garages, and a field bound the site to the west, with further fields beyond Knowle Lane.



2.3. SITE HISTORY

MAPPED HISTORY			
DATE RANGE	SITE	SURROUNDING AREA	
1871 - 1962	The 1871 map shows the site to comprise part of 7No. fields with a track crossing the centre of the site from west to east. By 1896 two of the fields on the site have been divided into two and a new track is shown crossing the centre of the site, from north to south, to a new farm located offsite bounding the site to the west labelled 'Redhurst'. A footpath is also shown crossing the centre of the site from east to west. The 1915 map shows a small presumed agricultural building to have been built in the centre west of the site and shows a small group of trees in the centre east of the site. By 1962 the small agricultural building in the centre west of the site has been replaced by two small similar buildings.	The 1871 map shows the site to be mostly surrounded by open fields with the Horsham and Guildford Branch of the London Brighton and South Coast Railway bounding the site to the east. The railway line is shown to be level with the site in the north, in a shallow cutting in the centre and on top of a small embankment in the south. The site is bounded to the north west by a farm, labelled as 'Coldharbour', a house labelled 'Oaklands', three ponds and a road. The site is also shown to wrap around another farm in the west, labelled as 'Redhurst'. A further pond is shown approximately 30m to the south. An estate labelled 'Knowle' is located beyond approximately 60m to the north west and a further house is also shown approximately 60m to the south west. 'Bushy Copse' is located beyond approximately 120m to the south west and the village of 'Cranley' is located beyond 250m to the north of the site. By 1896 the pond located approximately 30m to the south has become smaller in size, whilst a new large pond is shown approximately 150m to the north of the site. 'Cranley' is now labelled 'Cranlegh'. The 1915 map shows some of the houses bounding the site to have been extended. A new house is also shown approximately 60m to the south west of the site. The aerial photograph from 1948 shows some new residential or agricultural buildings bounding the site to the south west.	



MAPPED HISTORY		
DATE RANGE	SITE	SURROUNDING AREA
1971 - 2021	The 1971 map shows one of the two small agricultural buildings in the centre west of the site to have either been extended or replaced with a barn. A further small agricultural building is also shown in the centre east of the site. The rest of the site is now shown to comprise part of 6No. fields. The 1996 map shows some of the fields to have been subdivided into smaller fields. By 2006 the farm buildings bounding the site to the north west have been converted into a house and the track previously shown crossing the centre of the site from north to south is no longer shown. The 2021 map no longer shows the smaller of the two agricultural buildings in the centre west of the site.	The 1971 map shows the one of the ponds bounding the site to the north west to no longer be present, along with the pond located approximately 30m to the south of the site. The railway line bounding the site to the east is now labelled as 'dismantled'. Several new houses are shown bounding the site to the north west, west and south west. One labelled as 'The Coach House' is located over one of the former ponds bounding the site to the north west. Several former farm buildings within 'Redhurst' are now shown as houses. The village of Cranleigh has expanded greatly to the north east and east of the site and a housing estate and a recreation ground are now present beyond the 'dismantled railway' to the east. Further afield the large pond formerly shown approximately 150m to the north of the site is now shown as part of a housing estate. By 1989 one of the two remaining ponds bounding the site to the north west has been nearly completely infilled, coinciding with the neighbouring 'Oaklands' property being redeveloped. The 1996 maps shows a likely football pitch bounding the site to the north and some allotments located approximately 20m to the north west of the site.



AERIAL IMAGERY	Google Earth imagery from 1999 to 2001 shows the site as fields with barns present in the centre west and centre east of the site. Google Earth imagery from 2005 shows the barn in the centre east of the site along with several other former farm buildings bounding the site to the north west to have been converted into houses.
	Google Earth imagery from 2012 shows a Christmas tree crop to have been planted in the southern most field. This is shown more clearly in the 2013 imagery which indicates the Christmas trees are planted between 1.00m and 1.20m apart across the whole of the southern most field. Google Earth imagery from 2018 shows most of the Christmas tree crop to have been harvested but with numerous Christmas trees still left growing in the field. Google Earth imagery from 2020 to 2022 continues to show the remaining Christmas trees growing in the field. The 2022 image also shows the shipping containers beside the hay barn in the centre west of the site.
INTERNET SEARCH	No information specific to the site was identified.
ANECDOTAL	No anecdotal evidence of site history was gained during the study.

2.4. GEOLOGY

GEOLOGICAL CONTEXT	The site is located within an area of Cretaceous sedimentary bedrock and Quaternary superficial deposits.
	The Cretaceous sedimentary bedrock formed within lagoonal, lacustrine and alluvial environments that varied from freshwater to brackish forming mudstones, clays and sandstones.
	The Quaternary superficial deposits formed within fluvial and sub-aerial environments giving rise to clays, silts, sands and gravels.
	The Craterous sedimentary bedrock has been extracted for brick making in the surrounding area.
SUPERFICIAL DEPOSITS	No superficial deposits indicated to be present.
BEDROCK GEOLOGY	The shallowest bedrock unit is shown to be the Weald Clay Formation which is described by the British Geological Survey (BGS) as dark grey, thinly bedded, shale mudstone and mudstone with subordinate siltstone, fine to medium grained sandstone, shelly limestone and clay ironstone. The Weald Clay Formation can be up to 460m thick.
	A subordinate sandstone bed within the Weald Clay Formation is shown crossing the centre of the site from east to west.
BGS BOREHOLE RECORDS	There is one nearby publically available British Geological Survey (BGS) borehole record, located approximately 620m to the north east of the site which recorded the Weald Clay Formation to be present to a depth in excess of 25.9m. No further information was available.
SOIL GEOCHEMISTRY	The site is not situated in an area where the natural background concentrations of metals is elevated.



2.5. RADON

The site is not situated within an area where radon gas protection measures are required in new buildings.

2.6. HYDROGEOLOGY

SUPERFICIAL AQUIFER	No superficial deposits present.
BEDROCK AQUIFER	The Weald Clay Formation is designated as Unproductive Strata. The subordinate sandstone beds within the Weald Clay Formation are designated a Secondary A aquifer.
AQUIFER PROPERTIES	Given that the majority of the Weald Clay Formation is designated as Unproductive Strata groundwater would not be anticipated. However, the subordinate sandstone beds present within the Weald Clay Formation which are shown to be present across the centre of the site from east to west are designated as a Secondary A aquifer.
	It is considered that these sandstone beds would likely be saturated with groundwater which could therefore be quite shallow where the sandstone beds are present on the site. It is considered that any groundwater present underlying the site would flow in an easterly direction due to the topography of the site and the surrounding area.
LICENSED GROUNDWATER ABSTRACTIONS	None within 250m from the site.
GROUNDWATER SOURCE PROTECTION ZONE (SPZ)	Not located within a SPZ.

2.7. HYDROLOGY

SITE DRAINAGE CHARACTERISTICS	The fields on the site currently drain via surface infiltration or surface run- off. The residential dwelling in the centre east of the site and the shared driveway / access road drain via surface run-off. The hay barn in the centre west of the site drains via dilapidated guttering which does not currently appear to be connected to any down pipes.
	The shallow ditches surrounding the three northern most fields and along part of the shared driveway / aces road in the centre of the site were dry during the site walkover.
	The southern most field containing the Christmas trees contains several grass access tracks around the Christmas tree planation, some of which are rutted suggesting the soils at the site may be prone to becoming soft and wet in winter.



SURFACE WATER FEATURES	The closest surface water feature to the site is a small pond bounding the site to the north west. Two unnamed streams are present approximately 105m to the south of the site and approximately 120m to the north of the site. Both streams flow in an westerly direction before joining an unnamed tributary of the River Wey approximately 1.3km to the west of the site. The unnamed tributary of the River Wey flows in a northerly direction.
SURFACE WATER ABSTRACTIONS	None within 250m from the site.
DISCHARGE CONSENTS	None relevant to consideration of the site.
FLOODING	Zone 1 area and is highly unlikely to be affected by flooding. As the site is greater than one hectare in area, a Flood Risk Assessment will still have to be undertaken for the site.

2.8. ENVIRONMENTAL ASPECTS

LANDFILL	There are no recorded landfill sites within 250m of the site.
CONTEMPORARY TRADE DIRECTORY ENTRIES	No nearby contemporary trade entries of relevance to assessment of the site.
REGISTERED HAZARDOUS SITES	None within 250m of the site.
POLLUTION INCIDENTS TO CONTROLLED WATERS	There have been two recorded pollution incidents within 250m of the site. The pollution incidents took place approximately 118m and 123m to the north of the site at the unnamed stream present there. Both incidents were classed as Category 3 – Minor incidents and took place in 1994 and 1991 respectively, involving chemicals and oils respectively.
	Given the minor nature of the incidents, the time lapsed since the incidents took place and the distance from the site, the pollution incidents are not considered to present a cause for concern and as such are not considered further.
ECOLOGICALLY SENSITIVE LAND USE	None identified within 250m.

2.9. PREVIOUS GROUND INVESTIGATIONS

BRD is not aware of any previous ground investigation at the site.



3. PRELIMINARY CONTAMINATION RISK ASSESSMENT

3.1. HAZARD IDENTIFICATION

INVALID CONTAMINATION SOURCES	
HISTORIC LAND USE	DISCUSSION AS TO WHY THE HISTORICAL USE IS NOT CONSIDERED TO PRESENT A PLAUSIBLE HAZARD
On site fields.	The grassed fields on the site are not considered to represent a plausible hazard.
Bonfire Ash.	Whilst the burning of waste can potentially produce contamination, it was apparent from the bonfire ash that only vegetation chippings and waste such as prunings had been burnt. As such the bonfire ash is not considered to present a plausible hazard.
Former barn in centre east of site.	Whilst it is possible that contamination may have occurred in the former barn in the centre east of the site, this building and the surrounding land was converted into a residential dwelling at some point between 2001 and 2005. As such it is not considered to represent a plausible hazard.

POTENTIAL ON SITE SOURCES		
HISTORIC LAND USE	DESCRIPTION OF POTENTIAL CONTAMINATION HAZARD	POTENTIAL CONTAMINANTS OF CONCERN
Hay barn.	Agricultural barns may have been used for the storage of plant machinery and/or a variety of chemicals in support of the agricultural operations. Fuel may have been stored for the plant and therefore spilled. The small scale storage of potentially contaminative chemicals and lubricants is also common practice in farm operations and therefore can also be identified as a potential localised hazard. On site waste disposal activities may also have occurred.	Petroleum hydrocarbons (diesel, lubricating oils, greases and/or petrol). Asbestos containing materials (e.g. cement asbestos building products). Herbicides. Pesticides.



	POTENTIAL OFF SITE SOURCES	
HISTORIC LAND USE	DESCRIPTION OF POTENTIAL CONTAMINATION HAZARD	POTENTIAL CONTAMINANTS OF CONCERN
Off-site infilled former ponds.	Two ponds formerly bounded the site to the north west (immediately adjacent to the proposed development area) as well as two further ponds formerly present approximately 30m to the south of the site and approximately 150m to the north. The ponds were infilled at some point between 1962 and 1971 and at some point between 1973 and 1989. Historically it was common to backfill old ponds with waste materials. Organic rich wastes degrade to form hazardous gases under anaerobic conditions.	Landfill gases (mainly carbon dioxide and methane).
Former railway line.	It is probable on old railway lines that steam locomotives will have been employed and it is common for the waste ash and clinker to have been deposited around the sidings. Fuel oils, lubricating oils and greases have the potential to have caused localised contamination of any ballast in areas where locomotives and multiple units would have stood for any significant amount of time.	Polycyclic Aromatic Hydrocarbons (PAH). Metals.

3.2. **RECEPTOR ASSESSMENT**

CONTEXT	
ASSESSMENT LAND USE CATEGORY	Residential.
DESCRIPTION OF PROPOSED LAND USE	The proposed end use of the site is for a residential housing estate in the centre and south of the site including children's play areas and drainage basins. It is proposed the north of the site will be developed as an area of informal public open space.

RECEPTORS			
RECEPTOR DISCUSSION			
HUMAN HEALTH	Residents with zero to 6 year old child most sensitive receptor.		
CONTROLLED WATERS GROUNDWATER	Secondary A aquifer.		



CONTROLLED WATERS SURFACE WATER	Not considered to be a valid receptor as no nearby surface water bodies.
BUILDING MATERIALS	Water service pipes.
AND SERVICES	Buried concrete.

3.3. INITIAL CONCEPTUAL MODEL

POLLUTANT LINKAGES	The pollutant linkages are best presented in a diagrammatic form and therefore the initial conceptual site model plan is presented in Appendix 1. The individual pollutant linkages as numbered on the plan are described further in Section 3.4.
INVALID POLLUTANT LINKAGES	Given the anticipated cohesive soils, the nature of the potential contaminants and that most of the former railway line bounding the site to the east is within a cutting it is considered that any potential contamination from the former railway line would not have migrated onto the site. As such it is considered that a valid pollutant linkage between the former railway line and the receptors on the site does not exist.
LIMITATIONS AND UNCERTAINTIES	The preliminary conceptual model has been developed based solely on desk based research and assessment. The only way to conclusively determine the presence or absence of contamination is with intrusive site investigation.

3.4. PRELIMINARY ASSESSMENT OF CONTAMINATION RISKS

The following table identifies the potential risks that exist to the receptors through each of the identified pollutant linkages in the conceptual site model. It should be noted that the numbers referred to for each of the pathways refers to the numbered pollutant linkages from the Initial Conceptual Site Model Plan, as presented in Appendix 1.

POTENTIAL SOURCES AND CONTAMINANTS	PATHWAYS (REFERENCE FROM MODEL)	RECEPTORS	HAZARD SEVERITY	PROBABILITY OF OCCURRENCE	POTENTIAL RISK
Onsite hay barn - Petroleum hydrocarbons. Asbestos containing materials. Herbicides.	Ingestion Inhalation (1) Consumption of home grown produce (2)	Residents	Human health effects [Medium]	No evidence of any contamination during walkover, hay barn only used to store hay and hay making equipment. [Low- likelihood]	Moderate / Low Risk (but localised)
Pesticides.	Inhalation of asbestos fibres (3)			Human health effects [Severe]	Small pile of corrugated asbestos cement sheets and fragments present beside the hay barn to be cleared during demolition works. [Low-likelihood]



POTENTIAL SOURCES AND CONTAMINANTS	PATHWAYS (REFERENCE FROM MODEL)	RECEPTORS	HAZARD SEVERITY	PROBABILITY OF OCCURRENCE	POTENTIAL RISK
	Horizontal & vertical migration (4)	Groundwater	Secondary A Aquifer [Medium]	No evidence of any contamination during walkover, hay barn only used to store hay and hay making equipment. Only a small part of the site is anticipated to be on a Secondary A Aquifer, most of the site is anticipated to underlain by Unproductive Strata. [Unlikely]	Low Risk (but localised)
	Direct Contact (5)	Water Supply Pipes	Tainting of water supply [Medium]	No evidence of any contamination during walkover, hay barn only used to store hay and hay making equipment. [Low- likelihood]	Moderate / Low Risk (but localised)
Off-site infilled former ponds - Landfill gases.	Inhalation (6)	Residents	Human health effects [Medium]	Two ponds formerly bounded the site to the north west with a further pond formerly present 30m to the south of the site. However, these ponds were all infilled over 30 years ago. Gas migration potential will have been reduced and also migration limited by anticipated cohesive soils [Low-likelihood]	Moderate / Low Risk

3.5. **RECOMMENDATIONS**

Potential contamination risks have been identified by this Phase 1 Desk Study and therefore a Phase 2 Contamination Assessment is recommended to assess the significance of these potential pollutant linkages.

It is recommended that this next phase of assessment includes localised testing around the hay barn and boreholes with monitoring wells installed across the site, along with follow-on gas monitoring visits. These intrusive elements of the Phase 2 Contamination assessment are considered to be relatively limited in extent and could easily be incorporated into a geotechnical ground investigation.

It should be noted that an intrusive ground investigation incorporating a Phase 2 Contamination Assessment is being undertaken by BRD and shall be reported separately.



4. IMPLICATIONS FOR CONSTRUCTION

4.1. GEOTECHNICAL CONSIDERATIONS

The following is a checklist summary of geotechnical hazards and their likelihood to have an impact on the proposed development of the site.

GEOTECHNICAL HAZARD	LIKELY TO AFFECT SITE?	COMMENT
Removal of existing sub-structures affecting new foundations.	×	Existing structures on the site unlikely to have substantial footings and therefore unlikely to impact on proposed foundations.
Deep Made Ground.	×	
Historic wells.	×	
Soft or compressible natural deposits such as Alluvium or Peat.	×	
Changes in ground conditions within short distances.	\checkmark	A band of subordinate sandstone within the Weald Clay Formation is shown to be present across the centre of the site from east to west. The boundary between this and the clay soils of the rest of the Weald Clay Formation may complicate the design and construction of foundations, along this boundary.
Fine soils that have a volume change capacity.	✓	The Weald Clay Formation typically has a medium to high volume change potential. This will likely impact on foundation design and depths. Existing and proposed trees will further complicate foundations, in particular within the field containing the Christmas tree crop.
Dissolution features or 'swallow holes'.	×	
Cambering of valley sides with possibility of 'gulls'.	×	
Risk of slope instability.	×	
Shallow groundwater.	\checkmark	The sandstone bands within the Weald Clay Formation are often saturated with groundwater and if this is the case this could present construction difficulties and have implications for the design of sub-surface structures where the sandstone band is present.



GEOTECHNICAL HAZARD	LIKELY TO AFFECT SITE?	COMMENT
Underground mining.	×	
Geological faults.	×	
Aggressive chemical environment for concrete e.g. expansive slag or high sulphate soils.	\checkmark	Soils of the Weald Clay can commonly be elevated in sulphate and pyrite and as such can lead to the need for sulphate resistant concrete.

4.2. PRELIMINARY GEOTECHNICAL ASSESSMENT

The anticipated ground conditions at the site would typically support shallow spread foundations. Some local reinforcement may be required at the boundary between any sands and sandstone band and the clays in the rest of Weald Clay Formation to guard against differential settlement, however, this would be expected to be minimal.

Tree influence around the site boundary and within the field containing the Christmas tree crop may mean that foundations close to these boundaries or within the field will need to be deepened, potentially requiring piled foundations in some areas depending on the nature of the soils.

An intrusive ground investigation incorporating a geotechnical assessment is being undertaken by BRD and shall be reported separately. This investigation will look to establish the ground conditions and enable the preliminary design of the new structures.

4.3. CONSTRUCTION CONSIDERATIONS

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

In accordance with Health and Safety Executive (HSE) guidance, a 'Refurbishment Demolition Survey' (RDS) should be undertaken to identify whether or not asbestos containing materials are present in the existing structure(s) prior to demolition or refurbishment. The results of the survey should then be used to plan for the safe management, removal and disposal of asbestos containing materials from the existing buildings and infrastructure should such materials be present.



REPORT SPECIFIC REFERENCES

• British Geological Survey sheet 301 "Haslemere" Solid and Drift edition (1:50,000) published 1981.



SUPPORTING INFORMATION

SITE CHARACTERISTICS

The site characteristics are collated from various information sources, including but not limited to Ordnance Survey, British Geological Survey (BGS), Environment Agency (EA) and local authorities.

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

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

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

HISTORY

Mapped History

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

Aerial photography

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

Internet Searches

A simple search of the internet for relevant material relating to the use or history of the site is made. Information obtained from internet searches has been accepted as fact without validation by BRD except for ensuring the source is reputable. It should be recognised that due to programme and budgetary constraints the search conducted may not have revealed all the information available.

GEOLOGY

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



Ground Stability Hazards

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

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

<u>Radon</u>

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

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

The maps contained within 'Radon: Guidance on protective measures for new buildings' (2015) identify areas where no radon protection measures are necessary or where higher concentrations are present that either basic or full radon protection measures are required to be fitted to all new buildings together with supplementary advice concerning extensions, conversions and refurbishments. However, some local authorities have local bylaws, that BRD may not be aware of, that insist on radon protection to all new dwellings within their area regardless of the recommendations of the 'Radon: Guidance on protective measures for new buildings' (2015) report.

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

Full radon protection measures comprise incorporating a continuous gas resistant membrane into the floor construction together with a ventilated sub-floor void through either the use of suspended floor construction or a 'radon sump'. The membrane is sealed at joints and around service entries into the floor and extended across the cavity tray.

'Radon: Guidance on protective measures for new buildings' (2015) should be referred to for detail on the construction of the protective measures.



HYDROGEOLOGY

Aquifer Designations

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

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

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

Source Protection Zones

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

- Zone 1(Inner Protection Zone) is the most sensitive area within which pollution could reach the borehole within 50 days. Alternatively it is defined by a minimum 50m radius around the borehole.
- Zone 2 (Outer Protection Zone) are defined by the area within which pollution could reach the borehole within 400 days or 25% of the total catchment area.
- Zone 3 (Total Catchment) are defined by the total area required to support the removal of water from the borehole.



HYDROLOGY

<u>Flooding</u>

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

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

ENVIRONMENTAL ASPECTS

<u>Landfill</u>

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

Pollution Incidents

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

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

- Pollution incidents impacting 'air' only are not considered relevant.
- Pollution incidents to 'water' are only considered where the surface water impacted is either on, flows through or is immediately adjacent to the site.
- Pollution incidents to 'land' are only considered where these are on or immediately adjacent to the site unless there are grounds to consider that the incident had the potential to impact groundwater that may have migrated beneath the site.
- Category 4 potential pollutant incidents are recorded, but upon investigation were found to have had no impact and accordingly are not considered relevant.

Ecologically Sensitive Land Use

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



CONTAMINATION ASSESSMENT METHODOLOGY

<u>UK Policy</u>

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

The three main drivers for contamination assessment and remediation are:

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

Pollutant Linkages

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

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

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

Conceptual Site Model

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

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



Technical Guidance

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

- 'Investigation of Potentially Contaminated Sites Code of Practice BS 10175:2011+A2:2017', The British Standards Institution 2017.
- Land Contamination Risk Management, Environment Agency, 2021.
- 'Guidance for the safe development of housing on land affected by contamination R&D66: 2008', NHBC/Environment Agency, 2008.

Risk Assessment Methodology

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

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



Risk Classification

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

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

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

		SEVERITY OF CONSEQUENCE				
		SEVERE	MEDIUM	MILD	MINOR	
	HIGH LIKELIHOOD	Very High Risk	High Risk	Moderate Risk	Moderate/Low Risk	
	LIKELY	High Risk	Moderate Risk	Moderate/Low Risk	Low Risk	
PROBABILITY	LOW LIKELIHOOD	Moderate Risk	Moderate/Low Risk	Low Risk	Negligible Risk	
	UNLIKELY	Moderate/Low Risk	Low Risk	Negligible Risk	Negligible Risk	

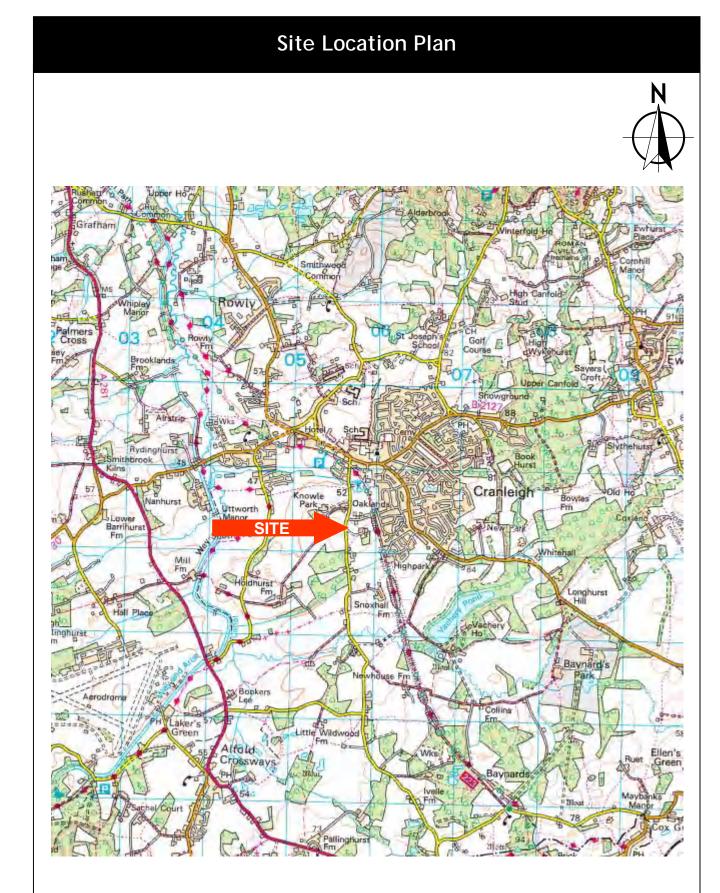
These risk classifications are defined as follows:

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

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



APPENDIX 1



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Not to scale.



Plate 1: View north showing the north western field and the overhead high voltage electricity cable crossing the site with the off site football ground beyond.



Plate 2: View north showing the north eastern field.





Plate 3: View north showing the centre north field.



Plate 4: View east showing the annexe in the centre east of the site.





Plate 5: View south east showing the centre east field and one of the grassed soil bunds present within this field.



Plate 6: View south west showing the centre east field and the other grassed soil bund present within this field.





Plate 7: View north showing the centre east field with the annexe and an off-site house in the background.



Plate 8: View south east showing the southern field and the Christmas tree crop.





Plate 9: View north showing the southern field and the Christmas tree crop.



Plate 10: View east showing the southern field and the Christmas tree crop.



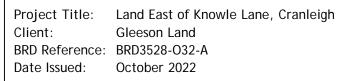
Site Walkover Photographs



Plate 11: View south west showing the centre west field and the hay barn and shipping containers present in the centre west of the site.



Plate 12: View east showing the centre west field and the hay barn and shipping containers present in the centre west of the site.





Site Walkover Photographs



Plate 13: View west showing the shared driveway / access road and the hay barn in the centre west of the site.



Plate 14: View east showing the hay and hay making equipment being stored within the hay barn in the centre west of the site.

Project Title:Land East of Knowle Lane, CranleighClient:Gleeson LandBRD Reference:BRD3528-O32-ADate Issued:October 2022



Site Walkover Photographs



Plate 15: Image showing the small pile of corrugated asbestos cement sheets and fragments present beside the shipping containers in the centre west of the site.



Plate 16: View south showing the bonfire ash in the centre of the site.

Project Title:Land East of Knowle Lane, CranleighClient:Gleeson LandBRD Reference:BRD3528-O32-ADate Issued:October 2022





LAND EAST OF KNOWLE LANE, CRANLEIGH

Drawing Illustrative masterplan





KEY	
	Site Boundary
\bigcirc	Existing trees retained
	Proposed residential development
	Proposed green infrastructure
*	Potential location for Childrens Play

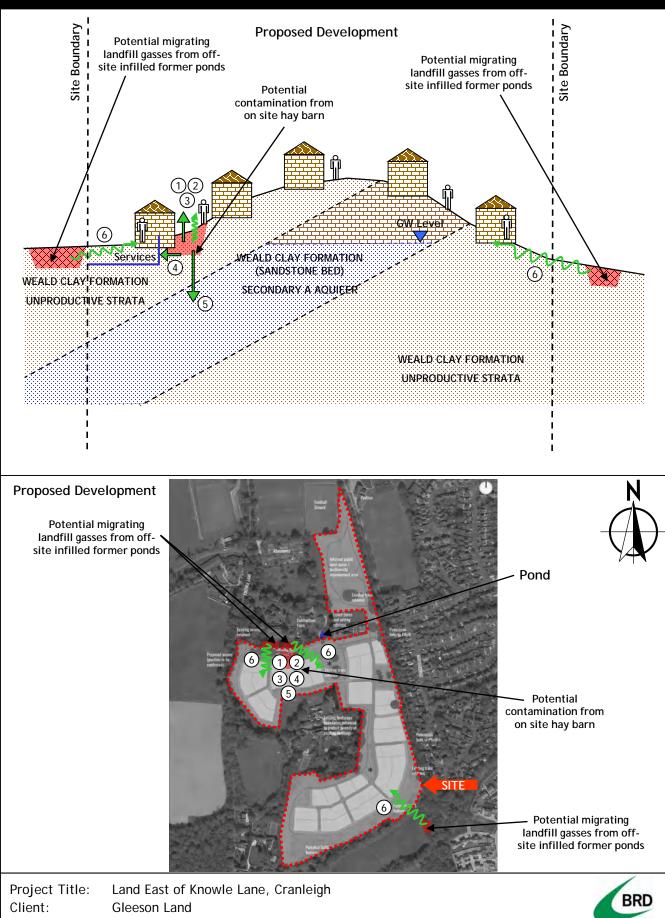
Ordnance Survey (c) Crown Copyright 2021. All rights reserved. Licence number 100020449 This drawing is for planning purposes only. Copyright of richards urban design ltd.

Pedestrian/ cycle links



Indicative SuDS basin

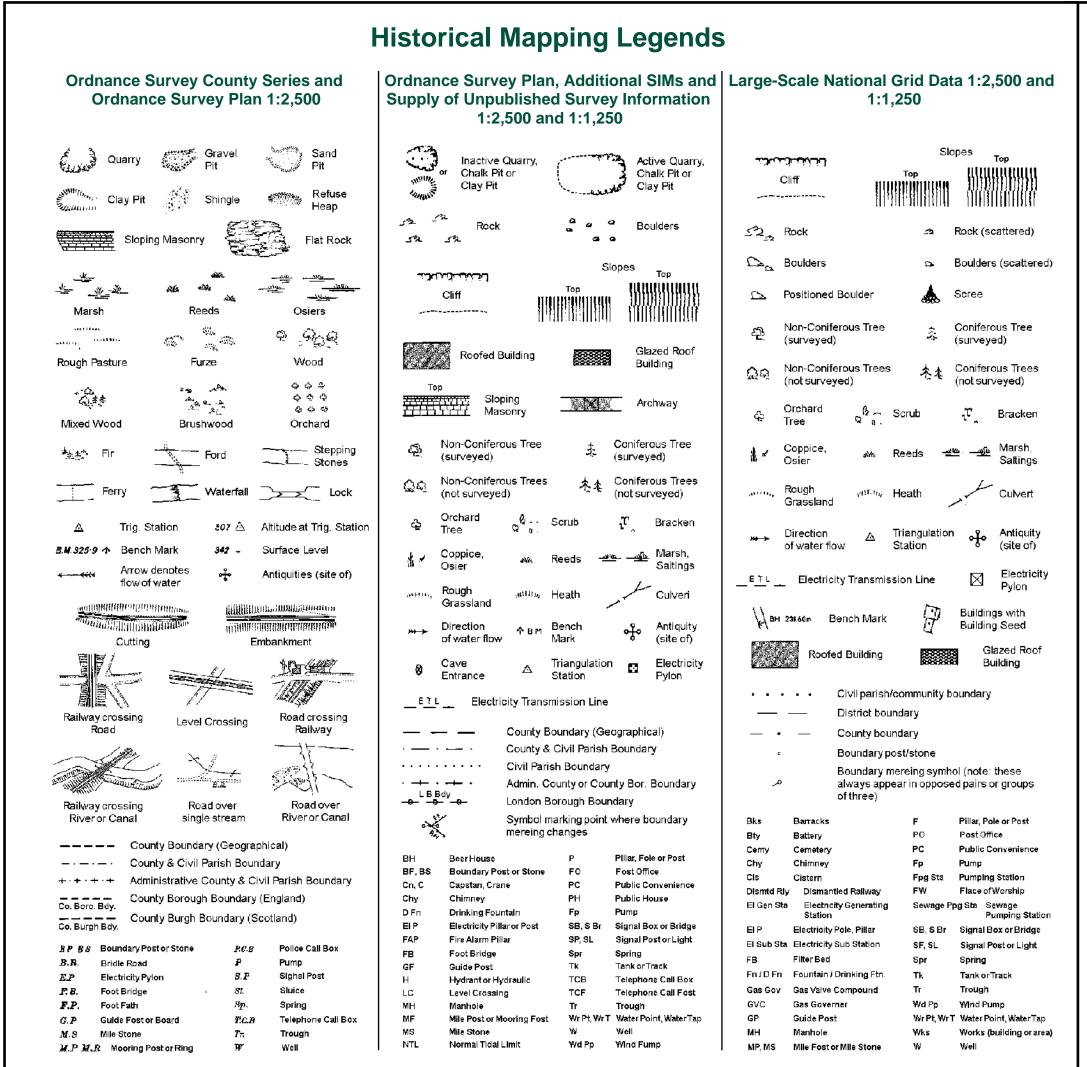
Initial Conceptual Model



Client:Gleeson LandBRD Reference:BRD3528-OP4-ADate Issued:October 2022

01295 272244 info@brduk.com

APPENDIX 2

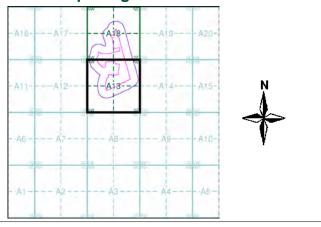


Historical Mapping & Photography included:

BRD

Mapping Type	Scale	Date	Pg
Surrey	1:2,500	1871	2
Surrey	1:2,500	1896 - 1897	3
Surrey	1:2,500	1915 - 1916	4
Ordnance Survey Plan	1:2,500	1971	5
Additional SIMs	1:2,500	1977 - 1989	6
Additional SIMs	1:2,500	1980 - 1992	7
Ordnance Survey Plan	1:2,500	1983	8
Additional SIMs	1:2,500	1989	9
Large-Scale National Grid Data	1:2,500	1994	10
Large-Scale National Grid Data	1:2,500	1996	11
Historical Aerial Photography	1:2,500	1999	12

Historical Map - Segment A13



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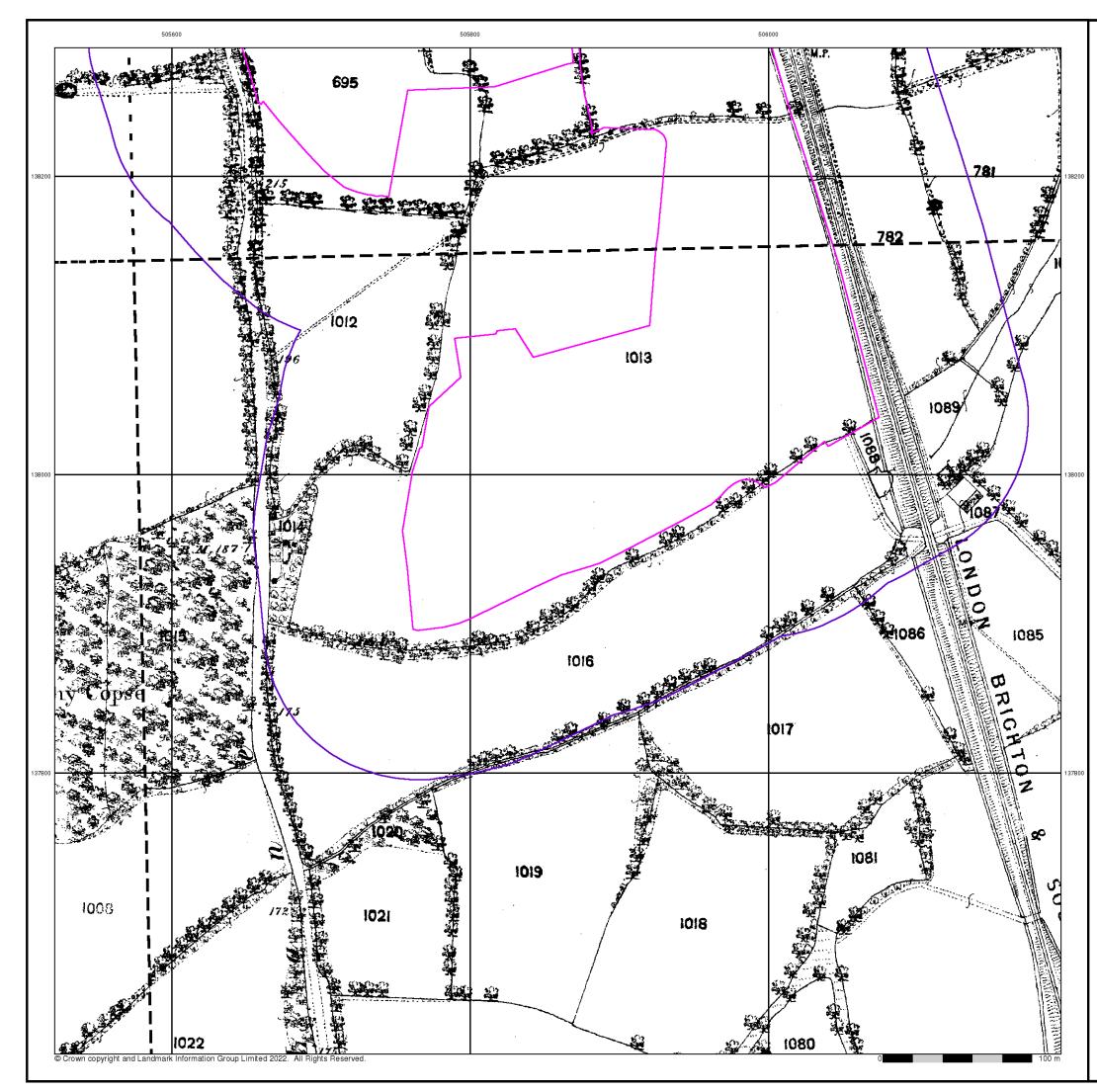
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Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN



Tel Fax: Web





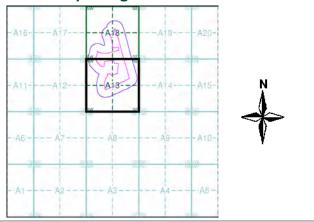
Surrey Published 1871 Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered tor mapping urban areas and by 189 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

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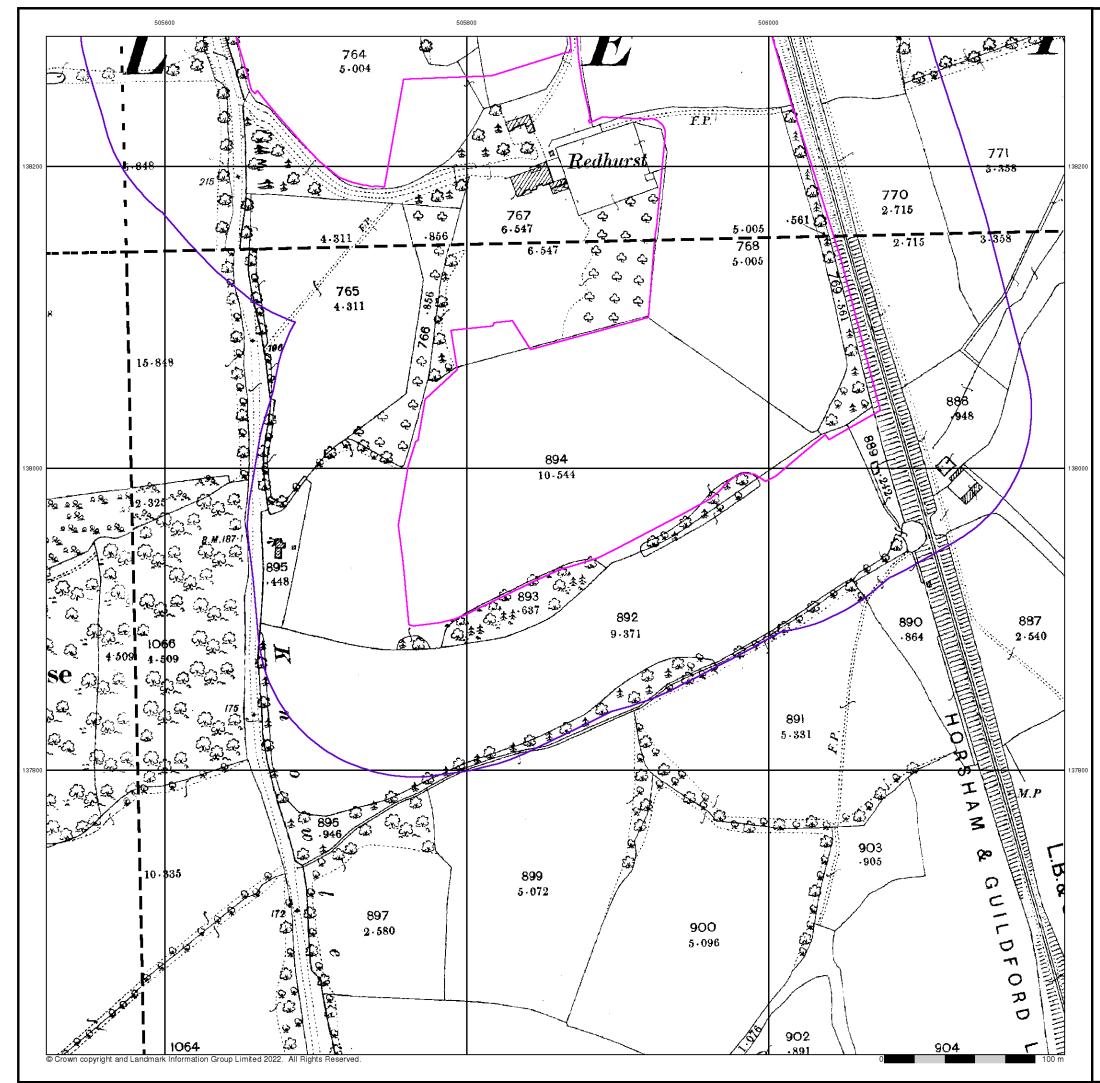
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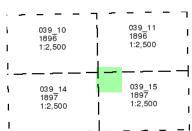




Surrey Published 1896 - 1897 Source map scale - 1:2,500

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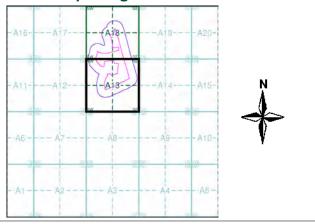
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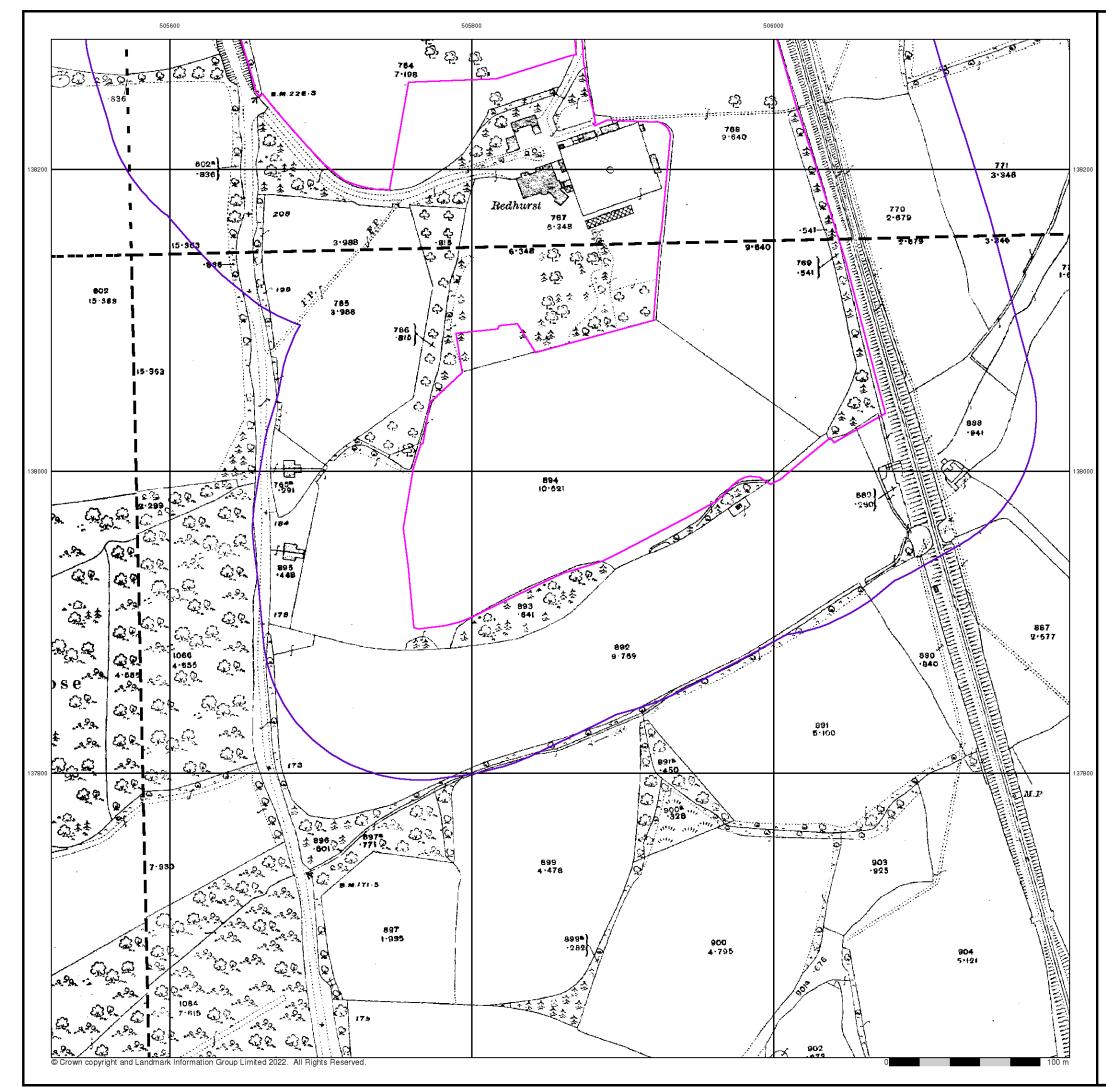
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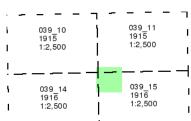




Surrey Published 1915 - 1916 Source map scale - 1:2,500

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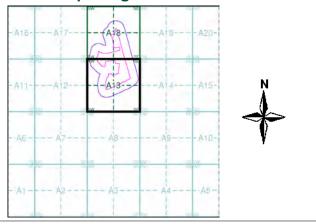
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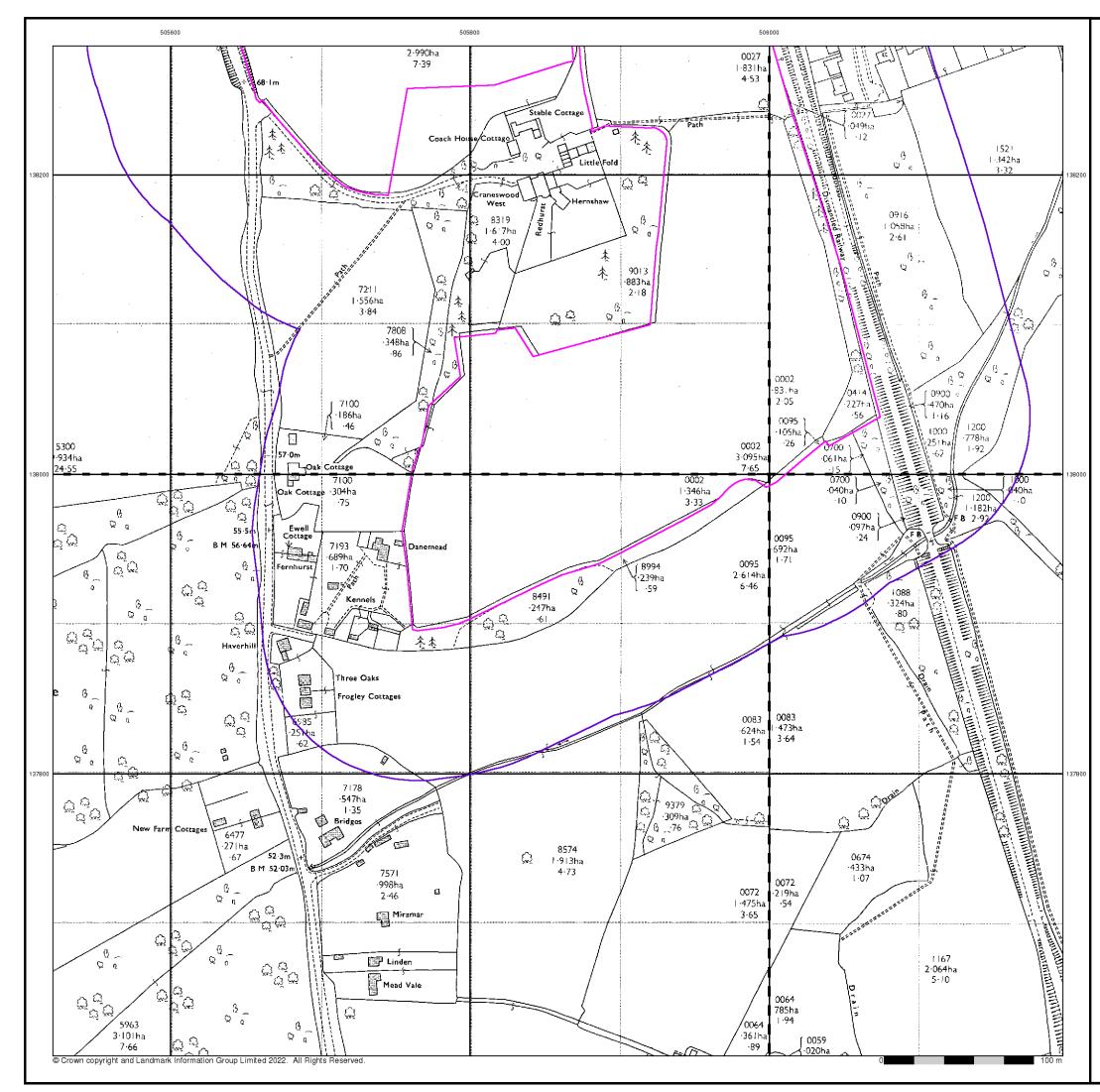
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Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN



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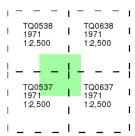
Ordnance Survey Plan

Published 1971

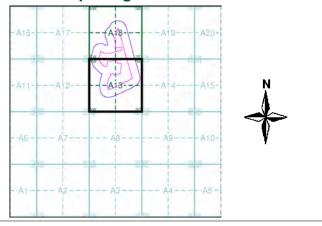
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: Customer Ref: National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

301569175_1_1 BRD3528 Α 12.23 100

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN



Tel: Fax: Web:





Additional SIMs

Published 1977 - 1989

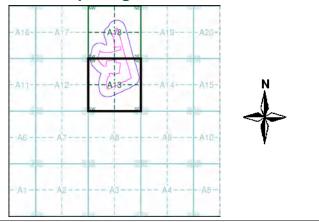
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

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T	1989	9		L		1977 1:2,5			I
Ι				1					I
T				I.					I
-		-	-	-	-	-	-	-	

Historical Map - Segment A13



Order Details

Order Number: Customer Ref: National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

301569175_1_1 BRD3528 А 12.23 100

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN



Tel: Fax: Web:





Additional SIMs

Published 1980 - 1992

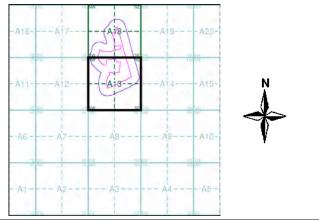
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

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T	TQ0	538		I.		TQ06	38		I
T	1992	2		I.		1980 1:2,5			I
T				I.					I
I				1					I
-		-	-	-		-	-	-	

Historical Map - Segment A13



Order Details

Order Number: Customer Ref: National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

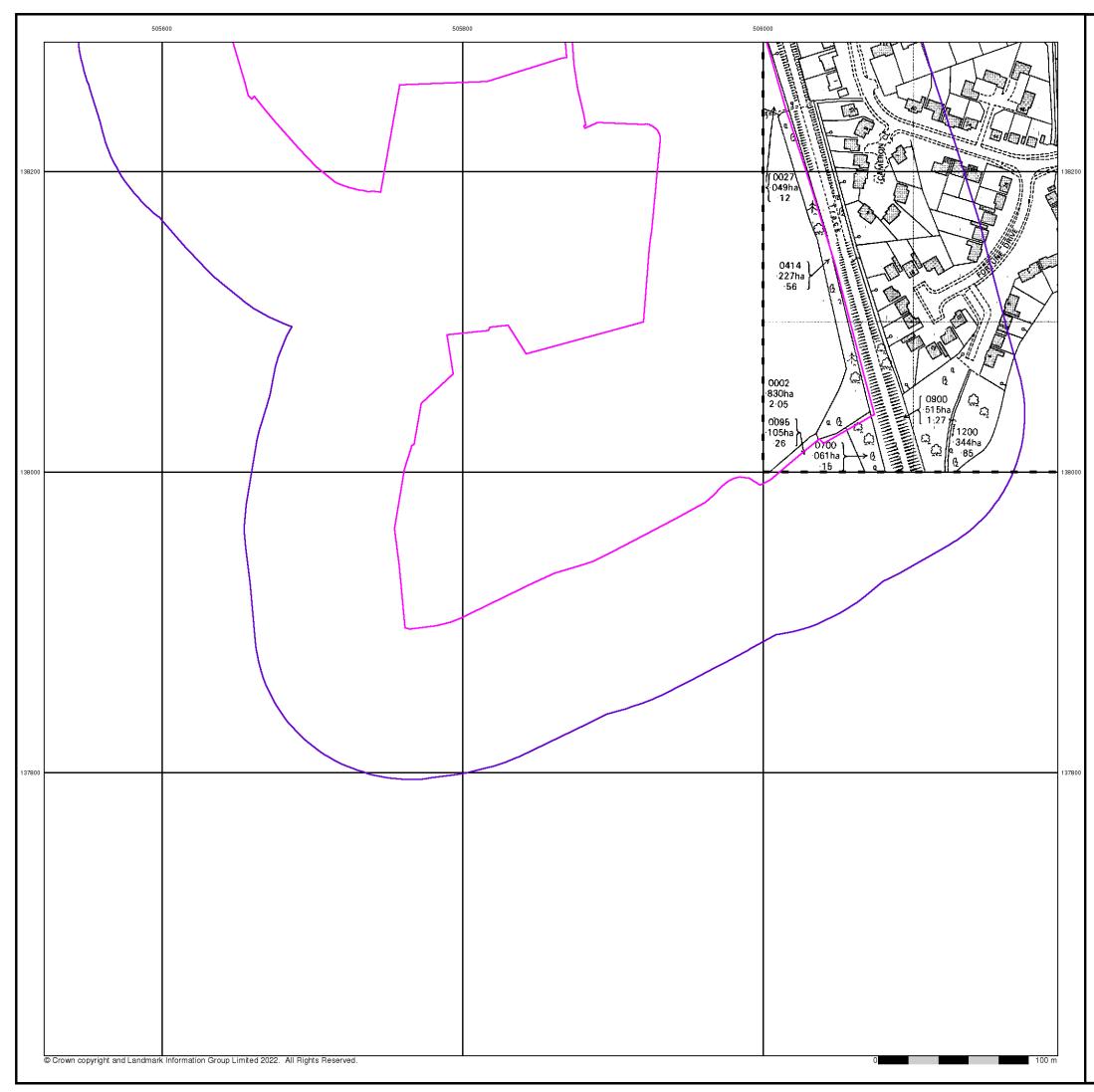
301569175_1_1 BRD3528 А 12.23 100

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN



Tel: Fax: Web:





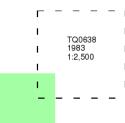
Ordnance Survey Plan

Published 1983

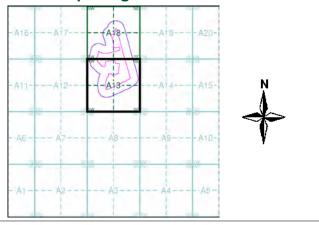
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: Customer Ref: National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

301569175_1_1 BRD3528 А 12.23 100

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN



Tel: Fax: Web:





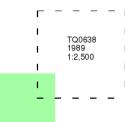
Additional SIMs

Published 1989

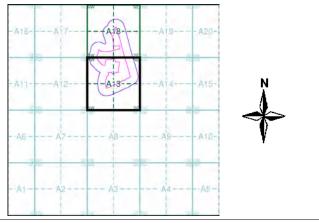
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

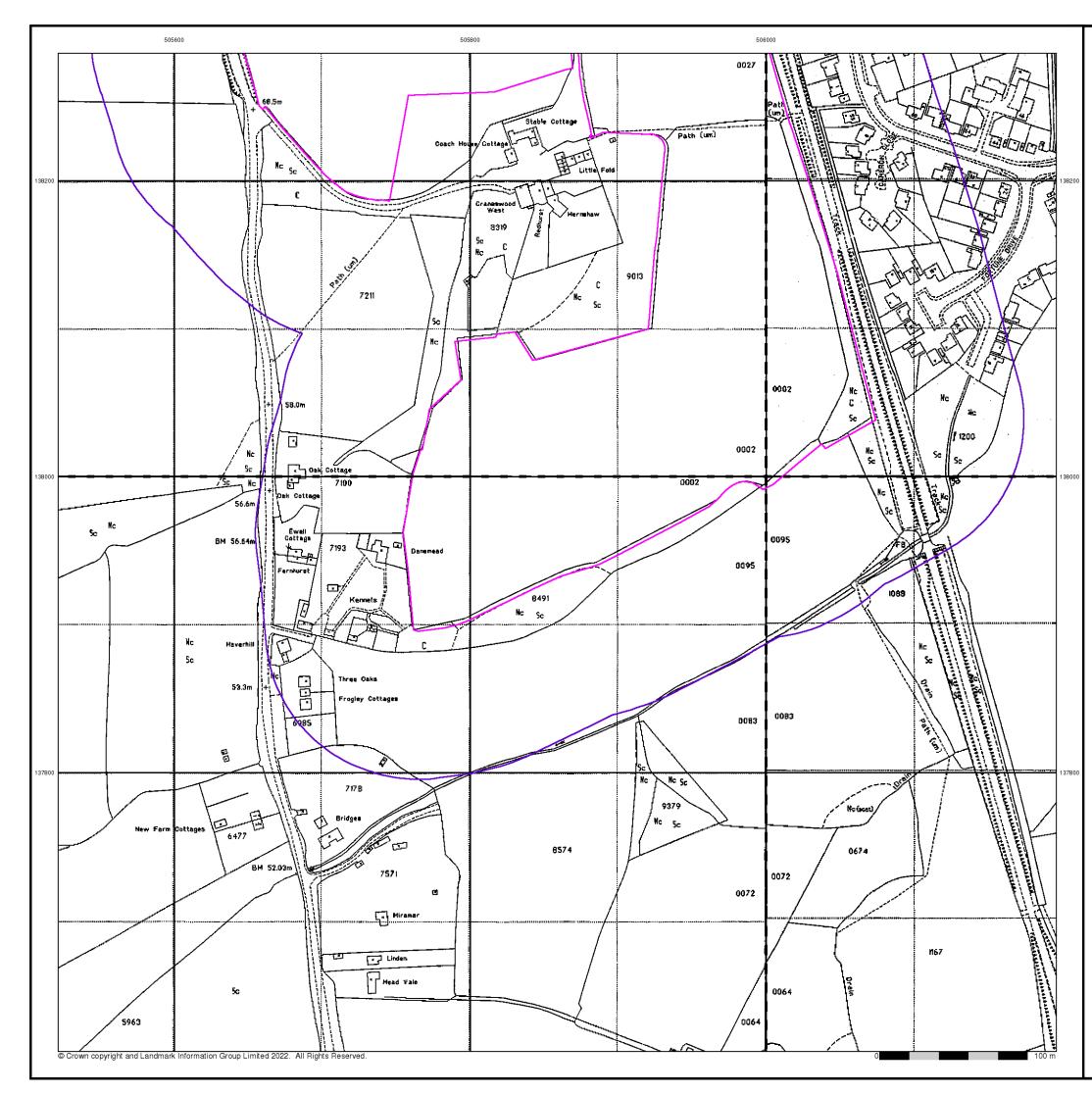
Order Number: 301569175_1_1 Customer Ref: BRD3528 National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

А 12.23 100

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN







Large-Scale National Grid Data

Published 1994

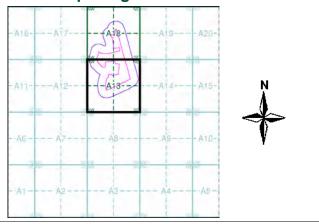
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

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 	199	4	 	199	4	- - - -

Historical Map - Segment A13



Order Details

Order Number: Customer Ref: National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

301569175_1_1 BRD3528 Α 12.23 100

Site Details

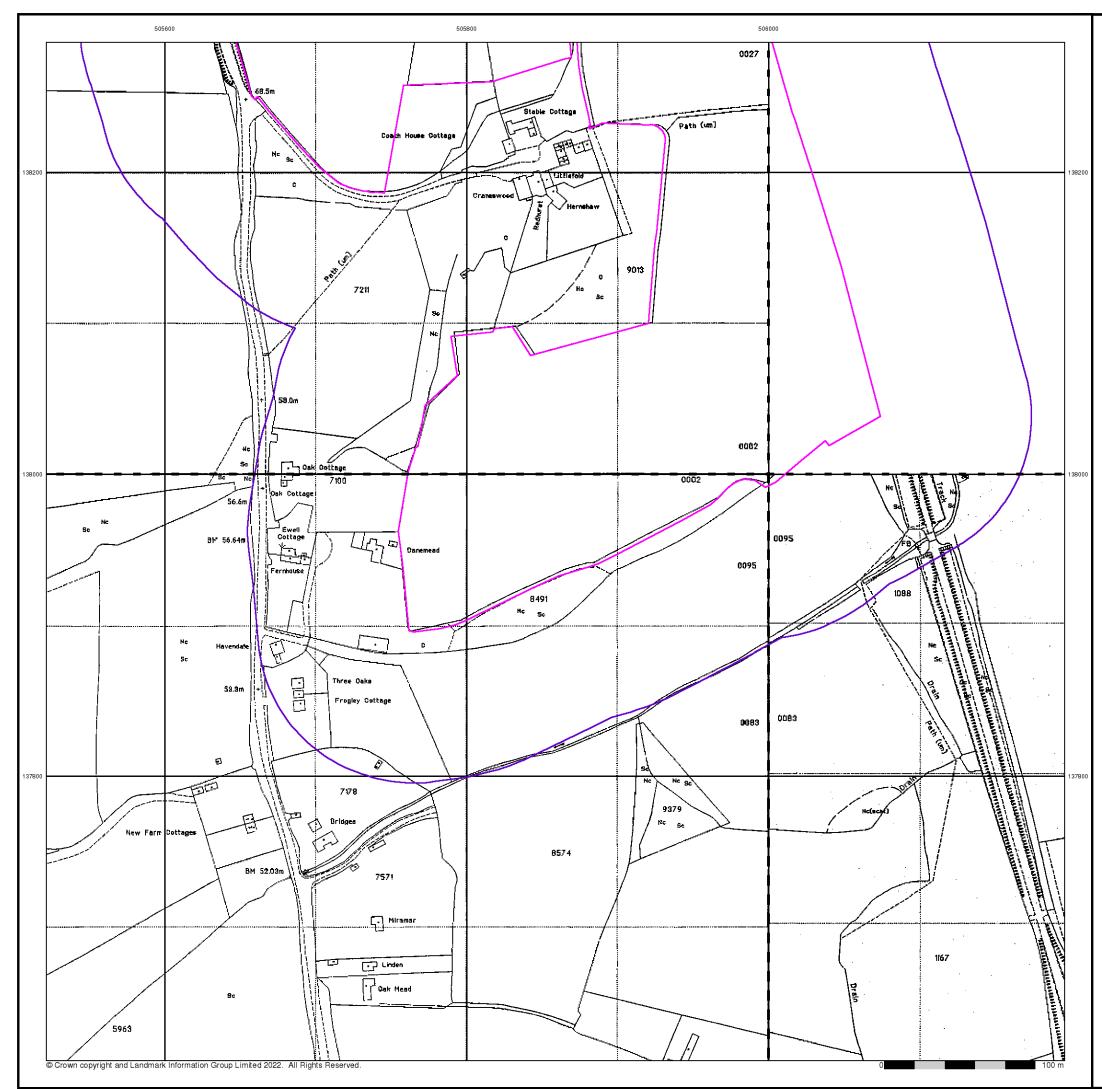
Land East of Knowle Lane, CRANLEIGH, GU6 8JN





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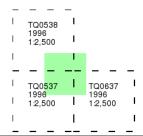
Large-Scale National Grid Data

Published 1996

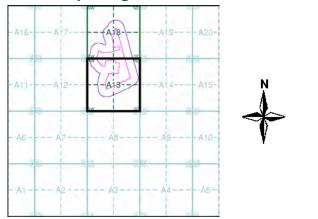
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: Customer Ref: National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

301569175_1_1 BRD3528 Α 12.23 100

Site Details

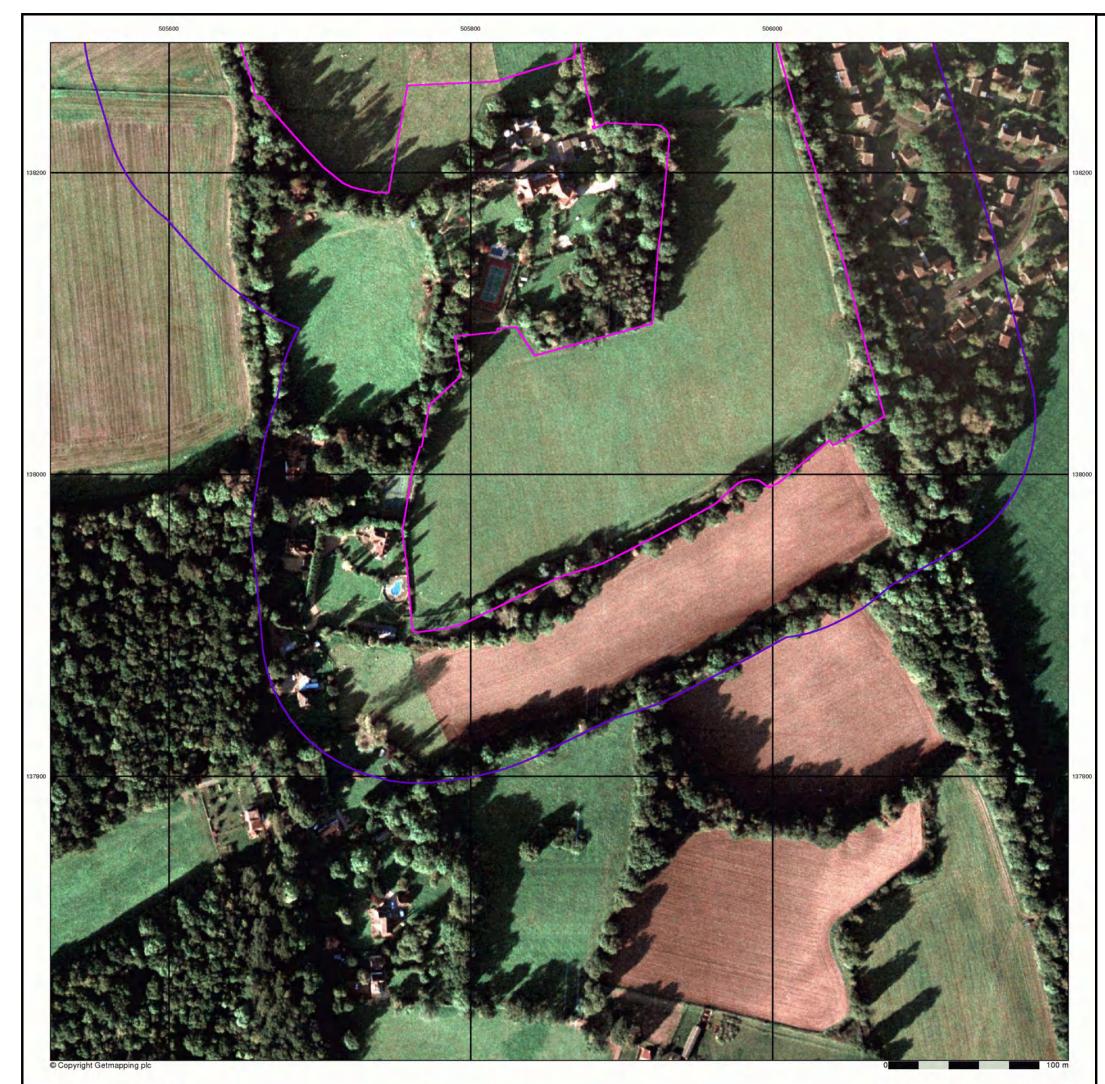
Land East of Knowle Lane, CRANLEIGH, GU6 8JN





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Historical Aerial Photography

Published 1999

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

Historical Aerial Photography - Segment A13

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-A11A13	2	3A	4+A15-	N
- A6 A7	Aa	3, A	A9	T
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Order Details Order Number: 301569175_1_1 Customer Ref: BRD3528 National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

A 12.23 100

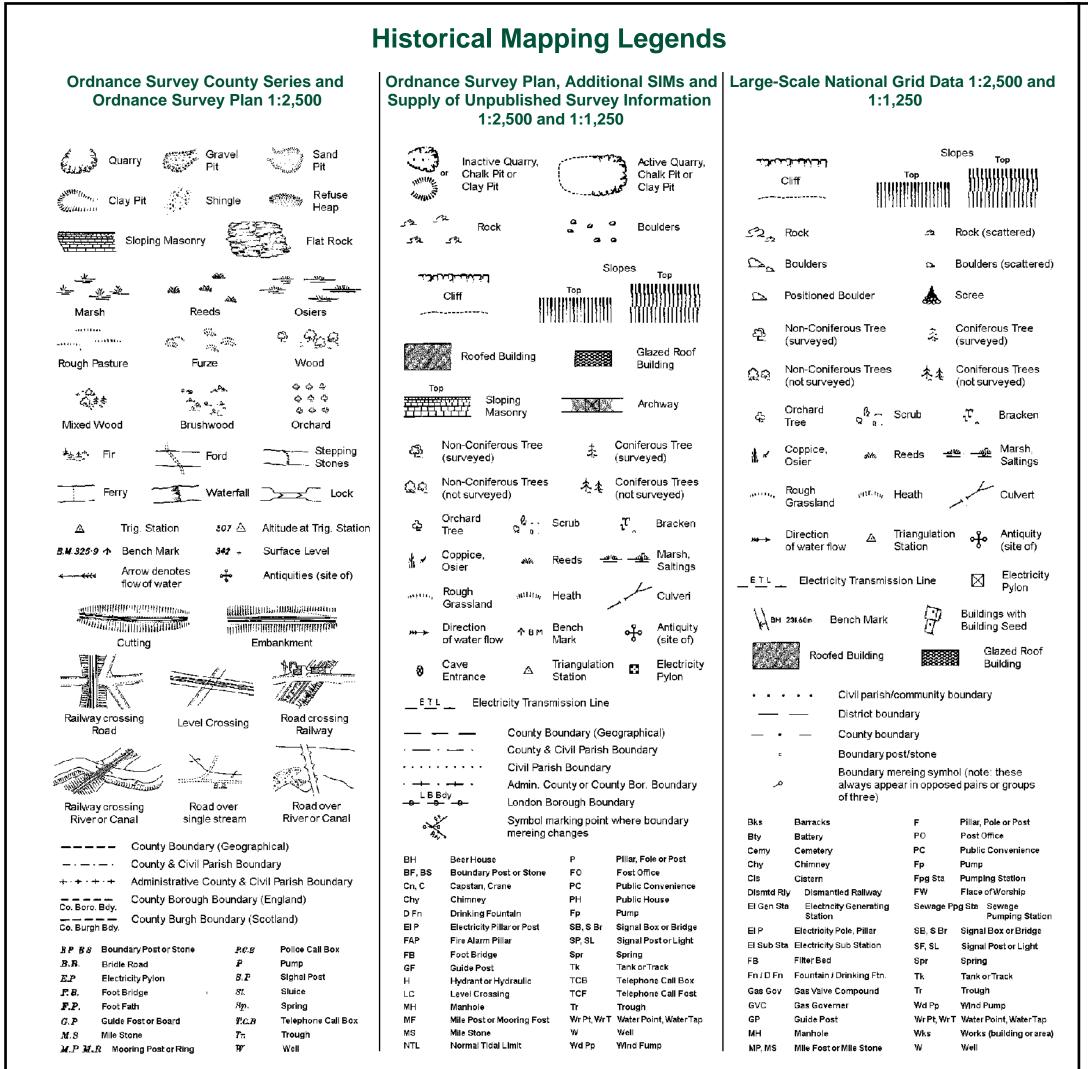
Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN





Tel: Fax: Web:

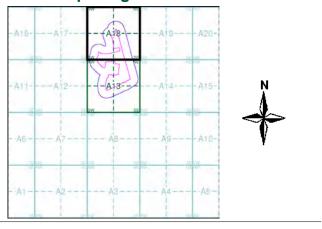


Historical Mapping & Photography included:

BRD

Mapping Type	Scale	Date	Pg
Surrey	1:2,500	1871	2
Surrey	1:2,500	1896	3
Surrey	1:2,500	1915	4
Ordnance Survey Plan	1:2,500	1971	5
Additional SIMs	1:2,500	1977 - 1989	6
Additional SIMs	1:2,500	1980 - 1992	7
Ordnance Survey Plan	1:2,500	1983	8
Additional SIMs	1:2,500	1989	9
Large-Scale National Grid Data	1:2,500	1994	10
Large-Scale National Grid Data	1:2,500	1996	11
Historical Aerial Photography	1:2,500	1999	12

Historical Map - Segment A18



Order Details

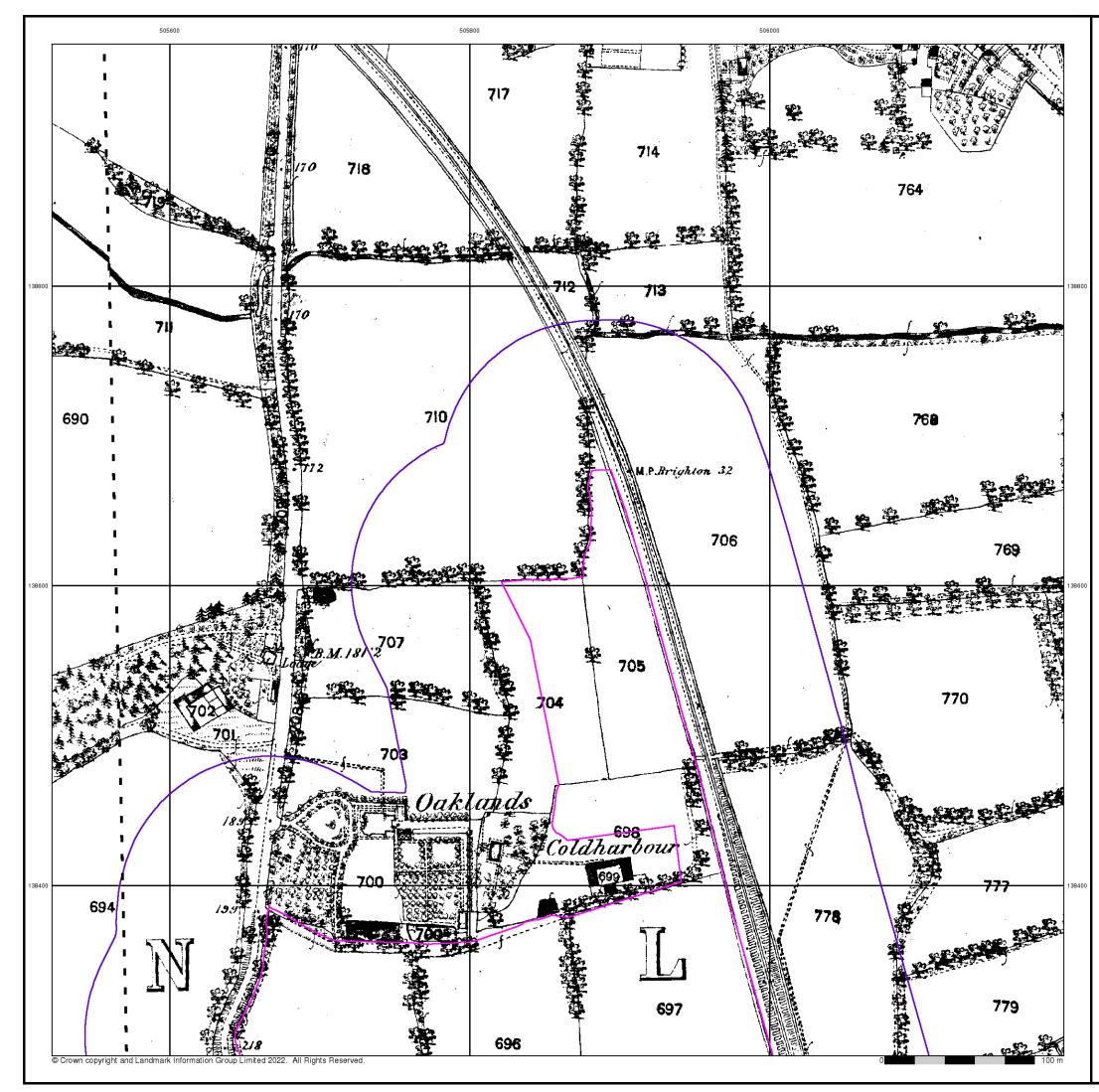
Order Number: Customer Ref: National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

301569175_1_1 BRD3528 Α 12.23 100

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN







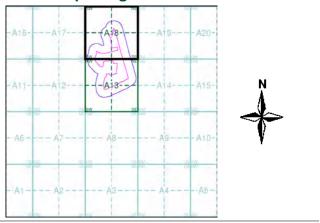
Surrey Published 1871 Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A18



Order Details

Order Number: 301569175_1_1 Customer Ref: BRD3528 National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

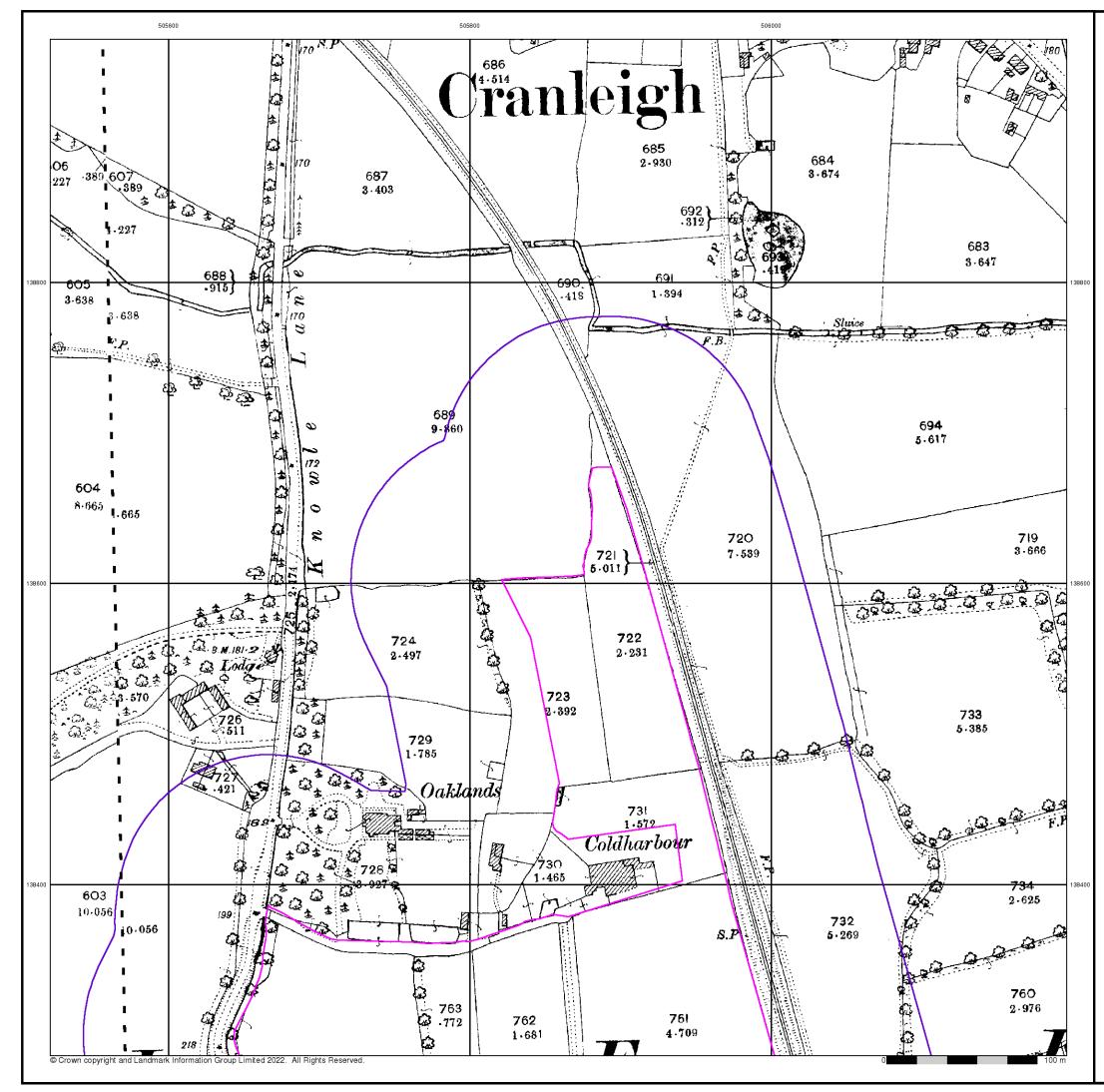
А 12.23 100

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN









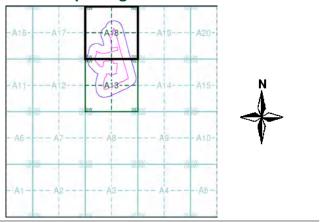
Surrey Published 1896 Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

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Historical Map - Segment A18



Order Details

Order Number: Customer Ref: National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

301569175_1_1 BRD3528 А 12.23 100

Site Details

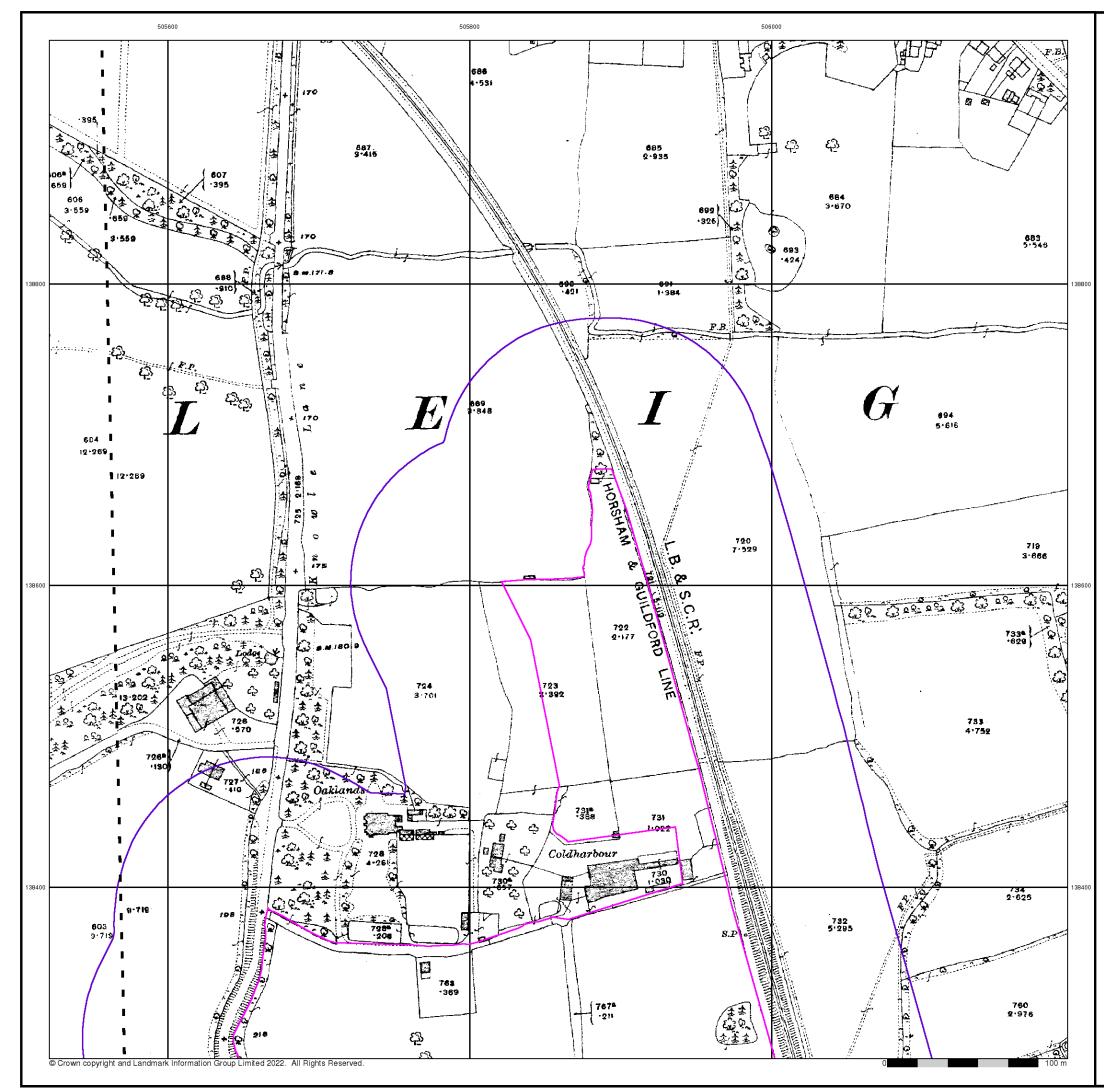
Land East of Knowle Lane, CRANLEIGH, GU6 8JN



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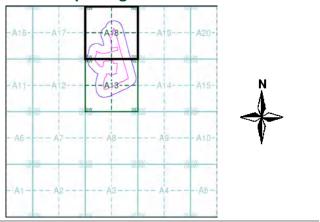
Surrey Published 1915 Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

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Historical Map - Segment A18



Order Details

Order Number: Customer Ref: National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

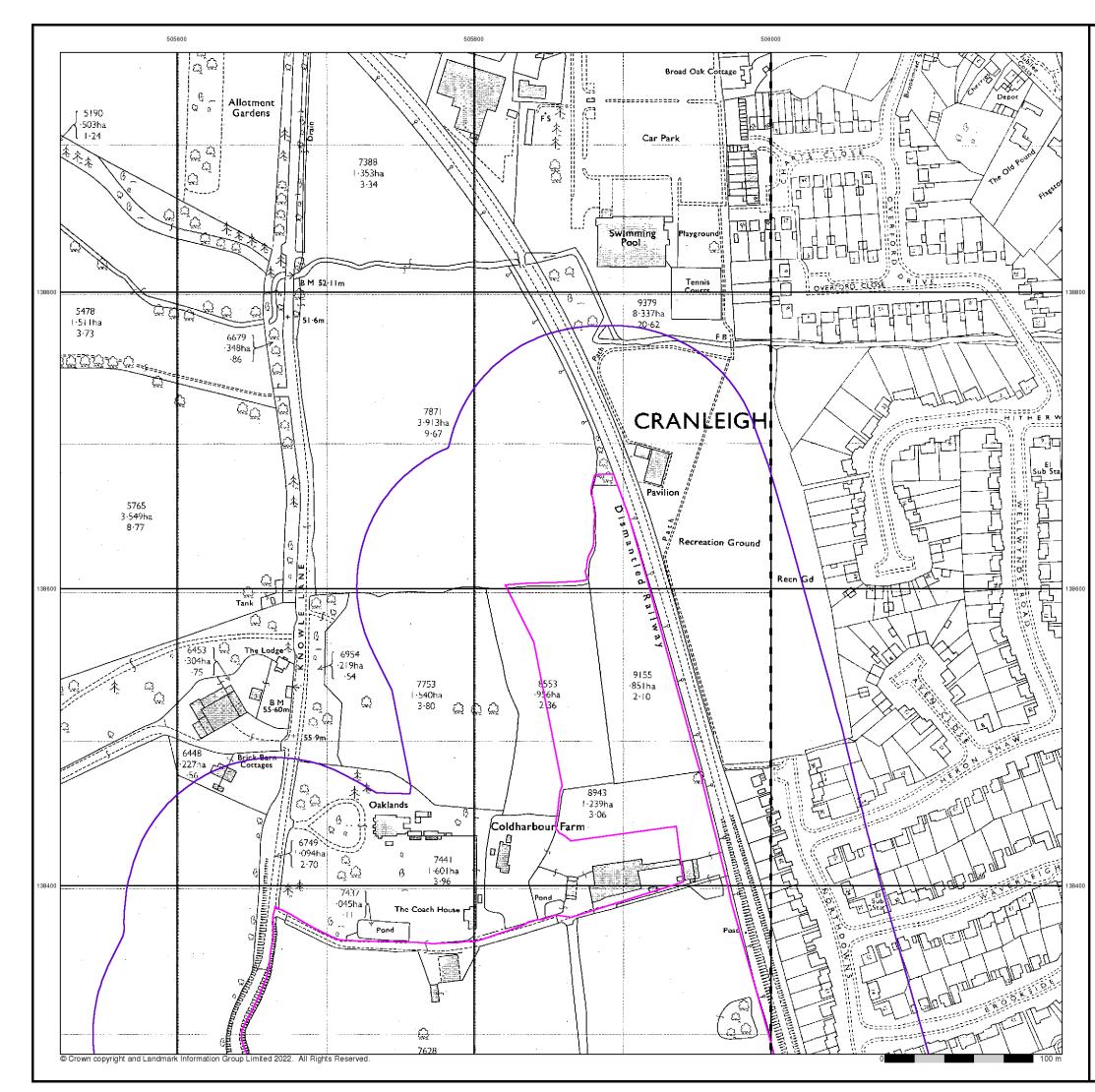
301569175_1_1 BRD3528 А 12.23 100

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN



Tel: Fax: Web:



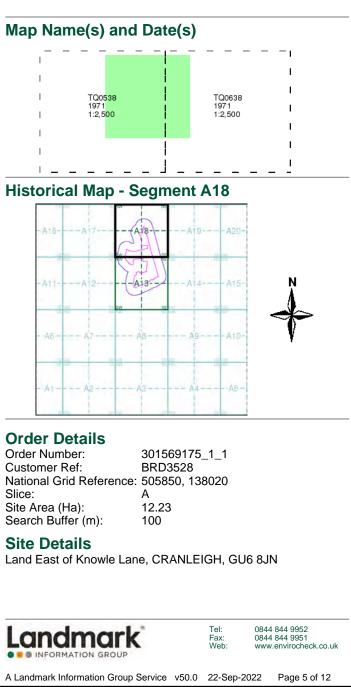


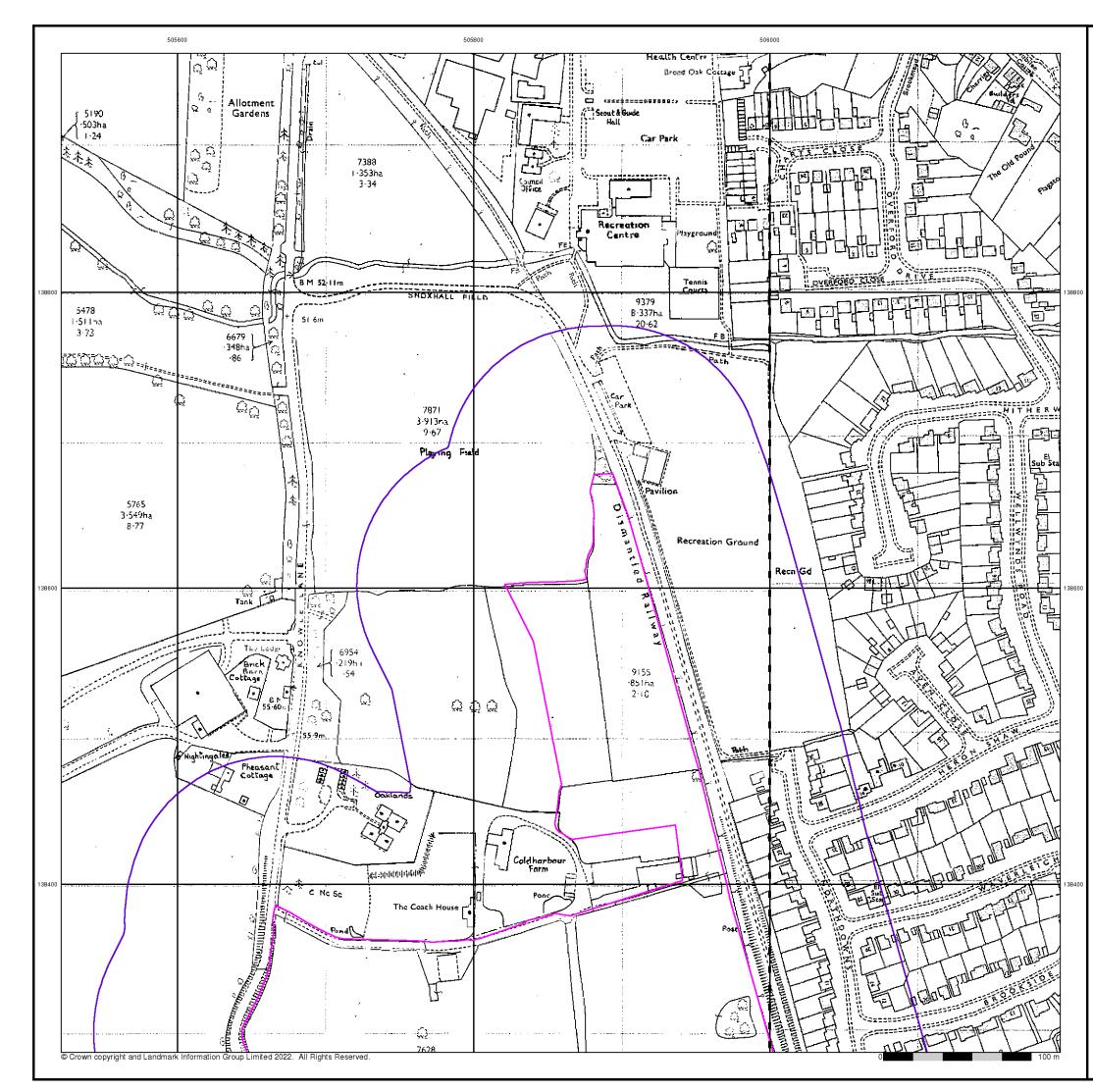
Ordnance Survey Plan

Published 1971

Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.





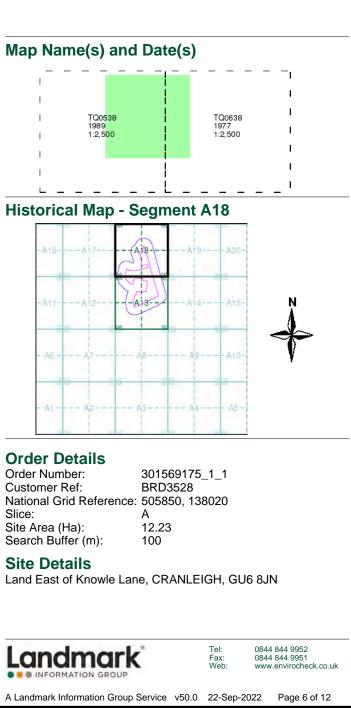


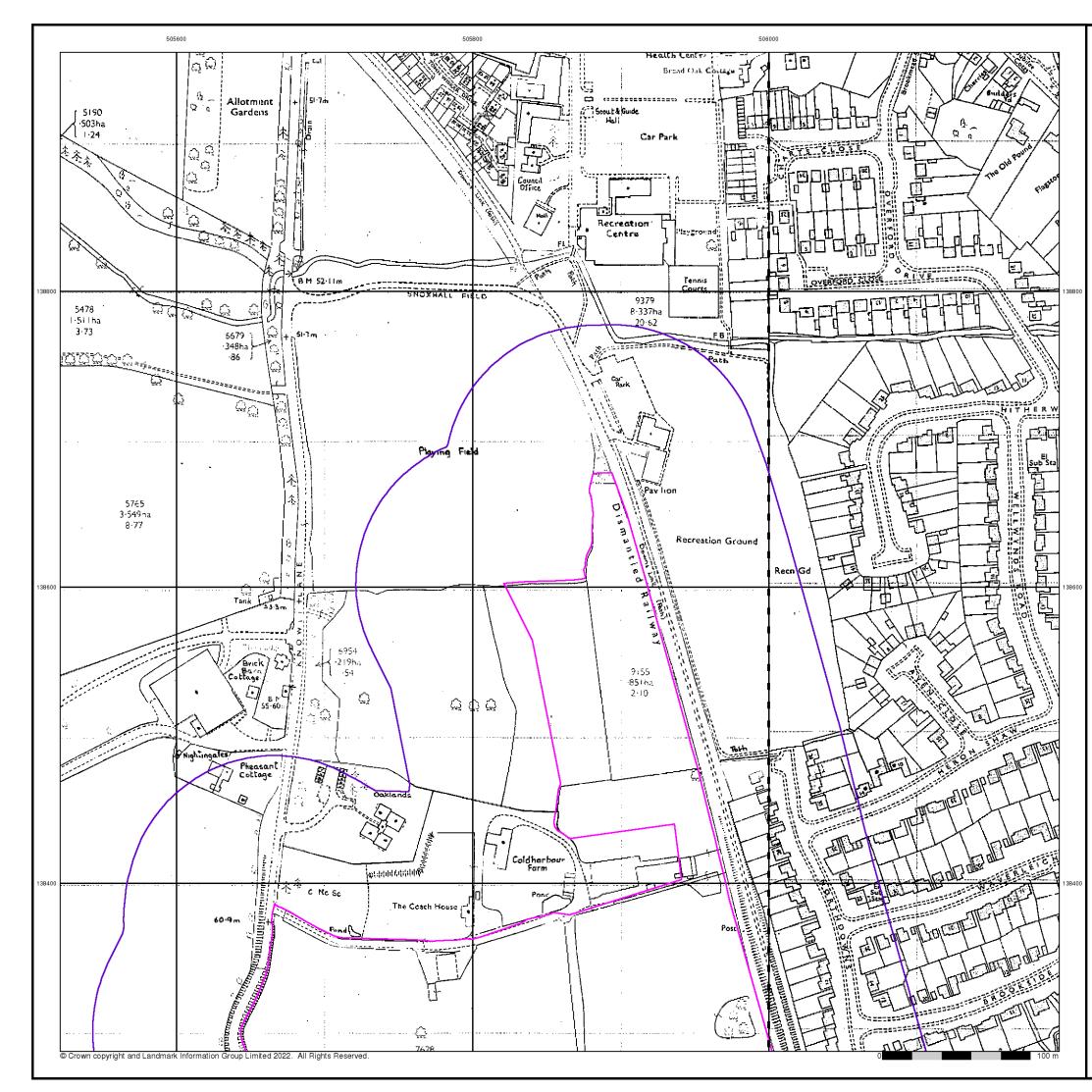
Additional SIMs

Published 1977 - 1989

Source map scale - 1:2,500

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





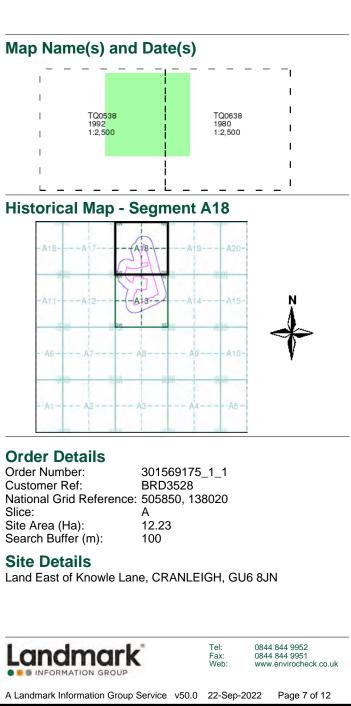


Additional SIMs

Published 1980 - 1992

Source map scale - 1:2,500

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





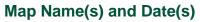


Ordnance Survey Plan

Published 1983

Source map scale - 1:2,500

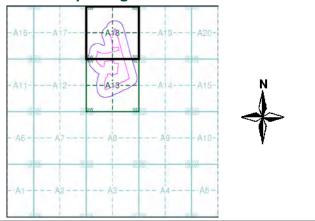
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.





Historical Map - Segment A18

1



Order Details

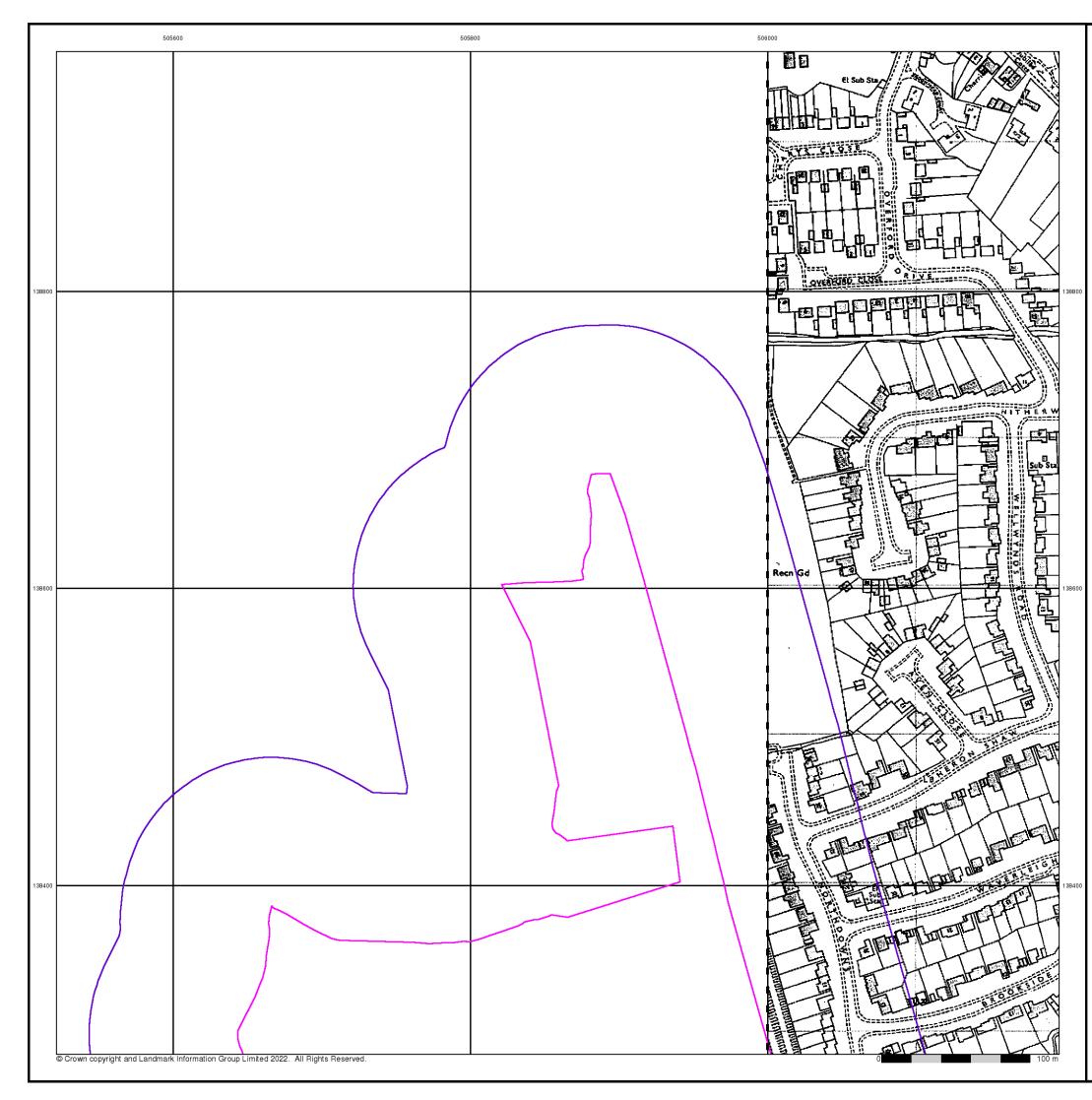
Order Number: Customer Ref: National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

301569175_1_1 BRD3528 Α 12.23 100

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN





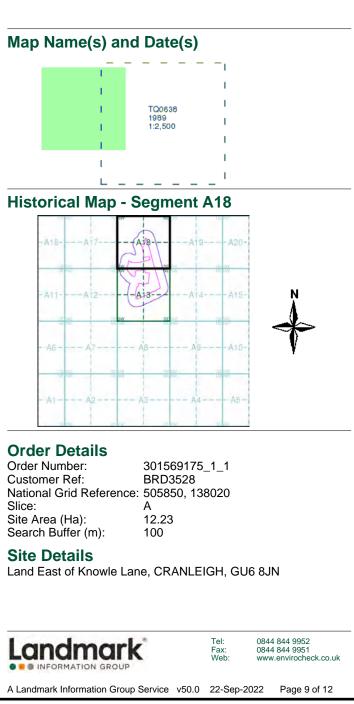


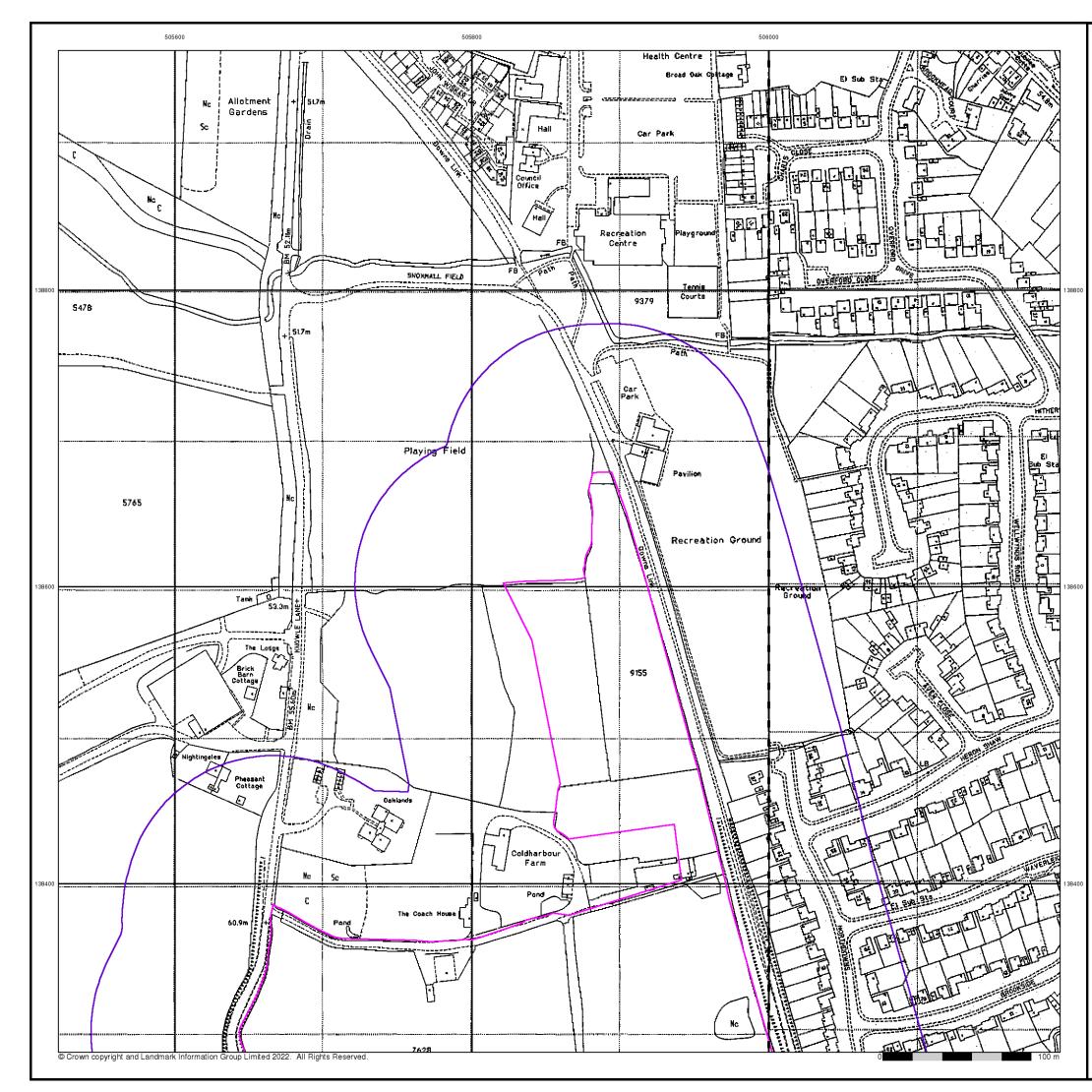
Additional SIMs

Published 1989

Source map scale - 1:2,500

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





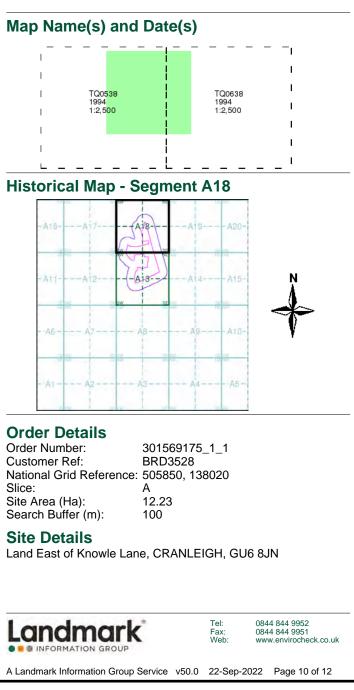


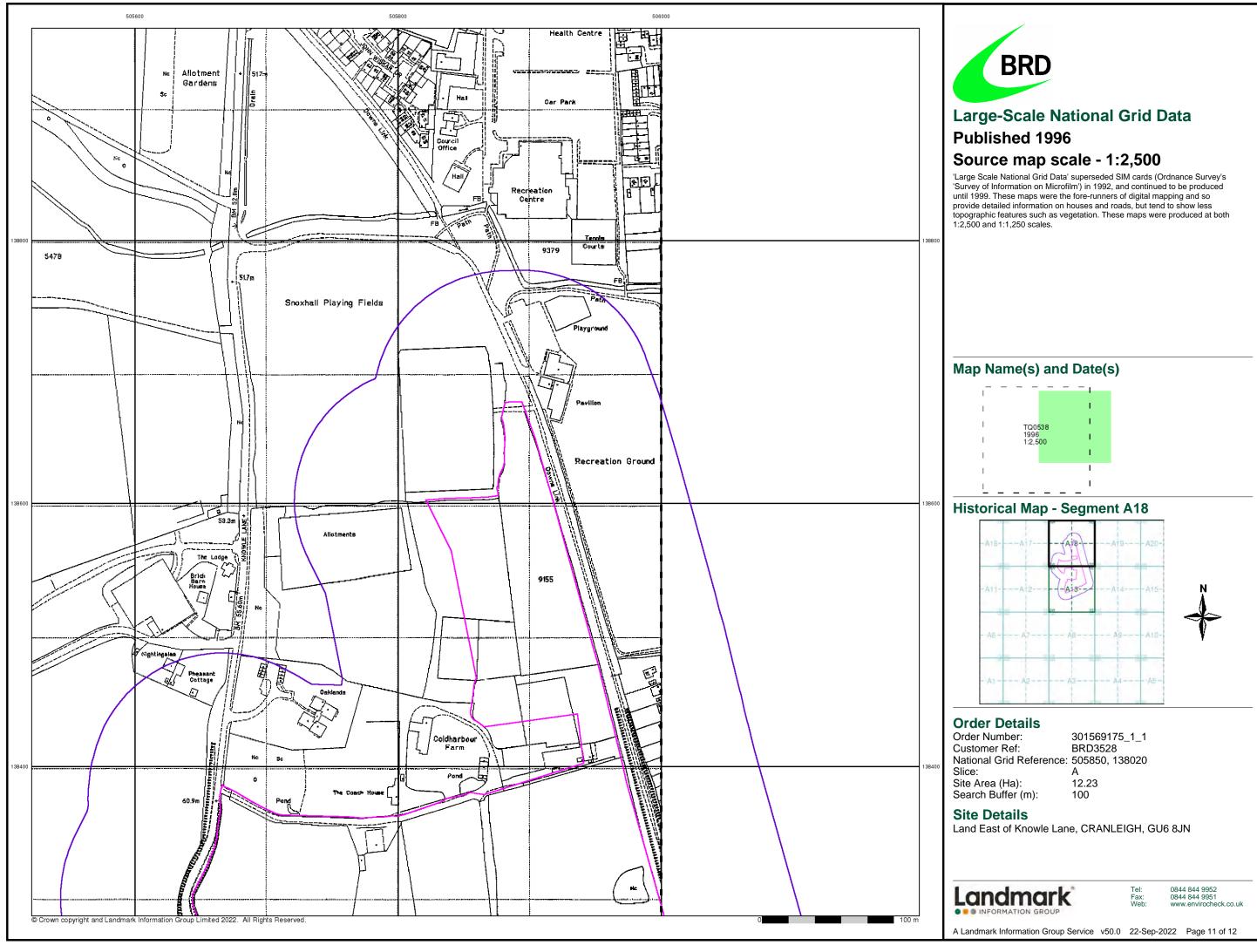
Large-Scale National Grid Data

Published 1994

Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.











Historical Aerial Photography

Published 1999

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

Historical Aerial Photography - Segment A18

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Order Details

Order Number:301569175_1_1Customer Ref:BRD3528National Grid Reference:505850, 138020 Slice: Site Area (Ha): Search Buffer (m): А

12.23 100

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN





Historical Mapping Legends

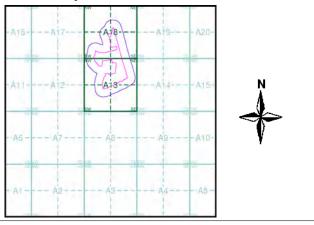
_		
Ordnance Survey County Series 1:10,560	Ordnance Survey Plan 1:10,000	1:10,000 Raster Mapping
Gravel Sand Other Pit Pit Pits	ر Chalk Pit, Clay Pit و Gravel Pit و Chalk Pit, Clay Pit و Chalk Pit, Clay Pit و Charles Pit	Gravel Pit Refuse tip or slag heap
Quarry Shingle Orchard	Sand Pit Disused Pit	Rock (scattered)
Marsh	Refuse or Lake, Loch	ຼິ້ງ Boulders Boulders (scattered)
A SEC AND A	Dunes 200 Boulders	Shingle Mud Mud
Mixed Wood Deciduous Brushwood	本 介 Coniferous	Sand Sand Sand Pit
	ሩ ሩ Orchard በስ_ Scrub \\አለ Coppice	Slopes Controlling Top of cliff
	ריין, Rough	General detail Underground detail Overhead detail Narrow gauge
Fir Furze Rough Pasture	ି ମ Grassland	— — — — Overhead detail nailway
Arrow denotes <u>A</u> Trigonometrical flow of water Station	<u>→</u> Marsh ,\\`\'/,, Reeds <u>→-1-</u> - Saltings	Multi-track Single track railway railway
-∱- Site of Antiquities -	Direction of Flow of Water Building	Ci∨il, parish or Ci∨il, parish or (England only) Ci∨il, parish or community boundary
Pump, Guide Post, Well, Spring, Signal Post Boundary Post • 285 Surface Level	Glasshouse Sand	District, Unitary, Metropolitan, Constituency London Borough boundary boundary
Sketched Instrumental Contour	Pylon ————————————————————————————————————	Area of wooded vegetation Area of wooded vegetation Area of wooded vegetation Area of wooded vegetation
Main Roads	— · ·	One-coniferous Coniferous trees (scattered) ★ ★ Coniferous trees tree trees trees trees trees
Un-Fenced Un-Fenced	Cutting Embankment Standard Gauge	
Sunken Road Raised Road	Road '''''' Road / Level Foot Single Track Under Over Crossing Bridge	ひっつ
Road over Railway River	Siding, Tramway or Mineral Line	متلك Rough منالك Heath منالك
Railway over Road	Geographioal Gounty	∩ Scrub <u> <u> </u> </u>
Road over Road over Road over	Administrative County, County Borough or County of City Municipal Borough, Urban or Rural District,	Water feature Flow arrows
Road over	Burgh or District Council Borougn, Burgh or County Constituency Shown only when not coincident with other boundaries	MHW(S) Mean high water (springs) MLW(S) Mean low water (springs)
————— County Boundary (Geographical)	Civil Parish Showh atternately when coincidence of boundaries occurs	
— · — · — · County & Civil Parish Boundary		(with poles) ← Bench mark . Triangulation
+ · + · + · + Administrative County & Civil Parish Boundary	BP, BS Boundary Post or Stone Pol Sta Police Station Ch Church PO Fost Office CH Club House PC Public Convenience	BM 123.45 m (where shown) Delist feature
—————— County Borough Boundary (England) Co. Boro. Bdy.	FE Sta Fire Engine Station PH Fublic House	
Co. Burgh Bdy.	FB Foot Bridge SB Signal Box Fn Fountain Spr Spring GP Guide Post TCB Telephone Call Box	•‡• Site of (antiquity) Glasshouse
Ro. Bdy. Ro. Civil Parish Boundary	MP Mile Post TCP Telephone Call Post MS Mile Stone W Well	General Building Important Building
Sivil Falish Doundary	I	



BRD

Mapping Type	Scale	Date	Pg
Surrey	1:10,560	1874	2
Sussex	1:10,560	1879	3
Surrey	1:10,560	1898	4
Sussex	1:10,560	1899	5
Sussex	1:10,560	1913	6
Sussex	1:10,560	1913	7
Surrey	1:10,560	1920	8
Surrey	1:10,560	1920	9
Historical Aerial Photography	1:10,560	1948	10
Ordnance Survey Plan	1:10,000	1961 - 1962	11
Ordnance Survey Plan	1:10,000	1973 - 1977	12
10K Raster Mapping	1:10,000	1999	13
10K Raster Mapping	1:10,000	2006	14
VectorMap Local	1:10,000	2021	15

Historical Map - Slice A



Order Details

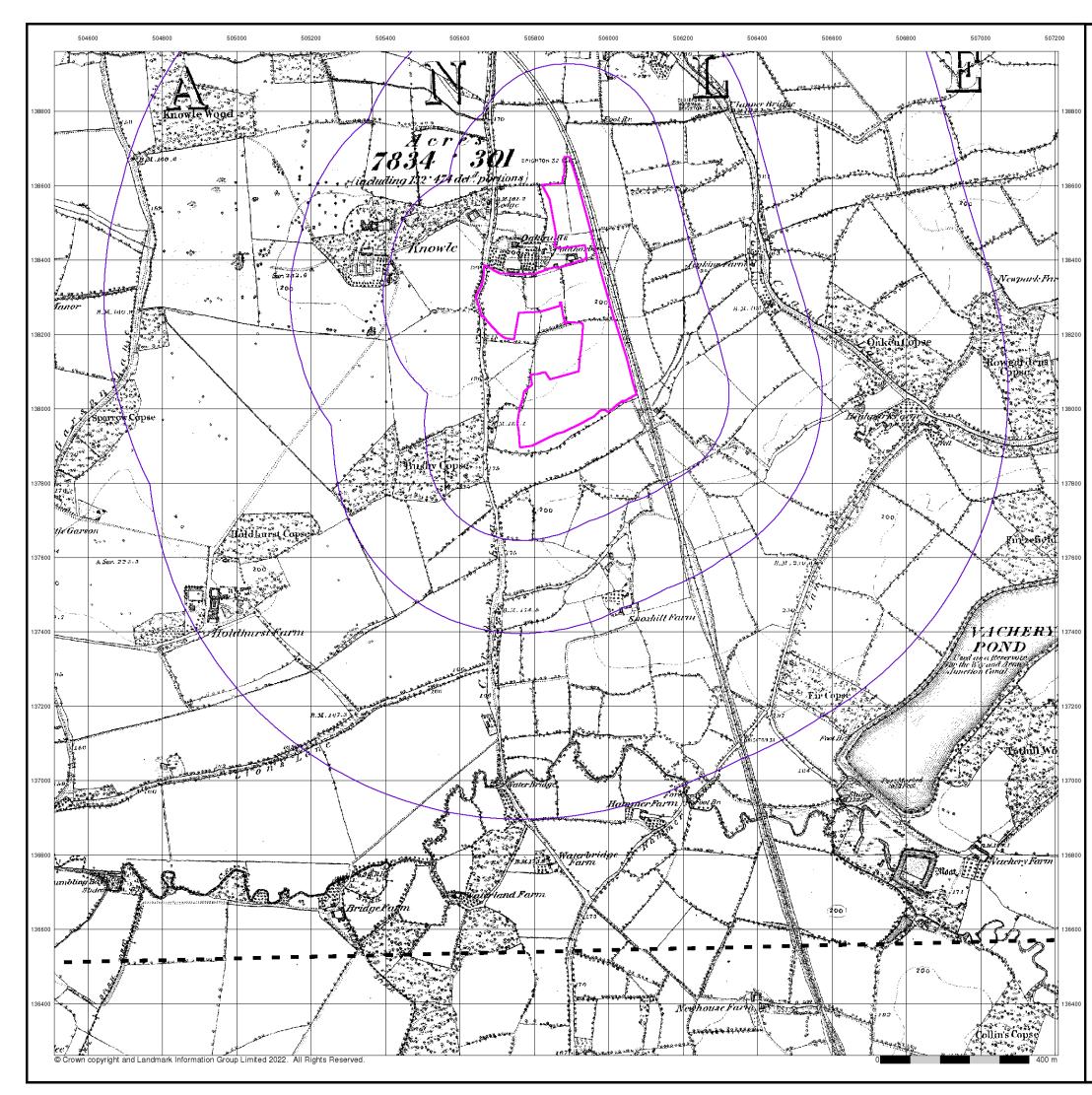
Order Number: Customer Ref: BRD3528 National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

301569175_1_1 А 12.23 1000

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN







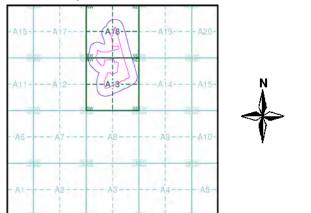
Surrey **Published 1874** Source map scale - 1:10,560

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 based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.



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Historical Map - Slice A



Order Details

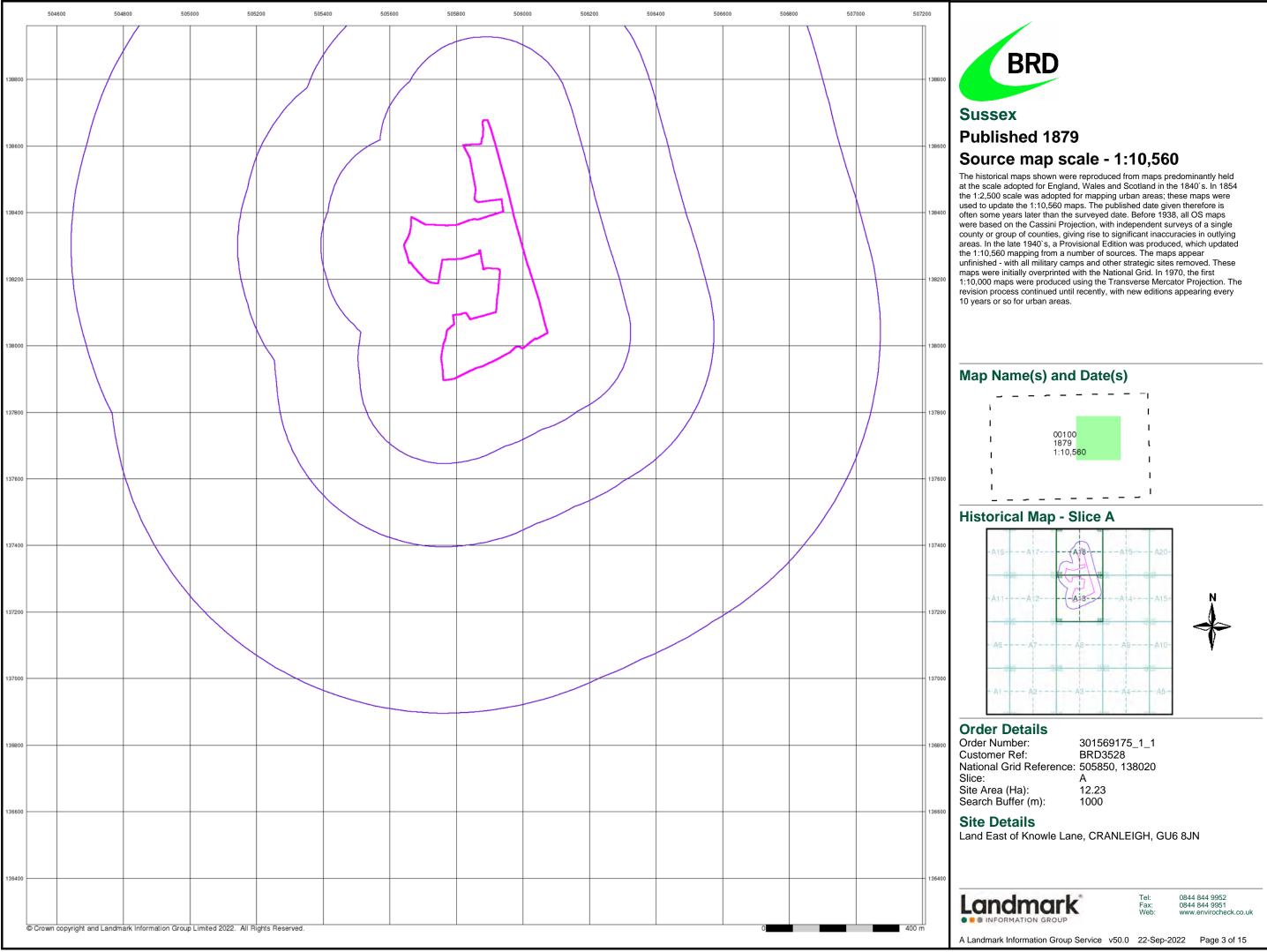
Order Number: Customer Ref: National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

301569175_1_1 BRD3528 Α 12.23 1000

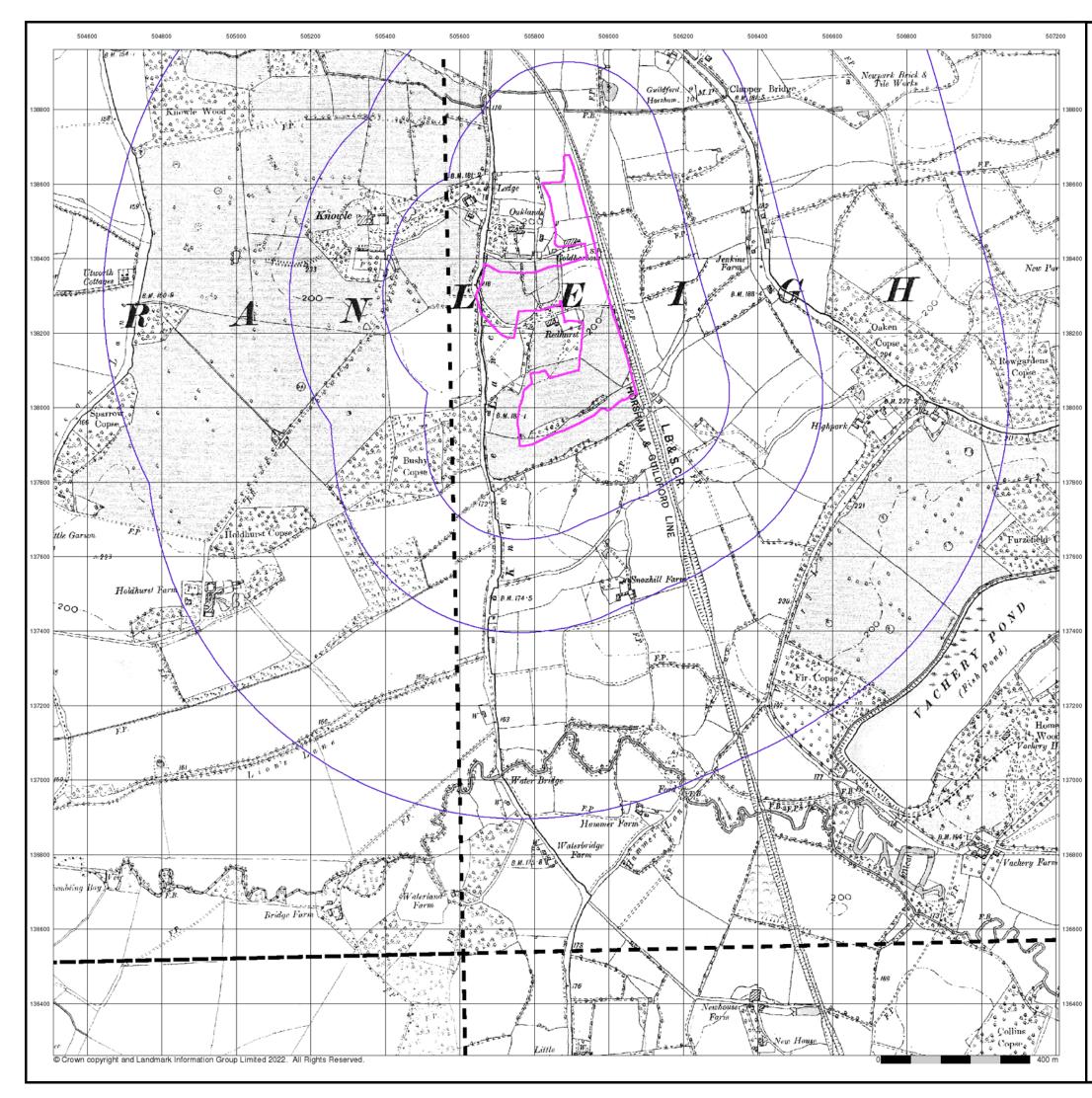
Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN





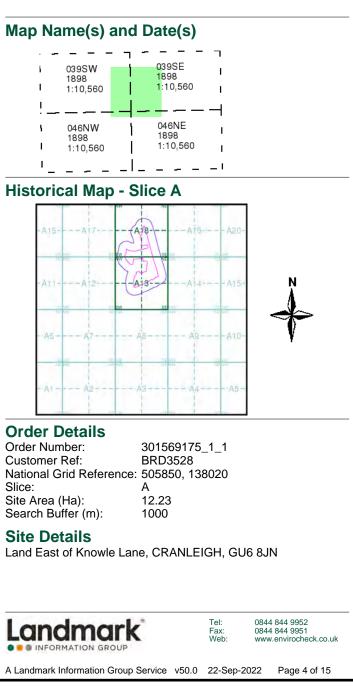


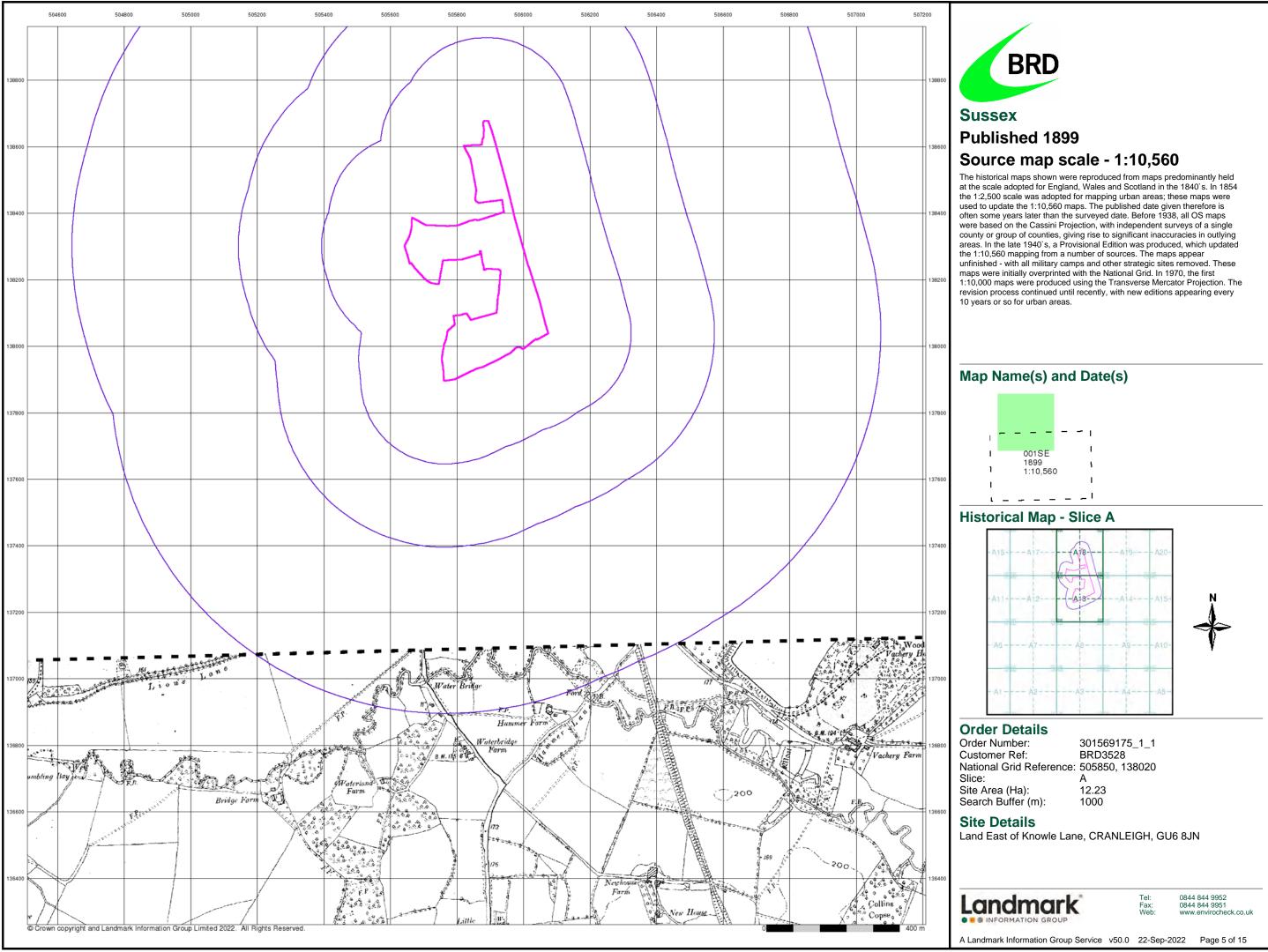




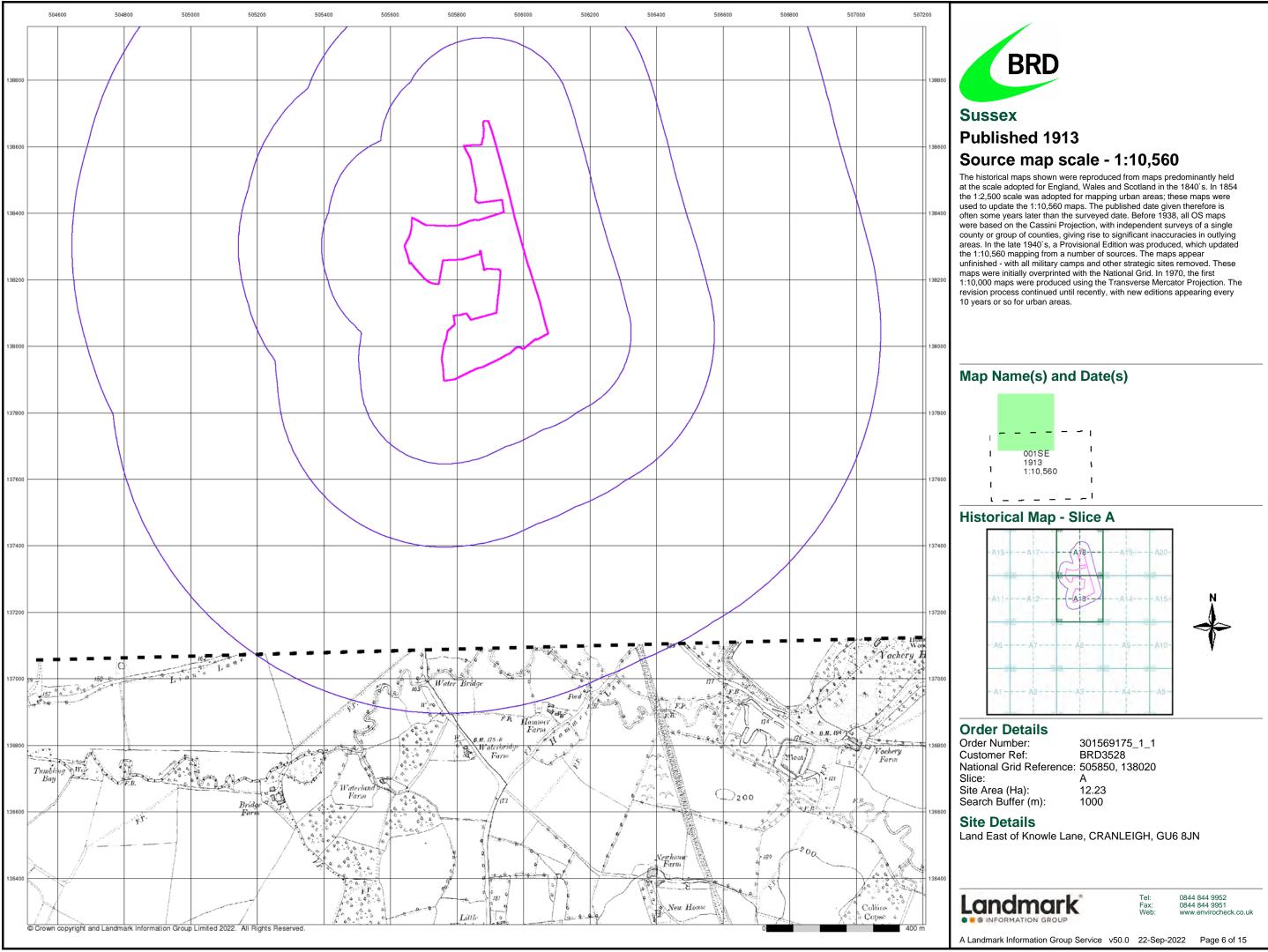
Surrey Published 1898 Source map scale - 1:10,560

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 based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

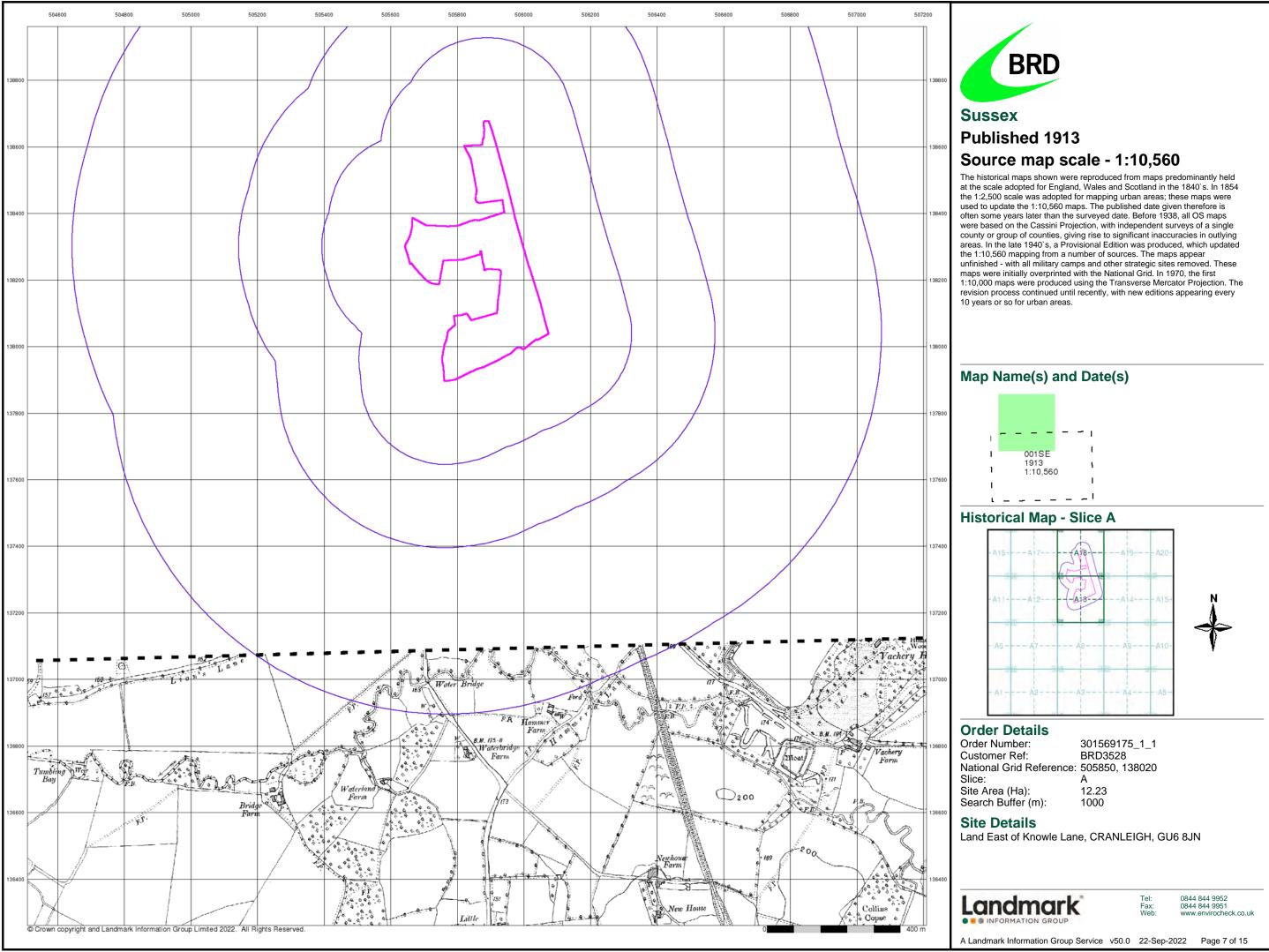




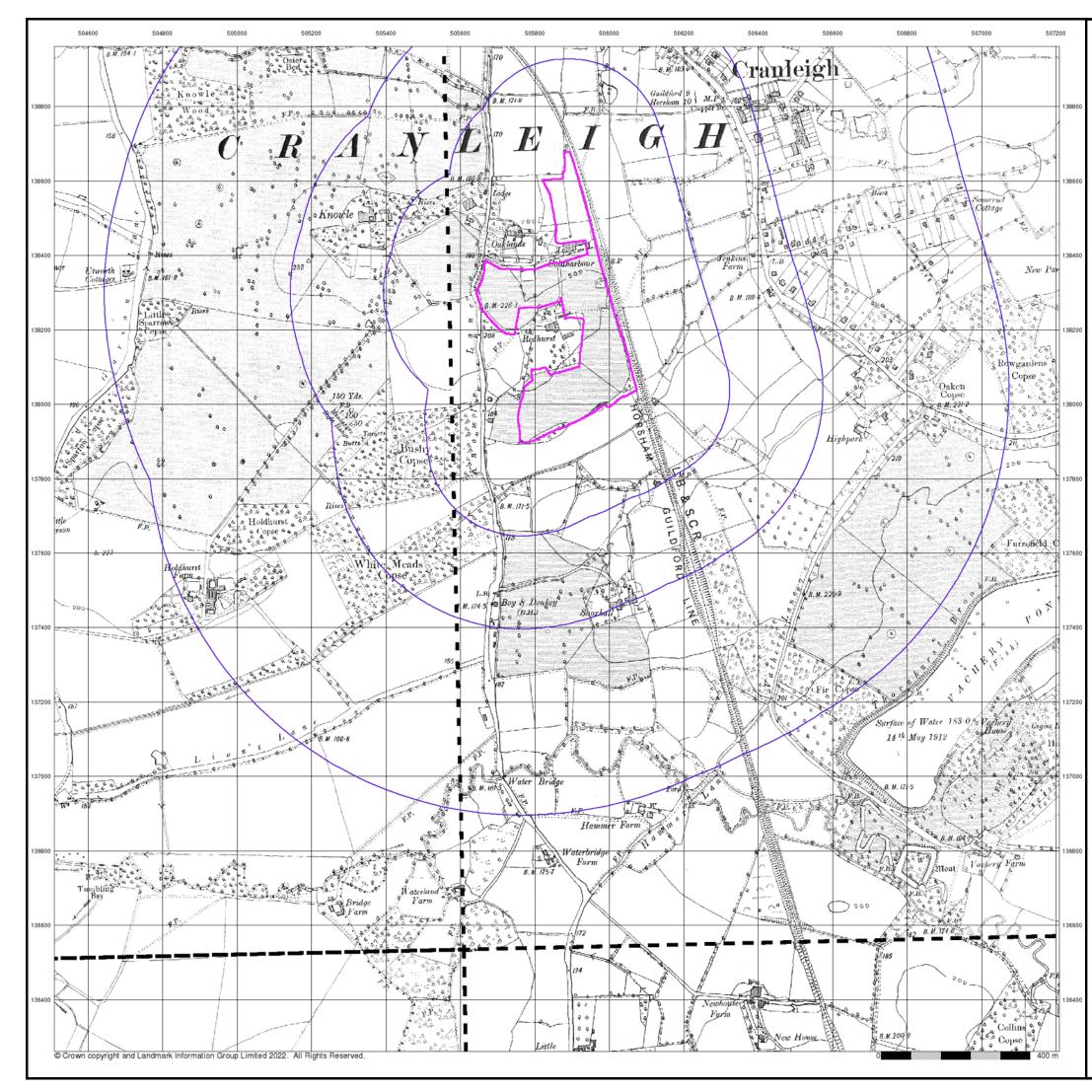








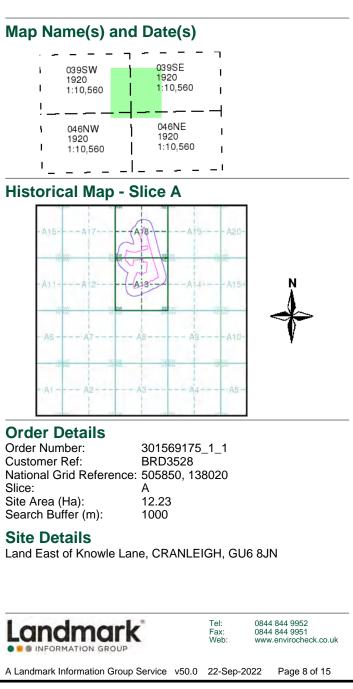


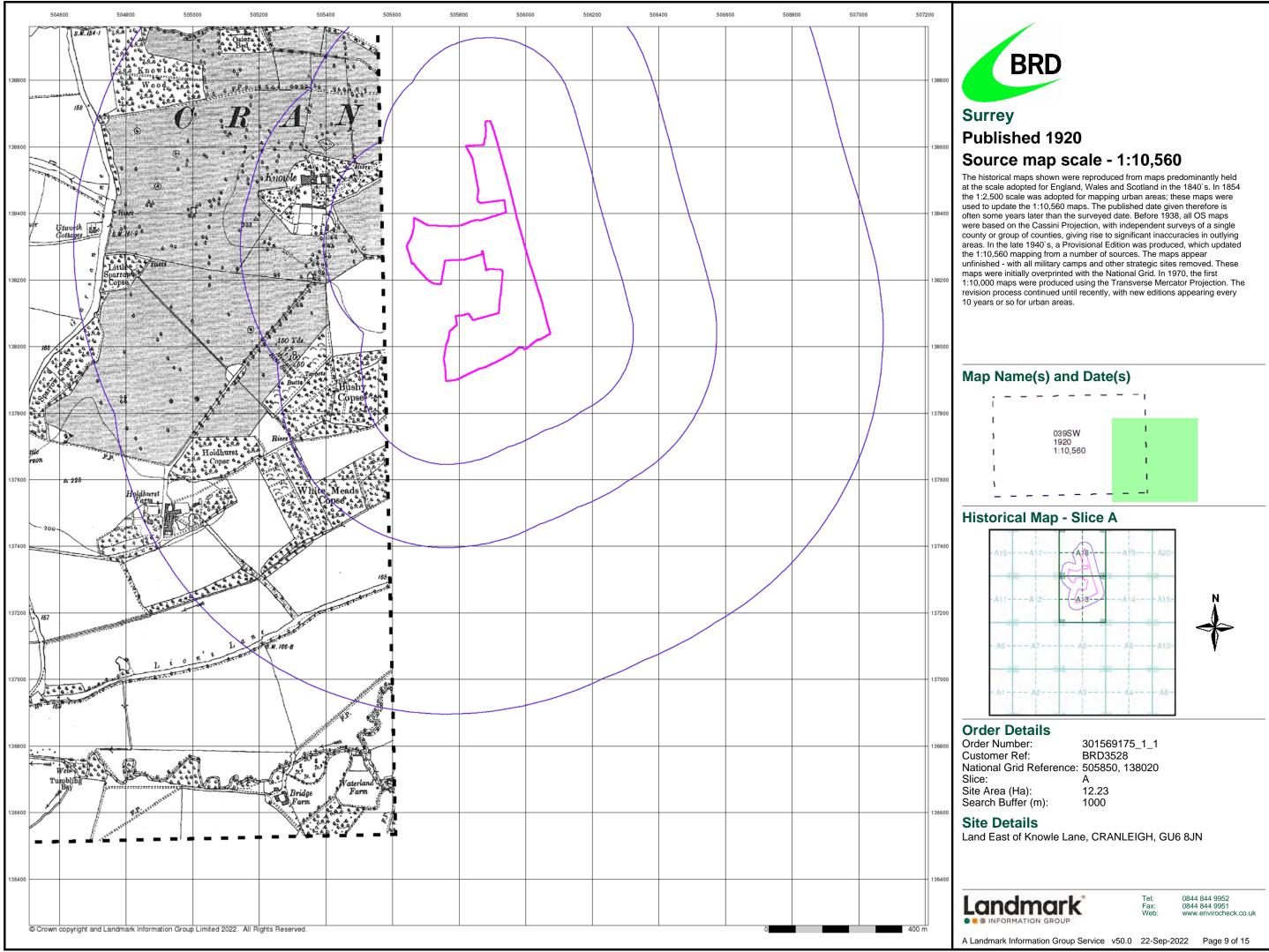




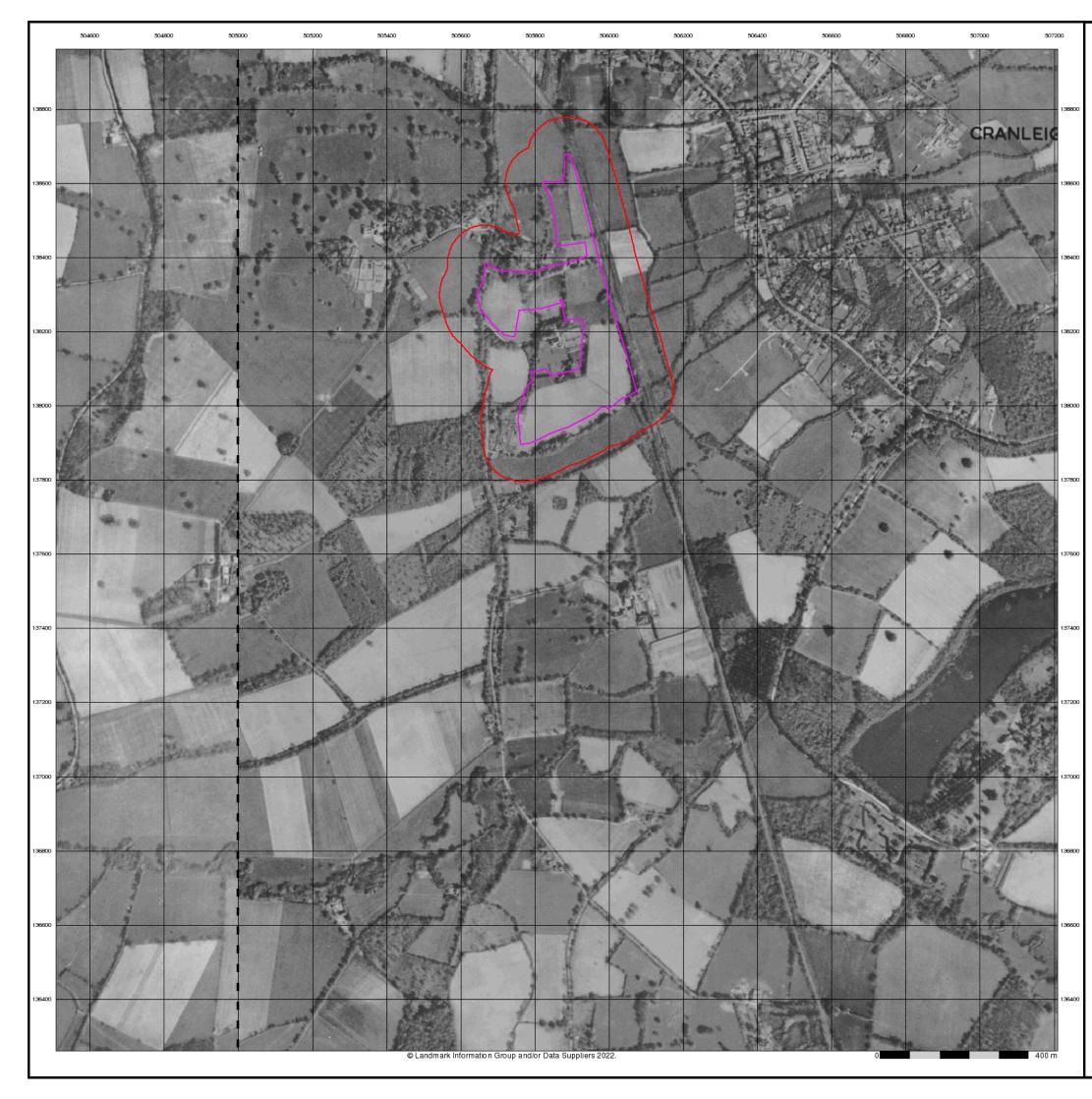
Surrey Published 1920 Source map scale - 1:10,560

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 based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.









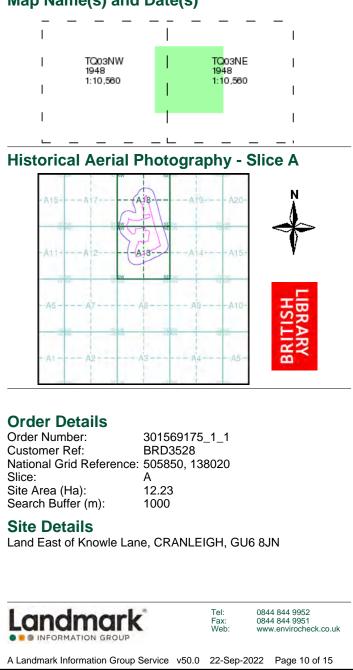


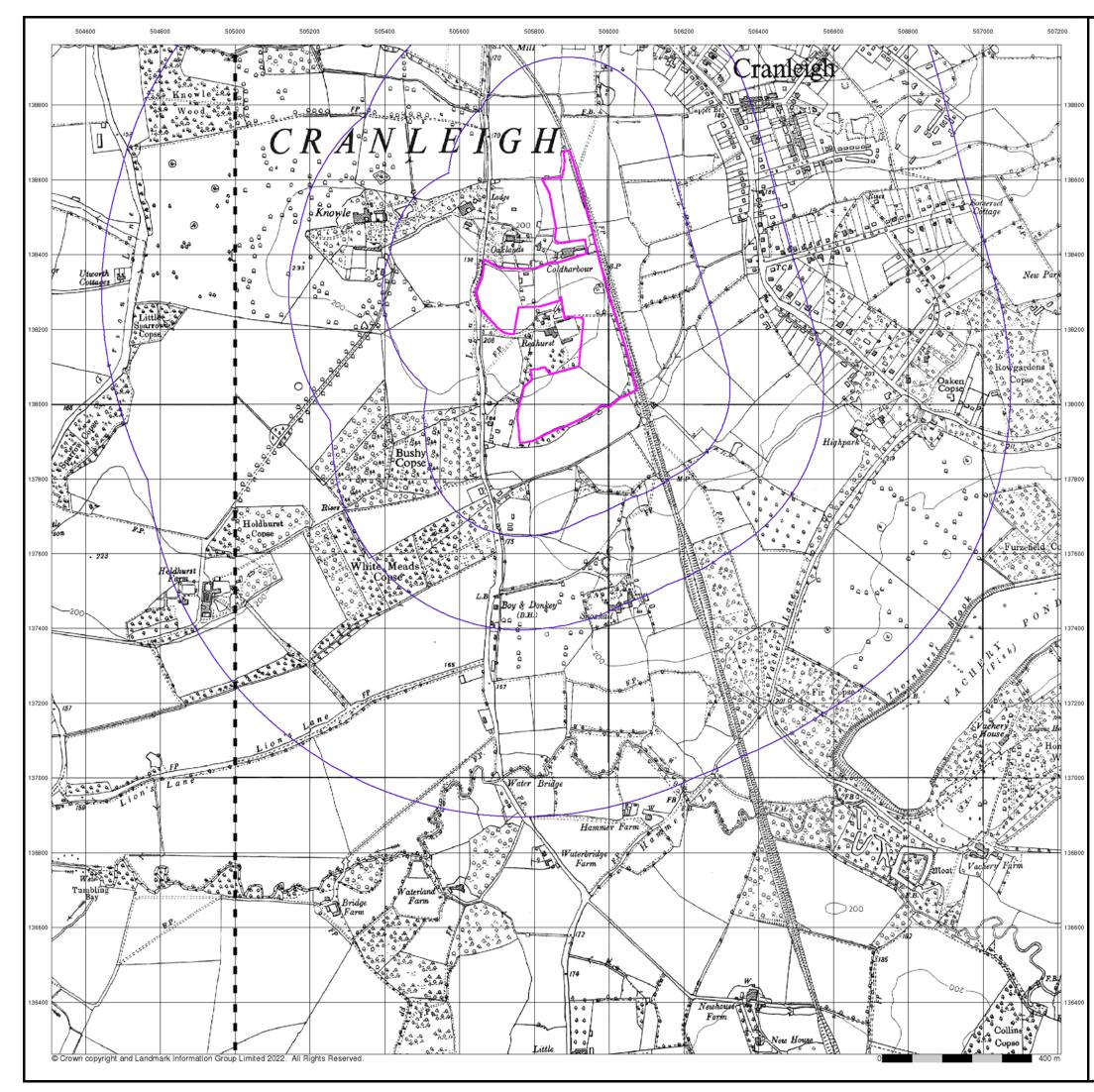
Historical Aerial Photography Published 1948 Source map scale - 1:10,560

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 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 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

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Map Name(s) and Date(s)

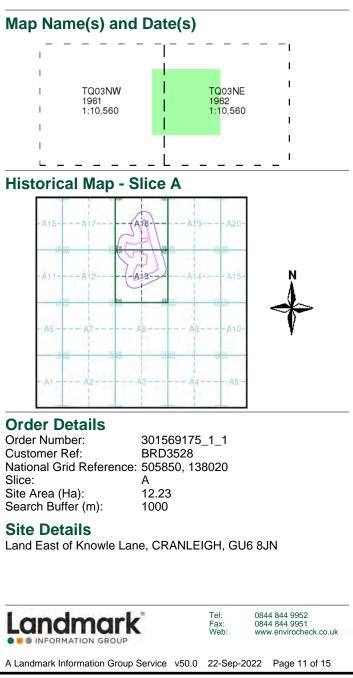


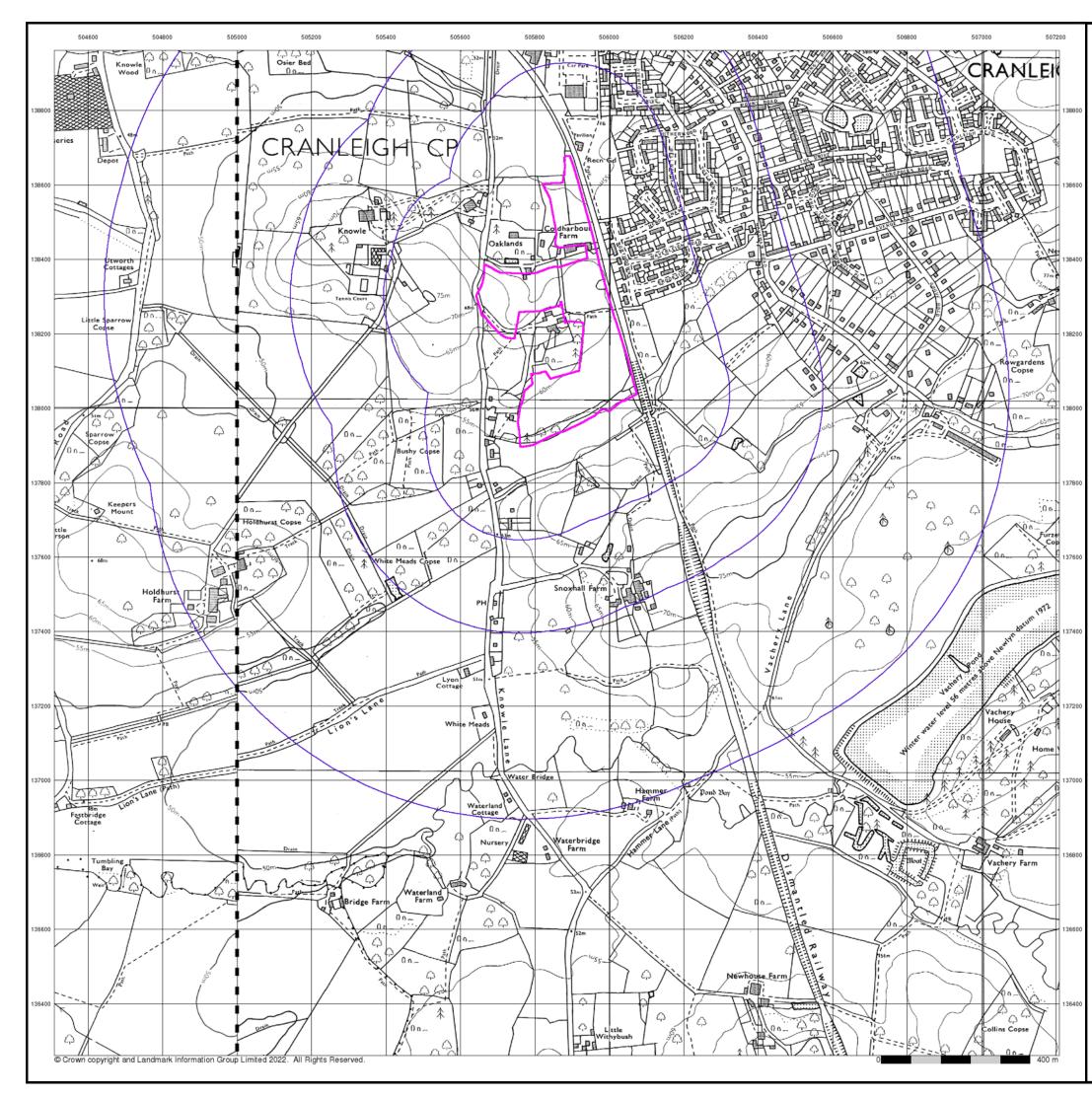




Ordnance Survey Plan Published 1961 - 1962 Source map scale - 1:10,000

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 surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

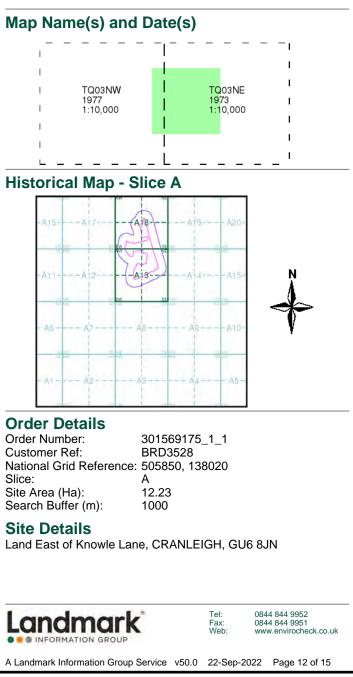


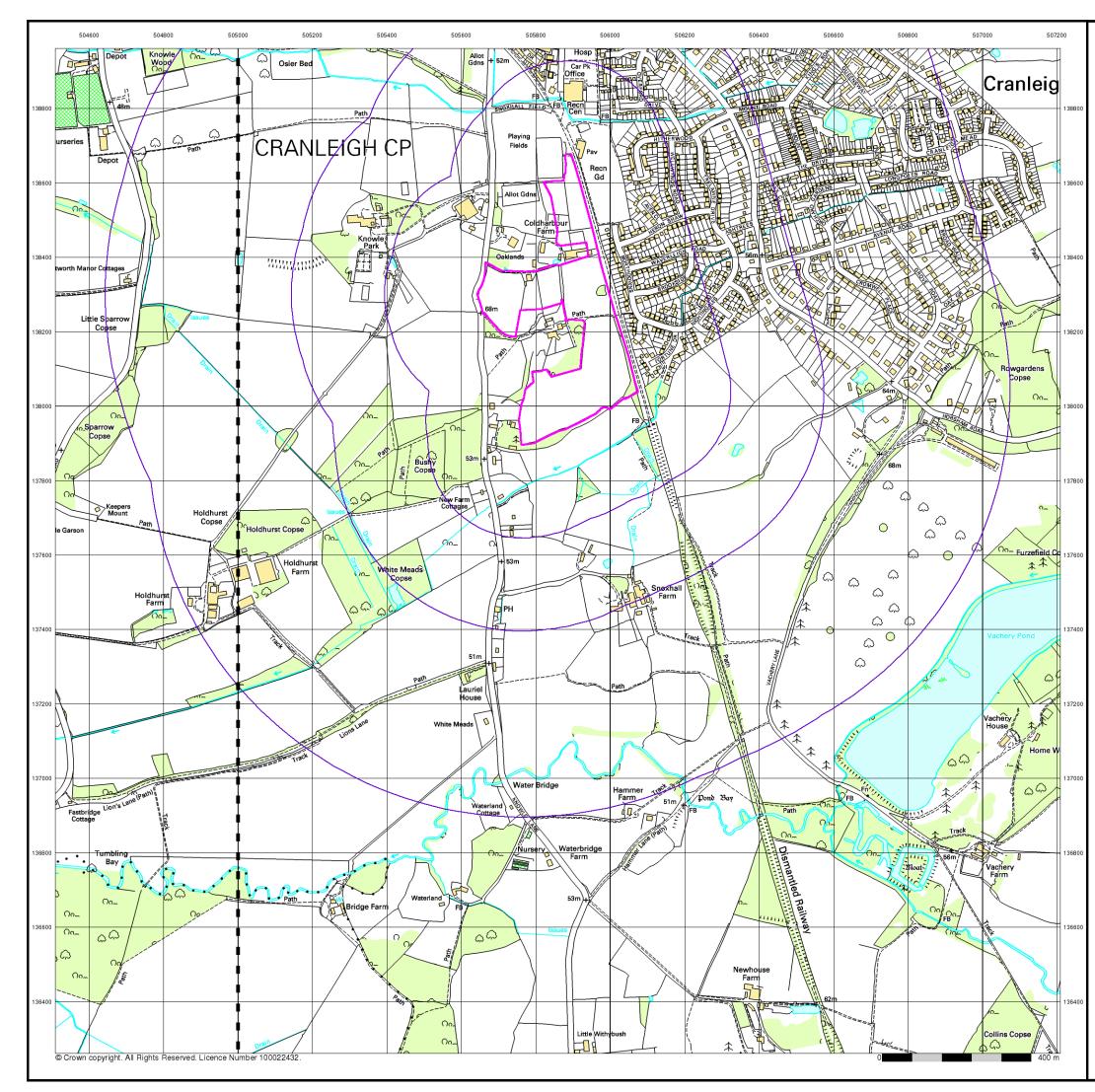




Ordnance Survey Plan Published 1973 - 1977 Source map scale - 1:10,000

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 surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.







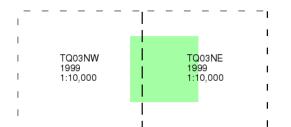
10k Raster Mapping

Published 1999

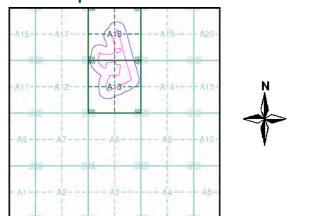
Source map scale - 1:10,000

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 relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number:	3
Customer Ref:	В
National Grid Reference:	5
Slice:	Α
Site Area (Ha):	1
Search Buffer (m):	1

301569175_1_1 BRD3528 505850, 138020 12.23 1000

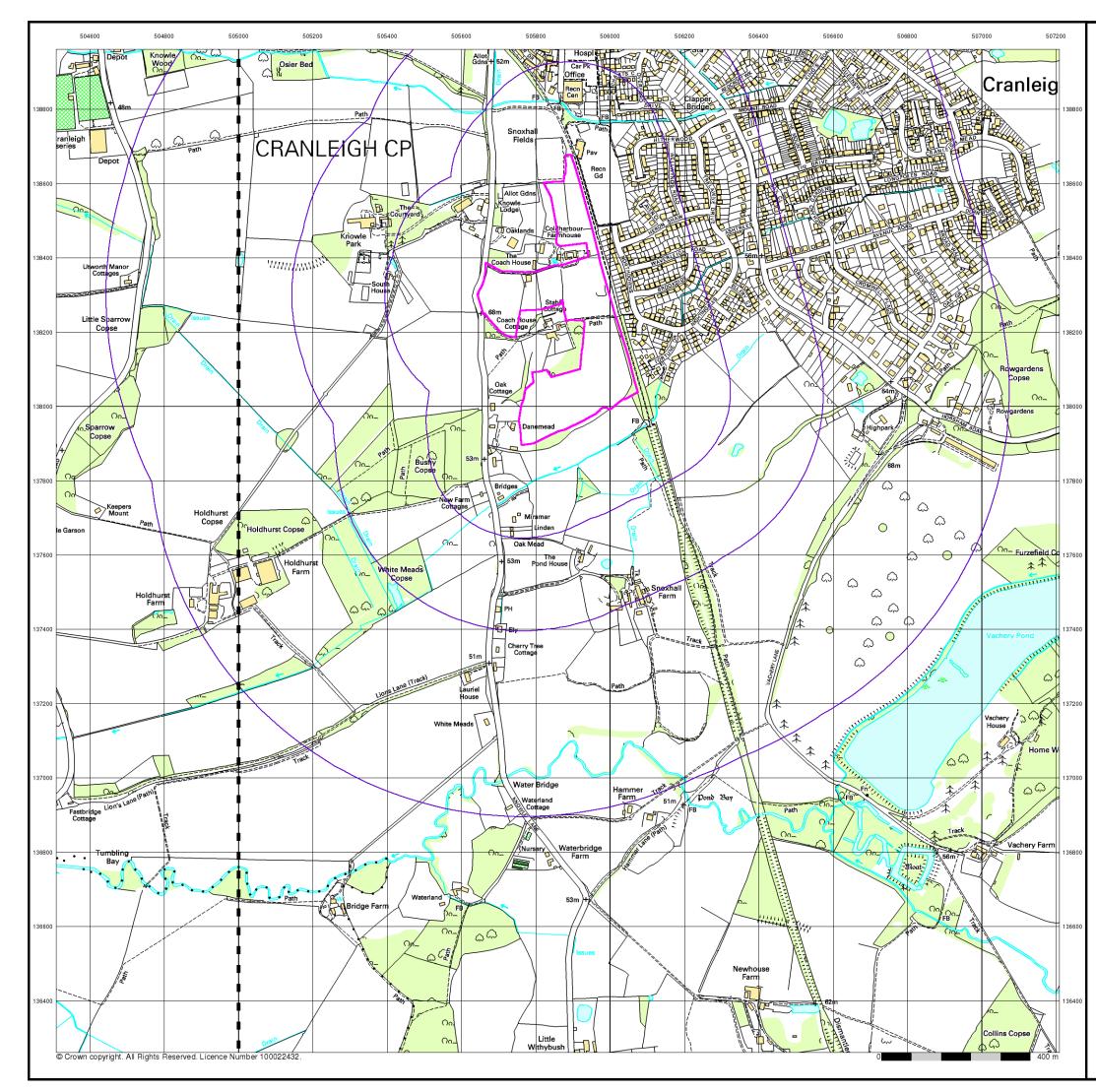
Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN





Tel: Fax: Web:





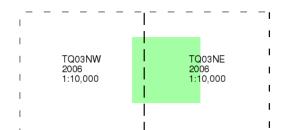
10k Raster Mapping

Published 2006

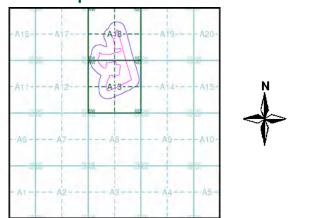
Source map scale - 1:10,000

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 relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: Customer Ref: National Grid Reference: 505850, 138020 Slice: Site Area (Ha): Search Buffer (m):

301569175_1_1 BRD3528 Α 12.23 1000

Site Details

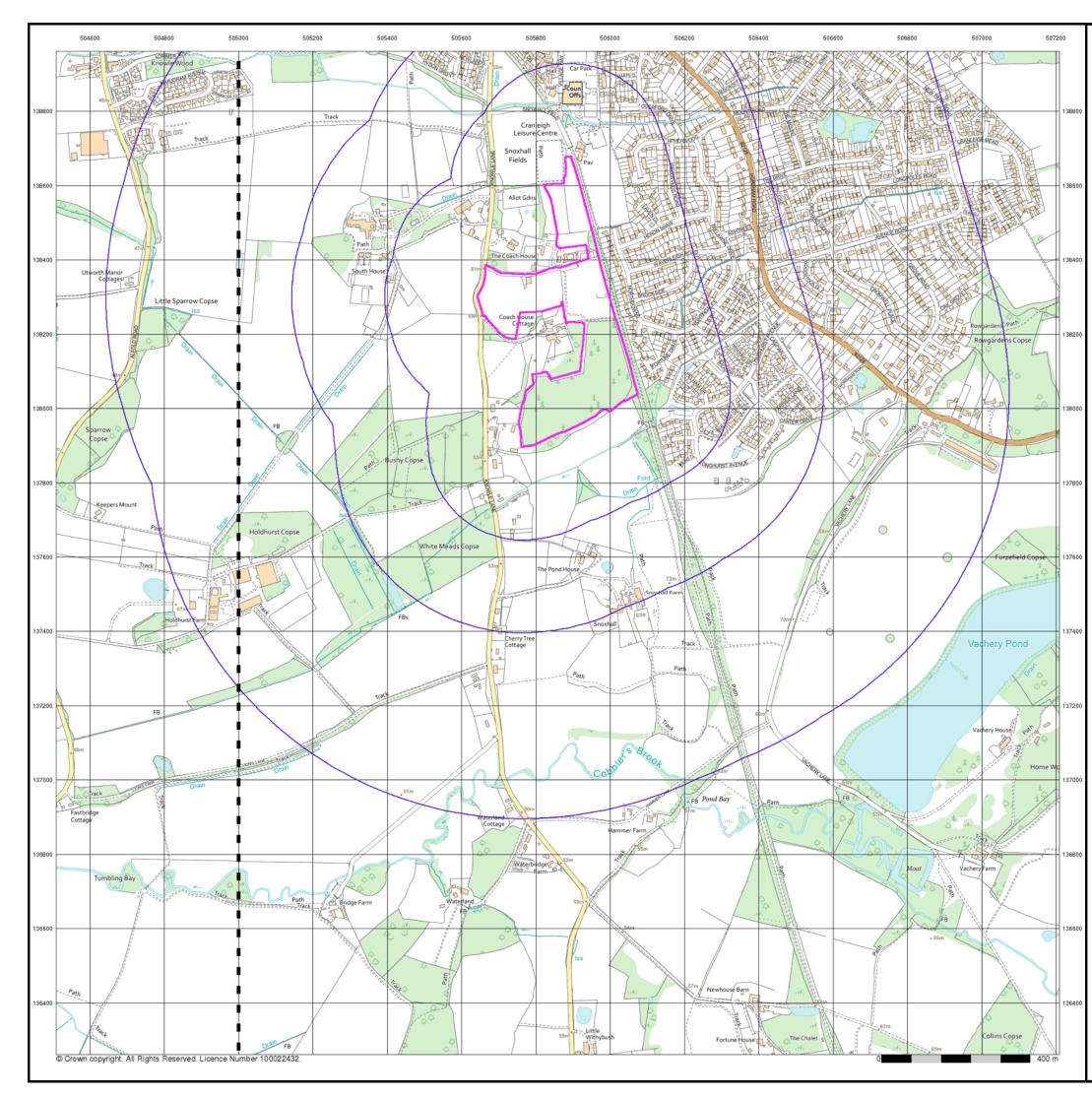
Land East of Knowle Lane, CRANLEIGH, GU6 8JN





Tel: Fax: Web:

0844 844 9951 www.envirocheck.co.uk



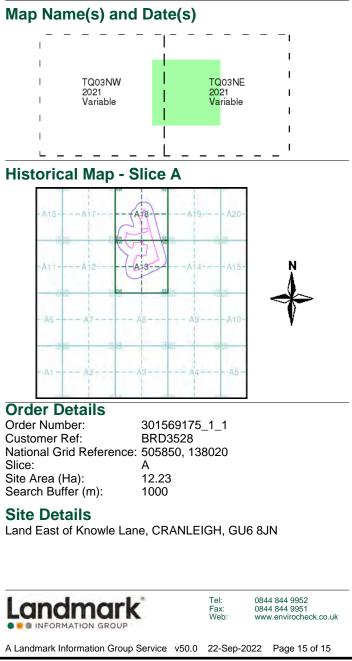


VectorMap Local

Published 2021

Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).



Historical Mapping Legends

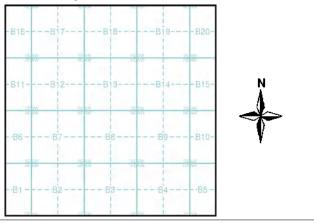
-		
Ordnance Survey County Series 1:10,560	Ordnance Survey Plan 1:10,000	1:10,000 Raster Mapping
Gravel Sand Other Pit Pit Pit Pits	رون کې د Chalk Pit, Clay Pit د Chavel Pit د رون کې د Chalk Pit, Clay Pit د د د د د د Chalk Pit, Clay Pit د د د د د د د د د د د د د د د د د د د	Gravel Pit
Quarry Shingle Orchard	Sand Pit	Rock (scattered)
And	Refuse or Lake, Loch	ົູ້້ຈີ Boulders Scattered)
	Dunes o Boulders	Shingle Mud Mud
Mixed Wood Deciduous Brushwood	未未れ Coniferous ♀⇔⇔⇔ Non-Coniferous Trees	Sand Sand Sand Pit
	ሩ	Top of cliff نيدنيديند Slopes
	ff ff Bracken sylling Heath (1177, Rough	General detail Underground detail Overbead detail
Fir Furze Rough Pasture	frassland	— — — — Overhead detail ———— Narrow gauge railway
Arrow denotes Arrigonometrical	<u>→</u> Marsh 、៶៶∀៸៷ Reeds <u>→-1</u> Saltings	Multi-track Single track railway railway
-∱≁ Site of Antiquities III Bench Mark	Direction of Flow of Water Building	Ci∨il, parish or Ci∨il, parish or (England only) community boundary
Pump, Guide Post, Well, Spring, Signal Post Boundary Post • 285 Surface Level	Glasshouse	District, Unitary, Metropolitan, Constituency London Borough boundary boundary
Sketched Instrumental Contour	Pylon — — — — — Electricity Transmission Pole Line	Area of wooded vegetation Area of wooded
Main Roads		 Non-coniferous A trees (scattered) ★★ Coniferous ★★ trees
Un-Fenced Un-Fenced	Cutting Embankment Standard Gauge	
Road over	Road ''∏''' Road / Level Foot Single Track Under Over Crossing Bridge	수 수 Orchard K Coppice 수 수 Orchard or Osiers
Road over Railway River Railway River	Siding, Tramway or Mineral Line	atter Rough Grassland
Railway over Level Crossing	Geographical Gounty	∩Scrub → ✓ Marsh, Salt √/∠ Marsh or Reeds
Road over River or Canal Stream	Administrative County, County Borough or County of City Municipal Borough, Urban or Rural District,	Water feature Flow arrows
Road over Stream	Burgh or District Council Borougn, Burgh or County Constituency Shown only when not coincident with other boundaries	MHW(S) Mean high Mean low water (springs) water (springs)
————— County Boundary (Geographical)	Civil Parish Showh alternately wheh coincidence of bouhdaries occurs	
— · — · — · County & Civil Parish Boundary	BP, BS Boundary Post or Stone PoiSta Police Station	(with poles) ← Bench mark , Triangulation
+ · + · + · + Administrative County & Civil Parish Boundary	Ch Church PO Fost Office	BM 123.45 m (where shown)
County Borough Boundary (England)	CH Club House PC Public Convenience F E Sta Fire Engine Station PH Fublic House FB Foot Bridge SB Signal Box	Point feature Pylon, flare stack • (e.g. Guide Post 🛛 or lighting tower or Mile Stone)
Co. Burgh Bdy. County Burgh Boundary (Scotland)	Fn Fountain Spr Spring GP Guide Post TCB Telephone Call Box	•‡• Site of (antiquity) Glasshouse
Ro. Bay. Civil Parish Boundary	MP Mile Post TCP Telephone Call Post MS Mile Stone W Well	General Building
and anot poundary	I	

Historical Mapping & Photography included:

BRD

Mapping Type	Scale	Date	Pg
Surrey	1:10,560	1874	2
Sussex	1:10,560	1879	3
Surrey	1:10,560	1897 - 1898	4
Surrey	1:10,560	1920	5
Surrey	1:10,560	1920	6
Historical Aerial Photography	1:10,560	1948	7
Ordnance Survey Plan	1:10,000	1961 - 1962	8
Ordnance Survey Plan	1:10,000	1973 - 1978	9
10K Raster Mapping	1:10,000	1999	10
10K Raster Mapping	1:10,000	2006	11
VectorMap Local	1:10,000	2021	12

Historical Map - Slice B



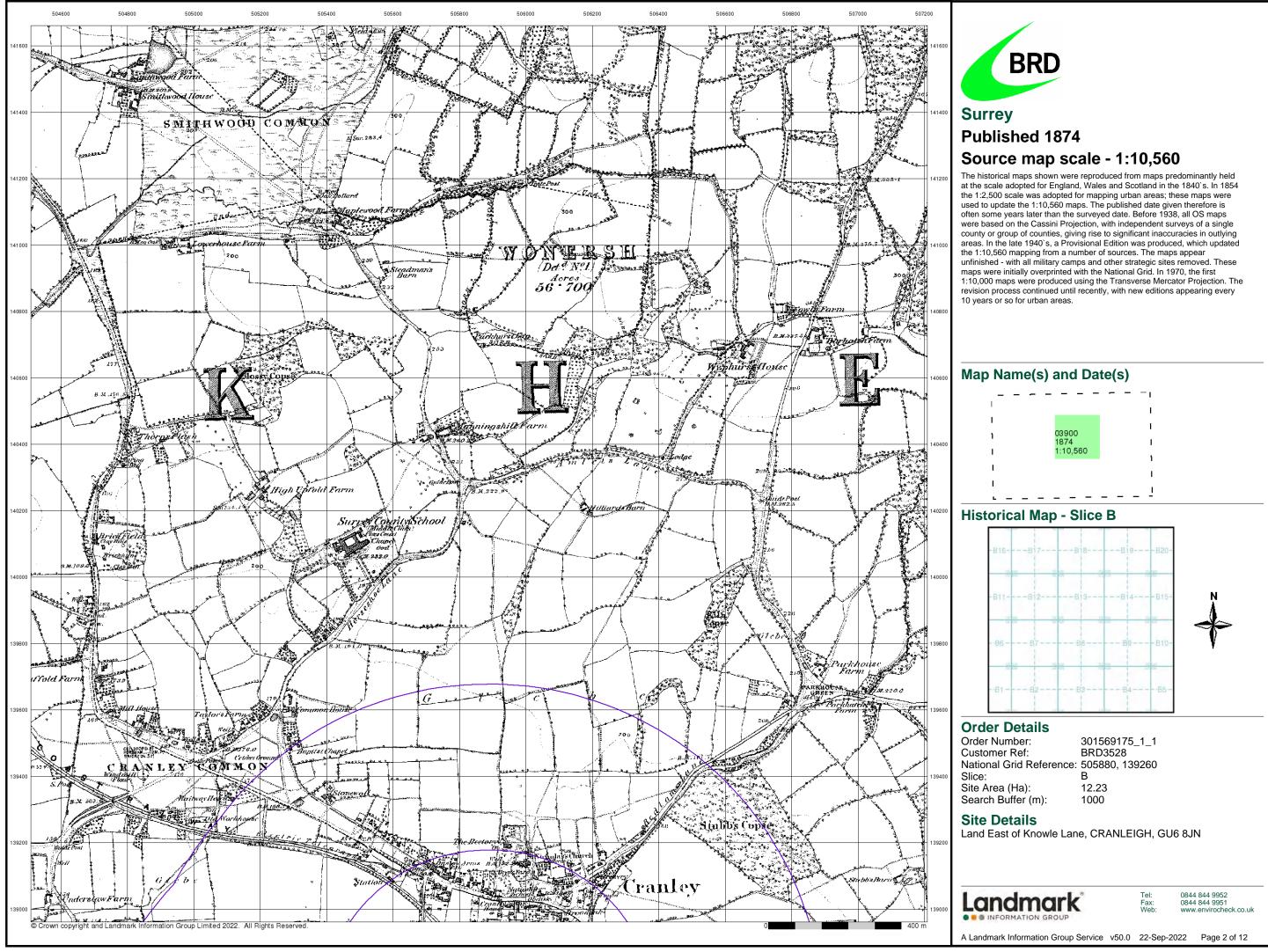
Order Details

Order Number:301569175_1_1Customer Ref:BRD3528National Grid Reference:505880, 139260Slice:BSite Area (Ha):12.23Search Buffer (m):1000

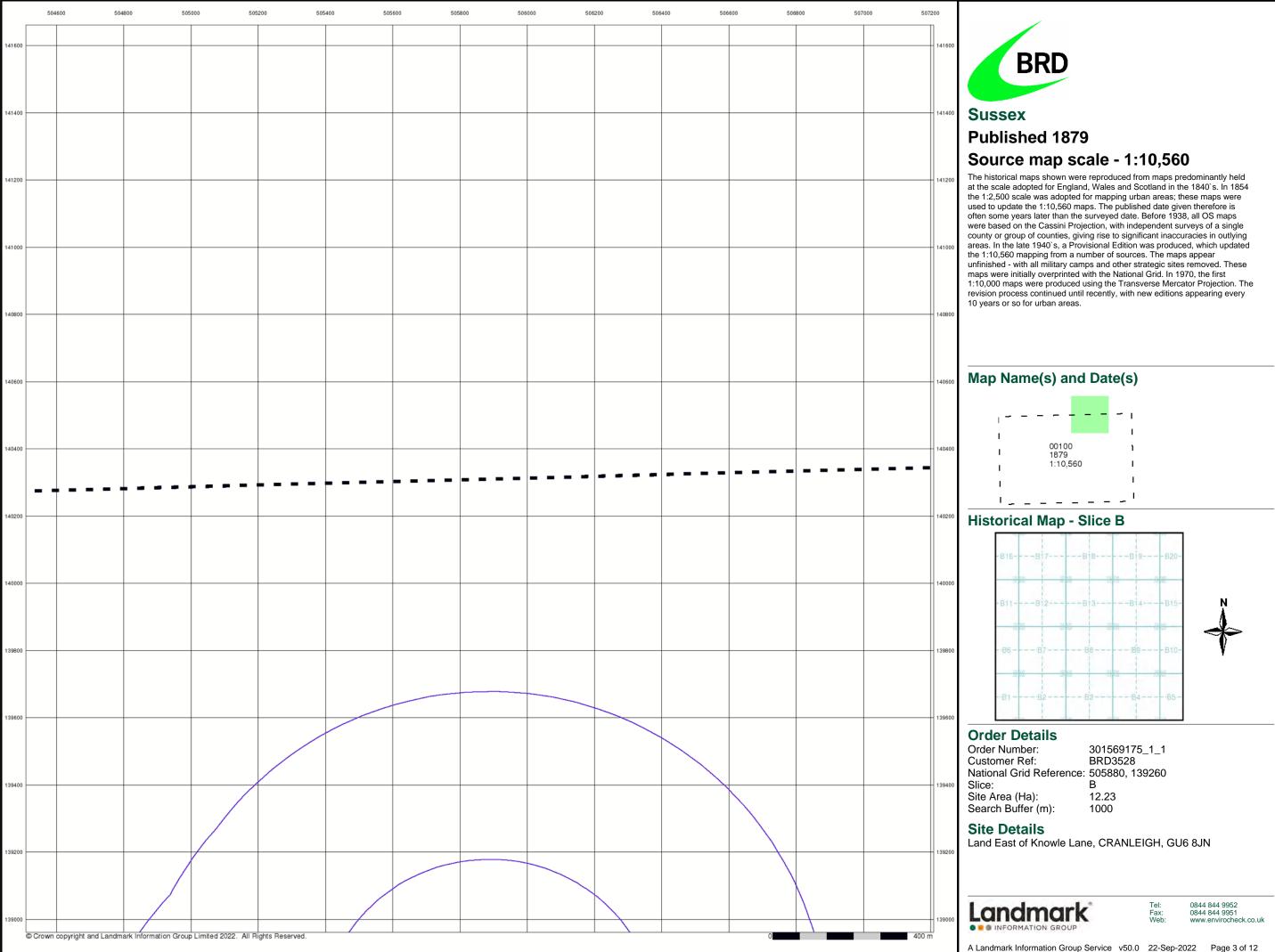
Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN

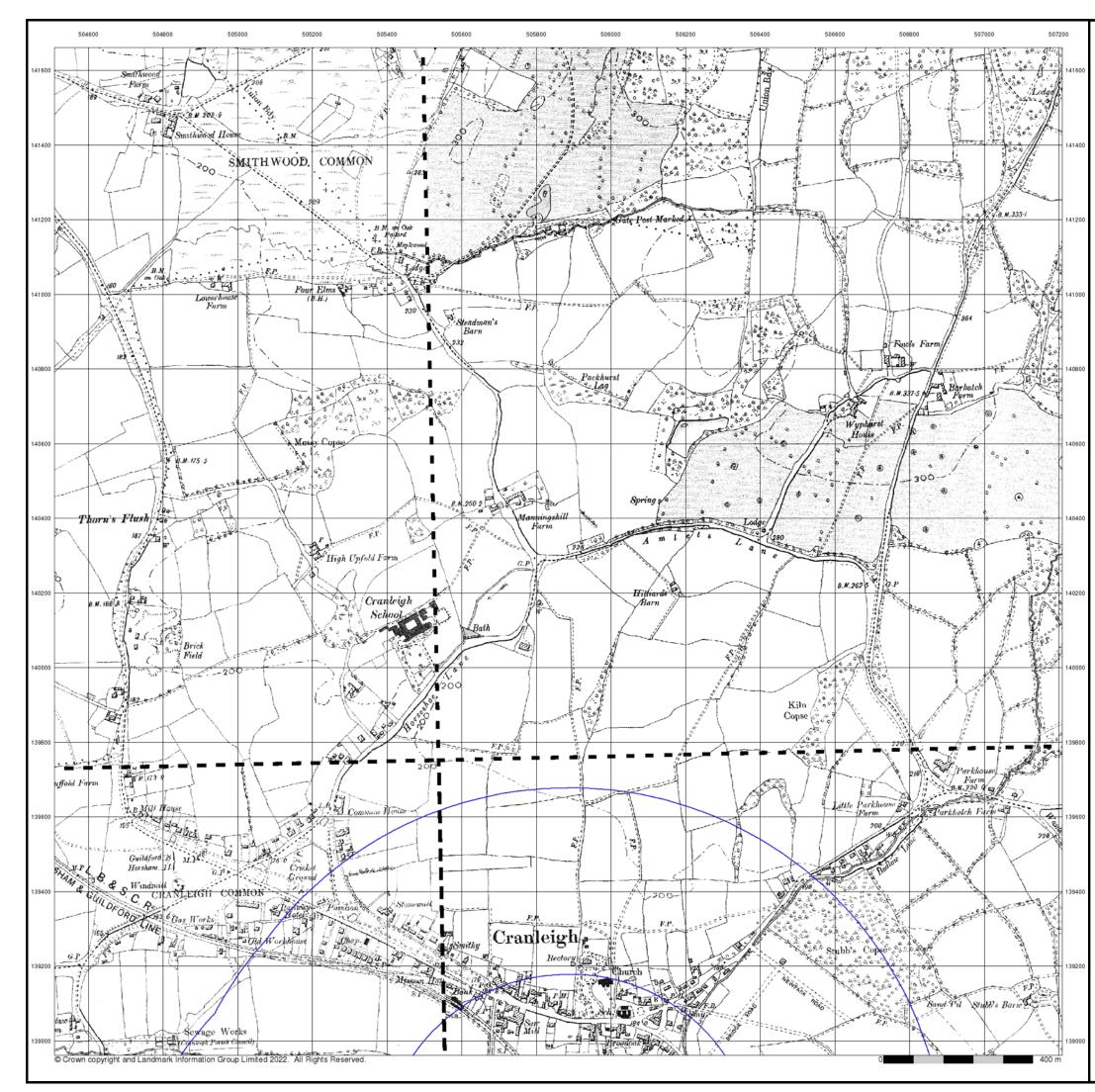








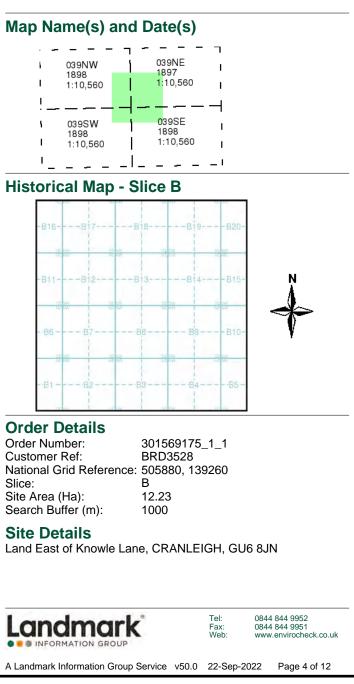


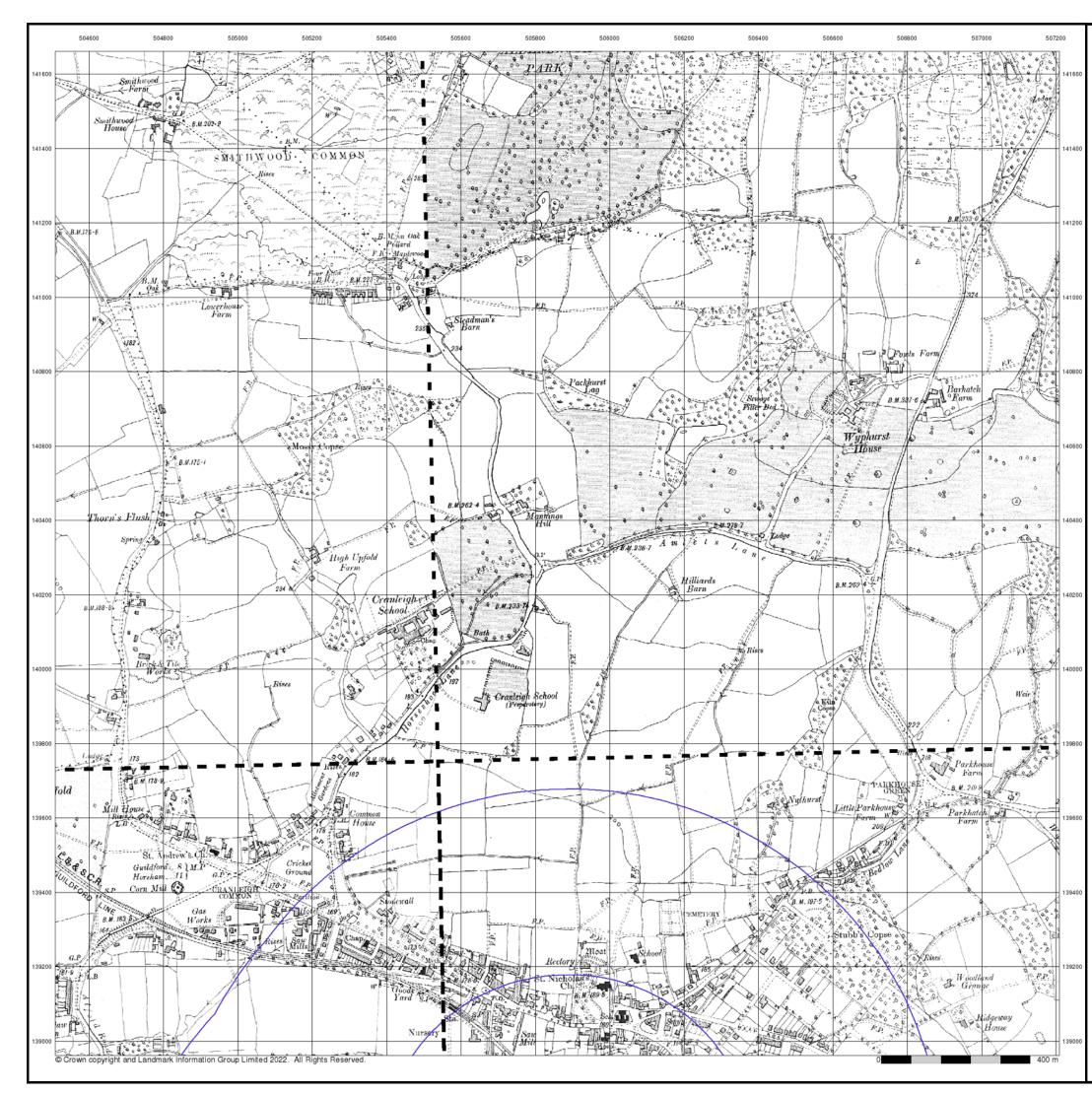




Surrey Published 1897 - 1898 Source map scale - 1:10,560

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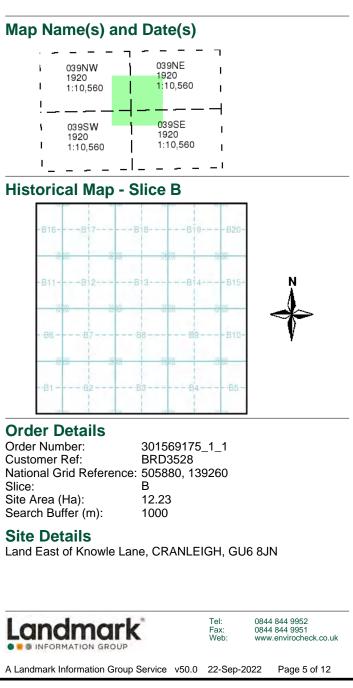


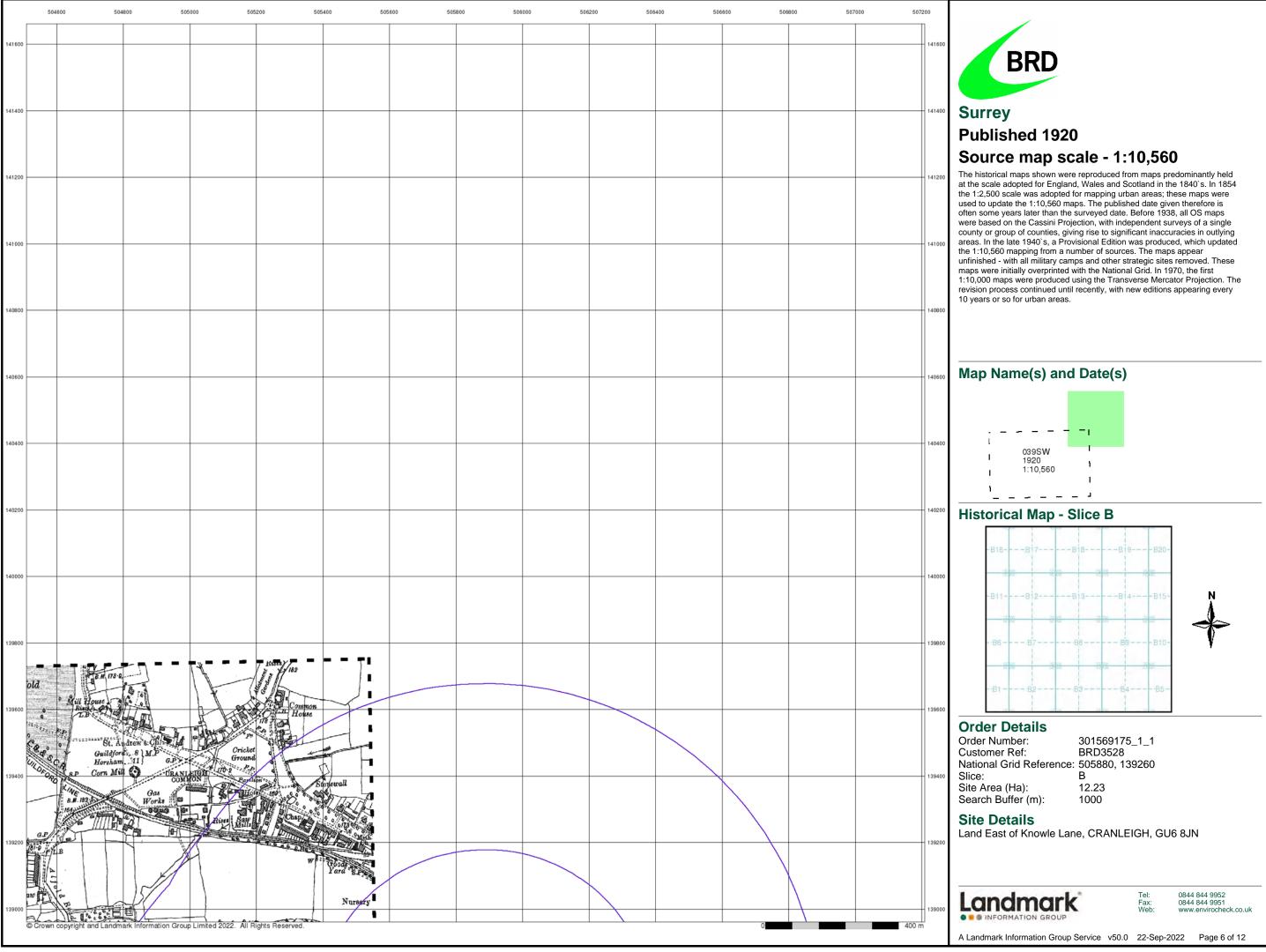




Surrey Published 1920 Source map scale - 1:10,560

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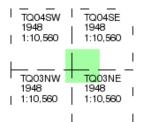


Historical Aerial Photography Published 1948 Source map scale - 1:10,560

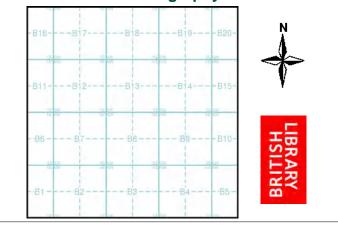
The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

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Map Name(s) and Date(s)



Historical Aerial Photography - Slice B



Order Details

Order Number:	301569175_1_1
Customer Ref:	BRD3528
National Grid Reference:	505880, 139260
Slice:	В
Site Area (Ha):	12.23
Search Buffer (m):	1000

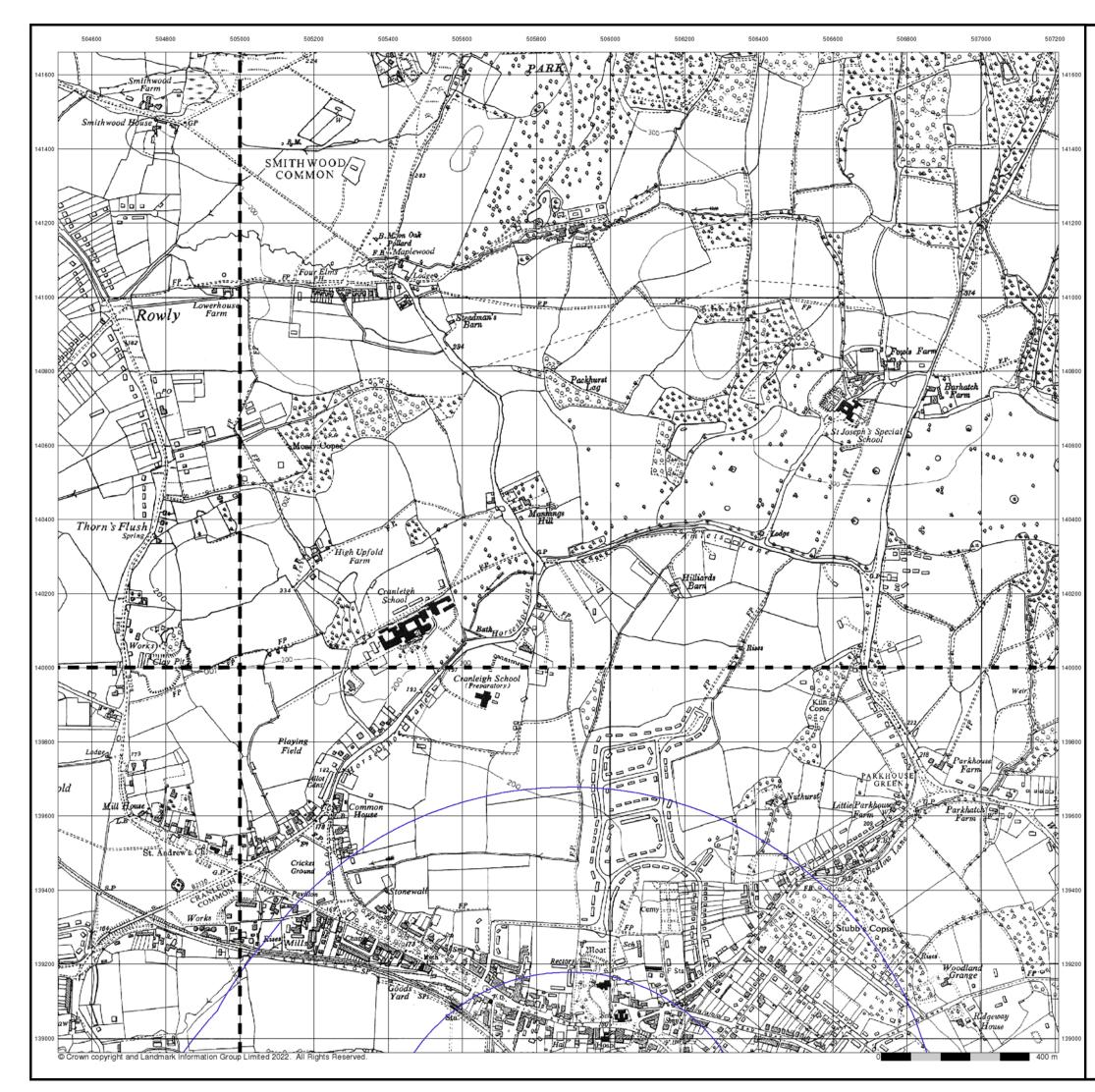
Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN





Tel: Fax: Web:





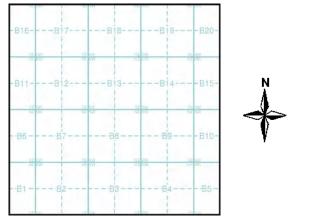
Ordnance Survey Plan Published 1961 - 1962 Source map scale - 1:10,000

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 surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

TQ04SW | TQ04SE | 1961 | 1961 | 1:10,560 | 1:10,560 | TQ03NW | TQ03NE | 1961 | 1962 | 1:10,560 | 1:10,560 | 1:10,560 | 1:10,560 |

Historical Map - Slice B



Order Details

Order Number:	3
Customer Ref:	В
National Grid Reference:	5
Slice:	E
Site Area (Ha):	1
Search Buffer (m):	1

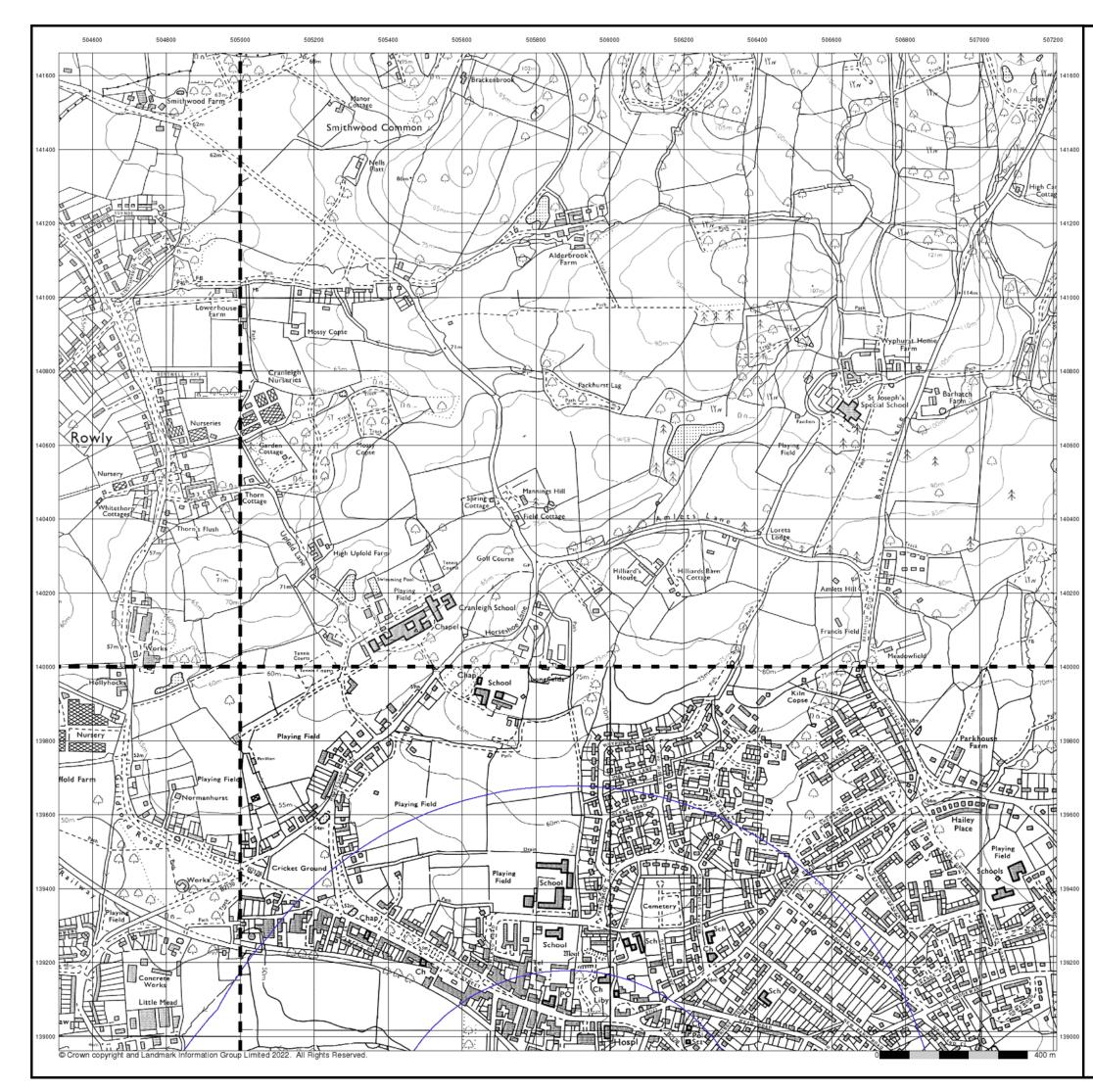
301569175_1_1 BRD3528 505880, 139260 B 12.23 1000

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN









Ordnance Survey Plan Published 1973 - 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 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

 TQ04SW
 TQ04SE

 1978
 1977

 1:10,000
 1:10,000

 I
 I

 TQ03NW
 TQ03NE

 1977
 1973

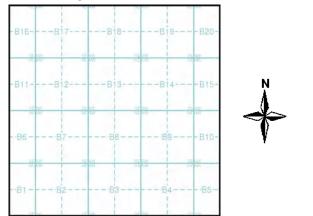
 1977
 1973

 1977
 1973

 1977
 1973

 110,000
 1:10,000

Historical Map - Slice B



Order Details

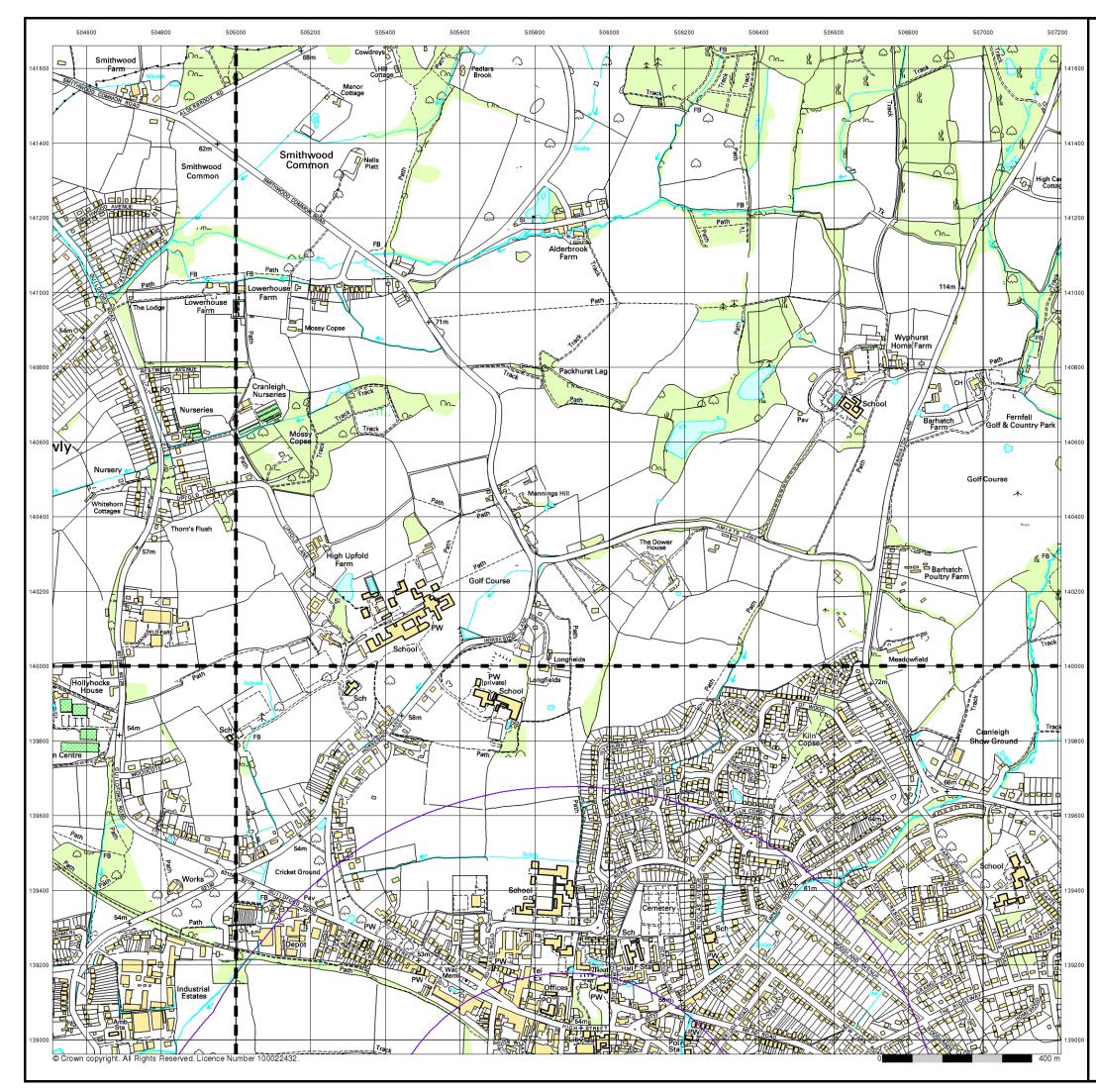
Order Number:	3
Customer Ref:	В
National Grid Reference:	5
Slice:	В
Site Area (Ha):	1
Search Buffer (m):	1

301569175_1_1 BRD3528 505880, 139260 B 12.23 1000

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN







10k Raster Mapping

Published 1999

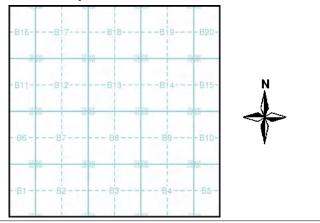
Source map scale - 1:10,000

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Map Name(s) and Date(s)

I TQ04SE
1999 1:10.000
TQ03NE
1999 1:10,000

Historical Map - Slice B



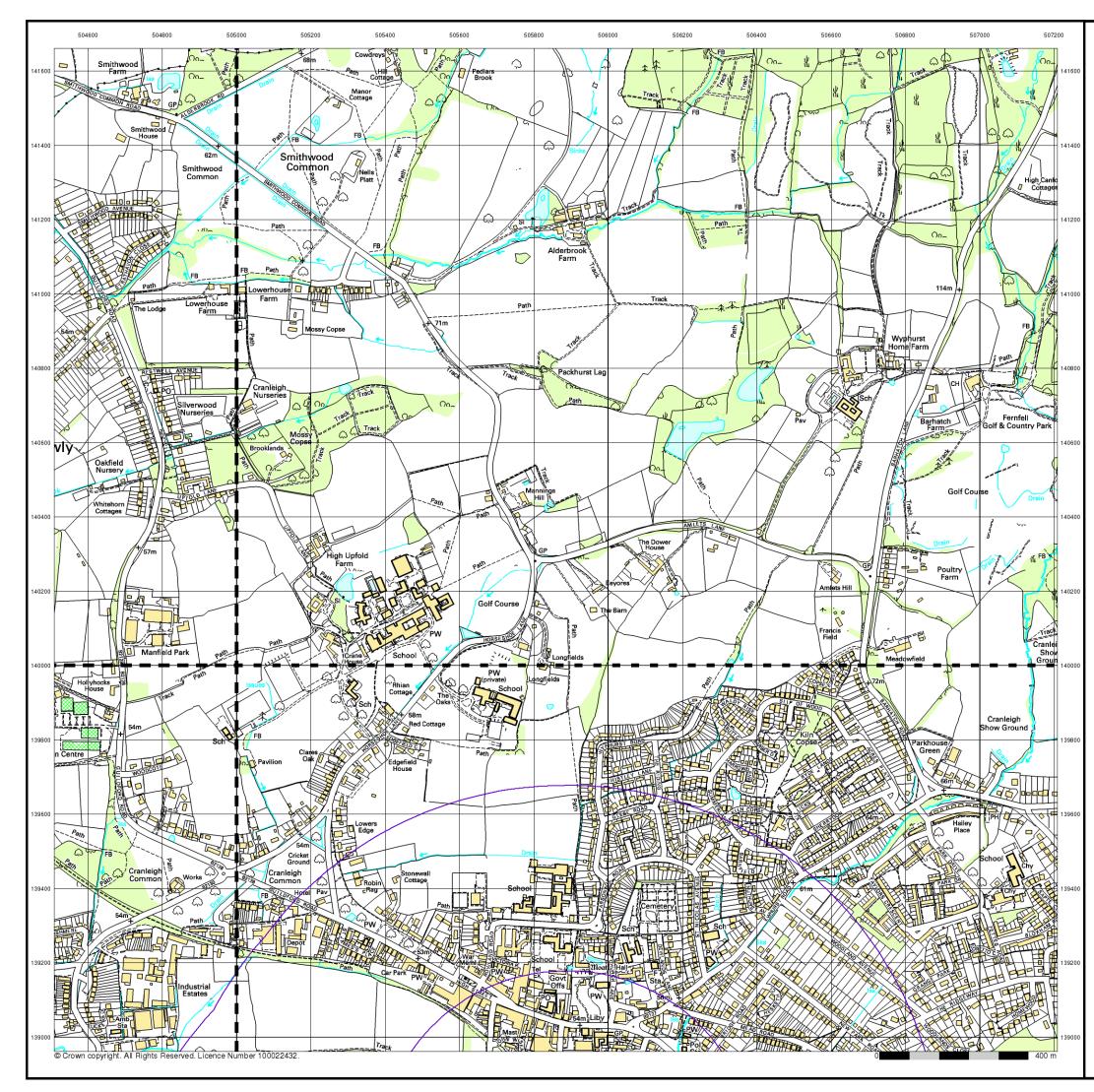
Order Details

Order Number:	301569175_1_1
Customer Ref:	BRD3528
National Grid Reference:	505880, 139260
Slice:	В
Site Area (Ha):	12.23
Search Buffer (m):	1000

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN







10k Raster Mapping

Published 2006

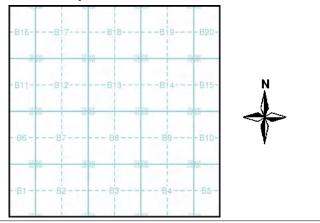
Source map scale - 1:10,000

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 relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

		_
TQ04SW	I TQ04SE	I
2006 1:10,000	2006 1:10.000	I
1	1	Т
		-
TQ03NW	TQ03NE	I
TQ03NW 2006 1:10,000	TQ03NE 2006 1:10,000	I I

Historical Map - Slice B



Order Details

Order Number:	301569175_1_1
Customer Ref:	BRD3528
National Grid Reference:	505880, 139260
Slice:	В
Site Area (Ha):	12.23
Search Buffer (m):	1000

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN





Tel: Fax: Web:

0844 844 9951 www.envirocheck.co.uk





VectorMap Local

Published 2021

Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

_			_	_	_
T	TQ04SW	T	TQ	04SE	Т
I	2021 Variable	I	202 Vari	1 iable	I
T	Variabio	Т	v car	abro	Т
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1	TQ03NW		_ та	<u>—</u> ЭЗNЕ	-
 	TQ03NW 2021 Variable	 	202		- 1 1

Historical Map - Slice B

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811B	2B	ізв	14B15-
ar sw fa sw		11 PW 11 PW	in ov Tarvin
·B6B7		38B	9B10-
SEAW 1	al av	1 BETW	SE SN TRETWO
·B1·B2	·	3	4B5-
		1	

Order Details

Order Number:	301569175_1_1
Customer Ref:	BRD3528
National Grid Reference:	505880, 139260
Slice:	В
Site Area (Ha):	12.23
Search Buffer (m):	1000

Site Details

Land East of Knowle Lane, CRANLEIGH, GU6 8JN





APPENDIX 3



Envirocheck® Report:

Datasheet

Order Details:

Order Number: 301569175_1_1

Customer Reference: BRD3528

National Grid Reference: 505850, 138020

Slice:

A

Site Area (Ha): 12.23

Search Buffer (m): 1000

Site Details:

Land East of Knowle Lane CRANLEIGH GU6 8JN

Client Details:

Ms A Stratford BRD Environmental Ltd Hawthorne Villa 1 Old Parr Road Banbury Oxfordshire OX16 5HT





Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	23
Hazardous Substances	-
Geological	24
Industrial Land Use	29
Sensitive Land Use	32
Data Currency	33
Data Suppliers	39
Useful Contacts	40

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.

Tor this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client. In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Report Version v53.0



Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1		Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1		12	4	4
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
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 6		Yes		
Pollution Incidents to Controlled Waters	pg 6		2		1
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 7				2
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points	pg 7				2
Substantiated Pollution Incident Register					
Water Abstractions	pg 8				(*13)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 12	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 13	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences	pg 13		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 13		Yes	n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 14		29	21	28



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 Landfill Coverage	pg 23	2	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 23				1
Potentially Infilled Land (Water)	pg 23		1	2	3
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					



Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 24	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 24	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 27				1
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 27	Yes		n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 27	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 27		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 27	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 27		Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 28	Yes	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
Industrial Land Use					
Contemporary Trade Directory Entries	pg 29		4	4	7
Fuel Station Entries					
Points of Interest - Commercial Services	pg 30		1	3	2
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 30			1	2
Points of Interest - Public Infrastructure	pg 31		1		3
Points of Interest - Recreational and Environmental	pg 31		3	2	2
Gas Pipelines					
Underground Electrical Cables					



Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland	pg 32			1	9
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 32	1			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	A13SW (S)	96	1	505800 137800
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	100	1	505950 137850
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Potential for Groundwater Flooding to Occur at Surface	A18NW (N)	110	1	505650 138700
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Potential for Groundwater Flooding to Occur at Surface	A13SW (SW)	159	1	505700 137750
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Potential for Groundwater Flooding of Property Situated Below Ground Level	A18NW (N)	251	1	505700 138850
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	A14SW (SE)	407	1	506250 137650
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Potential for Groundwater Flooding of Property Situated Below Ground Level	A7NE (SW)	431	1	505450 137600
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	A8NE (SE)	445	1	506100 137550
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (S)	446	1	505800 137450
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Potential for Groundwater Flooding of Property Situated Below Ground Level	A7NE (SW)	466	1	505450 137550
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (SW)	480	1	505350 137650
	Discharge Consent	s				
1	Operator: Property Type: Location: Authority: Catchment Area: Reference:	Mr Brunt DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Oak Cottage, Knowle Lane, Cranleigh, Surrey Environment Agency, Thames Region Not Given Cntm.0176	A18SW (NW)	44	2	505600 138300
	Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment:	1 26th March 1992 26th March 1992 1st October 1996 Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River				
	Receiving Water: Status:	Tributary Ofcranleigh Waters Lapsed (under Environment Act 1995, Schedule 23) Located by supplier to within 100m				
	Discharge Consent	S				
2	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date:	Mr Michael Ford And Mrs Lyeanda Joyce Ford DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Havendale And Fern House Knowle Lane Cranleigh Surrey Gu6 8jn Environment Agency, Thames Region Not Supplied Casm.0468 1 4th July 2001	A13SW (SW)	83	2	505730 137820
	Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water:	8th October 2001 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Trib Of The Holdhurst Brook				
	Status:	New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m				



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consents	S				
2	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Stuart Van Den Bergh DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Havendale And Fern House Knowle Lane Cranleigh Surrey Gu6 8jn Environment Agency, Thames Region Not Supplied Casm.0468 1 4th July 2001 8th October 2001 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Trib Of The Holdhurst Brook New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m	A13SW (SW)	83	2	505730 137820
	Discharge Consents	5 5				
2	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:	Knowle Farm Limited DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Three Oaks Knowle Lane Cranleigh Surrey Gu6 8jn Environment Agency, Thames Region Not Supplied Casm.0464 1 12th June 2001 21st September 2001 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Tributary Of Holdhurst Brook New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)	A13SW (SW)	93	2	505730 137810
	Positional Accuracy:	Located by supplier to within 10m				
3	-	Mr And Mrs Mark Wigfield DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Oak Tree Cottage, Knowle Lane, Cranleigh, Surrey Environment Agency, Thames Region Not Supplied Casm.0156 1 7th October 1999 17th May 2000 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Trib. Of Holdhurst Brook New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m	A13NW (W)	105	2	505650 137960
	Discharge Consents	S				
4	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Thames Water Utilities Ltd STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Cso At Knowle Lane Knowle Lane . Cranleigh Surrey Gu6 8ra Environment Agency, Thames Region Not Supplied Temp.2711 2 3rd September 2010 3rd September 2010 20th March 2019 Public Sewage: Storm Sewage Overflow Freshwater Stream/River Cranleigh Waters Varied under EPR 2010 Located by supplier to within 10m	A18NW (N)	156	2	505820 138820



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	Discharge Consent: Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Thames Water Utilities Ltd STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Cso At Knowle Lane Knowle Lane . Cranleigh Surrey Gu6 8ra Environment Agency, Thames Region Not Supplied Temp.2711 1 2nd November 1989 2nd November 1989 2nd November 1989 2nd September 2010 Public Sewage: Storm Sewage Overflow Freshwater Stream/River Cranleigh Waters Temporary Consents (Water Act 1989, Section 113) Located by supplier to within 10m	A18NW (N)	156	2	505820 138820
5	-	Thames Water Utilities Ltd PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Hitherwood Environment Agency, Thames Region Not Supplied Temp.1167 2 3rd September 2010 3rd September 2010 19th August 2014 Sewage Discharges - Pumping Station - Water Company Freshwater Stream/River Holdhurst Brook Surrendered under EPR 2010 Located by supplier to within 100m	A14NW (NE)	164	2	506200 138200
5	Discharge Consent: Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Thames Water Utilities Ltd PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Hitherwood Environment Agency, Thames Region Not Supplied Temp.1167 1 2nd November 1989 2nd November 1989 2nd November 1989 2nd September 2010 Sewage Discharges - Pumping Station - Water Company Freshwater Stream/River Holdhurst Brook Temporary Consents (Water Act 1989, Section 113) Located by supplier to within 100m	A14NW (NE)	164	2	506200 138200
6	Discharge Consent: Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Mrs Sarah-Jane Lebus DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Oakmead And Linden Knowle Lane Cranleigh Surrey Gu6 8jw Environment Agency, Thames Region Not Supplied Casm.0336 1 23rd August 2000 22nd March 2001 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Trib. Of The Holdhurst Brook New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m	A13SW (SW)	206	2	505700 137700



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Type: Status: Positional Accuracy:	s Mrs Veronica Mclellan DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Oakmead And Linden Knowle Lane Cranleigh Surrey Gu6 8jw Environment Agency, Thames Region Not Supplied Casm.0336 1 23rd August 2000 22nd March 2001 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Trib. Of The Holdhurst Brook New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by Supplier to within 100m	A13SW (SW)	206	2	505700 137700
7	Discharge Consent: Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Thames Water Utilities Ltd STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Cso At Knowle Lane Knowle Lane . Cranleigh Surrey Gu6 8ra Environment Agency, Thames Region Not Supplied Temp.2711 3 21st March 2019 21st March 2019 21st March 2019 Not Supplied Public Sewage: Storm Sewage Overflow Freshwater Stream/River Cranleigh Waters/Littlemead Varied under EPR 2010 Located by supplier to within 10m	A18NW (N)	236	2	505680 138800
8	Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s South London Nursing Homes Ltd. DENTIST/HOSPITAL/NURSING HOME (MEDICAL)/HUMAN HEALTH Knowle Park Nursing Home, Knowle Park, Cranleigh, Surrey Environment Agency, Thames Region Not Given CNTW.0185 1 1st December 1989 1st December 1989 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Onto Land Sandstone Inweald Clay Transferred from Water Act 1989 Located by supplier to within 100m	A17SE (NW)	364	2	505300 138420
9	Discharge Consent: Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Mr Colin Young DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Pond Cottage Knowle Lane Cranleigh Surrey Gu6 8jw Environment Agency, Thames Region Not Supplied Casm.0655 1 24th July 2002 30th July 2002 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Trib. Of The Holdhurst Brook New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m	A8NE (S)	367	2	505900 137550



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:	Mr C B Pegram DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) The White House Snoxhall Knowle Lane Cranleigh Surrey Gu6 8jw Environment Agency, Thames Region Not Supplied Casm.1412 1 10th November 2005 11th November 2005 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Tributary Of Holdhurst Brook New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as	A8NE (SE)	490	2	506100 137500
	Positional Accuracy:	amended by Environment Act 1995) Located by supplier to within 100m				
11	Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Mr. S.J. & Mrs. J.S.C. Batchelor FOOD+BEVERAGE SERVICES/CAFE/RESTAURANT/PUB The Boy & Donkey P.H.,Knowle Lane,Cranleigh,Surrey Environment Agency, Thames Region Not Given CTWC.1921 1 30th September 1987 30th September 1987 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Unnamed Trib Of Cranleigh Wtrs Transferred from COPA 1974 Located by supplier to within 100m	A8NW (S)	500	2	505700 137400
11	Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Mrs Tracy-Anne Chapman DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Ely Stp Ely Knowle Lane Cranleigh Surrey Gu6 8jw Environment Agency, Thames Region Not Supplied Eprsb3299as 1 15th October 2020 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Tributary Of Cranleigh Waters New issued under EPR 2010 Located by supplier to within 10m	A8NW (S)	525	2	505683 137377
12	Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Mr A Luckham DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Cherry Tree Cottage Knowle Lane Cranleigh Surrey Gu6 8jw Environment Agency, Thames Region Not Supplied Casm. 1059 1 19th July 2004 19th July 2004 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Tributary Of Cranleigh Waters New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m	A8NW (S)	562	2	505680 137340



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consent	s				
13	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Dasitional Assurace	Mr F. A. Davies And Mrs D. O. J. Davies DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Lauriel House, Knowle Lane, Cranleigh, Surrey Environment Agency, Thames Region Not Given CNTM.1553 1 17th August 1994 17th August 1994 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Tributary Ofcranleigh Waters New Consent, by Application (Water Resources Act 1991, Section 88)	A8SW (S)	699	2	505700 137200
	-	Located by supplier to within 100m				
14	Discharge Consent: Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:	Mrs S Woodward And Mr M Knight DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Waterland Cottage Knowle Lane Cranleigh Surrey Gu6 8jw Environment Agency, Thames Region Not Supplied Casm.0649 1 10th May 2002 22nd May 2002 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Tributary Of Cranleigh Waters New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)	A3NW (S)	977	2	505730 136920
	Positional Accuracy:	Located by supplier to within 10m				
	Nearest Surface Wa	ater Feature				
			A18SW (N)	3	-	505723 138365
	Pollution Incidents	to Controlled Waters	(1)			100000
15	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:	Not Given CRANLEIGH Environment Agency, Thames Region Chemicals - Unknown Confirmed As A Pollution Incident 13th May 1994 S1940220 Not Given Not Given Not Given Category 3 - Minor Incident Located by supplier to within 100m	A18NE (N)	118	2	505900 138795
	Pollution Incidents	to Controlled Waters				
15	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:	Not Given CRANLEIGH Environment Agency, Thames Region Oils - Unknown Confirmed As A Pollution Incident 7th October 1991 S1910406 Not Given Not Given Not Given Category 3 - Minor Incident Located by supplier to within 100m	A18NE (N)	123	2	505900 138800
	Pollution Incidents	to Controlled Waters				
16	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:	Not Given CRANLEIGH Environment Agency, Thames Region Chemicals - Unknown Confirmed As A Pollution Incident 14th April 1992 S1920178 Not Given Not Given Not Given Category 3 - Minor Incident Located by supplier to within 100m	A19NW (NE)	519	2	506400 138800



Map ID	Details		Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	River Quality					
	Name: GQA Grade: Reach: Estimated Distance (km): Flow Rate: Flow Type: Year:	Cranleigh Waters River Quality C Collins Bk - Water Bridge 2.7 Flow less than 0.31 cumecs River 2000	A8SE (S)	927	2	506045 136993
	River Quality					
	Name: GQA Grade: Reach:	Cranleigh Waters River Quality C Water Bridge - Cranleigh Stw 6.4 Flow less than 0.31 cumecs River 2000	A3NW (S)	985	2	505648 136918
	River Quality Chem	istry Sampling Points				
17	Name: Reach: Estimated Distance: Objective:	Cranleigh Waters Ellen'S Green To Collins Brook	A8SW (S)	908	2	505700
	Compliance: Year: GQA Grade: Compliance:	Not Supplied 2009 River Quality Chemistry GQA Grade B - Good Not Supplied				



Map ID	Details		Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	River Quality Chemistry Sampling Points					
17	Name: Reach: Estimated Distance: Objective: Positional Accuracy: Year: GQA Grade: Compliance: Year: GQA	Cranleigh Waters Collins Brook To Water Bridge 2.70 Not Supplied Located by supplier to within 10m 1990 River Quality Chemistry GQA Grade E - Poor Not Supplied 1993 River Quality Chemistry GQA Grade E - Poor Not Supplied 1994 River Quality Chemistry GQA Grade C - Fairly Good Not Supplied 1995 River Quality Chemistry GQA Grade C - Fairly Good Not Supplied 1996 River Quality Chemistry GQA Grade D - Fair Not Supplied 1997 River Quality Chemistry GQA Grade D - Fair Not Supplied 1998 River Quality Chemistry GQA Grade D - Fair Not Supplied 1999 River Quality Chemistry GQA Grade D - Fair Not Supplied 1999 River Quality Chemistry GQA Grade B - Good Not Supplied 2000 River Quality Chemistry GQA Grade B - Good Not Supplied 2001 River Quality Chemistry GQA Grade C - Fairly Good Not Supplied 2002 River Quality Chemistry GQA Grade B - Good Not Supplied 2004 River Quality Chemistry GQA Grade C - Fairly Good Not Supplied 2005 River Quality Chemistry GQA Grade C - Fairly Good Not Supplied 2004 River Quality Chemistry GQA Grade C - Fairly Good Not Supplied 2005 River Quality Chemistry GQA Grade C - Fairly Good Not Supplied 2006 River Quality Chemistry GQA Grade C - Fairly Good Not Supplied 2006 River Quality Chemistry GQA Grade C - Fairly Good Not Supplied 2006 River Quality Chemistry GQA Grade C - Fairly Good Not Supplied 2006 River Quality Chemistry GQA Grade C - Fairly Good Not Supplied 2007 River Quality Chemistry GQA Grade B - Good Not Supplied 2006 River Quality Chemistry GQA Grade B - Good Not Supplied 2007 River Quality Chemistry GQA Grade B - Good Not Supplied 2006 River Quality Chemistry GQA Grade B - Good Not Supplied 2007 River Quality Chemistry GQA Grade B - Good Not Supplied 2008	A8SW (S)	908	2	505700
	GQA Grade: Compliance: Year: GQA Grade: Compliance:	River Quality Chemistry GQA Grade B - Good Not Supplied 2009 River Quality Chemistry GQA Grade B - Good Not Supplied				
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised Start: Authorised End: Permit End Date: Positional Accuracy:	A2dominion Developments Ltd 28/39/30/0421/R01 2 Weald Clay At West Cranleigh Nurseries Environment Agency, Thames Region Horticulture And Nurseries: Spray Irrigation - Direct Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied 01 April 31 March 2nd December 2019 Not Supplied Located by supplier to within 10m	(NW)	1592	2	504142 138845



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Licence Number: Permit Version:	Mr N Vrijland 28/39/30/0421/R01 1	(NW)	1592	2	504142 138845
	-	Weald Clay At West Cranleigh Nurseries Environment Agency, Thames Region Horticulture And Nurseries: Spray Irrigation - Direct Water may be abstracted from a single point Groundwater Not Supplied Not Supplied 01 April 31 March 1st April 2015 Not Supplied Located by supplier to within 10m				
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	Mr N Vrijland 28/39/30/0421 1 West Cranleigh Nurseries, Cranleigh, Surrey- Borehole Environment Agency, Thames Region Horticulture And Nurseries: Spray Irrigation - Direct Water may be abstracted from a single point Groundwater Not Supplied Not Supplied West Cranleigh Nurseries, Cranleigh, Surrey 01 October 30 September 30th March 2004 Not Supplied	(NW)	1619	2	504110 138830
	Positional Accuracy: Water Abstractions	Located by supplier to within 10m				
	-	A2dominion Developments Ltd 28/39/30/0150 101 Trib Of Cranleigh Waters At West Cranleigh Nurseries Environment Agency, Thames Region Horticulture and Nurseries: Spray Irrigation - Spray Irrigation Definition Order Water may be abstracted from a single point Surface Not Supplied Not Supplied West Cranleigh Nurseries, Alford Road, Cranleigh 01 October 30 September 2nd December 2019 Not Supplied Located by supplier to within 100m	(NW)	1649	2	504100 138900
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised Start: Permit Start Date: Permit End Date: Positional Accuracy:	A2dominion Developments Ltd 28/39/30/0282 101 Trib Of Cranleigh Waters At West Cranleigh Nurseries Environment Agency, Thames Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from a single point Surface Not Supplied Not Supplied West Cranleigh Nurseries, Alfold Road, Cranleigh 01 October 30 September 2nd December 2019 Not Supplied Located by supplier to within 100m	(NW)	1649	2	504100 138900



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised Start: Permit Start Date: Permit End Date: Positional Accuracy:	A2dominion Developments Ltd 28/39/30/0282 101 Trib Of Cranleigh Waters At West Cranleigh Nurseries Environment Agency, Thames Region General Agriculture: Spray Irrigation - Spray Irrigation Definition Order Water may be abstracted from a single point Surface Not Supplied Not Supplied Cranleigh Waters At West Clandon Nurseries 01 October 30 September 2nd December 2019 Not Supplied Located by supplier to within 100m	(NW)	1649	2	504100 138900
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	A2dominion Developments Ltd 28/39/30/0282 101 Trib Of Cranleigh Waters At West Cranleigh Nurseries Environment Agency, Thames Region General Agriculture: Spray Irrigation - Storage Water may be abstracted from a single point Surface Not Supplied Not Supplied West Cranleigh Nurseries, Alfold Road, Cranleigh 01 November 31 March 2nd December 2019 Not Supplied Located by supplier to within 100m	(NW)	1649	2	504100 138900
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit Start Date: Positional Accuracy:	A2dominion Developments Ltd 28/39/30/0282 101 Trib Of Cranleigh Waters At West Cranleigh Nurseries Environment Agency, Thames Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from a single point Surface Not Supplied Not Supplied West Cranleigh Nurseries, Alfold Road, Cranleigh 01 October 30 September 2nd December 2019 Not Supplied Located by supplier to within 10m	(NW)	1690	2	504060 138910
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	A2dominion Developments Ltd 28/39/30/0282 101 Trib Of Cranleigh Waters At West Cranleigh Nurseries Environment Agency, Thames Region General Agriculture: Spray Irrigation - Spray Irrigation Definition Order Water may be abstracted from a single point Surface Not Supplied Not Supplied Cranleigh Waters At West Clandon Nurseries 01 October 30 September 2nd December 2019 Not Supplied Located by supplier to within 10m	(NW)	1690	2	504060 138910



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Positional Accuracy:	Mr N Vrijland 28/39/30/0282 100 Trib Of Cranleigh Waters At West Cranleigh Nurseries Environment Agency, Thames Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from a single point Surface 723 22730 West Cranleigh Nurseries, Alfold Road, Cranleigh 01 October 30 September 1st April 2012 Not Supplied Located by supplier to within 10m	(NW)	1690	2	504060 138910
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Mr N Vrijland 28/39/30/0150 100 Trib Of Cranleigh Waters At West Cranleigh Nurseries Environment Agency, Thames Region Horticulture and Nurseries: Spray Irrigation - Spray Irrigation Definition Order Water may be abstracted from a single point Surface Not Supplied Not Supplied West Cranleigh Nurseries, Alford Road, Cranleigh 01 October 30 September 1st April 2012 Not Supplied Located by supplier to within 10m	(NW)	1690	2	504060 138910
	Permit End Date:	Mr N Vrijland 28/39/30/0282 100 Trib Of Cranleigh Waters At West Cranleigh Nurseries Environment Agency, Thames Region General Agriculture: Spray Irrigation - Spray Irrigation Definition Order Water may be abstracted from a single point Surface Not Supplied Not Supplied Cranleigh Waters At West Clandon Nurseries 01 October 30 September 1st April 2012 Not Supplied Located by supplier to within 10m	(NW)	1690	2	504060 138910
	Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	Mr N Vrijland 28/39/30/0282 100 Trib Of Cranleigh Waters At West Cranleigh Nurseries Environment Agency, Thames Region General Agriculture: Spray Irrigation - Storage Water may be abstracted from a single point Surface Not Supplied Not Supplied West Cranleigh Nurseries, Alfold Road, Cranleigh 01 November 31 March 1st April 2012 Not Supplied Located by supplier to within 10m	(NW)	1690	2	504060 138910



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	A18SW (NW)	0	3	505712 138298
	Combined Vulnerability:	High	()			100200
	Combined Aquifer: Pollutant Speed:	Productive Bedrock Aquifer, No Superficial Aquifer Low				
	Bedrock Flow: Dilution:	Well Connected Fractures 300-550 mm/year				
	Baseflow Index: Superficial	40-70% <90%				
	Patchiness: Superficial	<3m				
	Thickness: Superficial	High				
	Recharge:	- ingit				
	Groundwater Vulne					
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	A13NW (N)	0	3	505809 138208
	Combined Vulnerability:	High				
	Combined Aquifer: Pollutant Speed:	Productive Bedrock Aquifer, No Superficial Aquifer Low				
	Bedrock Flow: Dilution:	Well Connected Fractures 300-550 mm/year				
	Baseflow Index: Superficial	40-70% <90%				
	Patchiness: Superficial	<3m				
	Thickness: Superficial	High				
	Recharge:					
	Groundwater Vulne	erability Map				
	Combined Classification:	Unproductive Aquifer (may have productive aquifer beneath)	A13NW (N)	0	3	505853 138024
	Combined Vulnerability:	Unproductive				
	Combined Aquifer: Pollutant Speed:	Unproductive Bedrock Aquifer, No Superficial Aquifer Low				
	Bedrock Flow: Dilution:	Well Connected Fractures 300-550 mm/year				
	Baseflow Index: Superficial	40-70% <90%				
	Patchiness: Superficial	<3m				
	Thickness: Superficial	High				
	Recharge:					
	Groundwater Vulne					
	Combined Classification:	Unproductive Aquifer (may have productive aquifer beneath)	A13NE (E)	0	3	506000 138024
	Combined Vulnerability:	Unproductive				
	Combined Aquifer: Pollutant Speed:	Unproductive Bedrock Aquifer, No Superficial Aquifer Low				
	Bedrock Flow: Dilution:	Well Connected Fractures 300-550 mm/year				
	Baseflow Index: Superficial	40-70% <90%				
	Patchiness: Superficial	<3m				
	Thickness: Superficial	No Data				
	Recharge:					



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulne	erability Map				
	Combined	Unproductive Aquifer (may have productive aquifer beneath)	A13NW	0	3	505853
	Classification: Combined	Unproductive	(S)			138000
	Vulnerability: Combined Aquifer:	Unproductive Bedrock Aquifer, No Superficial Aquifer				
	Pollutant Speed:	Low				
	Bedrock Flow: Dilution: Baseflow Index:	Well Connected Fractures 300-550 mm/year 40-70%				
	Superficial	40-70% <90%				
	Patchiness:					
	Superficial Thickness:	<3m				
	Superficial Recharge:	No Data				
	Groundwater Vulne	erability Map				
	Combined Classification:	Unproductive Aquifer (may have productive aquifer beneath)	A13NE (E)	0	3	506000 138000
	Combined	Unproductive				
	Vulnerability: Combined Aquifer:	Unproductive Bedrock Aquifer, No Superficial Aquifer				
	Pollutant Speed:	Low				
	Bedrock Flow:	Well Connected Fractures				
	Dilution: Baseflow Index:	300-550 mm/year 40-70%				
	Superficial	<90%				
	Patchiness: Superficial	<3m				
	Thickness:	<5m				
	Superficial Recharge:	No Data				
	Groundwater Vulne None	arability - Soluble Rock Risk				
	Bedrock Aquifer De	esignations				
	Aquifer Designation:	Secondary Aquifer - A	A13NW (N)	0	3	505809 138208
	Bedrock Aquifer De	esignations				
	Aquifer Designation:	Secondary Aquifer - A	A18SW (NW)	0	3	505712 138298
	Bedrock Aquifer De	esignations				
	Aquifer Designation:	Unproductive Strata	A13NW (N)	0	3	505853 138024
	Superficial Aquifer	Designations				
	No Data Available					
	Extreme Flooding f Type: Flood Plain Type: Boundary Accuracy:	rom Rivers or Sea without Defences Extent of Extreme Flooding from Rivers or Sea without Defences Fluvial Models As Supplied	A13SE (SE)	28	2	505923 137908
		rom Rivers or Sea without Defences				
	Type: Flood Plain Type: Boundary Accuracy:	Extent of Extreme Flooding from Rivers or Sea without Defences Fluvial Models	A18NE (N)	43	2	505887 138720
		rom Rivers or Sea without Defences				
	Туре:	Extent of Extreme Flooding from Rivers or Sea without Defences	A13NE	49	2	506113
	Flood Plain Type: Boundary Accuracy:	Fluvial Models As Supplied	(E)			137968
	Extreme Flooding f	rom Rivers or Sea without Defences				
	Type: Flood Plain Type: Boundary Accuracy:	Extent of Extreme Flooding from Rivers or Sea without Defences Fluvial Models As Supplied	A13SW (SW)	181	2	505683 137734
	Flooding from Rive	rs or Sea without Defences				
	Type: Flood Plain Type: Boundary Accuracy:	Extent of Flooding from Rivers or Sea without Defences Fluvial Models As Supplied	A13SE (SE)	31	2	505919 137896
	Flooding from Rive	rs or Sea without Defences				
	Type: Flood Plain Type: Boundary Accuracy:	Extent of Flooding from Rivers or Sea without Defences Fluvial Models	A13NE (E)	49	2	506113 137968



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Flooding from Rivers or Sea without Defences				
	Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A18NW (N)	81	2	505683 138716
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (NE)	160	2	506191 138216
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SW (SW)	181	2	505683 137734
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
18	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 347.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13SE (SE)	52	4	505941 137863
19	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 159.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13NE (E)	70	4	506138 138068
20	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 37.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	75	4	505878 138751
21	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 57.1 Watercourse Level: On ground surface Permanent: False Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13NE (E)	93	4	506160 138004
22	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 250.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13SE (S)	94	4	505913 137844
23	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 284.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	97	4	505953 138766



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
24	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 50.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13SE (S)	100	4	505913 137844
25	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 116.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13SE (SE)	108	4	506070 137909
26	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	111	4	505887 138787
27	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	112	4	505888 138789
28	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 219.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (N)	116	4	505889 138793
29	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 54.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13SE (S)	149	4	505927 137797
30	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 194.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13SE (S)	149	4	505927 137797
31	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 305.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13NE (NE)	163	4	506194 138217
32	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13SW (SW)	178	4	505691 137734



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 232.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13SW (SW)	183	4	505684 137732
34	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 121.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18SW (N)	194	4	505629 138580
35	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 34.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13SE (SE)	220	4	506097 137793
36	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 19.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13SE (SE)	222	4	506127 137811
37	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 263.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13SE (SE)	222	4	506097 137793
38	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NW (N)	236	4	505678 138803
39	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 12.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NW (N)	240	4	505667 138798
40	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NW (N)	240	4	505678 138803
41	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NW (N)	244	4	505680 138814



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
42	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NW (N)	247	4	505683 138823
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NW (N)	247	4	505662 138797
44	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 126.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NW (N)	249	4	505683 138828
45	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 905.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NW (N)	250	4	505650 138792
46	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NW (N)	250	4	505662 138797
47	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.2 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (NE)	287	4	506165 138770
48	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 159.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A18NE (NE)	297	4	506175 138772
49	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 306.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12NE (W)	305	4	505363 138174
50	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 303.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12NE (W)	318	4	505347 138181



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
51	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 54.8 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19SW (NE)	390	4	506369 138419
52	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 88.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (N)	403	4	506204 138935
53	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.5 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (N)	403	4	506205 138934
54	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 36.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (NE)	403	4	506229 138907
55	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A7NE (SW)	403	4	505505 137586
56	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (NE)	407	4	506239 138902
57	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 197.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A7NE (SW)	407	4	505502 137584
58	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 74.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (NE)	412	4	506292 138850
59	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A8NW (S)	413	4	505709 137487



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
60	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 8.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (NE)	434	4	506297 138843
61	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 18.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (NE)	436	4	506309 138828
62	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 37.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19SW (NE)	436	4	506406 138459
63	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 201.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (NE)	442	4	506309 138828
64	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 480.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19SW (NE)	470	4	506436 138478
65	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12SE (SW)	494	4	505303 137714
66	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 87.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12SE (SW)	494	4	505303 137714
67	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 139.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12SE (SW)	495	4	505303 137705
68	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12SE (SW)	506	4	505295 137701



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
69	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 58.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12SE (W)	530	4	505245 137779
70	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 278.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12SE (SW)	554	4	505251 137678
71	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12SE (W)	563	4	505204 137820
72	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 50.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A7NE (SW)	564	4	505421 137448
73	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 102.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12SE (W)	565	4	505201 137824
74	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 222.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A7NE (SW)	608	4	505375 137428
75	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 6.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12SW (W)	628	4	505130 137897
76	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 320.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12SW (W)	633	4	505125 137902
77	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 130.1 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NW (NE)	639	4	506506 138862



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
78	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 288.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12SW (W)	662	4	505099 137873
79	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 236.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A19NE (NE)	755	4	506596 138955
80	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12NW (W)	759	4	504903 138133
81	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 172.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12NW (W)	762	4	504899 138136
82	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 36.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12NW (W)	776	4	504870 138250
83	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A11NE (W)	809	4	504835 138261
84	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1245.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cobbler's Brook Catchment Name: Thames Primacy: 1	A8SE (S)	809	4	505900 137098
85	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 33.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A11NE (W)	812	4	504832 138261
86	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A7NE (SW)	815	4	505204 137303



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
87	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 676.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A7NE (SW)	825	4	505198 137295
88	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 64.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A11NE (W)	843	4	504801 138271
89	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 201.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A11NE (W)	884	4	504741 138276
90	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A11NE (W)	903	4	504740 138272
91	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A16SE (W)	926	4	504729 138446
92	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 379.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A16SE (W)	931	4	504725 138448
93	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 462.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A7SE (SW)	978	4	505219 137083
94	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cobbler's Brook Catchment Name: Thames Primacy: 1	A9SW (S)	988	4	506197 137000
95	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 296.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Cobbler's Brook Catchment Name: Thames Primacy: 1	A9SW (S)	990	4	506199 136998



Waste

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority La	ndfill Coverage				
	Name:	Waverley Borough Council - Has supplied landfill data		0	6	505853 138024
	Local Authority La	ndfill Coverage				
	Name:	Surrey County Council - Has supplied landfill data		0	5	505853 138024
	Potentially Infilled	Land (Non-Water)				
96	Bearing Ref: Use: Date of Mapping:	NE Unknown Filled Ground (Pit, quarry etc) 1973	A19NW (NE)	655	-	506532 138858
	Potentially Infilled	Land (Water)				
97	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1962	A18NE (N)	185	-	505994 138832
	Potentially Infilled	Land (Water)				
98	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1962	A17SE (NW)	253	-	505449 138516
	Potentially Infilled	Land (Water)				
99	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1962	A19NW (NE)	447	-	506312 138834
	Potentially Infilled	Land (Water)				
100	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1962	A19SE (NE)	590	-	506552 138510
	Potentially Infilled	Land (Water)				
101	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1961	A7NW (SW)	874	-	504996 137475
	Potentially Infilled Land (Water)					
102	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1961	A7NW (SW)	912	-	504960 137463



Geological

Map ID	Details		Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid	d Geology				
	Description:	Wealden Group	A13NW (N)	0	1	505853 138024
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Rural Soil and Sediment 15 - 25 mg/kg	A13NE (E)	0	1	506000 138024
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel	<100 mg/kg 15 - 30 mg/kg				
	Concentration:					
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	A13NW (N)	0	1	505853 138024
	Cadmium Concentration: Chromium Concentration:	<1.8 mg/kg 60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<100 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	A13SE (S)	94	1	505885 137819
	Concentration: Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel Concentration:					
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Rural Soil and Sediment 25 - 35 mg/kg	A18NW (N)	102	1	505810 138776
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel					
	Concentration:					
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration:	Chemistry British Geological Survey, National Geoscience Information Service Rural Soil and Sediment 15 - 25 mg/kg	A18NE (N)	145	1	506000 138776
	Cadmium Concentration: Chromium	<1.8 mg/kg 40 - 60 mg/kg				
	Concentration: Lead Concentration: Nickel Concentration:	<100 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment 25 - 35 mg/kg	A13SW (SW)	148	1	505700 137762
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel Concentration:	<100 mg/kg 15 - 30 mg/kg				



Geological

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry					
	Source: Soil Sample Type: Arsenic Concentration: Cadmium	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg 1.8 - 2.2 mg/kg	A8NW (S)	396	1	505853 137500
	Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	60 - 90 mg/kg <100 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	British Geological Survey, National Geoscience Information Service Sediment 25 - 35 mg/kg 1.8 - 2.2 mg/kg 60 - 90 mg/kg	A8NW (SW)	463	1	505524 137500
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg <1.8 mg/kg 60 - 90 mg/kg	A12SW (SW)	658	1	505128 137719
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Concentration: Chromium Concentration:	British Geological Survey, National Geoscience Information Service Sediment 25 - 35 mg/kg 1.8 - 2.2 mg/kg 60 - 90 mg/kg	A8SE (S)	770	1	505889 137136
	Lead Concentration:	<100 mg/kg 15 - 30 mg/kg				
	Nickel Concentration:	io - ou my/ky				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg <1.8 mg/kg 40 - 60 mg/kg	A8SE (S)	791	1	506000 137137
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration: Concentration: Chromium Concentration:	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg <1.8 mg/kg 40 - 60 mg/kg	A11NE (W)	826	1	504819 138250
	Lead Concentration: Nickel Concentration:	<100 mg/kg 15 - 30 mg/kg				



Geological

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR	
	BGS Estimated Soil Chemistry						
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	A16SE (NW)	854	1	504806 138470	
	Cadmium Concentration: Chromium	<1.8 mg/kg 40 - 60 mg/kg					
	Concentration: Lead Concentration: Nickel Concentration:	<100 mg/kg 15 - 30 mg/kg					
	BGS Estimated Soil	Chemistry					
	Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium	British Geological Survey, National Geoscience Information Service Rural Soil and Sediment 15 - 25 mg/kg <1.8 mg/kg 40 - 60 mg/kg	A16SE (NW)	854	1	504814 138500	
	Concentration: Lead Concentration: Nickel Concentration:	<100 mg/kg 15 - 30 mg/kg					
	BGS Estimated Soil	Chemistry					
	Source: Soil Sample Type: Arsenic Concentration: Cadmium	British Geological Survey, National Geoscience Information Service Rural Soil and Sediment 15 - 25 mg/kg <1.8 mg/kg	A17NW (NW)	859	1	505000 138928	
	Concentration: Chromium Concentration: Lead Concentration:	40 - 60 mg/kg					
	Nickel Concentration:	15 - 30 mg/kg					
	BGS Estimated Soil	Chemistry					
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	A16SE (NW)	860	1	504800 138471	
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg					
	Concentration: Lead Concentration: Nickel	<100 mg/kg 15 - 30 mg/kg					
	Concentration:						
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration:	Chemistry British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	A8SE (S)	898	1	505978 137020	
	Cadmium Concentration: Chromium	1.8 - 2.2 mg/kg 60 - 90 mg/kg					
	Concentration: Lead Concentration: Nickel						
	Concentration:						
	BGS Estimated Soil	Chemistry					
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Rural Soil and Sediment 15 - 25 mg/kg	A15NW (E)	926	1	507000 138024	
	Concentration: Cadmium Concentration:	<1.8 mg/kg					
	Chromium Concentration: Lead Concentration:						
	Nickel Concentration:	15 - 30 mg/kg					