Eastwood & Partners
CONSULTING ENGINEERS

GEOTECHNICAL AND GEO-ENVIRONMENTAL SITE INVESTIGATION

PHASE 3, ARNOLDS WAY YATTON

FOR

SMART SYSTEMS LTD

34392-001R **MARCH 2012**

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FOR

SMART SYSTEMS LTD

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APPENDICES

1.0 EXECUTIVE SUMMARY

1. This report presents the findings of a geotechnical and geo-environmental site investigation carried out by Eastwood & Partners (Consulting Engineers) Limited for, and on the instructions of, Smart Systems Ltd.

2. This report was originally compiled in March 2012 but issue was reserved on instruction from the client until the date as now shown on the cover.

3. The site comprises approximately 5.65 Ha of land, off Arnolds Way, on the northern side of Yatton in Somerset.

4. Historical maps show that no development has occurred on the site in the past and the surrounding area has been predominantly agricultural with the exception of the concrete works approximately 200 m east of the site.

5. The geology beneath the site is shown as Quaternary Tidal Flat Deposits overlying Mercia Mudstone of Triassic age.

6. The Tidal Flat Deposits are classified as Unproductive (groundwater) Strata and the underlying Mercia Mudstone is classified as a Secondary B Aquifer. The site does not lie within a Groundwater Source Protection Zone.

7. There are no coal measures strata at workable depth beneath the site, or other minerals of economic importance known to be present in the area.

8. There are no registered landfills within 500 m of the site. Therefore there is no significant source of landfill gas in the vicinity of the site.

9. No radon protective measures are required.

10. The site lies within a zone 3 floodplain and therefore a flood risk assessment is likely to be required.

11. The ground conditions were found to comprise topsoil overlying firm to stiff clay which became soft to very soft below around 1.5 m to 2.0 m depth. Bands of peat were encountered within the clay at a minimum depth of 2.7 m bgl. Mudstone was then encountered at depths of between 6.5 m and 13.8 m.

12. Slight seepages of water were recorded in the trial pits at around 2.0 m bgl and within the boreholes the water was recorded as rising to a minimum depth of 3.0 m bgl. The

water table is however known to be extremely shallow at times and is controlled by sluice gates in the surrounding rhynes.

13. Testing undertaken during the 2007 investigation by Geo-Testing Services demonstrated that both the Tidal Flat Deposits and the underlying Mercia Mudstone have low to medium volume change potentials.

14. Due to the presence of soft to very soft clay overlying the mudstone, the proposed building will need to be piled, including the floor slab. The piles should be anchored into the mudstone and further investigation is required to determine the depth of the mudstone across the area of the building. Heave precautions will also need to be included in the construction of some of the ground beams where trees have a significant influence.

15. Due to the presence of clay, soakaways will not be a viable option for surface water drainage.

16. A Design Sulphate Class of DS-1 and ACEC class of AC-1 has been assigned to the ground at the site. Therefore no sulphate precautions are required.

17. No elevated concentrations of contaminants were identified within the ground at the site and therefore no remediation is required. However, this is a preliminary investigation only and further testing will need to be undertaken at a later date to confirm these initial findings.

18. The conclusions made in this report are subject to agreement by the approving bodies, the Local Authority and the NHBC.

2.0 INTRODUCTION

2.1 Terms of Reference

This report presents the findings of a preliminary geotechnical and geo-environmental site investigation carried out by Eastwood & Partners (Consulting Engineers) Limited for, and on the instructions of, Smart Systems Ltd. Any other parties using the information in this report do so at their own risk and any duty of care is excluded.

2.2 Context

No previous geotechnical or geo-environmental investigations are known to have been undertaken at the site, however a 'Report on Ground Investigation' (reference 15131, dated November 2007) was undertaken by Geo-Testing Service Ltd prior to the Phase 2 development on land adjacent to the current site. This report has therefore been consulted during the current investigation works.

2.3 Aims and Objectives

The aims and objectives of this investigation were as follows.

- Assimilate phase 1 data to derive an outline conceptual model identifying potential contaminants, pathways and receptors, as well as possible linkages between these;
- Obtain information enabling refinement and subsequent testing of the conceptual model;
- Carry out tiered risk assessment to establish the likely risks to future receptors, involving the use of generic assessment criteria and where unacceptable risks are identified, site specific assessment criteria within a detailed quantitative risk assessment;
- Identify feasible remediation options if unacceptable risks are highlighted;
- Develop an appropriate remediation strategy where remediation is required.
- Detail the ground conditions and their geotechnical properties enabling outline foundation proposals to be made.

2.4 Scope of Investigation

This document is split into two sections. These constitute the findings of the phase 1 and phase 2 investigations, consecutively.

2.4.1 Phase 1

The phase 1 investigation consisted of a review of information extracted from published documentation as well as that obtained from a site reconnaissance. Information regarding the current and former land uses both on and surrounding the site, as well as the environmental sensitivity of the site location as determined by factors including geology, hydrogeology and hydrology have been examined.

Information analysed in this section of the report has been obtained from a variety of sources and included the following:

- A Landmark Envirocheck report, centred on National Grid Reference 341600, 165890 was obtained. This includes historical Ordnance Survey maps, as well as information regarding environmental issues such as abstraction licenses, pollution incidences and waste facilities. It compiles information obtained from amongst others, the Environment Agency and the Local Authority.
- The British Geological Survey map and memoir, Environment Agency Groundwater Vulnerability map, British Research Establishment Guidance with regards to radon and Law Society Guidance with respect to coal mining, covering this area have also been reviewed.

The results of the phase 1 investigation were used to derive an outline conceptual model from which a preliminary risk assessment was made.

2.4.2 Phase 2

This part of the investigation consisted of limited intrusive works and laboratory analysis. The findings were used to test the conceptual model and produce a final risk assessment.

The intrusive works comprised a limited number of trial pits and shell and auger boreholes.

The trial pits were excavated to enable:

- Examination of the upper few metres of ground;

- In situ description of soils, enabling any localised lateral and vertical changes in soil conditions to be logged;
- Assessment of any contamination identified using visual and olfactory methods;
- Collection of soil samples for chemical testing;

The shell and auger boreholes were undertaken to allow:

- Examination of ground up to 15 m below ground level;
- In situ description of soils, enabling any localised lateral and vertical changes in soil conditions to be logged;
- Assessment of any contamination identified using visual and olfactory methods;
- Standard Penetration Tests to be completed at regular intervals to provide a strength profile of the ground;
- Installation of groundwater monitoring wells.

Further investigation by means of additional trial pits and boreholes should be undertaken at a later stage to provide more detailed information on the ground conditions and their properties.

2.5 Limitations of Investigation

This report is based on the assumption that the site will be developed with a new factory extension and that existing ground levels will not alter significantly. If this is not the case, then the advice given in this report may not be appropriate. A limited investigation has been undertaken at this stage with further works planned prior to commencement of the construction works.

Where assessments of site areas affected in particular ways are given, these are approximate. All information, comments and opinions given in this report are based on the ground conditions encountered during the site work, on the results of laboratory testing carried out as part of the investigation and information gained from a geological and historical desk study. However, there may be conditions at the site that have not been taken into account, such as unpredictable soil strata and water conditions between or below investigation points.

This report considers the ground and groundwater and does not cover any buildings or their fabric. Generally, testing has only been carried out for contaminants identified as potentially present with no assessment made of biological contamination. Risks to ecological receptors, (flora and fauna), have not been considered.

PHASE 1

3.0 THE SITE

3.1 Description

The site has an area of approximately 5.65 hectares and is located off Arnolds Way on the western side of Yatton in Somerset. It is approximately rectangular on plan, with its long axis in an north west/south east orientation, and is centred on National Grid Reference 341600, 165890.

The site currently comprises three rectangular fields bordered by hedges and trees. Drainage ditches, or rhynes, also border the fields along the hedge lines. Both fields are relatively level with the surface being ridged due to the previous use of the land as corn fields. No crops are currently grown on the site though the stumps of the corn previously grown are still present.

The Exploratory Hole Location Plan, drawing 34392/001, revision A, in Appendix 1 shows the various features described.

3.2 History

A review of historical maps and other archival information has been carried out for the purposes of assessing former land usage at and within the vicinity of the site. Copies of historical Ordnance Survey (OS) maps for the site, from the Envirocheck report, are enclosed, along with a map list, in Appendix 2.

3.2.1 The Site

The First Edition OS Map, published in 1884, shows the site to be the same as it appears in the present day. It comprises open fields surrounded and separated by drains. No changes are observed on any of the subsequent maps.

3.2.2 The Surrounding Area

The 1884 map shows the surrounding area to be predominantly agricultural with a large number of drainage ditches crossing the area. Wembnerham Lane is present along the south eastern boundary of the site, as in the present day. Beyond this, the Great Western Railway is located around 150 m south east of the site. A Gas Works is also shown to be present around 250 m east of the site. By 1932 the gas works is no longer present, though on later maps a gas holder is labelled in the location of the gas works. The construction of a small number of factories and works buildings occurs between 1975 and 1982 approximately

300 m east of the site. These are in the location of the current concrete works. Construction continues and the number of buildings comprising the concrete works increases. The distance from site consequently decreases and by 1999, the nearest of the buildings is around 200 m from the site. By 2006 the first phase of the Smart Systems site is shown, and on the final map of 2011 the phase 2 extension is present.

3.3 Geology

The 1:50,000 British Geological Survey map, shows that the geology at the site is Quaternary Tidal Flat Deposits overlying the Mercia Mudstone of the Triassic period. Tidal Flat Deposits are commonly described as a consolidated soft silty clay, with layers of peat, sand and a basal gravel. A stronger, desiccated surface zone is sometimes present. The Mercia Mudstone is described as variable, typically consisting of conglomerate and/or breccia with clasts derived locally from rocks lying immediately below the unconformable base of these deposits. The matrix generally consists of finer-grained rock fragments or, less commonly, siltstone, sandstone or micritic limestone. Where these deposits overlie Carboniferous limestones, such as in the Bristol and Mendip areas, both the matrix and limestone clasts are commonly dolomitized ("Dolomitic Conglomerate"). Individual clasts can range up to several cubic metres in size.

3.4 Hydrogeology

3.4.1 Groundwater Vulnerability

The Quaternary Tidal Flat Deposits at the site are classified as Unproductive (groundwater) Strata whereas the underlying Mercia Mudstone is classified as a Secondary B Aquifer. Unproductive Strata is defined as are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow. Secondary B Aquifers are defined as 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. These are generally the water-bearing parts of the former non-aquifers.

The site is recorded in the Landmark Envirocheck report as being outside of a Groundwater Source Protection Zone.

3.4.2 Groundwater Abstractions

The Landmark Envirocheck report does not record any groundwater abstractions within 250 m of the site.

3.5 Hydrology

The nearest surface water features are un-named drains which border and cross the site. A large number of these are present in the surrounding area and are used to regulate the level of the water table. The nearest named surface water feature is Wemberham Lane Rhyne which borders the south eastern boundary of the site.

3.6 Mining

There are no coal measures strata at workable depth beneath the site. This is reiterated by the Law Society's Guidance Notes which show that the site does not lie within an area where a coal mining search is required.

No other minerals of economic importance are known to be present in the area.

3.7 Ground Gas

The Landmark Envirocheck report indicates that there are no landfill sites within 500 m of the site. We therefore consider it unlikely that there will be a ground gas issue from known landfill sites.

The site lies in an area where, according to current Building Research Establishment Report BR211 *'Radon: Guidance on Protective Measures for New Dwellings'* 2007, no radon precautions are required.

3.8 Pollution Incidents

The Landmark Envirocheck report does not list any pollution incidents to controlled waters within 1 km of the site.

3.9 Discharge Consents

There is one discharge consent listed in the Landmark Envirocheck report within 500 m of the site. This is located around 190 m east of the site and relates to sewage discharges into a soakaway. We do not expect this discharge affects the groundwater below the site.

3.10 Flooding

The published documentation suggests that the site may be at risk of flooding. However, here has been a substantial amount of further investigation of the flood risk for this site, which is contained in separate reports and correspondence, and these should be consulted if further information on the flood risk is required.

4.0 outline conceptual model

The following table details the possible sources and associated contaminants of concern, pathways and receptors, highlighted by the phase 1 investigation as potentially present.

4.1 Solid or Liquid Contaminants

Table 4.1 – Solid or Liquid Contaminants Outline Conceptual Model

Source	Potential Contaminants	Pathway	Receptor
Contaminants in the natural ground	Naturally occurring contaminants such as arsenic and pyrite (resulting in elevated levels of sulphate), as well as anthropogenically influenced contamination such as atmospheric deposition of PAHs.	Direct contact (dermal and ingestion) Leaching and migration through relatively permeable sand deposits	Future Residents Minor Aquifer

PHASE 2

5.0 SITE WORKS

The intrusive investigation strategy was two-fold comprising trial pits and shell and auger boreholes. These were undertaken to provide preliminary information regarding the ground conditions and their properties. Further investigation will be completed at a later date.

5.1 Trial Pits

Seven trial pits, referenced TP1 to TP7, were carried out on 24 January 2012. These extended to depths between 3.5 m and 4.1 m below ground level (bgl). Copies of the logs for these trial pits are included in Appendix 4 and their positions are shown on the *'Exploratory Hole Location Plan'*, drawing 33186/001, Revision A, in Appendix 1.

5.2 Shell and Auger Boreholes

Two shell and auger boreholes, referenced BH1 and BH2, were undertaken on the same date. BH1 reached a depth of 7.3 m and BH2 reached a depth of 14.2 m bgl. Standard Penetration Tests were undertaken at 2.0 m intervals in each hole. Each of the holes was also installed with a groundwater monitoring standpipe to a depth of 3.0 m bgl.

Copies of the logs for these boreholes are also included in Appendix 4 and their positions are shown on the *'Exploratory Hole Location Plan'*, drawing 33186/001, Revision A, in Appendix 1.

5.3 Soil Sampling

Disturbed samples were obtained from each of the trial pits and were generally taken at each change of stratum. No visual or olfactory evidence of contamination was noted in the trial pits or boreholes. Samples were collected using amber glass jars and plastic tubs. Chemical testing was undertaken by Chemtest using MCERTs accredited methodologies, where available. Geotechnical testing was undertaken by Geo-Testing Services Laboratories.

6.0 GROUND CONDITIONS

6.1 Surface Covering

The entire site is covered by topsoil consisting of pale brown clay. This was generally around 0.2 m to 0.3 m thick, however at the edges of the fields this increased to up to 0.7 m. This is thought to be a result of farming techniques used at the site in the past.

6.2 Natural Ground

Underlying the topsoil in all exploratory holes, the natural ground was found to comprise firm to stiff clay which generally became soft to very soft below around 1.5 m to 2.0 m depth. Bands of amorphous peat were also encountered within the clay at a minimum depth of 2.7 m bgl. The clay and peat is representative of the Tidal Flat Deposits and the base of this unit was not proven within the trial pits. The boreholes however encountered mudstone at a depth of 6.5 m in BH1 and 13.8 m in BH2. The boreholes were terminated shortly after encountering the mudstone owing to a lack of progress.

6.3 Obstructions

Obstructions were not identified in any of the exploratory holes.

6.4 Groundwater

Slight seepages of water were encountered within the trial pits at depths of around 2.0 m. Water strikes were also identified in the boreholes, the details of which are shown in the table below:

Borehole	Depth	Depth after 20 min
BH1	6.0 m	3.0 m
BH2	6.5 m	4.0 m
BH2	14.0 m	9.0 m

The level of the water table is however controlled by sluice gates in the rhynes and can therefore fluctuate significantly.

6.5 Evidence of Contamination

Visual or olfactory evidence of possible contamination was not identified in any of the exploratory holes.

7.0 GEOTECHNICAL APPRAISAL

7.1 Geotechnical Results

Our investigations, so far, indicate that beneath the topsoil is firm to stiff clay, becoming soft and very soft below 1.5 m to 2.0 m bgl. Bands of peat are also present within this material. Mudstone was then encountered at depths between 6.5 m and 13.8 m bgl. Plasticity testing of both the upper clay of the Tidal Flat Deposits and the lower Mercia Mudstone was undertaken by Geo-Testing Services during their investigation of the Phase 2 area of the site in 2007. Five samples of Mercia mudstone and six samples of the tidal flat deposits were tested. The results of the testing are summarised in the table below:

Exploratory Hole	Depth	Plasticity Index (%)	Volume Change Potential*
BH1	9.5	15	Low
BH1	10.0	22	Medium
BH1	10.4	NP	Non-Plastic
BH6	9.5	17	Low
BH6	11.0	13	Low
TP4	0.5	22	Medium
TP4	1.0	29	Medium
TP7	0.3	22	Medium
TP7	0.8	17	Low
TP9	0.5	24	Medium
TP9	1.0	24	Medium

* According to the NHBC Standards, Chapter 4.2

The results in the table above demonstrate that both strata were recorded as having a low to medium volume change potential. A medium volume change potential should therefore be assumed for both strata.

The SPT tests within the boreholes recorded N values of between 0 and 9 within the Tidal Flat Deposits. This suggests the consistency to be between very soft and soft for cohesive deposits and very loose to loose for granular material. The strength increased significantly within the underlying weathered mudstone and each SPT test recorded in excess of 50 blows over 75 mm.

7.2 Foundations

Owing to the presence of a significant thickness of soft to very soft clay and peat it will be necessary to employ piled foundations for the proposed building. The piles will need to

extend down a suitable distance into the mudstone which was identified at a depth of 13.8 m bgl in BH2 in the south east corner of the proposed building and 6.5 m depth in BH1 in the north west corner of the proposed building. Further investigation is required to determine the depth to the mudstone and levels to more accurately across the full extent of the proposed building.

Heave precautions will be required within the construction of the ground beams where trees have a significant influence. These will include the ground beams being cast on an appropriate thickness of compressible material or void former to give an equivalent void dimension of 100 mm and protected on the inside face with a 50 mm thickness of low density polystyrene.

7.2 Ground Floors

The building is intended for storage and light industrial use, and, due to the presence of soft ground, a piled in-situ concrete floor slab will be required.

7.3 Roadworks

Geo-Testing Services Ltd undertook mexecone penetrometer tests during their investigation in 2007. They found that the CBR value generally decreases below 0.5 m bgl, in line with the decreasing strength of the clay. They recommend a CBR value of 2% for external areas. This corresponds with the findings during the recent investigation, however we recommend undertaking full scale CBR tests across the areas of roads and parking areas prior to cinstruction. This will provide more accurate values.

7.4 Superstructure Precautions

No specific precautions will be required in the superstructure of proposed buildings as a result of the ground conditions.

7.5 Problems Due to Past Development

It is understood that a significant service main crosses part of the site and due regard will need to be paid to the depth, location, size and nature of the main. The exact course, depth and sensitivity of the main to anticipated intrusions and subsequent construction will require careful consideration.

7.6 Excavation Problems

Excavation is expected to be straightforward with easy digging anticipated, since the trial pits in the natural ground were found to be relatively stable. Support to excavations will be required in accordance with current Health & Safety Regulations wherever access is required to trenches deeper than 1.2 m or less where there is risk of collapse.

Slight seepages of groundwater were encountered in the trial pits at around 2.0 m, but this did not affect the stability of the side walls. In addition, water was recorded in the boreholes rising to a minimum depth of 3.0 m. The steady groundwater level has not been measured at the site, however it is know that this can be extremely shallow and is controlled by sluice gates within the surrounding rhynes.

7.7 Surface Water Drainage

Due to the presence of impermeable clay soakaways will not be a viable form of surface water drainage at the site. It is recommended that a piped drainage solution is sought.

8.0 REFINEMENT OF OUTLINE CONCEPTUAL MODEL

8.1 Source Characterisation

An outline conceptual model, detailing the possible sources and associated contaminants of concern, potential pathways and receptors identified in the phase 1 study was detailed in section 4.0.

This section of the report documents the works undertaken to obtain information to test and refine this model enabling a risk assessment to be produced and, where significant risks are expected, remediation recommendations.

8.2 Investigation of Potential Contamination Sources

The investigation works undertaken to cover each of the sources of potential contamination outlined in section 4.0 are detailed in the table below.

Source	Potential Contaminants	Exploratory hole used to investigate source
Contaminants in the natural ground	Naturally occurring contaminants such as arsenic and pyrite (resulting in elevated levels of sulphate), as well as anthropogenically influenced contamination such as atmospheric deposition of PAHs.	The natural ground at the site was encountered in all exploratory holes.

Visual or olfactory observations as well as the chemical testing scheduled to cover these are detailed in sections 8.2.2 and 8.3.

8.2.1 Ground Conditions

There is no reason to suspect that the materials recorded on site, being predominantly natural, will contain any specific contaminants although may contain elevated concentrations of common contaminants such as arsenic, and sulphates due to the presence of pyrite. Polycyclic Aromatic Hydrocarbons (PAHs), such as benzo(a)pyrene, may also be elevated due to the atmospheric fallout of these derived from the combustion of fossil fuels.

The chemical analysis undertaken for these materials are discussed in section 8.3.

8.2.2 Unexpected Contamination

No visual or olfactory observations of unexpected contamination were noted.

8.3 Chemical Testing

Three samples of topsoil and three samples of the natural clay were sent for testing following the field work. Each of the samples was analysed for the suite of contaminants listed below.

Contaminant Type	Actual Contamiants
Metals/Metalloids	Arsenic, cadmium, chromium, lead, mercury, nickel, copper, zinc, water soluble boron, beryllium and vanadium
pH	pH
PAHs	Speciated PAH

In addition to the above testing the samples of natural clay were analysed for total sulphate, water soluble sulphate and total sulphur.

All testing was undertaken by Chemtest and MCERTs accredited methodologies were used where available.

8.4 Assessment Criteria

The proposed development of the site is to be a factory unit with associated car parking and access roads. There will be limited landscaping at the site. Therefore the assessment criteria relating to a commercial/industrial end use have been used.

Tables detailing the relevant assessment concentrations used are included in Appendix 5.

8.5 Chemical Test Results

Some preliminary risk assessment is undertaken in this section of the report where certain chemical determinants can be readily discounted as not significant.

8.5.2 Metals

None of the metal determinants were found to exceed their relevant assessment concentrations within any of the samples tested.

8.5.3 Polycyclic Aromatic Hydrocarbons

None of the PAH determinants were found to exceed their relevant assessment concentrations within any of the samples tested.

8.5.4 Sulphates

The underlying Mercia Mudstone is not known as a geological formation which contains significant amounts of pyrite. Three samples of the Tidal Flat Deposits were sent for testing of sulphur and the total potential sulphates was calculated to be between 0.03% and 0.06%. The samples were also tested for water soluble sulphate and results of between 60 mg/l and 90 mg/l were recorded. The pH was between 7.9 and 8.4. On the basis of both the potential sulphate and water soluble sulphate concentrations, as well as the pH, the natural ground would be assigned a Design Sulphate Class of DS-1 and ACEC class of AC-1. Therefore no sulphate precautions are required and GEN-1 or RC35 concrete grades will be suitable.

8.6 Significant Pollutant Linkages

No significant pollutant linkages have been identified and therefore no remediation is required. However, this is a preliminary investigation only and further testing will need to be undertaken at a later date to confirm these initial findings.

9.0 RECOMMENDATIONS AND APPROVALS

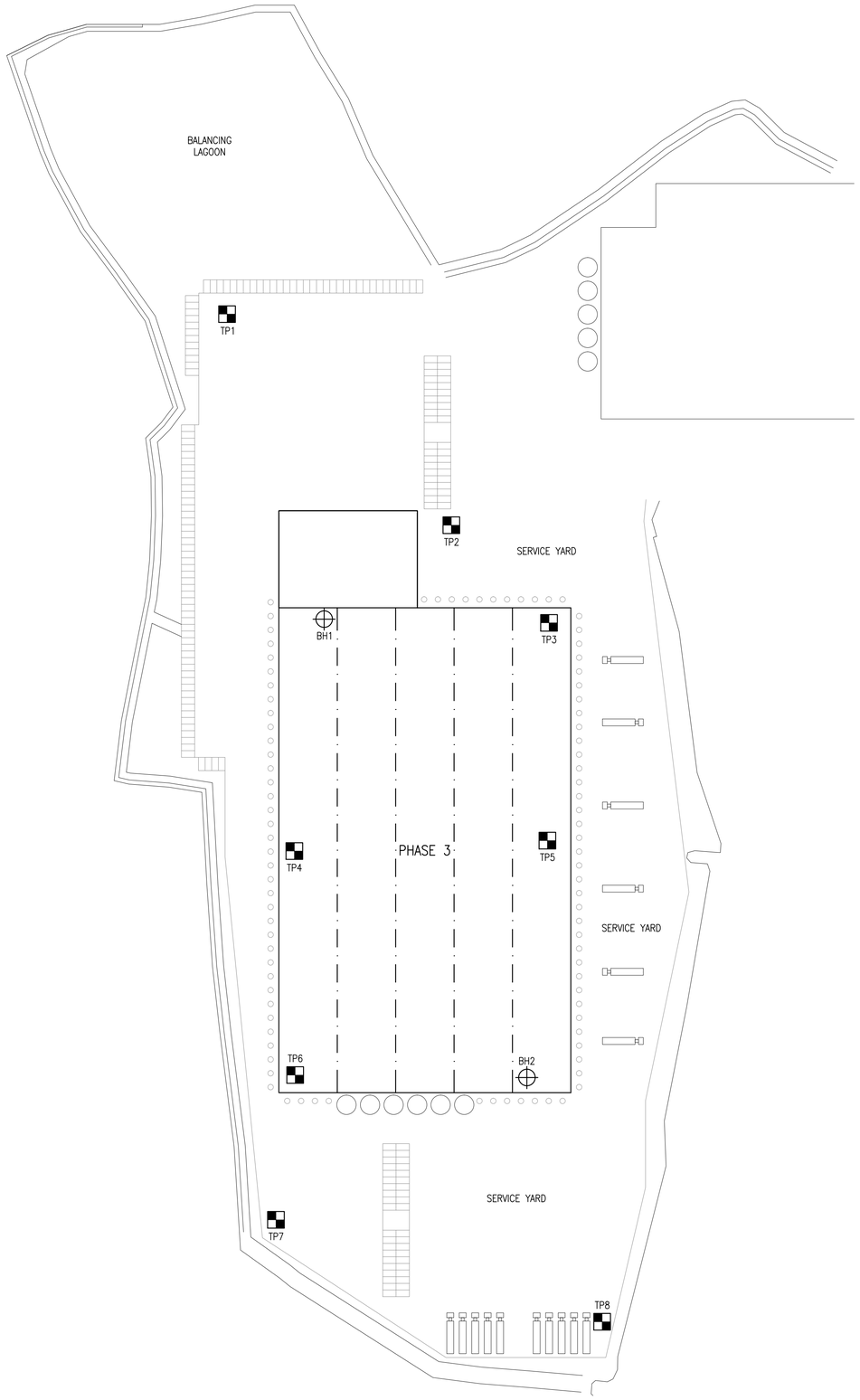
1. A Design Sulphate Class of DS-1 and ACEC class of AC-1 has been assigned to the ground at the site. Therefore no sulphate precautions are required.

2. No elevated concentrations of contaminants were identified within the samples and therefore no remediation is required. However, this is a preliminary investigation only and further testing will need to be undertaken at a later date to confirm these initial findings.

3. The conclusions made in this report are subject to agreement by the approving bodies such as the Local Authority.

Appendix 1

‘Exploratory Hole Location Plan’ drawing 34392/001 revision A



Information within this drawing is not necessarily produced to scale. Always use figured dimensions and co-ordinates – if in doubt, ask.

NOTES

1. Trial Pit/Borehole approximate locations only.

KEY:

– Approximate location of Borehole

– Approximate location of Trial Pit

REV	DESCRIPTION	SIG	CHK	DATE

SMART SYSTEMS LTD

YATTON PHASE 3

EXPLORATORY HOLE LOCATION PLAN

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SCALE WHEN PLOTTED AT A1	DRAWING STATUS
1:1000	PRELIMINARY

DRAWN	CHECKED	DATE	DRAWING NUMBER	REV
JB	.	06.03.14	34392/001	A

Appendix 2

Historical OS Maps

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

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

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry
Gravel Pit
Sand Pit
Disused Pit or Quarry
Refuse or Slag Heap
Lake, Loch or Pond
Dunes
Boulders
Coniferous Trees
Non-Coniferous Trees
Orchard
Scrub
Coppice
Bracken
Heath
Rough Grassland
Marsh
Reeds
Saltings
Building
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Pylon
Electricity Transmission Line
Sloping Masonry
Cutting
Embankment
Standard Gauge Multiple Track
Road Under
Road Over
Level Crossing
Foot Bridge
Standard Gauge Single Track
Siding, Tramway or Mineral Line
Narrow Gauge
Geographical County
Administrative County, County Borough or County of City
Municipal Borough, Urban or Rural District, Burgh or District Council
Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
Civil Parish
Shown alternately when coincidence of boundaries occurs

BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

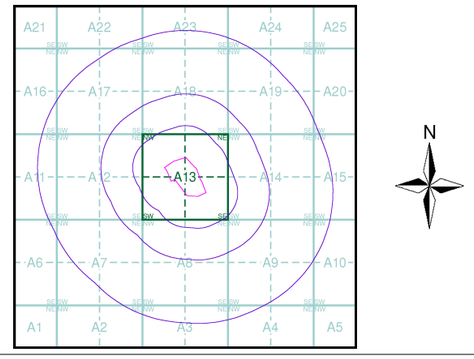
Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m Bench mark (where shown)
Triangulation station
Point feature (e.g. Guide Post or Mile Stone)
Pylon, flare stack or lighting tower
Site of (antiquity)
Glasshouse
General Building
Important Building

Envirocheck®

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Somerset	1:10,560	1884	1
Somerset	1:10,560	1904	1
Somerset	1:10,560	1932	1
Ordnance Survey Plan	1:10,000	1960 - 1961	1
Ordnance Survey Plan	1:10,000	1975	1
Ordnance Survey Plan	1:10,000	1981 - 1982	1
Ordnance Survey Plan	1:10,000	1992	1
10K Raster Mapping	1:10,000	1999	1
10K Raster Mapping	1:10,000	2006	1
10K Raster Mapping	1:10,000	2011	1

Historical Map - Slice A



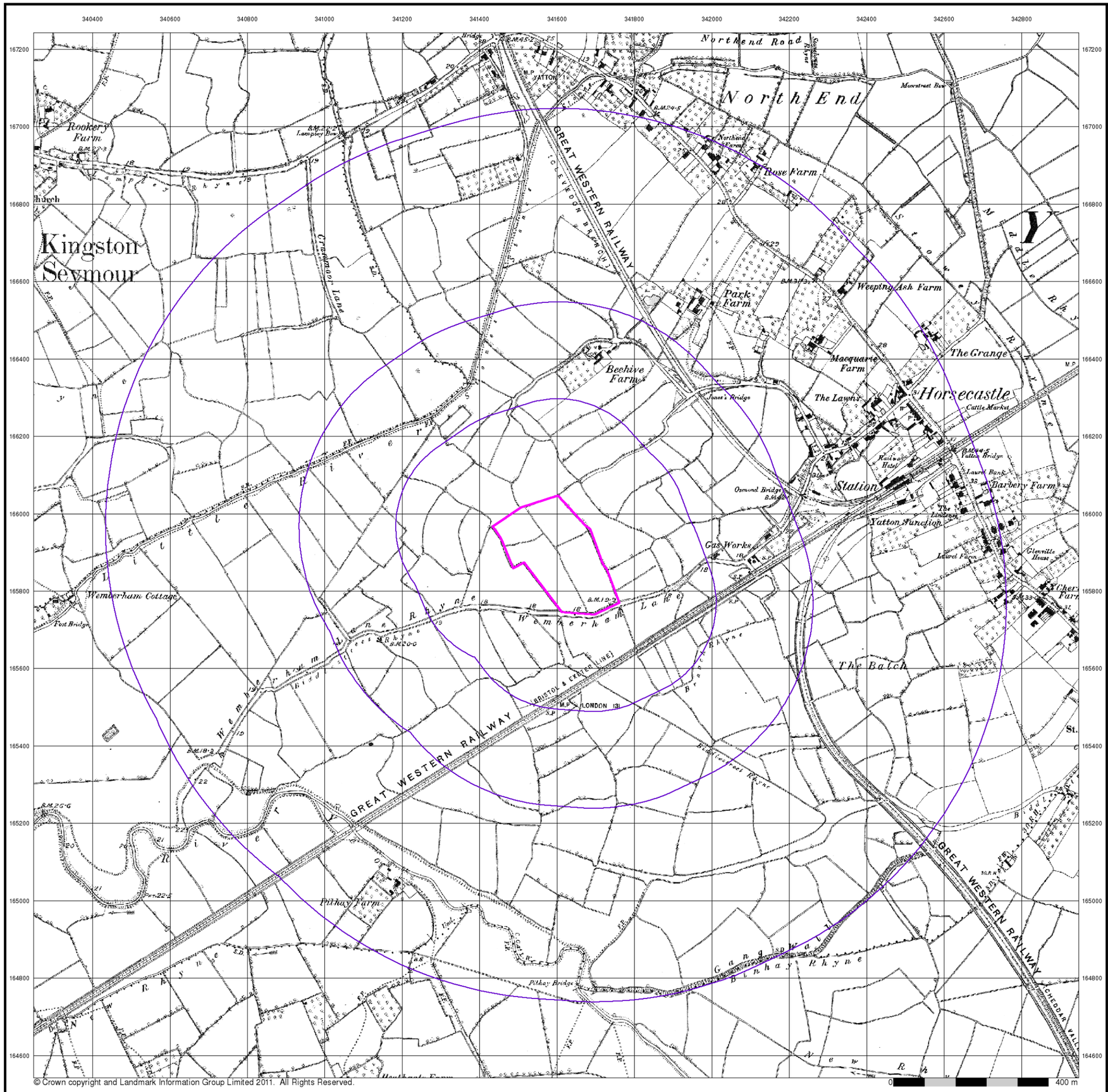
Order Details

Order Number: 37066161_1_1
Customer Ref: 34392/SDP/RAN
National Grid Reference: 341600, 165890
Slice: A
Site Area (Ha): 5.65
Search Buffer (m): 1000

Site Details

Smart Systems Ltd, Arnolds Way, Yatton, BRISTOL, BS49 4QN

Landmark® Information Group
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Envirocheck®

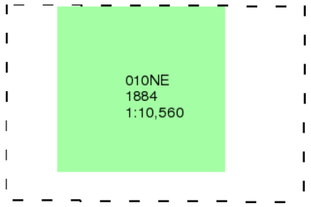
Somerset

Published 1884

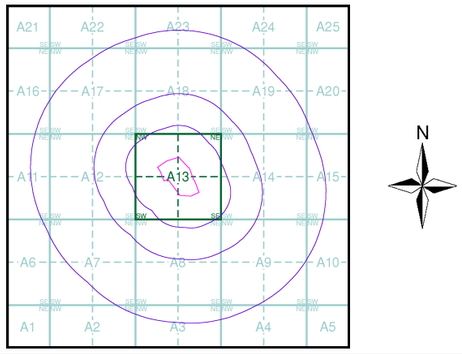
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

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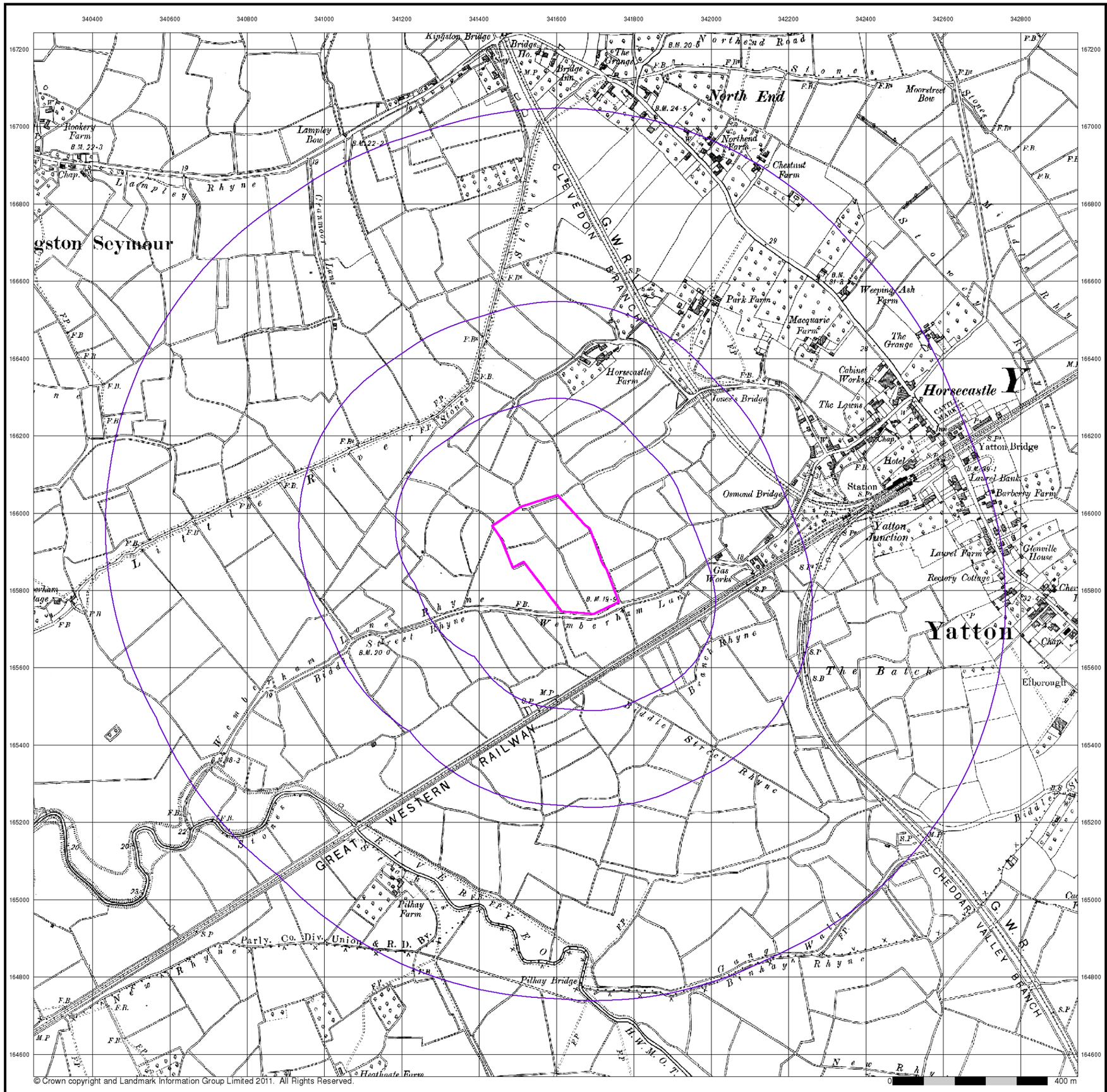


Envirocheck®

Somerset

Published 1904

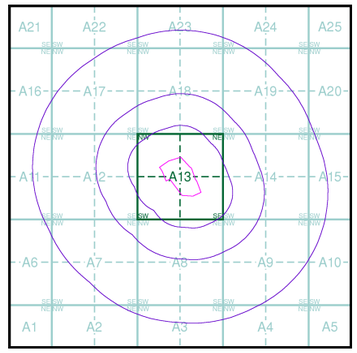
Source map scale - 1:10,560

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.

Map Name(s) and Date(s)

010NE
1904
1:10,560

Historical Map - Slice A



Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

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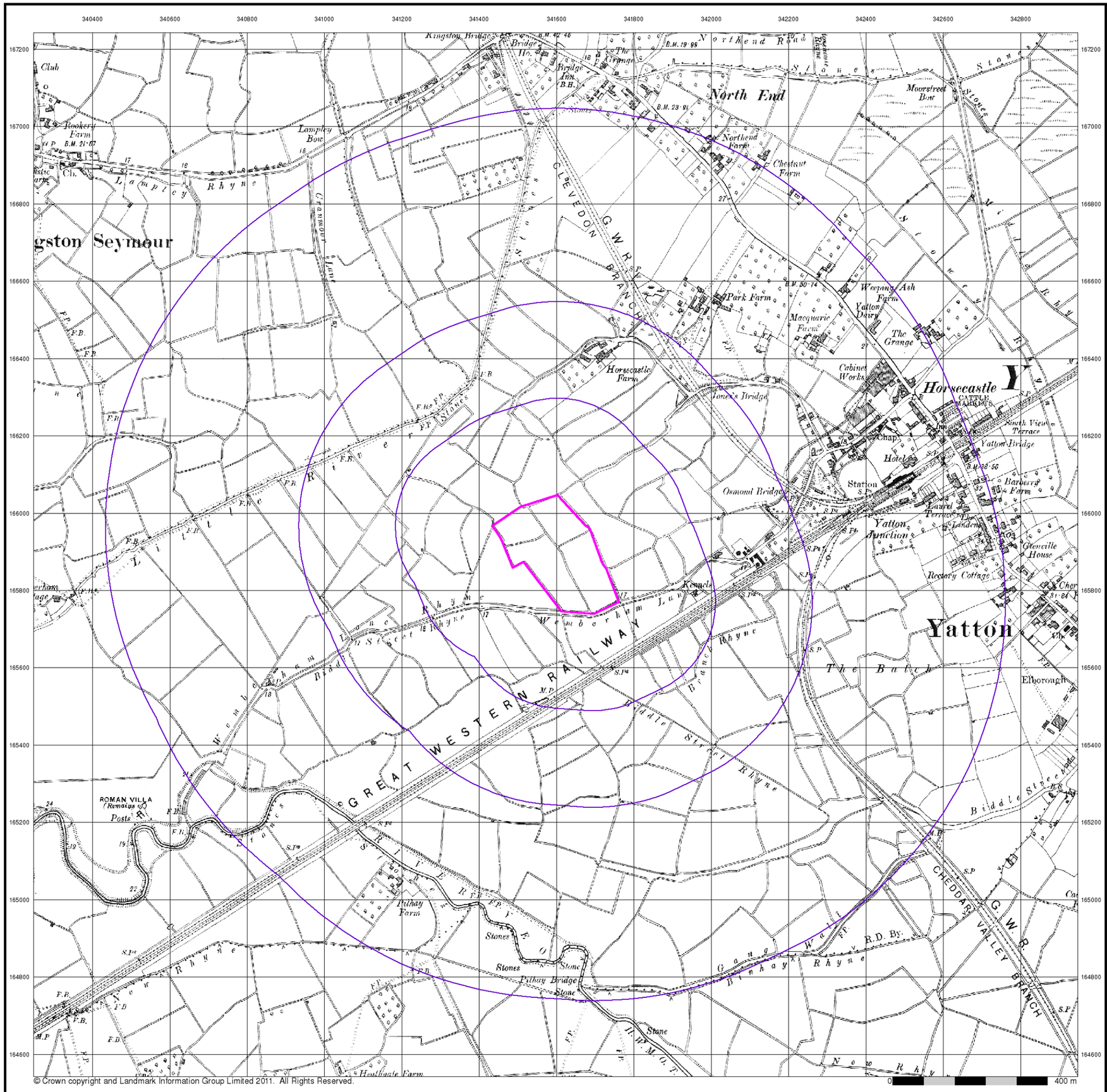


Envirocheck®

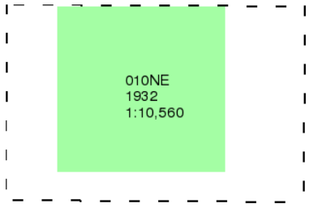
Somerset

Published 1932

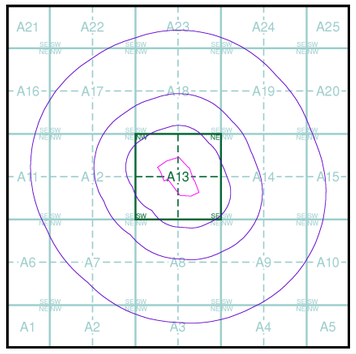
Source map scale - 1:10,560

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.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

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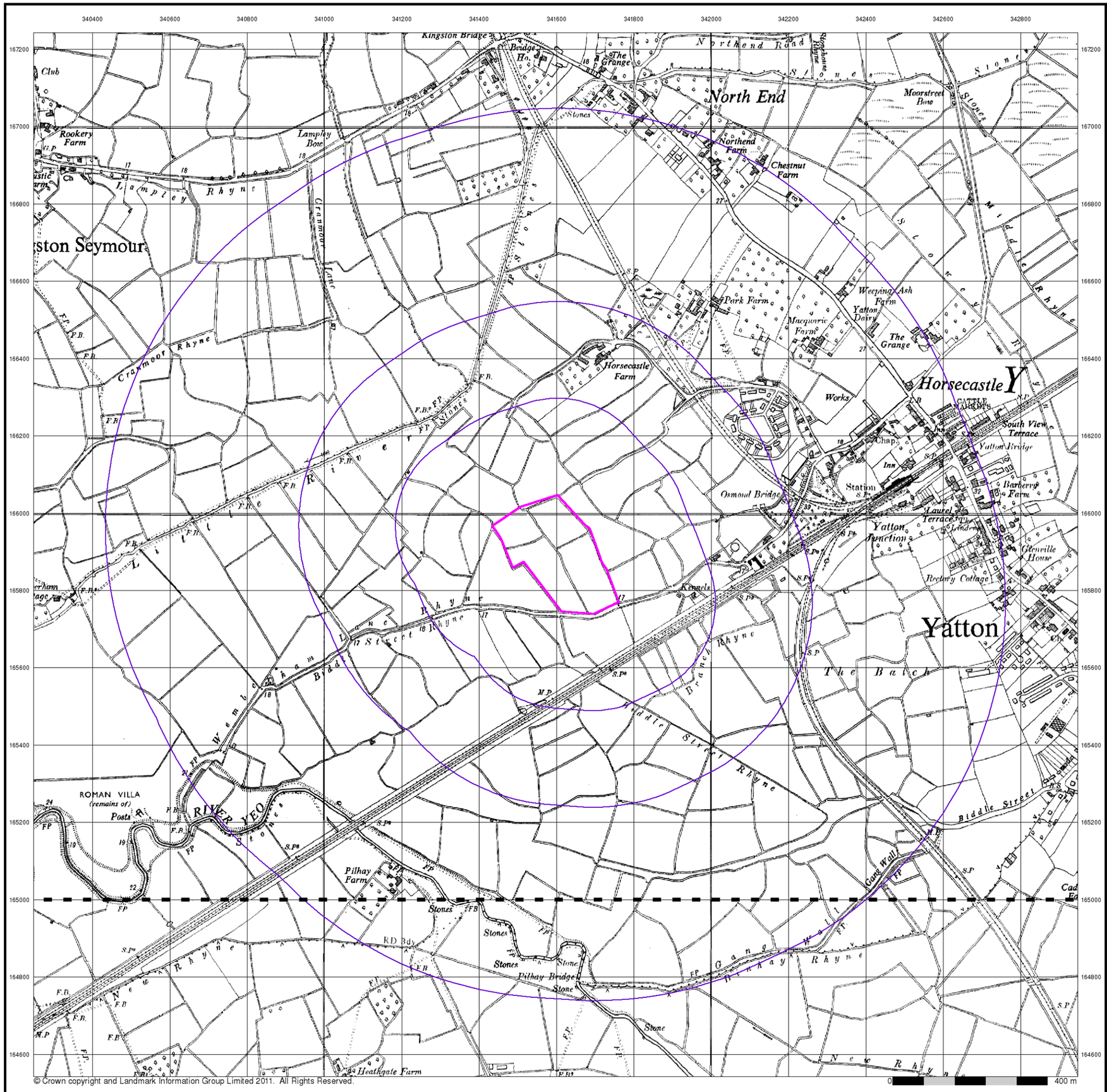


Envirocheck®

Ordnance Survey Plan

Published 1960 - 1961

Source map scale - 1:10,000

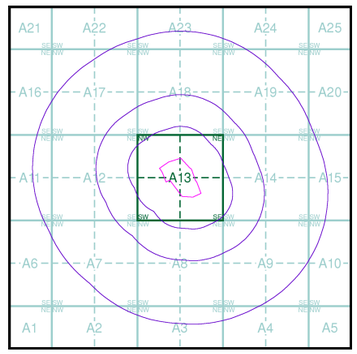
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some 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)

ST46NW
1961
1:10,560

ST46SW
1960
1:10,560

Historical Map - Slice A



Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

Site Details

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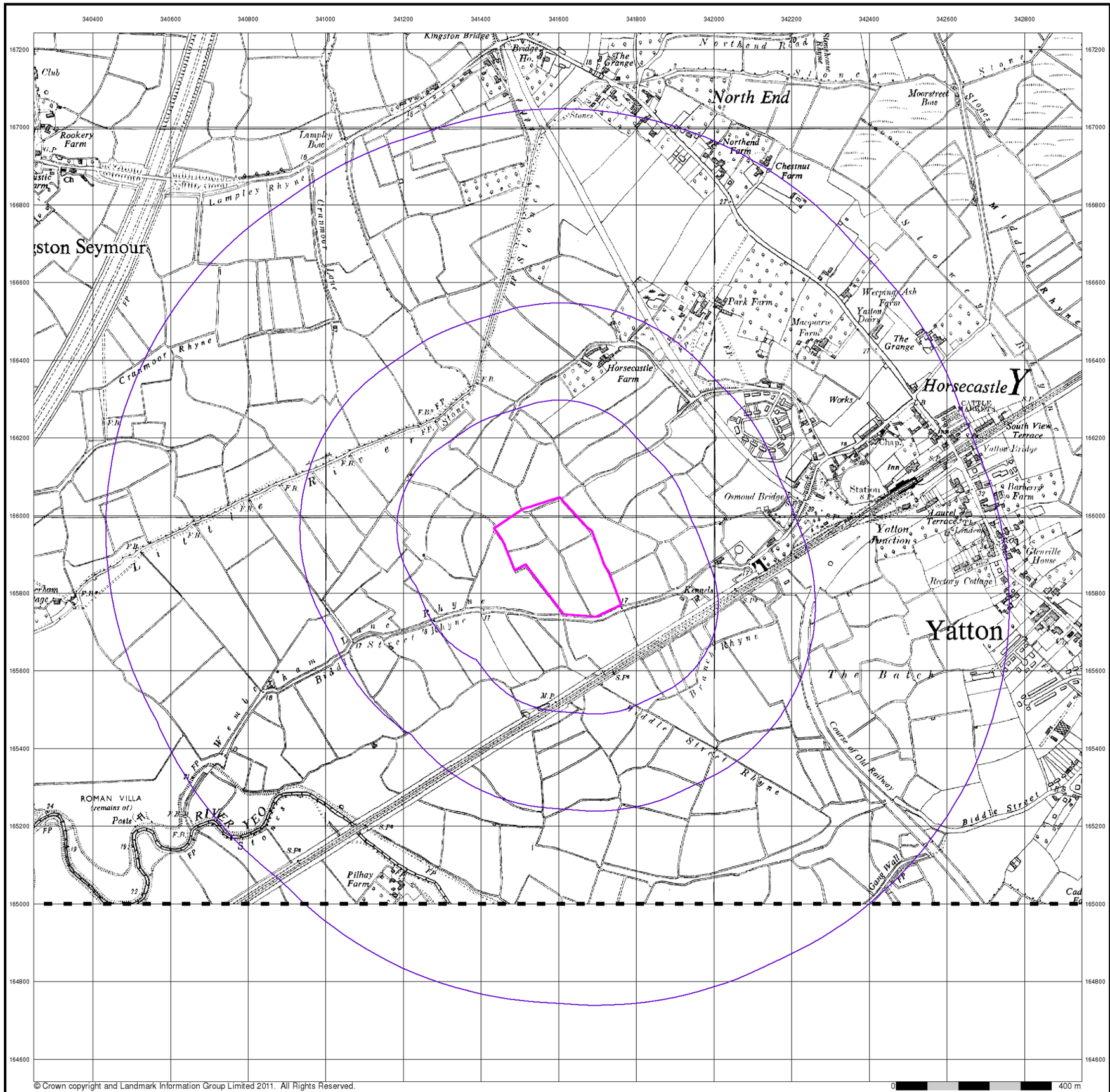


Envirocheck®

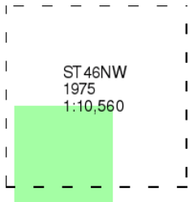
Ordnance Survey Plan

Published 1975

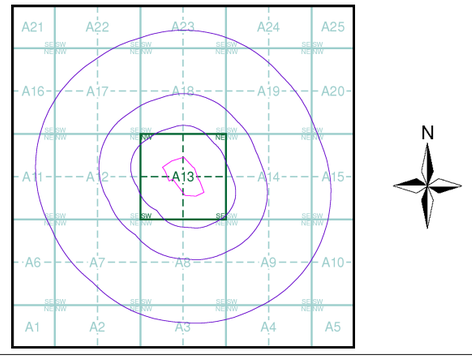
Source map scale - 1:10,000

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)



Historical Map - Slice A



Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

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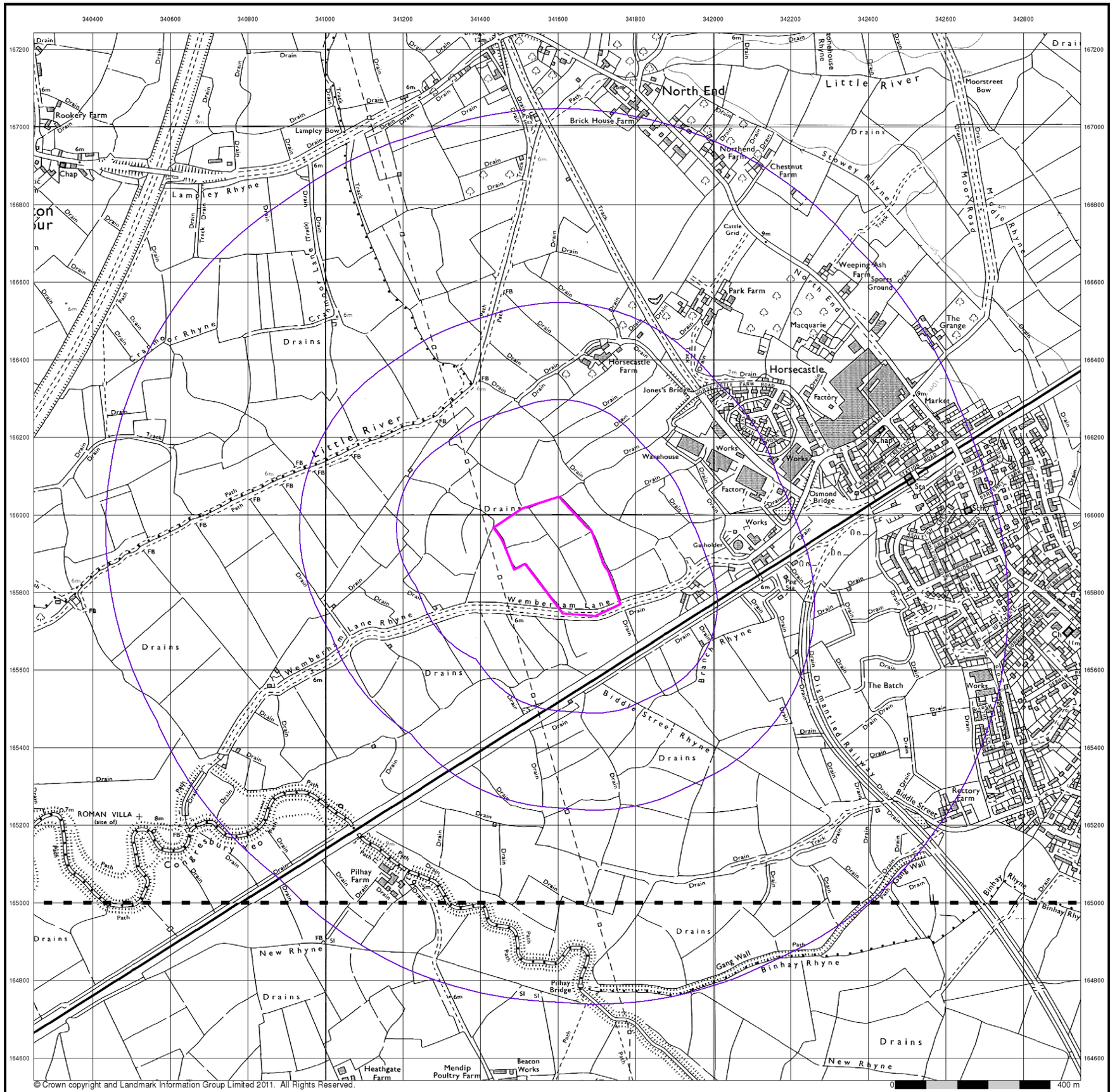


Envirocheck®

Ordnance Survey Plan

Published 1981 - 1982

Source map scale - 1:10,000

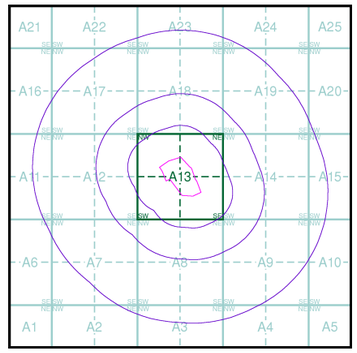
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some 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)

ST46NW
1982
1:10,000

ST46SW
1981
1:10,000

Historical Map - Slice A



Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

Site Details

Smart Systems Ltd, Arnolds Way, Yatton, BRISTOL, BS49 4QN

Landmark® Information Group

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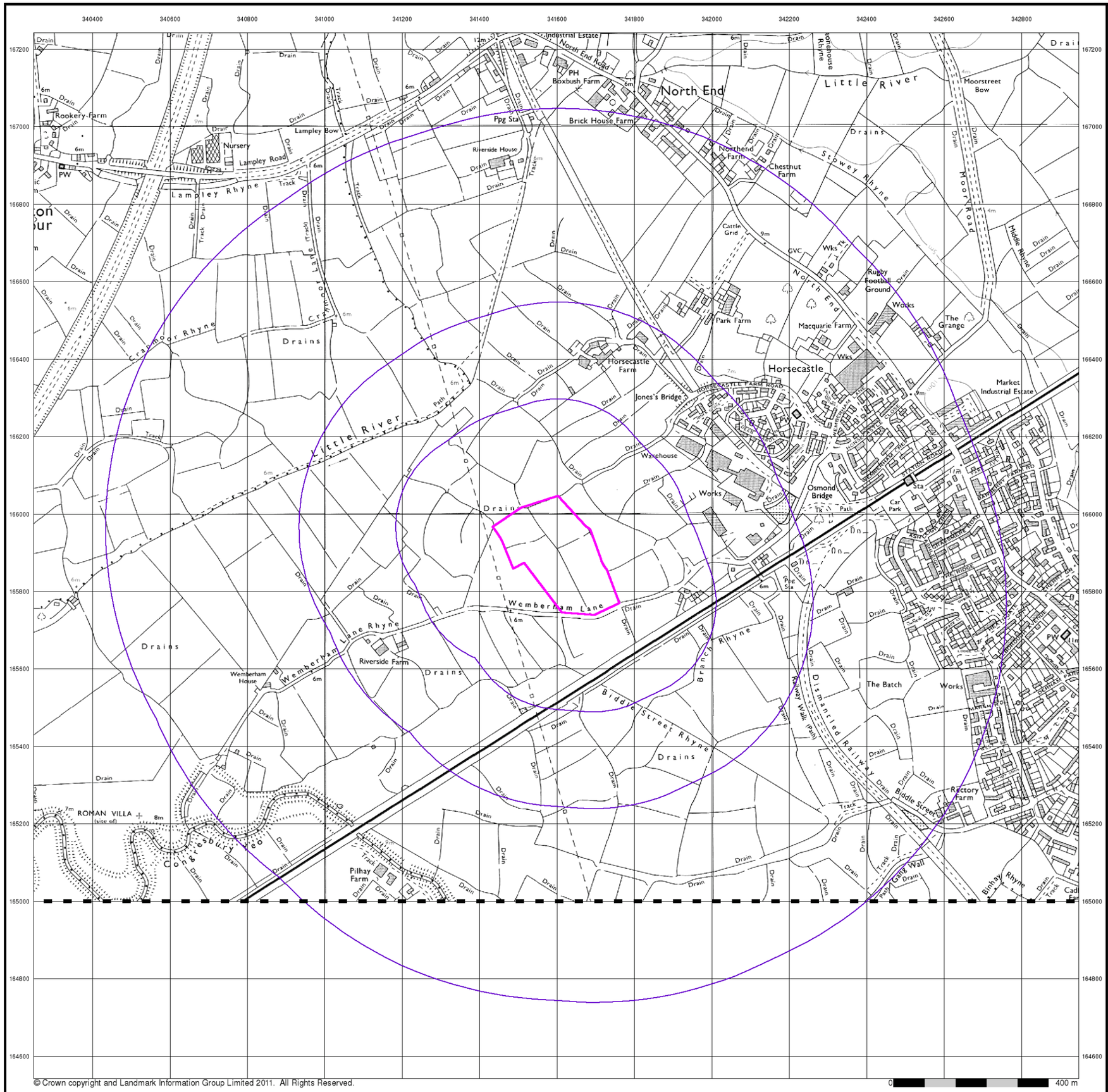
Web: www.envirocheck.co.uk



Envirocheck®

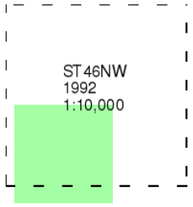
Ordnance Survey Plan

Published 1992

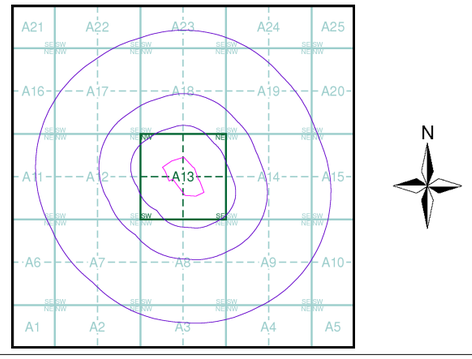
Source map scale - 1:10,000

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)



Historical Map - Slice A



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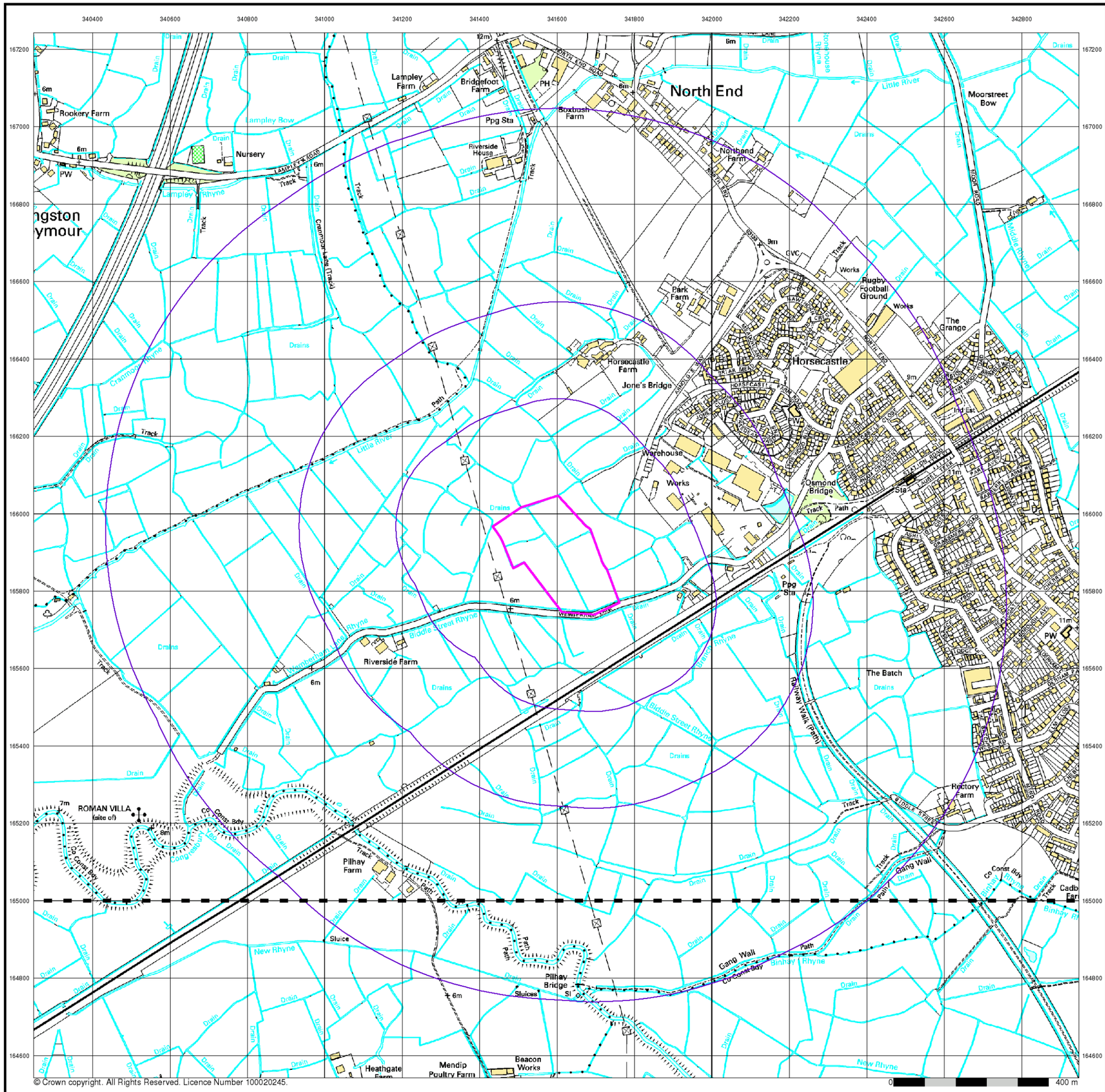


Envirocheck®

10k Raster Mapping

Published 1999

Source map scale - 1:10,000

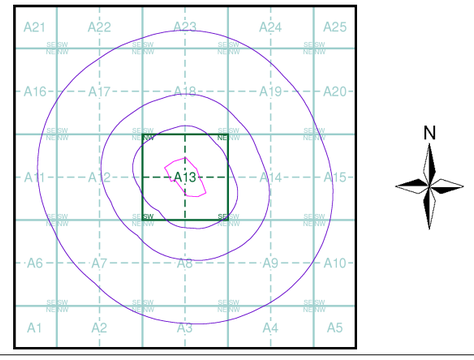
The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks 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)

ST46NW
1999
1:10,000

ST46SW
1999
1:10,000

Historical Map - Slice A



Order Details

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National Grid Reference:	341600, 165890
Slice:	A
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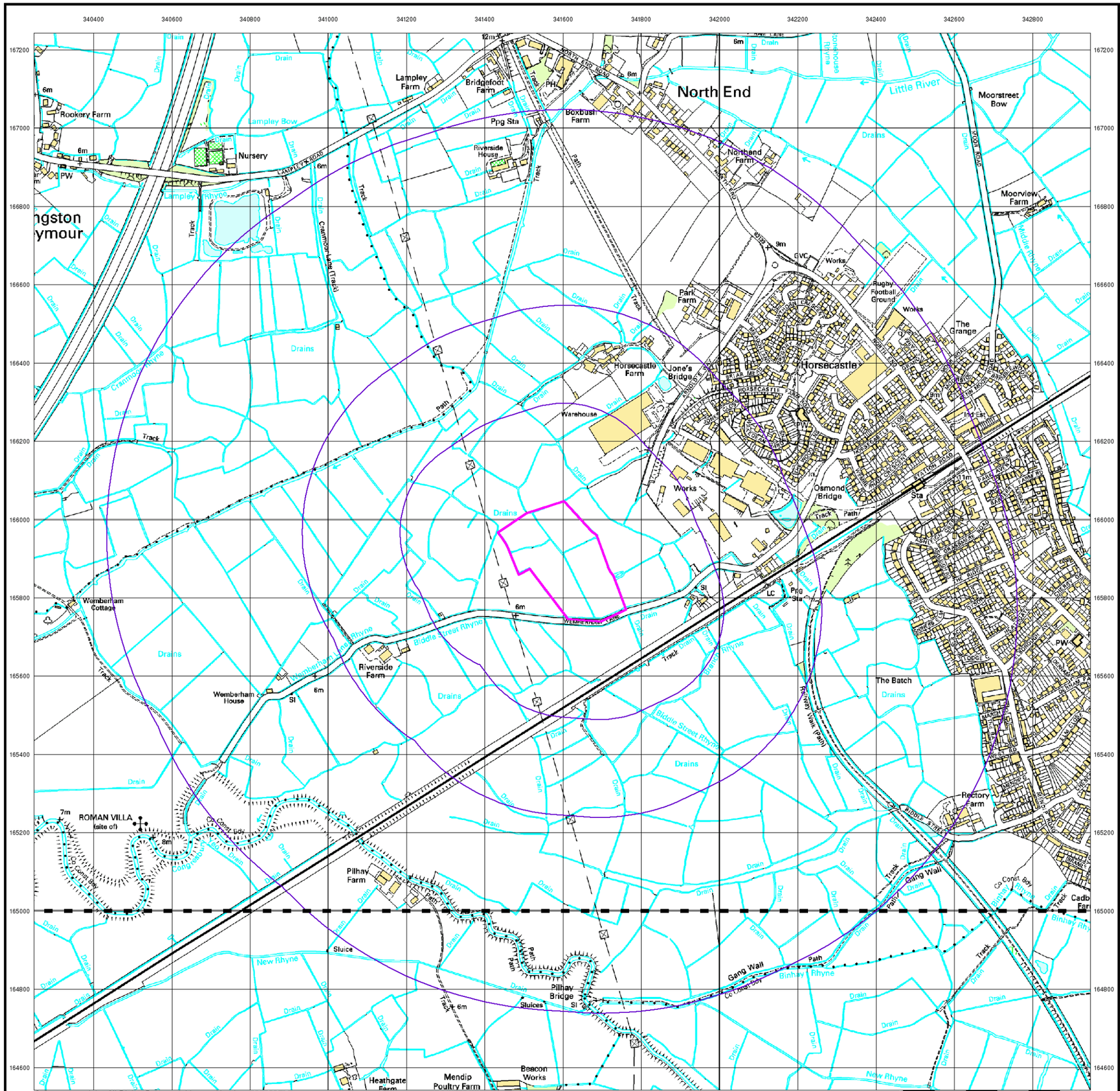


Envirocheck®

10k Raster Mapping

Published 2006

Source map scale - 1:10,000

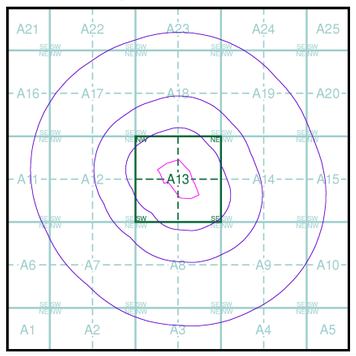
The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks 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)

ST46NW
2006
1:10,000

ST46SW
2006
1:10,000

Historical Map - Slice A

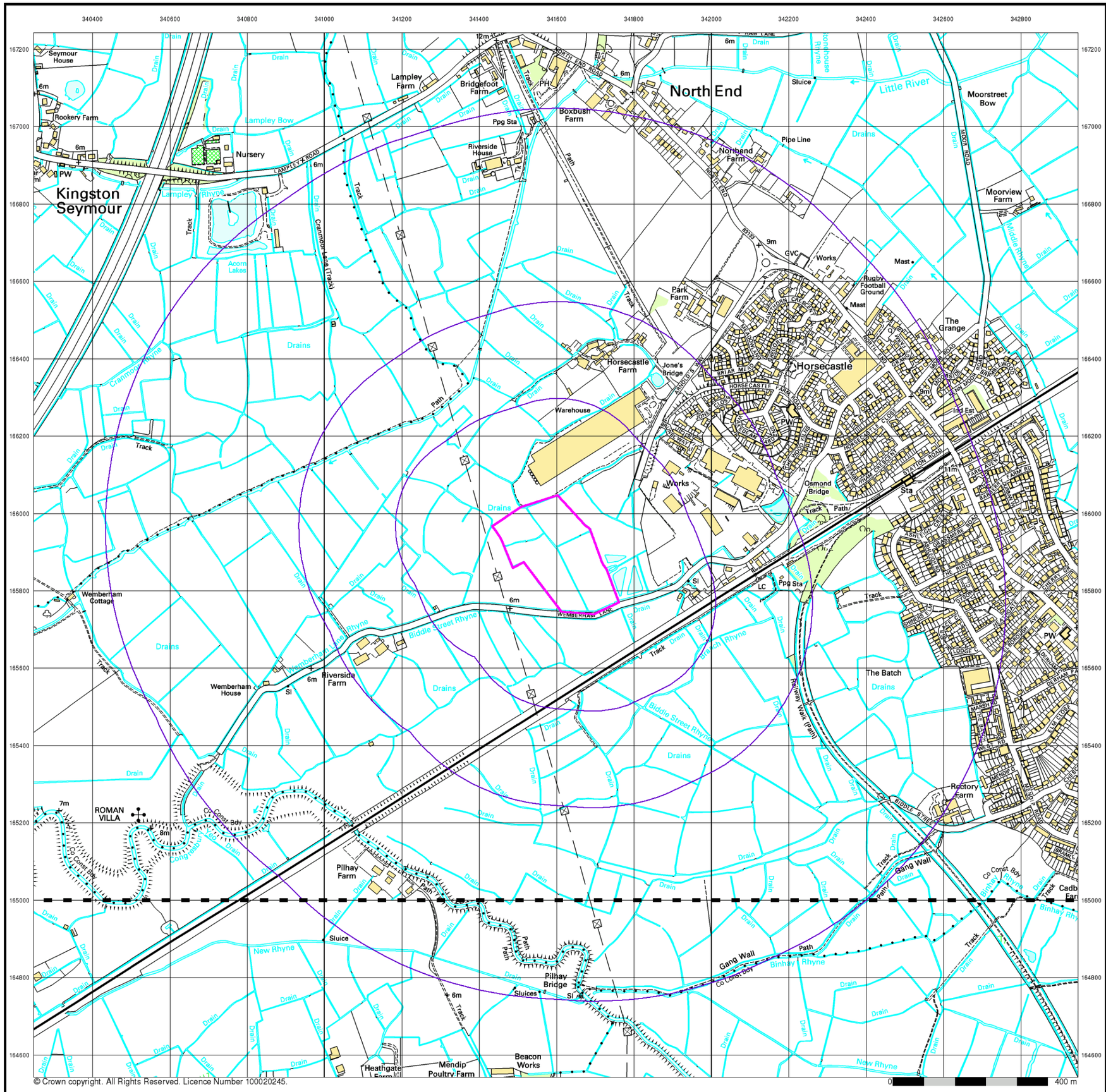


Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

Site Details

Smart Systems Ltd, Arnolds Way, Yatton, BRISTOL, BS49 4QN



Envirocheck®

10k Raster Mapping

Published 2011

Source map scale - 1:10,000

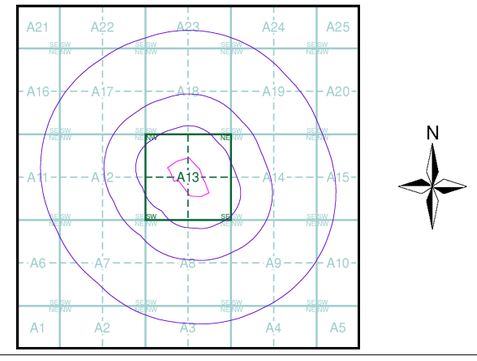
The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks 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)

ST46NW
2011
1:10,000

ST46SW
2011
1:10,000

Historical Map - Slice A



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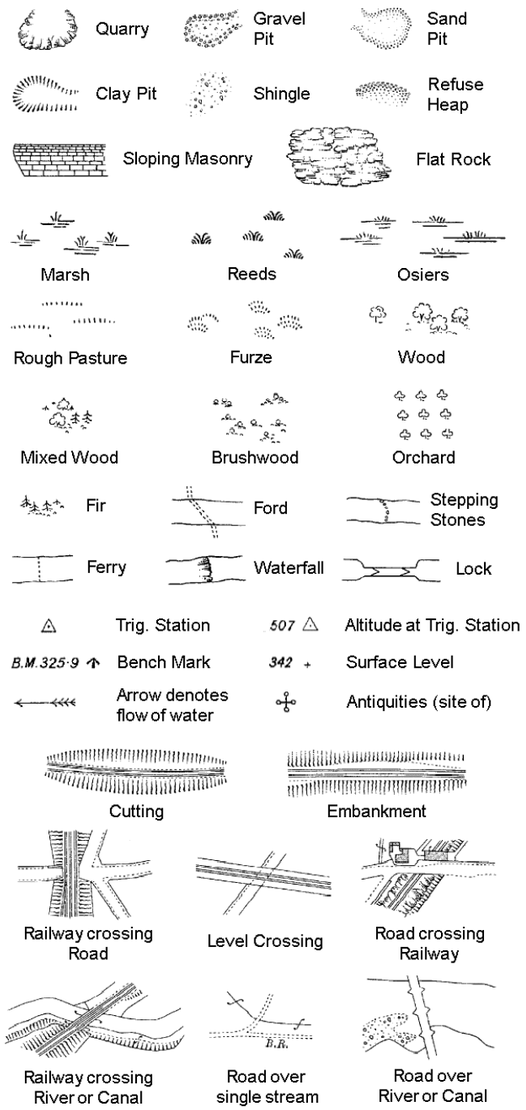
Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

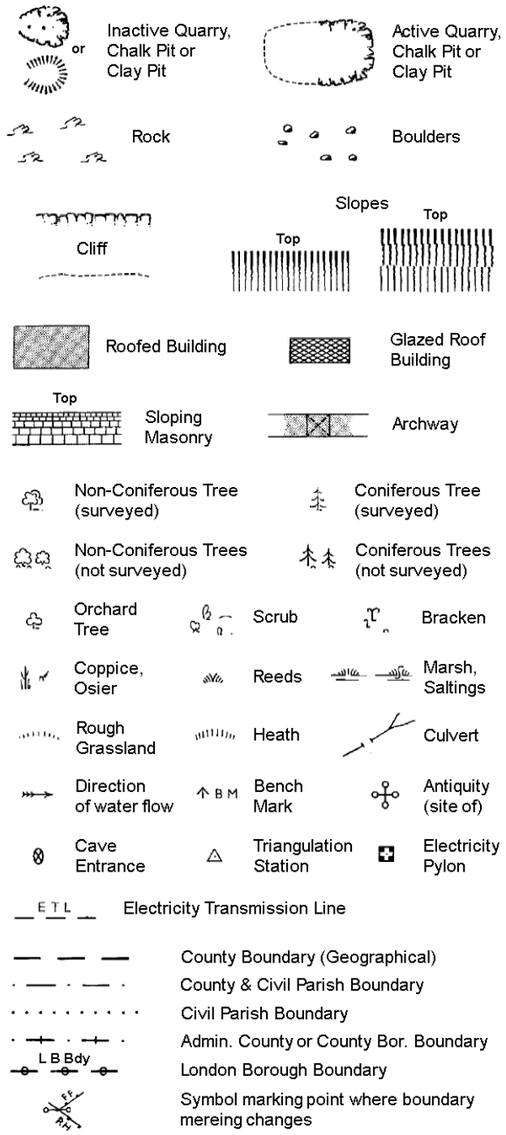
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

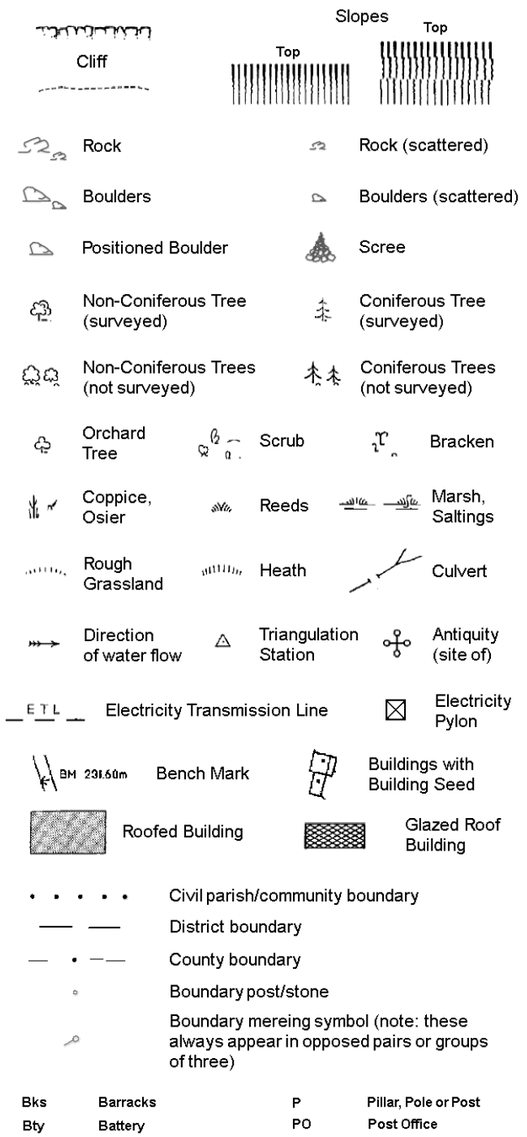
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

Large-Scale National Grid Data 1:2,500 and 1:1,250



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

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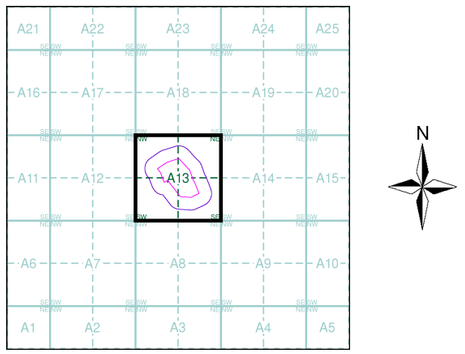
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Somerset	1:2,500	1885 - 1886	1
Somerset	1:2,500	1903	1
Somerset	1:2,500	1931	1
Ordnance Survey Plan	1:2,500	1974	1
Large-Scale National Grid Data	1:2,500	1992	1
Large-Scale National Grid Data	1:2,500	1993	1
Large-Scale National Grid Data	1:2,500	1995	1
Large-Scale National Grid Data	1:2,500	1997	1
Additional SIMs	1:2,500	1974 - 1991	1
Additional SIMs	1:2,500	1990	1

Historical Map - Segment A13



Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	100

Site Details

Smart Systems Ltd, Arnolds Way, Yatton, BRISTOL, BS49 4QN

Landmark® Information Group

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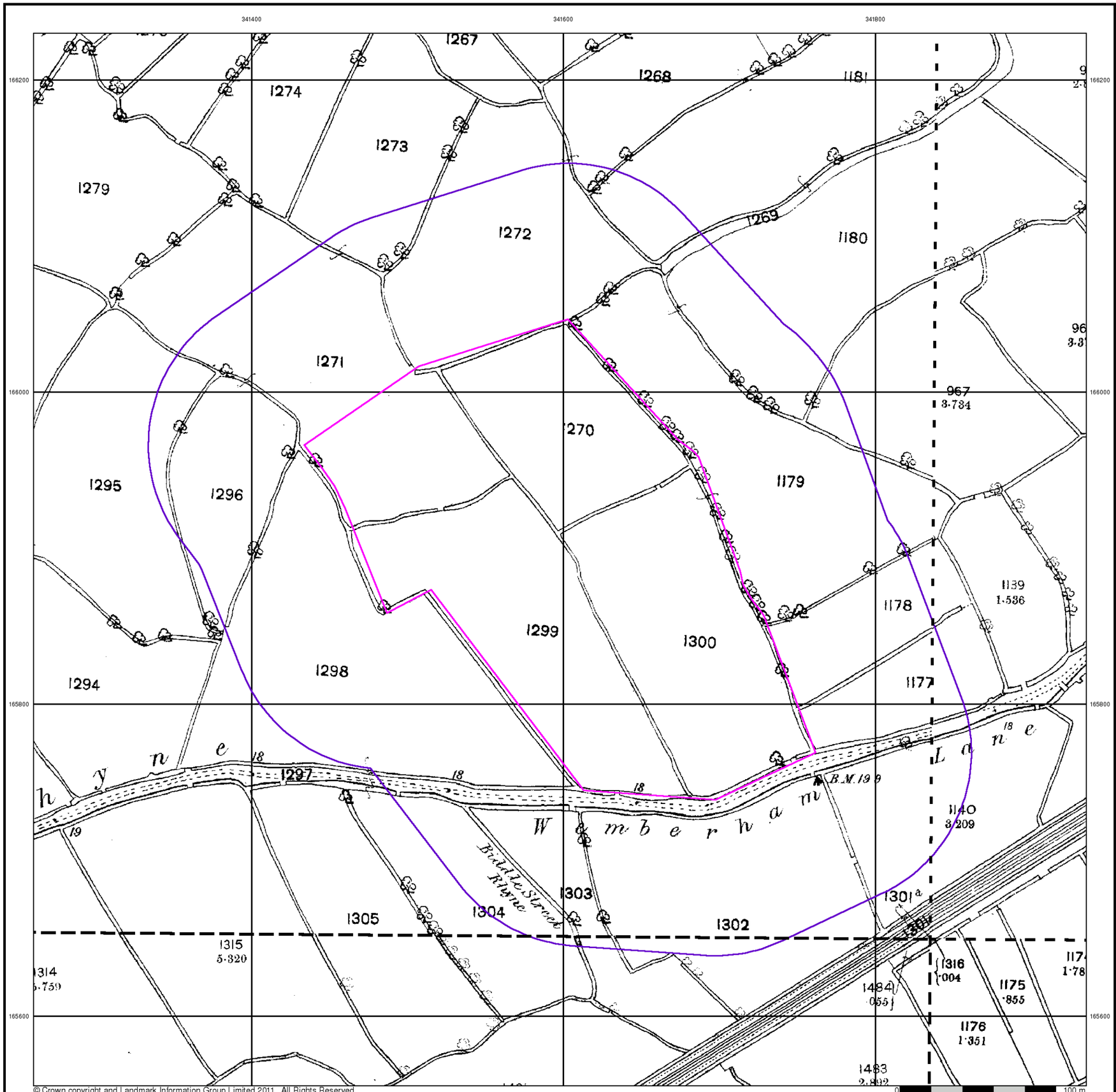


Envirocheck®

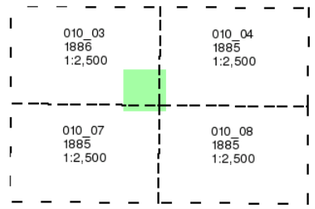
Somerset

Published 1885 - 1886

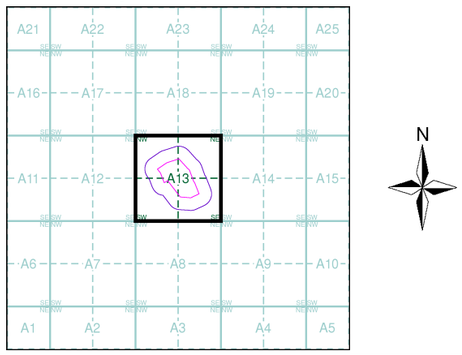
Source map scale - 1:2,500

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



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Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
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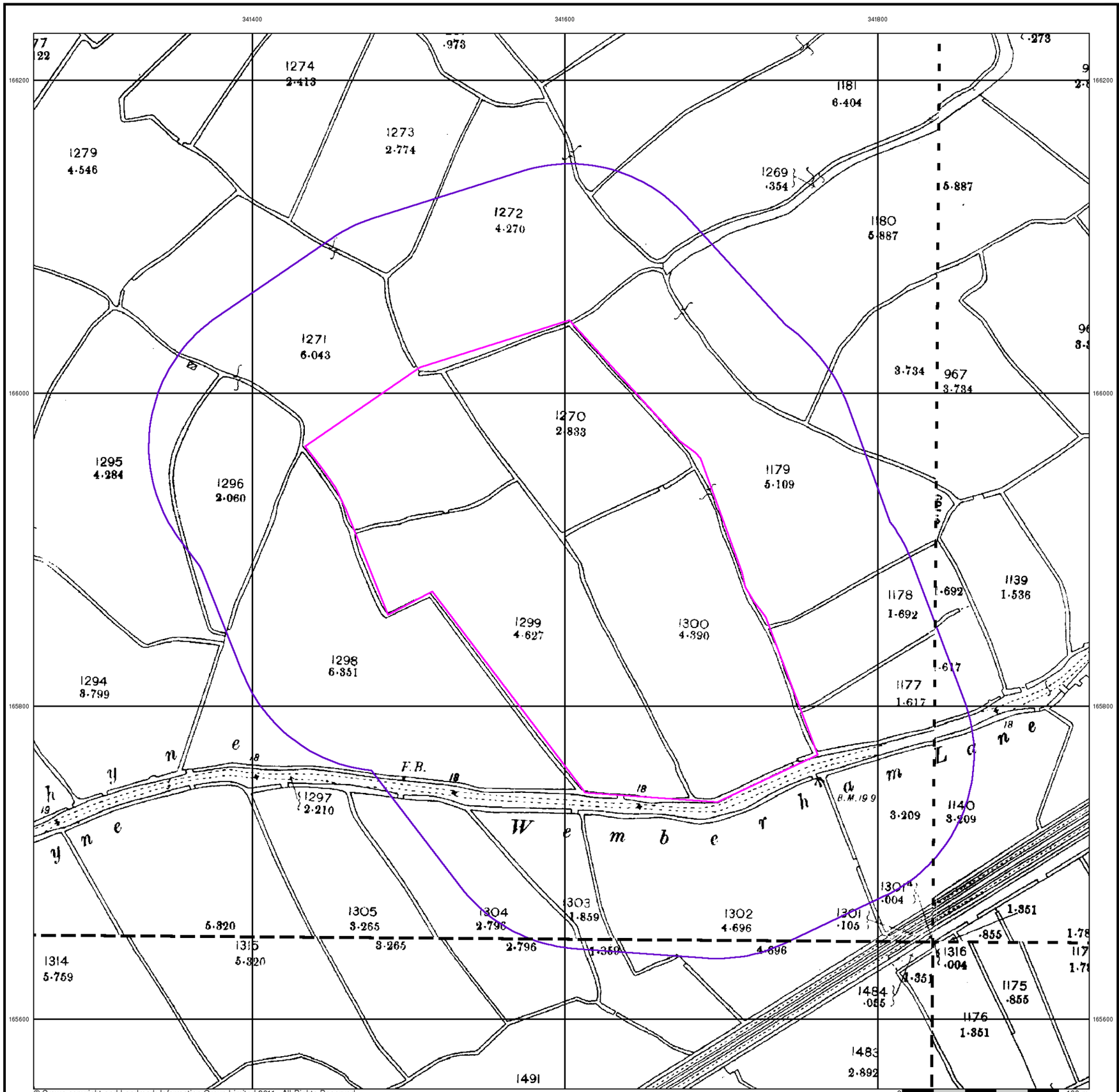


Envirocheck®

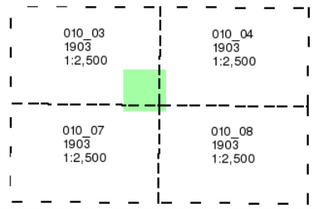
Somerset

Published 1903

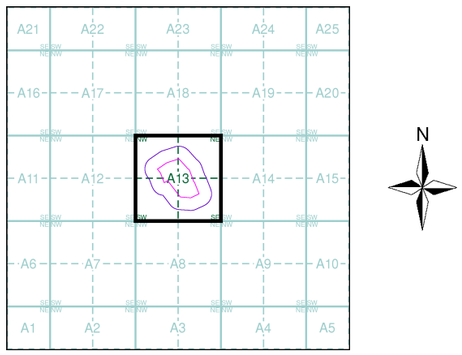
Source map scale - 1:2,500

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

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Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	100

Site Details

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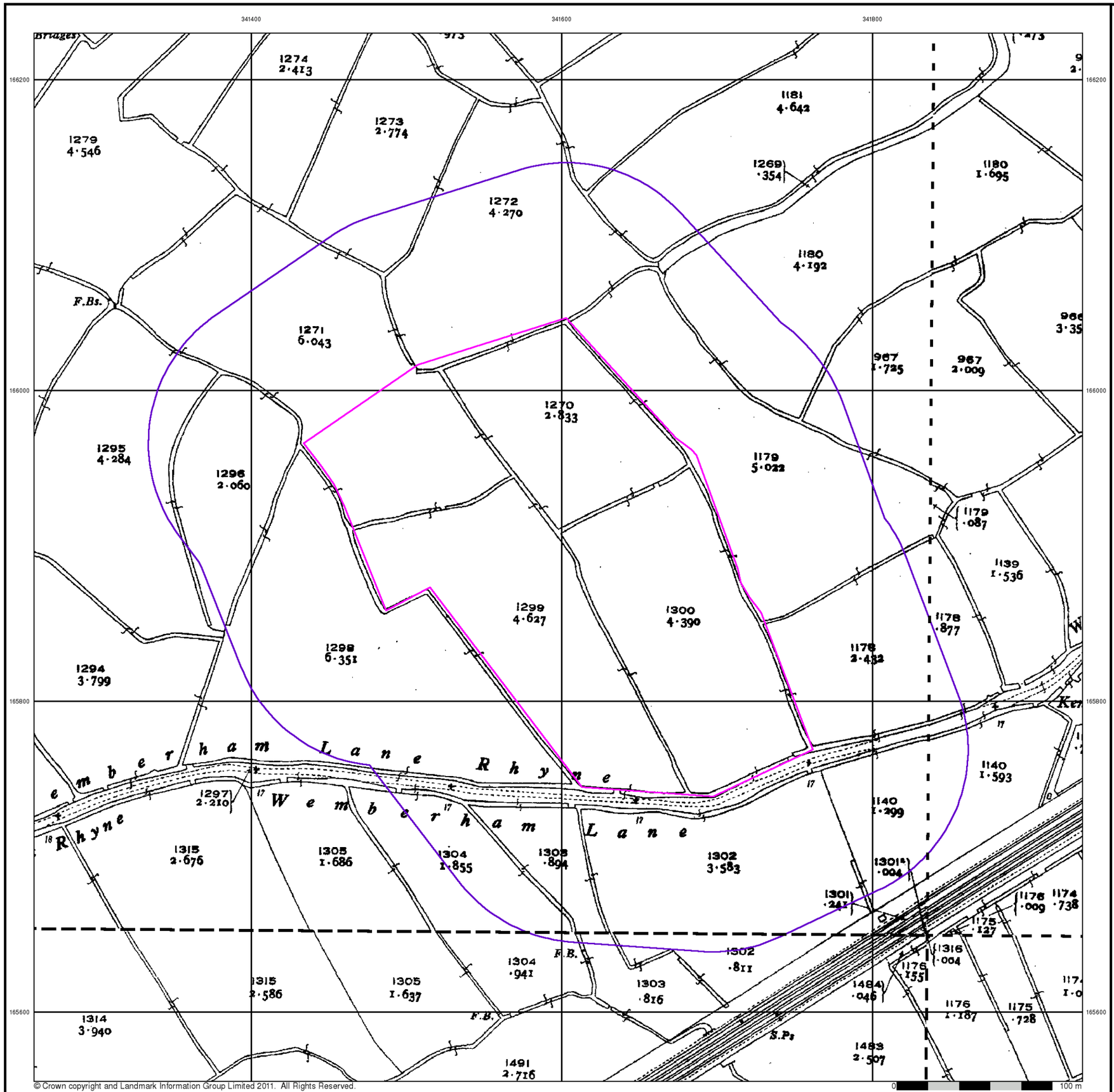


Envirocheck®

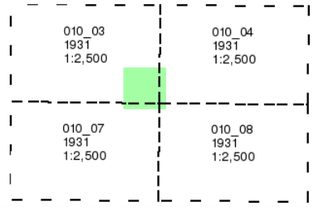
Somerset

Published 1931

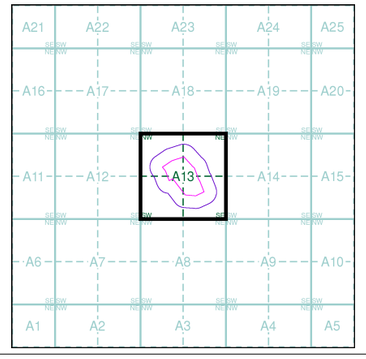
Source map scale - 1:2,500

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:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
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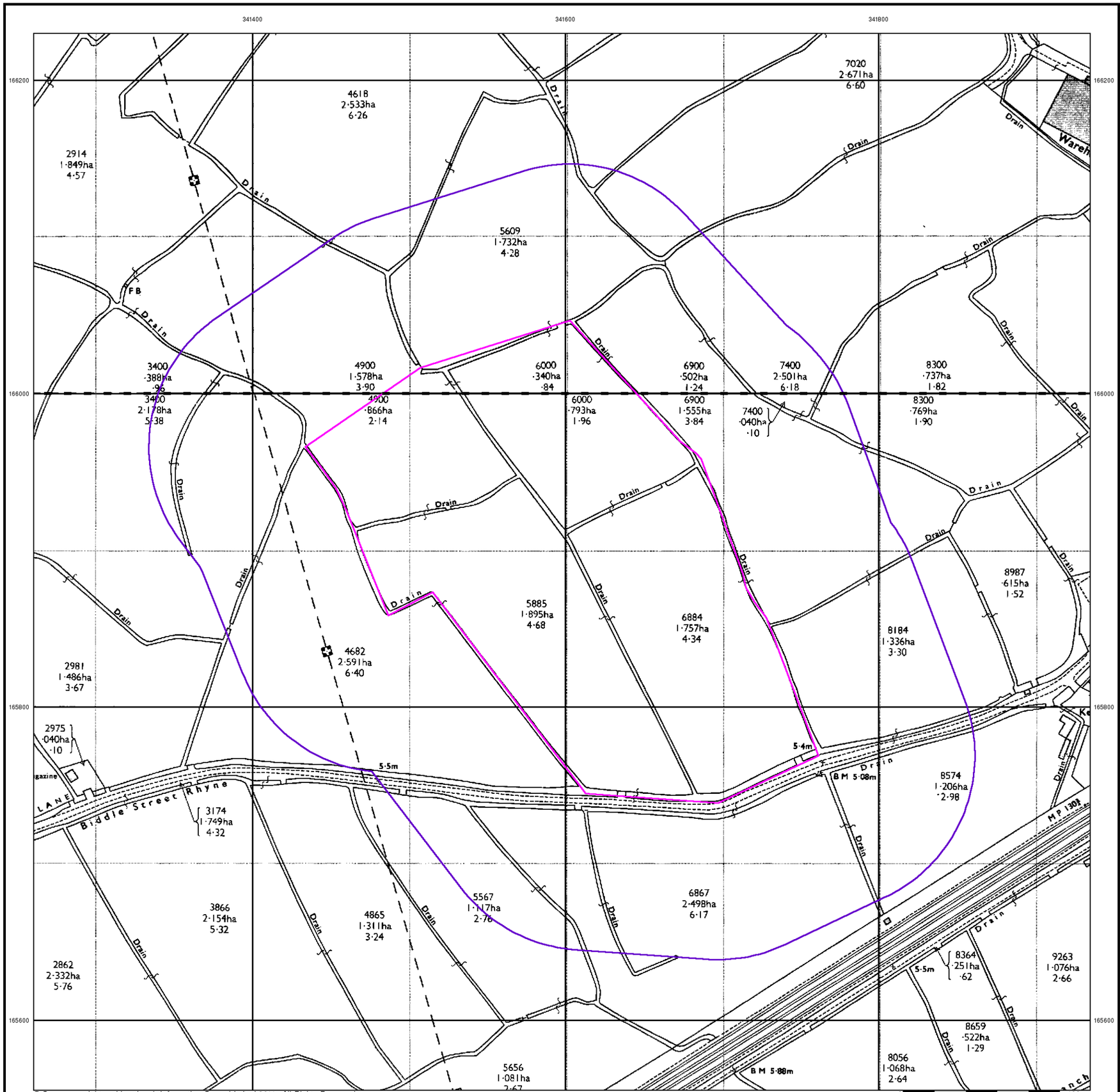
Web: www.envirocheck.co.uk



Envirocheck®

Ordnance Survey Plan

Published 1974

Source map scale - 1:2,500

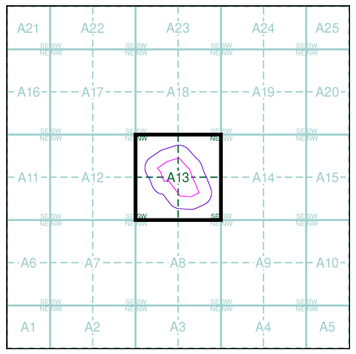
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. 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)

ST4166
1974
1:2,500

ST4165
1974
1:2,500

Historical Map - Segment A13



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Order Number:	37066161_1_1
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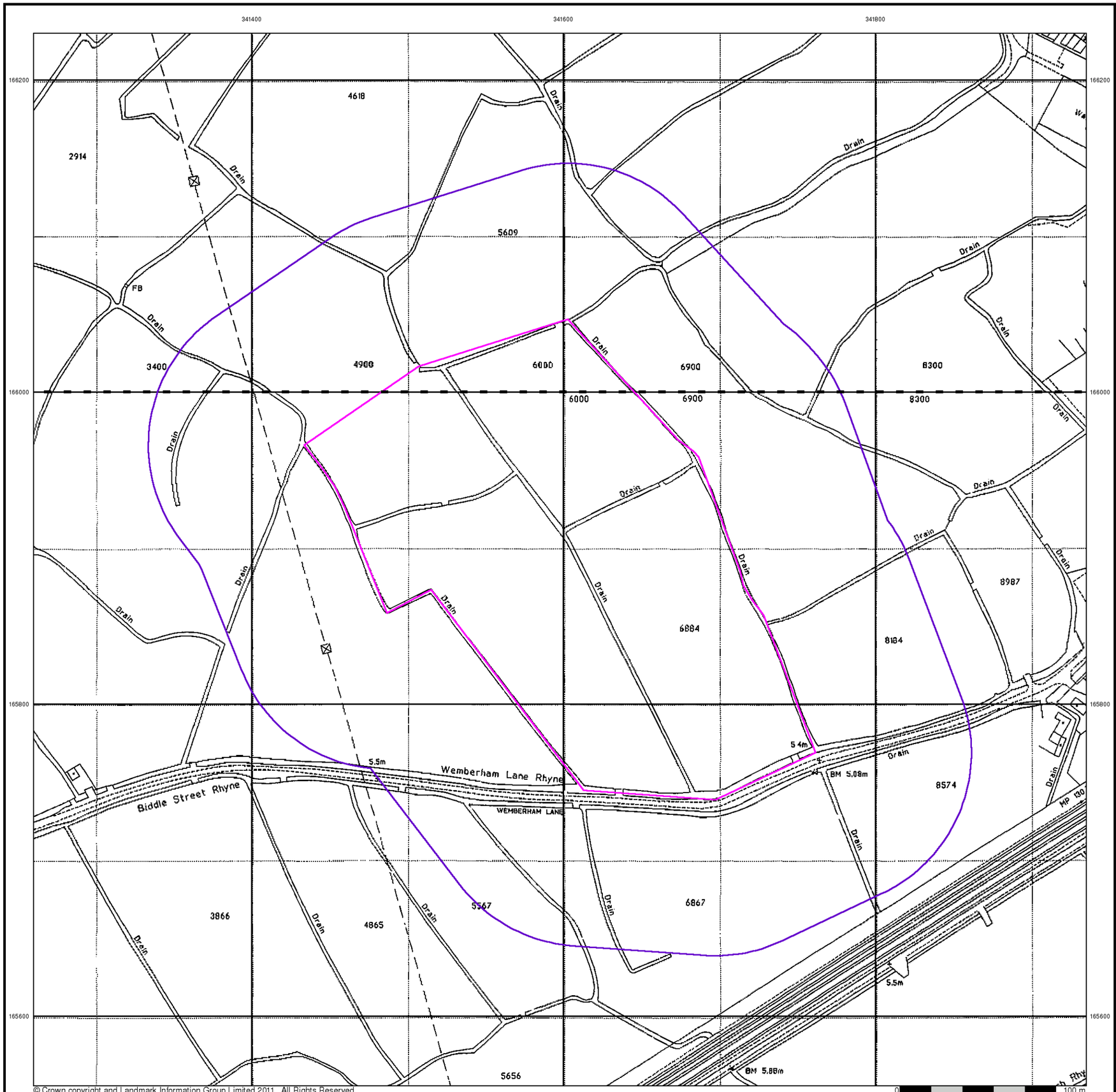


Envirocheck®

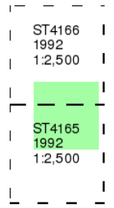
Large-Scale National Grid Data

Published 1992

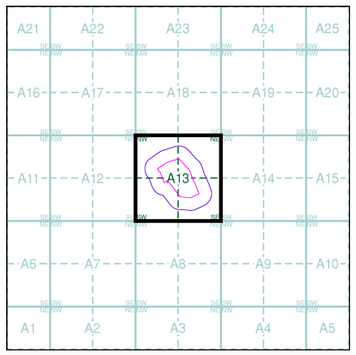
Source map scale - 1:2,500

'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:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	100

Site Details

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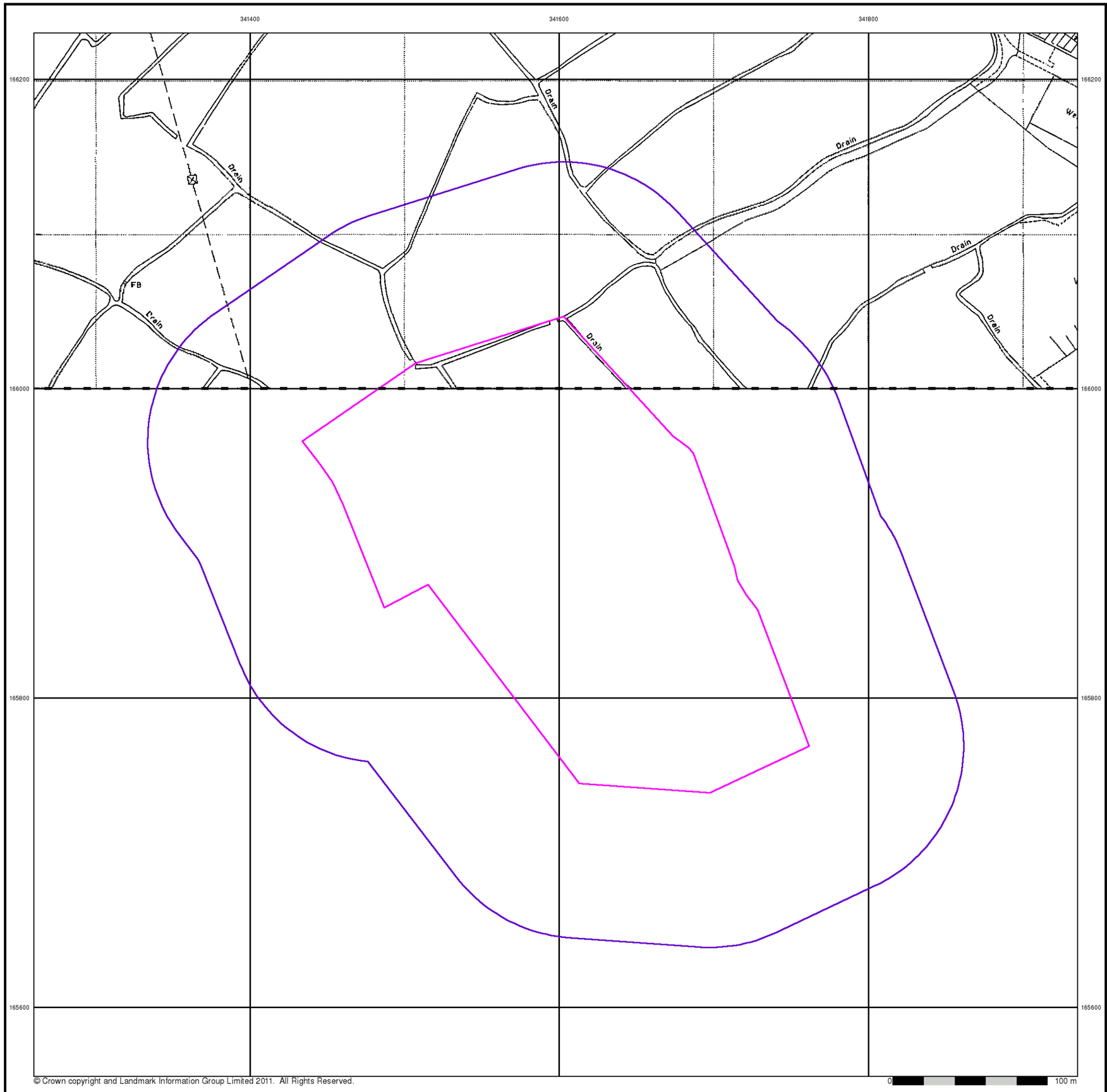


Envirocheck®

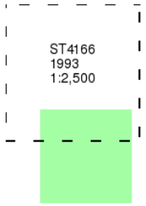
Large-Scale National Grid Data

Published 1993

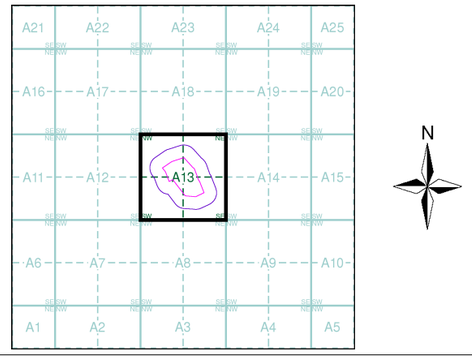
Source map scale - 1:2,500

'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:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	100

Site Details

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Landmark® Information Group

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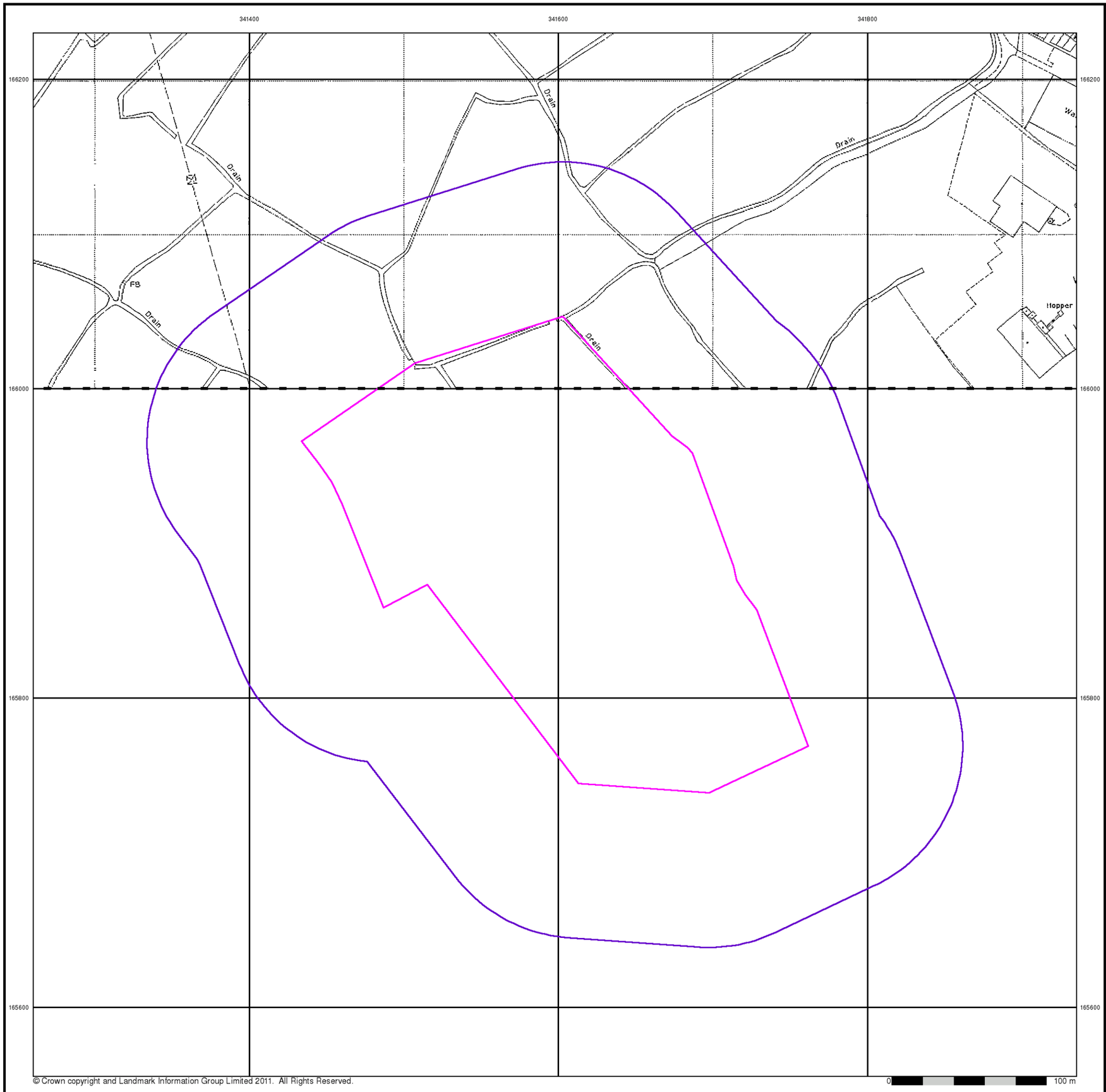
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Envirocheck®

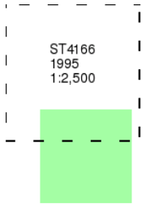
Large-Scale National Grid Data

Published 1995

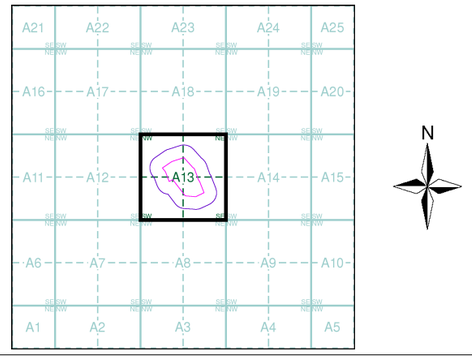
Source map scale - 1:2,500

'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



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Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	100

Site Details

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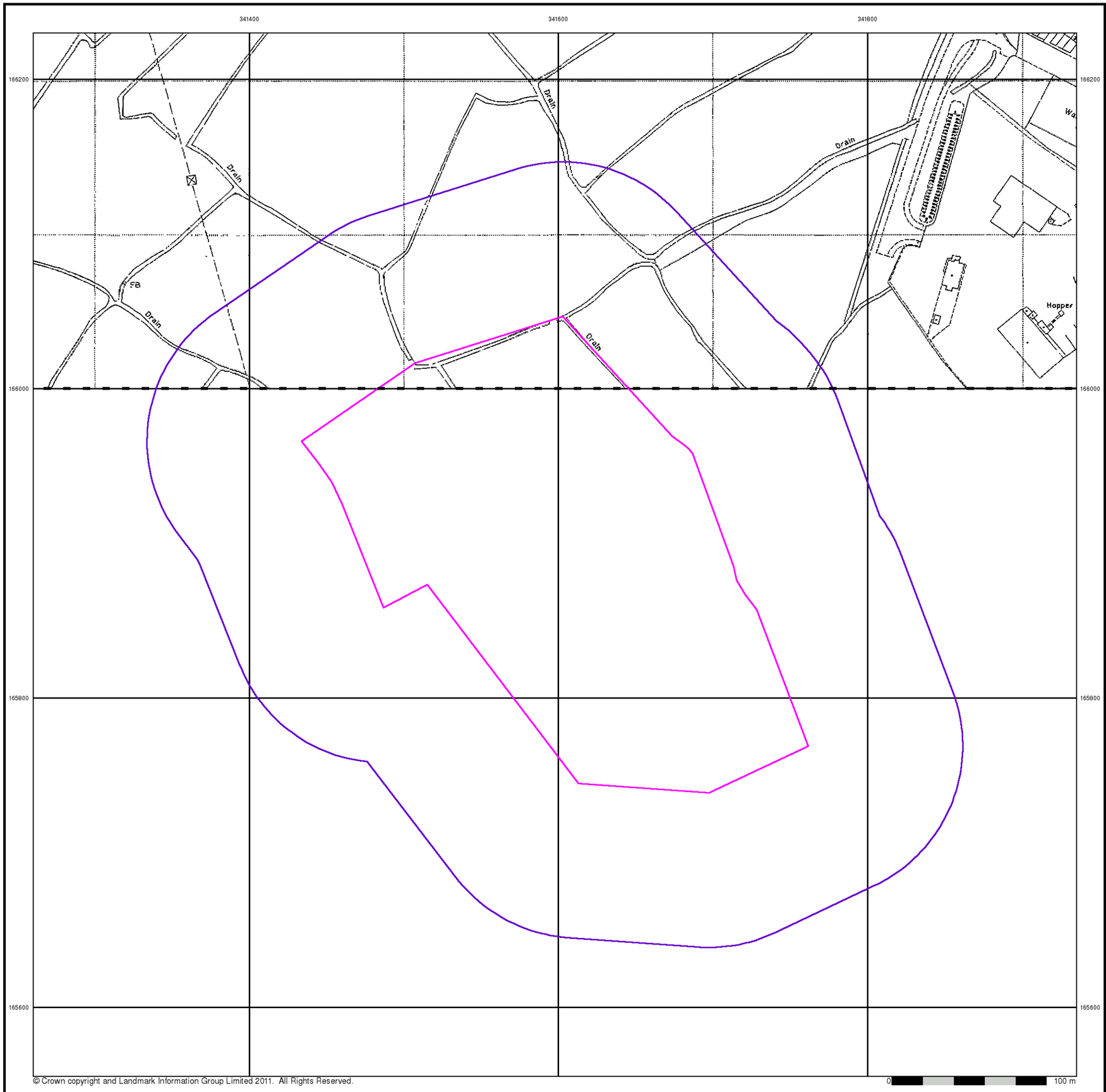


Envirocheck®

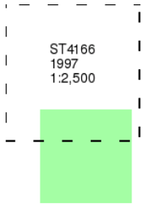
Large-Scale National Grid Data

Published 1997

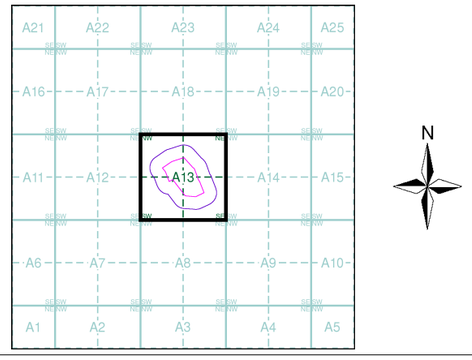
Source map scale - 1:2,500

'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



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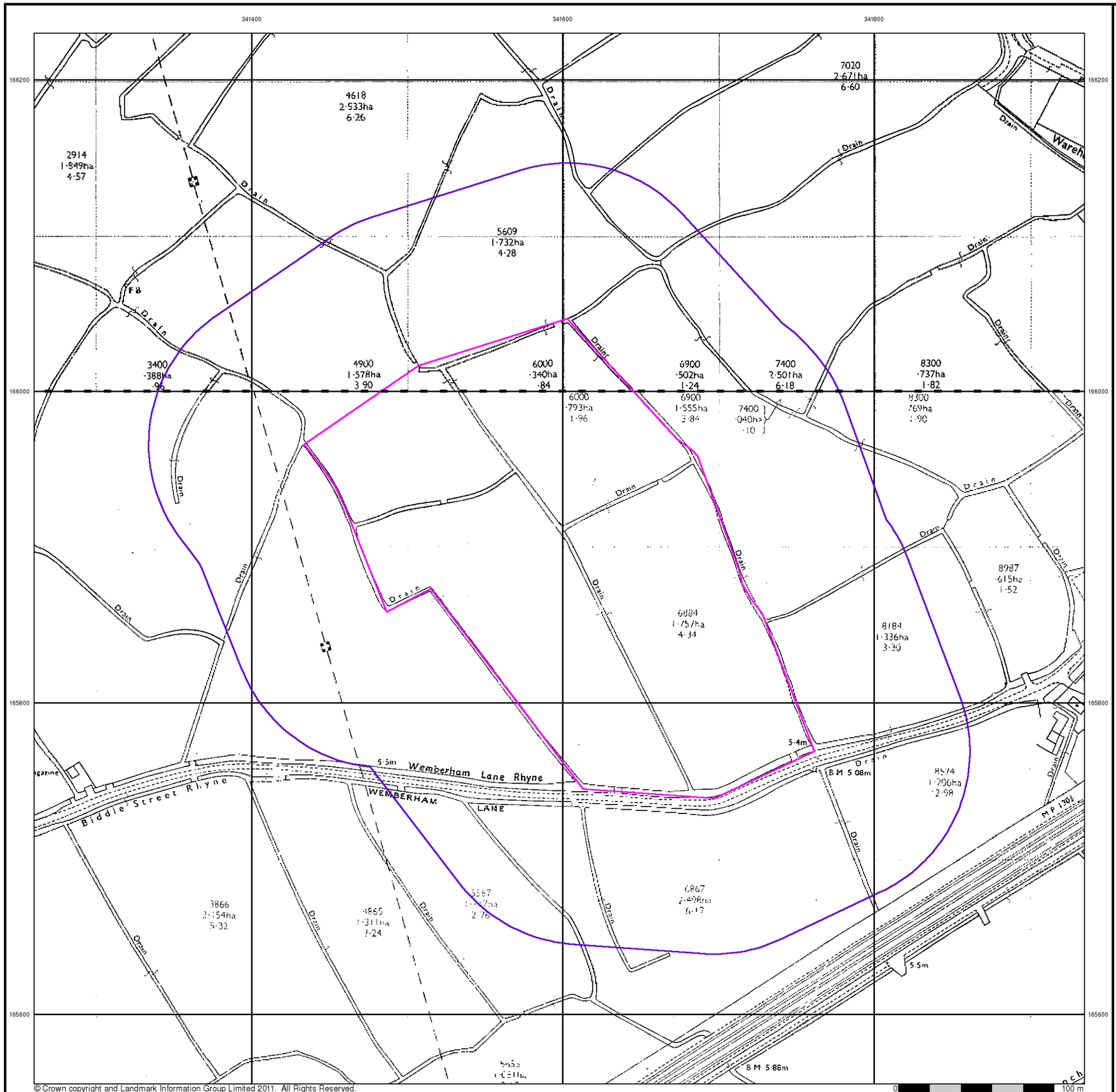


Envirocheck®

Additional SIMs

Published 1974 - 1991

Source map scale - 1:2,500

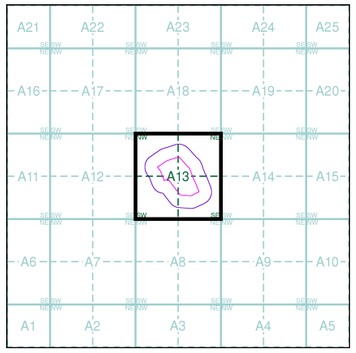
The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps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

Map Name(s) and Date(s)

ST4166
1974
1:2,500

ST4165
1991
1:2,500

Historical Map - Segment A13



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Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	100

Site Details

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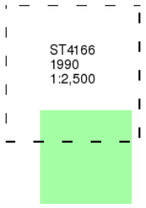
Additional SIMs

Published 1990

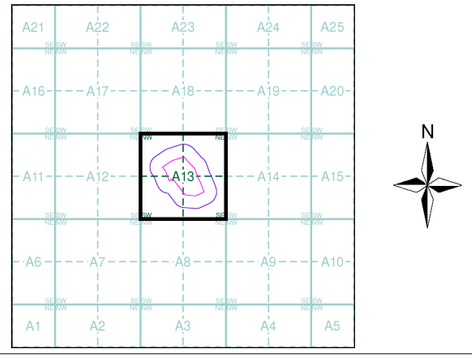
Source map scale - 1:2,500

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



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Search Buffer (m):	100

Site Details

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Landmark® Information Group

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Fax: 0844 844 9951
Web: www.envirocheck.co.uk

Appendix 3

Envirocheck Report

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
37066161_1_1

Customer Reference:
34392/SDP/RAN

National Grid Reference:
341600, 165890

Slice:
A

Site Area (Ha):
5.65

Search Buffer (m):
1000

Site Details:

Smart Systems Ltd, Arnolds Way
Yatton
BRISTOL
BS49 4QN

Client Details:

Miss A Seymour
Eastwood & Partners Ltd
St Andrews House
23 Kingfield Road
Sheffield
S11 9AS

Contents

Introduction

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

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

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Natural England Copyright Notice

Ove Arup Copyright Notice

Peter Brett Associates Copyright Notice

Radon Potential dataset Copyright Notice

Report Version v47.0

Envirocheck®

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1		1		3
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control	pg 2		1		
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 2		1	1	
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature		Yes			
Pollution Incidents to Controlled Waters					
Prosecutions Relating to Authorised Processes					
Prosecutions Relating to Controlled Waters					
Registered Radioactive Substances					
River Quality	pg 2				1
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 2				1
Water Abstractions	pg 3			1	2 (*3)
Water Industry Act Referrals					
Groundwater Vulnerability	pg 4	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 4	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 4	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences	pg 4	Yes	Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 4	Yes	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
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Recorded Landfill Sites	pg 6				1
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS Recorded Mineral Sites					
BGS 1:625,000 Solid Geology	pg 7	Yes	n/a	n/a	n/a
Brine Compensation Area			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 7		Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 7	Yes		n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 7	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 7	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 7	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 8		1		24
Fuel Station Entries					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves	pg 11			1	
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest	pg 11		1		
Special Areas of Conservation					
Special Protection Areas					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	**Discharge Consents** Operator: The Treasurer, Clifton Foot Beagles Property Type: Kennels Location: Clifton Foot Beagles Kennels, Wemberham Lane, Yatton, Avon Authority: Environment Agency, South West Region Catchment Area: River Congresbury Yeo Reference: 072398 Permit Version: 1 Effective Date: 21st September 1993 Issued Date: 29th September 1993 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Soakaway **Status: New Consent, by Application (Water Resources Act 1991, Section 113 & Schedule 12)** Positional Accuracy: Located by supplier to within 100m	A14SW (E)	189	1	341950 165770
2	**Discharge Consents** Operator: Mr Michael Burdge Property Type: Domestic Property (Single) Location: Pilhay Farm Hewish, Puxton, Somerset, Somerset, Bs49 4ar Authority: Environment Agency, South West Region Catchment Area: River Congresbury Yeo Reference: Npswqd000561 Permit Version: 1 Effective Date: 12th February 2008 Issued Date: 12th February 2008 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Onto Land Receiving Water: Tributary Of River Yeo **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	855	1	341132 165038
3	**Discharge Consents** Operator: R M Wayne Properties Property Type: Domestic Property (Multiple) Location: Industrial Development At (Hewish), Hewish, Weston Super Mare, Avon, Bs24 6re Authority: Environment Agency, South West Region Catchment Area: River Congresbury Yeo Reference: 071131 Permit Version: 1 Effective Date: 30th April 1990 Issued Date: Not Supplied Revocation Date: 23rd March 2007 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Congreesbury Yeo **Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A3NW (S)	910	1	341520 164840
4	**Discharge Consents** Operator: Mr And Mrs S Morris Property Type: Livestock Production, Food Production Location: Weeping Ash Farm, North End, Yatton, Avon Authority: Environment Agency, South West Region Catchment Area: River Congresbury Yeo Reference: 072451 Permit Version: 1 Effective Date: 10th December 1993 Issued Date: 17th December 1993 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Soakaway **Status: New Consent, by Application (Water Resources Act 1991, Section 113 & Schedule 12)** Positional Accuracy: Located by supplier to within 100m	A19NE (NE)	973	1	342400 166620

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Integrated Pollution Prevention And Control** Name: Smart Systems Limited Location: Smart Systems Limited, Arnolds Way, Yatton, North Somerset, BS49 4QN Authority: Environment Agency, South West Region Permit Reference: KP3434FE Original Permit Ref: Kp3434fe Effective Date: Not Supplied **Status: Valid** Application Type: Application App. Sub Type: New Positional Accuracy: Located by supplier to within 10m Activity Code: 2.3 A(1) (A) Activity Description: Surface Treating Metals And Plastics; Electrolytic/Chemical Greater Than 30 Cubic Metres Primary Activity: Y Activity Code: 6.4 B (A) (I) Activity Description: Coating, Printing & Textiles; Coating >20 T/A Applied As Solid Or Liquid With Release To Air Primary Activity: N	A13NE (NE)	199	1	341850 166070
6	**Local Authority Pollution Prevention and Controls** Name: Stowell Concrete Location: Arnolds Way, Yatton, BRISTOL, BS49 4QN Authority: North Somerset Council, Environmental Health Department Permit Reference: Qcs13 Dated: 15th April 2003 Process Type: Local Authority Air Pollution Control Description: PG3/16 Mobile screening and crushing processes **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A13NE (NE)	231	2	341905 166032
6	**Local Authority Pollution Prevention and Controls** Name: Stowell Concrete Ltd Location: Arnolds Way, Yatton, BRISTOL, Avon, BS49 Authority: North Somerset Council, Environmental Health Department Permit Reference: Cp11 Dated: 13th November 1992 Process Type: Local Authority Air Pollution Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A13NE (NE)	268	2	341930 166068
	Nearest Surface Water Feature	A13SE (S)	0	-	341634 165744
	River Quality Name: Congresbury Yeo GQA Grade: River Quality B Reach: Congresbury-M5 Estimated Distance (km): 8.2 Flow Rate: Flow less than 1.25 cumecs Flow Type: River Year: 2000	A7SE (SW)	781	1	341178 165093
7	**Substantiated Pollution Incident Register** Authority: Environment Agency - South West Region, Wessex Area Incident Date: 1st August 2008 Incident Reference: 609939 Water Impact: Category 4 - No Impact Air Impact: Category 4 - No Impact Land Impact: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 10m Pollutant: General Biodegradable : Natural Organic Material Pollutant: Inert : Construction / Demolition Material Pollutant: Specific Waste Materials: Commercial Waste Pollutant: Specific Waste Materials: Household Waste Pollutant: Specific Waste Materials: Metal Wastes Pollutant: Specific Waste Materials: Tyres Pollutant: Specific Waste Materials: Vehicles And Vehicle Parts	A9NE (SE)	960	1	342562 165240

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	**Water Abstractions** Operator: G Hardwick Licence Number: 16/52/014/G/007b Permit Version: 100 Location: Yatton Authority: Environment Agency, South West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st February 1967 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A18SE (N)	367	1	341700 166400
9	**Water Abstractions** Operator: F C Burdge Licence Number: 16/52/014/G/007a Permit Version: 100 Location: Yatton Authority: Environment Agency, South West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Keuper Marls and Dolomitic Conglomerate Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st February 1967 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A18SE (NE)	541	1	341905 166495
9	**Water Abstractions** Operator: F C Burdge Licence Number: 165214G007 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, South West Region Abstraction: Agriculture (General) Abstraction Type: Not Supplied Source: Well Daily Rate (m3): 7 Yearly Rate (m3): 2487 Details: Not Supplied Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A18SE (NE)	543	1	341900 166500
	Water Abstractions Operator: M H Crossman Licence Number: 16/52/015/G/007 Permit Version: 100 Location: Yatton (Two Wells) Authority: Environment Agency, South West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st December 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A23SE (N)	1166	1	341800 167195

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: M H Crossman Licence Number: 165215G007 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, South West Region Abstraction: Unspecified Abstraction Type: Not Supplied Source: Borehole Daily Rate (m3): 9 Yearly Rate (m3): 3182 Details: Not Supplied Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A23SE (N)	1171	1	341800 167200
	Water Abstractions Operator: Clevedon Golf Club Licence Number: 165216G024 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, South West Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Spring Daily Rate (m3): 46 Yearly Rate (m3): 4545 Details: Not Supplied Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A24NE (NE)	1612	1	342300 167500
	Groundwater Vulnerability Soil Classification: Not classified Map Sheet: Sheet 36 Mid Glamorgan Scale: 1:100,000	A13SE (E)	0	1	341605 165887
	Drift Deposits None				
	Bedrock Aquifer Designations Aquifer Desination: Secondary Aquifer - B	A13SE (E)	0	3	341605 165887
	Superficial Aquifer Designations Aquifer Designation: Unproductive Strata	A13SE (E)	0	3	341605 165887
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial/Tidal Models Boundary Accuracy: As Supplied	A13SE (E)	0	1	341605 165887
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied	A13SE (SE)	111	1	341779 165650
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial/Tidal Models Boundary Accuracy: As Supplied	A13SE (E)	0	1	341605 165887
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied	A13SE (SE)	106	1	341799 165670
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (SE)	111	1	341752 165641
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied	A13SE (SE)	124	1	341744 165625

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	A13SE (SE)	125	1	341744 165623
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (SE)	127	1	341739 165619
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied	A13SE (SE)	127	1	341739 165620
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied	A13SE (SE)	128	1	341729 165615
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied	A13SE (S)	131	1	341714 165610
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (SE)	132	1	341729 165611
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (SE)	143	1	341779 165620
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial/Tidal Models Boundary Accuracy: As Supplied	A13SE (S)	174	1	341689 165565
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial/Tidal Models Boundary Accuracy: As Supplied	A13SE (S)	180	1	341684 165560
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial/Tidal Models Boundary Accuracy: As Supplied	A8NE (S)	185	1	341679 165555
	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	A8NW (S)	210	1	341590 165536
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Landfill Coverage Name: North Somerset Unitary Council - Has supplied landfill data		0	5	341605 165887
10	**Local Authority Recorded Landfill Sites** Location: Not Supplied Reference: Not Supplied Authority: Bath and North East Somerset Council, Planning Services Department **Last Reported Status:** **Unknown** Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Positioned by the supplier Boundary Quality: Moderate	A18SE (N)	524	4	341841 166512

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Triassic mudstones (including Keuper Marl, Dolomitic Conglomerate and Rhaetic)	A13SE (E)	0	3	341605 165887
	Coal Mining Affected Areas In an area which may not be affected by coal mining				
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	0	3	341605 165887
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	208	3	341755 166190
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	0	3	341605 165887
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	208	3	341755 166190
	Potential for Ground Dissolution Stability Hazards No Hazard				
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	0	3	341605 165887
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	0	3	341605 165887
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	208	3	341755 166190
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	0	3	341605 165887
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	208	3	341755 166190
	Radon Potential - Radon Affected Areas Affected Area: The property is in a lower probability radon area, as less than 1% of homes are above the action level Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	0	3	341605 165887
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	0	3	341605 165887

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	**Contemporary Trade Directory Entries** Name: Stowell Concrete Ltd Location: Arnolds Way, Yatton, Bristol, BS49 4QN Classification: Concrete Products **Status: Active** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	204	-	341854 166074
12	**Contemporary Trade Directory Entries** Name: Oven Kleen Location: 52, Wakedean Gardens, Yatton, Bristol, Avon, BS49 4BN Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	527	-	342112 166269
13	**Contemporary Trade Directory Entries** Name: A D Cycle Repairs Location: 58, Wakedean Gardens, Yatton, Bristol, BS49 4BN Classification: Motor Cycle Repairs **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	580	-	342149 166307
14	**Contemporary Trade Directory Entries** Name: Myland R C Location: 4, The Wood Kilns, Yatton, Bristol, BS49 4QF Classification: Hydraulic Systems & Equipment Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	593	-	342246 166156
15	**Contemporary Trade Directory Entries** Name: Michael Burdge Ltd Location: Park Farm, North End Road, Yatton, Bristol, BS49 4AR Classification: Agricultural Machinery - Sales & Service **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	615	-	341968 166541
16	**Contemporary Trade Directory Entries** Name: Search 4 Print Location: 28, Gregory Mead, Yatton, BRISTOL, BS49 4QJ Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	688	-	342181 166436
17	**Contemporary Trade Directory Entries** Name: J & M Transport Location: Care Of Stowell's Yard,Wenberham La, Yatton, Bristol, BS49 4BP Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A14NE (NE)	690	-	342322 166226
18	**Contemporary Trade Directory Entries** Name: C B S Precast Ltd Location: Wemberham House, Wemberham Lane, Yatton, Bristol, BS49 4BT Classification: Concrete Products **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SW (SW)	703	-	340851 165559
19	**Contemporary Trade Directory Entries** Name: Custom Cleans Location: 47, Wemberham Crescent, Yatton, Bristol, BS49 4BD Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (E)	710	-	342406 166070
20	**Contemporary Trade Directory Entries** Name: Classic Clean Location: 48, Hawthorn Crescent, Yatton, Bristol, BS49 4BF Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	786	-	342219 166536
21	**Contemporary Trade Directory Entries** Name: Jewson Ltd Location: Station Incline, Yatton, Bristol, BS49 4AG Classification: Builders' Merchants **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	809	-	342522 166043
22	**Contemporary Trade Directory Entries** Name: Oxford Instruments Plasma Technology Location: North End Road, Yatton, Bristol, BS49 4AP Classification: Scientific Apparatus & Instruments - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	826	-	342366 166427

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
23	**Contemporary Trade Directory Entries** Name: Gordano Packaging Ltd Location: North End Road, Yatton, Bristol, BS49 4AW Classification: Pallets, Crates & Packing Cases **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	888	-	342415 166466
24	**Contemporary Trade Directory Entries** Name: A L Distributors Batavon Location: Weeping Ash Farm, North End Road, Yatton, Bristol, BS49 4AW Classification: Builders' Merchants **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NE (NE)	904	-	342308 166615
25	**Contemporary Trade Directory Entries** Name: Triangle Lift Services Ltd Location: 149, High Street, Yatton, Bristol, BS49 4DB Classification: Lift Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A15NW (E)	961	-	342704 165956
25	**Contemporary Trade Directory Entries** Name: Just Lifts Ltd Location: 149, High Street, Yatton, Bristol, BS49 4DB Classification: Lift Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A15NW (E)	961	-	342704 165956
26	**Contemporary Trade Directory Entries** Name: Overseer Systems Ltd Location: Unit 1, Market Industrial Estate, Yatton, Bristol, BS49 4RF Classification: Control Panel Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (E)	962	-	342598 166268
26	**Contemporary Trade Directory Entries** Name: Gefactive Ltd Location: Unit 4, Market Industrial Estate, Yatton, Bristol, BS49 4RF Classification: Precision Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A20SW (E)	985	-	342618 166279
26	**Contemporary Trade Directory Entries** Name: T E S A (Western) Ltd Location: Unit 5, Market Industrial Estate, Yatton, Bristol, BS49 4RF Classification: Control Panels **Status: Active** Positional Accuracy: Automatically positioned to the address	A20SW (E)	999	-	342630 166286
27	**Contemporary Trade Directory Entries** Name: A J Mechanical Handling Services Ltd Location: Bridge Works, 2, North End Road, Yatton, Bristol, BS49 4AL Classification: Fork Lift Trucks **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A15NW (E)	968	-	342634 166197
27	**Contemporary Trade Directory Entries** Name: Richards Brackets Location: Unit 14, Market Industrial Estate, Yatton, Bristol, BS49 4RF Classification: Bracket Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A15NW (E)	968	-	342623 166225
27	**Contemporary Trade Directory Entries** Name: R P H Motors Location: Bridge Works, 2, North End Road, Yatton, Bristol, BS49 4AL Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A15NW (E)	968	-	342634 166197
27	**Contemporary Trade Directory Entries** Name: Arrow Southwest Location: Bridge Works, 2, North End Road, Yatton, Bristol, BS49 4AL Classification: Commercial Vehicle Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A15NW (E)	968	-	342634 166197
27	**Contemporary Trade Directory Entries** Name: Unity Disposables Location: Unit 13, Market Industrial Estate, Yatton, Bristol, BS49 4RF Classification: Janitorial Equipment - Servicing & Repairs **Status: Active** Positional Accuracy: Automatically positioned to the address	A15NW (E)	980	-	342634 166230

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
28	**Contemporary Trade Directory Entries** Name: Titan Ladders Ltd Location: 195-201, Mendip Road, Yatton, Bristol, BS49 4ET Classification: Ladder Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A10NW (E)	995	-	342731 165547

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
29	**Local Nature Reserves** Name: Cheddar Valley Railway Walk Multiple Area: Y Area (m2): 288067.67 Source: Natural England Designation Date: 1st January 1999	A14SW (E)	442	6	342193 165862
30	**Sites of Special Scientific Interest** Name: Biddle Street, Yatton Multiple Areas: Y Total Area (m2): 446854.34 Source: Natural England Reference: 1006788 Designation Details: Local Nature Reserve Designation Date: 6th September 1994 Date Type: Notified	A13SE (SE)	137	6	341777 165617

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

Agency & Hydrological	Version	Update Cycle
Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	November 2011	Quarterly
Areas Benefiting from Flood Defences		
Environment Agency - Head Office	November 2011	Quarterly
Flood Water Storage Areas		
Environment Agency - Head Office	November 2011	Quarterly
Flood Defences		
Environment Agency - Head Office	November 2011	Quarterly
Waste	**Version**	**Update Cycle**
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites		
Environment Agency - South West Region - North Wessex Area	October 2011	Quarterly
Environment Agency - South West Region - Wessex Area	October 2011	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - South West Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - South West Region - North Wessex Area	October 2011	Quarterly
Environment Agency - South West Region - Wessex Area	October 2011	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - South West Region - North Wessex Area	July 2011	Quarterly
Environment Agency - South West Region - Wessex Area	July 2011	Quarterly
Local Authority Landfill Coverage		
North Somerset Council	May 2000	Not Applicable
Local Authority Recorded Landfill Sites		
Bath and North East Somerset Council - Planning Services Department	May 2000	Not Applicable
North Somerset Council	May 2000	Not Applicable
Registered Landfill Sites		
Environment Agency - South West Region - North Wessex Area	March 2003	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - South West Region - North Wessex Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites		
Environment Agency - South West Region - North Wessex Area	March 2003	Not Applicable
Hazardous Substances	**Version**	**Update Cycle**
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	July 2011	Bi-Annually
Explosive Sites		
Health and Safety Executive	January 2011	Bi-Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		
North Somerset Council	August 2011	Annual Rolling Update
Planning Hazardous Substance Consents		
North Somerset Council	August 2011	Annual Rolling Update

Geological	Version	Update Cycle
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	October 2011	Bi-Annually
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	August 1996	Not Applicable
Brine Compensation Area Cheshire Brine Subsidence Compensation Board	November 2002	Not Applicable
Coal Mining Affected Areas The Coal Authority - Mining Report Service	August 2011	As notified
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	February 2011	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	As notified
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	As notified
Industrial Land Use	**Version**	**Update Cycle**
Contemporary Trade Directory Entries Thomson Directories	August 2011	Quarterly
Fuel Station Entries Catalist Ltd - Experian	November 2011	Quarterly

Sensitive Land Use	Version	Update Cycle
Areas of Adopted Green Belt North Somerset Council	May 2011	As notified
Areas of Unadopted Green Belt North Somerset Council	May 2011	As notified
Areas of Outstanding Natural Beauty Natural England	September 2011	Bi-Annually
Environmentally Sensitive Areas Natural England	September 2011	Annually
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	September 2011	Bi-Annually
Marine Nature Reserves Natural England	September 2011	Bi-Annually
National Nature Reserves Natural England	September 2011	Bi-Annually
National Parks Natural England	September 2011	Bi-Annually
Nitrate Sensitive Areas Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	March 2003	Not Applicable
Nitrate Vulnerable Zones Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	February 2011	Annually
Ramsar Sites Natural England	September 2011	Bi-Annually
Sites of Special Scientific Interest Natural England	September 2011	Bi-Annually
Special Areas of Conservation Natural England	September 2011	Bi-Annually
Special Protection Areas Natural England	September 2011	Bi-Annually

Data Suppliers

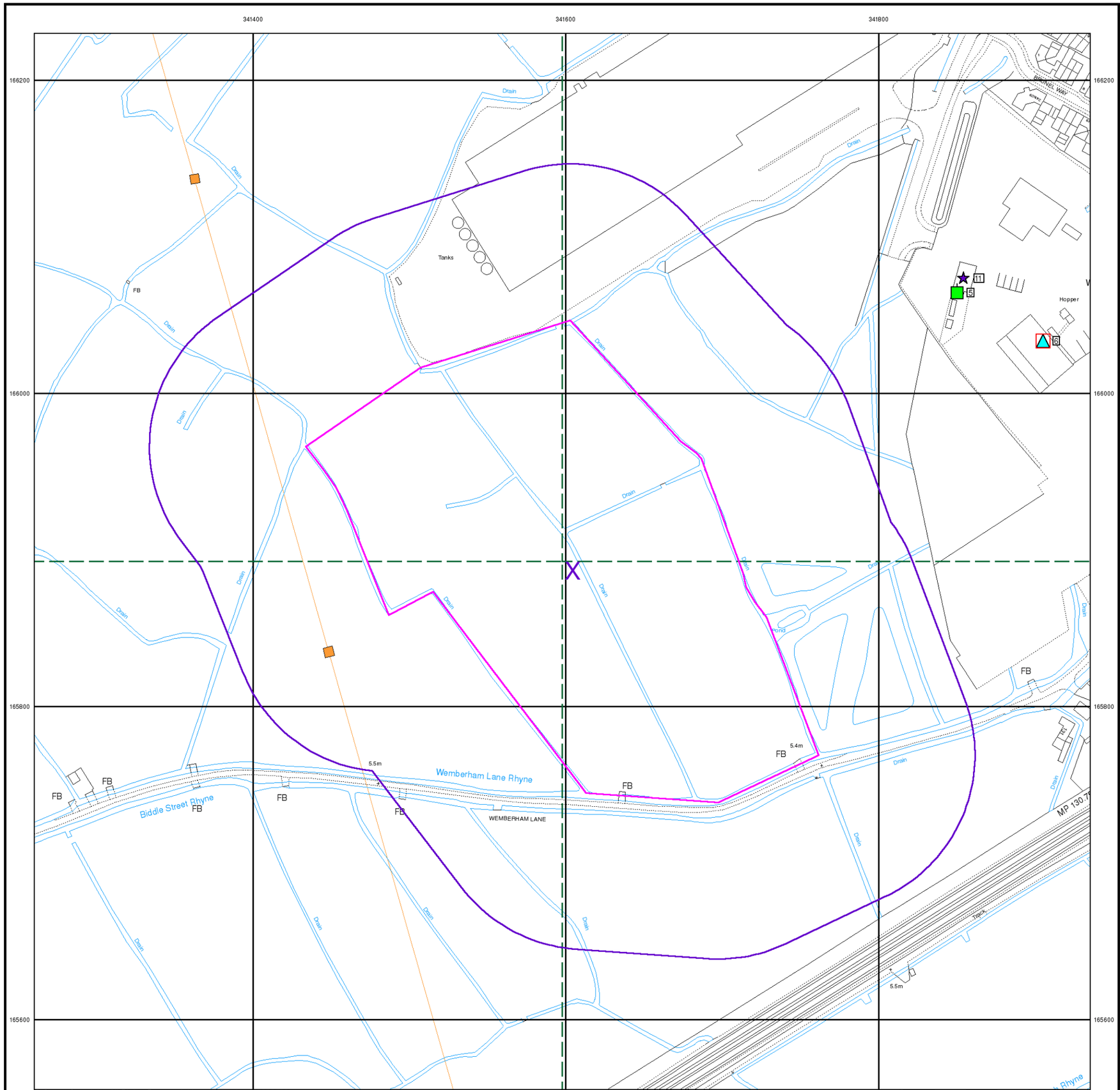
A selection of organisations who provide data within this report

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

Useful Contacts

Contact	Name and Address	Contact Details
1	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 08708 506 506 Email: enquiries@environment-agency.gov.uk
2	**North Somerset Council - Environmental Health Department** P O Box 143, Town Hall, Weston-super-mare, Avon, BS23 1EY	Telephone: 01934 888888 Fax: 01934 634634 Website: www.n-somerset.gov.uk
3	**British Geological Survey - Enquiry Service** British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
4	**Bath and North East Somerset Council - Planning Services Department** Trimbridge House, Trim Street, Bath, BA1 2DP	Website: www.bathnes.gov.uk
5	**North Somerset Council** PO Box 140, Town Hall, Weston-super-Mare, Avon, BS23 1UJ	Telephone: 01934 888888 Fax: 01934 888822 Website: www.n-somerset.gov.uk
6	**Natural England** Northminster House, Northminster Road, Peterborough, Cambridgeshire, PE1 1UA	Telephone: 0845 600 3078 Fax: 01733 455103 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	**Health Protection Agency - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@hpa.org.uk Website: www.hpa.org.uk
-	**Landmark Information Group Limited** The Smith Centre, Henley On Thames, Oxfordshire, RG9 6AB	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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



Envirocheck®

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Geological

- BGS Recorded Mineral Site

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry

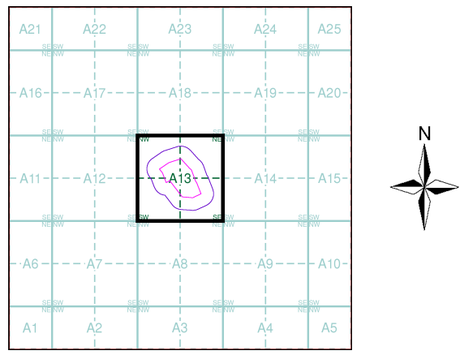
Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

Site Sensitivity Map - Segment A13



Order Details

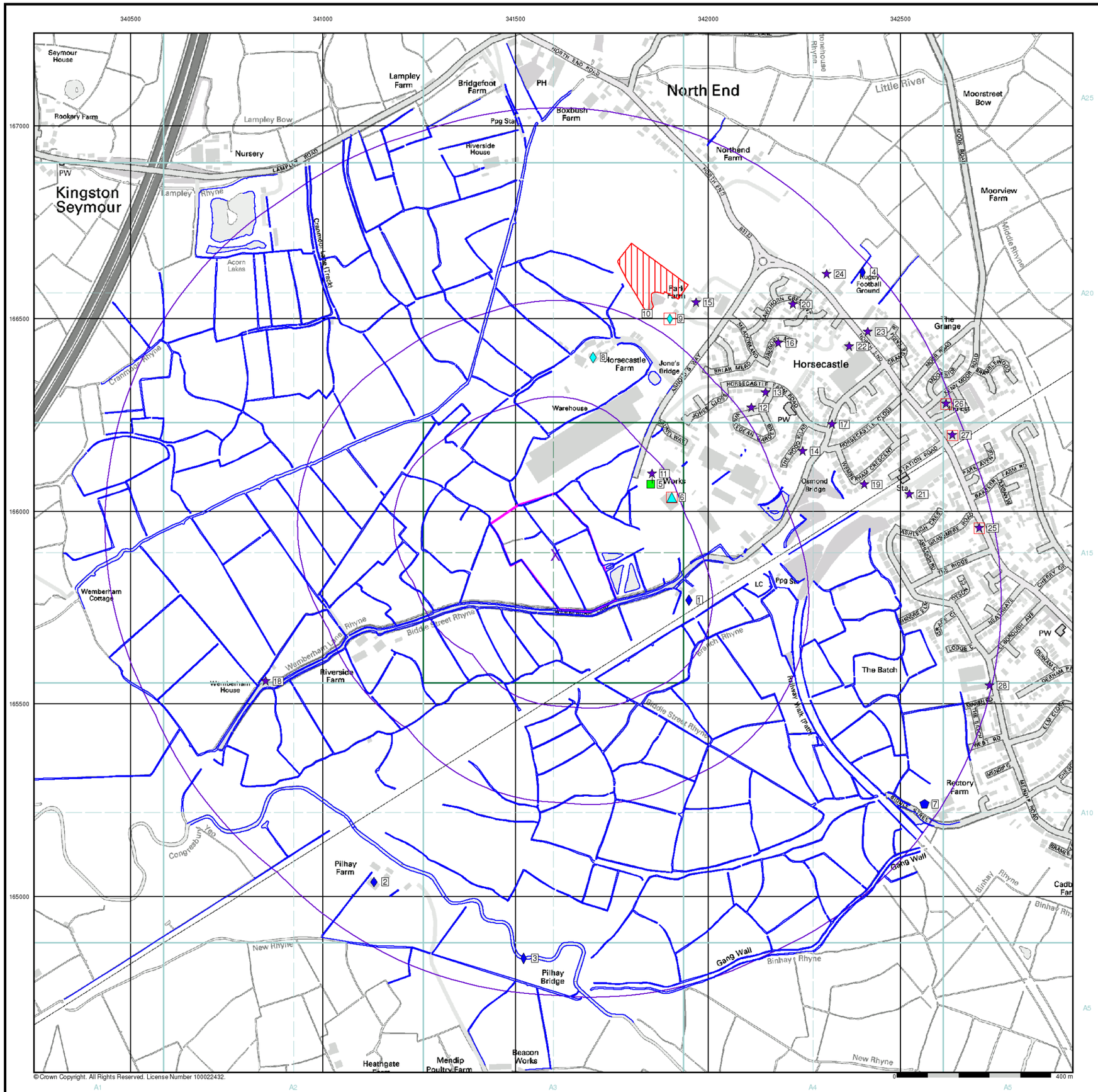
Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Plot Buffer (m):	100

Site Details

Smart Systems Ltd, Arnolds Way, Yatton, BRISTOL, BS49 4QN

Landmark® Information Group

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Envirocheck®

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Geological

- BGS Recorded Mineral Site

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry

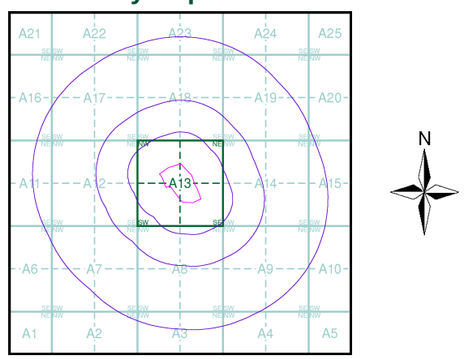
Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

Site Sensitivity Map - Slice A



Order Details

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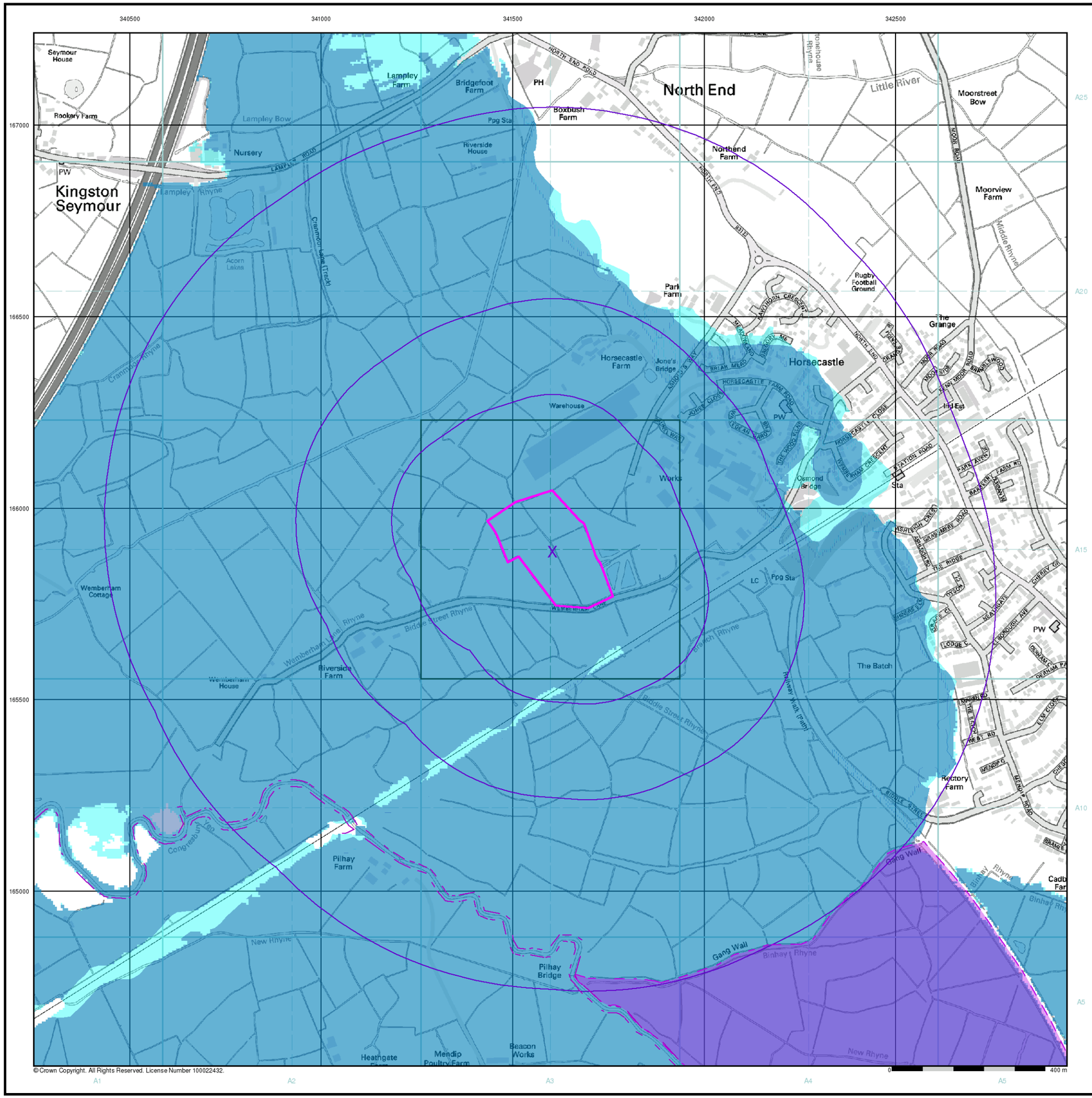
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

Site Details

Smart Systems Ltd, Arnolds Way, Yatton, BRISTOL, BS49 4QN

Landmark® Information Group

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Envirocheck®

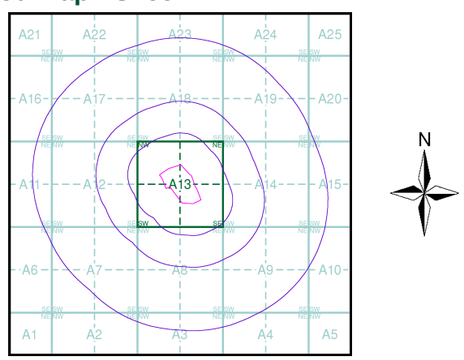
General

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

Agency and Hydrological (Flood)

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

Flood Map - Slice A



Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

Site Details

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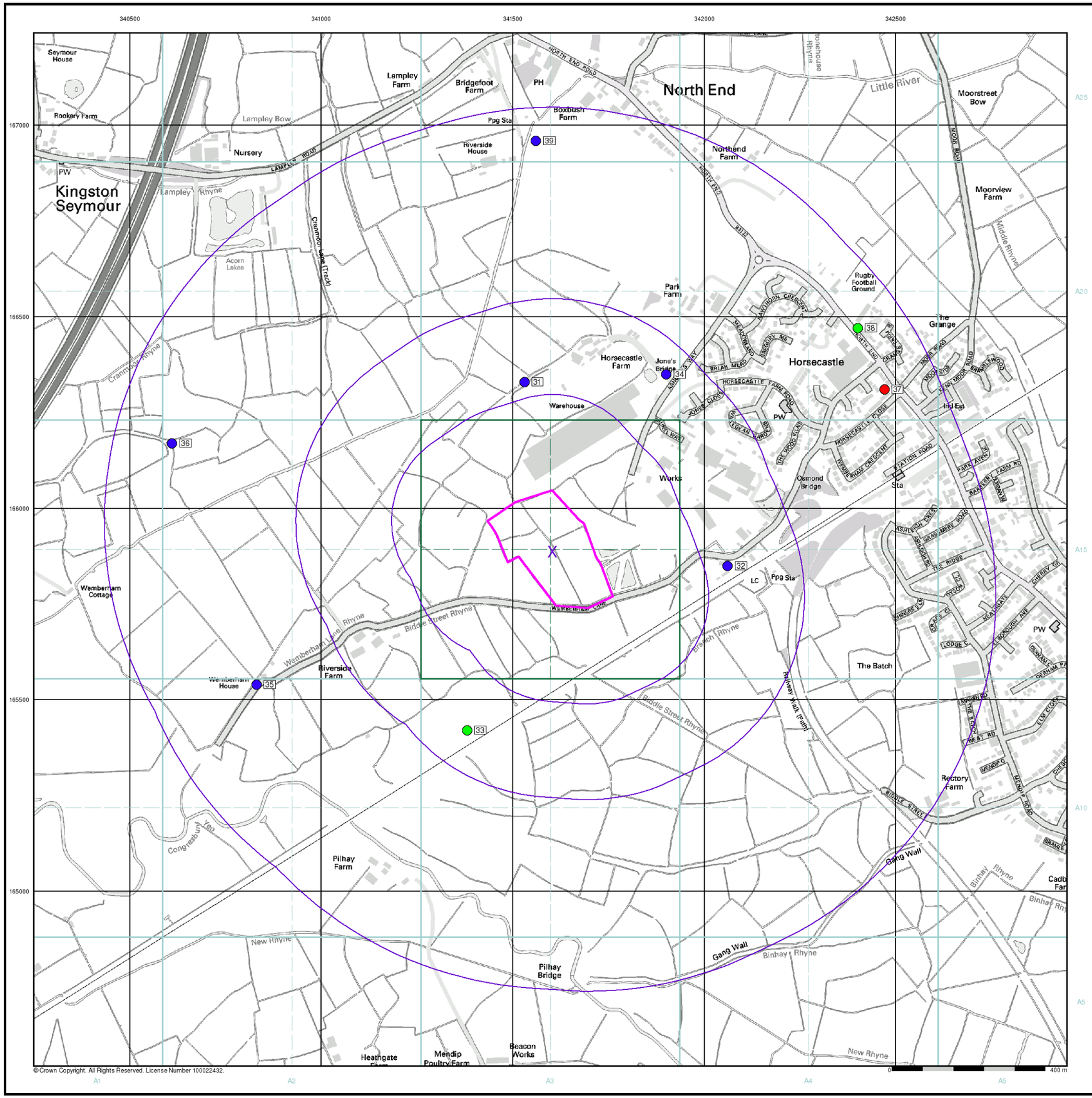


Envirocheck®

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

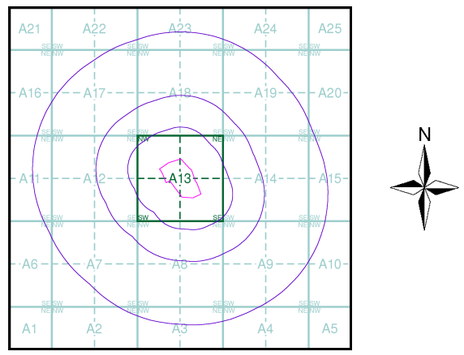
Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A



Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

Site Details

Smart Systems Ltd, Arnolds Way, Yatton, BRISTOL, BS49 4QN

Landmark® Information Group

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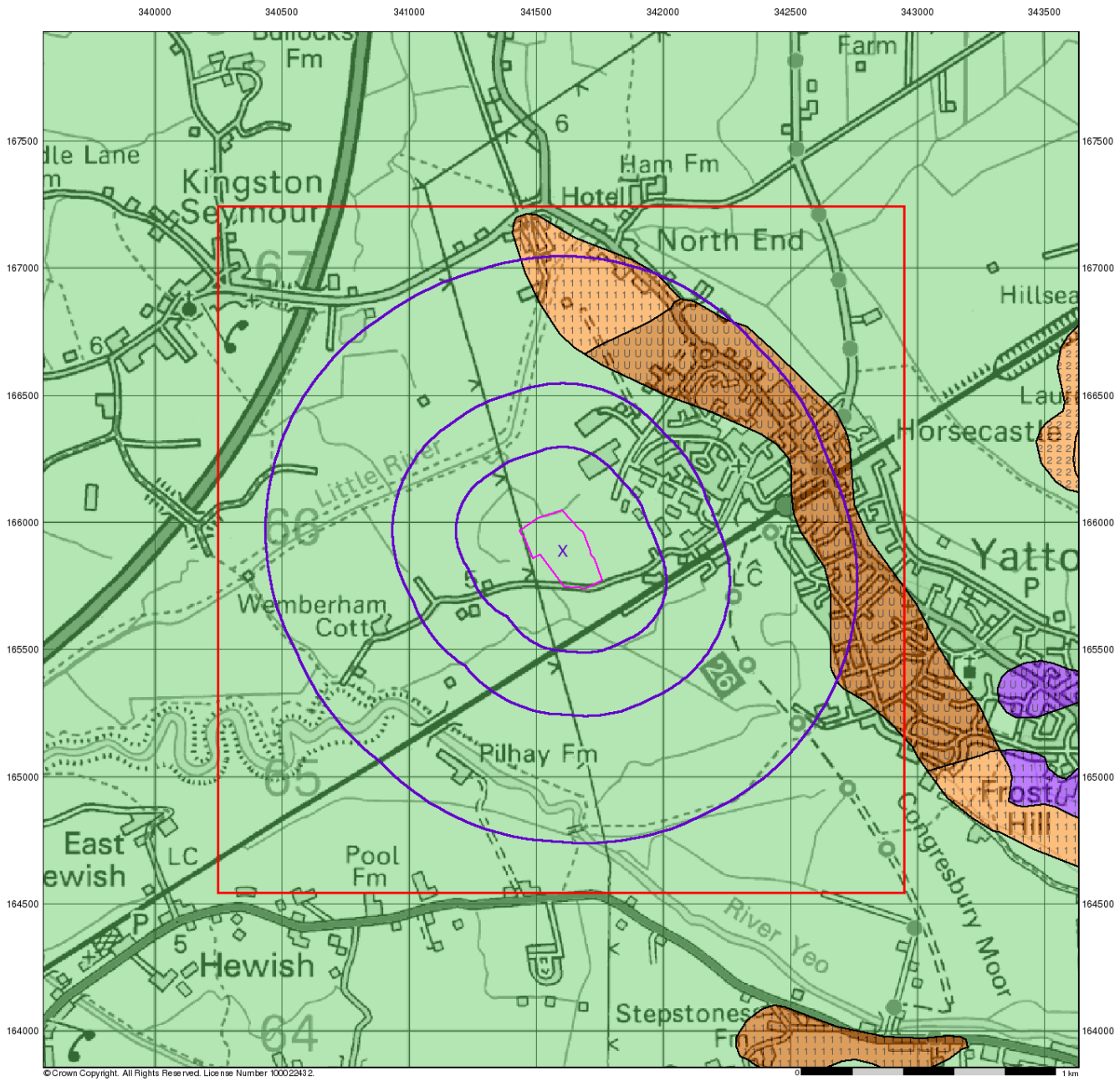
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Envirocheck®

Groundwater Vulnerability

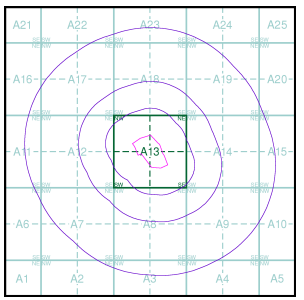
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Geological Classes	Soil Classes
Major Aquifer (Highly Permeable)	High (H) 1, 2, 3, U
	Intermediate (I) 1, 2
	Low
Minor Aquifer (Variably Permeable)	High (H) 1, 2, 3, U
	Intermediate (I) 1, 2
	Low
Non Aquifer (Negligibly Permeable)	
Water or Sea	
Drift Deposit	

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

Site Details

Smart Systems Ltd, Arnolds Way, Yatton, BRISTOL, BS49 4QN

Landmark® Information Group
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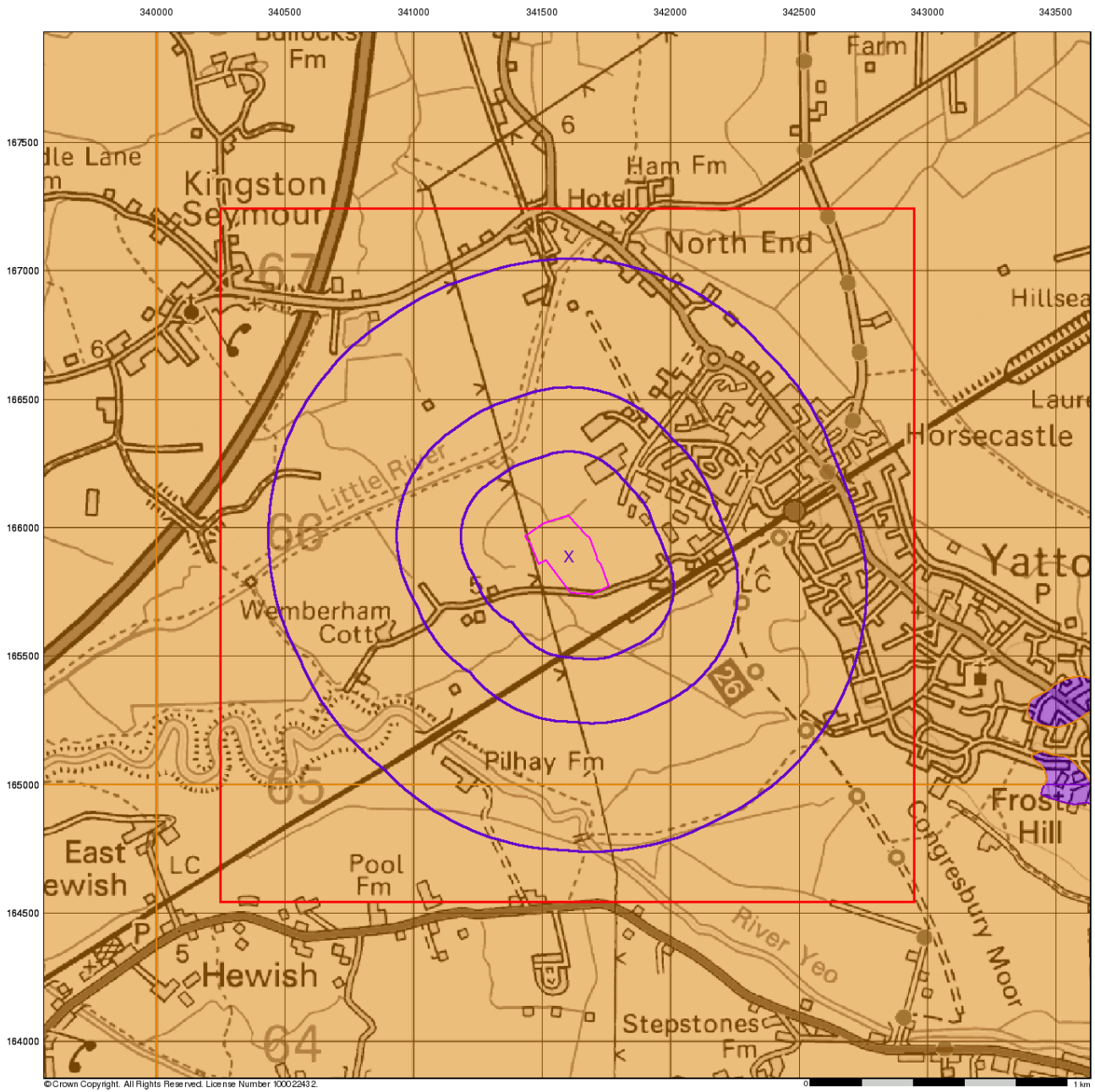
Web: www.envirocheck.co.uk



Envirocheck®

Bedrock Aquifer Designation

General

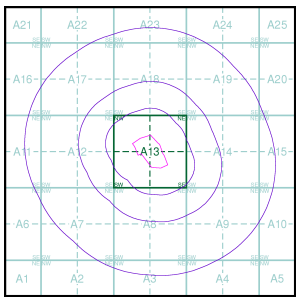
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown

Site Sensitivity Context Map - Slice A



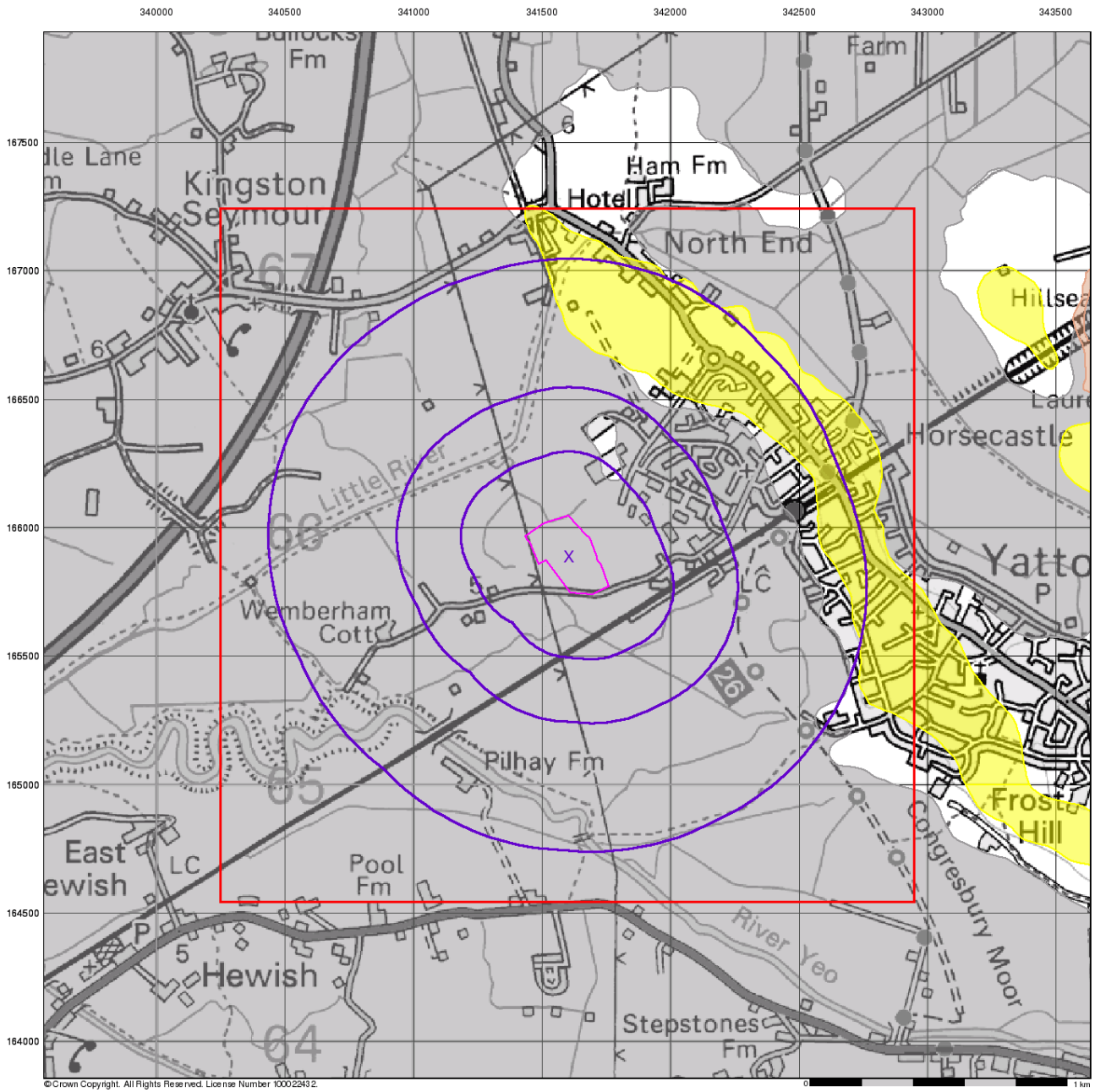
Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

Site Details

Smart Systems Ltd, Arnolds Way, Yatton, BRISTOL, BS49 4QN

Landmark® Information Group
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Envirocheck®

Superficial Aquifer Designation

General

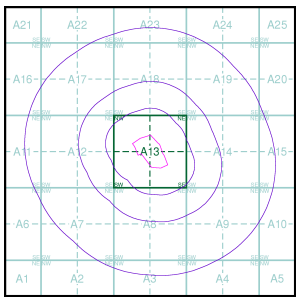
Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown

Site Sensitivity Context Map - Slice A



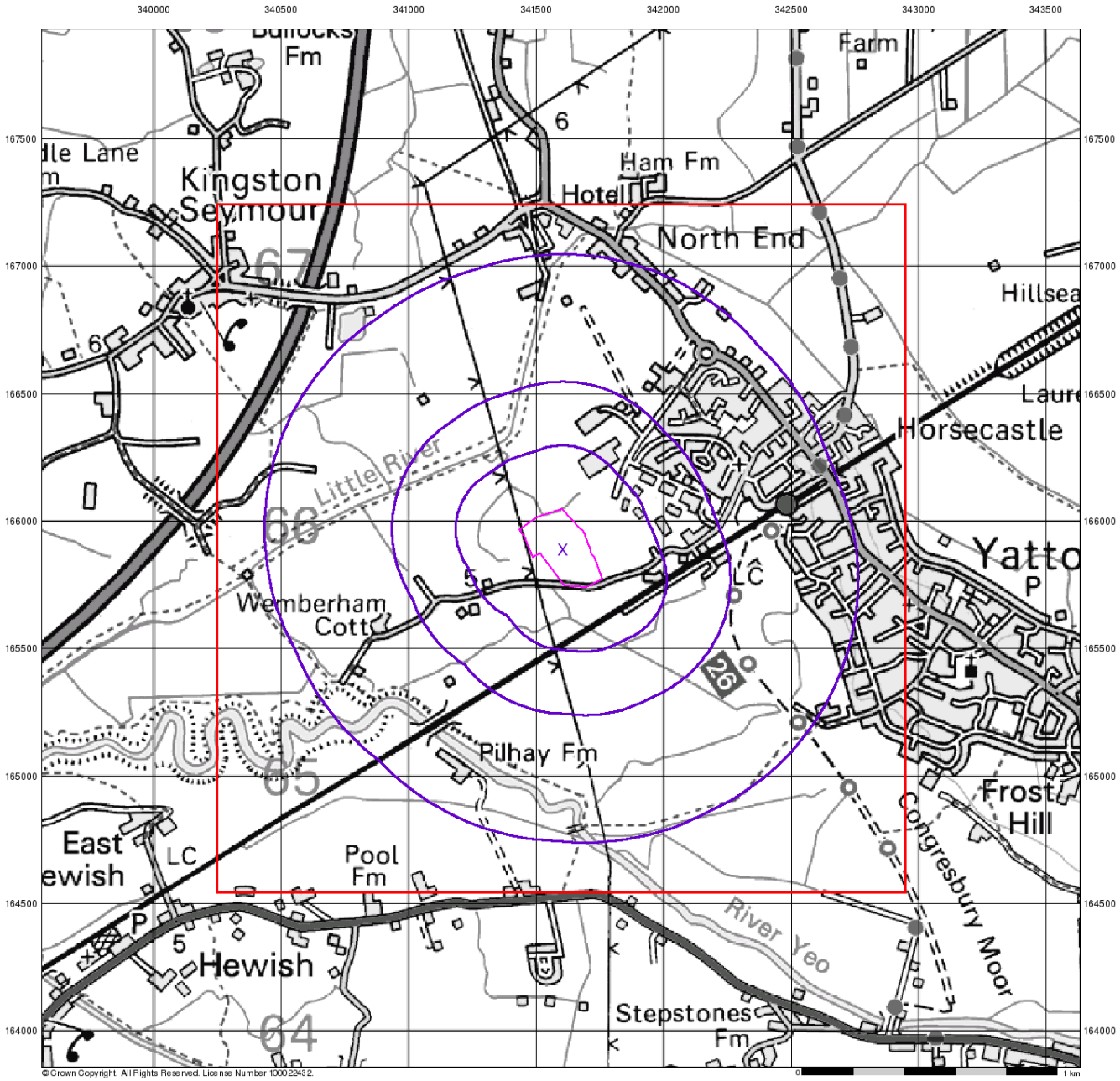
Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

Site Details

Smart Systems Ltd, Arnolds Way, Yatton, BRISTOL, BS49 4QN

Landmark® Information Group
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Source Protection Zones

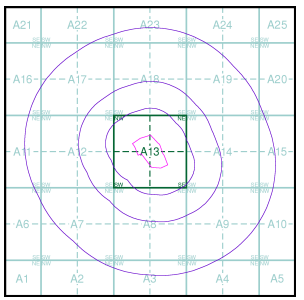
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Source Protection Zone I
Source Protection Zone II
Source Protection Zone III
Zone of Special Interest
Source Protection Zone Borehole

Site Sensitivity Context Map - Slice A



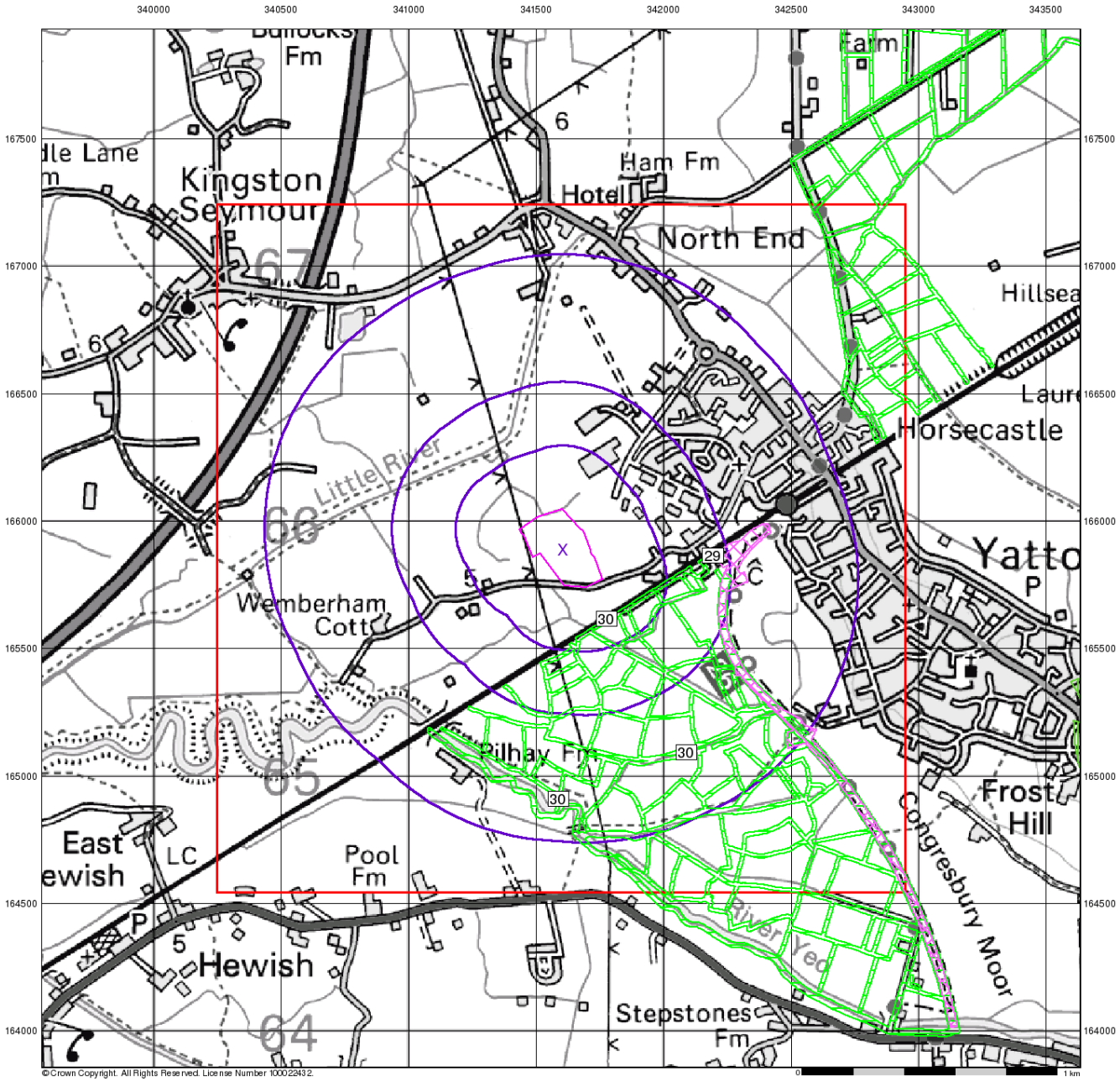
Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

Site Details

Smart Systems Ltd, Arnolds Way, Yatton, BRISTOL, BS49 4QN

Landmark Information Group
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Envirocheck®

Sensitive Land Uses

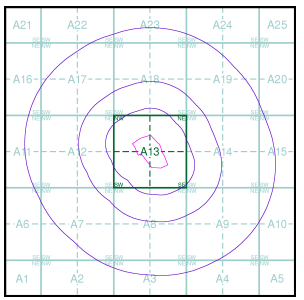
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Sensitive Land Uses

- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	37066161_1_1
Customer Ref:	34392/SDP/RAN
National Grid Reference:	341600, 165890
Slice:	A
Site Area (Ha):	5.65
Search Buffer (m):	1000

Site Details

Smart Systems Ltd, Arnolds Way, Yatton, BRISTOL, BS49 4QN

Landmark® Information Group
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

Appendix 4

Trial Pit Logs

Borehole Logs

Eastwood & Partners
CONSULTING ENGINEERS

Eastwood & Partners
St. Andrew's House
23 Kingfield Road
Sheffield
S11 9AS

Trialpit No
TP1
Sheet 1 of 1

Project Name	Project No.	Co-ords: -	Date
Arnolds Way	34392	Level: -	24/01/2012

Location: Yatton, Phase 3

Dimensions: 2.00m; Depth 3.70m; 1.00m

Scale 1:25

Client: Smart Systems

Logged By RAN

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
			0.20			TOPSOIL: Pale brown CLAY.
						Firm to stiff grey mottled orange CLAY.
0.50	IPP 1	175				
0.50	IPP 2	200				
0.50	IPP 3	175				
0.50	D					
						Grey below 1.0 m.
						1.5 m - 2.7 m: Soft to very soft.
1.70	D					
						2.7 m - 3.7 m: Firm.
3.60	IPP 4	150				
3.60	IPP 5	150				
3.60	D		3.70			Trialpit Complete at 3.70 m

Remarks: Sides relatively stable.

Groundwater:

AGS

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Trialpit No
TP2
Sheet 1 of 1

Project Name	Project No.	Co-ords: -	Date
Arnolds Way	34392	Level: -	24/01/2012
Location: Yatton, Phase 3		Dimensions: 2.00m, Depth 3.60m, 1.00m	Scale 1:25
Client: Smart Systems			Logged By RAN

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
						TOPSOIL: Pale brown CLAY.
			0.25			Firm to stiff grey mottled orange CLAY. Becomes grey and soft to very soft below 1.5 m.
1.00	IPP 1	150				
1.00	IPP 2	150				
1.00	IPP 3	200				
1.00	D					
2.00	D					
3.50	D					
			3.60			Trialpit Complete at 3.60 m

Remarks: Sides relatively stable.

Groundwater:

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Trialpit No
TP3
Sheet 1 of 1

Project Name	Project No.	Co-ords: -	Date
Arnolds Way	34392	Level: -	24/01/2012
Location: Yatton, Phase 3		Dimensions: 2.00m, Depth 4.10m, 1.00m	Scale 1:25
Client: Smart Systems			Logged By RAN

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
						TOPSOIL: Pale brown CLAY.
			0.30			Firm to stiff grey mottled orange CLAY. Becomes grey and soft to very soft below 1.5 m.
0.60	D					
2.20	D					
3.30	D					
			3.90			Brown amorphous PEAT with frequent decomposing wood fragments.
			4.10			Trialpit Complete at 4.10 m

Remarks: Sides relatively stable.

Groundwater:

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Trialpit No
TP4
Sheet 1 of 1

Project Name	Project No.	Co-ords: -	Date
Arnolds Way	34392	Level: -	24/01/2012
Location: Yatton, Phase 3		Dimensions: 2.00m, Depth 3.50m, 1.00m	Scale 1:25
Client: Smart Systems			Logged By RAN

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.20	D					TOPSOIL: Pale brown CLAY.
			0.65			Firm to stiff grey mottled orange CLAY. Becomes grey and soft to very soft below 2.0 m.
1.20	D					
			2.70			
2.80	D					Brown amorphous PEAT with frequent decomposing wood fragments. Strong hydrogen sulphide odour.
			3.10			Soft to very soft grey CLAY.
3.40	IPP 1	75				
			3.50			Trialpit Complete at 3.50 m

Remarks: Sides relatively stable.

Groundwater:

AGS

HoleBASE 3.1 (Bld 422.20) Standard Trialpit Log v2 dated 27th Nov 03

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Trialpit No
TP5
Sheet 1 of 1

Project Name	Project No.	Co-ords: -	Date
Arnolds Way	34392	Level: -	24/01/2012
Location: Yatton, Phase 3		Dimensions: 2.00m, Depth 3.50m, 1.00m	Scale 1:25
Client: Smart Systems			Logged By RAN

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.20	D		0.25			TOPSOIL: Pale brown CLAY.
1.10	IPP 1	150				Firm to stiff grey mottled orange CLAY. Becomes grey and soft to firm below 1.7 m.
1.10	IPP 2	250				
1.10	IPP 3	125				
1.10	D					
2.40	D		2.70			Brown amorphous PEAT with frequent decomposing wood fragments.
			3.00			Soft to very soft grey CLAY.
			3.50			Trialpit Complete at 3.50 m

Remarks: Sides relatively stable.

Groundwater:

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Trialpit No
TP6
Sheet 1 of 1

Project Name	Project No.	Co-ords: -	Date
Arnolds Way	34392	Level: -	24/01/2012
Location: Yatton, Phase 3		Dimensions: 2.00m, Depth 3.70m, 1.00m	Scale 1:25
Client: Smart Systems			Logged By RAN

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
						TOPSOIL: Pale brown CLAY.
			0.70			Firm to stiff grey mottled orange CLAY. Becomes grey and soft to firm below 1.5 m.
1.90	D					
3.20	D					Pockets of peat identified below 3.0 m.
			3.70			Trialpit Complete at 3.70 m

Remarks: Sides relatively stable.

Groundwater:

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Trialpit No
TP7
Sheet 1 of 1

Project Name	Project No.	Co-ords: -	Date
Arnolds Way	34392	Level: -	24/01/2012
Location: Yatton, Phase 3		Dimensions: 2.00m, Depth 3.50m, 1.00m	Scale 1:25
Client: Smart Systems			Logged By RAN

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.20	D		0.30			TOPSOIL: Pale brown CLAY.
0.90	D					Firm to stiff grey mottled orange CLAY. Becomes grey and soft to firm below 2.0 m.
2.60	D		3.40			Brown amorphous PEAT with frequent decomposing wood fragments.
			3.50			Trialpit Complete at 3.50 m

Remarks: Sides relatively stable.

Groundwater:

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Trialpit No
BH1
Sheet 1 of 2

Project Name	Project No.	Co-ords: -	Date
Arnolds Way	34392	Level: -	24/01/2012
Location: Yatton, Phase 3		Dimensions: -	Scale 1:25
		Depth 7.30m	
Client: Smart Systems			Logged By RAN

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
						Soft brown CLAY.
1.00	SPT	N=5				
			1.50			Soft grey alluvium.
3.00	SPT	N=0	3.00			PEAT
						Continued next sheet

Remarks: Chiselled for 0.5 hrs at 6.9 mHole complete at 7.3 m.

Groundwater:

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Trialpit No
BH1
Sheet 2 of 2

Project Name	Project No.	Co-ords: -	Date
Arnolds Way	34392	Level: -	24/01/2012
Location: Yatton, Phase 3		Dimensions: -	Scale 1:25
		Depth 7.30m	
Client: Smart Systems			Logged By RAN

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
5.00	SPT	N=9	5.00			Grey CLAY/MUDSTONE.
			6.50			Blue/red MUDSTONE.
6.90	SPT	50/275mm	6.90			Trialpit Complete at 7.30 m
7.30	SPT	Error				

Remarks: Chiselled for 0.5 hrs at 6.9 mHole complete at 7.3 m.

Groundwater:

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Trialpit No
BH2
Sheet 1 of 3

Project Name	Project No.	Co-ords: -	Date
Arnolds Way	34392	Level: -	24/01/2012
Location: Yatton, Phase 3		Dimensions: -	Scale 1:25
Client: Smart Systems		Depth 14.20m	Logged By RAN

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
						Soft brown CLAY.
			1.70			Soft grey alluvium.
2.00	SPT	N=5				
4.00	SPT	N=0				

Continued next sheet

Remarks: Chiselled at 14.0 m for 0.5 hrs. Hole complete at 14.2 m.

Groundwater:

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Trialpit No
BH2
Sheet 2 of 3

Project Name	Project No.	Co-ords: -	Date
Arnolds Way	34392	Level: -	24/01/2012
Location: Yatton, Phase 3		Dimensions: -	Scale 1:25
Client: Smart Systems		Depth 14.20m	Logged By RAN

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
			5.00			PEAT
6.00	SPT	N=4				
			6.50			Grey alluvium.
8.00	SPT	N=0				

Continued next sheet

Remarks: Chiselled at 14.0 m for 0.5 hrs. Hole complete at 14.2 m.

Groundwater:

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Trialpit No
BH2
Sheet 3 of 3

Project Name	Project No.	Co-ords: -	Date
Arnolds Way	34392	Level: -	24/01/2012
Location: Yatton, Phase 3		Dimensions: -	Scale 1:25
Client: Smart Systems		Depth 14.20m	Logged By RAN

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
10.00	SPT	N=1				Grey alluvium.
			11.00			Peat/alluvium.
12.00	SPT	N=5				
			13.80			MUDSTONE.
14.00	SPT	50/265mm				
14.20	SPT	50/170mm	14.20			Trialpit Complete at 14.20 m

Remarks: Chiselled at 14.0 m for 0.5 hrs. Hole complete at 14.2 m.

Groundwater:

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Appendix 5

Tables of Assessment Criteria

Chemical Test Results

	Intended Land Use				
	Commercial/Industrial End Use (mg/kg)				
Contaminant	Human Health	Phytoxicity			
		pH 5.0-5.5	pH 5.5-6.0	pH 6.0-6.5	pH >7.0
Arsenic	640	50			
Cadmium	230	3			
Chromium	5,000	400			
Chromium (VI)	35	-			
Lead	750	300			
Mercury	26	1			
Nickel	1,800	50	60	75	110
Selenium	13,000				
Copper		80	100	135	200
Zinc		200	200	200	300

Notes:

The assessment values are the Soil Guideline Values derived by DEFRA and Environment Agency using the '*Contaminated Land Exposure Assessment'* model. The assessment concentrations for arsenic, cadmium, nickel, mercury and selenium are outlined in the Environment Agency's Science Report series SC050021. These are based on a sandy loam soil and 6% soil organic matter.

The assessment concentrations for the remaining metals/metalloids are described in the Contaminated Land Report Series (CLR), which have now been withdrawn. The SGV threshold value is not intended to be applied to individual sample results where materials are similar, as the levels of contaminants will have a natural variability across the site. The modified mean value should instead be compared with the SGV.

The assessment values for phytotoxicity are levels at which plant growth is thought to be affected. These are taken from the maximum permissible and advisable concentrations in soil after application of soil sludge given in the '*The Code of Good Agricultural Practice for the Protection of Soil*', MAFF, 1998.

The assessment criterion for chromium (VI) have been taken from Nathanail, C. P., McCaffrey, C., Ashmore, M. H., Cheng, Y. Y., Gillett, A., Ogden, R. & Scott, D., 2009 *'The LQM/CIEH Generic Assessment Criteria for Human Health Risk Assessment 2nd Edition'*, Land Quality Press, Nottingham. These are also all based on a sandy loam soil and 6% soil organic matter.

Prepared	RAN	Typist	RAN	Checked	CAT	Date	08/03/12	Job No	34392

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SMART SYSTEMS LIMITED

PHASE 3, ARNOLDS WAY, YATTON

GENERIC ASSESSMENT CRITERIA – COMMERCIAL/INDUSTRIAL

Compound	Intended Land Use
	Commercial/Industrial (mg/kg)
Phenol	3,200
Benzene	95
Toluene	4,400
Ethylbenzene	2,800
o-Xylene	2,600
m-Xylene	3,500
p-Xylene	3,200
Benzo(a)pyrene	14
Naphthalene	1,100
Acenaphthene	100,000
Acenaphthylene	100,000
Anthracene	540,000
Benzo(a)anthracene	97
Benzo(b)fluoranthene	100
Benzo(g,h,i)perylene	660
Benzo(k)fluoranthene	140
Chrysene	140
Dibenz(a,h)anthracene	13
Fluoranthene	23,000
Fluorene	71,000
Indeno(1,2,3-cd)pyrene	62
Phenanthrene	23,000
Pyrene	54,000

The assessment values for phenol and the BTEX compounds are the Soil Guideline Values derived by DEFRA and Environment Agency using the '*Contaminated Land Exposure Assessment'* model. These are outlined in the Environment Agency's Science Report series SC050021. The assessment criteria for the sixteen polycyclic aromatic hydrocarbon (PAH) species covered under the USEPA test have been taken from Nathanail, C. P., McCaffrey, C., Ashmore, M. H., Cheng, Y. Y., Gillett, A., Ogden, R. & Scott, D., 2009 *'The LQM/CIEH Generic Assessment Criteria for Human Health Risk Assessment 2nd Edition'*, Land Quality Press, Nottingham.

These are also all based on a sandy loam soil and 6% soil organic matter. The SGV threshold value is not intended to be applied to individual sample results where materials are similar, as the levels of contaminants will have a natural variability across the site. The modified mean value should instead be compared with the SGV.

Prepared	RAN	Typist	RAN	Checked	CAT	Date	08/03/12	Job No	34392

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SMART SYSTEMS LIMITED

PHASE 3, ARNOLDS WAY, YATTON

GENERIC ASSESSMENT CRITERIA – COMMERCIAL/INDUSTRIAL

Chemtest
The right chemistry to deliver results

Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070

Eastwood & Partners
St. Andrews House
23 Kingfield Road
Sheffield
S11 9AS

FAO C Topliss / R Noble
07 February 2012

Dear C Topliss / R Noble

Test Report Number **151721**

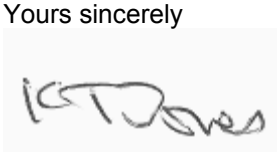
Your Project Reference **Phase 3, Yatton - 34392/27.01.12**

Please find enclosed the results of analysis for the samples received 30 January 2012.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely



Keith Jones, Technical Manager

UKAS TESTING
2183

mCERTS

ISO 14001
sira
UKAS ENVIRONMENTAL MANAGEMENT

Notes to accompany report:

- *The sign < means 'less than'*
- *Tests marked 'U' hold UKAS accreditation*
- *Tests marked 'M' hold MCertS (and UKAS) accreditation*
- *Tests marked 'N' do not currently hold UKAS accreditation*
- *Tests marked 'S' were subcontracted to an approved laboratory*
- *n/e means 'not evaluated'*
- *i/s means 'insufficient sample'*
- *u/s means 'unsuitable sample'*
- *Comments or interpretations are outside of the scope of UKAS accreditation*
- *The results relate only to the items tested*
- *Stones represent the quantity of material removed prior to analysis*
- *All results are expressed on a dry weight basis*
- *The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, phenols*
- *For all other tests the samples were dried at < 37°C prior to analysis*
- *Uncertainties of measurement for the determinands tested are available upon request*
- *Soil descriptions, including colour and texture, are beyond the scope of MCertS accreditation*
- *None of the test results included in this report have been recovery corrected*

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St. Andrews House
23 Kingfield Road
Sheffield
S11 9AS

FAO C Topliss / R Noble

LABORATORY TEST REPORT

Results of analysis of 6 samples received 30 January 2012

Phase 3, Yatton - 34392/27.01.12

Report Date 07 February 2012

Login Batch No					151721					
Chemtest LIMS ID					AG94570	AG94571	AG94572	AG94573	AG94574	AG94575
Sample ID					TP1	TP3	TP4	TP5	TP5	TP7
Sample No										
Sampling Date					30/12/1899	30/12/1899	30/12/1899	30/12/1899	30/12/1899	30/12/1899
Depth					0.5m	0.6m	0.2m	0.2m	1.1m	0.2m
Matrix					*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*						
2175	Sulfur (total TRL report 447)		%	M	0.020	0.010			0.020	
2120	Sulfate (2:1 water soluble) as SO4	14808798	g l-1	M	0.06	0.06			0.09	
2490	Chromium (hexavalent)	18540299	mg kg-1	N	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2430	Sulfate (total BS1377 HCl extract)	14808798	%		0.02	0.02			0.02	
2450	Arsenic	7440382	mg kg-1	M	47	26	37	36	40	71
	Cadmium	7440439	mg kg-1	M	0.18	<0.10	0.15	<0.10	0.18	0.18
	Chromium	7440473	mg kg-1	M	48	25	55	89	60	130
	Copper	7440508	mg kg-1	M	25	9.2	25	31	14	86
	Mercury	7439976	mg kg-1	M	0.40	0.15	0.35	0.42	0.26	2.6
	Nickel	7440020	mg kg-1	M	46	18	40	54	43	84
	Lead	7439921	mg kg-1	M	72	27	43	39	22	340
	Selenium	7782492	mg kg-1	M	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	Zinc	7440666	mg kg-1	M	90	45	71	160	76	210
2800	Naphthalene	91203	mg kg-1	M	<0.1	0.3	<0.1	<0.1	<0.1	<0.1
	Acenaphthylene	208968	mg kg-1	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Acenaphthene	83329	mg kg-1	M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Fluorene	86737	mg kg-1	M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Phenanthrene	85018	mg kg-1	M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Anthracene	120127	mg kg-1	M	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
	Fluoranthene	206440	mg kg-1	M	<0.1	0.6	<0.1	<0.1	<0.1	<0.1
	Pyrene	129000	mg kg-1	M	<0.1	0.4	<0.1	<0.1	<0.1	<0.1
	Benzo[a]anthracene	56553	mg kg-1	M	<0.1	0.2	<0.1	<0.1	<0.1	<0.1
	Chrysene	218019	mg kg-1	M	<0.1	0.2	<0.1	<0.1	<0.1	<0.1
	Benzo[b]fluoranthene	205992	mg kg-1	M	<0.1	0.2	<0.1	<0.1	<0.1	<0.1
	Benzo[k]fluoranthene	207089	mg kg-1	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Benzo[a]pyrene	50328	mg kg-1	M	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
	Dibenzo[a,h]anthracene	53703	mg kg-1	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

All tests undertaken between 31/01/2012 and 07/02/2012

* Accreditation status

This report should be interpreted in conjuction with the notes on the accompanying cover page.

Eastwood & Partners
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23 Kingfield Road
Sheffield
S11 9AS

FAO C Topliss / R Noble

LABORATORY TEST REPORT

Results of analysis of 6 samples received 30 January 2012

Phase 3, Yatton - 34392/27.01.12

Report Date 07 February 2012

					151721					
					AG94570	AG94571	AG94572	AG94573	AG94574	AG94575
					TP1	TP3	TP4	TP5	TP5	TP7
					30/12/1899	30/12/1899	30/12/1899	30/12/1899	30/12/1899	30/12/1899
					0.5m	0.6m	0.2m	0.2m	1.1m	0.2m
					SOIL	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
2800	Indeno[1,2,3-cd]pyrene	193395	mg kg-¹	M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Benzo[g,h,i]perylene	191242	mg kg-¹	M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Total (of 16) PAHs		mg kg-¹	N	<2	2.1	<2	<2	<2	<2
2010	pH			M	7.9	8.2	8.4	9.0	8.4	9.3
2030	Moisture		%	n/a	24	22.9	28	36.4	24.4	26.9
	Stones content (>50mm)		%	n/a	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2040	Soil colour			n/a	brown	brown	brown	brown	brown	brown
	Soil texture			n/a	clay	clay	clay	clay	clay	sand
	Other material			n/a	none	none	none	none	none	none

All tests undertaken between 31/01/2012 and 07/02/2012

* Accreditation status

This report should be interpreted in conjuction with the notes on the accompanying cover page.