

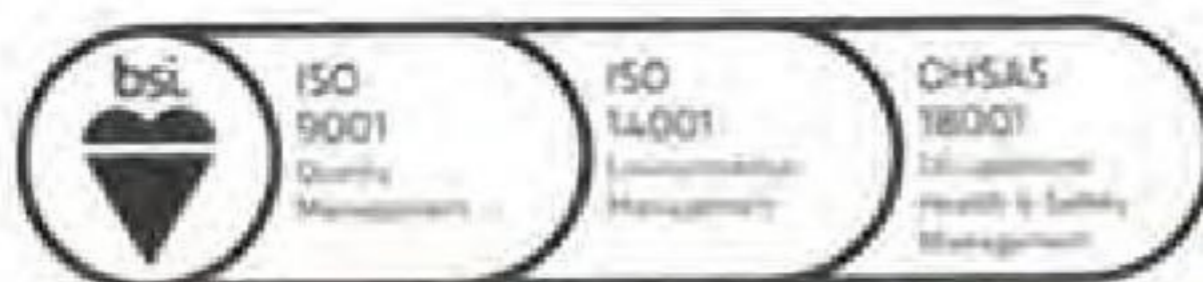


**TECHNICAL REPORT P6799.02:  
STAGE 1 SITE INVESTIGATION**  
Burnside Poultry Unit, Little  
Clinterty, Kinellar,  
Aberdeenshire AB21 0TL



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**health, safety & environment: monitoring, assessment and consultancy**

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## EXECUTIVE SUMMARY

An assessment of site contamination has been carried out for the Burnside Poultry Unit site at Little Clinterty, Kinellar Aberdeenshire AB21 0TL. This involved review of historic maps, regulatory documentation etc plus site walkover. Due to the extensive presence of asbestos materials some sampling of asbestos debris was undertaken in tandem with an asbestos building survey undertaken at the same time on the main agricultural shed standing (reported at P6799.01).

There are two standing structures with extensive asbestos cement in-situ totalling approximately 1000-1500 sq m. The internal fabric within the main shed (wall cladding and roof underside) requires to be cleaned under controlled conditions ("environmental clean") prior to any significant occupancy.

The external asbestos cement sheeting on these two existing structures does not present any risk to occupants but should be inspected for deterioration on a three-yearly basis.

Prior to demolition and re-development the in-situ asbestos should be removed under controlled conditions. The external sheeting to be removed may be sufficiently degraded to constitute "asbestos insulation board" and should be tested by water sorption test in advance to confirm appropriate category of work. The internal asbestos cement has not degraded.

There is extensive contamination of surface and sub-surface ground with asbestos in some areas of the site assumed to derive from a previously-demolished agricultural shed. The extent of this contamination requires further work in terms of delineating the contamination (ie lateral spread, depth of contamination), understanding the nature of the contamination (ie degree of degradation of material/product categorisation, free-fibre quantification). This will assist in informing the client on the most cost-effective remediation solution, depending on end-use options.

The asbestos present on-site (in-situ or ground contamination) currently presents negligible risk to human health (occupants or neighbouring community). There is a low but readily-controllable human exposure risk during earthworks for site operatives and neighbouring receptors.

There is no evidence of other potential contamination on-site excepting possible animal waste residues associated with the existing structure, however these waste residues are concluded to be sufficiently small in volume and sufficiently old to present minimal microbiological hazard, excepting during either demolition of the main shed or dust-raising activities during occupancy of the shed, in which cases there is concluded to be a low and readily-controllable risk of human respiratory health impact.

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## 1.0 INTRODUCTION

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1.1 At the request of Mr Graham Buchan (Private Client), a Stage 1 Site Investigation was undertaken at the following site:

Burnside Poultry Unit  
Little Clinterty  
Kinellar  
Aberdeenshire  
AB21 0TL

1.2 The site has one remaining structure which has recently been used for poultry farming. A survey of the structure for asbestos is separately reported (P6799.01). This report addresses the potential for ground contamination of the site itself (and adjoining areas) due to current or historical activities on the site. The scope of the report does not extend to assessment of the site for ground stability or with regard to suitability for any specific construction or development type or other planning or other considerations.

1.3 The client is considering options for the site, including development of two dwellings.

1.4 The site walkover and assessment was undertaken by Dr Brian Gardner, Senior Consultant, Ethos Environmental Limited on 29<sup>th</sup> September 2015.

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## 2.0 METHODOLOGY

2.1 The assessment was undertaken by means of a desk-top review of the available historical and related data. The site was attended on 29<sup>th</sup> September 2016 for the purposes of a site walkover and examination of ground conditions

2.2 The site walkover was undertaken by Dr B Gardner who is a Certified Occupational Hygienist (BOHS) and has first and research degrees in Environmental Chemistry. He also holds the BOHS CCP in asbestos.

2.3 Additionally, analysis of debris materials identified on the surface of the ground was undertaken at the company's Edinburgh laboratory, accredited by UKAS to ISO17025 for asbestos analysis in building materials.

2.4 No previous site investigation report was available.

2.5 Where appropriate the site investigation and assessment work followed the requirements of the following:

- Planning Advice Note 33 (2000) and Part 11A of the Environmental Act 1990 (as inserted by section 57 of the Environment Act 1995)
- Contamination report 11 – *Model Procedures for the Management of Land Contamination* (CLR11)
- BS 10175:2011 British Standards institution *The Investigation of Potentially Contaminated Sites – Code of Practice*.
- CIRIA *Asbestos in soil and made ground: a guide to understanding and managing risks* (C733)
- Joint Industry Working Group's Control of Asbestos Regulations 2012: *Interpretation for Managing and Working with Asbestos in Soil and Construction and Demolition (C&D) materials: Industry Guidance* (shortened name CAR-SOIL)
- Draft Analyst's Guide HSG248, Section 7, Appendix 7

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### 3.0 SUMMARY OF FINDINGS

#### 3.1 Site Location

##### 3.1.1 The site is located at

Burnside Poultry Unit  
Little Clinterty  
Kinellar  
Aberdeenshire  
AB21 0TL

(National Grid Reference: 383270 811890)

##### 3.1.2 The site comprises approximately 1.26 Hectares. A satellite image is shown in Figure 1 with site border detailed in pink.



Figure 1. Satellite image of site (in pink) and 50m perimeter (blue)

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3.1.3 The site comprises one functional agricultural shed (12 x 35m) currently used for miscellaneous storage and incorporating small office/ stores area. This is shown on Figure 2 as structure A. The site also has a derelict garden shed [B], the above-ground foundations of a large glasshouse structure [C], and the below-ground footings and demolition rubble assumed to be associated with the former poultry building at the westernmost location [D].

3.1.4 There is an agricultural feed hopper at location E. Area F shows a location with no known history of building but substantial asbestos contamination assumed to derive from the demolition of the former building D (see section 3.3)



Figure 2. Satellite photograph showing site structures

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### 3.2 Environs

The site is bordered to the north by a non-metalled road and beyond, agricultural land. To the west and south is agricultural land, and to the east there are a number of dwellings.

### 3.3 Site Walkover and Sampling Results

A site walkover was carried out during afternoon of 29<sup>th</sup> September 2016. There was 80% cloud cover and slight precipitation during the site visit.

- A. The main existing structure is shown in figure 3. This is constructed primarily from timber and asbestos cement with a concrete slab and some plasterboard internal walling recently added. This structure is relatively intact and currently functions for storage purposes. The asbestos management risks associated with this occupied structure are discussed in a separate report (P6799.01) commissioned by the client under the *Control of Asbestos Regulations 2012*.

Some limited debris was noted on surface ground around the structure that appeared to be associated with the corrugated roof sheeting. This debris is discussed in more detail at section F below.



Figure 3. Photograph of front entrance of Poultry Unit shed (west elevation)

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- B. The agricultural storage sheds remaining at the east end of the site have corrugated asbestos cement roof sheeting (approx. 40 sq m).

Figures 4 & 5 show the sheds and the roof asbestos sheeting in close-up. The structure is constructed from concrete blockwork. There is some debris associated with the sheds which has asbestos cement attached (see figure 6), and some limited ground contamination as discussed at section F

Figure 7 shows a small length of partially-buried footing to the east of the sheds, which has a section of asbestos cement forming part of the footing.



Figure 4. East Elevation of Sheds [B] to west of site

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Figure 5. Asbestos cement roof sheeting to sheds [B] to west of site



Figure 6. Door frame debris with asbestos cement sheeting attached

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**Figure 7. Footing to unknown structure to east of B, with asbestos cement sheeting within wall.**

- C. The former glasshouse to the immediate west of the sheds shown at B, has visible in-situ footings present above ground as well as some associated demolition waste (glazed timber frames).
- D. This is the area of a former agricultural shed demolished in the early 1990s. There is evidence of buried footings to the structure and extensive surface contamination with asbestos cement products as identified in-situ on the remaining shed [A] and discussed in more detail at section F.
- E. Figure 8 shows the agricultural feed hopper located to the immediate west of the main shed [A]. This comprises sheet metal only but should be assumed to contain some residual feed.

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**Figure 8. Agricultural Feed Hopper, Location E**

- F. Area F has no history of built structures above ground and no obvious evidence of below ground footings. This area has extensive contamination of the surface and immediate sub-surface with the two main asbestos products identified in-situ in the main shed [A], the internal flat, pale yellow asbestos cement sheeting located on the wall cladding and roof underside, and the external corrugated asbestos cement roof sheeting (see Figure 9a-c). There is additionally evidence of asbestos cement downpipes (see Figure 9d).

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Figure 9a. Ground Contamination (Area F)



Figure 9b. Ground Contamination (Area F)



Figure 9c. Ground Contamination (Area F)



Figure 9d. Ground Contamination (Area F)

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## G. General Site

Asbestos cement debris was observed on ground surfaces at a number of locations elsewhere on the site. The debris was similar in colour, thickness and morphology to that observed in-situ in the Main Shed [A] forming either the corrugated external roof sheeting or the internal flat sheeting wall cladding and roof underside.

Analysis of these samples confirmed the presence of asbestos (chrysotile) in the material. Water sorption testing of the debris sampled from ground surfaces was also carried out. This indicated that in two out of the five samples tested, the contact with soil and moisture had degraded the cement matrix sufficiently to significantly reduce the cement composition such that water sorption capacity was >30% (Refer samples 67444, 67447, 67448, 67450 and 67451, Certificate No. A20653, Appendix 1). As such it is prudent to assume until otherwise indicated that any ground debris material assumed to be asbestos debris requires to be classed under the Regulations as "asbestos insulation board". This is a more friable and risky product category than the original un-degraded in-situ product retained in the Poultry Shed structure.

The site walkover and visual inspection did not indicate any other obvious contamination, however there was significant grass vegetation/foliage inhibiting visual inspection. There was no sign of staining of soils or retardation of vegetative growth, except for areas where there was significant demolition rubble/aggregate present.

There was no evidence of site drainage save for natural drainage via the slope to the south of the site. No other significant pollutant vectors or conduits were evident.

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### 3.4 Documentation Review/Consultations

3.4.1 The main findings from review of standard Envirocheck data (Landmark Information Group, see Appendix 2) for the site are shown in Table 1, as follows:

**Table 1. Summary of Review of Envirocheck (Agency/Regulator) Data**

Item	Findings	
<b>Historical Building Plans</b>	Review of historical plans indicates no structures on the site until three poultry sheds constructed during period 1959-65. The western-most of these was removed above ground by 1994. The glazing to the easternmost structure has been removed more recently though the brick footings remain as do the sheds to the east of these though now in a derelict condition	
<b>Current Industrial Land Use</b>	The site has been used as a poultry farm since early 1960s until this ceased in early 2000s. A landfill site has been in operation at a location approximately 287m to the north-east of the site. With the exception of a consultancy service operating out of one of the dwellings 34m to the SE of the site, all other commercial activities are >500m distance	
<b>Historical Tanks and Energy Facilities</b>	There is no evidence from review of plans or site walkover of current or historical above-ground or underground storage tanks.	
<b>Landfill and Other Waste Sites</b>	Registered landfill site 287m to NE, closed in 2002 containing paper mill sludges/wastes; numerous areas of potential infilled land within 50-1000m distance	
<b>Geology and Hydrogeology</b>	Weakly permeable geology; generally considered as containing insignificant quantities of groundwater	
<b>Designated Environmentally Sensitive Sites</b>	Sensitive land use: ancient woodland to north east and east (500m) and smaller woodlands to south and west and north also at similar distance	
<b>Flooding</b>	Potential for flooding at surface level (BGS Flood Data)	
<b>Source Protection Zones</b>	None within 1000m	
<b>Planning</b>	Site is within adopted green belt, local authority development plan	
<b>Mining</b>	None	
<b>Agency &amp; Hydrological</b>	Discharge Consents	Three consents within 500m in relation to septic tanks/sewage discharge to Black Burn tributary; one consent in relation to surface water from garage at Blackburn (527m, discharge to Black Burn tributary)
	Nearest Surface Water Feature	134m south-west of site



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## 4.0 RISK ASSESSMENT

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### 4.1 Summary of Main Findings

The client's intentions for the site were reviewed alongside the desk-top data, observations made during the site investigation, and the results from sampling of suspect asbestos debris.

### 4.2 In-situ Asbestos

4.2.1 In summary, asbestos cement totaling approximately 1000-1500 sq m is present in a relatively intact condition on structures at A and B as shown in Figure 2. Approximately 40% of the material is external to the structures and exposed to the elements.

4.2.2 This material does not present a risk of human or environmental exposure unless significant damage is received (eg fire, demolition etc).

4.2.3 Occupancy of the main shed presents a risk to occupants if the area is occupied without pre-cleaning (environmental clean) of the internal surfaces as discussed in Report P6799.01.

4.2.4 In the longer-term, weathering and low-level deterioration of the external materials which are exposed to the elements, may increase the extent of contamination of the ground cover in the immediate vicinity of these buildings.

4.2.5 Removal of the asbestos paneling from the internal parts of the main shed is likely to be a notifiable, non-licenced task. Removal of the asbestos intact on the external parts of the existing structures is a non-notifiable, non-licencable activity. Such work will constitute demolition and will require to be undertaken in tandem with – and in advance of - general demolition. Costs for the asbestos removal and disposal should be expected to be the major part of the overall demolition cost, and be in the range £50-100,000.

### 4.3 Asbestos Ground Contamination

4.3.1 It is assumed that some areas of the site have extensive surface contamination with asbestos cement debris. The contaminated material appears to have been moved around on-site to some extent but it is assumed to have derived from the most westerly of the three original agricultural sheds constructed on-site in the early 1960s.

4.3.2 It is assumed from the materials observed that this structure – while smaller in size overall - was of similar function and construction to the existing shed internally and externally and as such there may have been approximately 1000sq m of asbestos cement associated with it. It is currently unclear whether this material was buried on-site (as was commonly carried out) during demolition, or to what extent the asbestos waste was removed.

4.3.3 The contamination is concentrated in the north-west section of the site in areas E&F on Figure 2. It is considered prudent to assume that this material - while concentrated in the surface and sub-surface depths – may be present to a depth of 1.0mbgl or more until demonstrated otherwise by excavation and sampling.

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4.3.4 The material appears to have become sufficiently degraded to constitute “asbestos insulation board” in many instances, and this should be the default assumption until proved otherwise. As such it presents an elevated risk of fibre release compared to the un-degraded product still in-situ.

4.3.5 It may be possible to undertake a clean-up of the soils associated with the readily-identifiable asbestos debris, as there is scope for re-use of this material on-site if suitable precautions are put in place (eg careful location, suitable capping with fresh material etc). This will require consultation in advance with the planning authority however.

4.3.6 Given the condition of the asbestos contamination and the small fragments evident (suggesting extensive historical damage) it is likely that on-site decontamination and re-use of significant volumes of this soil material will not be cost-effective and it will require to be removed off-site and disposed of as special waste. For an area of approximately 100 sq m footprint and a soil volume with depth of 1.0m, the disposal costs for hazardous soils/demolition rubble containing asbestos would be likely to be in the region of £30-50,000 (100 cubic metres)

4.3.7 Further investigations to delineate the physical extent (ie lateral and horizontal) of this contamination (including free-fibre quantification), to characterize the asbestos cement classification, and to fine-tune costs, are warranted to further inform the client’s decision-making options prior to any mitigation works.

4.3.8 A conceptual model of the environmental risk presented by the asbestos ground contamination is provided at section 4.4. However it should be noted that there are other risks to the client not directly accounted for in this. These include:

- a. the risk of asbestos being identified on-site during or even subsequent to construction of new development/dwelling at which point remedial mitigation can become very expensive; and
- b. inadvertent removal off-site of material classed as inert waste which is subsequently identified as containing asbestos wastes, and which may contaminate other material streams, again with possible high-risk financial consequences.

## 4.4 Poultry Wastes

4.4.1 Historically the site has only been used – since the early 1960s – for the purposes of poultry farming. Historic poultry wastes on-site are not evident in significant volumes but are assumed to be present as residues within the shed area. These are considered to present a risk to water-courses from run-off or to constitute a hazard in the soil surfaces on the site, given the time since cessation of poultry farming on-site.

4.4.2 Recent studies have identified that there is a human respiratory health risk from exposure by inhalation to the organic dusts associated with such processes. These dusts can be a complex mixture of components including bioaerosols and various allergens, as well as ammonia. However this is considered primarily an occupational exposure risk when working in live facilities. The biological activity of the dust residues present in the Main Shed and externally is considered to be very low and any gaseous by-products such as ammonia will

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long since have volatilised off. Nevertheless there should be assumed to remain a low risk of exposure by inhalation exclusively for persons occupying the shed (if undertaking dust-raising activities), and for operatives engaged in demolition of the shed.

4.4.3 The impact of such dusts beyond the site perimeter during demolition activities is considered to be negligible.

#### 4.5 Environmental Risk

A formal conceptual model of the environmental risk has been developed on the basis of the asbestos ground contamination and poultry waste residues, and the possible environmental pathways available, and the ultimate pollution receptors in each instance. This is presented in Table 2.

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**Table 2. Conceptual Risk Model**

Pollutant	Linkage	Receptor	Risk Assessment
Asbestos	Dispersion by air	Groundwater	Negligible risk
		Surface water(on-site)	Not applicable
		Surface waters (off-site)	Negligible risk
		Water supply	Not applicable
		Building foundation integrity	Not applicable
		Human exposure (site worker)	Potential low risk (during earthworks if simple controls are not implemented)
		Human exposure (off-site, eg neighbour)	Potential low risk (during earthworks if simple controls are not implemented)
		Human exposure (occupier)	Very low risk of exposure of subsequent occupant of dwelling (eg during garden-related activities)
		Vegetation (on-site or off-site)	Not applicable
		Ecological habitats	Not applicable
Asbestos	Physical migration through soil within site or off-site	Groundwater	Negligible risk
		Surface water(on-site)	Not applicable
		Surface waters (off-site)	Negligible risk
		Water supply	Not applicable
		Building foundation integrity	Not applicable
		Human exposure (site worker)	Negligible risk
		Human exposure (off-site, eg neighbour)	Negligible risk
		Human exposure (occupier)	Negligible risk
		Vegetation (on-site or off-site)	Not applicable
		Ecological habitats	Not applicable
Asbestos	Percolation in surface/groundwaters within site or off-site	Groundwater	Negligible risk
		Surface water(on-site)	Not applicable
		Surface waters (off-site)	Negligible risk
		Water supply	Not applicable
		Building foundation integrity	Not applicable
		Human exposure (site worker)	Negligible risk
		Human exposure (off-site, eg neighbour)	Negligible risk
		Human exposure (occupier)	Negligible risk
		Vegetation (on-site or off-site)	Not applicable
		Ecological habitats	Not applicable
Poultry Wastes	Dispersion by air	Groundwater	Negligible risk
		Surface water(on-site)	Not applicable
		Surface waters (off-site)	Negligible risk
		Water supply	Not applicable
		Building foundation integrity	Not applicable
		Human exposure (site worker)	Low risk
		Human exposure (off-site, eg neighbour)	Negligible risk
		Human exposure (occupier)	Low risk
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		Vegetation (on-site or off-site)	Not applicable
		Ecological habitats	Not applicable
Poultry Wastes	Physical migration through soil within site or off-site	Groundwater	Negligible risk
		Surface water(on-site)	Negligible risk
		Surface waters (off-site)	Negligible risk
		Water supply	Not applicable
		Building foundation integrity	Not applicable
		Human exposure (site worker)	Not applicable
		Human exposure (off-site, eg neighbour)	Negligible risk
		Human exposure (occupier)	Negligible risk
		Vegetation (on-site or off-site)	Not applicable
		Ecological habitats	Not applicable
Poultry Wastes	Percolation in surface/groundwaters within site or off-site	Groundwater	Negligible risk
		Surface water(on-site)	Negligible risk
		Surface waters (off-site)	Negligible risk
		Water supply	Not applicable
		Building foundation integrity	Not applicable
		Human exposure (site worker)	Not applicable
		Human exposure (off-site, eg neighbour)	Negligible risk
		Human exposure (occupier)	Negligible risk
		Vegetation (on-site or off-site)	Not applicable
		Ecological habitats	Not applicable

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

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5.1 There are two standing structures with extensive asbestos cement in-situ. The internal fabric within the main shed requires to be cleaned under controlled conditions ("environmental clean") prior to any significant occupancy. This will be notifiable, non-licensed work. Refer to Report P6799.01

5.2 The external asbestos cement sheeting on the two existing structures does not present any risk to occupants but should be inspected for deterioration on a three-yearly basis. Refer to Report P6799.01.

5.3 Prior to demolition and redevelopment the in-situ asbestos should be removed under controlled conditions. The external sheeting to be removed may be sufficiently degraded to constitute "asbestos insulation board" and should be tested by water sorption test in advance to confirm appropriate category of work. The work on the internal asbestos cement should be assumed to be classed as non-notifiable, non-licensed work.

5.4 There is extensive contamination of surface and sub-surface ground with asbestos in some areas of the site assumed to derive from a previously-demolished agricultural shed. The extent of this contamination requires further work in terms of delineating the contamination (ie lateral spread, depth of contamination), understanding the nature of the contamination (ie degree of degradation of material/product categorisation, free-fibre quantification). This will assist in informing the client on the most cost-effective remediation solution.

5.5 The asbestos present on-site (in-situ or ground contamination) currently presents negligible risk to human health (occupants or neighbouring community). There is a low human exposure risk during earthworks for site operatives and neighbouring receptors.

5.6 In addition to elevating human exposure/environmental risks, inadequate identification, assessment, segregation or disposal of soil and demolition rubbles contaminated with asbestos can result in significant commercial/project risks.

5.7 There is no evidence of other potential contamination on-site excepting possible animal waste residues associated with the existing structure, however these waste residues are concluded to be sufficiently small in volume and sufficiently old to present minimal microbiological hazard, excepting during either demolition of the main shed or dust-raising activities during occupancy of the shed, in which cases there is concluded to be a low risk of human respiratory health impact.

P6799.02		Page 23 of 28		Ethos Environmental Ltd	
Burnside Poultry Unit				Stage 1 Site Contamination Assessment	
Mr Graham Buchan				November 2016	
<b>Form No</b>	30-014	<b>Date of Issue</b>	27/04/2016	<b>Issue no.</b>	5.0

5.8 It is considered that sufficient information is presented in this report with regard to the in-situ asbestos materials and the poultry wastes risks, to enable the client to progress decision-making with regards to the site. In contrast, to evaluate options for future use of the site, it is however considered that there is still room for significant clarification as to the nature and extent of the asbestos ground contamination, the work categorisation for this (licensable/non-licensable etc), and the likely associated costs for remediation, removal/disposal etc.

P6799.02		Page 24 of 28		Ethos Environmental Ltd	
Burnside Poultry Unit				Stage 1 Site Contamination Assessment	
Mr Graham Buchan				November 2016	
<b>Form No</b>	30-014	<b>Date of Issue</b>	27/04/2016	<b>Issue no.</b>	5.0



APPENDIX 1. Certificate of Analysis (A20653)



**CERTIFICATE OF ANALYSIS**

Analysis undertaken to Ethos UKAS accredited Documented In-House Procedure (7) based upon Appendix 2 of the Analysts' Guide (HS0248)

**Ethos Environmental Ltd**

**Head Office**  
Unit 15-16 Dumbryton Industrial Estate  
Dumbryton Road  
EDINBURGH  
EH14 2AB



tel: 0131 453 0111  
fax: 0131 453 0111  
email: info@ethosenvironmental.co.uk

<b>ASBESTOS JOB NUMBER</b>	A-20653	<b>DATE OF SAMPLING</b>	29/09/2016	<b>Sampling Disclaimer</b> Ethos Environmental Ltd operates a UKAS Accredited documented in-house method for bulk asbestos sampling. Where samples are sent in by external clients Ethos Environmental Ltd, can accept no responsibility for samples incorrectly collected or cross contaminated. The sampling will also be outwith the scope of our UKAS Accreditation for sampling. This disclaimer should be considered when interpreting the results of the analysis below.
<b>CLIENT</b>	MR GRAHAM BUCHAN 59 SCHOOL DRIVE  ABERDEEN  AB24 1TH	<b>DATE OF ANALYSIS</b>	11/10/2016	
		<b>SAMPLED BY</b>	Arka Gargwal	
		<b>SITE DETAILS</b>	Burnside Poultry Farm, Kinellar	

SAMPLE ID	SAMPLE DETAILS	CONTAINS	COMMENTS
07440	Sample 1	Chrysotile (white asbestos)	
07441	Sample 2	Chrysotile (white asbestos)	<30% w/w asbestin - cement
07442	Sample 3	Chrysotile (white asbestos)	<30% w/w asbestin - board
07443	Sample 4	Chrysotile (white asbestos)	<30% w/w asbestin - cement

<b>ANALYSED BY:</b>	Arka Gargwal	<b>ANALYSED BY SIGNATURE</b>		<b>Analysis Disclaimer</b> All comments and opinions, including water vapour analysis, contained on this certificate are outside the scope of our UKAS Accreditation for Analysis of Asbestos in Bulk Materials. No responsibility can be accepted for the incorrect use or misrepresentation of the information detailed in this certificate.  This certificate is invalid without an authorized signature.
<b>DESIGNATION:</b>	Laboratory Analyst			
<b>AUTHORISED BY:</b>	Arka Gargwal	<b>AUTHORISED BY SIGNATURE</b>		
<b>DESIGNATION:</b>	Senior Laboratory Analyst			

Form No.	22-001
Issue	2.0
Next Issue	March 14

P6799.02	Page 25 of 28		Ethos Environmental Ltd		
Burnside Poultry Unit			Stage 1 Site Contamination Assessment		
Mr Graham Buchan			November 2016		
<b>Form No</b>	30-014	<b>Date of Issue</b>	27/04/2016	<b>Issue no.</b>	5.0



2146

# CERTIFICATE OF ANALYSIS

Analysis performed in Ethos UKAS Accredited Documented Procedure (where applicable) with Appendix 3 of the Analysis Guide (H50245)

## Ethos Environmental Ltd

Head Office  
Unit 15-16 Dumfries Road Industrial Estate  
Dumfries Road  
EDINBURGH  
EH14 2AR



tel: 0131 453 8111  
fax: 0131 453 8111  
email: info@ethosenvironmental.co.uk

<b>ASBESTOS JOB NUMBER</b>	A-20633		
<b>CLIENT</b>	MR GRAHAM BUCHAN 79 SCHOOL DRIVE  ASBOSTON AB21 1TH	<b>DATE OF SAMPLING</b>	26/06/2016
		<b>DATE OF ANALYSIS</b>	11/10/2016
		<b>SAMPLED BY</b>	Brian Gardner
		<b>SITE DETAILS</b>	Burnside Poultry Farm, Newbig
<b>Sampling Disclaimer</b>	Ethos Environmental Ltd operate a UKAS Accredited documented in-house method for bulk asbestos sampling. Where samples are sent in by external clients, Ethos Environmental Ltd can accept no responsibility for samples incorrectly collected or cross contaminated. The sampling will also be within the scope of our UKAS Accreditation for sampling. This disclaimer should be considered when interpreting the results of the analysis below.		
17440	Sample 5	Chrysotile (white asbestos)	< 50% w/w absorption - cement
17441	Sample 6	Chrysotile (white asbestos)	< 50% w/w absorption - cement
17442	Sample 7	Chrysotile (white asbestos)	< 50% w/w absorption - cement
17443	Sample 8	Chrysotile (white asbestos)	

<b>ANALYSED BY</b>	Ravi Grewal	<b>ANALYSED BY SIGNATURE</b>		<b>Analysis Disclaimer</b>
<b>DESIGNATION</b>	Lead Asbestos Analyst			All comments and options, including water sorption analysis, contained on this certificate are within the scope of our UKAS Accreditation for Analysis of Asbestos in Bulk Materials. No responsibility can be accepted for the incorrect use or misrepresentation of the information detailed in this certificate.
<b>AUTHORISED BY</b>	Amy Dziondziska	<b>AUTHORISED BY SIGNATURE</b>		This certificate is invalid without an authorising signature.
<b>DESIGNATION</b>	Senior Laboratory Analyst			

Form no.	21.001
Issue	1.0
Date issued	May 14

P6759.02		Page 26 of 28		Ethos Environmental Ltd	
Burnside Poultry Unit				Stage 1 Site Contamination Assessment	
Mr Graham Buchan				November 2016	
<b>Form No</b>	30-014	<b>Date of Issue</b>	27/04/2016	<b>Issue no.</b>	5.0



2146

# CERTIFICATE OF ANALYSIS

Analysis undertaken to Ethos UKAS Accredited Documented Procedure 27 based upon Elements 2 of the Analytical Guide (AS0240)

## Ethos Environmental Ltd

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Unit 15, 16 Dumbryon Industrial Estate  
Dumbryon Road  
EDINBURGH  
EH14 2AB

tel: 0111 452 8111  
fax: 0111 452 8111  
email: info@ethosenvironmental.co.uk



<b>ASBESTOS JOB NUMBER</b>	<b>A-20633</b>	<b>DATE OF SAMPLING</b>	20/09/2016	<b>Sampling Disclaimer</b> Ethos Environmental Ltd operate a UKAS Accredited documented procedure method for bulk asbestos sampling. Where samples are sent to by external parties Ethos Environmental Ltd can accept no responsibility for samples incorrectly collected or found contaminated. The sampling will also be subject to the scope of our UKAS Accreditation for sampling. This disclaimer should be considered when interpreting the results of the analysis data.
<b>CLIENT</b>	MR GRAHAM BUCHAN Mc DONOGG group	<b>DATE OF ANALYSIS</b>	11/10/2016	
	ABERDEEN	<b>SAMPLED BY</b>	Ethos Client	
	ABDULATH	<b>SITE DETAILS</b>	Burnside Poultry Farm Kinellar	
07430	Control 6	Crystalline (amphibole)		100%w/w asbestos - board
07431	Control 6	Crystalline (chrysotile)		100%w/w asbestos - ceiling

<b>ANALYSED BY</b>	Keith Gurney	<b>ANALYSED BY SIGNATURE</b>		<b>Analysis Disclaimer</b> All comments and opinions, including wider context analysis contained on this certificate are outside the scope of our UKAS Accreditation for Analysis of Asbestos in Bulk Materials. No responsibility can be accepted for the incorrect use or misrepresentation of the information detailed in this certificate.  This certificate is invalid without an authorised signature.
<b>DESIGNATION</b>	Lab/entry Analyst			
<b>AUTHORISED BY</b>	Neil Robertson	<b>AUTHORISED BY SIGNATURE</b>		
<b>DESIGNATION</b>	Senior Laboratory Analyst			

Page 3 of 3

Form No.	27-003
Issue	1.02
Valid until	Never

P6799.02		Page 27 of 28		Ethos Environmental Ltd	
Burnside Poultry Unit				Stage 1 Site Contamination Assessment	
Mr Graham Buchan				November 2016	
<b>Form No</b>	30-014	<b>Date of issue</b>	27/04/2016	<b>Issue no.</b>	5.0

## APPENDIX 2. Envirocheck Data

P6799.02		Page 28 of 28		Ethos Environmental Ltd	
Burnside Poultry Unit				Stage 1 Site Contamination Assessment	
Mr Graham Buchan				November 2016	
<b>Form No</b>	30-014	<b>Date of Issue</b>	27/04/2016	<b>Issue no.</b>	5.0

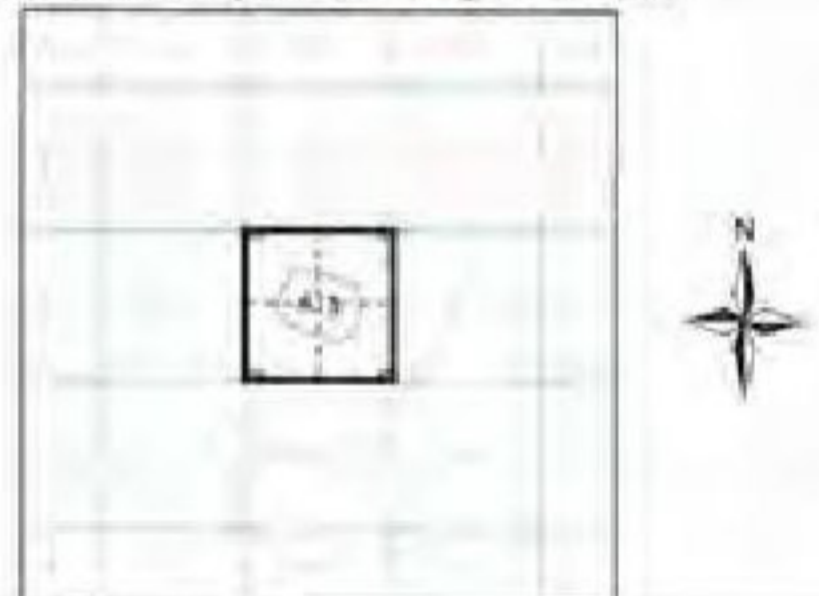


# Envirocheck<sup>®</sup>

LANDMARK INFORMATION GROUP<sup>™</sup>

- General**
- Specified Site
  - Specified Buffer(s)
  - General Type of Location
  - From
  - Planning Reference Point
  - 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 Enforcement
  - Pollution Incident to Controlled Polluter
  - Provisional Permitting to Authorised Processes
  - Provisional Permitting to Controlled Polluter
  - Registered Radioactive Substances
  - River Network or Water Feature
  - Subsidiary Pollution Control Register
  - Water Abstraction
  - Water Industry Act Features
- Hazardous Substances**
- COMAH Site
  - EMIS Site
  - Planning Hazardous Substance Consent
  - Planning Hazardous Substance Enforcement
- Waste**
- EU5 Recorded Landfill Site (Current)
  - EU5 Recorded Landfill Site
  - EU5 Record Control Register Other Site
  - Local Authority Recorded Landfill Site (Current)
  - Local Authority Recorded Landfill Site
  - Potentially Infill Land (Non-water)
  - Potentially Infill Land (Non-water)
  - Potentially Infill Land (Non-water)
  - Potentially Infill Land (Water)
  - Potentially Infill Land (Water)
  - Potentially Infill Land (Water)
  - Registered Landfill Site (Current)
  - Registered Landfill Site (Non-Authorised to Operate)
  - Registered Landfill Site (Non-Authorised to Operate)
  - Registered Waste Transfer Site (Current)
  - Registered Waste Transfer Site
  - Registered Waste Treatment or Disposal Site (Current)
  - Registered Waste Treatment or Disposal Site
- Geological**
- EU5 Recorded Mineral Site

## Site Sensitivity Map - Segment A13



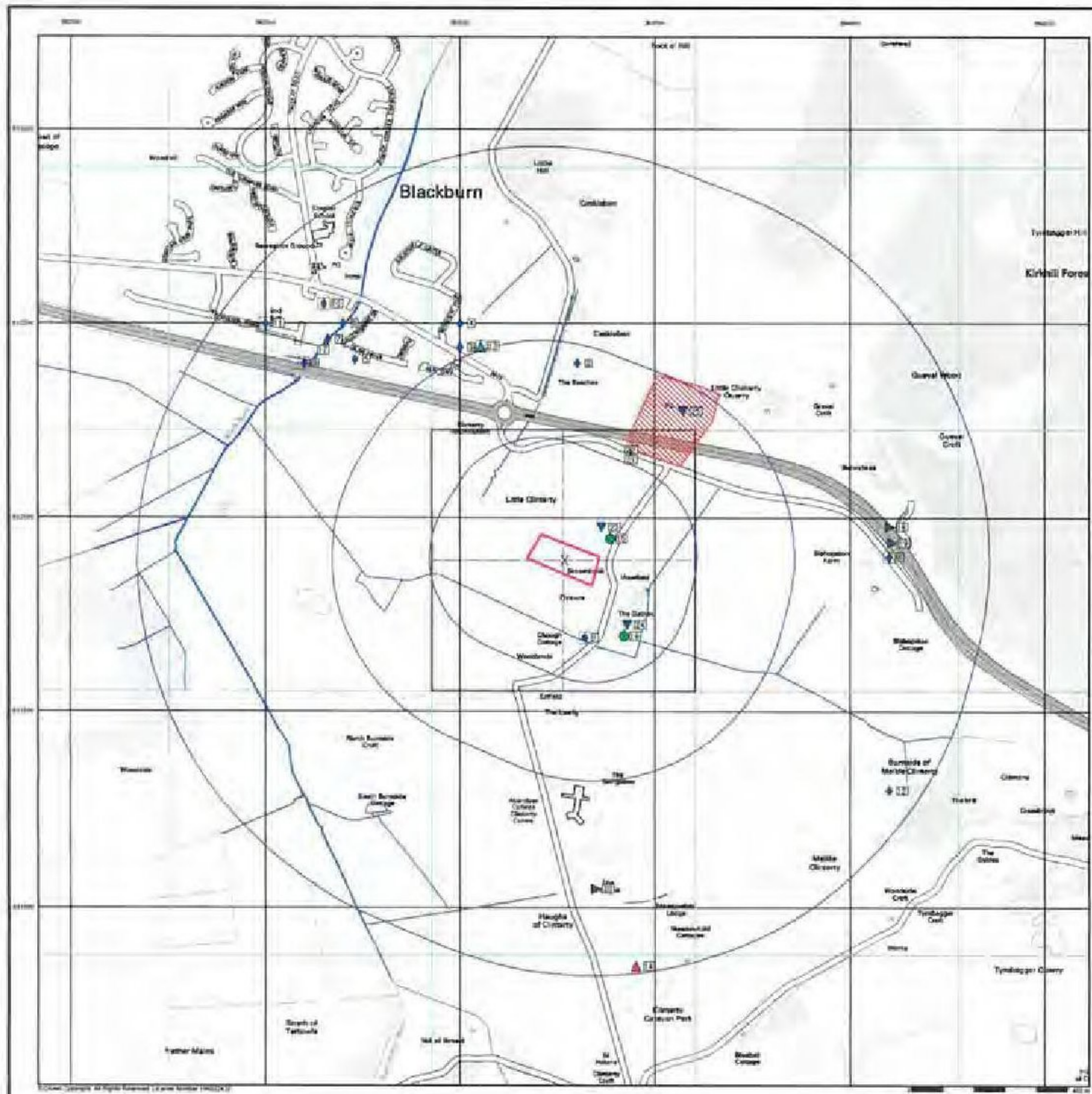
**Order Details**

Order Number: 104603676\_1\_1  
 Customer Ref: P6799  
 National Grid Reference: 383270, 811890  
 Slice: A  
 Site Area (Ha): 1.26  
 Plot Buffer (m): 100

**Site Details**  
 Burnside Poultry Unit, Little Cinterty, Kinellar, ABERDEEN, AB21 0TL

**Landmark**  
 LANDMARK INFORMATION GROUP

Tel: 0844 844 0902  
 Fax: 0141 844 0261  
 Web: www.landmark.co.uk

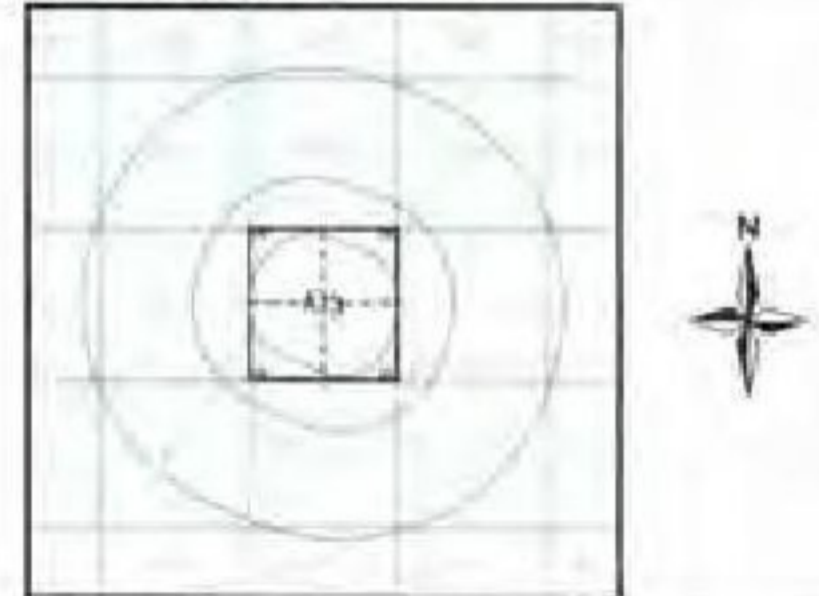


# Envirocheck<sup>®</sup>

LANDMARK INFORMATION GROUP<sup>®</sup>

- General**
- Specified Site
  - Specified Buffer(s)
  - ✕ Planning Protection Point
  - Hard ID
  - Symbol of Type at Location
- Agency and Hydrological**
- Contaminated Land Register Entry of Status (Location)
  - Contaminated Land Register Entry of Status
  - ▲ 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 Control History
  - ▲ Prohibition Notice by Authorised Personnel
  - ▲ Prohibition Notice by Controlled Person
  - ▲ Registered Inertive Substance
  - ▲ River Network or Water Feature
  - Substantiated Pollution Incident Register
  - ▲ Water Abstraction
  - ▲ Water Industry Act Permit
- Waste**
- ▲ EOD Recorded Landfill Site (Current)
  - ▲ EOD Recorded Landfill Site
  - ▲ Integrated Pollution Control Registered Waste Site
  - ▲ Local Authority Recorded Landfill Site (Current)
  - ▲ Local Authority Recorded Landfill Site
  - ▲ Potentially Infilled Land (Non-water)
  - ▲ Potentially Infilled Land (Non-water)
  - ▲ Potentially Infilled Land (Non-water)
  - ▲ Potentially Infilled Land (Water)
  - ▲ Potentially Infilled Land (Water)
  - ▲ Potentially Infilled Land (Water)
  - ▲ Registered Landfill Site
  - ▲ Registered Landfill Site (Current)
  - ▲ Registered Landfill Site (Over Authorised in 2000)
  - ▲ Registered Landfill Site (Over Authorised in 2000)
  - ▲ Registered Waste Transfer Site (Current)
  - ▲ Registered Waste Transfer Site
  - ▲ Registered Waste Treatment or Disposal Site (Current)
  - ▲ Registered Waste Treatment or Disposal Site
- Hazardous Substances**
- ▲ COSHH Site
  - ▲ Explosive Site
  - ▲ HNS Site
  - ▲ Planning Hazardous Substance Consent
  - ▲ Planning Hazardous Substance Environment
- Geological**
- ▲ EOD Recorded Mining Site

## Site Sensitivity Map - Slice A



## Order Details

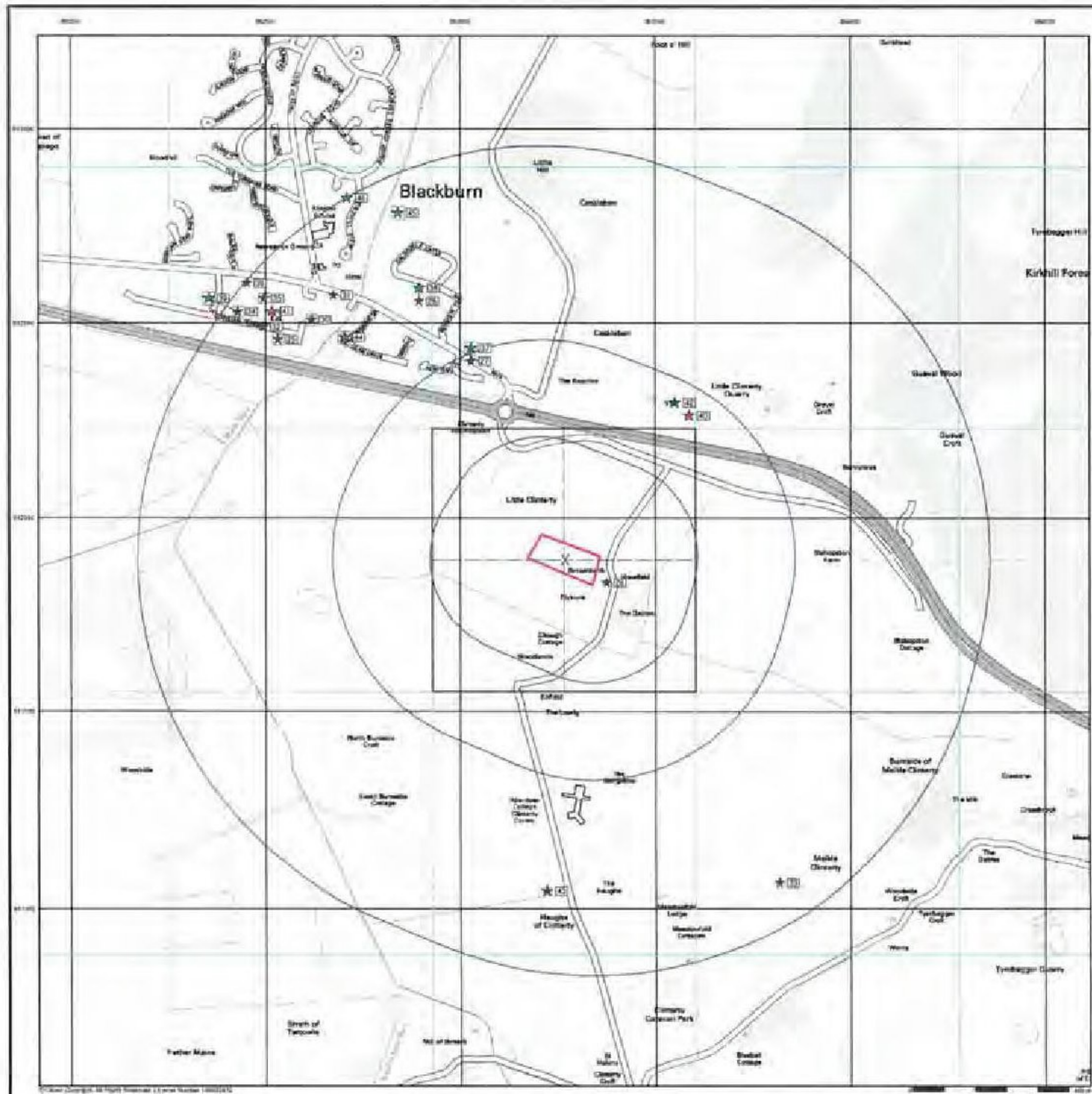
Order Number: 104603876\_1\_1  
 Customer Ref: P6799  
 National Grid Reference: 383270, 811800  
 Slice: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 1000

## Site Details

Burnside Poultry Unit, Little Clontarf, Kinellar, ABERDEEN, AB21 0TL

**Landmark<sup>®</sup>**  
 LANDMARK INFORMATION GROUP

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



# Envirocheck<sup>®</sup>

LANDMARK INFORMATION GROUP<sup>™</sup>

## Industrial Land Use Map

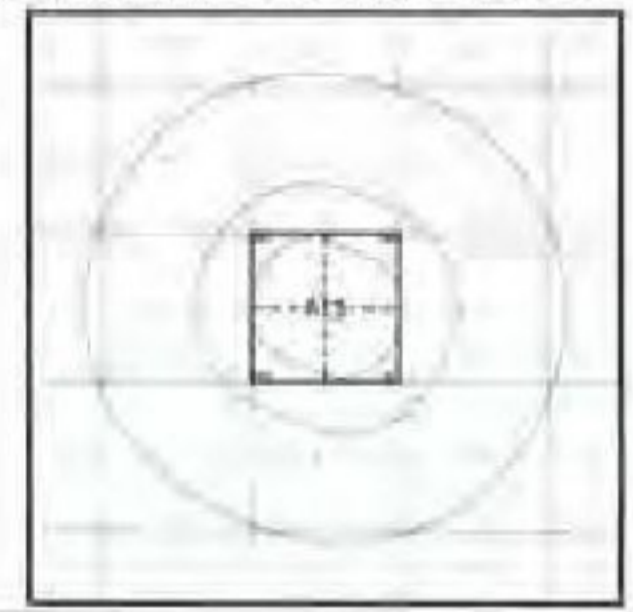
### General

- Specified Site
- Specified Outfalls
- Bearing Reference Point
- Slice
- Map ID

### Industrial Land Use

- Contemporary Trade Directory Entry
- Post Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Outdoors
- Unapproved Electrical Cables

## Industrial Land Use Map - Slice A



### Order Details

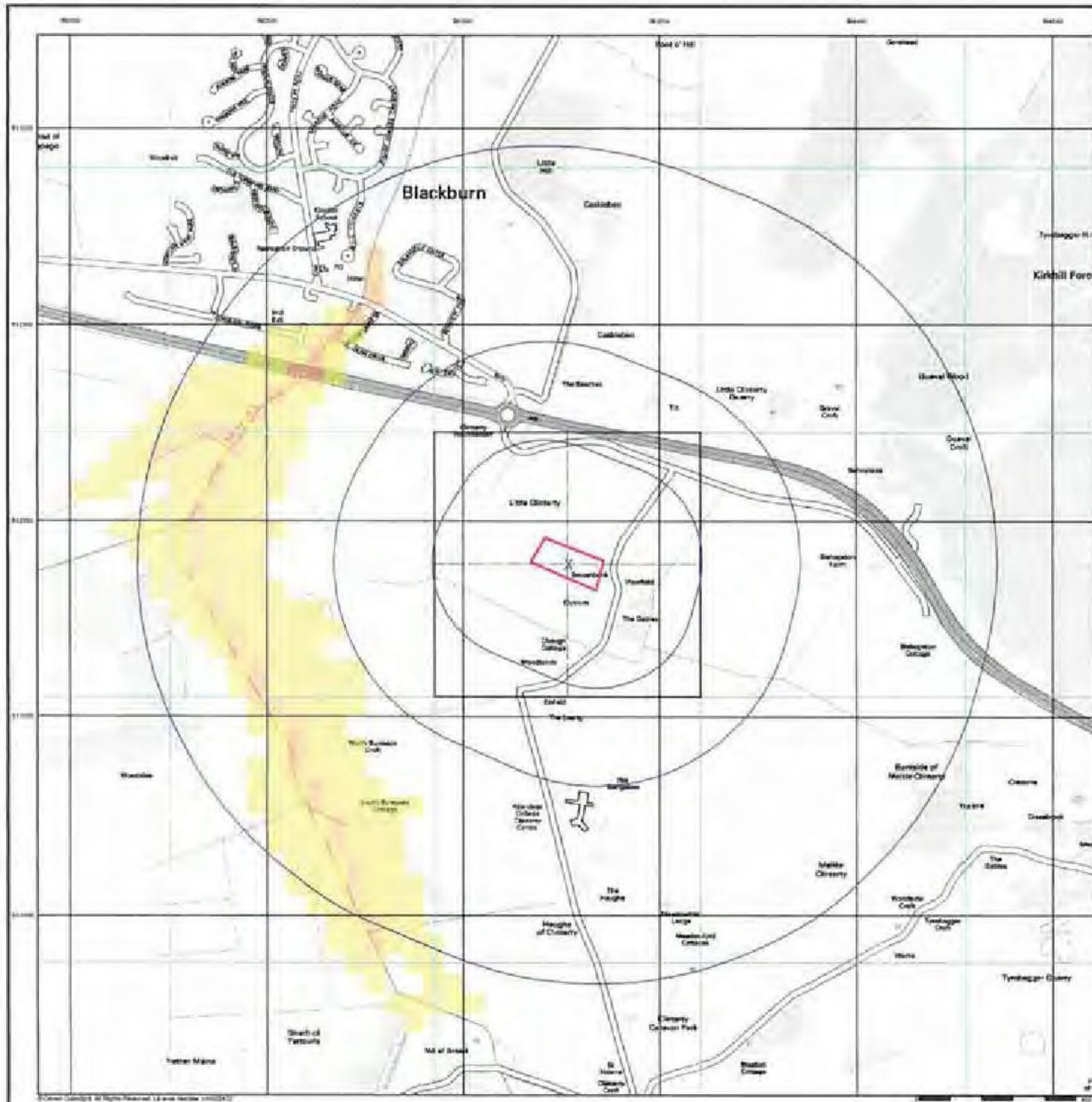
Order Number: 104603876\_1\_1  
 Customer Ref: P6709  
 National Grid Reference: 383270, 811690  
 Slice: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 1000

### Site Details

Burnside Poultry Unit, Little Cinterty, Kneifar, ABERDEEN, AB21 0TL

**Landmark**  
 LANDMARK INFORMATION GROUP

Tel: 0844 844 8881  
 Fax: 0844 844 8881  
 Email: [www.envirocheck.co.uk](mailto:www.envirocheck.co.uk)



# Envirocheck<sup>®</sup>

LANDMARK INFORMATION GROUP<sup>®</sup>

### General

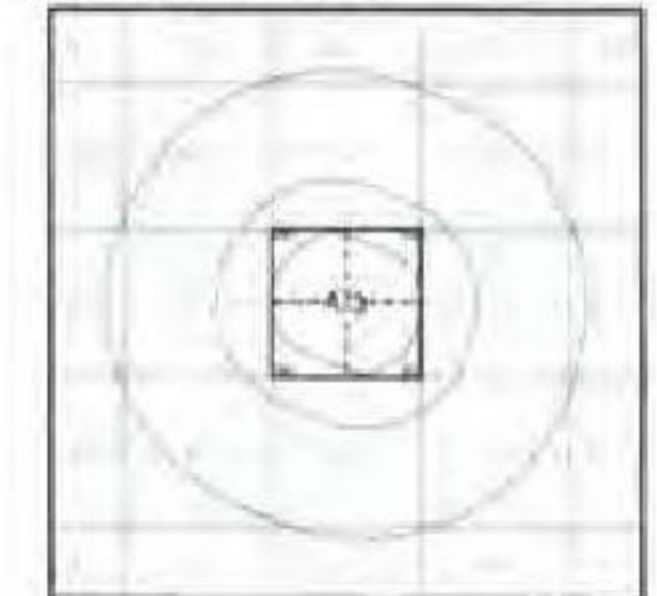
- Specified Site
- Specified Buffer
- X Existing Infrastructure

### Agency and Hydrological (Flood)

- 0 - 1m estimated 100yr flood depth
- 1 - 2m estimated 100yr flood depth
- Over 2m estimated 100yr flood depth

The flood map has been generated using a generalised technique and should not, by themselves, be used as the basis for any specific decision. Flood risk at any specific location may be influenced by local features - all local flood defences - that have not been taken into account.

### Flood Map - Slice A



### Order Details

Order Number: 104603576\_1\_1  
 Customer Ref: P6799  
 National Grid Reference: 383270, 811890  
 Slice: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 1000

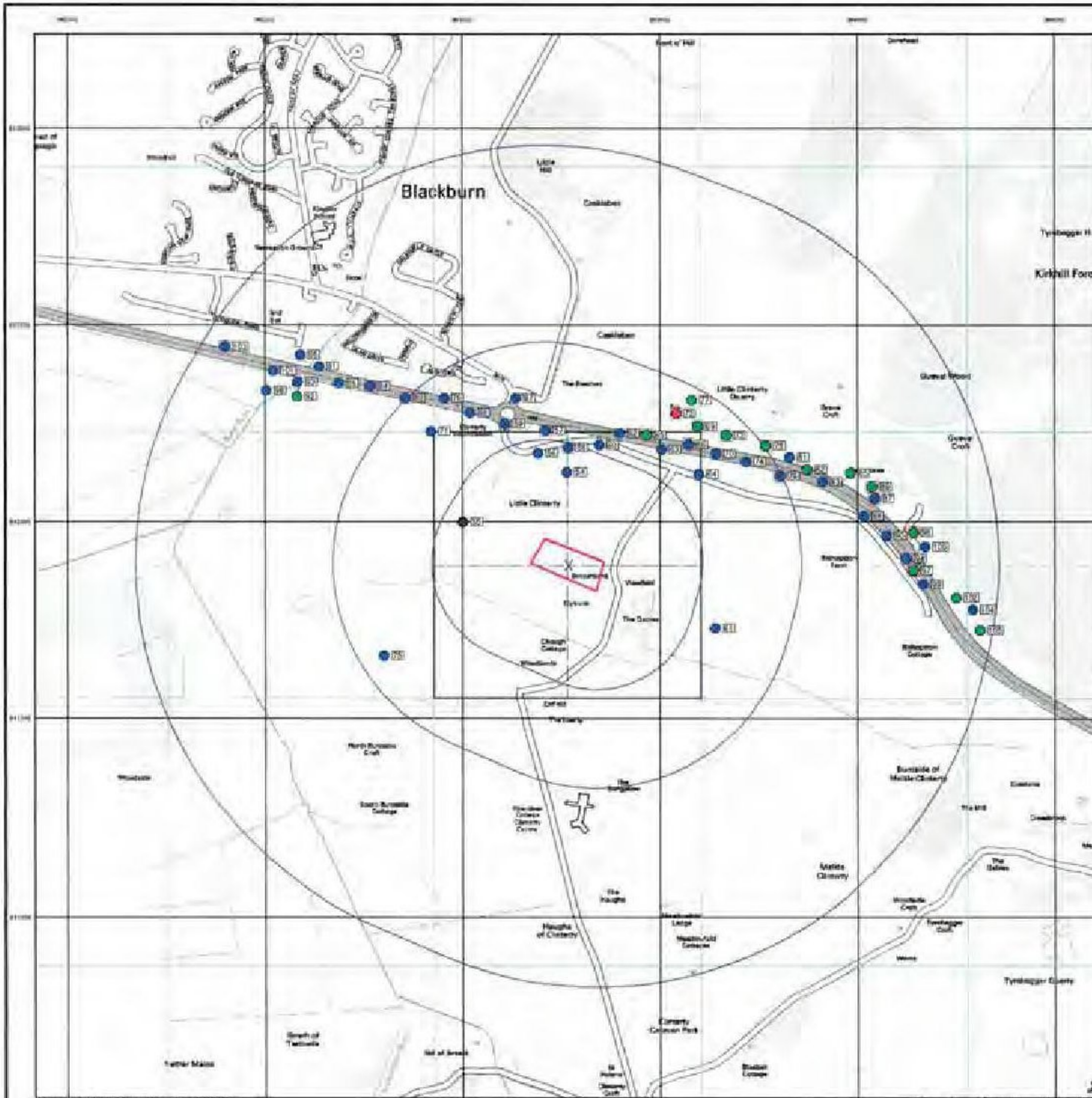
### Site Details

Burnside Poultry Unit, Little Cinterty, Kinellar, ABERDEEN, AB21 0TL

**Landmark**  
 LANDMARK INFORMATION GROUP

Tel: 0844 544 0952  
 Fax: 0844 544 0951  
 Web: www.envirocheck.co.uk





# Envirocheck<sup>®</sup>

LANDMARK INFORMATION GROUP<sup>®</sup>

## General

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point
- Map ID
- General of Time & Location

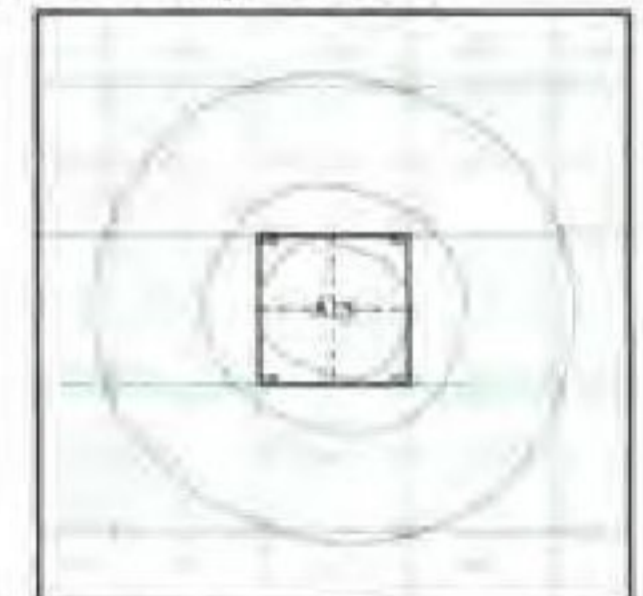
## Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Coordinate
- 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](http://www.envirocheck.co.uk)

## Borehole Map - Slice A



## Order Details

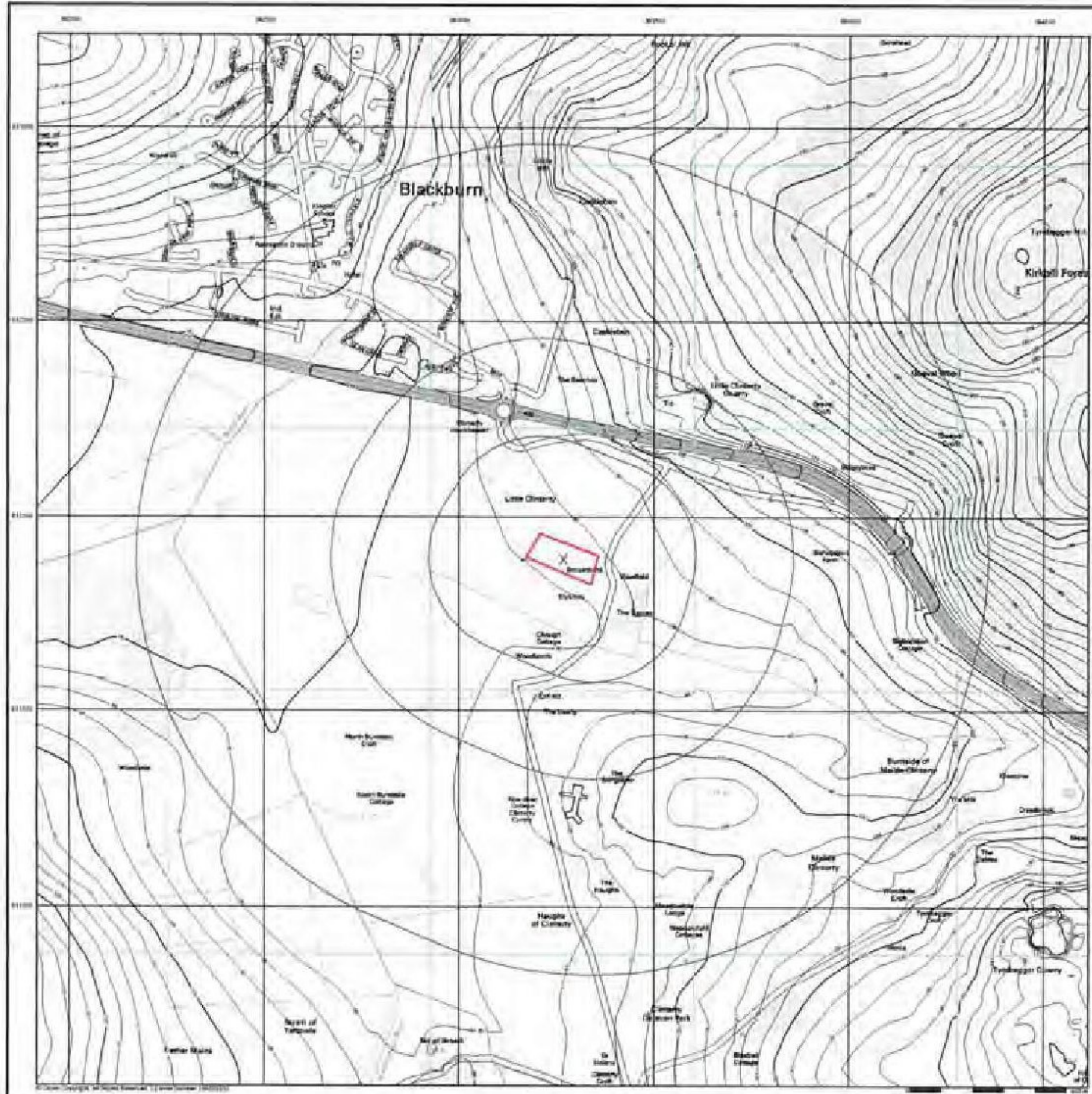
Order Number: 104603876\_1\_1  
 Customer Ref: P6796  
 National Grid Reference: 383270, 811890  
 Slice: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 1000

## Site Details

Burnside Poultry Unit, Little Clinterty, Kinellar, ABERDEEN, AB21 0TL

**Landmark**  
 LANDMARK INFORMATION GROUP

Tel: 0844 544 0552  
 Fax: 0844 544 0551  
 Web: [www.landmark.co.uk](http://www.landmark.co.uk)



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### General

- Selected Site
- Selected Buffer
- X River/Stream/Canal
- Map ID

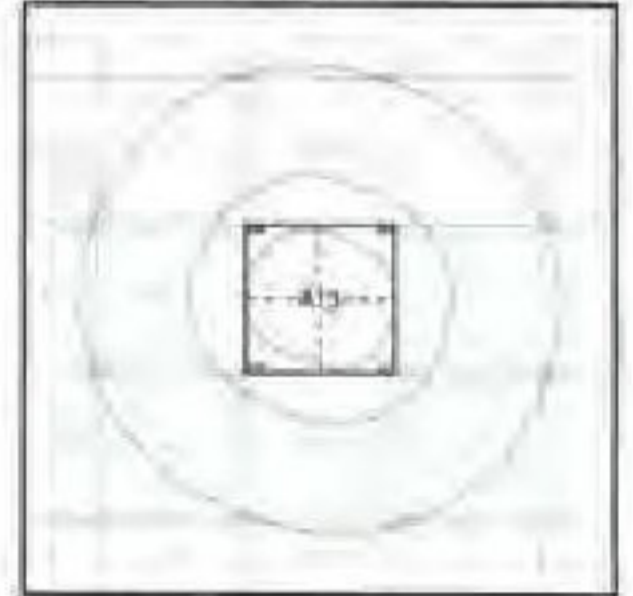
### Detailed River Network Data

- Primary River
- Secondary River
- Tertiary River
- Canal
- - - Canal Tunnel
- Undefined River
- - - L&L Discharge
- - - Other Drainage Feature
- Extended Culvert (greater than 50m)
- Underground River (Inferred)
- Underground River (Not known)
- Downstream of High Water Mark
- - - Downstream of Sewer Extension
- - - Not assigned River feature

### CONTOURS (height in metres)

- Standard Contour
- Master Contour
- Spot Height
- Mean Low Water Springs
- Mean High Water Springs

### EA/NRW Detailed River Network Map - Slice A



### Order Details

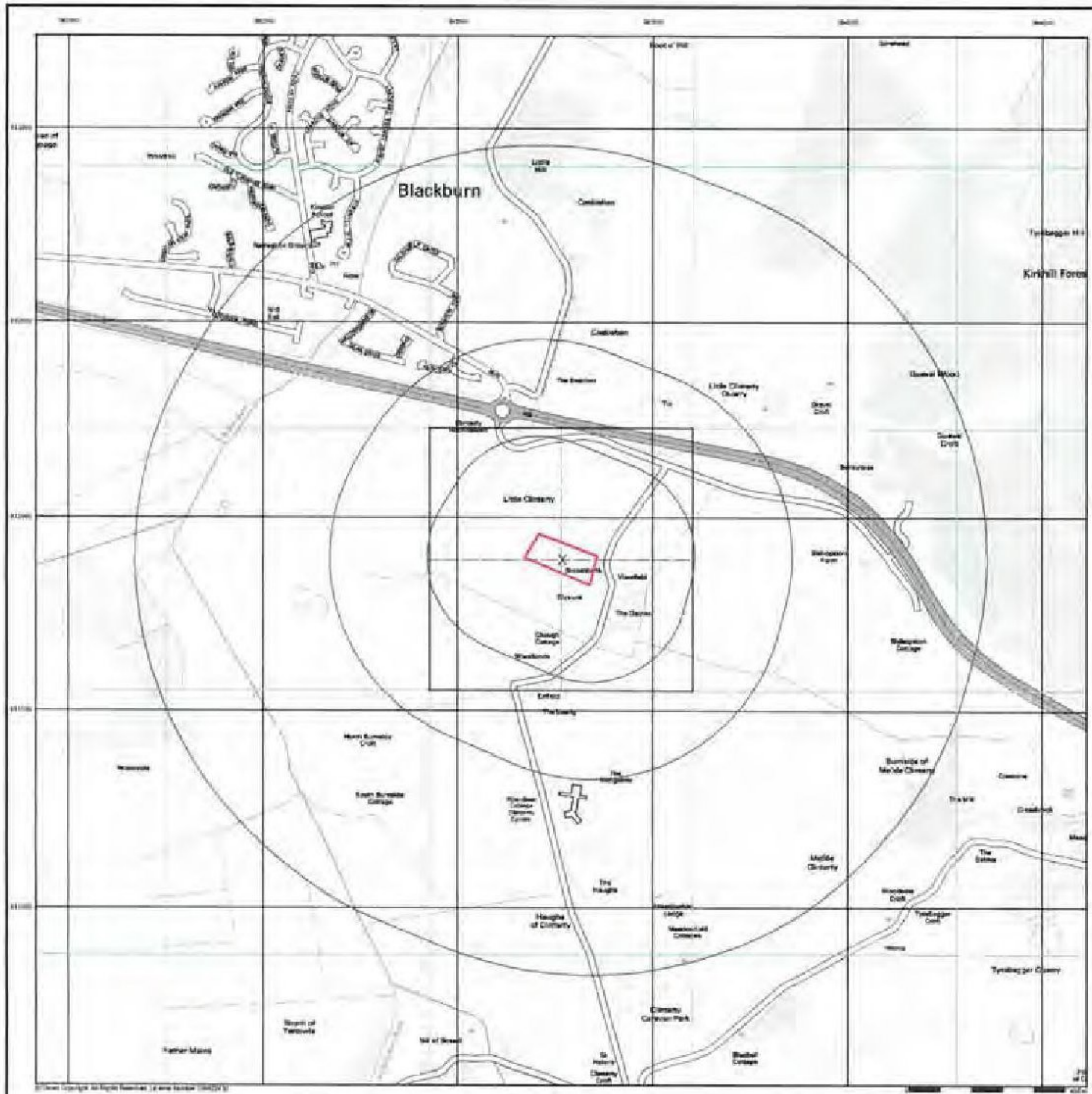
Order Number: 104603676\_1\_1  
 Customer Ref: P6799  
 National Grid Reference: 353270, 811890  
 Slice: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 1000

### Site Details

Burnside Poultry Unit, Little Cintarty, Kinellar, ABERDEEN, AB21 0TL

**Landmark**  
 LANDMARK INFORMATION GROUP

Tel: 0844 844 9002  
 Fax: 0844 844 9001  
 Web: www.envirocheck.co.uk



# Envirocheck<sup>®</sup>

LANDMARK INFORMATION GROUP<sup>®</sup>

### General

- Specified Site
- Specified Buffer (m)
- X Existing Reference Point

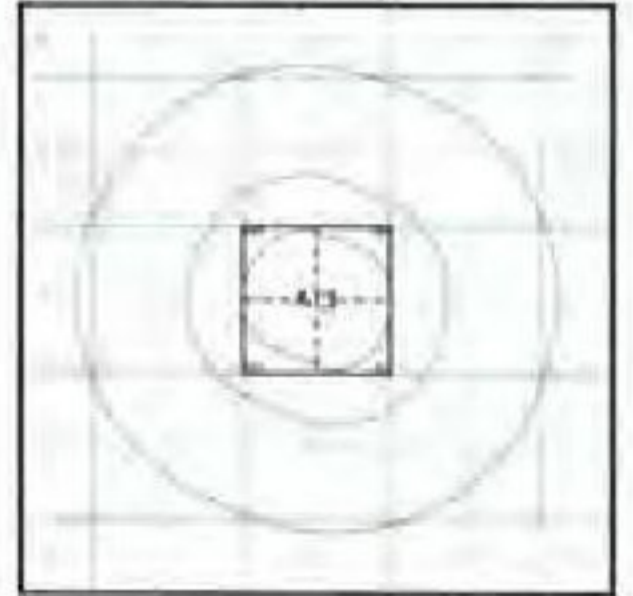
### Risk of Flooding from Surface Water

- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

### Suitability

- National to county
- County to town
- Town to grid
- Grid to parcels of land
- Locality

### EA/NRW Suitability Map - Slice A



### Order Details

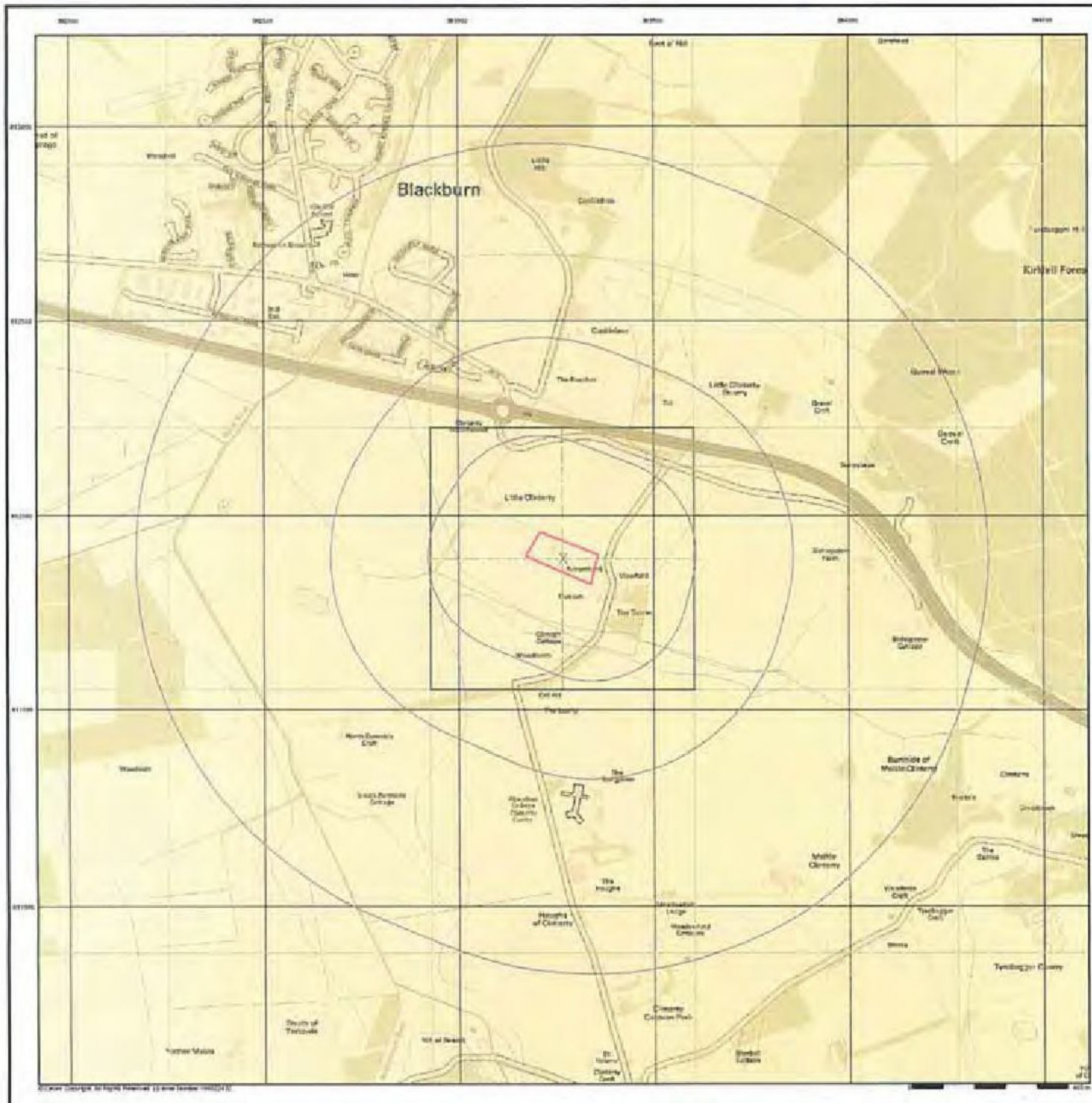
Order Number: 104603875\_1\_1  
 Customer Ref: P6799  
 National Grid Reference: 383270, 611890  
 Slice: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 1000

### Site Details

Burnside Poultry Unit, Little Clintony, Kinellar, ABERDEEN, AB21 0TL

**Landmark**  
 INFORMATION GROUP

Tel: 0844 944 2002  
 Fax: 0844 944 2051  
 Web: www.landmarkinfo.co.uk



# Envirocheck<sup>®</sup>

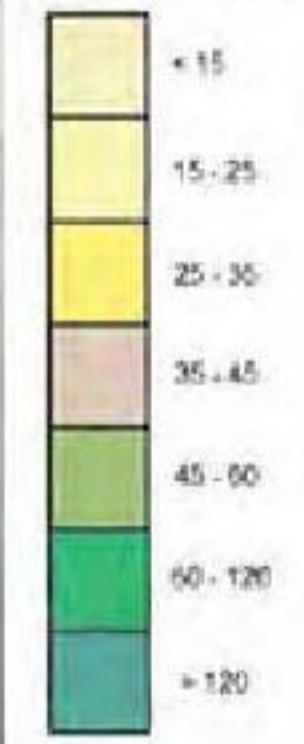
LANDMARK INFORMATION GROUP<sup>™</sup>

## General

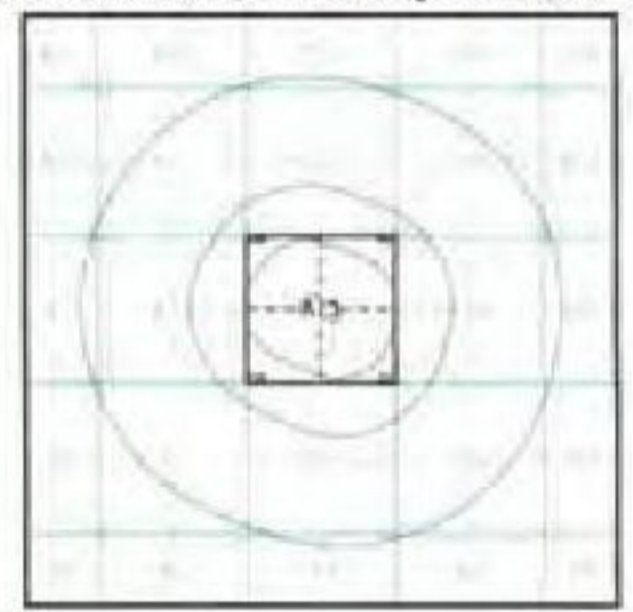
- Specified Site
- Specified Buffer(s)
- Search Reference Point

## Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg



## Estimated Soil Chemistry Arsenic - Slice A



## Order Details

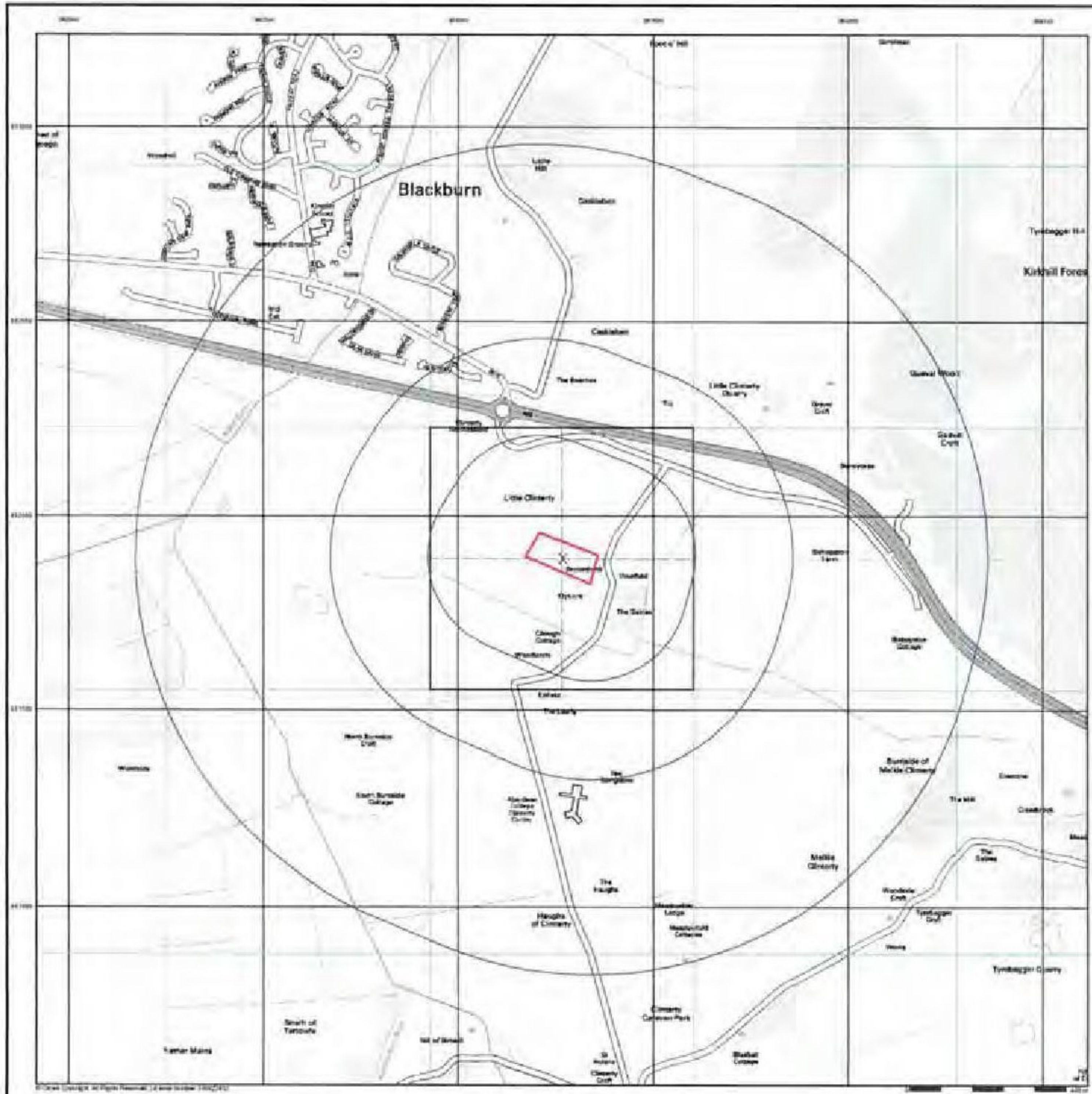
Order Details: 104603676\_1\_1  
 Customer Ref: P6799  
 National Grid Reference: 383270, 811890  
 Slice: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 1000

## Site Details

Burnside Poultry Unit, Little Clinterty, Kinellar, ABERDEEN, AB21 0TL

**Landmark**  
 LANDMARK INFORMATION GROUP

Tel: 0844 844 9932  
 Fax: 0844 844 9931  
 Web: www.envirocheck.co.uk



# Envirocheck<sup>®</sup>

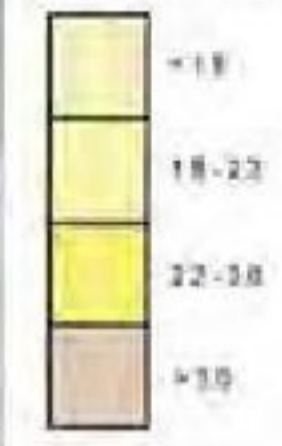
LANDMARK INFORMATION GROUP<sup>®</sup>

### General

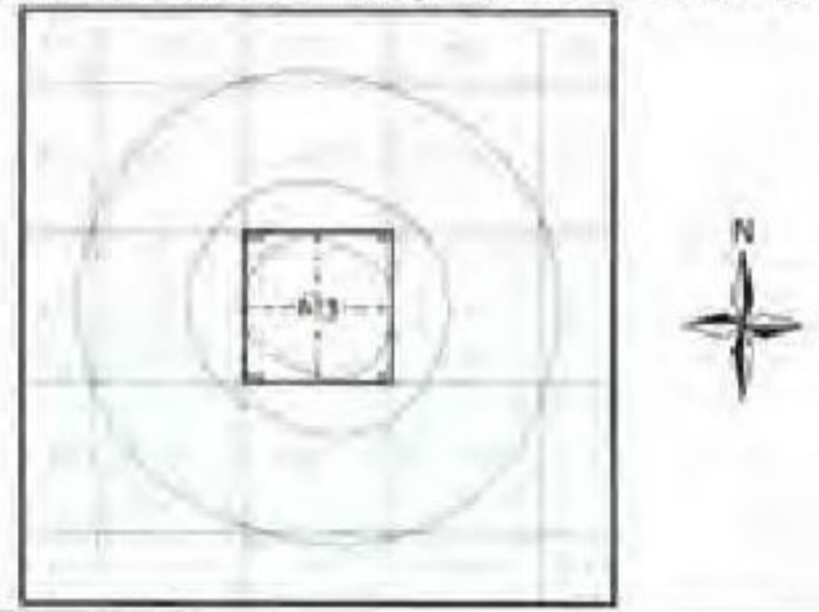
- Scuffed Site
- Scuffed Buffer(s)
- Being Reference Point

### Estimated Soil Chemistry Cadmium

Cadmium Concentration mg/kg



### Estimated Soil Chemistry Cadmium - Slice A



### Order Details

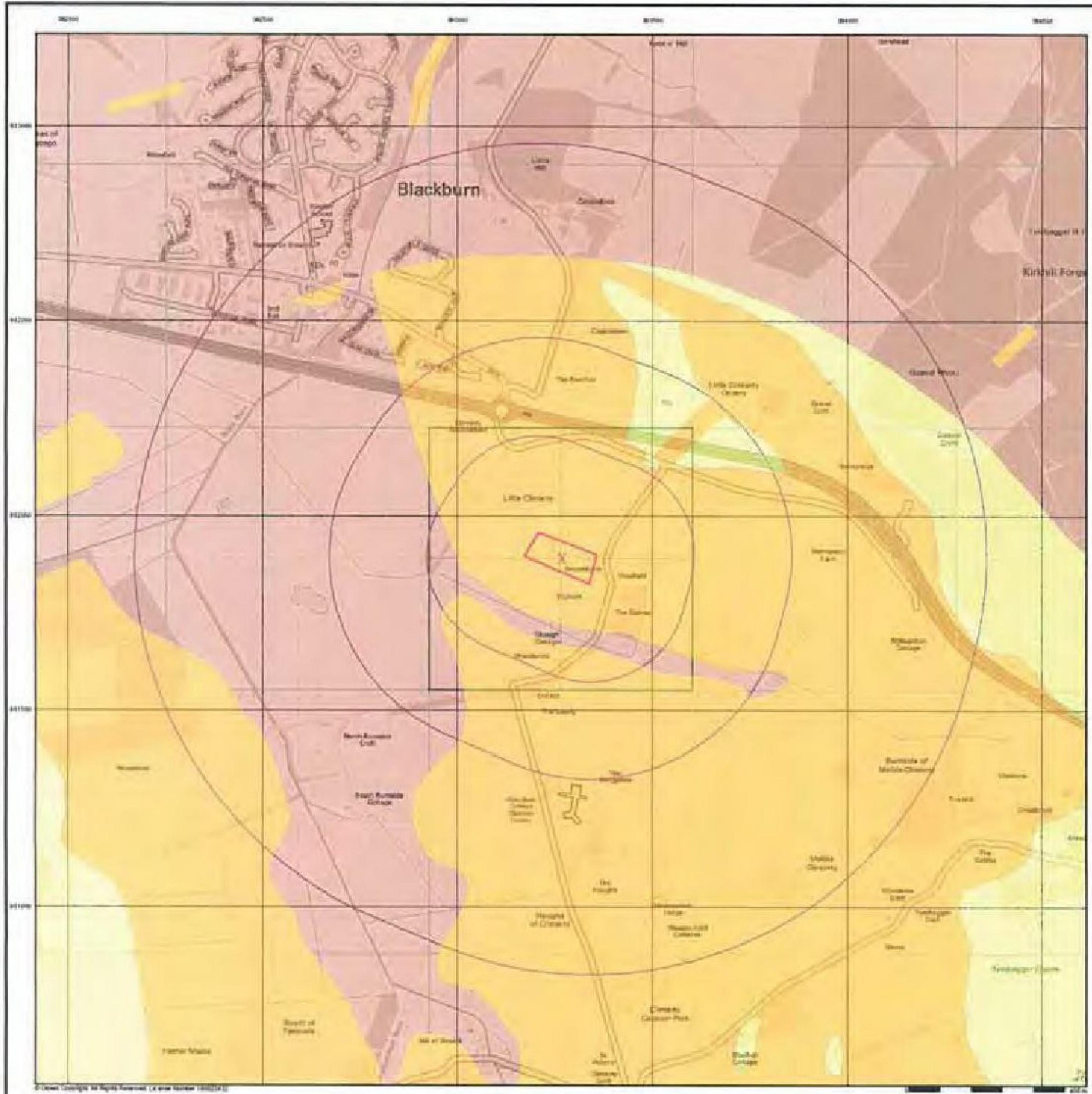
Order Details: 104603876\_1\_1  
 Customer Ref: P6799  
 National Grid Reference: 383270, 811890  
 Slice: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 1000

### Site Details

Burnside Poultry Unit, Little Cinterty, Kinellar, ABERDEEN, AB21 0TL

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 Fax: 0844 644 9951  
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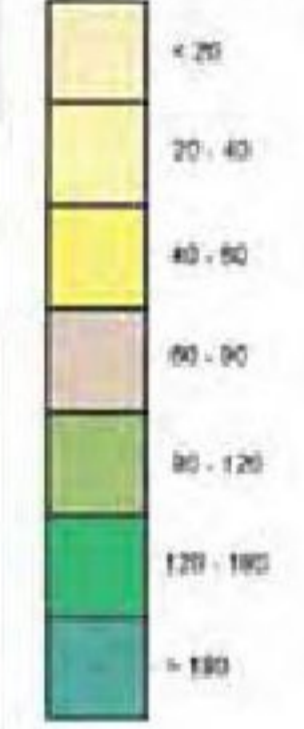
LANDMARK INFORMATION GROUP<sup>®</sup>

### General

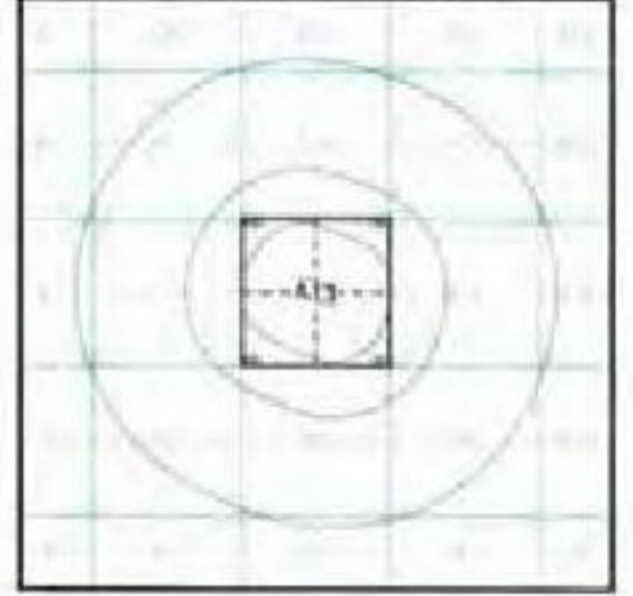
- Searched Site
- Searched National
- Showing Reference Point

### Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg



### Estimated Soil Chemistry Chromium - Slice A



### Order Details

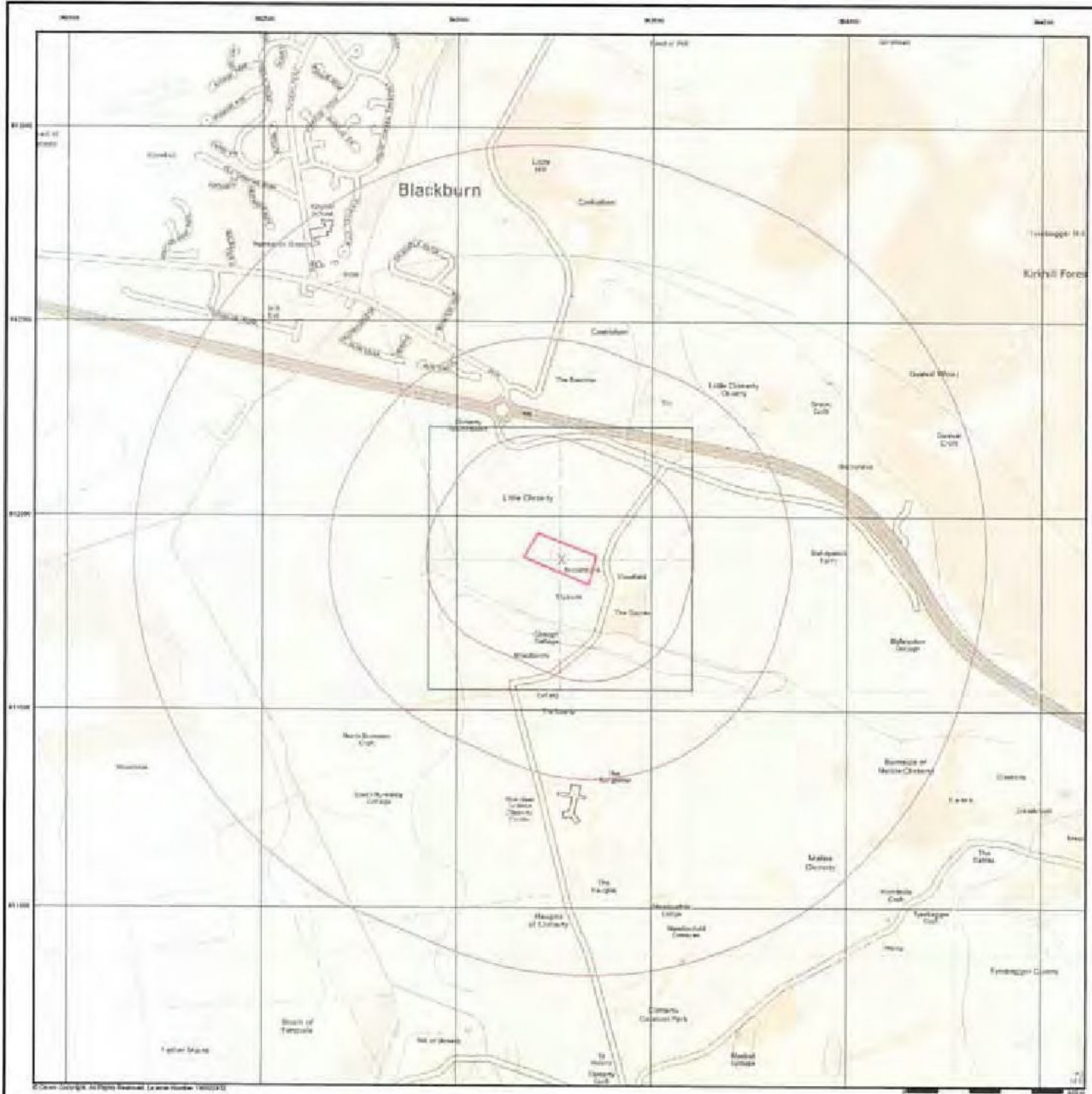
Order Details: 104603876\_1\_1  
 Customer Ref: P6799  
 National Grid Reference: 383270, 811890  
 Slice: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 1000

### Site Details

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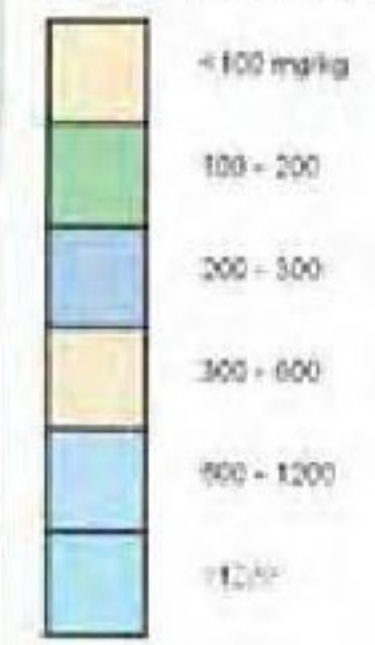
LANDMARK INFORMATION GROUP<sup>®</sup>

### General

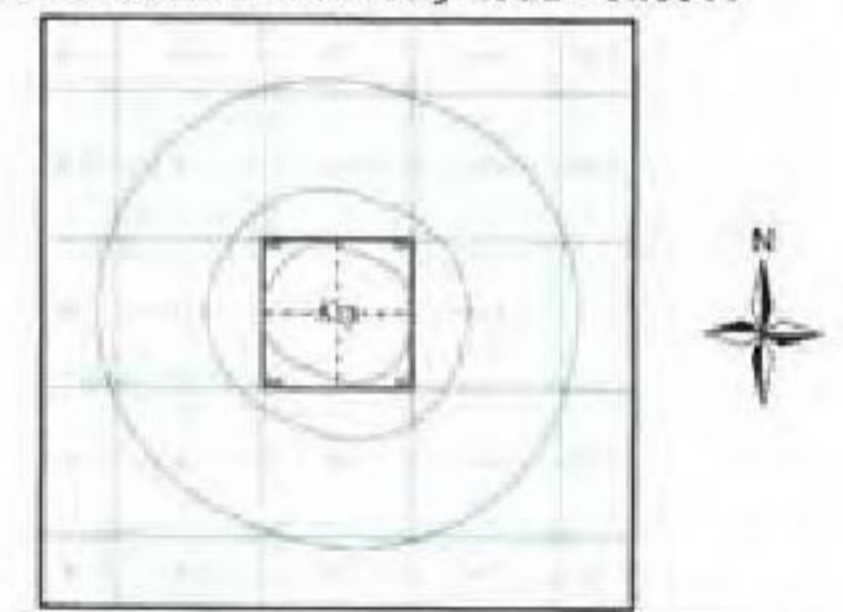
- Specified Site
- Specified Buffer(s)
- Display Reference Data

### Estimated Soil Chemistry Lead

Lead Concentrations mg/kg



### Estimated Soil Chemistry Lead - Slice A



### Order Details

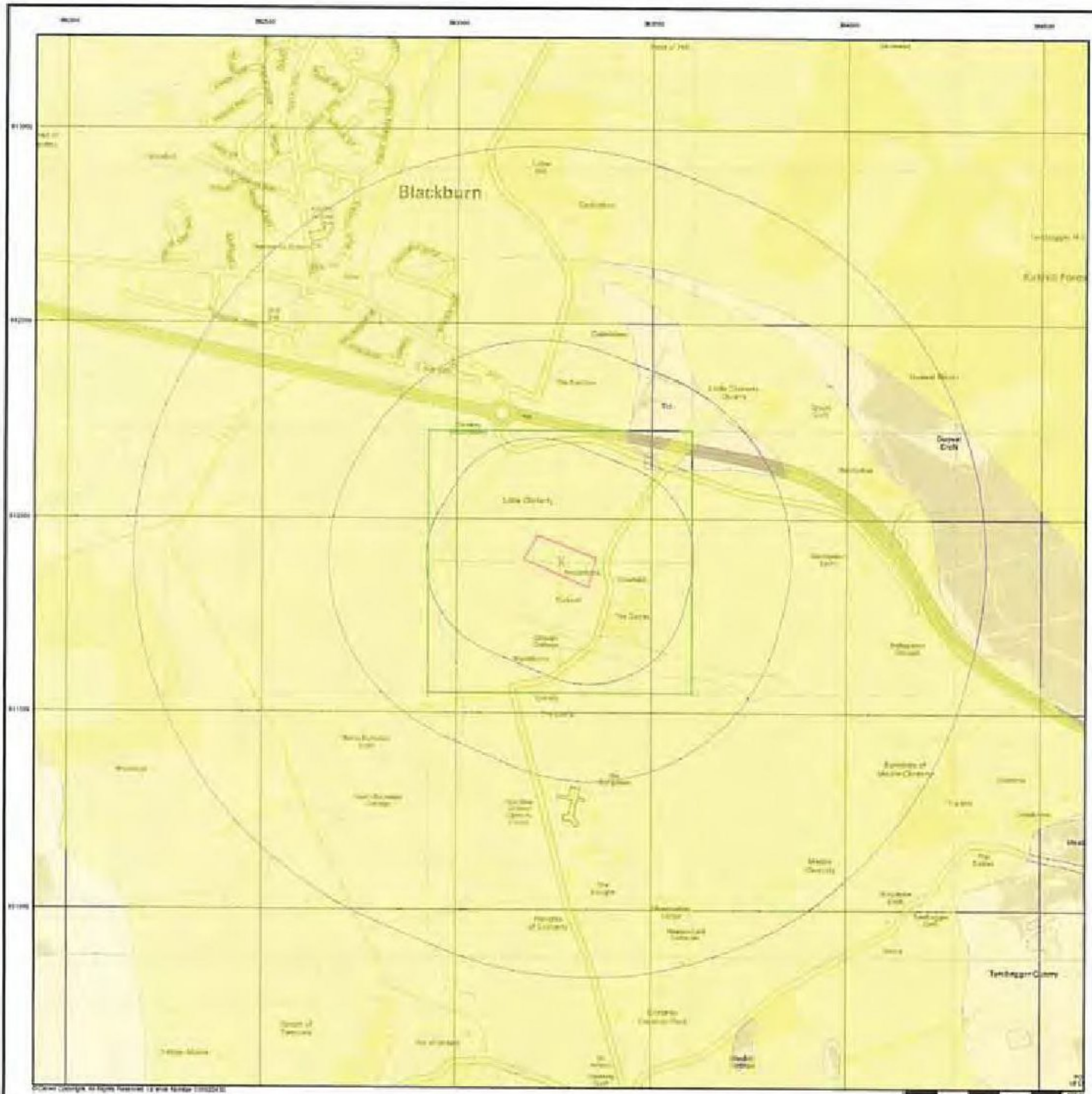
Order Details: 104603876\_1\_1  
 Customer Ref: P8799  
 National Grid Reference: 383270, 811890  
 Slice: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 1000

### Site Details

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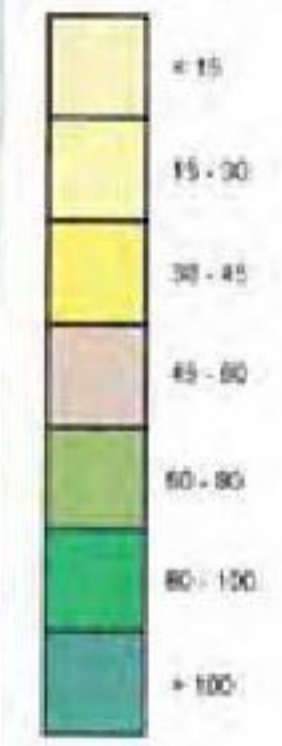
LANDMARK INFORMATION GROUP<sup>®</sup>

### General

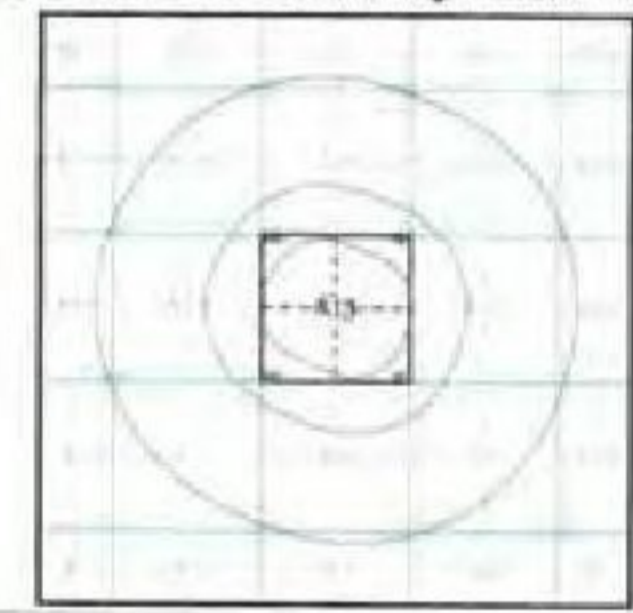
- Specified Site
- Specified Features
- X Designated Areas

### Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg



### Estimated Soil Chemistry Nickel - Slice A



### Order Details

Order Details: 104603876\_1\_1  
 Customer Ref: P6799  
 National Grid Reference: 383270, 811890  
 Slice: A  
 Site Area (Ha): 1.28  
 Search Buffer (m): 1000

### Site Details

Bunside Poultry Unit, Little Clintarty, Kinellar, ABERDEEN, AB21 0TL

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# Historical Mapping Legends

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

**Quarry** (dotted pattern), **Gravel Pit** (dotted pattern), **Sand Pit** (dotted pattern), **Clay Pit** (dotted pattern), **Shingle** (dotted pattern), **Refuse Heap** (dotted pattern), **Sloping Masonry** (cross-hatched), **Flat Rock** (cross-hatched), **Marsh** (wavy lines), **Reeds** (wavy lines), **Oscars** (wavy lines), **Rough Pasture** (wavy lines), **Furze** (wavy lines), **Wood** (wavy lines), **Mixed Wood** (wavy lines), **Brushwood** (wavy lines), **Orchard** (wavy lines), **Fir** (wavy lines), **Ford** (wavy lines), **Stepping Stones** (wavy lines), **Ferry** (wavy lines), **Waterfall** (wavy lines), **Lock** (wavy lines), **Trig. Station** (triangle), **Altitude at Trig. Station** (triangle with number), **Bench Mark** (circle with cross), **Surface Level** (circle with cross), **Arrow denotes flow of water** (arrow), **Antiquities (site of)** (circle with cross), **Cutting** (wavy lines), **Embankment** (wavy lines), **Railway crossing Road** (wavy lines), **Level Crossing** (wavy lines), **Road crossing Railway** (wavy lines), **Railway crossing River or Canal** (wavy lines), **Road over single stream** (wavy lines), **Road over River or Canal** (wavy lines), **County Boundary (Geographical)** (dashed line), **County & Civil Parish Boundary** (dashed line), **Administrative County & Civil Parish Boundary** (dashed line), **County Borough Boundary (England)** (dashed line), **County Burgh Boundary (Scotland)** (dashed line), **Boundary Post or Stone** (circle with cross), **Police Call Box** (circle with cross), **Under Road** (circle with cross), **Pump** (circle with cross), **Electricity Pylon** (circle with cross), **Signal Post** (circle with cross), **Foot Bridge** (circle with cross), **Stake** (circle with cross), **Foot Path** (circle with cross), **Spring** (circle with cross), **Guide Post or Board** (circle with cross), **Telephone Call Box** (circle with cross), **Wine Stone** (circle with cross), **Trough** (circle with cross), **Mixing Post or Ring** (circle with cross), **Well** (circle with cross)

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

**Inactive Quarry, Chalk Pit or Clay Pit** (dotted pattern), **Active Quarry, Chalk Pit or Clay Pit** (dotted pattern), **Rock** (dotted pattern), **Boulders** (dotted pattern), **Cliff** (wavy lines), **Slopes** (wavy lines), **Toe** (wavy lines), **Roofed Building** (cross-hatched), **Glazed Roof Building** (cross-hatched), **Sleeping Masonry** (cross-hatched), **Archway** (cross-hatched), **Non-Coniferous Tree (surveyed)** (circle with cross), **Coniferous Tree (surveyed)** (circle with cross), **Non-Coniferous Trees (not surveyed)** (circle with cross), **Coniferous Trees (not surveyed)** (circle with cross), **Orchard Tree** (circle with cross), **Scrub** (circle with cross), **Bracken** (circle with cross), **Coppice, Osier** (circle with cross), **Reeds** (circle with cross), **Marsh, Sittings** (circle with cross), **Rough Grassland** (circle with cross), **Heath** (circle with cross), **Cuvert** (circle with cross), **Direction of water flow** (arrow), **Bench Mark** (circle with cross), **Antiquity (site of)** (circle with cross), **Cave Entrance** (circle with cross), **Triangulation Station** (circle with cross), **Electricity Pylon** (circle with cross), **Electricity Transmission Line** (dashed line), **County Boundary (Geographical)** (dashed line), **County & Civil Parish Boundary** (dashed line), **Civil Parish Boundary** (dashed line), **Admin. County or County Bor. Boundary** (dashed line), **London Borough Boundary** (dashed line), **Symbol marking point where boundary merging changes** (circle with cross), **Beer House** (circle with cross), **Boundary Post or Stone** (circle with cross), **Capstan Crane** (circle with cross), **Public Convenience** (circle with cross), **Chimney** (circle with cross), **Public House** (circle with cross), **Drinking Fountain** (circle with cross), **Pump** (circle with cross), **Electricity Pylon or Post** (circle with cross), **Signal Box or Bridge** (circle with cross), **Fire Alarm Pillar** (circle with cross), **Signal Post or Light** (circle with cross), **Footbridge** (circle with cross), **Spring** (circle with cross), **Guide Post** (circle with cross), **Tank or Truck** (circle with cross), **Hydrant or Hydraulic** (circle with cross), **Telephone Call Box** (circle with cross), **Level Crossing** (circle with cross), **Telephone Call Post** (circle with cross), **Manhole** (circle with cross), **Trough** (circle with cross), **Mix Post or Mooring Post** (circle with cross), **Water Post, Water Tap** (circle with cross), **Mix Stone** (circle with cross), **Well** (circle with cross), **Normal Tide Limit** (circle with cross), **Wind Pump** (circle with cross)

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

**Cliff** (wavy lines), **Slopes** (wavy lines), **Toe** (wavy lines), **Rock** (dotted pattern), **Rock (scattered)** (dotted pattern), **Boulders** (dotted pattern), **Boulders (scattered)** (dotted pattern), **Positioned Boulder** (circle with cross), **Scrub** (circle with cross), **Non-Coniferous Tree (surveyed)** (circle with cross), **Coniferous Tree (surveyed)** (circle with cross), **Non-Coniferous Trees (not surveyed)** (circle with cross), **Coniferous Trees (not surveyed)** (circle with cross), **Orchard Tree** (circle with cross), **Scrub** (circle with cross), **Bracken** (circle with cross), **Coppice, Osier** (circle with cross), **Reeds** (circle with cross), **Marsh, Sittings** (circle with cross), **Rough Grassland** (circle with cross), **Heath** (circle with cross), **Cuvert** (circle with cross), **Direction of water flow** (arrow), **Triangulation Station** (circle with cross), **Antiquity (site of)** (circle with cross), **Electricity Transmission Line** (dashed line), **Electricity Pylon** (circle with cross), **Bench Mark** (circle with cross), **Buildings with Building Seed** (circle with cross), **Roofed Building** (cross-hatched), **Glazed Roof Building** (cross-hatched), **Civil parish/community boundary** (dashed line), **District boundary** (dashed line), **County boundary** (dashed line), **Boundary post/stone** (circle with cross), **Boundary merging symbol (note: these always appear in opposed pairs or groups of three)** (circle with cross), **Barricade** (circle with cross), **Battery** (circle with cross), **Cemetery** (circle with cross), **Public Convenience** (circle with cross), **Chimney** (circle with cross), **Pump** (circle with cross), **Cistern** (circle with cross), **Pug Stn** (circle with cross), **Pumping Station** (circle with cross), **Domestic Railway** (circle with cross), **Electricity Generating Station** (circle with cross), **Sewage Pug Stn** (circle with cross), **Sewage Pumping Station** (circle with cross), **Electricity Pole, Pylon** (circle with cross), **Signal Box or Bridge** (circle with cross), **Electricity Sub Station** (circle with cross), **Signal Post or Light** (circle with cross), **Filter Bed** (circle with cross), **Spring** (circle with cross), **Fountain (Drinking Ftn)** (circle with cross), **Tank or Truck** (circle with cross), **Gas Gov** (circle with cross), **Trough** (circle with cross), **Gas Governor** (circle with cross), **Wind Pann** (circle with cross), **Guide Post** (circle with cross), **Water Post, Water Tap** (circle with cross), **Manhole** (circle with cross), **Wells (Building or well)** (circle with cross), **Mix Post or Mix Stone** (circle with cross), **Well** (circle with cross)

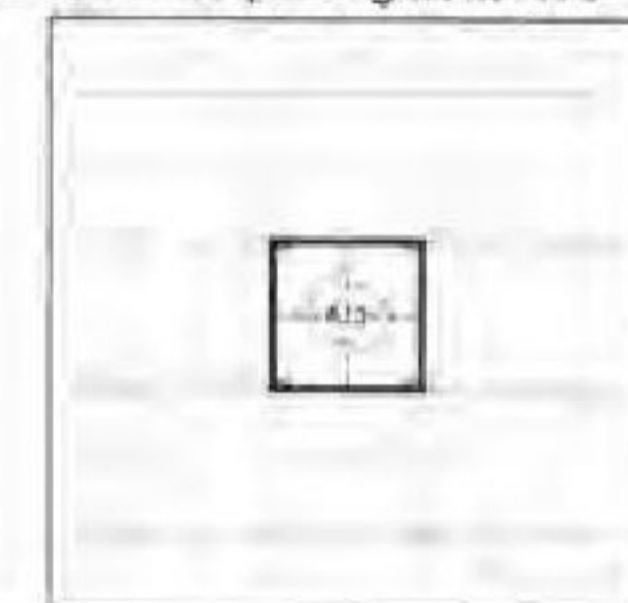
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## Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Aberdeenshire	1:2,500	1865 - 1869	2
Aberdeenshire	1:2,500	1888	3
Aberdeenshire	1:2,500	1988	4
Aberdeenshire	1:2,500	1887 - 1890	5
Aberdeenshire	1:2,500	1900	6
Aberdeenshire	1:2,500	1925	7
Ordnance Survey Plan	1:2,500	1985	8
Additional SIMs	1:2,500	1982 - 1984	9
Additional SIMs	1:2,500	1984	10
Additional SIMs	1:2,500	1995	11
Large-Scale National Grid Data	1:2,500	1904	12
Large-Scale National Grid Data	1:2,500	1995	13
Historical Aerial Photography	1:2,500	2001	14

## Historical Map - Segment A13



## Order Details

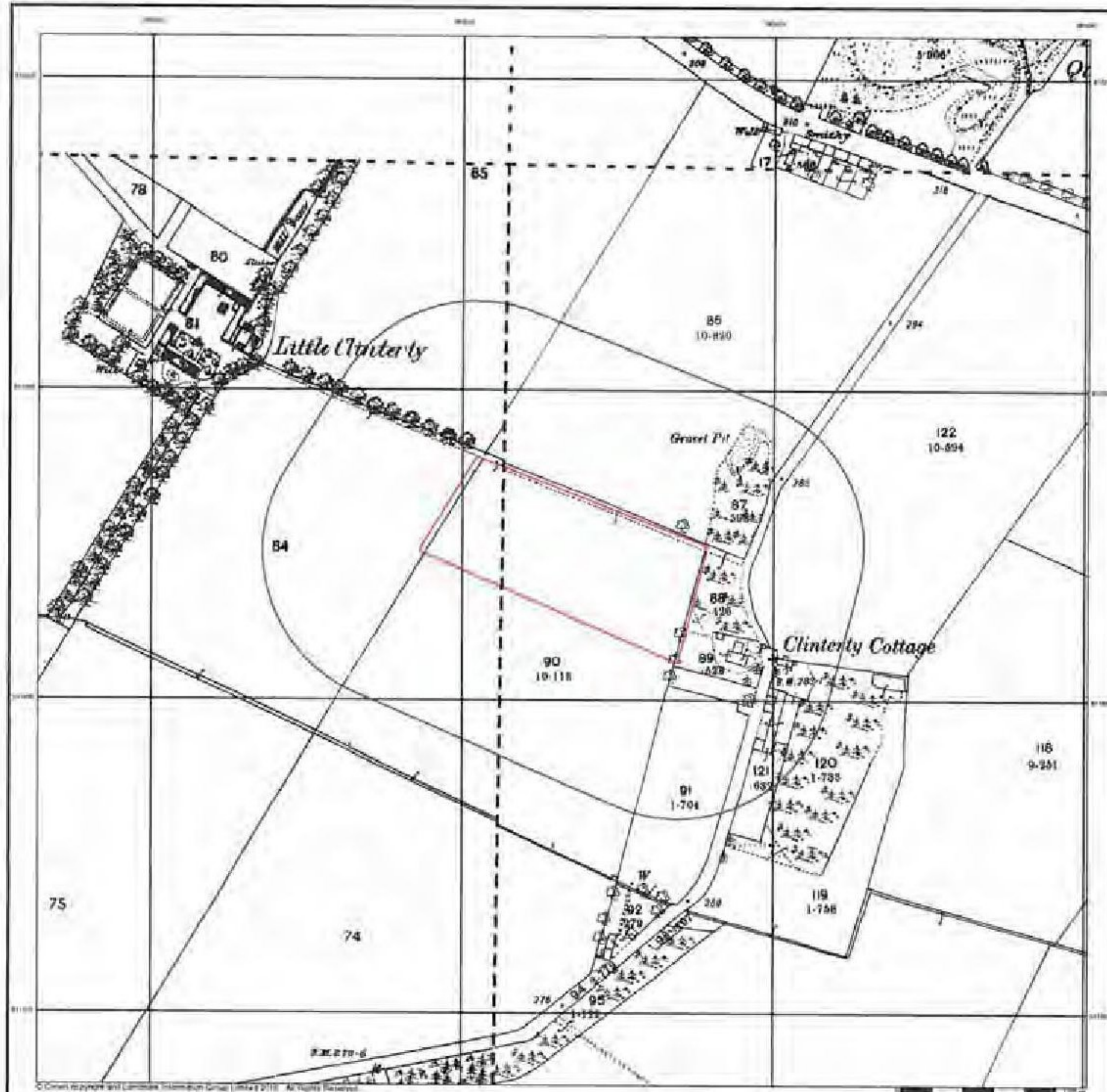
Order Number: 104603675\_1\_1  
 Customer Ref: P5799  
 National Grid Reference: 383270, 811890  
 Slice: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 100

## Site Details

Burnside Poultry Unit, Little Cilmerty, Kinellar, ABERDEEN, AB21 0TL

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Aberdeenshire

Published 1866 - 1899

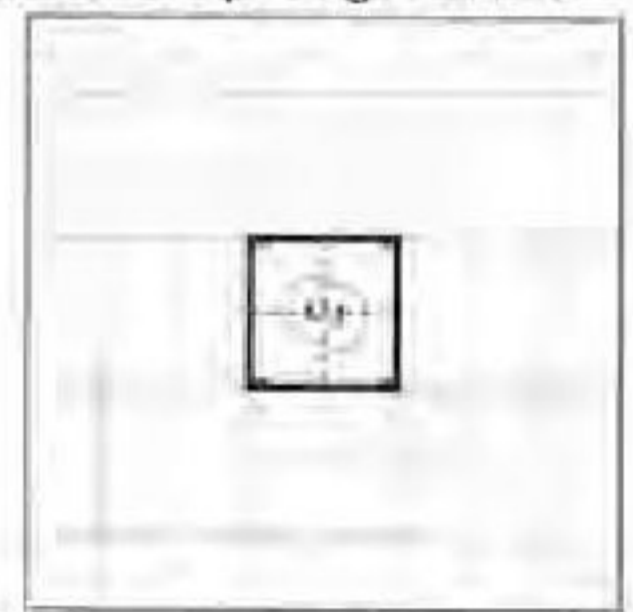
Source map scale - 1:2,500

The historical maps shown were reproduced from maps presumably made at the scale selected for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1899 it covered the areas 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 1939, 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)

85, 10 1899 1:2,500	85, 11 1892 1:2,500
85, 14 1862 1:2,500	85, 15 1868 1:2,500

### Historical Map - Segment A13



### Order Details

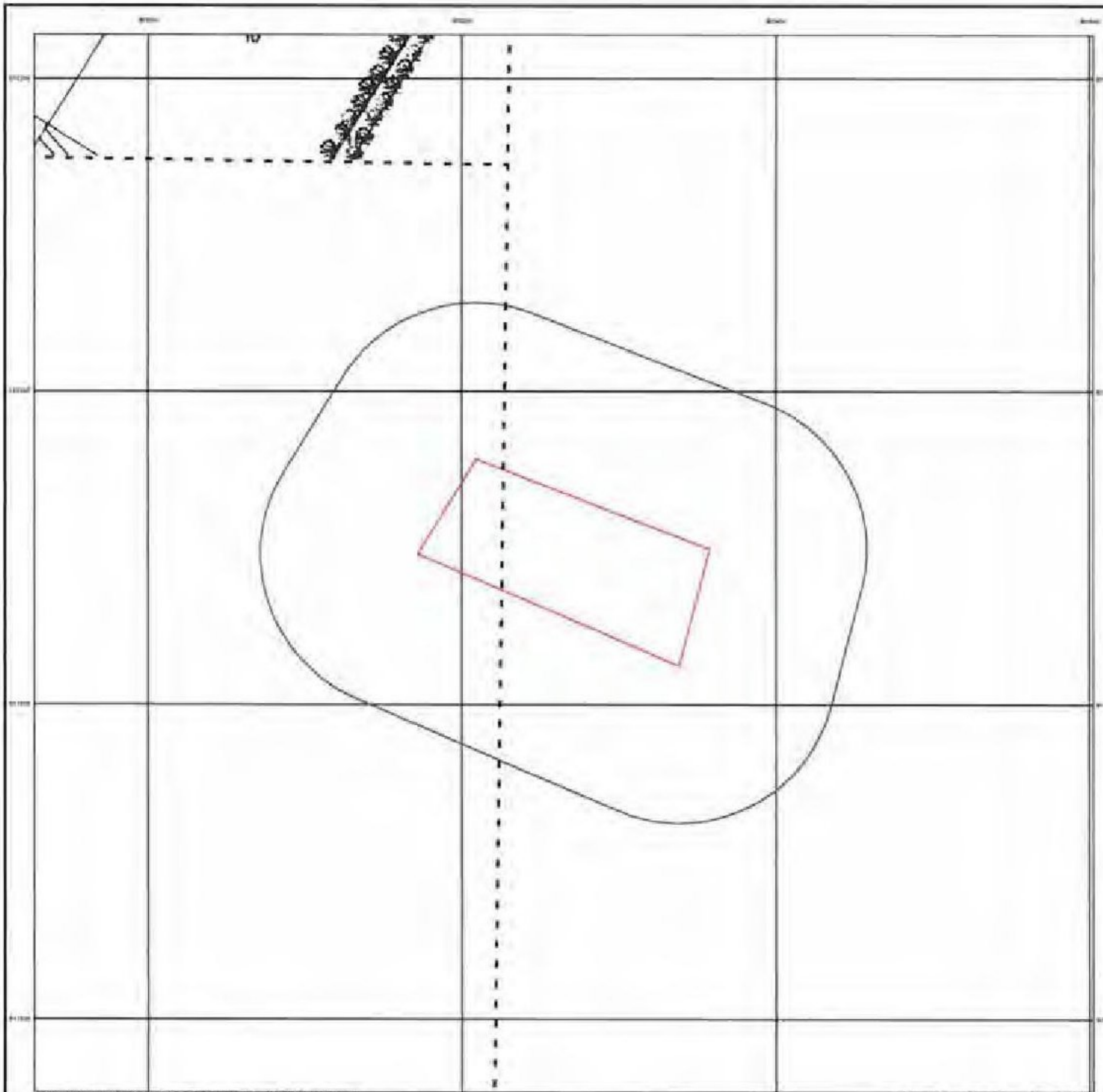
Order Number:	104603876_1_1
Customer Ref:	P6799
National Grid Reference:	333270, 811890
Slice:	A
Site Area (Ha):	1.26
Search Buffer (m):	100

### Site Details

Burnside Poultry Unit, Little Clinterty, Kintlar, ABERDEEN, AB21 0TL

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**Aberdeenshire**

**Published 1866**

**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

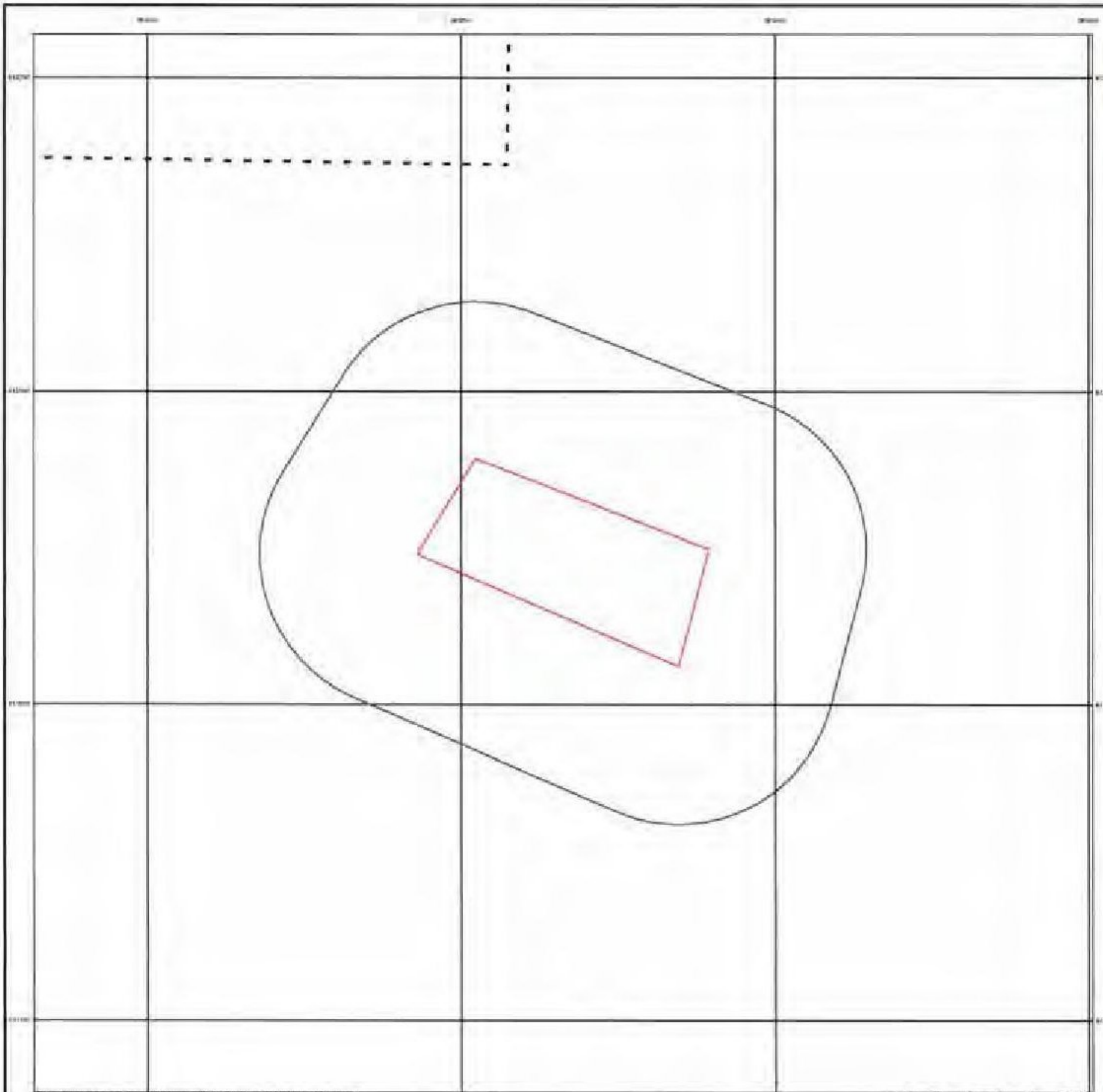
Order Number: 104603676\_1\_1  
 Customer Ref: P6799  
 National Grid Reference: 383270, 811880  
 Size: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 100

## Site Details

Burnside Poultry Unit, Little Clinterty, Kinellar, ABERDEEN, AB21 0TL

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**Aberdeenshire**

**Published 1866**

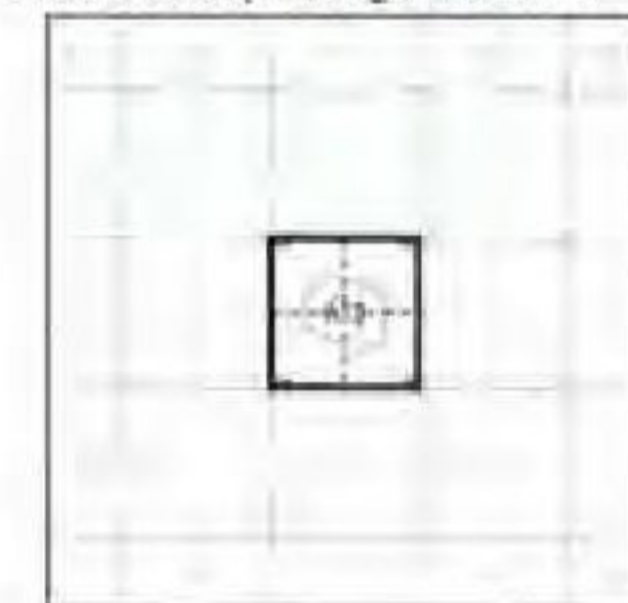
**Source map scale - 1:2,500**

The historical maps shown here reproduced from maps, predominantly laid 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

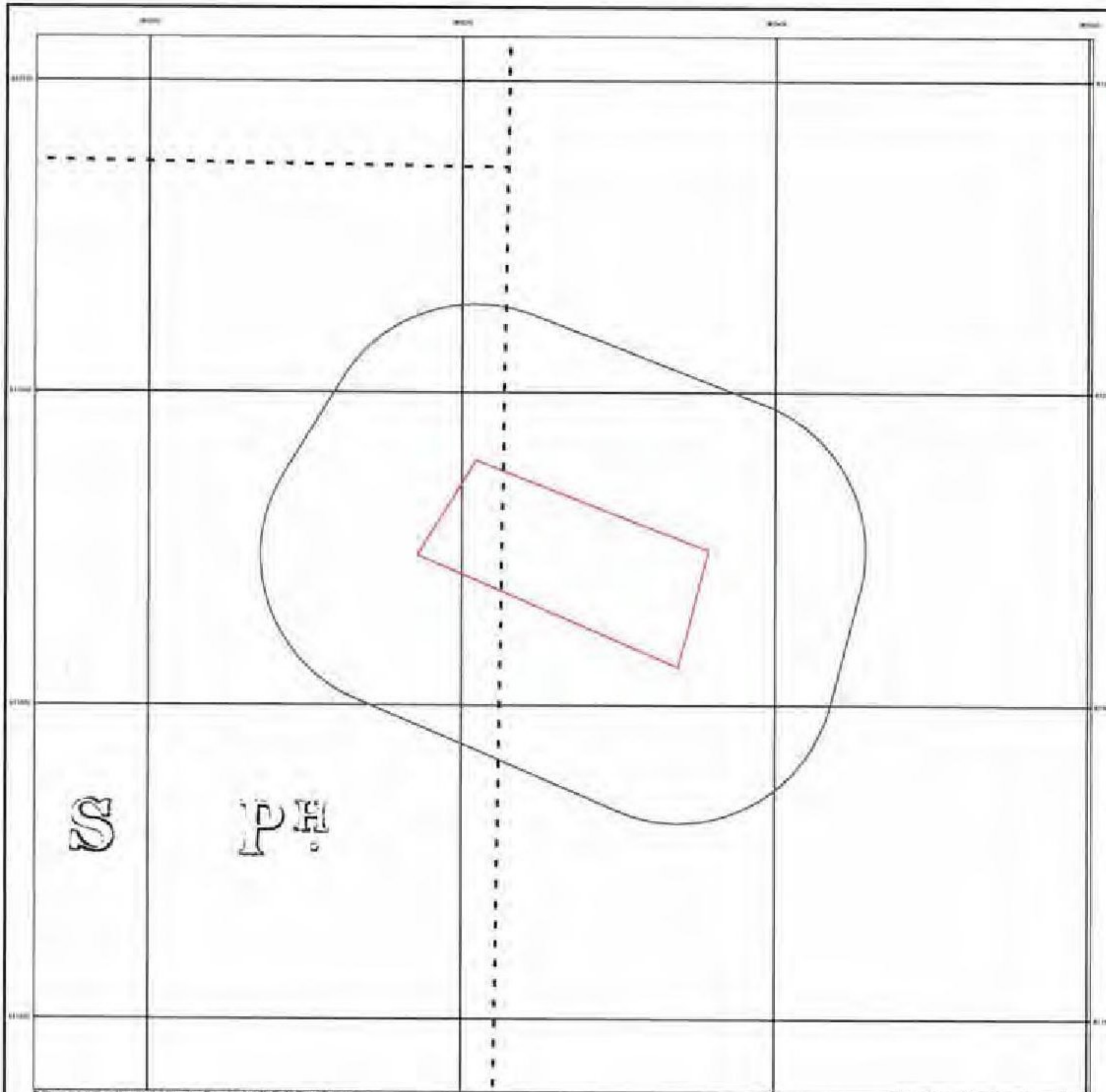
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 Customer Ref: P6709  
 National Grid Reference: 383270, 811890  
 Slice: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 100

### Site Details

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**Aberdeenshire**

**Published 1867 - 1899**

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

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

OS 10	1867	1:2,500
OS 14	1899	1:2,500

### Historical Map - Segment A13



### Order Details

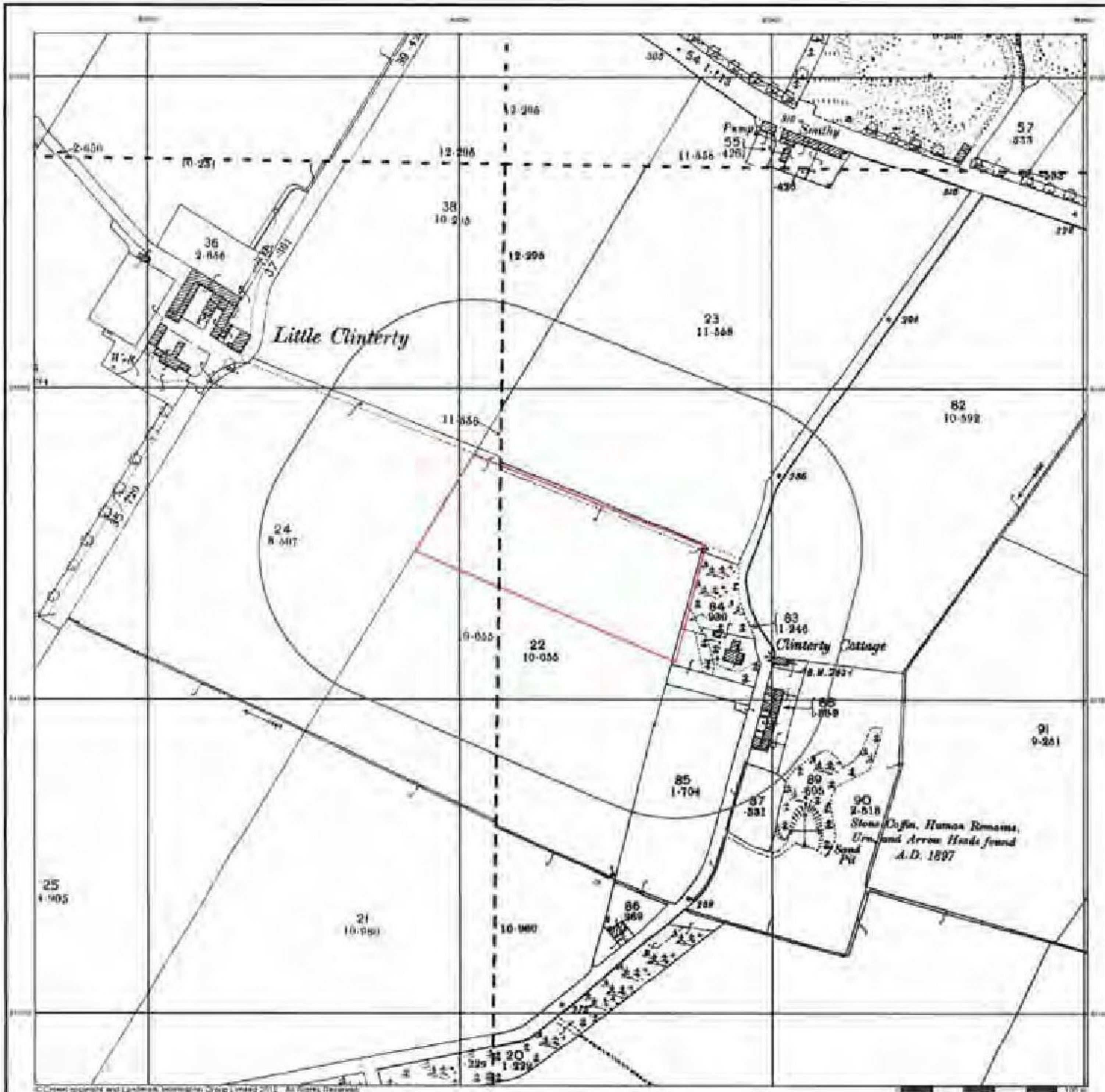
Order Number: 104803876\_1\_1  
 Customer Ref: P6799  
 National Grid Reference: 383270, 811890  
 Slice: A  
 Site Area (Ha): 1.28  
 Search Buffer (m): 100

### Site Details

Burnside Poultry Unit, Little Cinterty, Kinellar, ABERDEEN, AB21 0TL

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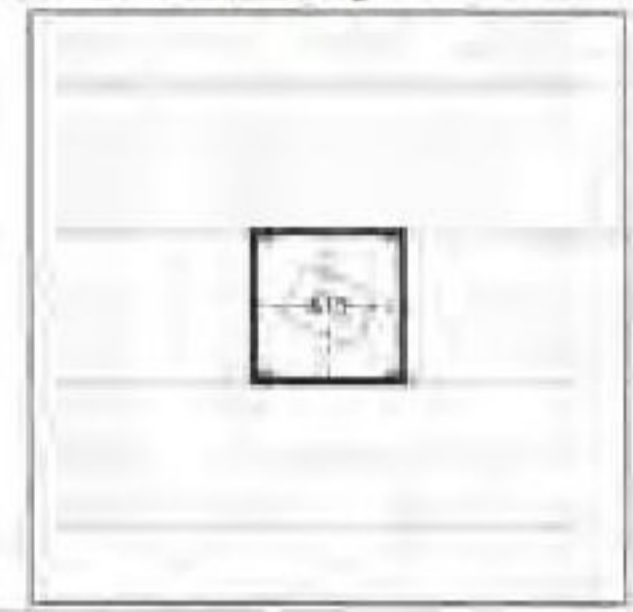
**Aberdeenshire**  
**Published 1900**  
**Source map scale - 1:2,500**

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 1900 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 survey date. Before 1900, all OS maps were based on the Cassini Projection, with interpolator's 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

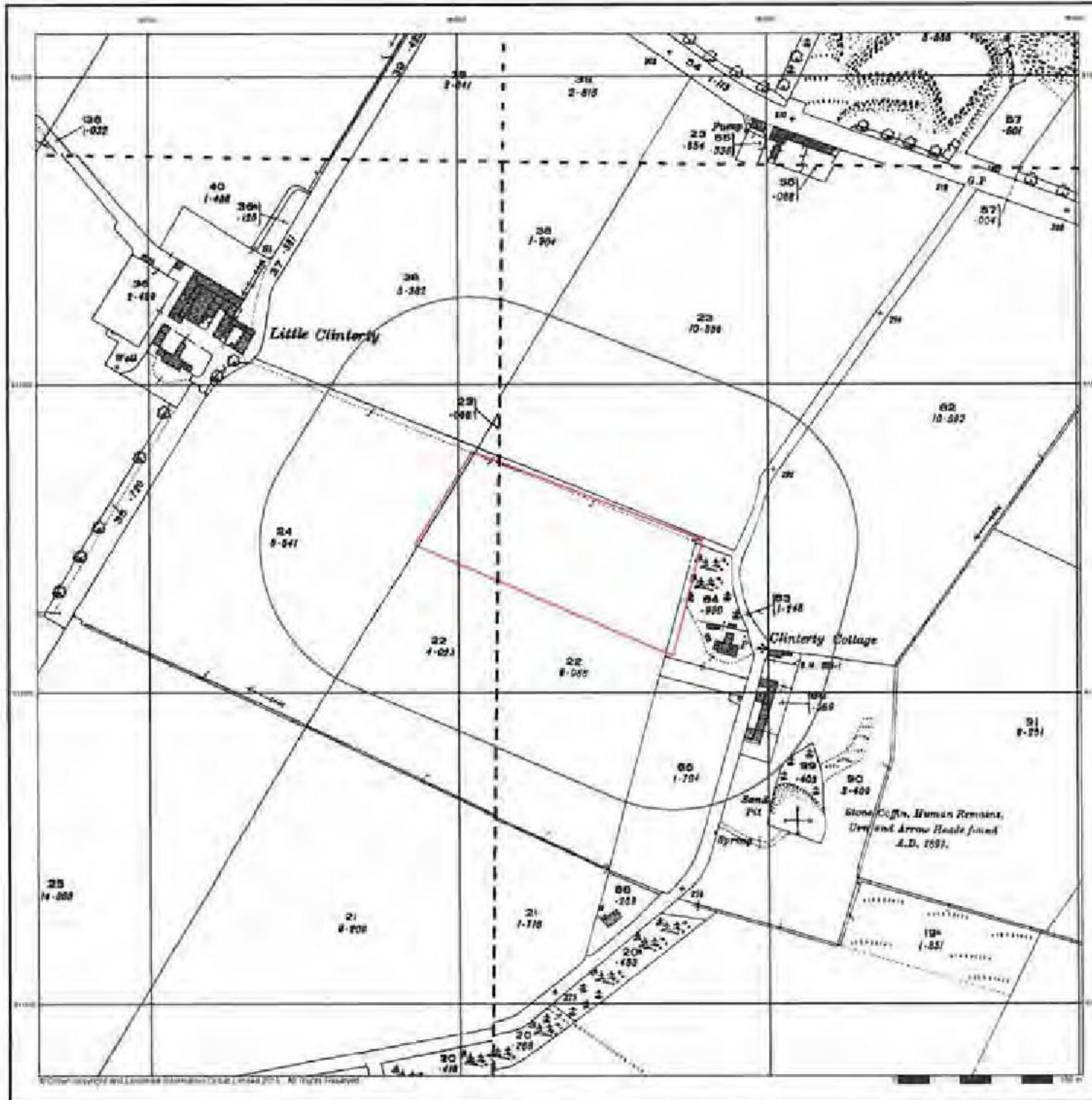
Order Number: 104603575\_1\_1  
 Customer Ref: P6799  
 National Grid Reference: 353270, 511860  
 Site: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 100

### Site Details

Burnside Poultry Unit, Little Clinterty, Knellar, ABERDEEN, AB21 0TL

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 LANDMARK INFORMATION GROUP

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 Fax: 0244 544 0001  
 Email: [info@landmarkinfo.co.uk](mailto:info@landmarkinfo.co.uk)



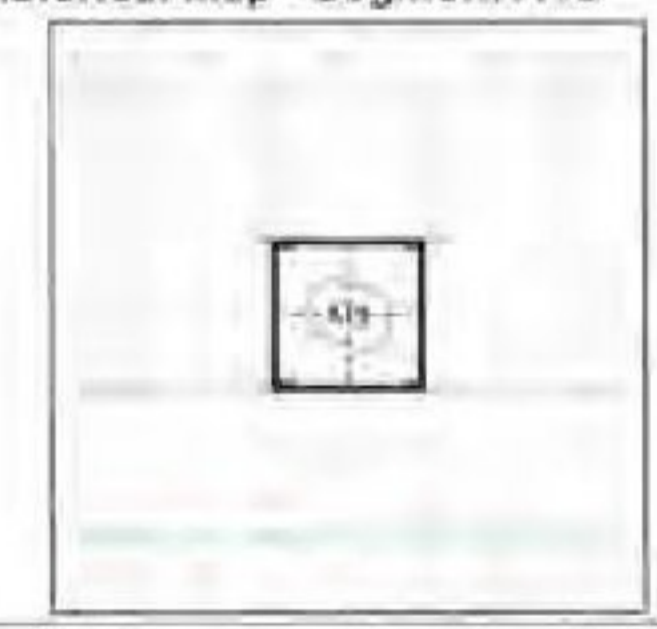
**Aberdeenshire**  
**Published 1925**  
**Source map scale - 1:2,500**

The historical maps shown were reproduced from maps predominantly based at the scale adopted for England, Wales and Scotland in the 1840's. In 1888 the 1:2,500 scale was adopted for mapping urban areas and by 1906 it covered the whole of what was 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 interparental surveys of a single county or group of counties giving rise to significant inaccuracies in outlying areas.

**Map Name(s) and Date(s)**

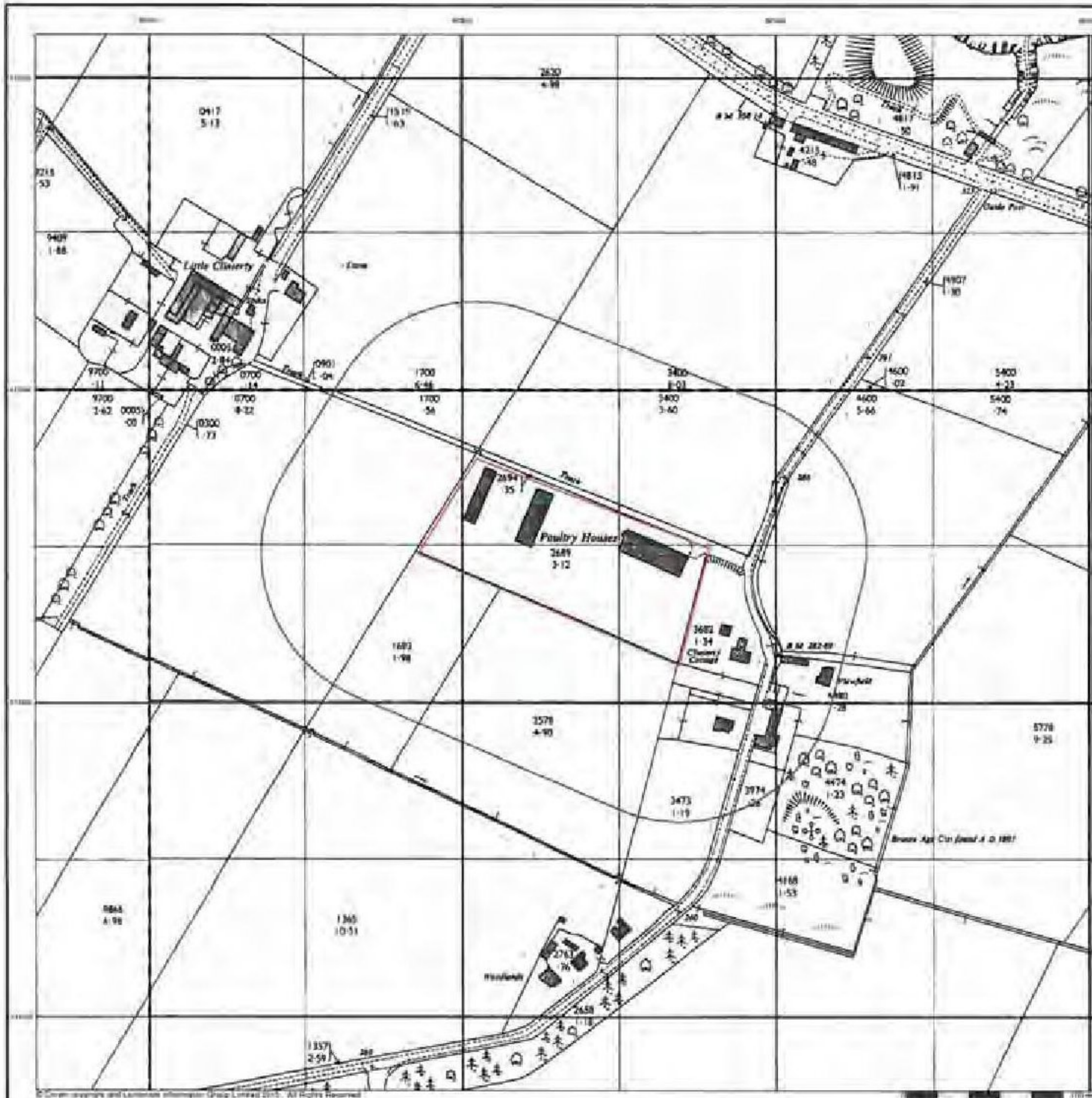


**Historical Map - Segment A13**



**Order Details**  
 Order Number: 104603876\_1\_1  
 Customer Ref: P6709  
 National Grid Reference: 363270, 811600  
 Slice: A  
 Site Area (Ha): 1.25  
 Search Buffer (m): 100

**Site Details**  
 Burnside Poultry Unit, Little Clinterty, Kneflar, ABERDEEN,  
 AB21 0TL



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## Ordnance Survey Plan

Published 1965

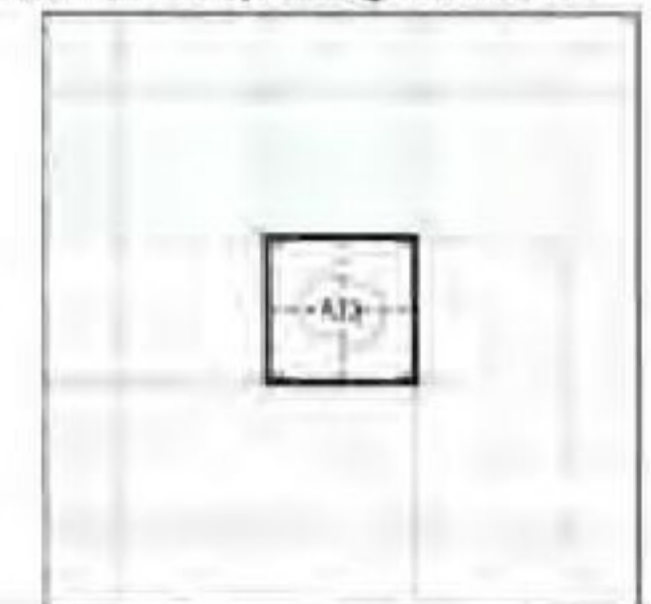
Source map scale - 1:2,500

The historical maps shown here reproduced from maps predominantly used at the time collected for England, Wales and Scotland in the 1840's to 1890's the 1:2,500 scale was selected for mapping urban areas and by 1986 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published data given below is often some years later than the surveyed data. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single country or group of countries giving rise to significant inaccuracies in surveying areas.

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

NL6211 1965 1:2,500	NL6212 1965 1:2,500
NL6211 1965 1:2,500	NL6211 1965 1:2,500

### Historical Map - Segment A13



### Order Details

Order Number 104603576\_1\_1  
 Customer Ref P6799  
 National Grid Reference: 383270, 811800  
 Slice A  
 Site Area (Ha) 1.26  
 Search Buffer (m) 100

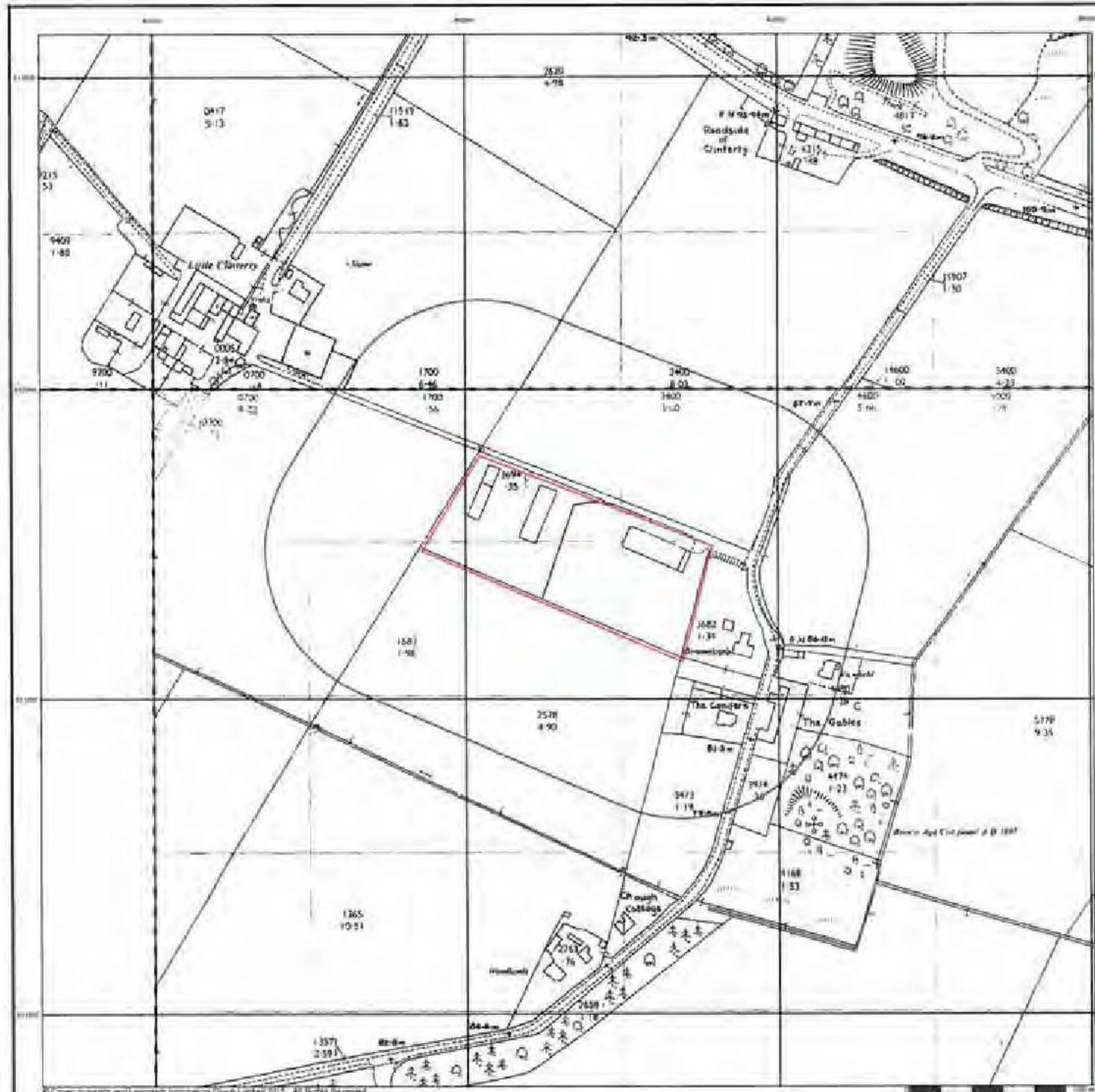
### Site Details

Burnside Poultry Unit, Little Cintarty, Kinellar, ABERDEEN.  
 AB21 0TL

**Landmark**  
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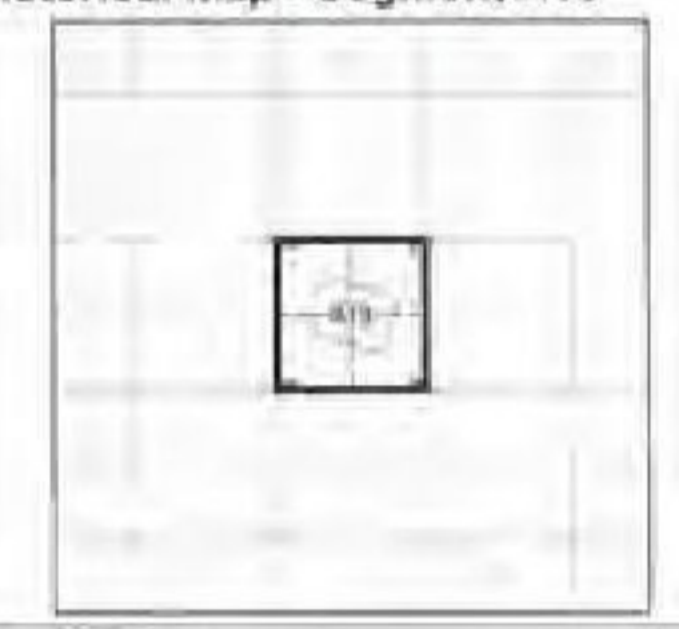
**Additional SIMs  
Published 1982 - 1984  
Source map scale - 1:2,500**

The SIM cards (Ordnance Survey's 'Survey of Information on Mapping') are further, more editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1984 and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

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



### Historical Map - Segment A13



### Order Details

Order Number: 104603876\_1\_1  
 Customer Ref: P6799  
 National Grid Reference: 383270, 811890  
 Slice: A  
 Site Area (Ha): 1.26  
 Search Buffer (m): 100

### Site Details

Burnside Poultry Unit, Little Clontarf, Kinellar, ABERDEEN, AB21 0TL

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 0845 844 8401  
 0845 844 8402