

26 November 2013

NB503-14/ACJ/FT

For the attention of: Neil Clubbs
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NE32 3DP

PHASE 1 DESK STUDY REPORT
For
**LAND AT WARK CRESCENT,
JARROW, NE32 4SP**

This report was carried out in accordance with JPB Quality Management procedures.

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1.0 INTRODUCTION

- 1.1 Further to the written instruction dated 18 November 2013 from South Tyneside Homes (STH), Johnson Poole and Bloomer Limited (JPB) is pleased to present a Phase 1 Desk Study Report for the site known as Land at Wark Crescent, Jarrow. The site's general location and site boundaries and layout are shown on JPB Drawings NB503/05 and NB503/06, respectively.
- 1.2 This report has been written for STH and is required in order to highlight any potential environmental risks and liabilities associated with ownership of the site, arising from its past and present uses. Information is provided relating to the on-site ground conditions, together with any issues which could lead to potential liabilities which may affect the land value or impact upon its current and future redevelopment.
- 1.3 At the time of writing it is understood that STH is considering the redevelopment of the site for residential use. This will be a design and build contract, and therefore, a proposed development site layout has not been provided by STH.
- 1.4 This report is based on desktop research, which has included a search of the JPB Archive, which contains geological maps and memoirs, historical Ordnance Survey plans and other published information as detailed in Appendix A. A site walkover inspection was conducted by a JPB geologist on 18 November 2013.
- 1.5 A GroundSure EnviroInsight and GeoInsight Report has been purchased for the site, and is included in Appendix B. Relevant information is cited within this report. Copies of the historical plans, are reproduced in Appendix C.
- 1.6 Based on the information held within the JPB Archive and available from the British Geological Survey, The Coal Authority Gazetteer and the Law Society's Guidance Notes (2006), it was deemed necessary to purchase a Non-Residential Coal Authority Coal Mining Report. This is reviewed within this report and presented in Appendix D.
- 1.7 This report and related documents have been prepared for the sole use of the specified client in response to an agreed brief, for a stated purpose and at a particular time and its application must be made accordingly. No duty of care extends to any other party who may make use of the information contained therein, without prior written confirmation. The information discussed in Sections 7.0, 8.0 and 9.0 - Conclusions, Recommendations and General - of this report should be consulted and noted.

2.0 SITE DESCRIPTION AND SITE HISTORY

2.1 Site Description

General

- 2.1.1 The site comprises two areas; the main site which is a former residential garage site, and an 'Additional' area which is understood to have always been unoccupied. The two areas are adjacent to each other and have been considered as one site for the purposes of this report. The site is located to the south of Wark Avenue between properties numbered 42 and 64, close to the Fellgate Metro Station approximately 3km to the south of Jarrow town centre. The centre of the site is at approximate National Grid Reference 432892, 562695, and the site's general location is shown on JPB Drawing NB503/05.
- 2.1.2 Occupying a total area of approximately 0.1169ha, the site is a general wedge shape in plan view, with its longest axis orientated east to west and its apex to the north. The site and its local surroundings were generally level, at an approximate elevation of 26m above ordnance datum (AOD), with the surroundings falling slightly to the north. The site boundaries and layout are shown on JPB Drawing NB503/06.
- 2.1.3 A site walkover was undertaken on 18 November 2013, and the following is an account of the on site conditions at the time of the visit.

Site Boundaries and Adjacent Site Uses

- 2.1.4 The site comprised a cleared piece of land which is understood to have been previously used for residential garages, situated in a generally residential area. Accessed from a service road, formed as an extension to Wark Crescent and extending from each end, the site was surrounded by the gardens of residential properties to the north, northeast and northwest. These boundaries were marked by a combination of wide and close boarded timber fencing, double timber gates (side of rear garden of 42 Wark Crescent) and a 0.75m high red brick wall (42 Wark Crescent side boundary).
- 2.1.5 The eastern, southern and western boundaries were open and formed by the concrete surfaced 'service road', with further residential properties beyond to the east and west and open land to the south. The open land to the south formed a wide plain at the base of an embankment approximately 4m high associated with the Metro line, which led to Fellgate Metro Station approximately 100m to the east.

Site Layout

- 2.1.6 The site was clear of above ground features, with the only evidence of its previous garage use being concrete bases and tarmac parking bays towards the northern boundary of the site. The ground cover of the main site area was a combination of hardcore, concrete and tarmac hardstanding, whilst the 'Additional' area to the east and the westernmost area were covered with short grass. A few shrubs and brambles were noted towards the apex of the site and generally towards the northern boundary.

Site Access

2.1.7 Vehicular access to the site could be made immediately from the concrete surfaced 'service road' which led from Wark Crescent to the east and joined it again to the west of the site.

Services

2.1.8 Surface water gully pots and various types of manhole and inspection covers were noted within the service road. No other evidence of services crossing the site was apparent, with the exception of a linear section of more recent tarmac, parallel with and adjacent to the edge of the service road and within the site.

2.1.9 A search has been undertaken to determine the proximity of underground oil / fuel pipelines, fibre optic networks and the main National Grid electricity and gas transmission routes. The search determined that the site is **not** in the zone of interest for any of the following pipeline operators.

- BOC Limited (A Member of the Linde Group)
- BPA
- Centrica Energy
- Centrica Storage Ltd
- ConocoPhillips (UK) Ltd
- Coryton Energy Co Ltd (Gas Pipeline)
- E-on UK Plc (Gas Pipelines Only)
- ESSAR
- Esso Petroleum Company Limited
- FibreSpeed Limited
- Geo Networks Limited
- Government Pipelines & Storage System
- HV Cables
- Humbly Grove Energy
- IGas Energy
- INEOS Manufacturing (Scotland and TSEP)
- Ineos Enterprises Limited
- LinesearchbeforeUdig Asset Owners
- Mainline Pipelines Limited
- Manchester Jetline Limited
- Marchwood Power Ltd (Gas Pipeline)
- NPower CHP Pipelines
- National Grid Gas and Electricity Transmission
- Oikos Storage Limited
- Perenco UK Limited (Purbeck Southampton Pipeline)
- Phillips 66
- Premier Transmission Ltd (SNIP)
- RWEpower (Little Barford and South Haven)
- SABIC UK Petrochemicals
- Scottish Power Generation
- Shell Pipelines
- Total UK (Finaline, Colnbrook & Colwick Pipelines)
- Wingas Storage UK Ltd
- York Potash

2.2 Site History

2.2.1 A review of the relevant County Series (CS) and Ordnance Survey (OS) historical maps has been undertaken to determine the previous usage of the site.

On Site

2.2.2 The earliest available CS plan for the site dated 1857 at 1:2,500 scale shows the site to be within an undeveloped field. By the 1941 edition, a power line is shown to cross the southern part of the site from east to west, but this is no longer shown on the 1973 plan.

2.2.3 There are no significant changes recorded on site until the publication of the 1969 plan, where a row of twelve small garages are shown on site along the northwestern boundary. Boundary lines are shown on this plan demarcating the additional land in the east and the currently grassed area in the west, adjacent to no 42 Wark Crescent.

2.2.4 By the publication of the 1992 plan, only three of the garages remain and these are located towards the apex of the site in the north. This plan and all later editions, including the current 2012 OS plan show no significant changes on site.

2.2.5 It is apparent that the site clearance of the remaining garages, leaving the unoccupied and cleared site that currently exists, was undertaken following the publication of the latest edition.

Off-site

2.2.6 The earliest available CS plans for the area at 1:10,560 and 1:2,500 scale are dated 1857 and show the site to be surrounded by open fields with tree lined boundaries, streams, drainage ditches and farms. An east to west aligned railway line and associated embankment are shown approximately 50m to the south whilst a northeast flowing northeast to southwest aligned tributary to Calfclose Burn is shown 50m to the east. The north to south aligned Calfclose Burn and Monkton Burn are shown 250m to the northeast and 350m to the northwest respectively. The east to west aligned Calfclose Lane is approximately 75m to the north of the site and joins the northeast to southwest aligned Leam Lane 250m to the northwest.

2.2.7 There are no significant changes recorded until the 1938 plan, which shows a large scale housing development under construction to the north, northwest and west of the site. This includes Wark Crescent immediately north, northwest and northeast of the site.

2.2.8 Further development continues until the 1951 plan where a series of rectangular structures are shown to the south and southwest of the site. These may be prefabricated or temporary structures and remain on the 1963 plan, but are no longer shown by 1969.

2.2.9 The 1965 plan shows further development to the west, northwest and north, and a large 'bakery' 200m to the northeast. The bakery is shown as a 'Depot' on the 1973 plan, which also shows further development of the housing estate to the east and northeast of the site. Additionally, there is widespread development beyond the railway to the south and a 'playground' is labelled immediately east of the site.

2.2.10 By the publication of the 2002 plan, the area around the depot to the northeast of the site has been replaced by housing and further development is shown generally. The site and its surroundings appear on this and subsequent editions as they generally currently exist, with the exception of the on site features, which have been cleared since the publication of the 2012 plan.

3.0 GEOLOGY, MINING AND GROUND SUBSIDENCE

3.1 Geology

- 3.1.1 The published British Geological Survey (BGS) Sheet 21 for Sunderland at 1:50,000 scale (solid and drift edition) and BGS information reproduced in the GroundSure GeolInsight report indicates superficial clay deposits of the Pelaw Clay Member beneath the site.
- 3.1.2 The underlying bedrock is indicated to comprise strata of the Carboniferous Pennine Middle Coal Measures Formation. At this location, this formation comprises mudstones, siltstones and sandstones.
- 3.1.3 A limited thickness of Made Ground is anticipated across the site as a result of historic use. This is likely to comprise reworked natural materials and materials arising from previous demolition and construction activities both on and off site.
- 3.1.4 The area is heavily faulted with a number of faults recorded in the vicinity of the site. The closest are approximately 31m to the northeast and 105 to the south. Both are aligned north to south and downthrow strata to the east.

3.2 Mining and Quarrying

- 3.2.1 Reference to the Law Society's Guidance Notes and Directory of Coal Mining Searches (2006) indicated that a coal mining search was required for the site. A Non-Residential Coal Authority Mining Report has therefore been obtained and is presented in Appendix D of this report.
- 3.2.2 The Non-Residential Coal Authority Mining Report indicates that the site is within the likely zone of influence on the surface from workings in two seams of coal at 360m to 400m depth, although any ground movement from these workings, last worked in 1930, should have now ceased. The site is not within the likely zone of influence on the surface from current or future underground coal workings and there are no recorded mine entries within, or within 20m of the site boundaries.
- 3.2.3 The Coal Authority also indicates that the site is not located within the boundary of a former, current or proposed opencast coal extraction site.
- 3.2.4 Information on the Coal Authority website indicates that the site is **not** located within a coal mining development high risk area and therefore a coal mining risk assessment report will not be required as part of the planning process.
- 3.2.5 Information from the BGS website indicates that there are no active quarries within a 1km radius of the site. In addition, consultation of the Department of the Environment (DOE) Review of Mining Instability in Great Britain (1991) indicates that there is inconclusive evidence of ground instability relating to coal mining within the area.

3.2.6 On the basis of the geological setting and information provided by the Coal Authority, GroundSure Report and that held within JPB's archives, mining and quarrying are considered to be **not significant** to the site and its future redevelopment.

3.3 Ground Stability Hazards (excluding mining)

3.3.1 The GroundSure Report, citing information from the BGS, indicates that there is a very low risk from landslide and collapsible soils hazards and a low risk from shrink swell soil hazards. There is a negligible risk of ground instability from soluble rock, compressible deposits and running sands hazards.

3.3.2 These risks are likely to be attributed to the underlying natural geology and the surrounding topography of the site and are therefore considered **not significant** to the site or its future redevelopment.

3.4 Radon

3.4.1 Citing the BGS and Health Protection Agency (HPA), the GroundSure Report indicates less than 1% of homes in the vicinity of the site are above the residential action level for radon gas. Consultation of BRE 211 – 'Radon, Guidance on Protection Measures for New Buildings' indicates that radon protective measures are not required in the construction of new dwellings or extensions.

3.4.2 Radon gas is therefore considered to be **not significant** in relation to the site or its future redevelopment.

4.0 ENVIRONMENTAL SETTING

4.1 General

4.1.1 In reading the following sections, reference to the sensitivity plans reproduced from the GroundSure Report presented in Appendix B should be made.

4.2 Hydrogeology

4.2.1 The Environment Agency's (EA) website and GroundSure report indicate that the classification of the aquifers at the site and its environs are as follows:

Table 4.1: Aquifer and Leachability Classification

Inferred Strata	Aquifer Classification	Groundwater Vulnerability
Pelaw Clay	Unproductive Strata ¹	N/A
Pennine MiddleCoal Measures Formation	Secondary A ²	High

¹ **Unproductive Strata:** These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.

² **Secondary A:** Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

4.2.2 Information from the EA website indicates that the site is not located within a groundwater Source Protection Zone (SPZ). The GroundSure Report does not record any licensed groundwater abstractions for potable or any other use within 1km of the site. It should be noted that not all groundwater abstractions are required to be licensed and therefore private abstractions may exist, particularly in rural areas. There are no recorded active discharge consents or pollution incidents affecting groundwaters within a 1km radius of the site. The site is located within a Drinking Water Protected Area (DrWPA), where groundwater is '*not at risk*'.

4.2.3 The Water Framework Directive (WFD) is European Legislation to ensure waters are managed to achieve good quality water across Europe. In the UK, the WFD is governed by the EA who is responsible for making plans to protect and improve lakes, rivers, groundwaters and coastal water habitats. Risk assessments of these water bodies are based on point and diffuse sources of pollution, water abstraction and flow regulation, physical and morphological alteration to water bodies and alien sources. Information from the EA website indicates that the groundwaters underlying the site are currently of '*good*' quantitative quality and '*poor*' chemical quality.

4.2.4 On the basis of the available researched information, groundwaters underlying the site are considered to be of **low to moderate sensitivity** to contamination.

4.3 Hydrology

4.3.1 The nearest surface water features have been identified from the site walkover inspection, current Ordnance Survey plans and the GroundSure Report. The only surface water features identified within 250m of the site, are the north to south aligned Calfclose Burn and Monkton Burn, 220m east and 350m west of the site respectively.

- 4.3.2 The Calfclose Burn has current 'good' ecological quality under the WFD and the chemical quality is not currently required to be assessed. The surface waters are not within a DrWPA.
- 4.3.3 The GroundSure Report indicates that there are no surface water abstractions licences, for potable or other use, within 1km of the site. There are no discharge consents within a 500m radius of the site and there have been no reported pollution incidents affecting surface waters within 500m of the site.
- 4.3.4 Based on the researched information, surface waters in the proximity of the site are considered to be of **low to moderate sensitivity**.

4.4 Flood Risk

- 4.4.1 The EA flood maps indicate the site to be located in Flood Zone 1, which is all land outside the flood plains shown on the Environment Agency (EA) flood maps, where the risk of fluvial flooding is considered to be **low**. The site is not located in an area where the EA issue Flood Warnings or Flood Alerts.
- 4.4.2 Data provided by the BGS within the GroundSure Report indicates that the site is not within a groundwater flooding susceptibility area.
- 4.4.3 Flooding and flood risk are therefore considered to be **not significant** to the site and its future redevelopment.

4.5 Landfill and Waste Management Sites

- 4.5.1 The GroundSure Report and EA website indicate that there are no areas of active or historic landfill activity within a 500m radius of the site. A risk from a landfill site is considered to exist when it is located within a 250m radius of the site, therefore, landfill sites are considered to be **not significant** to the site and its future redevelopment.
- 4.5.2 There are no records relating to other waste management sites within 500m of the site. Waste management and treatment sites are considered to be **not significant** to the site and its future redevelopment.
- 4.5.3 The GroundSure report indicates ground workings, comprising a refuse heap, 184m to the northeast of the site. This is not recorded as a landfill or waste management site and on inspection of the 1969 historic plans, appears to comprise mounded materials associated possibly with the culverting of the Calfclose Burn beneath Calf Close Lane. This is considered to be **not significant** to the site and its future redevelopment.

4.6 Storage of Hazardous Substances and Authorisations

- 4.6.1 Notification of Installations Handling Hazardous Substances (NIHHS) Authorisations prohibit the handling of certain hazardous substances unless the Health and Safety Executive (HSE) has been notified. There are no NIHHS authorisations recorded in the vicinity of the site.
- 4.6.2 The Control of Major Accident Hazards (COMAH) amendments came into force on 30 June 2005 replacing the previous COMAH 1999 regulations. These aim to prevent and mitigate the effects on people and the environment of those major incidents involving dangerous substances such as natural gas, oil or explosives (not exhaustive). There are no COMAH sites recorded in the vicinity of the site, as confirmed by information within the GroundSure Report.
- 4.6.3 There are no historic IPC Authorisations, Part A(1) or IPPC authorised activities, Part A(2) and Part B authorised activities or List 1 or List 2 Dangerous Substance Inventory Sites within a 250m radius of the site.
- 4.6.4 The above records are considered to be **not significant** to the site and its future redevelopment.

4.7 Other Environmental Information

- 4.7.1 Information within the GroundSure Report indicates that the site has not been determined as Contaminated Land under the Environmental Protection Act 1990. There are no sites designated as Contaminated Land within a 500m radius of the site.
- 4.7.2 No invasive species, as listed in the current environmental legislation (i.e. Japanese Knotweed, Himalayan Balsam, Giant Hogweed) were visually noted on site during the site inspection.
- 4.7.3 The site is located in an area designated to potentially be at **moderate risk** from unexploded bombs (UXBs) and ordnance (UXOs) from World War 2, resulting in between 11 and 50 bombing hits per 1000 acres. This is considered to be **potentially significant** to the site and further assessment is recommended.

5.0 QUALITATIVE RISK ASSESSMENT AND CONCEPTUAL SITE MODEL

5.1 In the UK, the currently adopted method of assessment of potential contamination risk is to consider contamination in terms of **source, pathway and receptor**, thus deriving a conceptual model for the site. This method is broadly termed as a 'risk assessment' approach. The first stage in such an assessment is to identify whether a potential source exists as a result of the presence of contaminated soil, groundwater or ground gas beneath the site or neighbouring sites. The second step is to identify sensitive receptors to such contamination and finally, the third stage identifies how such sources of contamination might be transferred, via a specific pathway to identified receptors, either on, or in the vicinity of the site. Consequently, the possible risk posed can be considered.

5.2 Based on the researches undertaken using historical plans of the site, the site walkover inspection and from other information sources, the following are considered to be potential historic and present **on site sources** of contamination.

- Made Ground materials most likely comprising reworked natural materials and construction / demolition debris etc from off site development.
- Former garages - possible small scale fuel and oil spillages, asbestos from former structures;

5.3 The **potential off-site sources** of contamination, either historic or current, possibly affecting the site are considered to include:

- Made Ground associated with the construction of roads and adjacent structures and historical activities etc;
- Off site former drainage ditches and tributaries which may have been infilled and may produce ground gases and leachates, if organic rich materials;

5.4 The **potential receptors** to the identified contamination sources described above are considered to be:

- Current site users;
- General public visiting the site;
- Future occupants and site users;
- Construction workers;
- Neighbouring site users;
- Controlled waters - groundwater of low to moderate sensitivity.

5.5 The **potential pathways** linking the identified probable contamination **sources** and the **receptors** are considered to be:

- Direct contact and ingestion of potentially contaminated soils during current use, future construction works and future use;
- Direct contact with any potentially contaminated standing water;

- Direct contact with any potentially contaminated groundwater during future construction (dependent upon resting groundwater levels);
- Surface water run-off via land;
- Leaching of elements and compounds from soils to the underlying groundwaters and their mobilisation laterally through the superficial deposits to local watercourses and Aquifers;
- Dust and vapour inhalation (outdoor air and/or the indoor air of structures);
- Ingestion of contaminated food stuffs grown on site, in the future.

5.6 On the basis of the researched information, it is considered from the above that there are limited potentially complete **source, pathway, receptor linkages** at the site. These are primarily related to the risk of contamination as a result of the former construction activities on and off site.

5.7 The current and future risk to site users from contamination and ground gases is considered to be **low**. On the basis of groundwater and surface water sensitivities, environmental setting and previous site use; the environmental risk from the site is also considered to be **low**.

6.0 GEOTECHNICAL AND OTHER CONSIDERATIONS

- 6.1 An unknown layer of Made Ground is anticipated to be present on site as a result of historical construction activities both on and off site. Superficial deposits comprising the Pelaw Clay Member clays are recorded across the site and underlain by solid strata of the Pennine Middle Coal Measures Formation.
- 6.2 Whilst the site is within the zone of influence of ceased mine workings, these are considered to be of such depth and age that they are not significant to the site or its future redevelopment.
- 6.3 The presence and distribution of natural superficial deposits should be confirmed by intrusive ground investigation, together with determining the strength and maximum bearing capacities of each stratum encountered. The investigation should also determine the presence of Made Ground on site, and the nature of compressibility of these materials if identified to be present. The development layout may need to be arranged to prevent structures spanning across the boundaries of variable superficial deposits, particularly if the geotechnical properties are proven to vary significantly.
- 6.4 On the basis of the published geological conditions, it is considered unlikely at this stage that the ground conditions will be conducive to infiltration style drainage. This should be addressed in future intrusive investigation works on site.
- 6.5 The site was previously developed, with a number of small garages. Foundations and other obstructions may remain in the ground as a result and this should be considered in any future investigations or redevelopment.

7.0 CONCLUSIONS

- 7.1 The site occupies approximately 0.1169ha of unoccupied land approximately 3km to the south of Jarrow town centre. Historically, the site was occupied by fields and more recently, residential garages.
- 7.2 A limited thickness of Made Ground is anticipated across the site, and this is likely to comprise materials arising from the construction and demolition of buildings and roads both on and off site. The BGS published information indicates the site to be underlain by clays of the Pelaw Clay Formation and Carboniferous Pennine Middle Coal Measures Strata.
- 7.3 On the basis of the geological setting and information provided by the Coal Authority and held within JPB's archives, mining and quarrying and ground subsidence hazards are considered to be **not significant** to the site and its future redevelopment.
- 7.4 Radon gas, landfill sites, waste treatment facilities, COMAH, NIHHS sites are all considered to be **not significant** to the site.
- 7.5 UXO / UXB risk is considered to be **potentially significant**.
- 7.6 The superficial deposits underlying the site are classified by the EA as Unproductive Strata, whilst the solid geology is classified as a Secondary A Aquifer. Groundwater is considered to be of **low to moderate sensitivity** and at a **low risk** from potential contamination on site.
- 7.7 There are two surface water features within 250m of the site, of **low to moderate sensitivity**, and the risk from potential contamination on site to surface waters is considered to be low. The site is not located within a flood risk area and therefore flooding is considered to be **not significant** to the site.
- 7.8 On the basis of the researched information indicating the former adjacent uses of the site and the environmental setting, it is considered that from potential contamination and ground gases there is a **low risk** to current and future site users and a **low risk** to the environment.

8.0 RECOMMENDATIONS

- 8.1 In view of the potentially moderate risk from UXO / UXB on site, it is **recommended** that a preliminary desktop threat assessment is undertaken, to determine the actual site specific risk.
- 8.2 A suitably designed intrusive ground investigation **should be carried out** to determine the shallow ground conditions at the site. Particular attention **should** be paid to the suitability of the ground conditions for the proposed future redevelopment on site.
- 8.3 The presence and distribution of Made Ground and natural superficial deposits **should** be confirmed by intrusive ground investigation, together with determining the strength and maximum bearing capacities of each stratum encountered. The investigation **should** also aim to determine the nature of compressibility of the materials on site in order to determine foundation options. The development layout may need to be arranged to prevent structures spanning across variable superficial deposits, if the geotechnical properties are proven to vary significantly.
- 8.4 The recommended ground investigation **should** also seek to determine the contamination status of the shallow materials on site and an appropriate risk assessment to determine the risk to human health and the environment should also be undertaken. During any such investigation, the aggressive nature of the ground **should** also be determined so that any future subsurface concrete can be suitably designed and the infiltration drainage potential of the shallow materials should also be determined.
- 8.5 Gas and groundwater monitoring **should also be conducted** in order to determine the on site ground gas and groundwater regime.

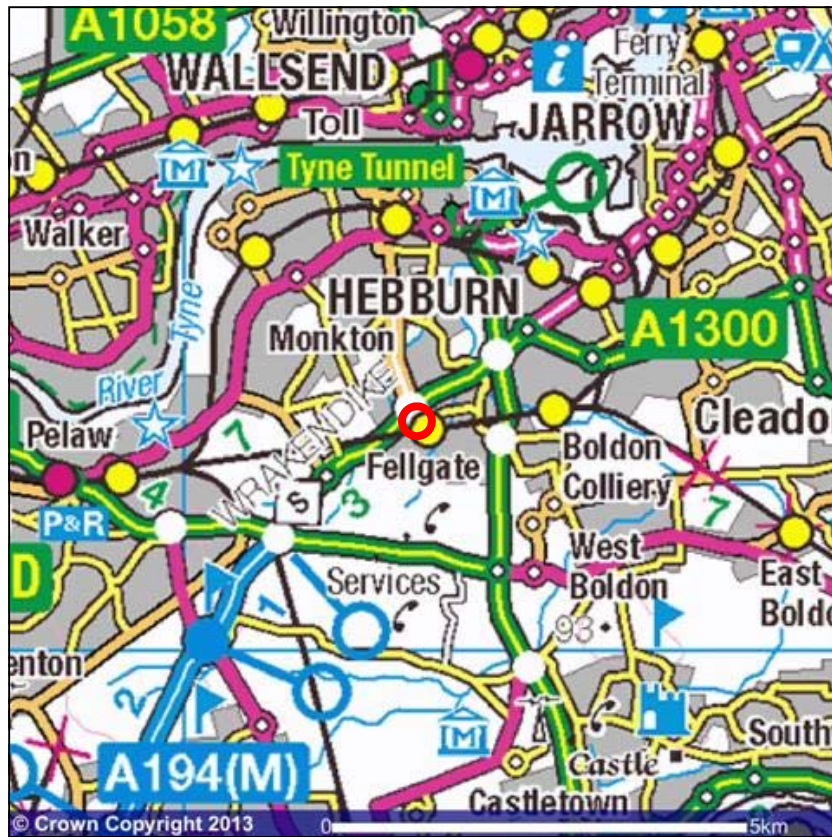
9.0 GENERAL

- 9.1 Whilst confident in the findings of our report we are unable to give an assurance that they will be accepted by the authorities without question. We therefore advise that where appropriate our report and associated matters are submitted to approving bodies and approval obtained or sought before detailed design, site works or other irrevocable action is embarked upon.
- 9.2 The recommendations contained in this report do not constitute any form of specification for the undertaking of the works required.
- 9.3 The conclusions reached in this report are necessarily restricted to those that can be determined from the information consulted and may be subject to amendment in the light of additional information becoming available.
- 9.4 This report has been prepared for the sole use of the specified client in the intended context stated above. It should not be relied upon or used for any other project or by any other party without written authority from Johnson Poole and Bloomer Limited.
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
DRAWINGS

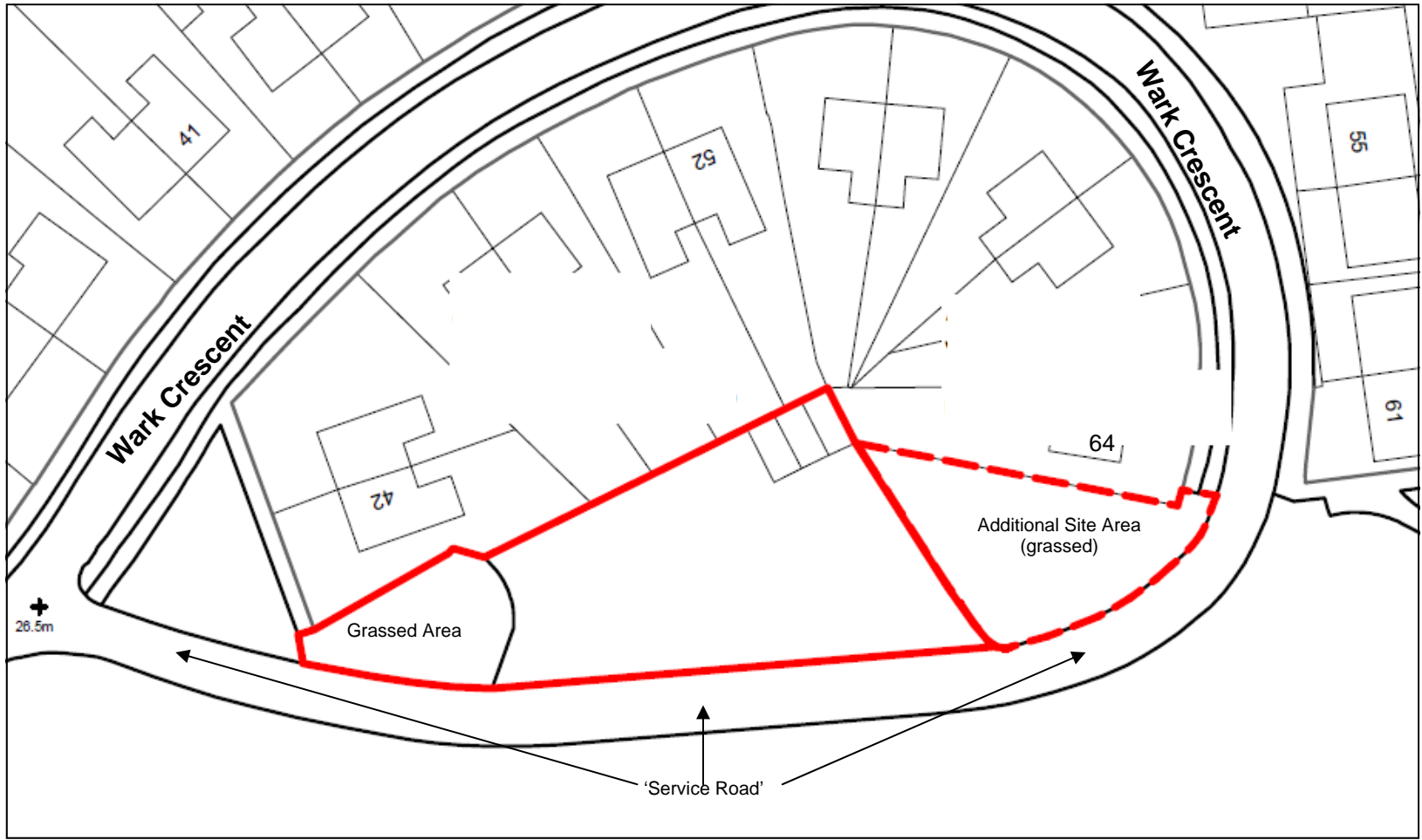
(Note – these plans are reproduced in colour)



Key -

 Site Location

		Engineer DM	Client SOUTH TYNESDIE HOMES		Title GENERAL SITE LOCATION	This Plan is based upon the Ordnance Survey Map with the sanction of the Controller of H.M. Stationery Office. Crown Copyright AL 100002652.
	Checked FT	Project LAND AT WARK CRESCENT				
	Approved ACJ	Date 22-11-13	Scale As shown	Drawing NB503/05		



Key -

— Site Boundaries



Engineer DM	Client SOUTH TYNESIDE HOMES	Title SITE BOUNDARIES AND LAYOUT	
Checked FT	Project LAND AT WARK CRESCENT		
Approved ACJ	Date 22-11-13	Scale N.T.S.	Drawing NB503/06

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APPENDIX A

Information Consulted

INFORMATION CONSULTED:

In preparation of this report, the following information has been consulted:

General

- JPB Archive
- Historical Ordnance Survey Plans
- Law Society Guidance Notes and Directory of Coal Mining Searches 2006

Environmental Setting

- British Geological Survey Sheet No 21 Sunderland, Solid and Drift 1978 Edition, 1:50,000 scale;
- British Geological Survey website – <http://www.bgs.ac.uk>;
- Department of the Environment (1991) “Review of Mining Instability in Great Britain”;
- GroundSure Reports (EnviroInsight, GeoInsight and Historical maps) dated 21 November 2013 and referenced CMAPS-CM-275680-4283-211113;
- Coal Authority Non-Residential Coal Authority Mining Report dated 21 November 2013 and referenced 51000416437002;
- Environment Agency website - <http://www.environment-agency.gov.uk>;
- Linesearch website – <http://www.linesearch.org>;
- MAGIC website – <http://www.magic.gov.uk/website/magic>;
- Building Research Establishment 211 - ‘Radon: guidance on protective measures for new dwellings’;
- Indicative Atlas of Radon in England and Wales, Health Protection Agency (HPA) and British Geological Society (BGS), 2007

Environmental Risk Assessment

- CIRIA (1995) CLR6 “Prioritisation and Categorisation Procedure for Sites which may be Contaminated”
- CIRIA (2001) C552 “Contaminated Land Risk Assessment: A Guide to Good Practice”
- DETR (2000) “Guidelines for Environmental Risk Assessment and Management”
- Department of the Environment Industry Profiles
- CLR8: Potential Contaminants for the Assessment of Land, DEFRA 2002
- Environment Protection Act 1990: Part IIA Contaminated Land
- Environment Agency (September 2004) Contaminated Land Report 11 - Model Procedures for the Management of Land Contamination
- Guide to Good Practice for the Development of Conceptual Models and the Selection and Application of Mathematical Models of Contaminant Transport Processes in the Subsurface - National Groundwater & Contaminated Land Centre report NC/99/38/2, Environment Agency 2001
- Environment Agency (March 2010) Guiding Principles for Land Contamination - GPLC1, GPLC2 and GPLC3



APPENDIX B

GroundSure Report



GroundSure Envirolnsight

Address: Land at Wark Crescent, NE32 4SP
Date: 21 Nov 2013
Reference: CMAPS-CM-275680-4283-211113EDR
Client: CENTREMAPS

NW

N

NE

W

E



SW

S

SE

Grid Reference: 432906,562695

Aerial Photograph Capture date: 01-Jun-2009
Site Size: 0.12ha

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Overview of Findings

For further details on each dataset, please refer to each individual section in the main report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Environmental Permits, Incidents and Registers						
	On-site	0-50m	51-250	251-500		
1.1 Industrial Sites Holding Environmental Permits and/or Authorisations						
1.1.1 Records of historic IPC Authorisations	0	0	0	0		
1.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0		
1.1.3 Records of Water Industry Referrals (potentially harmful discharges to the public sewer)	0	0	0	0		
1.1.4 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters)	0	0	0	0		
1.1.5 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0		
1.1.6 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0		
1.1.7 Records of Part A(2) and Part B Activities and Enforcements	0	0	0	2		
1.1.8 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0		
1.1.9 Records of Licensed Discharge Consents	0	0	0	0		
1.1.10 Records of Planning Hazardous Substance Consents and Enforcements	0	0	0	0		
1.2 Records of COMAH and NIHHS sites	0	0	0	0		
1.3 Environment Agency Recorded Pollution Incidents						
1.3.1 National Incidents Recording System, List 2	0	0	0	0		
1.3.2 National Incidents Recording System, List 1	0	0	0	0		
1.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0		
Section 2: Landfill and Other Waste Sites						
	On-site	0-50m	51-250	251-500	501-1000	1000-5000
2.1 Landfill Sites						
2.1.1 Environment Agency Registered Landfill Sites	0	0	0	0	0	Not searched
2.1.2 Environment Agency Historic Landfill Sites	0	0	0	0	1	0
2.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	1
2.1.4 GroundSure Local Authority Landfill Sites Data	0	0	0	0	2	6
2.2 Landfill and Other Waste Sites Findings						
2.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
2.2.2 Environment Agency Licensed Waste Sites	0	0	0	0	0	4

Section 3: Current Land Use	On-site	0-50m	51-250	251-500
3.1 Current Industrial Sites Data	0	0	6	Not searched
3.2 Records of Petrol and Fuel Sites	0	0	0	2
3.3 Underground High Pressure Oil and Gas Pipelines	0	0	0	0

Section 4: Geology

4.1 Are there any records of Artificial Ground and Made Ground present beneath the study site?	No
4.2 Are there any records of Superficial Ground and Drift Geology present beneath the study site?	Yes
4.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 5: Hydrogeology and Hydrology

	0-500m
5.1 Are there any records of Productive Strata in the Superficial Geology within 500m of the study site?	Yes
5.2 Are there any records of Productive Strata in the Bedrock Geology within 500m of the study site?	Yes

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
5.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	3
5.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
5.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
5.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
	On-site	0-50m	51-250	251-500	501-1000	1000-1500
5.7 Is there any Environment Agency information on river quality within 1500m of the study site?	No	No	No	No	No	No
5.8 Detailed River Network entries within 500m of the site	0	0	3	6	Not searched	Not searched
5.9 Surface water features within 250m of the study site	No	No	No	Not searched	Not searched	Not searched

Section 6: Flooding

6.1 Are there any Environment Agency indicative Zone 2 floodplains within 250m of the study site?	No
6.2 Are there any Environment Agency indicative Zone 3 floodplains within 250m of the study site?	No
6.3 Are there any Flood Defences within 250m of the study site?	No
6.4 Are there any areas benefiting from Flood Defences within 250m of the study site?	No
6.5 Are there any areas used for Flood Storage within 250m of the study site?	No
6.6 What is the maximum BGS Groundwater Flooding susceptibility within 50m of the study site?	Negligible
6.7 What is the BGS confidence rating for the Groundwater Flooding susceptibility areas?	Not Applicable

Section 7: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
7.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	0
7.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
7.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
7.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
7.5 Records of Ramsar sites	0	0	0	0	0	0
7.6 Records of Ancient Woodlands	0	0	0	0	0	0
7.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	4
7.8 Records of World Heritage Sites	0	0	0	0	0	0
7.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0
7.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
7.11 Records of National Parks	0	0	0	0	0	0
7.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
7.13 Records of Nitrate Vulnerable Zones	0	0	0	0	0	0

Section 8: Natural Hazards

8.1 What is the maximum risk of natural ground subsidence?

Low

Section 9: Mining

9.1 Are there any coal mining areas within 75m of the study site?

No

9.2 What is the risk of subsidence relating to shallow mining within 150m of the study site?

Low-Moderate

9.3 Are there any brine affected areas within 75m of the study site?

No

Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between GroundSure and the Client. The document contains the following sections:

1. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

2. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

3. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure underground oil and gas pipelines.

4. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

5. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licenses, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

6. Flooding

Provides information on surface water flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

7. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

8. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence.

9. Mining

Provides information on areas of coal and shallow mining.

10. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, GroundSure provide a free Technical Helpline (08444 159000) for further information and guidance.

Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.















1 Environmental Permits, Incidents and Registers Map



Environmental Permits,
Incidents and Registers Legend



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- | | | | | | |
|---|--------------------|---|-------------------------------|---|--|
|  | Site Outline |  | Recorded Pollution Incident |  | RAS 3 & 4 Authorisations |
|  | Search Buffers (m) |  | Dangerous Substances (List 1) |  | Part A(1) Authorised Processes and Historic IPC Authorisations |
| | |  | Dangerous Substances (List 2) |  | Part A(2) and Part B Authorised Processes |
| | |  | Water Industry Referrals |  | COMAH / NIHHS Sites |
| | |  | Licenced Discharge Consents |  | Sites Determined as Contaminated Land |
| | |  | Red List Discharge Consents |  | Hazardous Substance Consents and Enforcements |



1 Environmental Permits, Incidents and Registers

1.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency and Local Authorities reveal the following information:

1.1.1 Records of historic IPC Authorisations within 500m of the study site:

0

Database searched and no data found.

1.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

0

Database searched and no data found.

1.1.3 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

0

Database searched and no data found.

1.1.4 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

Database searched and no data found.

1.1.5 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

1.1.6 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0

Database searched and no data found.

1.1.7 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

2

The following Part A(2) and Part B Activities are represented as points on the Authorisations, Incidents and Registers map:

ID	Distance	Direction	NGR	Details	
1A	272.0	NW	432704 562906	Address: St Matthews Service Station, York Avenue Garage, Jarrow, NE32 5YX Process: Vapour Recovery Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
2A	279.0	NW	432694 562907	Address: Hedworth Service Station, Leam Lane, Jarrow, NE32 4SL Process: Vapour Recovery Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified

1.1.8 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

1.1.9 Records of Licensed Discharge Consents within 500m of the study site:

0

Database searched and no data found.

1.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

0

Database searched and no data found.

1.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site: 0

Database searched and no data found.

1.3 Environment Agency Recorded Pollution Incidents

1.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site: 0

Database searched and no data found.

1.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site: 0

Database searched and no data found.

1.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

How many records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site? 0

Database searched and no data found.





2 Landfill and Other Waste Sites Map



Landfill and Other Waste Sites Legend



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- | | | | | | |
|---|--------------------|---|--------------------------|---|----------------------------------|
|  | Site Outline |  | E.A. Active Landfill |  | Historic and Planned Waste Sites |
|  | Search Buffers (m) |  | E.A. Historic Landfill |  | E.A. Licensed Waste Site |
| | |  | Local Authority Landfill |  | BGS / DoE Survey Landfill |



2 Landfill and Other Waste Sites

2.1 Landfill Sites

2.1.1 Records from Environment Agency landfill data within 1000m of the study site:

0

Database searched and no data found.

2.1.2 Records of Environment Agency historic landfill sites within 1500m of the study site:

1

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
Not shown	743.0	N	433400 563700	Site Address: Burnside, Simonside View, Primrose Waste Licence: - Site Reference: ST 030, ST 7, ST 005 Waste Type: Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: -

2.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

1

The following landfill records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
Not shown	1232.0	NE	43350 0.0 56380 0.0	Address: Simonside Tip, Jarrow, T&W BGS Number: 1830.0 Risk: No risk to aquifer Waste Type: N/A

2.1.4 Records of Local Authority landfill sites within 1500m of the study site:

8

The following landfill records are represented as points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
Not shown	889.0	NE		Refuse Tip	1968 mapping	Polygon
Not shown	890.0	NE		Refuse Tip	1968 mapping	Polygon
Not shown	1089.0	NE		Refuse Tip	1968 mapping	Polygon
Not shown	1090.0	NE		Refuse Tip	1968 mapping	Polygon
Not shown	1161.0	NE		Refuse Tip	1968 mapping	Polygon
Not shown	1161.0	NE		Refuse Tip	1968 mapping	Polygon
Not shown	1209.0	NE		Refuse Tip	1968 mapping	Polygon
Not shown	1235.0	W		Refuse Tip	1962 mapping	Polygon

2.2 Other Waste Sites

2.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

0

Database searched and no data found.

2.2.2 Records of Environment Agency licensed waste sites within 1500m of the study site:

4

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
Not shown	1465.0	W	431400 562700	<p>Site Address: Mill Lane, Hebburn, Tyne & Wear, NE31 Type: Other Landfill Site taking Special Waste Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: URB001 EPR reference: EA/EPR/RP3598ZH/A001 Operator: One North East Waste Management licence No: 64000 Annual Tonnage: 255000.0</p> <p>Issue Date: 20/08/1998 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure Site Name: Monkton Cokeworks Correspondence Address: -, -</p>

ID	Distance (m)	Direction	NGR	Details
Not shown	1465.0	W	431400 562700	<p>Site Address: Monkton Cokeworks, Mill Lane, Hebburn, Tyne & Wear, NE31</p> <p>Type: Other Landfill Site taking Special Waste</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: URB001</p> <p>EPR reference: EA/EPR/RP3598ZH/A001</p> <p>Operator: Homes And Community Agency</p> <p>Waste Management licence No: 64000</p> <p>Annual Tonnage: 255000.0</p> <p>Issue Date: 20/08/1998</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Closure</p> <p>Site Name: Former Monkton Cokeworks</p> <p>Correspondence Address: -, -</p>
Not shown	1465.0	W	431400 562700	<p>Site Address: Mill Lane, Hebburn, Tyne & Wear, NE31</p> <p>Type: Other Landfill Site taking Special Waste</p> <p>Size: >= 75000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: URB001</p> <p>EPR reference: -</p> <p>Operator: The Urban Regeneration Agency</p> <p>Waste Management licence No: 64000</p> <p>Annual Tonnage: 255000.0</p> <p>Issue Date: 20/08/1998</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: Monkton Cokeworks</p> <p>Correspondence Address: -, St Georges House, Kingsway, Team Valley, Gateshead, Tyne & Wear, NE11 0NA</p>
Not shown	1465.0	W	431400 562700	<p>Site Address: Mill Lane, Hebburn, Tyne & Wear, NE31</p> <p>Type: Other Landfill Site taking Special Waste</p> <p>Size: >= 75000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: URB001</p> <p>EPR reference: -</p> <p>Operator: One North East</p> <p>Waste Management licence No: 64000</p> <p>Annual Tonnage: 255000.0</p> <p>Issue Date: 20/08/1998</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: Monkton Cokeworks</p> <p>Correspondence Address: -, St Georges House, Kingsway, Team Valley, Gateshead, Tyne & Wear, NE11 0NA</p>







3 Current Land Use Map



Current Land Use Legend



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-  Site Outline
-  Current Industrial Sites
-  Petrol & Fuel Sites
-  Underground High Pressure Oil & Fuel Pipelines
-  250 Search Buffers (m)
-  500 Search Buffers (m)



3 Current Land Uses

3.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

6

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1A	91.0	SE	Fellgate Station	433032 562664	NE32	Railway Stations, Junctions and Halts	Public Transport, Stations and Infrastructure
2A	100.0	SE	Fellgate Station (Tyne & Wear Metro)	433035 562650	NE32	Tram, Metro and Light Railway Stations and Stops	Public Transport, Stations and Infrastructure
3	100.0	N	Electricity Sub Station	432905 562809	NE32	Electrical Features	Infrastructure and Facilities
4	114.0	N	Electricity Sub Station	432941 562819	NE32	Electrical Features	Infrastructure and Facilities
5	145.0	W	Electricity Sub Station	432722 562664	NE32	Electrical Features	Infrastructure and Facilities
6	246.0	SW	Electricity Sub Station	432706 562497	NE32	Electrical Features	Infrastructure and Facilities

3.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site:

2

The following petrol or fuel site records provided by Catalist are represented as points on the Current Land Use map:

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
7	271.0	NW	432726 562920	Esso	St Matthews Service Station, York Avenue, York Avenue, Jarrow, Tyne & Wear, NE32 5YX	No	Open
8	320.0	W	432551 562627	Unbranded	Hedworth Service Station, Leam Lane, Leam Lane, Hedworth, Jarrow, Tyne & Wear, NE32 4SL	No	Closed

3.3 Underground High Pressure Oil and Gas Pipelines

Records of high pressure underground pipelines within 500m of the study site:

0

Database searched and no data found.



4 Geology

4.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

4.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
PELC-CLAY	PELAW CLAY MEMBER	CLAY

4.3 Bedrock and Solid Geology

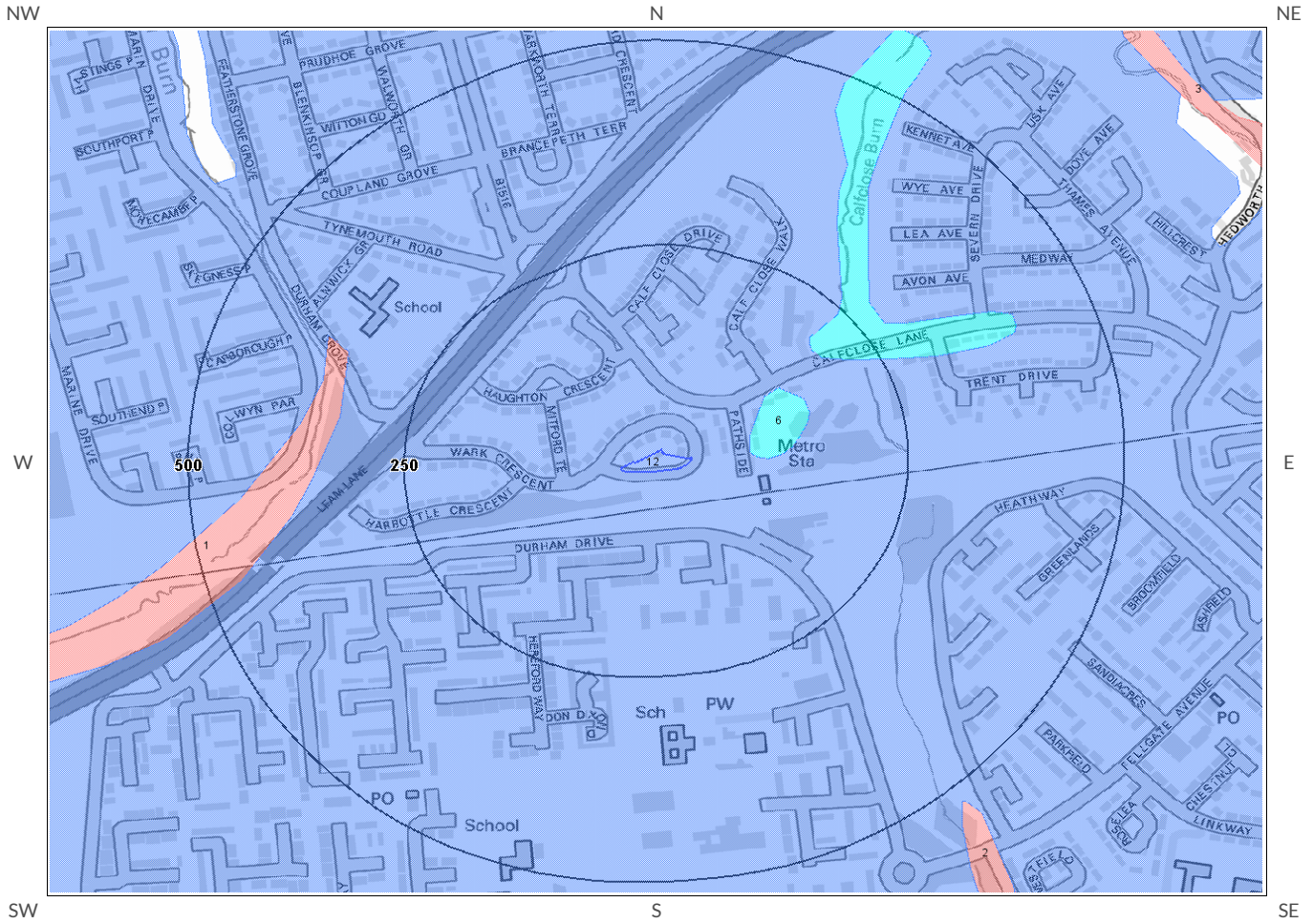
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION	SANDSTONE
PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE
PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE
PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION	SANDSTONE

(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

5 Hydrogeology and Hydrology









5a Aquifer Within Superficial Geology



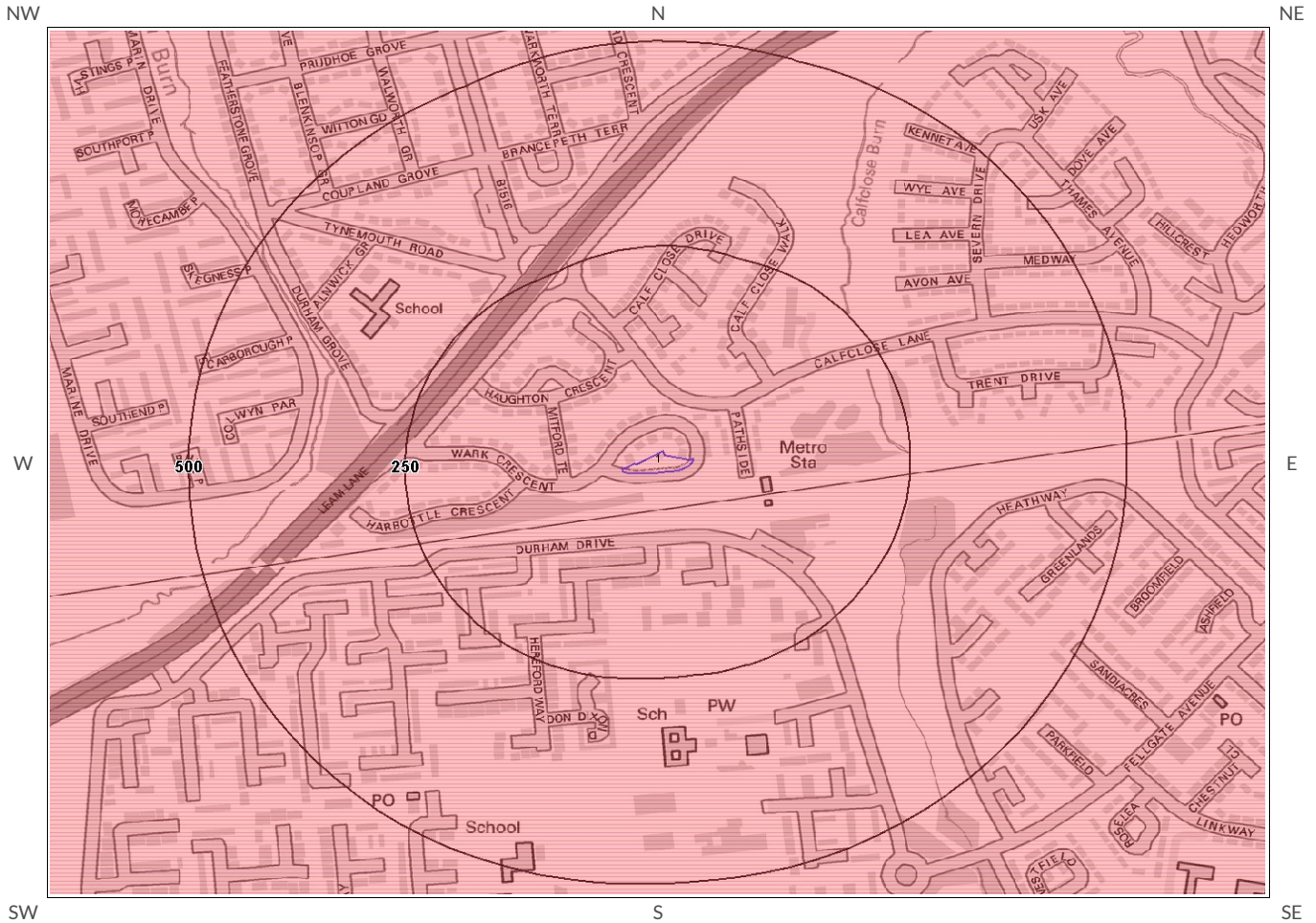
Map Legend



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-  Site Outline
-  Principal Aquifer
-  Secondary Aquifer - Undifferentiated Layers
-  Secondary (A) Aquifer - Permeable Layers
-  Unproductive
-  Secondary (B) Aquifer - Lower Permeability Layers
-  Unknown (lakes and landslip)
-  Search Buffers (m)

5b Aquifer Within Bedrock Geology and Abstraction Licenses



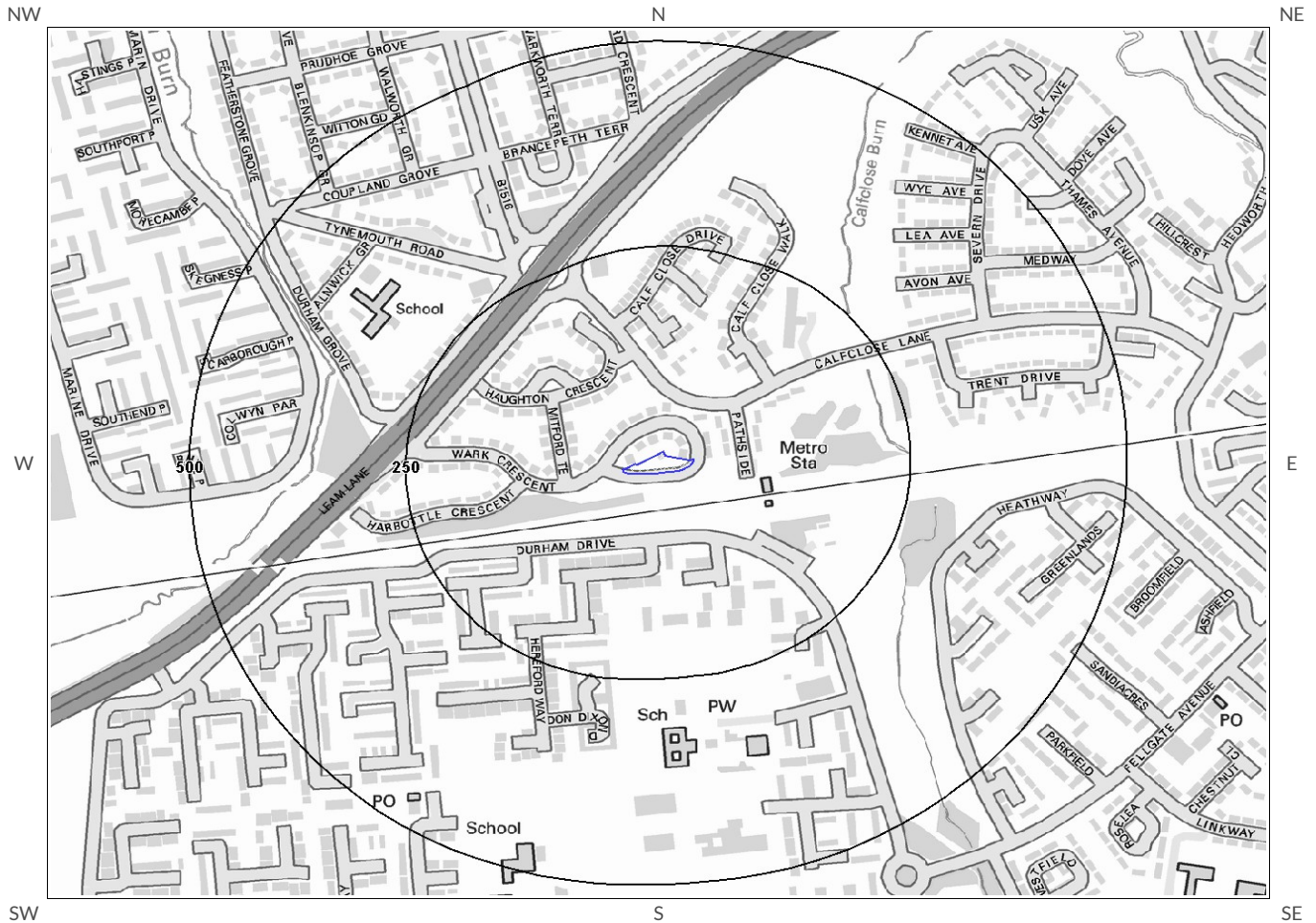
Map Legend



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- Site Outline
- Principal Aquifer
- Secondary Aquifer - Undifferentiated Layers
- Secondary (A) Aquifer - Permeable Layers
- Unproductive
- Secondary (B) Aquifer - Lower Permeability Layers
- Unknown (lakes and landslip)
- Search Buffers (m)
— 250 —
— 500 —
- Groundwater Abstraction Licence
- Surface Water Abstraction Licence








5c Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



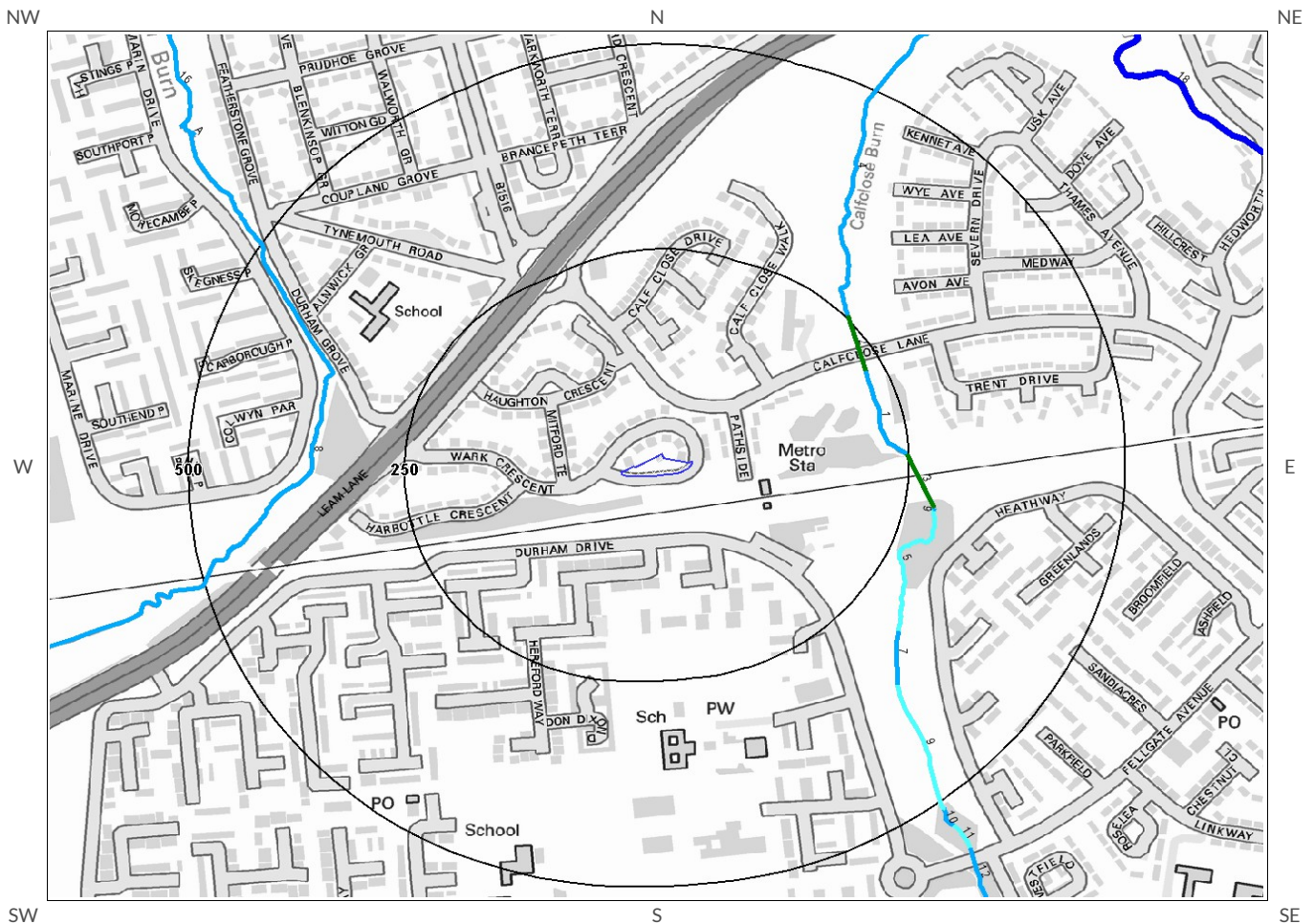
Map Legend



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-  Site Outline
-  Source Protection Zone 1 - Inner Catchment
-  Source Protection Zone 2 - Outer Catchment
-  Source Protection Zone 3 - Total Catchment
-  Source Protection Zone 4 - Zone of Special Interest
-  Potable Water Abstraction Licence
-  Search Buffers (m)














5d Hydrology - Detailed River Network and River Quality

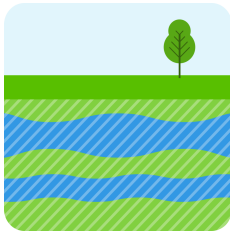


Map Legend



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- | | | | |
|---|---------------------------------------|--|-------------------------------------|
|  | Primary River |  | Canal |
|  | Secondary River |  | Canal Tunnel |
|  | Tertiary River |  | Culvert |
|  | Lake/Reservoir |  | Multiple Channel Culvert |
|  | Underground River (inferred) |  | Underground River (Potential Sewer) |
|  | General Quality Assessment: Biology |  | Underground River (local knowledge) |
|  | General Quality Assessment: Chemistry | | |



5 Hydrogeology and Hydrology

5.1 Aquifer within Superficial Deposits

Are there records of productive strata within the superficial geology at or in proximity to the property? **Yes**

From 1 April 2010, the Environment Agency's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the GroundSure Enviroinsight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (5a):

ID	Distance (m)	Direction	Designation	Description
12	0.0	On Site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
6	67.0	E	Unknown	Unknown
7	191.0	NE	Unknown	Unknown
1	330.0	W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

5.2 Aquifer within Bedrock Deposits

Are there records of productive strata within the bedrock geology at or in proximity to the property? **Yes**

From 1 April 2010, the Environment Agency's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the GroundSure Enviroinsight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (5b):

ID	Distance (m)	Direction	Designation	Description
1	0.0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

5.3 Groundwater Abstraction Licences

Are there any Groundwater Abstraction Licences within 2000m of the study site? Yes

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (5b):

ID	Distance (m)	Direction	NGR	Details
Not shown	1859.0	SE	433920 561110	Licence No: 1/23/05/028 Details: Fish Farm/Cress Pond Throughflow Direct Source: Groundwaters Point: Borehole - Coal Measures - Boldon Data Type: Point Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 032/23/05 Original Start Date: 18/4/1986 Expiry Date: - Issue No: 100 Version Start Date: 2/7/1999 Version End Date:
Not shown	1859.0	SE	433920 561110	Licence No: 1/23/05/028 Details: Make-Up or Top Up Water Direct Source: Groundwaters Point: Borehole - Coal Measures - Boldon Data Type: Point Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 032/23/05 Original Start Date: 18/4/1986 Expiry Date: - Issue No: 101 Version Start Date: 1/4/2004 Version End Date:
Not shown	1859.0	SE	433920 561110	Licence No: 1/23/05/028 Details: Lake & Pond Throughflow Direct Source: Groundwaters Point: Borehole - Coal Measures - Boldon Data Type: Point Annual Volume (m ³): 80300 Max Daily Volume (m ³): 220 Original Application No: 032/23/05 Original Start Date: 18/4/1986 Expiry Date: - Issue No: 102 Version Start Date: 1/9/2006 Version End Date:

5.4 Surface Water Abstraction Licences

Are there any Surface Water Abstraction Licences within 2000m of the study site? No

Database searched and no data found.

5.5 Potable Water Abstraction Licences

Are there any Potable Water Abstraction Licences within 2000m of the study site? No

Database searched and no data found.

5.6 Source Protection Zones

Are there any Source Protection Zones within 500m of the study site? No

Database searched and no data found.

5.7 River Quality

Is there any Environment Agency information on river quality within 1500m of the study site? No

5.7.1 Biological Quality:

Database searched and no data found.

5.7.2 Chemical Quality:

Database searched and no data found.

5.8 Detailed River Network

Are there any Detailed River Network entries within 500m of the study site?

Yes

The following Detailed River Network records are represented on the Hydrology Map (5d):

ID	Distance (m)	Direction	Details
1	221.0	E	River Name: Calfclose Burn Welsh River Name: - Alternative Name: - River Type: Secondary River Main River Status: Currently Undefined
2	229.0	NE	River Name: Calfclose Burn Welsh River Name: - Alternative Name: - River Type: Culvert Main River Status: Currently Undefined
3	248.0	E	River Name: Calfclose Burn Welsh River Name: - Alternative Name: - River Type: Culvert Main River Status: Currently Undefined
4	253.0	NE	River Name: Calfclose Burn Welsh River Name: - Alternative Name: - River Type: Secondary River Main River Status: Currently Undefined
5	263.0	SE	River Name: Calfclose Burn Welsh River Name: - Alternative Name: - River Type: Tertiary River Main River Status: Currently Undefined
6	284.0	E	River Name: Calfclose Burn Welsh River Name: - Alternative Name: - River Type: Secondary River Main River Status: Currently Undefined
7	313.0	SE	River Name: Calfclose Burn Welsh River Name: - Alternative Name: - River Type: Secondary River Main River Status: Currently Undefined
8	352.0	W	River Name: Monkton Burn Welsh River Name: - Alternative Name: - River Type: Secondary River Main River Status: Currently Undefined
9	359.0	SE	River Name: Calfclose Burn Welsh River Name: - Alternative Name: - River Type: Tertiary River Main River Status: Currently Undefined

5.9 Surface Water Features

Are there any surface water features within 250m of the study site?

No

Database searched and no data found.








6 Environment Agency Flood Map



Map Legend



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-  Site Outline
-  Search Buffers (m)
-  Zone 2 Floodplain
-  Zone 3 Floodplain
-  Flood Storage Area
-  Area Benefiting from Flood Defences
-  Flood Defences



6 Flooding

6.1 Zone 2 Flooding

Zone 2 floodplain estimates the annual probability of flooding as one in one thousand (0.1%) or greater from rivers and the sea but less than 1% from rivers or 0.5% from the sea. Alternatively, where information is available they may show the highest known flood level.

Is the site within 250m of an Environment Agency indicative Zone 2 floodplain? No

Database searched and no data found.

6.2 Zone 3 Flooding

Zone 3 estimates the annual probability of flooding as one in one hundred (1%) or greater from rivers and a one in two hundred (0.5%) or greater from the sea. Alternatively, where information is available they may show the highest known flood level.

Is the site within 250m of an Environment Agency indicative Zone 3 floodplain? No

Database searched and no data found.

6.3 Flood Defences

Are there any Flood Defences within 250m of the study site? No

Database searched and no data found.

6.4 Areas benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site? No

6.5 Areas benefiting from Flood Storage

Are there any areas used for Flood Storage within 250m of the study site? No

6.6 Groundwater Flooding Susceptibility Areas

6.6.1 Are there any British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site?

No

6.6.2 What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions?

Negligible

6.7 Groundwater Flooding Confidence Areas

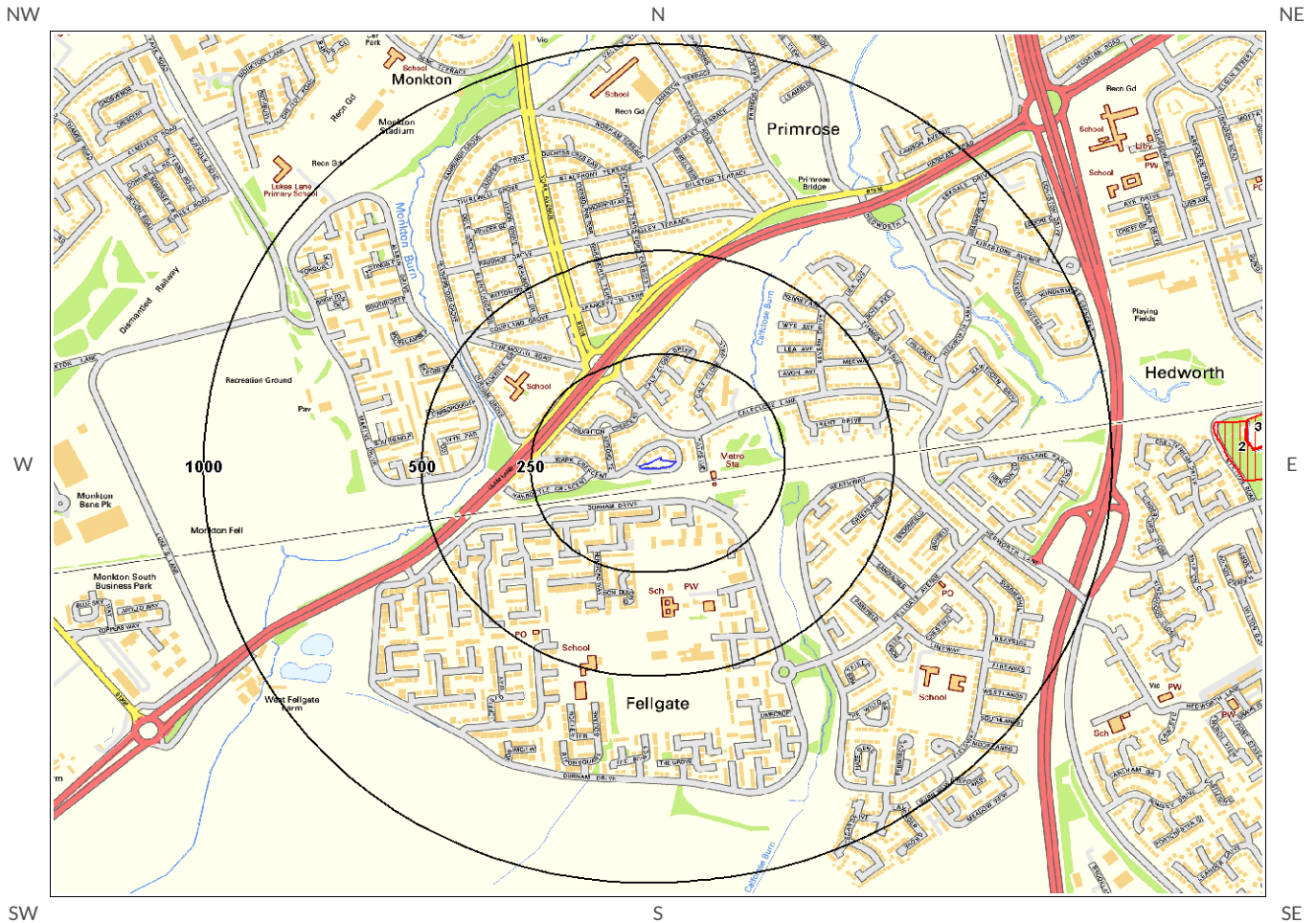
What is the British Geological Survey confidence rating in this result?

Not Applicable

Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.















7 Designated Environmentally Sensitive Sites Map



Map Legend



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-  Site Outline
-  Areas of Outstanding Natural Beauty
-  SAC
-  SPA
-  Nitrate Vulnerable Zones
-  SSSI
-  Ramsar
-  Nitrate Sensitive Areas
-  NNR
-  LNR
-  National Parks
-  World Heritage Sites
-  Environmentally Sensitive Areas
-  Ancient Woodlands



7 Designated Environmentally Sensitive Sites

Presence of Designated Environmentally Sensitive Sites within 2000m of the study site? No

7.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site: 0

Database searched and no data found.

7.2 Records of National Nature Reserves (NNR) within 2000m of the study site: 0

Database searched and no data found.

7.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site: 0

Database searched and no data found.

7.4 Records of Special Protection Areas (SPA) within 2000m of the study site: 0

Database searched and no data found.

7.5 Records of Ramsar sites within 2000m of the study site: 0

Database searched and no data found.

7.6 Records of Ancient Woodland within 2000m of the study site: 0

Database searched and no data found.

7.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

4

The following Local Nature Reserve (LNR) records provided by Natural England/Countryside Council for Wales and Scottish Natural Heritage are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	LNR Name	Data Source
Not shown	1132.0	NE	Primrose	Natural England
2	1236.0	E	Station Burn	Natural England
3	1309.0	E	Station Burn	Natural England
Not shown	1720.0	W	Pelaw Quarry Pond	Natural England

7.8 Records of World Heritage Sites within 2000m of the study site:

0

Database searched and no data found.

7.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

7.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

0

Database searched and no data found.

7.11 Records of National Parks (NP) within 2000m of the study site:

0

Database searched and no data found.

7.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

7.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

0

Database searched and no data found.



8 Natural Hazards Findings

8.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a **GroundSure GeoInsight**, available from our [website](#). The following information has been found:

8.1.1 Shrink Swell

What is the maximum Shrink-Swell* hazard rating identified on the study site? Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.

8.1.2 Landslides

What is the maximum Landslide* hazard rating identified on the study site? Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

8.1.3 Soluble Rocks

What is the maximum Soluble Rocks* hazard rating identified on the study site? Null - Negligible

Soluble rocks are not present in the search area. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

* This indicates an automatically generated 50m buffer and site.

8.1.4 Compressible Ground

What is the maximum Compressible Ground* hazard rating identified on the study site? Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

8.1.5 Collapsible Rocks

What is the maximum Collapsible Rocks* hazard rating identified on the study site? Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

8.1.6 Running Sand

What is the maximum Running Sand** hazard rating identified on the study site? Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

* This indicates an automatically generated 50m buffer and site.



9 Mining

9.1 Coal Mining

Are there any coal mining areas within 75m of the study site?

Yes

The following coal mining information provided by the Coal Authority is not represented on Mapping:

Distance	Direction	Details
0.0	On Site	The study site is located within the specified search distance of an identified mining area. Further details concerning this can be obtained from the Coal Authority Helpline on 0845 762 6848.

9.2 Shallow Mining

What is the subsidence hazard relating to shallow mining on-site*?

Low-Moderate

*Please note this data is searched with a 150m buffer.

9.3 Brine Affected Areas

Are there any brine affected areas within 75m of the study site?

No

Guidance: No Guidance Required.

Contact Details

CENTREMAPS
Telephone: 01886 832972
groundsure@centremaps.co.uk
CENTREMAPS, Brockamin House, Leigh, Worcester, London, WR6 5JU

Directors: M C Walker, MInst C.E.S., C M Walker,
S J Hawkins BSc (Hons), S E Stewart BSc (Hons)
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Registered Company: Laser Surveys Limited
Brockamin House, Leigh, Worcester, WR6 5JU.

British Geological Survey Enquiries

Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email: enquiries@bgs.ac.uk
Web: www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries

Environment Agency

National Customer Contact Centre, PO Box 544
Rotherham, S60 1BY
Tel: 08708 506 506

Web: www.environment-agency.gov.uk
Email: enquiries@environment-agency.gov.uk

Public Health England

Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
<https://www.gov.uk/government/organisations/public-health-england>
Email: enquiries@phe.gov.uk
Main switchboard: 020 7654 8000

The Coal Authority

200 Lichfield Lane
Mansfield
Notts NG18 4RG
Tel: 0845 762 6848
DX 716176 Mansfield 5
www.coal.gov.uk

Ordnance Survey

Romsey Road
Southampton SO16 4GU
Tel: 08456 050505

Local Authority

Authority: South Tyneside Metropolitan Borough Council
Phone: 0191 427 7000
Web: www.southtyneside.info
Address: Town Hall and Civic Offices, Westoe Road, South Shields, Tyne and Wear. NE33 2RI

Gemapping PLC

Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444

centremapslive.com
the mapping portal from Laser Surveys



British
Geological Survey

NATURAL ENVIRONMENT RESEARCH COUNCIL



Environment
Agency



Public Health
England



The Coal
Authority



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This report has been prepared in accordance with the GroundSure Ltd standard Terms and Conditions of business for work of this nature.

Standard Terms and Conditions

1 Definitions

In these terms and conditions unless the context otherwise requires:

"Beneficiary" means the person or entity for whose benefit the Client has obtained the Services.

"Client" means the party or parties entering into a Contract with GroundSure.

"Commercial" means any building or property which is not Residential.

"Confidential Information" means the contents of this Contract and all information received from the Client as a result of, or in connection with, this Contract other than

(i) information which the Client can prove was rightfully in its possession prior to disclosure by GroundSure and

(ii) any information which is in the public domain (other than by virtue of a breach of this Contract).

"Support Services" means Support Services provided by GroundSure including, without limitation, interpreting third party and in-house environmental data, providing environmental support advice, undertaking environmental audits and assessments, Site investigation, Site monitoring and related items.

"Contract" means the contract between GroundSure and the Client for the provision of the Services, and which shall incorporate these terms and conditions, the Order, and the relevant User Guide.

"Third Party Data Provider" means any third party providing Third Party Content to GroundSure.

"Data Reports" means reports comprising factual data with no accompanying interpretation.

"Fees" has the meaning set out in clause 5.1.

"GroundSure" means GroundSure Limited, a company registered in England and Wales under number 03421028.

"GroundSure Materials" means all materials prepared by GroundSure and provided as part of the Services, including but not limited to Third Party Content, Data Reports, Mapping, and Risk Screening Reports.

"Intellectual Property" means any patent, copyright, design rights, trade or service mark, moral rights, data protection rights, know-how or trade mark in each case whether registered or not and including applications for the same or any other rights of a similar nature anywhere in the world.

"Mapping" means a map, map data or a combination of historical maps of various ages, time periods and scales.

"Order" means an electronic, written or other order form submitted by the Client requesting Services from GroundSure in respect of a specified Site.

"Ordnance Survey" means the Secretary of State for Business, Innovation and Skills, acting through Ordnance Survey, Adanac Drive, Southampton, SO16 0AS, UK.

"Order Website" means the online platform through which Orders may be placed by the Client and accepted by GroundSure.

"Report" means a Risk Screening Report or Data Report for Commercial or Residential property.

"Residential" means any building or property used as or intended to be used as a single dwelling.

"Risk Screening Report" means a risk screening report comprising factual data with an accompanying interpretation by GroundSure.

"Services" means any Report, Mapping and/or Support Services which GroundSure has agreed to provide by accepting an Order pursuant to clause 2.6.

"Site" means the area of land in respect of which the Client has requested GroundSure to provide the Services.

"Third Party Content" means data, database information or other information which is provided to GroundSure by a Third Party Data Provider.

"User Guide" means the user guide, as amended from time to time, available upon request from GroundSure and on the website (www.GroundSure.com) and forming part of this Contract.

2 Scope of Services, terms and conditions, requests for insurance and quotations

2.1 GroundSure agrees to provide the Services in accordance with the Contract.

2.2 GroundSure shall exercise reasonable skill and care in the provision of the Services.

2.3 Subject to clause 7.3 the Client acknowledges that it has not relied on any statement or representation made by or on behalf of GroundSure which is not set out and expressly agreed in writing in the Contract and all such statements and representations are hereby excluded to the fullest extent permitted by law.

2.4 The Client acknowledges that terms and conditions appearing on a Client's order form, printed stationery or other communication, or any terms or conditions

implied by custom, practice or course of dealing shall be of no effect, and that this Contract shall prevail over all others in relation to the Order.

2.5 If the Client or Beneficiary requests insurance in conjunction with or as a result of the Services, GroundSure shall use reasonable endeavours to recommend such insurance, but makes no warranty that such insurance shall be available from insurers or that it will be offered on reasonable terms. Any insurance purchased by the Client or Beneficiary shall be subject solely to the terms of the policy issued by insurers and GroundSure will have no liability therefor. In addition you acknowledge and agree that GroundSure does not act as an agent or broker for any insurance providers. The Client should take (and ensure that the Beneficiary takes) independent advice to ensure that the insurance policy requested or offered is suitable for its requirements.

2.6 GroundSure's quotations or proposals are valid for a period of 30 days only unless an alternative period of time is explicitly stipulated by GroundSure. GroundSure reserves the right to withdraw any quotation or proposal at any time before an Order is accepted by GroundSure. GroundSure's acceptance of an Order shall be binding only when made in writing and signed by GroundSure's authorised representative or when accepted through the Order Website.

3 The Client's obligations

3.1 The Client shall comply with the terms of this Contract and

(i) procure that the Beneficiary or any third party relying on the Services complies with and acts as if it is bound by the Contract and

(ii) be liable to GroundSure for the acts and omissions of the Beneficiary or any third party relying on the Services as if such acts and omissions were those of the Client.

3.2 The Client shall be solely responsible for ensuring that the Services are appropriate and suitable for its and/or the Beneficiary's needs.

3.3 The Client shall supply to GroundSure as soon as practicable and without charge all requisite information (and the Client warrants that such information is accurate, complete and appropriate), including without limitation any environmental information relating to the Site and shall give such assistance as GroundSure shall reasonably require in the provision of the Services including, without limitation, access to the Site, facilities and equipment.

3.4 Where the Client's approval or decision is required to enable GroundSure to carry out work in order to provide the Services, such approval or decision shall be given or procured in reasonable time and so as not to delay or disrupt the performance of the Services.

3.5 Save as expressly permitted by this Contract the Client shall not, and shall procure that the Beneficiary shall not, re-sell, alter, add to, or amend the GroundSure Materials, or use the GroundSure Materials in a manner for which they were not intended. The Client may make the GroundSure Materials available to a third party who is considering acquiring some or all of, or providing funding in relation to, the Site, but such third party cannot rely on the same unless expressly permitted under clause 4.

3.6 The Client is responsible for maintaining the confidentiality of its user name and password if using the Order Website and the Client acknowledges that GroundSure accepts no liability of any kind for any loss or damage suffered by the Client as a consequence of using the Order Website.

4 Reliance

4.1 The Client acknowledges that the Services provided by GroundSure consist of the presentation and analysis of Third Party Content and other content and that information obtained from a Third Party Data Provider cannot be guaranteed or warranted by GroundSure to be reliable.

4.2 In respect of Data Reports, Mapping and Risk Screening Reports, the following classes of person and no other are entitled to rely on their contents;

(i) the Beneficiary,

(ii) the Beneficiary's professional advisers, (iii) any person providing funding to the Beneficiary in relation to the Site (whether directly or as part of a lending syndicate),

(iv) the first purchaser or first tenant of the Site, and

(v) the professional advisers and lenders of the first purchaser or tenant of the Site.

4.3 In respect of Support Services, only the Client, Beneficiary and parties expressly named in a Report and no other parties are entitled to rely on its contents.

4.4 Save as set out in clauses 4.2 and 4.3 and unless otherwise expressly agreed in writing, no other person or entity of any kind is entitled to rely on any Services or Report issued or provided by GroundSure. Any party considering such Reports and Services does so at their own risk.

5 Fees and Disbursements

5.1 GroundSure shall charge and the Client shall pay fees at the rate and frequency specified in the written proposal, Order Website or Order acknowledgement form, plus (in the case of Support Services) all proper disbursements incurred by GroundSure. The Client shall in addition pay all value added tax or other tax payable on such fees and disbursements in relation to the provision of the Services (together "Fees").

5.2 The Client shall pay all outstanding Fees to GroundSure in full without deduction, counterclaim or set off within 30 days of the date of GroundSure's invoice or such other period as may be agreed in writing between GroundSure and the Client ("Payment Date"). Interest on late payments will accrue on a daily basis from the Payment Date until the date of payment (whether before or after judgment) at the rate of 8% per annum.

5.3 The Client shall be deemed to have agreed the amount of any invoice unless an objection is made in writing within 28 days of the date of the invoice. As soon as reasonably practicable after being notified of an objection, without prejudice to clause 5.2 a member of GroundSure's management team will contact the Client and the parties shall then use all reasonable endeavours to resolve the dispute within 15 days.

6 Intellectual Property and Confidentiality

6.1 Subject to

(i) full payment of all relevant Fees and

(ii) compliance with this Contract, the Client is granted (and is permitted to sub-licence to the Beneficiary) a royalty-free, worldwide, non-assignable and (save to the extent set out in this Contract) non-transferable licence to make use of the GroundSure Materials.

6.2 All Intellectual Property in the GroundSure Materials are and shall remain owned by GroundSure or GroundSure's licensors (including without limitation the Third Party Data Providers) the Client acknowledges, and shall procure acknowledgement by the Beneficiary of, such ownership. Nothing in this Contract purports to transfer or assign any rights to the Client or the Beneficiary in respect of such Intellectual Property.

6.3 Third Party Data Providers may enforce any breach of clauses 6.1 and 6.2 against the Client or Beneficiary.

6.4 The Client shall, and shall procure that any recipients of the GroundSure Materials shall:

(i) not remove, suppress or modify any trade mark, copyright or other proprietary marking belonging to GroundSure or any third party from the Services;

(ii) use the information obtained as part of the Services in respect of the subject Site only, and shall not store or reuse any information obtained as part of the Services provided in respect of adjacent or nearby sites;

(iii) not create any product or report which is derived directly or indirectly from the Services (save that those acting in a professional capacity to the Beneficiary may provide advice based upon the Services);

(iv) not combine the Services with or incorporate such Services into any other information data or service;

(v) not reformat or otherwise change (whether by modification, addition or enhancement), the Services (save that those acting for the Beneficiary in a professional capacity shall not be in breach of this clause 6.4(v) where such reformatting is in the normal course of providing advice based upon the Services);

(vi) where a Report and/or Mapping contains material belonging to Ordnance Survey, acknowledge and agree that such content is protected by Crown Copyright and shall not use such content for any purpose outside of receiving the Services; and

(vii) not copy in whole or in part by any means any map prints or run-on copies containing content belonging to Ordnance Survey (other than that contained within Ordnance Survey's OS Street Map) without first being in possession of a valid Paper Map Copying Licence from Ordnance Survey,

6.5 Notwithstanding clause 6.4, the Client may make reasonable use of the GroundSure Materials in order to advise the Beneficiary in a professional capacity. However, GroundSure shall have no liability in respect of any advice, opinion or report given or provided to Beneficiaries by the Client.

6.6 The Client shall procure that any person to whom the Services are made available shall notify GroundSure of any request or requirement to disclose, publish or disseminate any information contained in the Services in accordance with the Freedom of Information Act 2000, the Environmental Information Regulations 2004 or any associated legislation or regulations in force from time to time.

7. Liability: Particular Attention Should Be Paid To This Clause

7.1 This Clause 7 sets out the entire liability of GroundSure, including any liability for the acts or omissions of its employees, agents, consultants, subcontractors and Third Party Content, in respect of:

(i) any breach of contract, including any deliberate breach of the Contract by GroundSure or its employees, agents or subcontractors;

(ii) any use made of the Reports, Services, Materials or any part of them; and

(iii) any representation, statement or tortious act or omission (including negligence) arising under or in connection with the Contract.

7.2 All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from the Contract.

7.3 Nothing in the Contract limits or excludes the liability of the Supplier for death

or personal injury resulting from negligence, or for any damage or liability incurred by the Client or Beneficiary as a result of fraud or fraudulent misrepresentation.

7.4 GroundSure shall not be liable for

(i) loss of profits;

(ii) loss of business;

(iii) depletion of goodwill and/or similar losses;

(iv) loss of anticipated savings;

(v) loss of goods;

(vi) loss of contract;

(vii) loss of use;

(viii) loss or corruption of data or information;

(ix) business interruption;

(x) any kind of special, indirect, consequential or pure economic loss, costs, damages, charges or expenses;

(xi) loss or damage that arise as a result of the use of all or part of the GroundSure Materials in breach of the Contract;

(xii) loss or damage arising as a result of any error, omission or inaccuracy in any part of the GroundSure Materials where such error, omission or inaccuracy is caused by any Third Party Content or any reasonable interpretation of Third Party Content;

(xiii) loss or damage to a computer, software, modem, telephone or other property; and

(xiv) loss or damage caused by a delay or loss of use of GroundSure's internet ordering service.

7.5 GroundSure's total liability in relation to or under the Contract shall be limited to £10 million for any claim or claims.

7.6 GroundSure shall procure that the Beneficiary shall be bound by limitations and exclusions of liability in favour of GroundSure which accord with those detailed in clauses 7.4 and 7.5 (subject to clause 7.3) in respect of all claims which the Beneficiary may bring against GroundSure in relation to the Services or other matters arising pursuant to the Contract.

8 GroundSure's right to suspend or terminate

8.1 If GroundSure reasonably believes that the Client or Beneficiary has not provided the information or assistance required to enable the proper provision of the Services, GroundSure shall be entitled to suspend all further performance of the Services until such time as any such deficiency has been made good.

8.2 GroundSure shall be entitled to terminate the Contract immediately on written notice in the event that:

(i) the Client fails to pay any sum due to GroundSure within 30 days of the Payment Date; or

(ii) the Client (being an individual) has a bankruptcy order made against him or (being a company) shall enter into liquidation whether compulsory or voluntary or have an administration order made against it or if a receiver shall be appointed over the whole or any part of its property assets or undertaking or if the Client is struck off the Register of Companies or dissolved; or

(iii) the Client being a company is unable to pay its debts within the meaning of Section 123 of the Insolvency Act 1986 or being an individual appears unable to pay his debts within the meaning of Section 268 of the Insolvency Act 1986 or if the Client shall enter into a composition or arrangement with the Client's creditors or shall suffer distress or execution to be levied on his goods; or

(iv) the Client or the Beneficiary breaches any term of the Contract (including, but not limited to, the obligations in clause 4) which is incapable of remedy or if remediable, is not remedied within five days of notice of the breach.

9. Client's Right to Terminate and Suspend

9.1 Subject to clause 10.1, the Client may at any time upon written notice terminate or suspend the provision of all or any of the Services.

9.2 In any event, where the Client is a consumer (and not a business) he/she hereby expressly acknowledges and agrees that:

(i) the supply of Services under this Contract (and therefore the performance of this Contract) commences immediately upon GroundSure's acceptance of the Order; and

(ii) the Reports and/or Mapping provided under this Contract are

(a) supplied to the Client's specification(s) and in any event

(b) by their nature cannot be returned.

10 Consequences of Withdrawal, Termination or Suspension

10.1 Upon termination of the Contract:

(i) GroundSure shall take steps to bring to an end the Services in an orderly manner, vacate any Site with all reasonable speed and shall deliver to the Client and/or Beneficiary any property of the Client and/or Beneficiary in

GroundSure's possession or control; and

(ii) the Client shall pay to GroundSure all and any Fees payable in respect of the performance of the Services up to the date of termination or suspension. In respect of any Support Services provided, the Client shall also pay GroundSure any additional costs incurred in relation to the termination or suspension of the Contract.

11 Anti-Bribery

11.1 The Client warrants that it shall:

(i) comply with all applicable laws, statutes and regulations relating to anti-bribery and anti-corruption including but not limited to the Bribery Act 2010;

(ii) comply with such of GroundSure's anti-bribery and anti-corruption policies as are notified to the Client from time to time; and

(iii) promptly report to GroundSure any request or demand for any undue financial or other advantage of any kind received by or on behalf of the Client in connection with the performance of this Contract.

11.2 Breach of this Clause 11 shall be deemed a material breach of this Contract.

12 General

12.1 The Mapping contained in the Services is protected by Crown copyright and must not be used for any purpose other than as part of the Services or as specifically provided in the Contract.

12.2 The Client shall be permitted to make one copy only of each Report or Mapping Order. Thereafter the Client shall be entitled to make unlimited copies of the Report or Mapping Order only in accordance with an Ordnance Survey paper map copy license available through GroundSure.

12.3 GroundSure reserves the right to amend or vary this Contract. No amendment or variation to this Contract shall be valid unless signed by an authorised representative of GroundSure.

12.4 No failure on the part of GroundSure to exercise, and no delay in exercising, any right, power or provision under this Contract shall operate as a waiver thereof.

12.5 Save as expressly provided in this Contract, no person other than the persons set out therein shall have any right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of the Contract.

12.6 The Secretary of State for Business, Innovation and Skills ("BIS") or BIS' successor body, as the case may be, acting through Ordnance Survey may enforce a breach of clause 6.4(vi) and clause 6.4(vii) of these terms and conditions against the Client in accordance with the provisions of the Contracts (Rights of Third Parties) Act 1999.

12.7 GroundSure shall not be liable to the Client if the provision of the Services is delayed or prevented by one or more of the following circumstances:

- (i) the Client or Beneficiary's failure to provide facilities, access or information;
- (ii) fire, storm, flood, tempest or epidemic;
- (iii) Acts of God or the public enemy;
- (iv) riot, civil commotion or war;
- (v) strikes, labour disputes or industrial action;
- (vi) acts or regulations of any governmental or other agency;
- (vii) suspension or delay of services at public registries by Third Party Data Providers;
- (viii) changes in law; or
- (ix) any other reason beyond GroundSure's reasonable control.

In the event that GroundSure is prevented from performing the Services (or any part thereof) in accordance with this clause 12.6 for a period of not less than 30 days then GroundSure shall be entitled to terminate this Contract immediately on written notice to the Client.

12.8 Any notice provided shall be in writing and shall be deemed to be properly given if delivered by hand or sent by first class post, facsimile or by email to the address, facsimile number or email address of the relevant party as may have been notified by each party to the other for such purpose or in the absence of such notification the last known address.

12.9 Such notice shall be deemed to have been received on the day of delivery if delivered by hand, facsimile or email (save to the extent such day is not a working day where it shall be deemed to have been delivered on the next working day) and on the second working day after the day of posting if sent by first class post.

12.10 The Contract constitutes the entire agreement between the parties and shall supersede all previous arrangements between the parties relating to the subject matter hereof.

12.11 Each of the provisions of the Contract is severable and distinct from the others and if one or more provisions is or should become invalid, illegal or unenforceable, the validity and enforceability of the remaining provisions shall not in any way be tainted or impaired.

12.12 This Contract shall be governed by and construed in accordance with English

law and any proceedings arising out of or connected with this Contract shall be subject to the exclusive jurisdiction of the English courts.

12.13 GroundSure is an executive member of the Council of Property Search Organisation (CoPSO) and has signed up to the Search Code administered by the Property Codes Compliance Board (PCCB). All Risk Screening Reports shall be supplied in accordance with the provisions of the Search Code.

12.14 If the Client or Beneficiary has a complaint about the Services, written notice should be given to the Compliance Officer at GroundSure who will respond in a timely manner.

12.15 The Client agrees that it shall, and shall procure that each Beneficiary shall, treat in confidence all Confidential Information and shall not, and shall procure that each Beneficiary shall not (i) disclose any Confidential Information to any third party other than in accordance with the terms of this Contract; and (ii) use Confidential Information for a purpose other than the exercise of its rights and obligations under this Contract. Subject to clause 6.6, nothing shall prevent the Client or any Beneficiary from disclosing Confidential Information to the extent required by law. © GroundSure Limited June 2013



APPENDIX C

Historical Plans

Ordnance Survey®
Historical Mapping Extract

www.centremapslive.com

Site Details:

Land at Wark Crescent, NE32
4SP

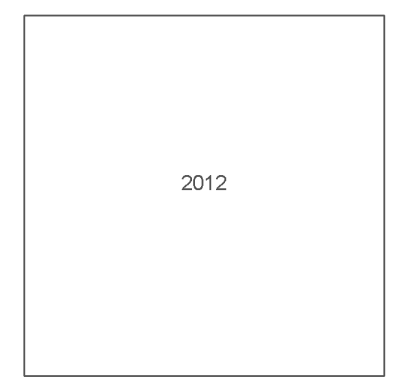
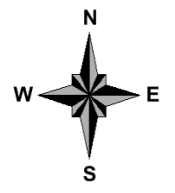
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Grid Ref: 432906, 562695

Map Name: MasterMap

Map date: 2012

Scale: 1:1,250

Printed at: 1:2,500



Produced by
GroundSure Environmental Insight
www.groundsure.com



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groundsure@centremaps.com

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Production date: 21 November 2013

To view map legend click here [Legend](#)

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Historical Mapping Extract

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Site Details:

Land at Wark Crescent, NE32
4SP

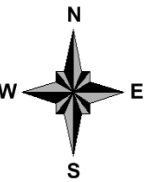
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Map Name: National Grid

Map date: 1995

Scale: 1:1,250

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1995
Levelled N/A



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4SP

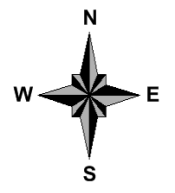
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Map Name: National Grid

Map date: 1993-1994

Scale: 1:1,250

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1994
Levelled N/A

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A



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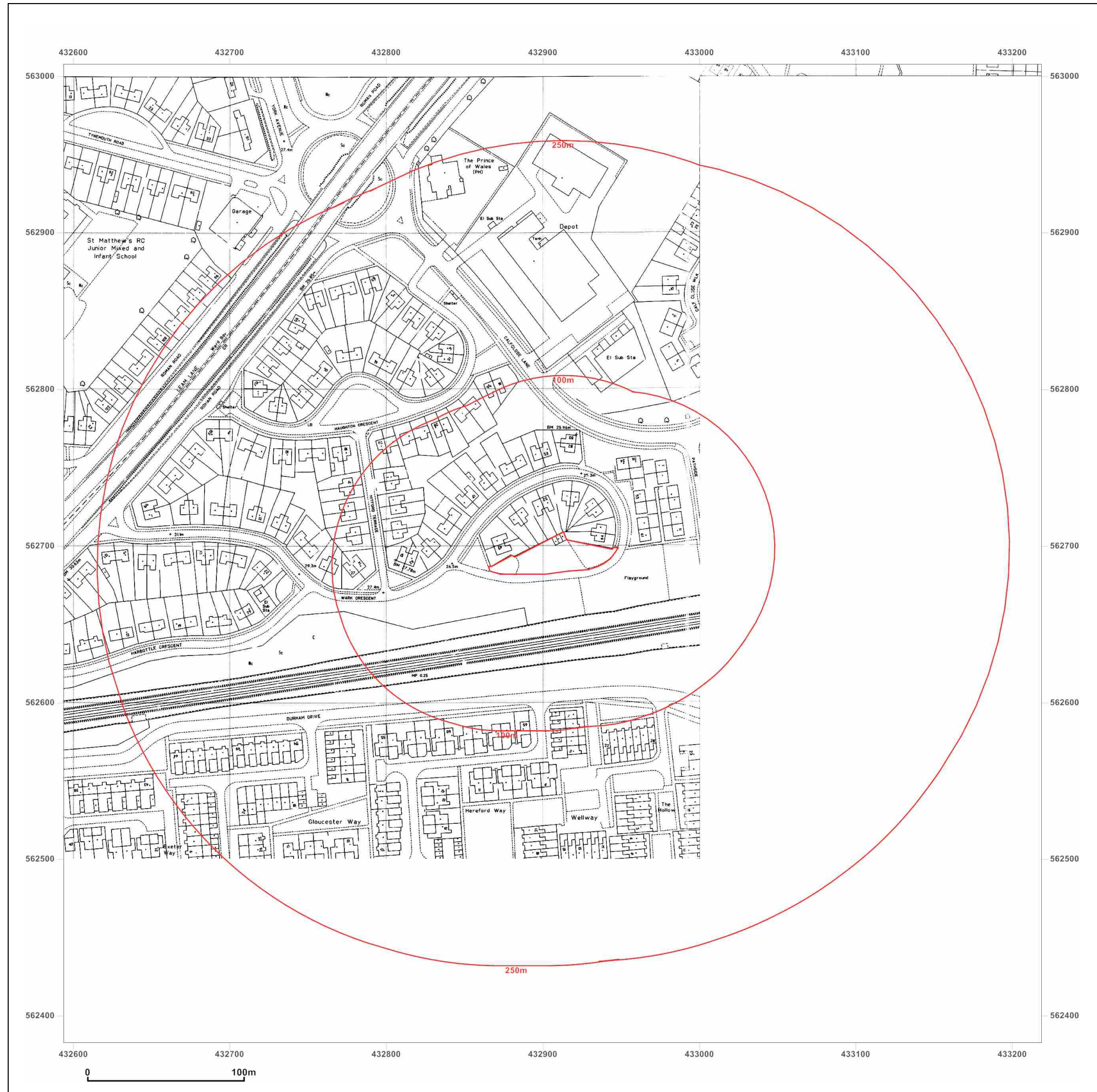


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Production date: 21 November 2013

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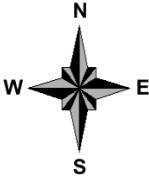
www.centremapslive.com

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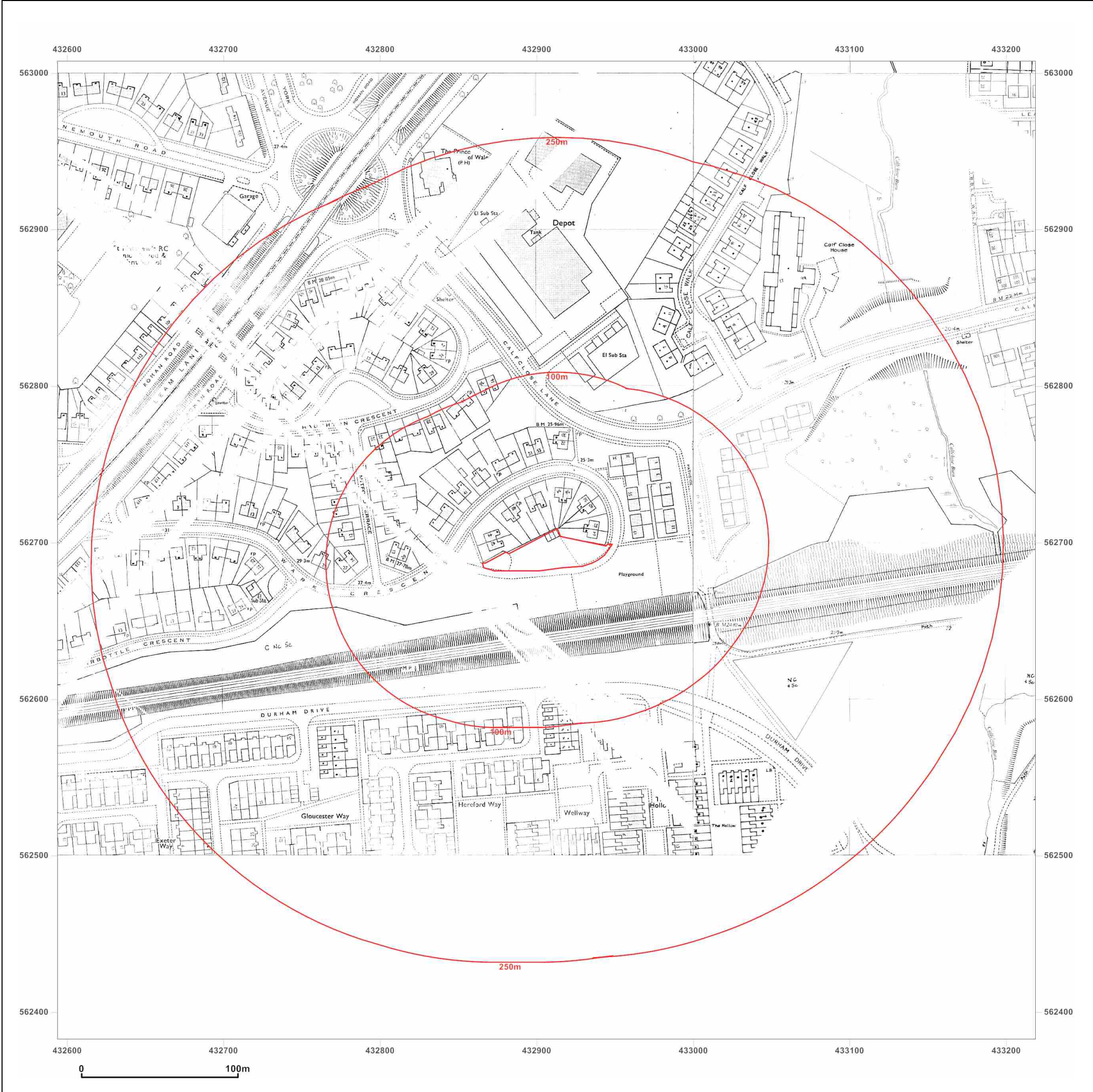
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Surveyed N/A
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Surveyed 1992
Revised 1992
Edition N/A
Copyright 1992
Levelled N/A

Surveyed 1963
Revised 1988
Edition N/A
Copyright 1988
Levelled 1963



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Historical Mapping Extract

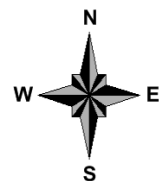
www.centremapslive.com

Site Details:

Land at Wark Crescent, NE32
4SP

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Grid Ref: 432906, 562695

Map Name: National Grid
Map date: 1988-1992
Scale: 1:1,250
Printed at: 1:2,500



<p>Surveyed 1992 Revised 1992 Edition N/A Copyright 1992 Levelled N/A</p>	<p>Surveyed 1963 Revised 1988 Edition N/A Copyright 1988 Levelled 1963</p>
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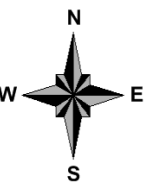
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Map Name: National Grid

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Scale: 1:1,250

Printed at: 1:2,500



Surveyed 1957
Revised 1979
Edition N/A
Copyright 1981
Levelled 1963

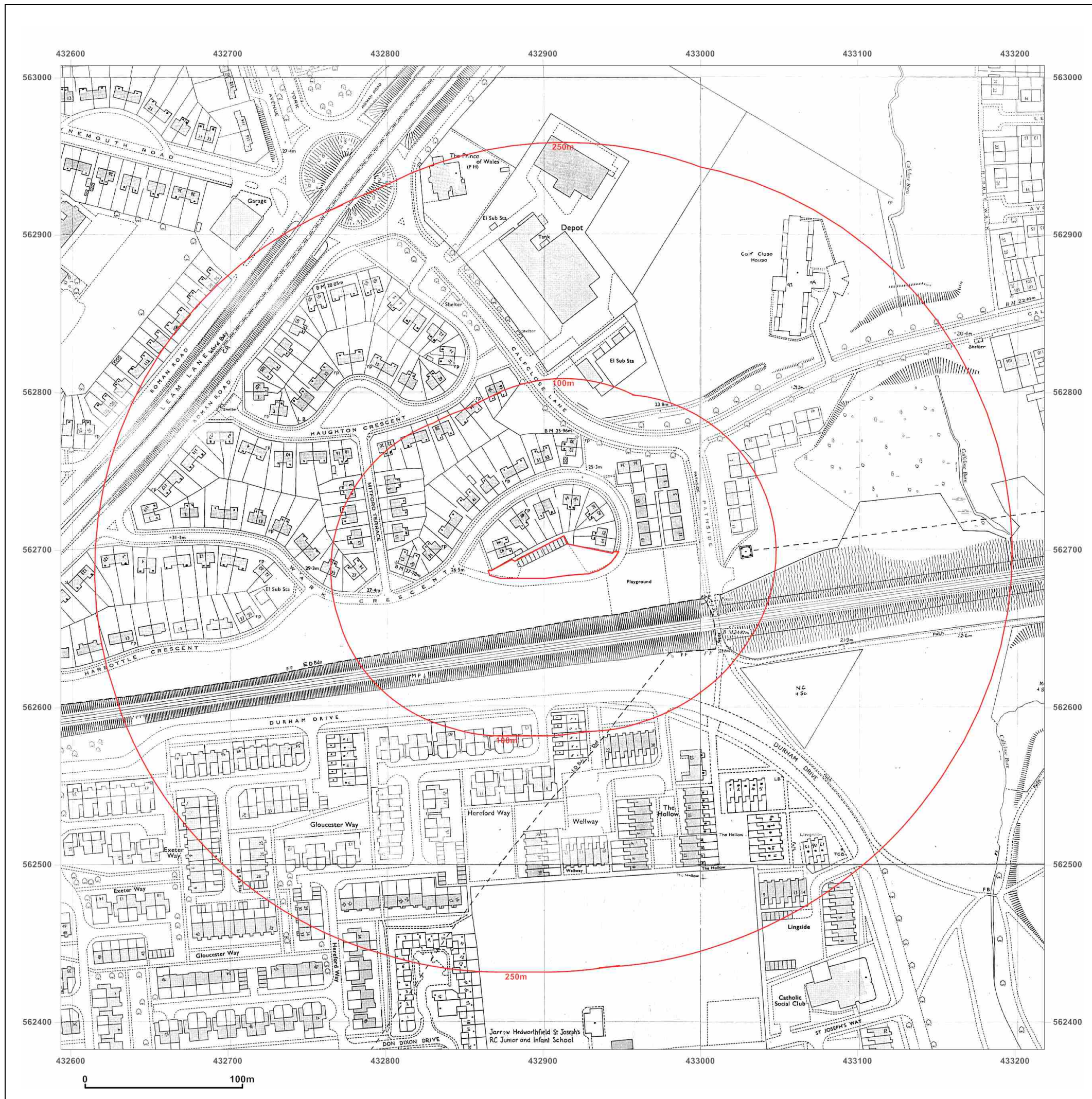
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Revised 1982
Edition N/A
Copyright 1982
Levelled 1963

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Edition N/A
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Historical Mapping Extract

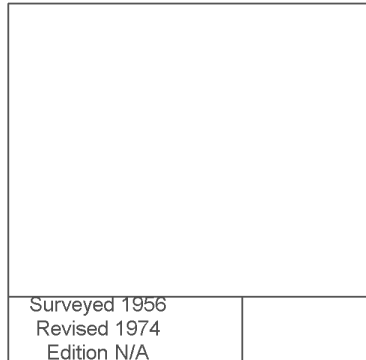
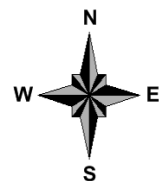
www.centremapslive.com

Site Details:

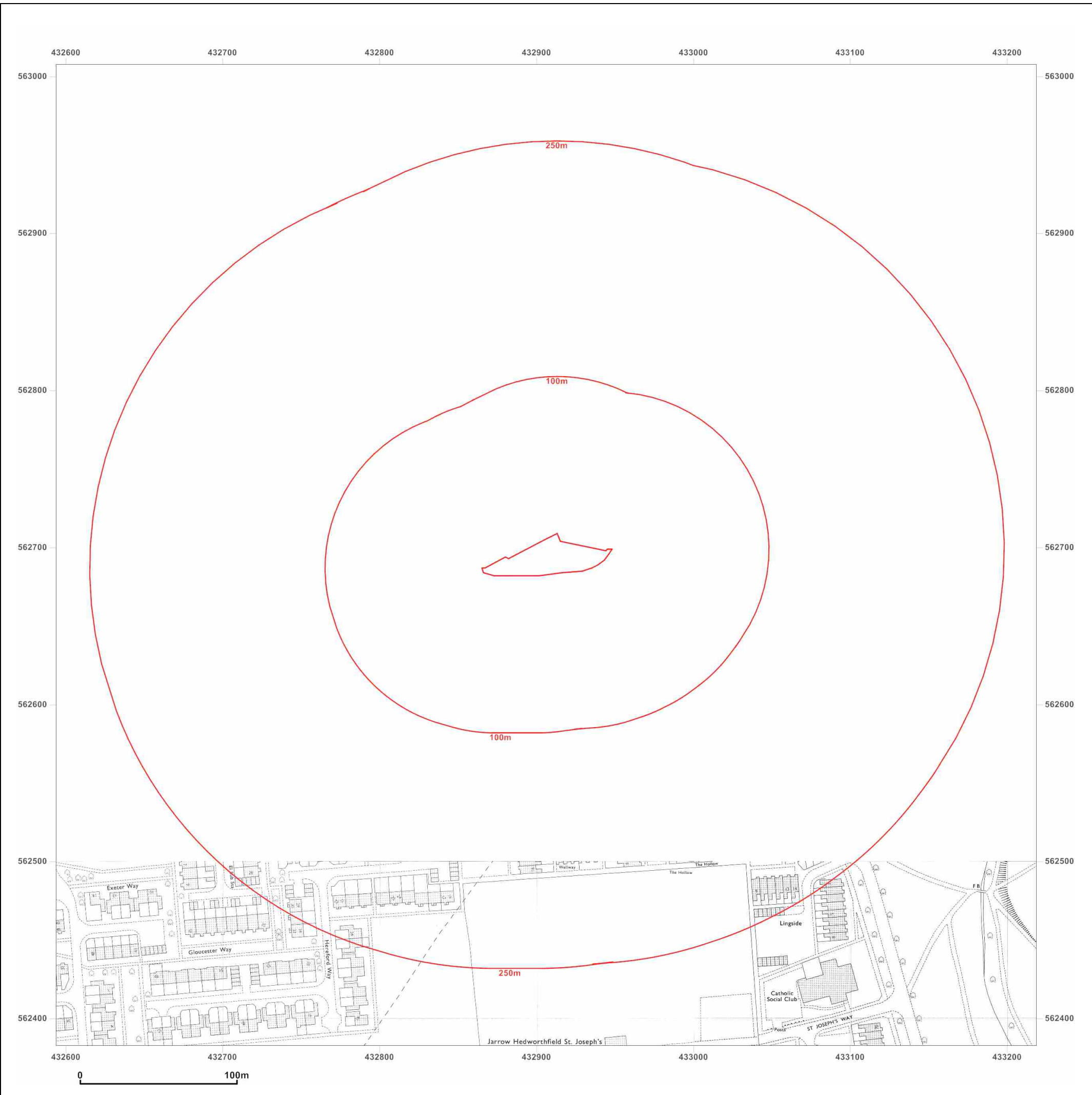
Land at Wark Crescent, NE32
4SP

Client Ref: 4283
Report Ref: CMAPS-CM-275680-4283-211113HIS
Grid Ref: 432906, 562695

Map Name: National Grid
Map date: 1974-1975
Scale: 1:1,250
Printed at: 1:2,500



Surveyed 1956 Revised 1974 Edition N/A Copyright 1975 Levelled 1963	Surveyed 1956 Revised 1973 Edition N/A Copyright 1974 Levelled 1963
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Site Details:

Land at Wark Crescent, NE32
4SP

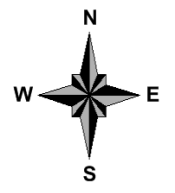
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Report Ref: CMAPS-CM-275680-4283-211113HIS
Grid Ref: 432906, 562695

Map Name: National Grid

Map date: 1967-1971

Scale: 1:1,250

Printed at: 1:2,500



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Levelled 1963

Surveyed 1956
Revised 1970
Edition N/A
Copyright 1971
Levelled 1963

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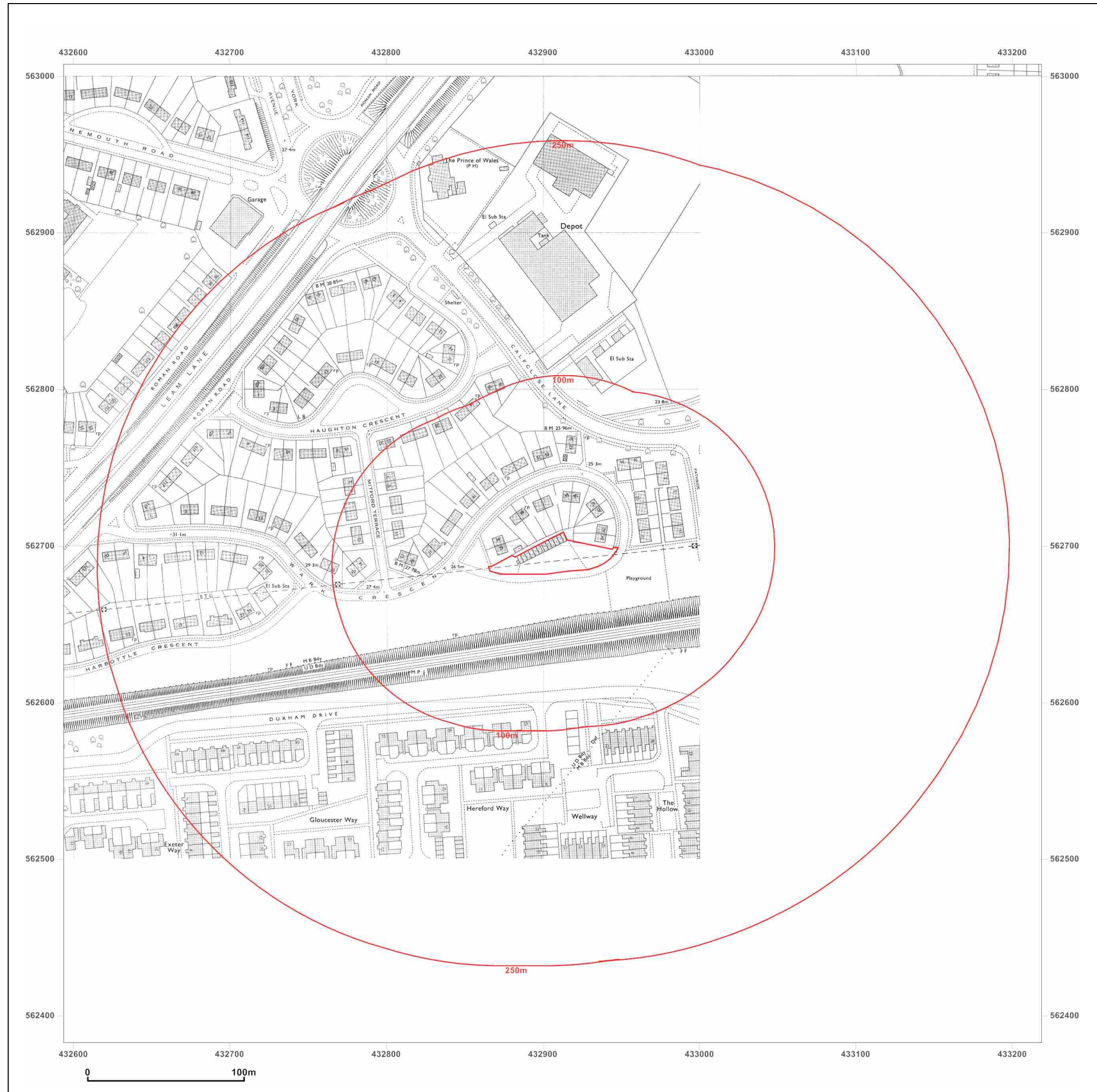


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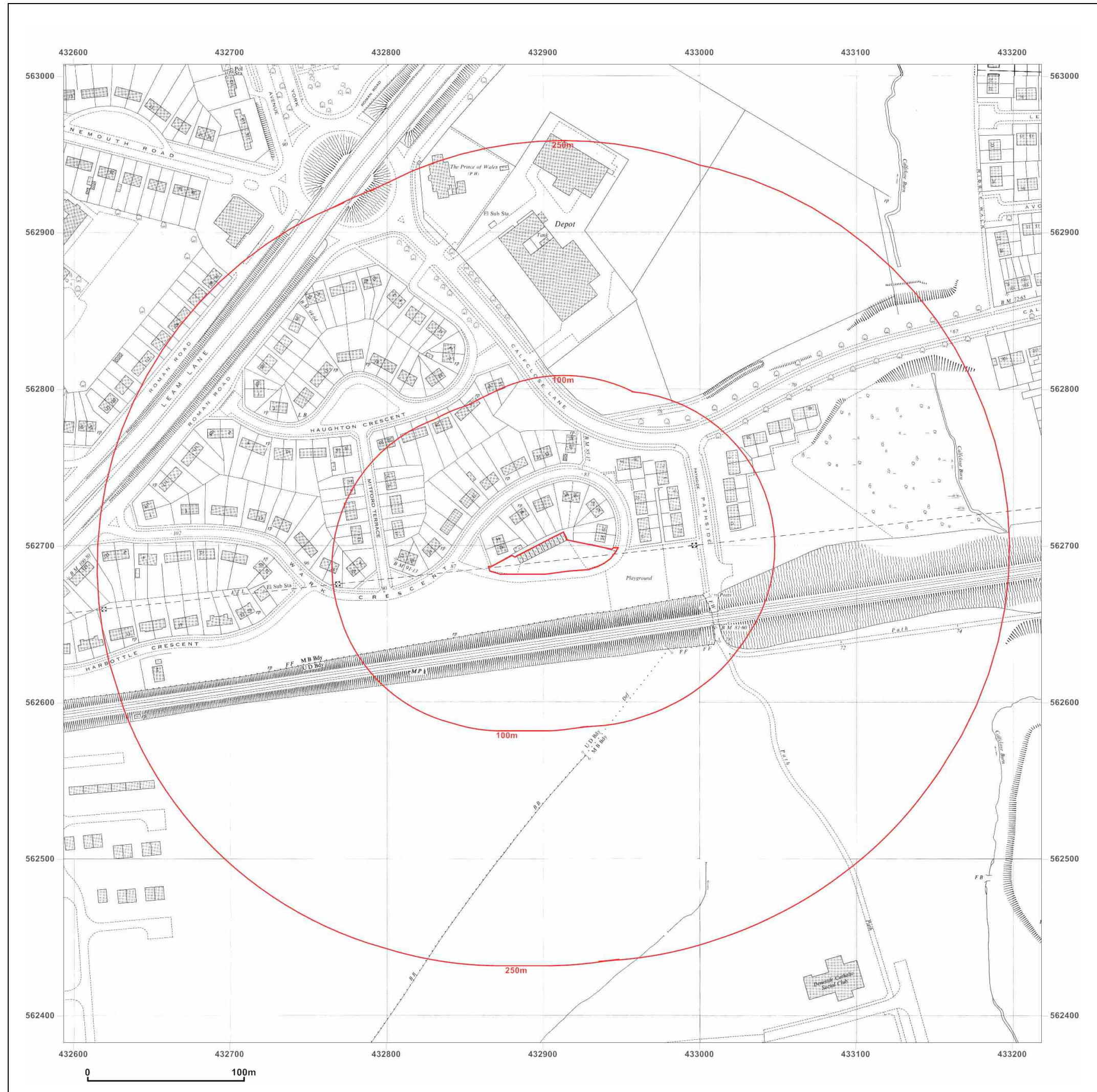
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Grid Ref: 432906, 562695

Map Name: National Grid

Map date: 1966-1969

Scale: 1:1,250

Printed at: 1:2,500



Surveyed 1968 Revised 1968 Edition N/A Copyright 1968 Levelled 1963	Surveyed N/A Revised N/A Edition N/A Copyright N/A Levelled N/A
Surveyed 1956 Revised 1968 Edition N/A Copyright 1969 Levelled 1963	Surveyed 1968 Revised 1968 Edition N/A Copyright 1969 Levelled 1963
Surveyed 1956 Revised 1968 Edition N/A Copyright 1969 Levelled 1963	Surveyed 1968 Revised 1968 Edition N/A Copyright 1969 Levelled 1963



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Land at Wark Crescent, NE32
4SP

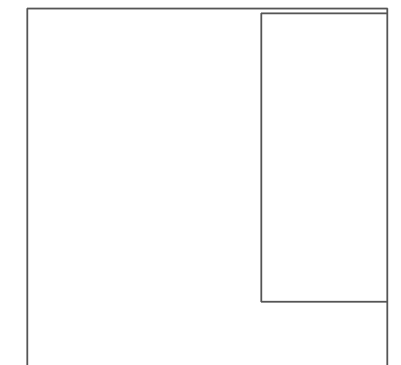
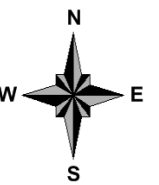
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Grid Ref: 432906, 562695

Map Name: National Grid

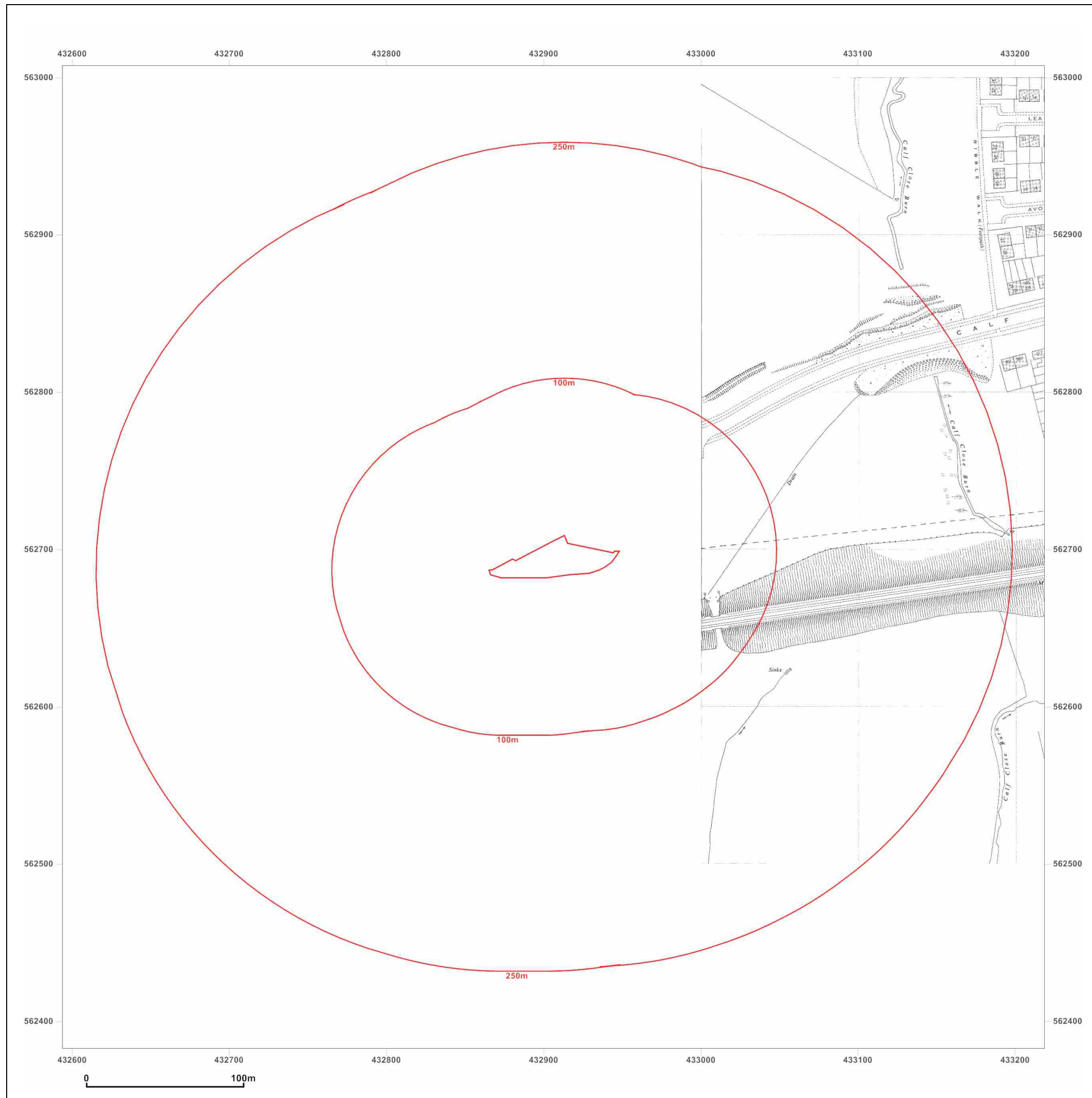
Map date: 1959

Scale: 1:1,250

Printed at: 1:2,500



Surveyed 1956
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4SP

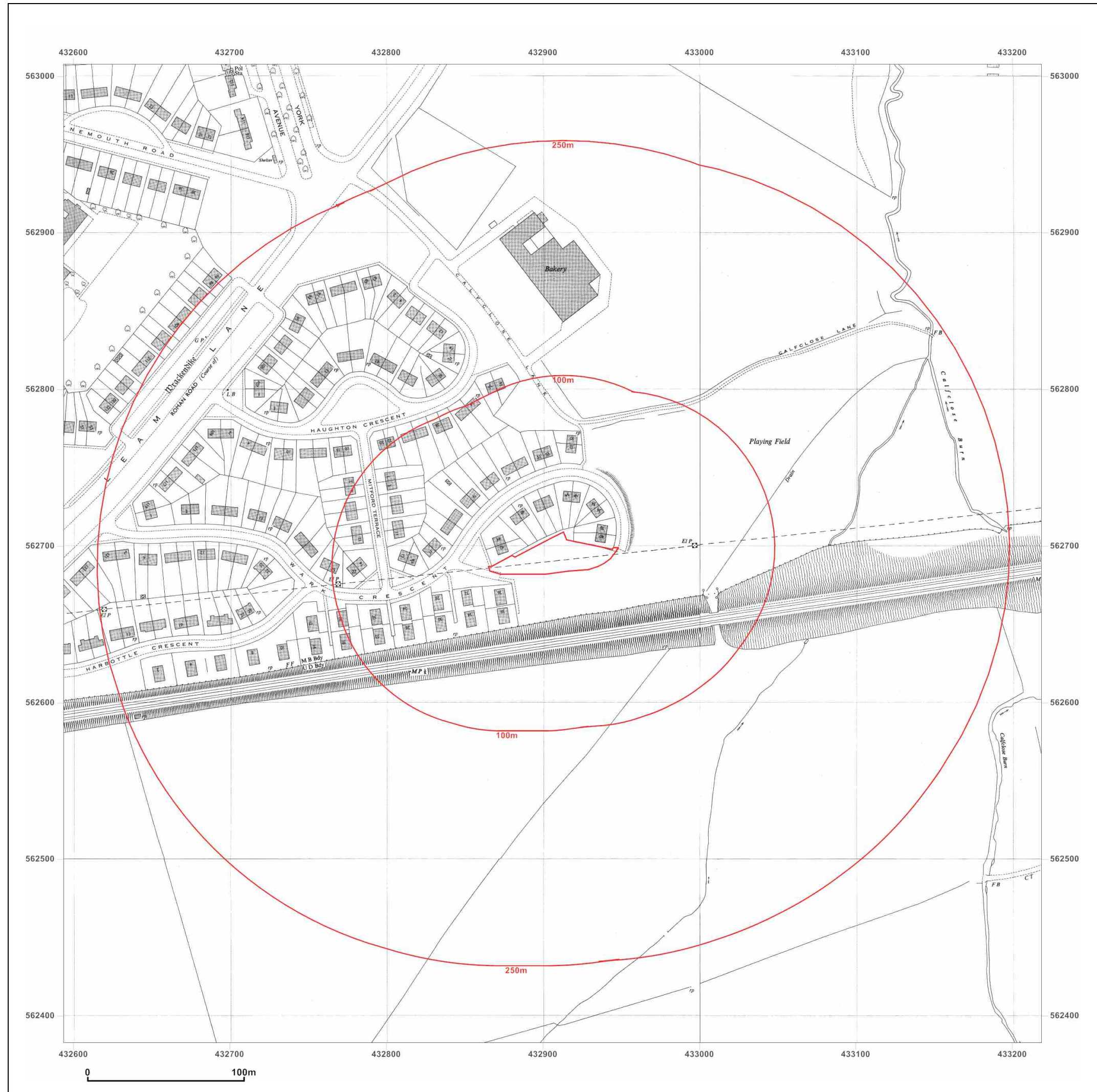
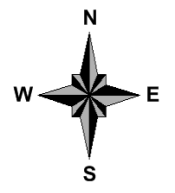
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Report Ref: CMAPS-CM-275680-4283-211113HIS
Grid Ref: 432906, 562695

Map Name: National Grid

Map date: 1956-1957

Scale: 1:1,250

Printed at: 1:2,500



Surveyed 1957
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Surveyed 1956
Revised 1956
Edition N/A
Copyright N/A
Levelled 1936

Surveyed 1956
Revised 1956
Edition N/A
Copyright N/A
Levelled 1936

Surveyed 1957
Revised 1957
Edition N/A
Copyright N/A
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Surveyed 1956
Revised 1956
Edition N/A
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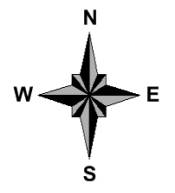
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Grid Ref: 432906, 562695

Map Name: National Grid

Map date: 1956-1957

Scale: 1:2,500

Printed at: 1:2,500

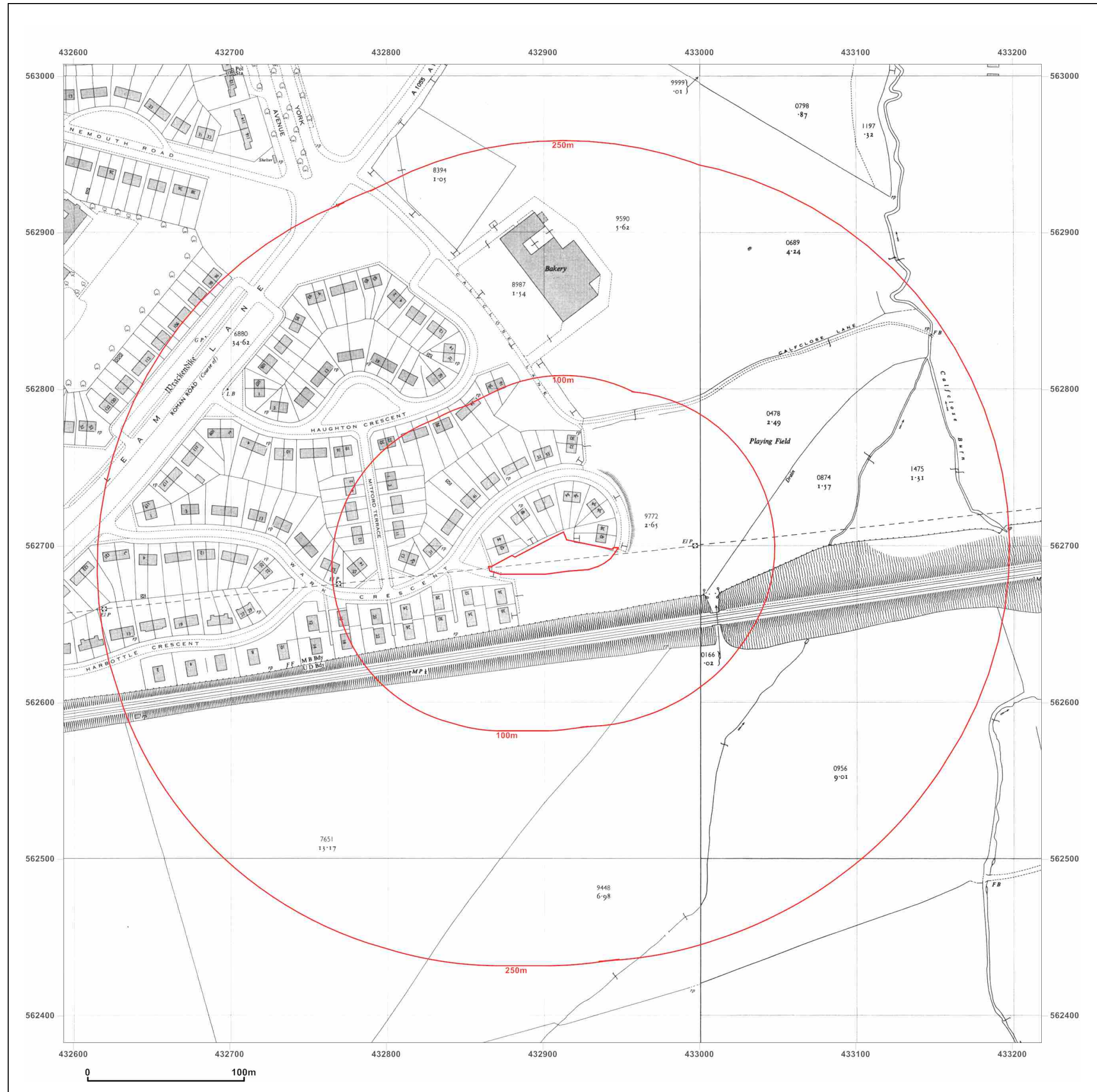


Surveyed 1957
Revised 1957
Edition 1958
Copyright N/A
Levelled 1939

Surveyed 1957
Revised 1957
Edition 1958
Copyright N/A
Levelled 1939

Surveyed 1956
Revised 1956
Edition 1956
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Surveyed 1956
Revised 1956
Edition 1956
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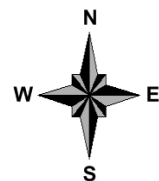
Client Ref: 4283
Report Ref: CMAPS-CM-275680-4283-211113HIS
Grid Ref: 432906, 562695

Map Name: County Series

Map date: 1939-1941

Scale: 1:2,500

Printed at: 1:2,500



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Surveyed 1941
Revised 1941
Edition N/A
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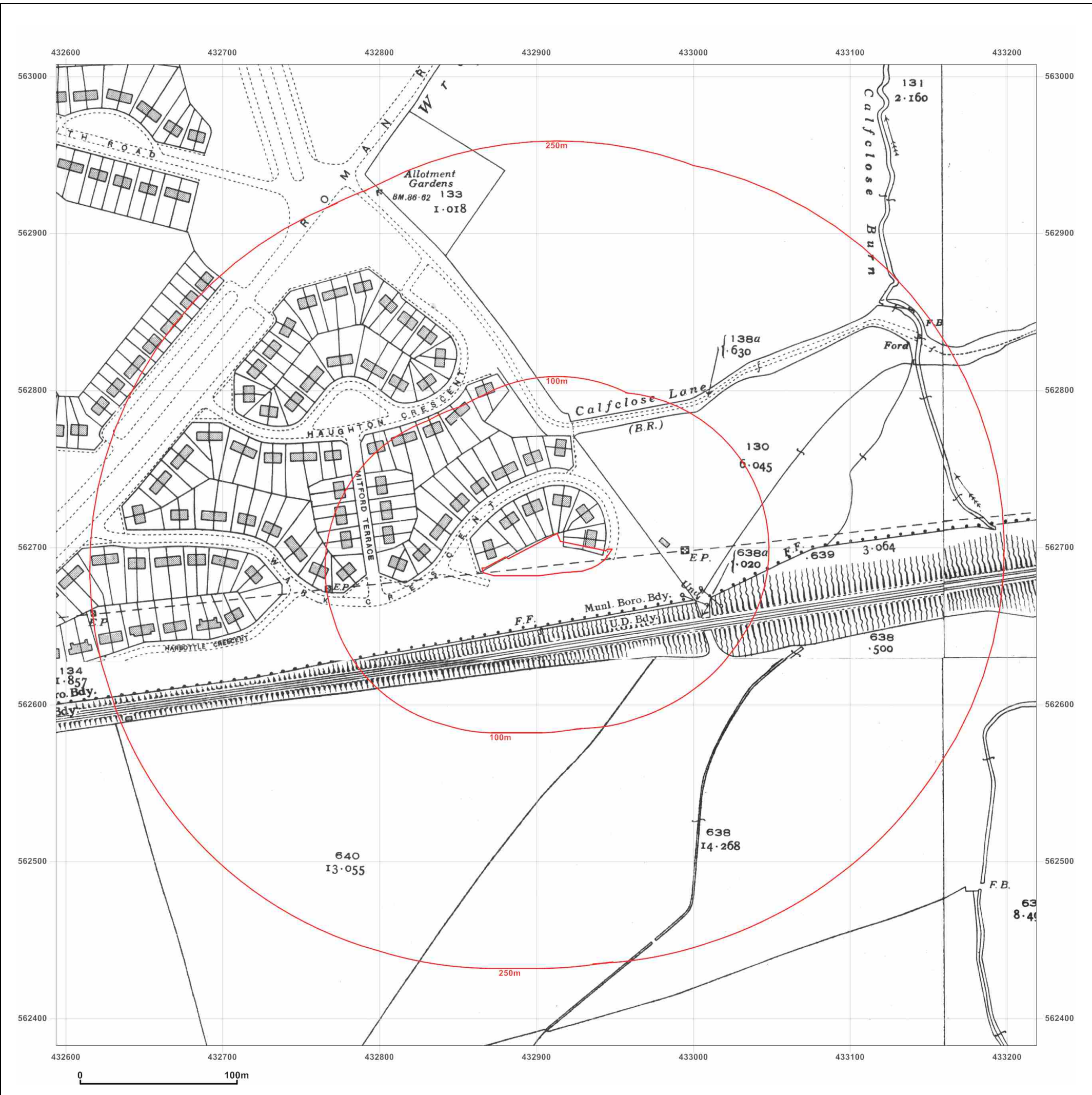


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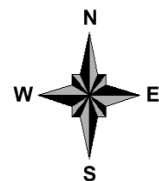
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Map Name: County Series

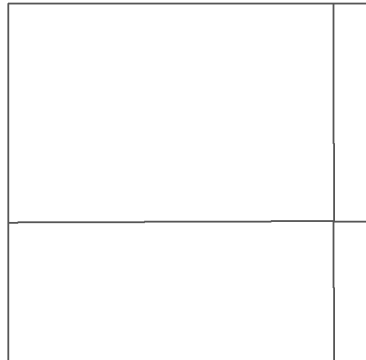
Map date: 1932

Scale: 1:2,500

Printed at: 1:2,500



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Edition N/A
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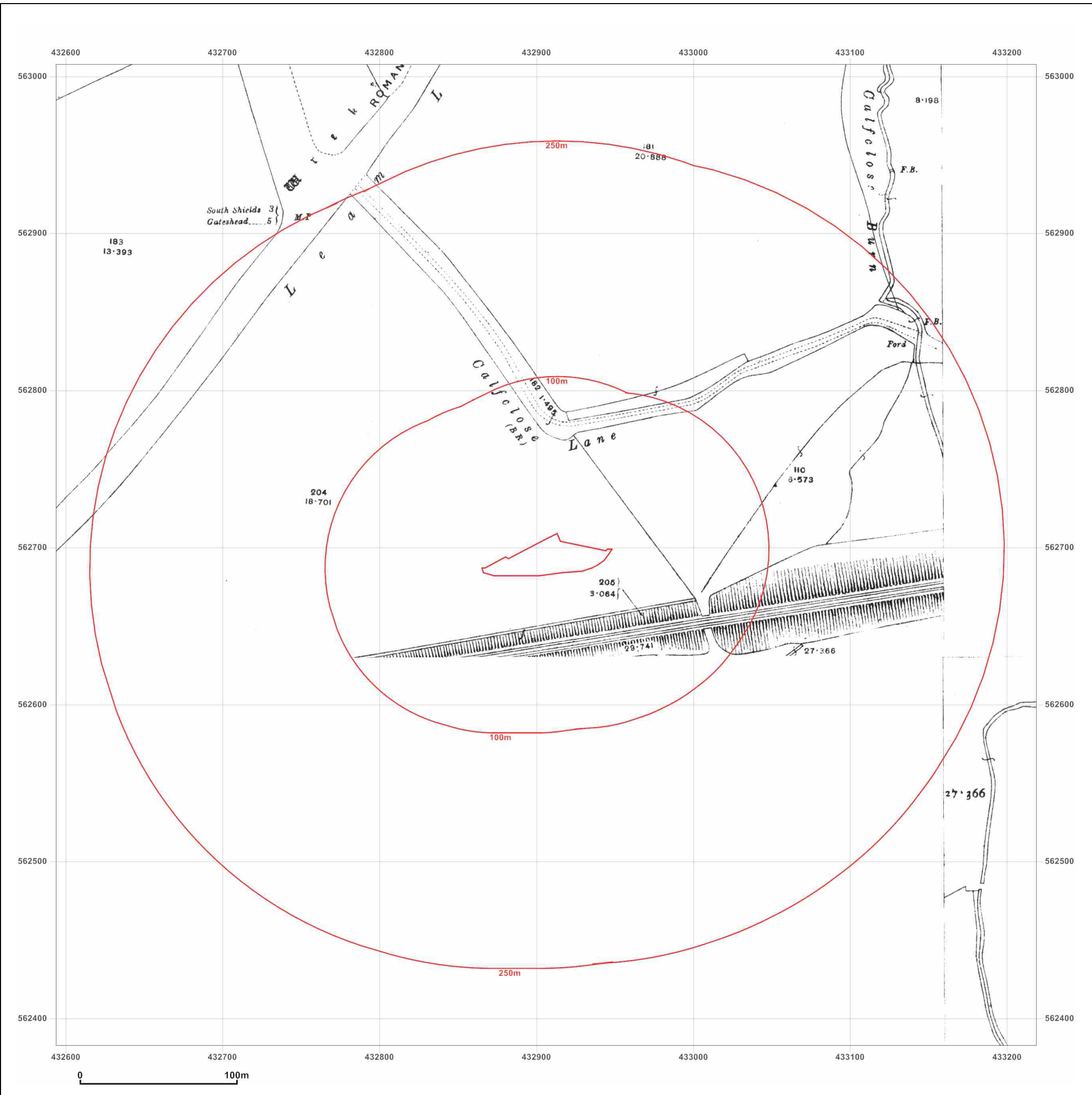


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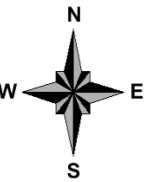
Client Ref: 4283
Report Ref: CMAPS-CM-275680-4283-211113HIS
Grid Ref: 432906, 562695

Map Name: County Series

Map date: 1916-1919

Scale: 1:2,500

Printed at: 1:2,500



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Revised 1917
Edition N/A
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Surveyed 1919
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Edition N/A
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Surveyed 1919
Revised 1919
Edition N/A
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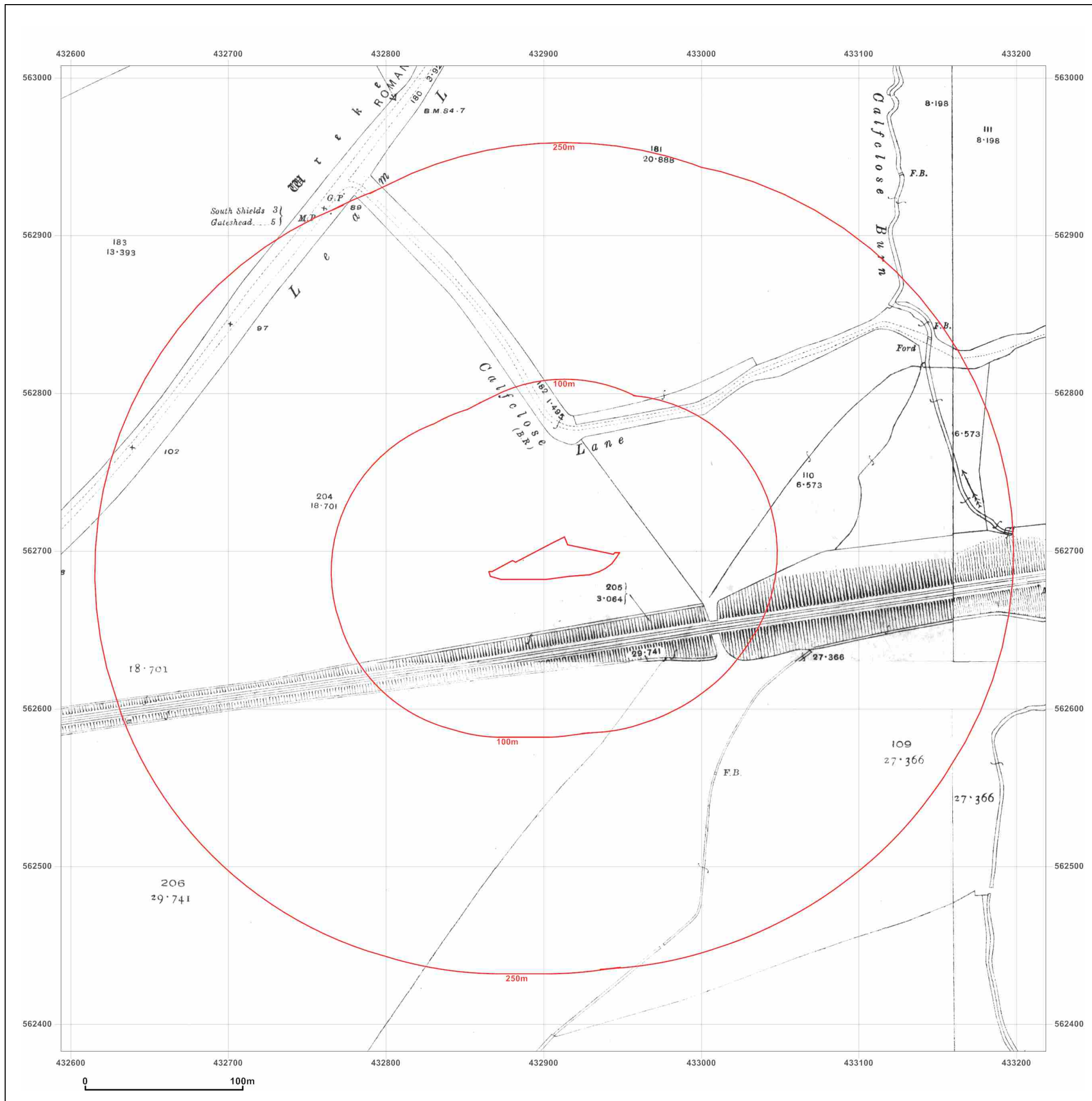


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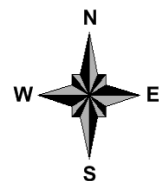
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Report Ref: CMAPS-CM-275680-4283-211113HIS
Grid Ref: 432906, 562695

Map Name: County Series

Map date: 1897

Scale: 1:2,500

Printed at: 1:2,500



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Revised 1897
Edition N/A
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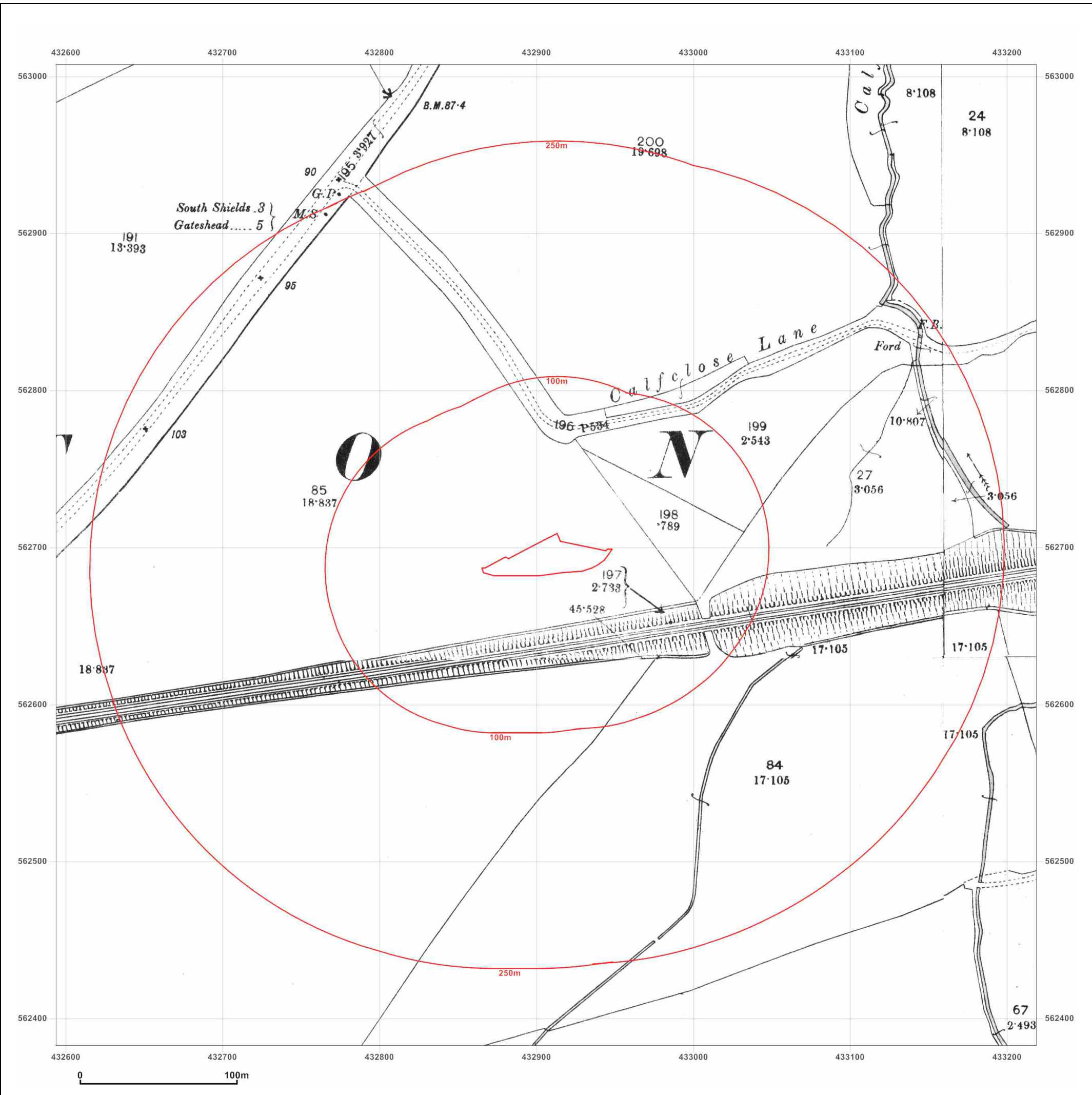


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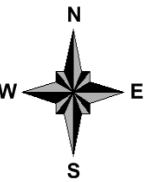
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Grid Ref: 432906, 562695

Map Name: County Series

Map date: 1856-1857

Scale: 1:2,500

Printed at: 1:2,500



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Surveyed N/A
Revised N/A
Edition N/A
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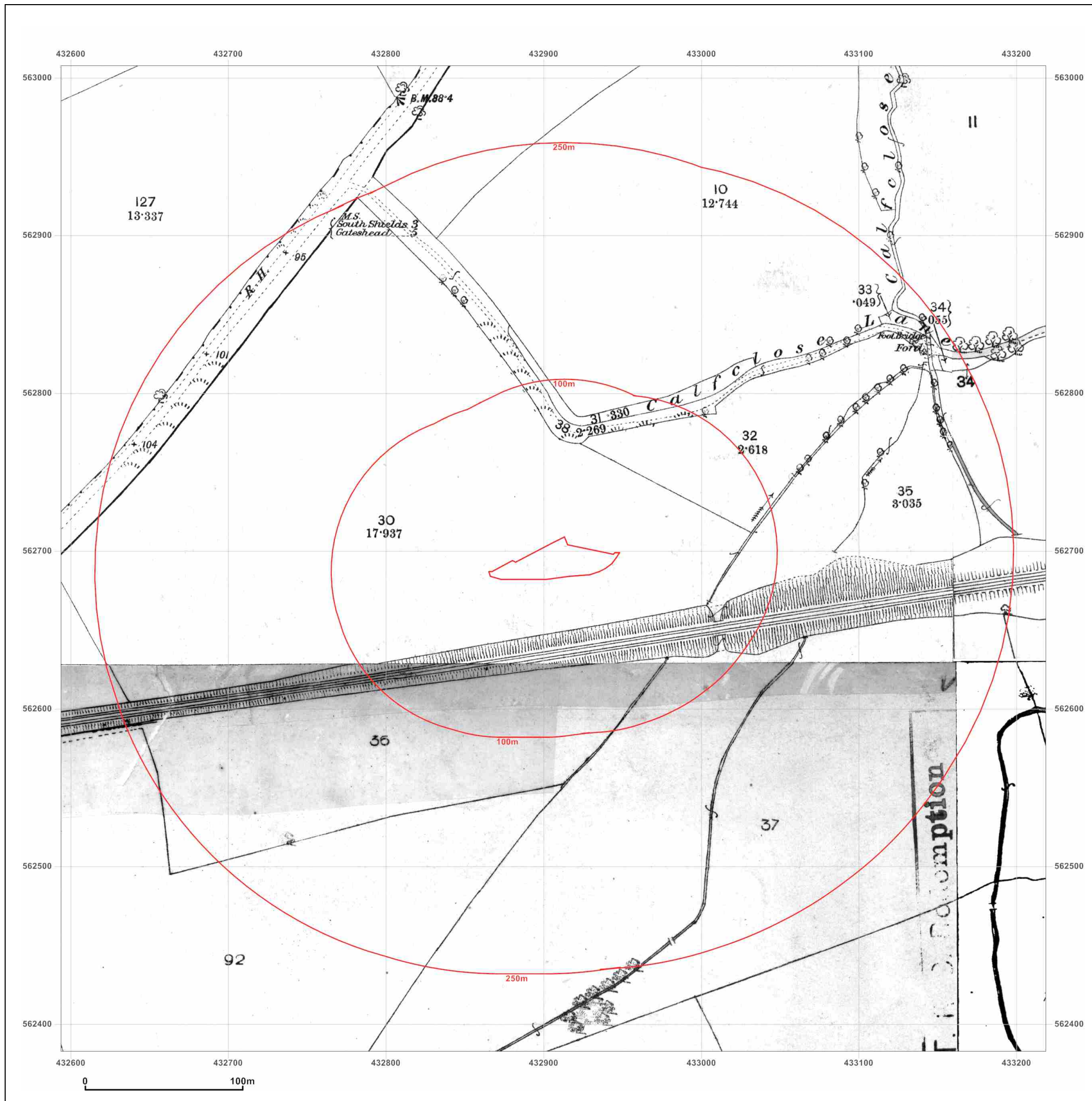


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4SP

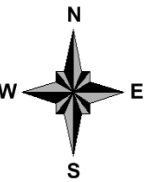
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Grid Ref: 432906, 562695

Map Name: National Grid

Map date: 2012

Scale: 1:10,000

Printed at: 1:10,000



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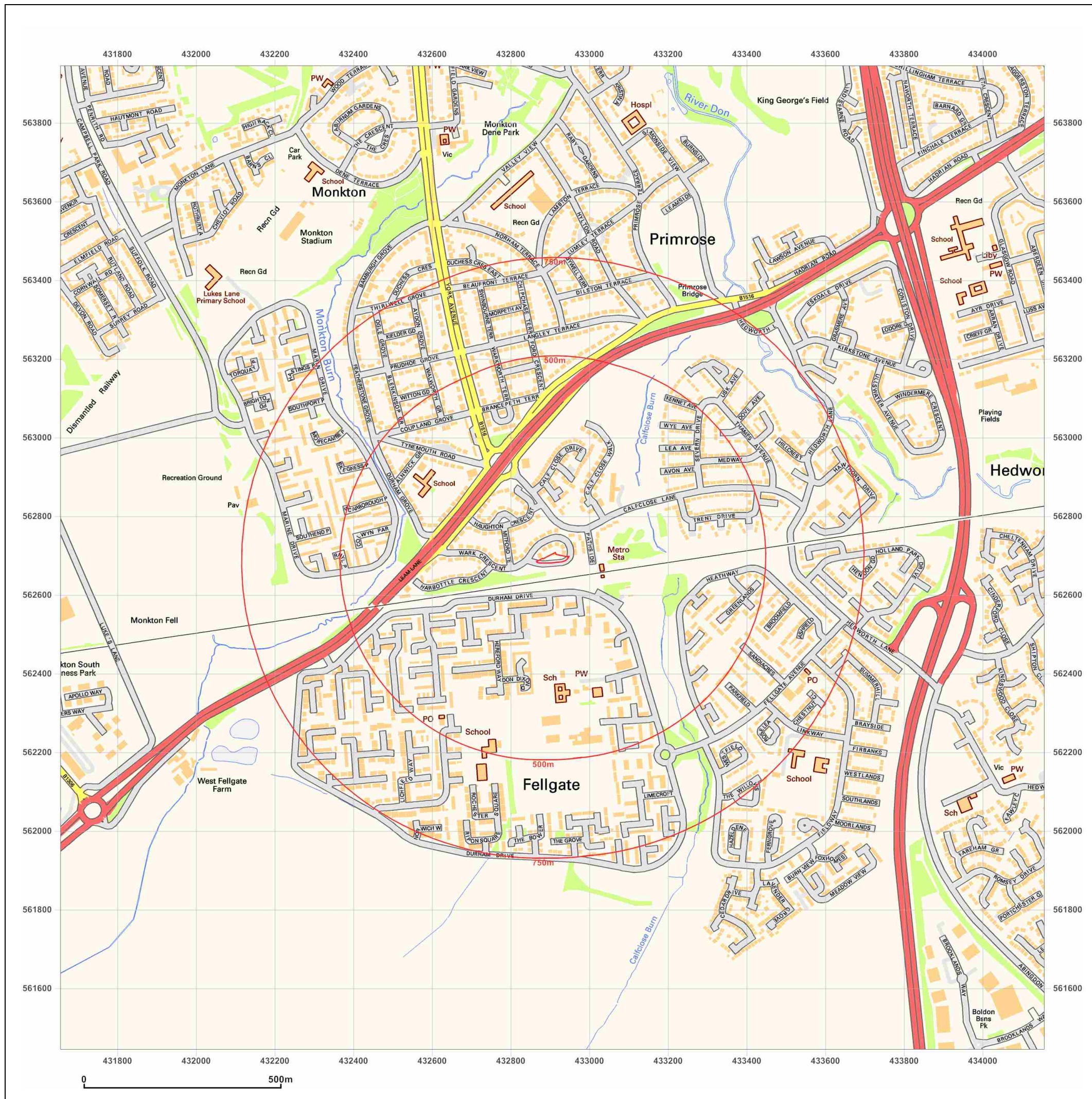


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4SP

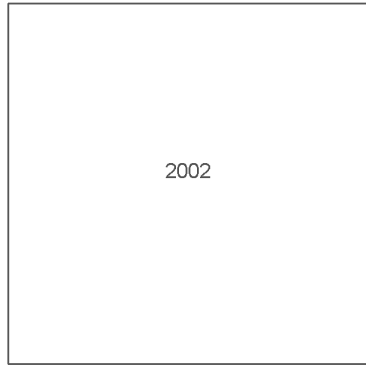
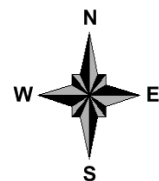
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Report Ref: CMAPS-CM-275680-4283-211113HIS
Grid Ref: 432906, 562695

Map Name: 1:10,000 Raster

Map date: 2002

Scale: 1:10,000

Printed at: 1:10,000



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4SP

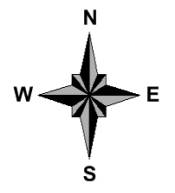
Client Ref: 4283
Report Ref: CMAPS-CM-275680-4283-211113HIS
Grid Ref: 432906, 562695

Map Name: National Grid

Map date: 1992


Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1989
Revised 1992
Edition N/A
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Levelled N/A

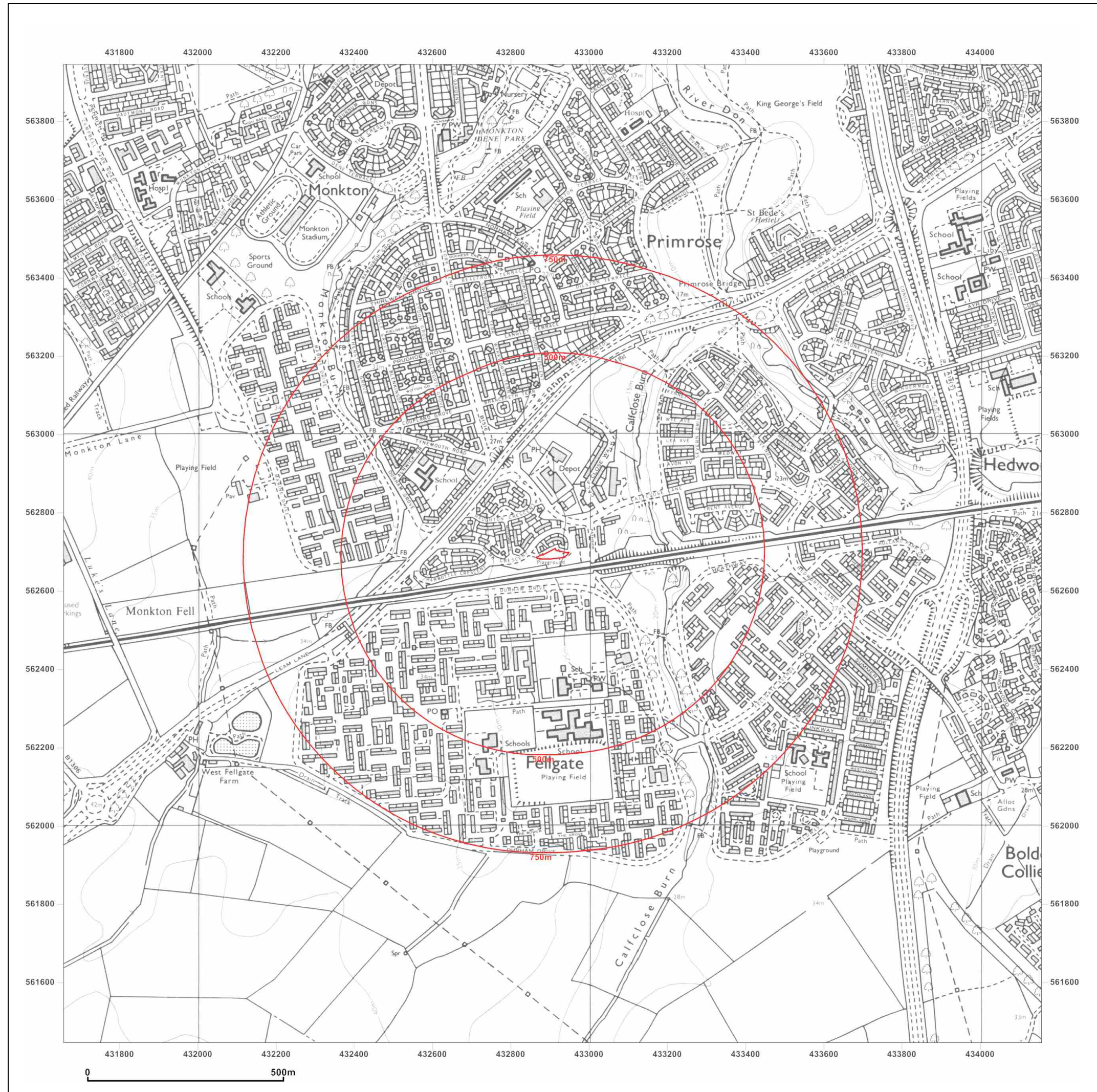
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Land at Wark Crescent, NE32
4SP

Client Ref: 4283
Report Ref: CMAPS-CM-275680-4283-211113HIS
Grid Ref: 432906, 562695

Map Name: National Grid

Map date: 1973

Scale: 1:10,000

Printed at: 1:10,000



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4SP

Client Ref: 4283
Report Ref: CMAPS-CM-275680-4283-211113HIS
Grid Ref: 432906, 562695

Map Name: Provisional

Map date: 1965

Scale: 1:10,560

Printed at: 1:10,560



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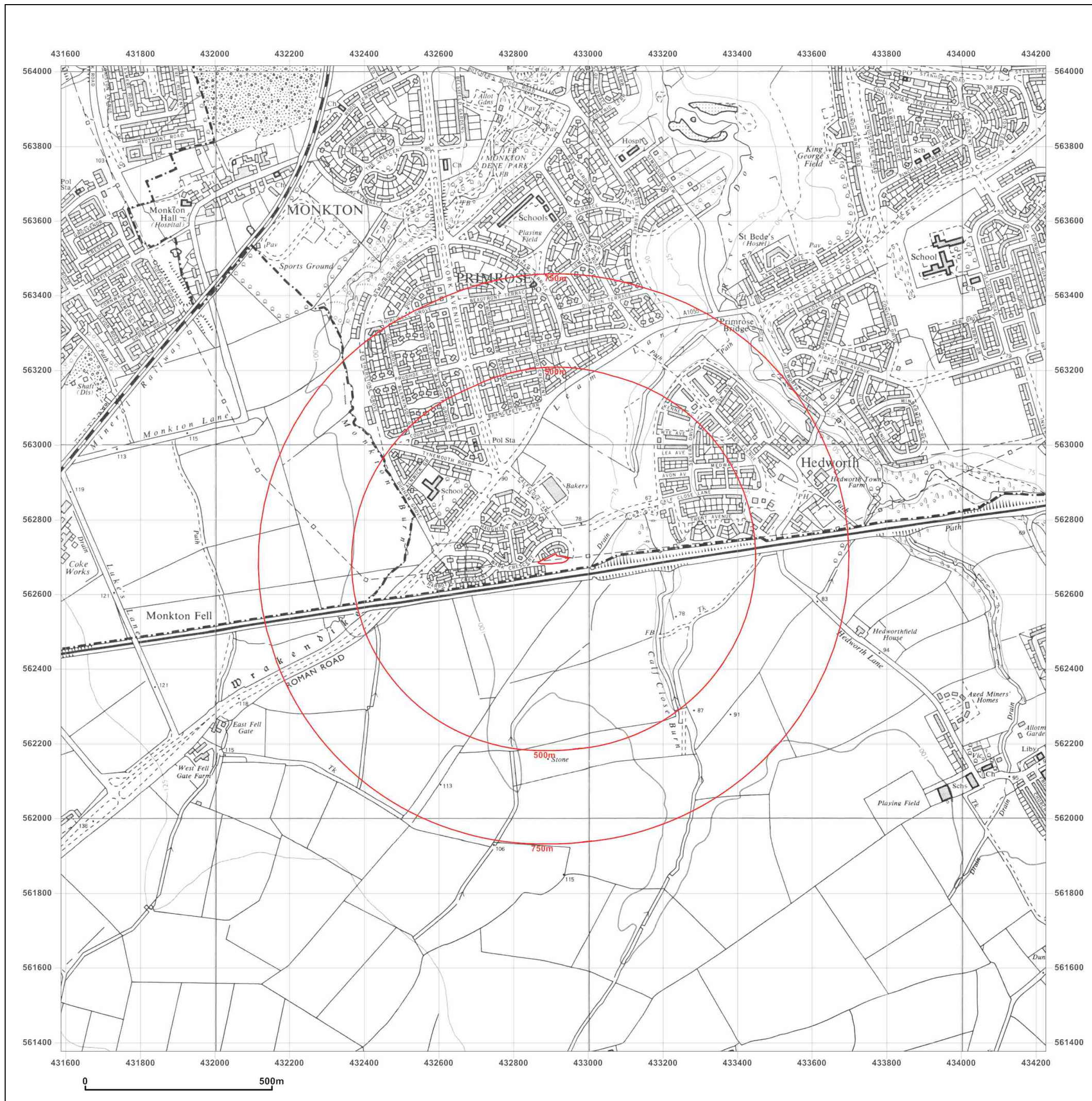


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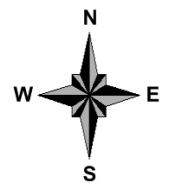
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Grid Ref: 432906, 562695

Map Name: Provisional

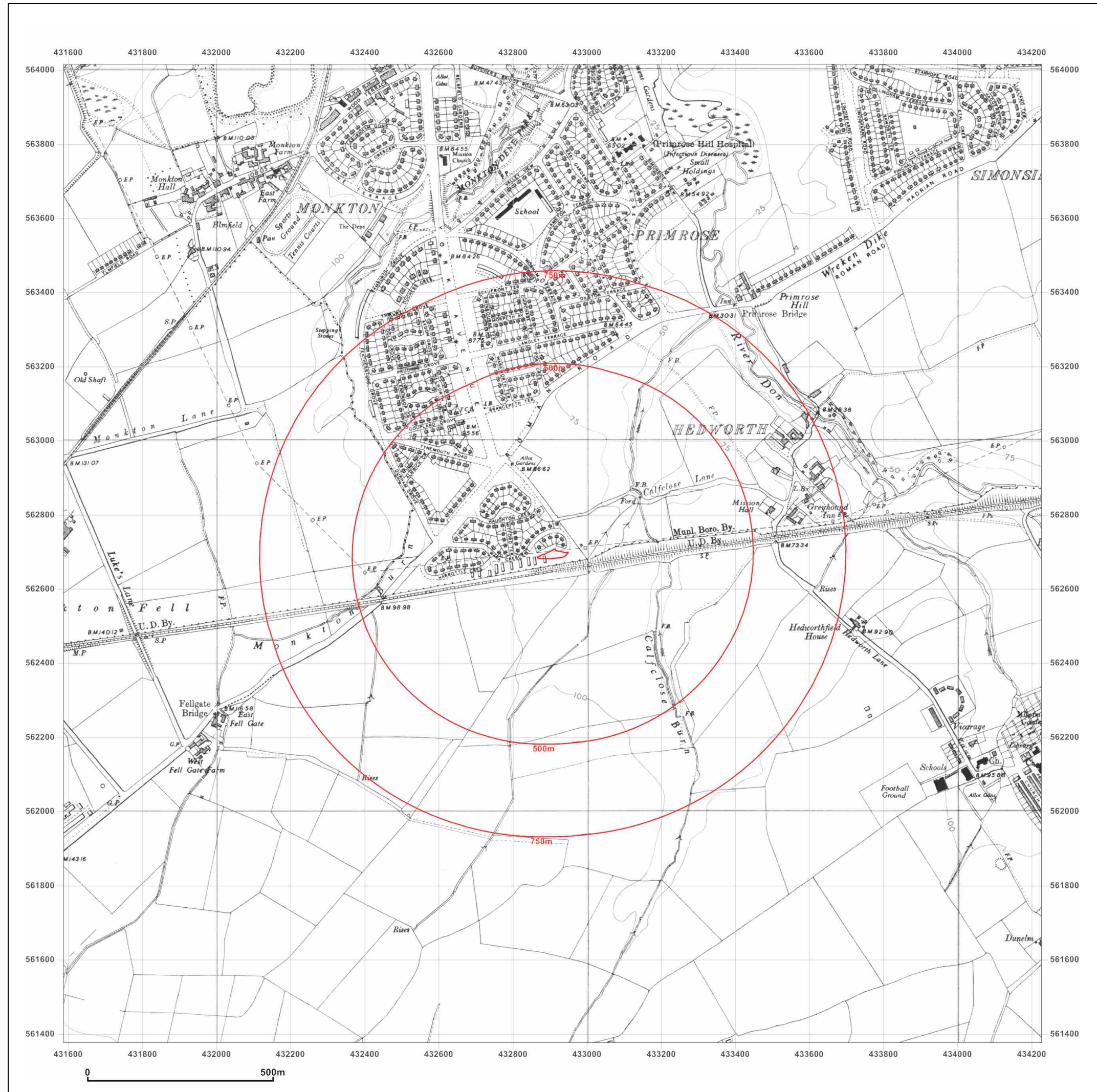
Map date: 1951

Scale: 1:10,560

Printed at: 1:10,560



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Revised 1951
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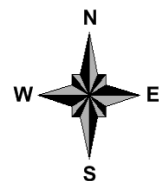
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Grid Ref: 432906, 562695

Map Name: County Series

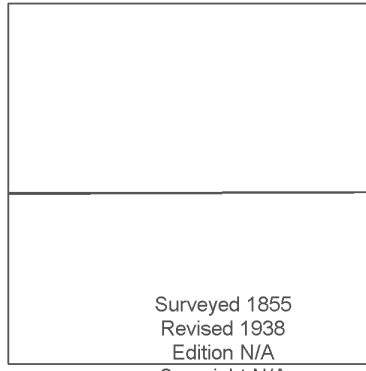
Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



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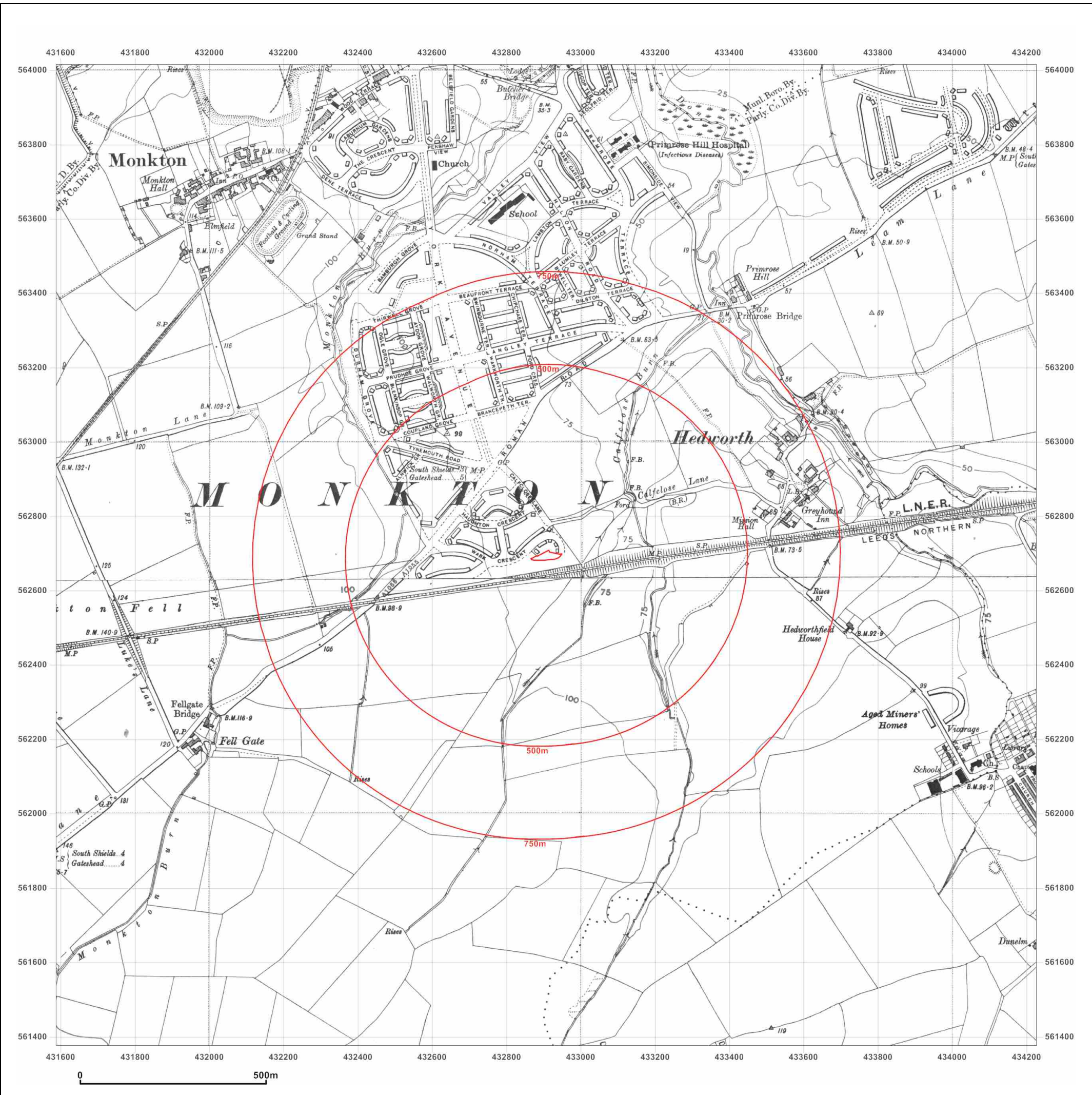


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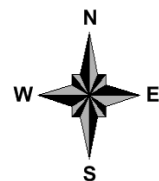
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Grid Ref: 432906, 562695

Map Name: County Series

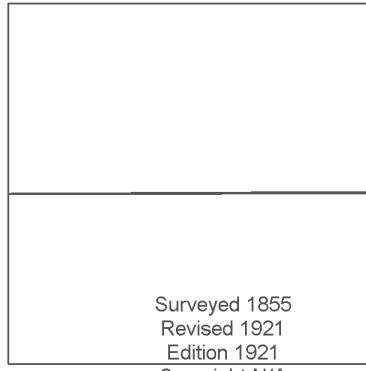
Map date: 1921

Scale: 1:10,560

Printed at: 1:10,560



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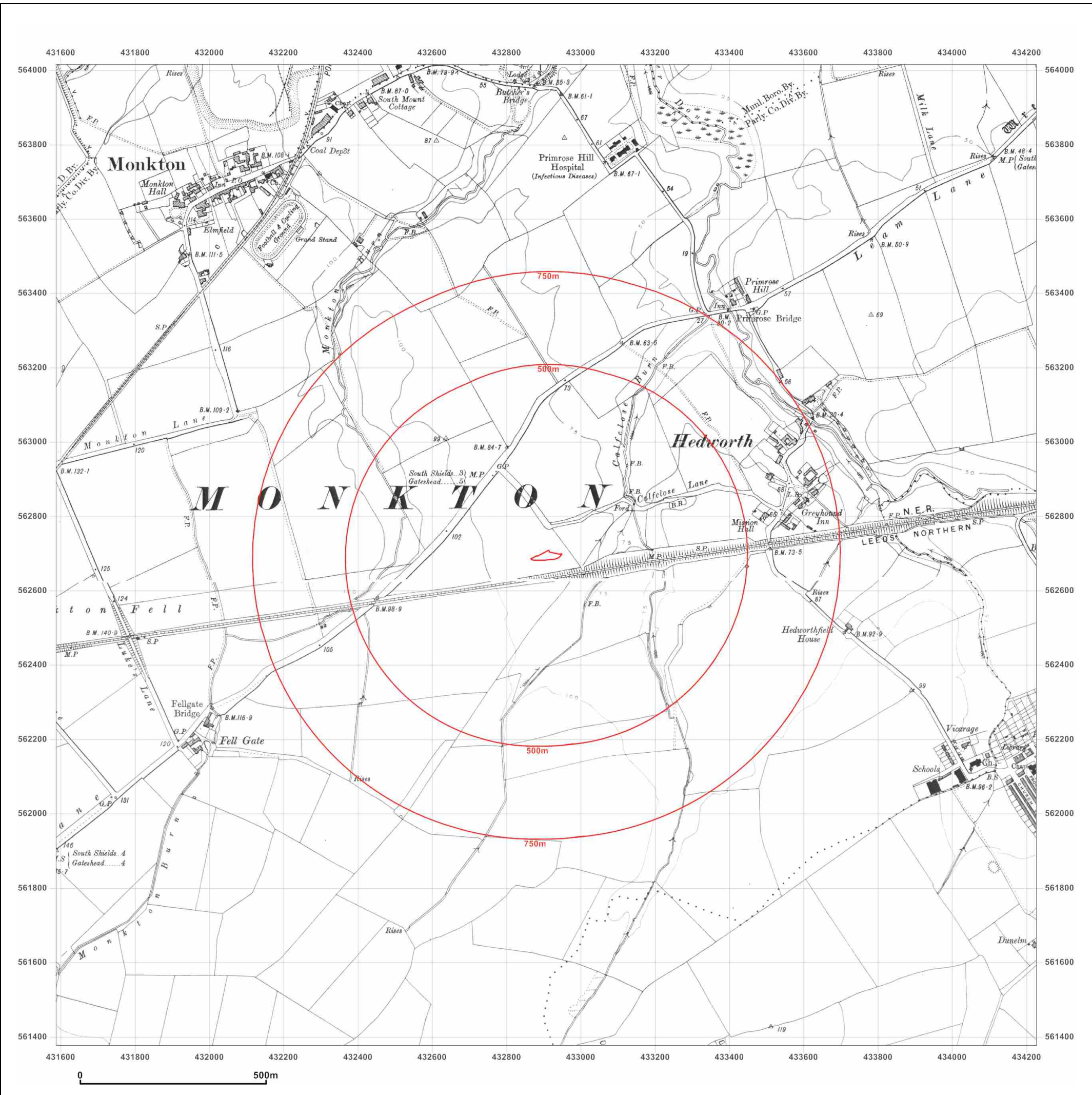


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Site Details:

Land at Wark Crescent, NE32
4SP

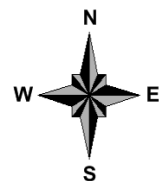
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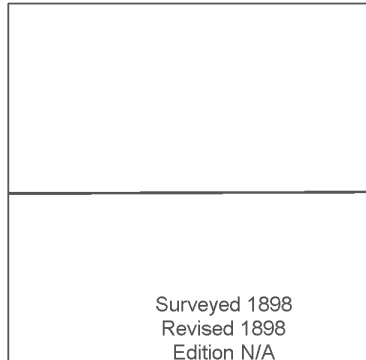
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Printed at: 1:10,560



Surveyed 1858
Revised 1895
Edition N/A
Copyright N/A
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Surveyed 1898
Revised 1898
Edition N/A
Copyright N/A
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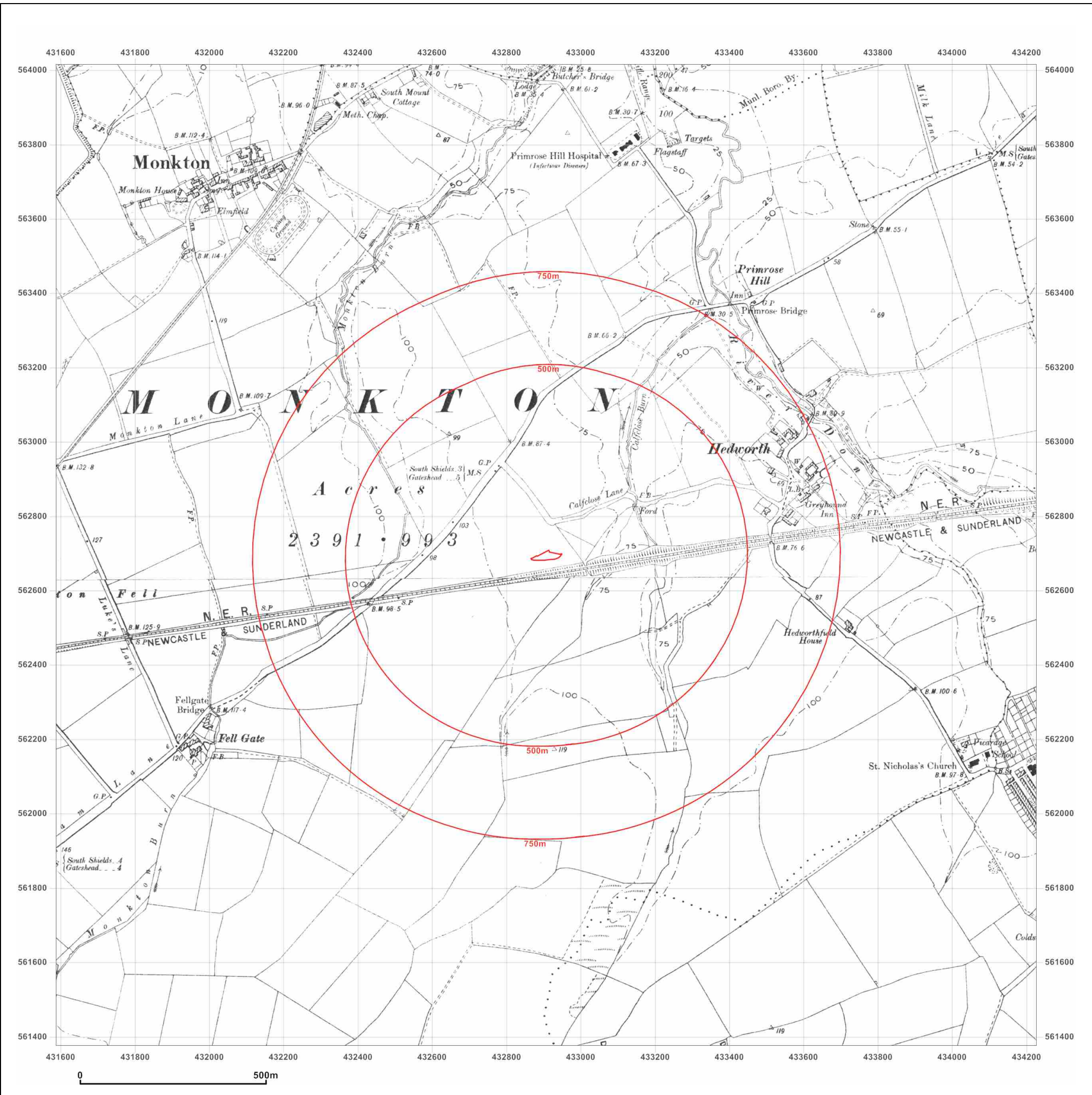


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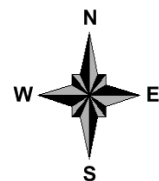
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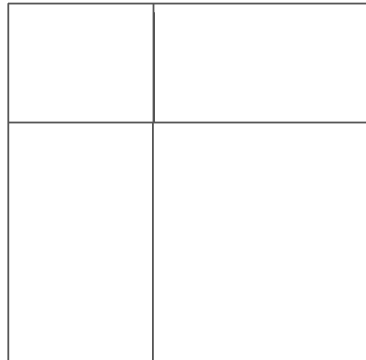
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Surveyed 1858
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A

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Edition N/A
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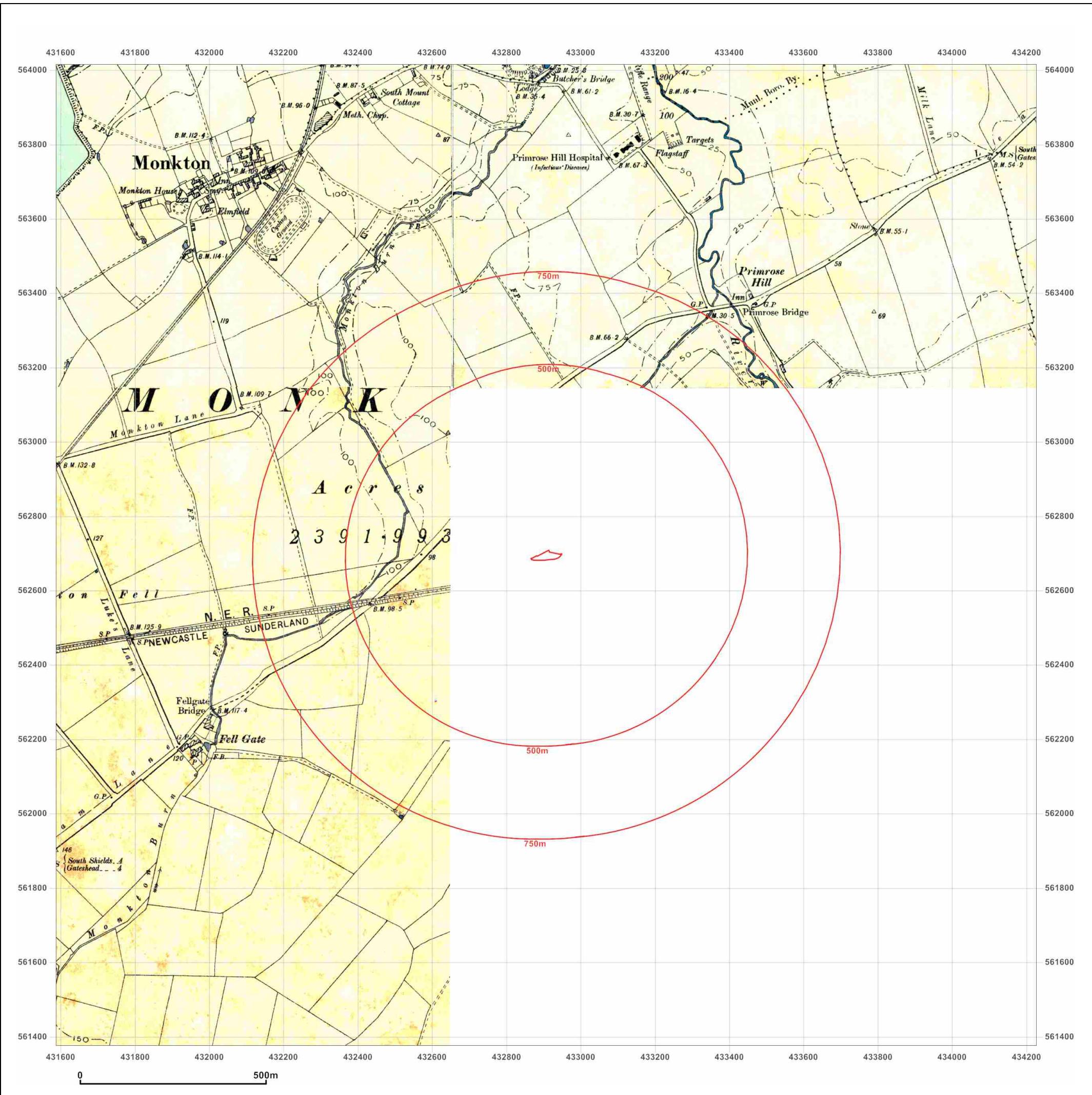


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Site Details:

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4SP

Client Ref: 4283
Report Ref: CMAPS-CM-275680-4283-211113HIS
Grid Ref: 432906, 562695

Map Name: County Series

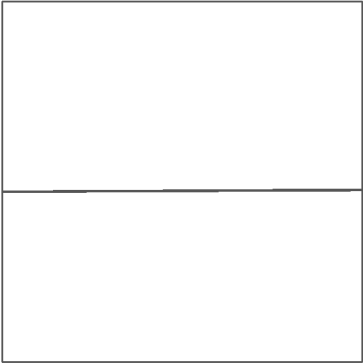
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Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1856
Revised 1856
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1857
Revised 1857
Edition N/A
Copyright N/A
Levelled N/A



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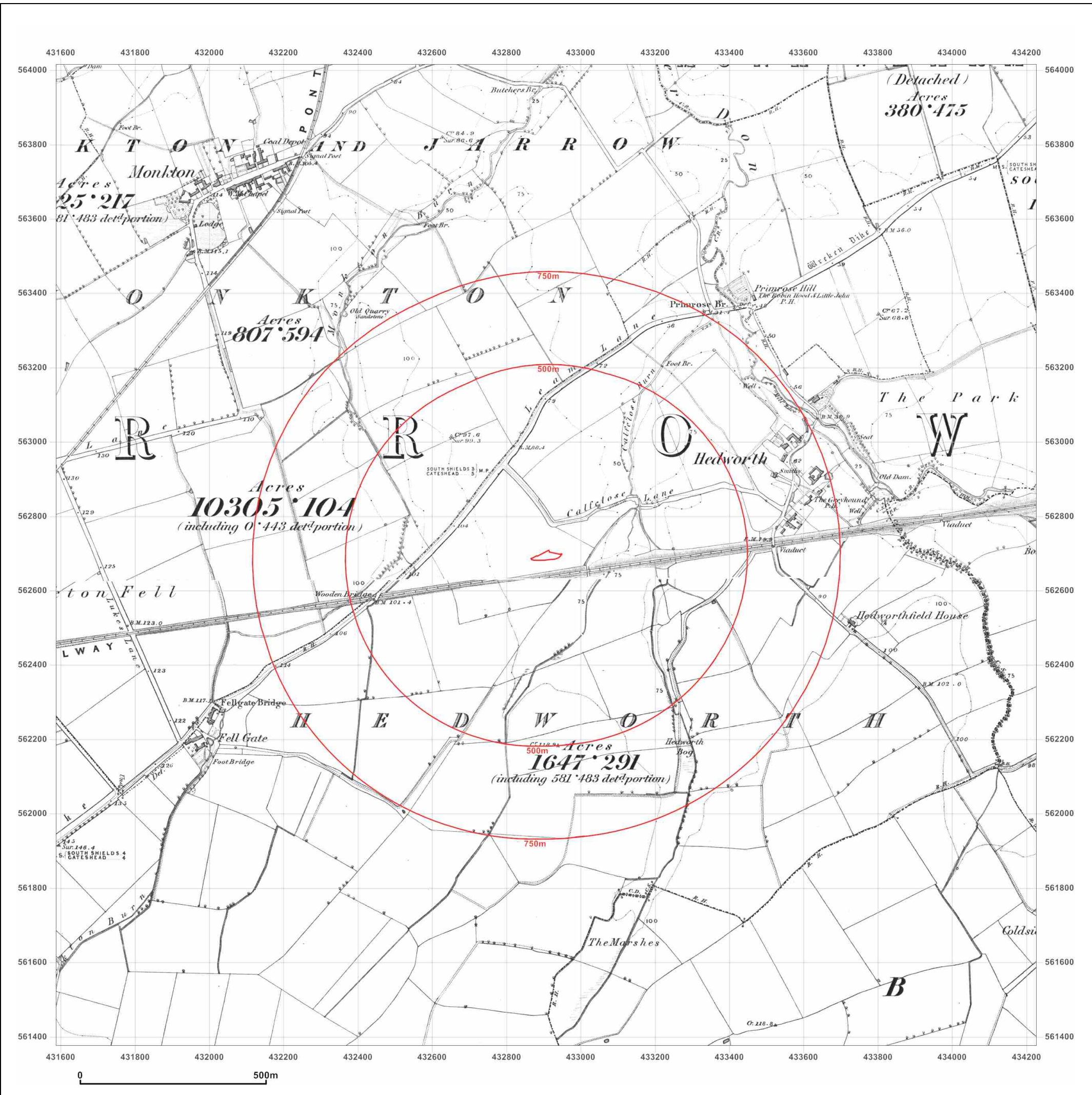


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Production date: 21 November 2013

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APPENDIX D

Non-Residential Coal Authority Mining Report

The COAL AUTHORITY

Issued by:

The Coal Authority, Property Search Services, 200 Lichfield Lane, Berry Hill, Mansfield, Nottinghamshire, NG18 4RG

Website: www.groundstability.com Phone: 0845 762 6848 DX 716176 MANSFIELD 5

**JOHNSON POOLE & BLOOMER
HARRIS & PEARSON BUILDING
BRETTELL LANE
BRIERLEY HILL
WEST MIDLANDS
DY5 3LH**

Our reference: **51000416437002**
Your reference: **NB503/Wark Crescent**
Date of your enquiry: **21 November 2013**
Date we received your enquiry: **21 November 2013**
Date of issue: **21 November 2013**

This report is for the property described in the address below and the attached plan.

Non-Residential Coal Authority Mining Report

42 WARK CRESCENT, JARROW, TYNE AND WEAR, NE32 4SP

This report is based on and limited to the records held by, the Coal Authority, and the Cheshire Brine Subsidence Compensation Board's records, at the time we answer the search.

Coal mining	See comments below
Brine Compensation District	No

Information from the Coal Authority

Underground coal mining

Past

The property is in the likely zone of influence from workings in 2 seams of coal at 360m to 400m depth, and last worked in 1930.

Any ground movement from these coal workings should have stopped by now.

Present

The property is not in the likely zone of influence of any present underground coal workings.

Future

The property is not in an area for which the Coal Authority is determining whether to grant a licence to remove coal using underground methods.

The property is not in an area for which a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area that is likely to be affected at the surface from any planned future workings.

However, reserves of coal exist in the local area which could be worked at some time in the future.

No notice of the risk of the land being affected by subsidence has been given under section 46 of the Coal Mining Subsidence Act 1991.

Mine entries

There are no known coal mine entries within, or within 20 metres of, the boundary of the property.

Coal mining geology

The Authority is not aware of any evidence of damage arising due to geological faults or other lines of weakness that have been affected by coal mining.

Opencast coal mining

Past

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

Present

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

Future

The property is not within 800 metres of the boundary of an opencast site for which the Coal Authority is determining whether to grant a licence to remove coal by opencast methods.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres, since 31st October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas

There is no record of a mine gas emission requiring action by the Coal Authority within the boundary of the property.

Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Authority, under its Emergency Surface Hazard Call Out procedures.

Withdrawal of support

The property is not in an area for which a notice of entitlement to withdraw support has been published.

The property is not in an area for which a notice has been given under section 41 of the Coal Industry Act 1994, revoking the entitlement to withdraw support.

Working facilities orders

The property is not in an area for which an Order has been made under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

Payments to owners of former copyhold land

The property is not in an area for which a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Information from the Cheshire Brine Subsidence Compensation Board

The property lies outside the Cheshire Brine Compensation District.

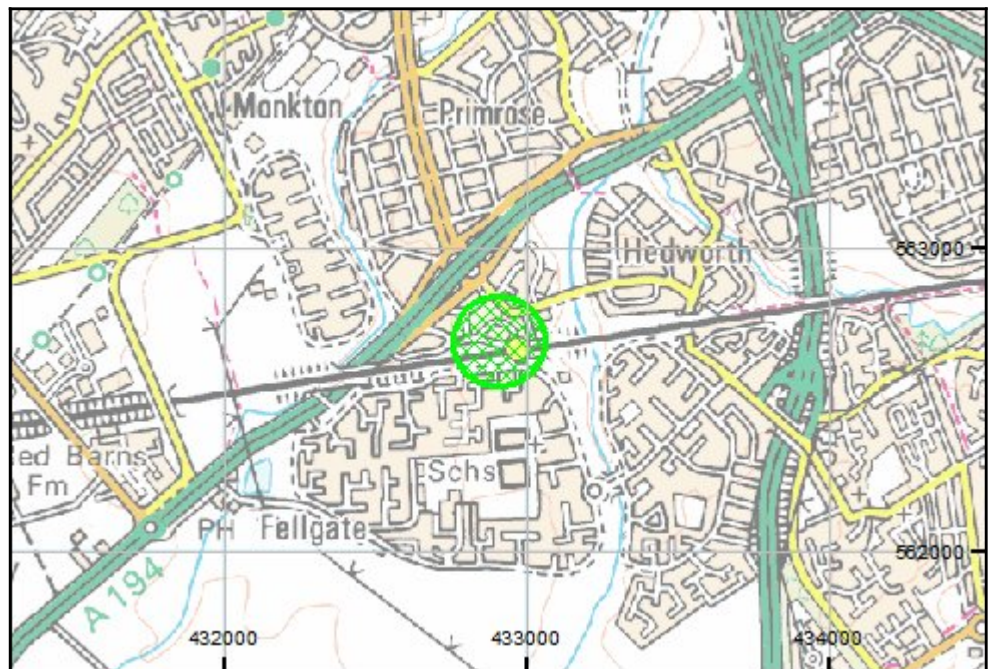
Additional Remarks

This report is prepared in accordance with the Law Society's Guidance Notes 2006, the User Guide 2006 and the Coal Authority and Cheshire Brine Board's Terms and Conditions 2006. The Coal Authority owns the copyright in this report. The information we have used to write this report is protected by our database right. All rights are reserved and unauthorised use is prohibited. If we provide a report for you, this does not mean that copyright and any other rights will pass to you. However, you can use the report for your own purposes.

Location map



Approximate position of property



Enquiry boundary

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Key

Approximate position of enquiry boundary shown

