# Temple Park Centre, South Shields

## Phase 1 Land Contamination Assessment

South Tyneside Council

**October 2017**

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# Executive Summary

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| **Project Background** | Atkins Limited has been appointed by South Tyneside Council to carry out a Phase 1 land contamination desk study for the proposed redevelopment of the Temple Park Centre in South Shields. The proposed redevelopment comprises demolition of the swimming pool building, creation of a new gable wall, landscaping (including infill of former pool) and constructing new underground services. |
| **Location & Description** | The site is located to the south of John Reid Road in South Shields. King George Road is located to the east. The 3.1 hectare site is centred about 437207, 563898. The site comprises a leisure centre surrounded by associated car parking and sports pitch as part of the wider Temple Memorial Park. |
| **Historical Land Use** | Historically, the site was agricultural land, part of a golf course, then part of the Memorial Park until development of the current leisure centre c.1980's/1990's. Between the 1950's and 1990's the site and the surrounding area has been subject to licensed landfilling.<br><br>The site is located in an UXO high risk area. |
| **Geology** | The published geological maps indicate that the site is underlain by Made Ground, Pelaw Clay Member (Clay) with lithologies of the Pennine Middle Coal Measures at depth. Coal seams are present to the east of the site and at depth beneath the centre of the site.<br><br>Previous investigations have reported between 0.5m and 2.4m of Made Ground with potential for landfill material present prior to construction of the leisure centre and surrounding the site. |
| **Mining** | The site is located in a Coal Mining Reporting Area with the eastern periphery of the site located in a High Risk Development area associated with a coal seam and potential shallow workings. No mine entries are reported to be present at or within 20m of the site boundary. |
| **Hydrology** | There are no significant surface waters located in proximity to the site. The nearest surface water being an un-named stream located approximately 200m west of the site. Historically, a watercourse was located immediately east of the site which may have been culverted or infilled. |
| **Hydrogeology** | The underlying superficial deposits are of an unknown classification due to the landfilling activity. The Pelaw Clay is considered to be Unproductive Strata and the bedrock as a Secondary A Aquifer. The site is not located in a groundwater Source Protection Zone and there are no groundwater abstractions located within 1km of the site.<br><br>Previous investigation reported the limited presence of shallow groundwater. Where observed, shallow groundwater was generally at the base of the Made Ground. |
| **Previous Ground Investigations by others** | BGS records associated with a ground investigation in 1973 indicated the presence of approximately 2m of landfill material underlain by natural clay around the swimming pool building. A previous investigation in 1983 also identified between 2m and 3m of landfill material including evidence of domestic type waste associated with an extension to the leisure centre north of the swimming pool building.<br><br>A previous investigation (in 2012) reported the presence of Made Ground between 0.5m and 1.35m bgl underlain by natural clay with weathered sandstone from 8.7m bgl. The Made Ground observed had less evidence of the presence of domestic type landfill material.<br><br>Previous investigations (in 2009) of the surrounding Temple Memorial Park indicate that the site is likely to be underlain by Made Ground, comprising clay fill, reworked natural deposits and a thin layer of ashy fill, in turn underlain by Pelaw Clay and Glacial Till (clay) at depth. Landfill materials were identified surrounding the site. Chemical analysis from surrounding the site reported the presence of benzo(a)pyrene, hydrocarbons and asbestos which may pose a risk to human health. Ground gas assessments indicated significantly elevated ground gas migrating across the site from the landfill source. |

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| **Conclusions** | There is a potential for contamination to be present within the Made Ground present on site potentially originating from landfill material. However, there is likely to be less domestic landfill type material and/or a substantial thickness of Made Ground in the area of the proposed works, although increasing in likelihood associated with proposed service trenches.<br><br>Reassessment of the 2012 chemical soil data by Atkins did not indicate a significant risk to human health (long term). Asbestos was also not identified during the 2012 investigation.<br><br>Overall, contamination at the site is considered to represent a Low to Moderate Risk to receptors for the proposed end use (open space). Risk from asbestos in the soil has been considered as Moderate Risk based on potential effects (severe) effects and potential for Made Ground. Risk to building and human health from ground gases is high without mitigation. |
| **Recommendations** | It is recommended that an UXO desk study be undertaken to determine if any mitigation measures are required during construction.<br><br>It is recommended that a remediation statement is prepared associated with the following to reduce the potential unacceptable risks associated with the proposed development and to discharge anticipated planning conditions for the scheme. The remediation statement should include:<br>• Detailed ground gas mitigation measures for buildings including validation requirements;<br>• Soil cover system for landscaped areas;<br>• Recommendations of any mitigation measures required for service trenches;<br>• Recommendations for reuse of site won soils;<br>• Recommendations for waste management;<br>• Establishment of a watching brief for contamination;<br>• Dealing with unexpected contamination;<br>• Validation criteria for reuse or site son and imported soils; and,<br>• Development of an outline Validation report.<br><br>Contractors involved in the redevelopment works should consider the following:<br><br>• Potentially contaminated Made Ground and presence of ground gases should be considered in relation to deriving appropriate methods of working and appropriate PPE, specifically flammability risk during works associated with elevated methane and asphyxiation risk associated with carbon dioxide in confined spaces;<br>• Ground gas mitigation measures should be included for the new gable wall to tie into existing building and associated service trenches;<br>• Following further assessment, excavated arisings may be suitable for reuse on site or beneath a soil cover system/hardstanding but may be unsuitable for reuse near surface;<br>• Waste soil may attract a premium for disposal; and,<br>• Watching brief for asbestos and compliance with Asbestos Regulations. |

# 1. Introduction

## 1.1. Background

Atkins Limited (Atkins) has been appointed by South Tyneside Council to carry out a Phase 1 Land Contamination Assessment for the proposed redevelopment works at the Temple Park Centre in South Shields.

The site is currently occupied by a leisure centre, comprising swimming pool, gymnastics centre and leisure sports centre. It is proposed to undertake redevelopment of the centre, which will comprise demolition works (mainly of the swimming pool) followed by the construction of a new gable wall and landscaping (including infilling of the former pool) with installation of new underground services. This report has been prepared in support of an anticipated planning application associated with these proposals and to provide information on potential contamination as part of the tender documentation for contractors who will construct the works.

The location of the Temple Park Centre is shown in Figure 1 and the development red line boundary is shown on South Tyneside Council's Drawing No. AD5069 001 Remodelling of Temple Park Leisure Ctr Location Plan.

The proposed redevelopment is shown on Figure 2 and South Tyneside Council's Drawing No. AD5069 400 Remodelling of Temple Park Leisure Ctr Proposed External Works.

## 1.2. Aims and Objectives

This report provides a desk based assessment of the site to develop a preliminary conceptual site model (PCSM) in respect to the proposed development and to determine a qualitative risk assessment of the potential risks posed by land contamination.

This assessment includes the following:

- Site walkover to determine the current site condition (Appendix A);
- Obtain and review a Landmark Envirocheck Report (Appendix D);
- Obtain and review a Coal Authority Coal Mining Report (Appendix C);
- Review existing third party information with the data screening against current Generic Assessment Criteria (GAC);
- An assessment of the environmental setting of the development based on review of information published online by the Environment Agency and other national or local government bodies;
- Summarise the environmental context of the site with an appraisal of the historical development, geology, hydrology and hydrogeology based on a review of published information;
- Development of a preliminary conceptual site model (PCSM) for the current and proposed future site use of the development, based on the contaminant source-pathway-receptor model (as identified in CLR11 (Environment Agency, 2004));
- Outline recommendations for further work and remediation.

This report presents an assessment of the potential risks posed by ground contamination and provides an indication of the possible constraints that such contamination may present to current occupiers and possible future users.

Where potential geotechnical, archaeological, flood or ecological issues have been identified during the data review, then these will be highlighted together with recommendations for the additional specialist surveys/assessments. This report does not provide a geotechnical assessment of the site or an assessment of ground instability. Consideration of other potential development constraints beyond land/ground contamination, such as ecology, or archaeological issues are beyond the scope of this assessment.

## 1.3. Information Sources

Information has been obtained from the following sources:

- British Geological Survey (BGS) website (British Geological Survey, 2017);
- Coal Authority Interactive Map (2017);
- Coal Authority Coal Mining Report 51001620225001 (included as Appendix D);
- Environment Agency website (What's in My Backyard, 2017);
- Envirocheck Report 140507389_1_1 (produced by Landmark Information Group), containing historical Ordnance Survey (OS) Maps, groundwater vulnerability maps and environmental data sheet (included as Appendix C);
- MAGIC Interactive Map (DEFRA, 2017);
- Public Health England website, Radon (Public Health England, 2017).
- Site Investigation for Temple Park Leisure Centre – Phase 2 (Factual Report) South Shields, Soil Mechanics, January 1983 (ref: 7071/56);
- Temple Memorial Park, Contaminated Land Investigation Report, Sirius, October 2009 (ref: C2621);
- Temple Park, Ground Gas Risk Assessment, Sirius, Letters February, June, July, August & September 2011 (ref: A2621B);
- Temple Park Leisure Centre, South Shields Site Investigation Report, Solmek, July 2012 (Ref: S120505);
- Temple Park, Football Pitch Refurbishment, Ground Investigation Interpretative Report, Shadbolt Environmental, October 2013; and,
- Zetica, Tyne and Wear Regional Unexploded Bomb Risk map.

## 1.4. Limitations

Atkins is responsible for selecting and summarising the data supplied to it by other parties but cannot be held responsible for any mistakes or inaccuracies or the completeness of third party data on which it has relied.

As with any point data, ground conditions can only be inferred between test locations and as such localised conditions on-site may vary between point locations.

This report does not advise on measures to deal with asbestos. Detailed advice should be sought from a specialist contractor, as necessary.

# 2. Site Characterisation

## 2.1. Location and Description

The site is located to the south of John Reid Road (A1300) in South Shields, NE34 8QN. King George Road is located to the east of the site. The site is centred at grid reference 437207, 563898. A site location plan is presented in Figure 1.

The approximate 3.1 hectare site comprises a leisure centre (partially derelict) surrounded by Temple Memorial Park. The leisure centre buildings comprising swimming pool, gymnastics centre and leisure sports centre are surrounded by grassed areas (some mounded) to the south, west and north; with lamp posts and tarmac paths.

The site is surrounded by the following land uses (Google Inc., 2017):

- North: open space, John Reid Road (A1300) with residential properties and hospital beyond;
- East: open space, King George Road (A1018) with residential properties and school beyond;
- South: Temple Memorial Park, sports ground, playing fields; and,
- West: Temple Memorial Park and fire station.

## 2.2. Walkover Survey

A walkover survey to inspect the site and the immediate surroundings was undertaken by Atkins on the(28 September 2017. The walkover was undertaken to determine the site condition and identify potential sources of contamination which may impact upon the proposed development. A summary of observations in the immediate vicinity of the development are given above and those inside the existing structure are summarised below. Relevant photographs are included in Appendix A.

### 2.2.1. Internally

An internal inspection of the buildings that will be impacted through the redevelopment works was undertaken. The buildings inspected comprised a swimming pool, boiler room. plenum room, battery room, filter room, storage rooms, corridors and changing rooms. The main area of impact was considered to be the swimming pool. The buildings were derelict, having been closed for approximately 4 years.

The following potentially contaminative uses were identified:

- Storage rooms - chemicals (cleaning liquids, solvents and aggregates etc) on the floor below ground level.
- Swimming pool - general material lying around including empty tubs of cleaning materials/aggregates. Flaking paint was noted across some parts of the pool area (changing rooms, entrance to main pool and other rooms).
- Plenum room leading into boiler room – partly flooded near bottom of stairs, rusted metal on pipes.
- Battery/Telemetry room– contained active electrical structures/switches, but no evidence of leakages.
- Filter room – flaking paint, piping systems / valves / switches. Occasional water pooling. Calcium hydrochloride storage.
- Asbestos signage was noted throughout the building relating to restricted room access and pipework.

## 2.3. Historical Land Use

A review of the historical land use of the site and surrounding land has been undertaken to identify the nature and location of potentially contaminative activities that may have taken place on or adjacent to the site. Ordnance Survey Plans dating from 1862 to 2017 have been reviewed and potentially contaminative uses are summarised in Table 2-1. Distances listed are approximate and are from the closest site boundary. A copy of the Ordnance Survey plans is included in the Envirocheck Report (Landmark Information Group, 2017) in Appendix C.

The earliest historical map (1862) illustrates that the site comprised agricultural land with a northerly flowing stream adjacent to the eastern site boundary which emanates from a pond approximately 100m to the

southeast. No significant changes took place at the site until 1951. A record of potentially infilled land (water) is recorded c. 1951 which it is assumed is associated with infilling of this former watercourse. By this time, the site formed part of the Harton Moor Golf Course including a wooded area in the southeast of the site c. 1968. By 1970, the site has been recontoured and formed part of the Temple Memorial Park. The Leisure Centre was developed c.1983 with further development c.1993 to the present day arrangement.

The earliest historical maps (1862 and 1982) illustrates that the Harton and Whitburn Colliery and the South Shield Workhouse were located approximately 600m northwest of the site. By 1898, a rifle range had been developed approximately 100m west of the site and the West Harton Brick Works (with clay pit subsequently infilled) approximately 600m to the east. During the 1940's, the site was illustrated as being located in the Harton Moor Golf Course with a church and railway (later King George Road) being located approximately 200m east of the site. In 1956, evidence of landfilling was present approximately 200m southwest of the site. During the 1970's the site was part of the wider Temple Memorial Park until the leisure centre was constructed c. 1973 with a car park, playground and all weather sports ground to the east of the site. The memorial park being still present to the south and west today.

Records provided by Landmark and the Environment Agency indicate that Temple Memorial Park including the site and the surrounding area was subject to landfilling between the 1950's to the 1990's.

**Table 2-1 Summary of potentially contaminative historical land uses on and within 250 m**

| On-site/off-site | Name of source | Approximate date present: from – until | Approximate distance from site (m) |
|---|---|---|---|
| On-site | Earthworks | 1977 | N/A |
| On site and surrounding | Landfill | 1950's-1990's | N/A |
| Off-site | Railway | 1942-1956 | 200m east |
| | Civil Defence Control Centre | 1956 | 200m northeast |
| | Landfilling | 1956 | 200m southwest |

# 3. Previous Investigations

Previous investigations have been reviewed, those from 1973, 1983 and 2012 pertain directly to the site, those is 2009 and 2001 cover a wider area which includes the site but there is limited information for the site. The 2013 investigation is associated with the sports pitch adjacent to the site.

Copies of the previous reports are provided in Appendix B, apart from the 1973 information which is available from the BGS website.

## 3.1. 1973 Investigation

The British Geological Society (BGS) website provides records for 8 no. boreholes drilled by Dunelm Drilling to approximately 12m bgl associated with a site investigation for the Temple Park Leisure Centre in January 1973.

### 3.1.1. Ground Conditions

These indicate that ground conditions comprised:

- Made Ground between 2.1m and 2.4m thick of 'hardcore, soil, domestic waste, clay and ash'
- Made Ground is underlain by natural clay with boulder clay, proven to 12m bgl.
- Groundwater was not generally observed; however, there were some records of shallow groundwater at the base of the Made Ground and at approximately 5m bgl in one location.

## 3.2. 1983 Investigation

Soil Mechanics were instructed by the Borough Council of South Tyneside to carry out a site investigation associated with establishing the ground conditions for a Phase 2 extension of the existing leisure centre building. A factual report on the investigation was provided; however, the precise location of the boreholes was not legible on the plans provided. It has been presumed, based on historical plans that these are located on the northern part of the current leisure centre building (north of the swimming pool).

### 3.2.1. Ground Investigation

The ground investigation comprised 8 no. cable percussive boreholes (BH1 to BH7) to a depth between 13 and 16.5m bgl. In-situ and laboratory testing of soils for geotechnical purposes was undertaken. Chemical testing (sulphate and pH) for aggressive ground conditions was also undertaken. No asbestos testing was undertaken.

### 3.2.2. Ground Conditions

Made Ground was encountered between 2m and 3m thick comprising topsoil, black fill (ash), gravel, cobbles with fragments of wood, glass and brick (up to cobble size) in BH1 to BH4. Domestic waste type material was observed in BH5 to BH8 comprising sandy soil with organic matter, cloth, shoe, wire, plastic, metal and brick. Made Ground was underlain by firm to stiff laminated silty Clay with very stiff gravelly Clay at greater depth. Beneath the Clay, bedrock of weathered yellow brown moderately weak sandstone was encountered at depths between 14.8m and 16.45m bgl.

Groundwater was only observed in two boreholes; one as a seepage in the Made Ground (BH8) and one at 6m bgl in the Glacial Till (BH6).

## 3.3. 2009 Investigation

Sirius were commissioned by South Tyneside Council in 2009 to undertake a contaminated land assessment in accordance with Part 2A of the Environmental Protection Act 1900 for Temple Memorial Park. This report also includes a review of a 1999 ground investigation report associated with the John Reid Road Fire Station to the north of the site boundary which identified elevated ground gases. Salient information contained within the 2009 report pertaining to the specific area of the development site has been included in the associated sections of this report with pertinent information for the whole area of the investigation summarised below.

The 2009 report covers an area greater than the current site and comprised approximately 79.5 hectares occupied by the leisure centre, associated facilities and surrounding park bounded by John Reid Road, King George Road, Nevinson Avenue and Whiteleas Way. Historically this area had been used as a brick works, clay pit, now backfilled and landfilling until the early 1970's.

### 3.3.1. Ground Investigation

The ground investigation (July to September 2009) comprised a mixture of hand dug shallow samples, trial pits, window sample holes with installation of groundwater and gas monitoring wells at the site boundaries to determine off site migration, cable percussive boreholes with gas/groundwater monitoring wells, laboratory testing and gas monitoring (3 visits reported). None of the exploratory locations were located proximal to the area of proposed redevelopment. Only two trial pits were located approximately 100m to the south and 100m to the west of the site.

### 3.3.2. Ground Conditions

Ground levels vary by approximately 10m to 15m across the park, specifically higher topography in the east, west and a plateau in the southeast. Ground conditions encountered comprised Made Ground comprising of ashy waste, demolition arisings, reworked natural, topsoil, domestic refuse and imported fill (playground), generally between 1-2m thick but up to between 5m to 9m thick. The Made Ground was underlain by natural Glacial Till with this bands of sand.

### 3.3.3. Risk Assessment

Comparison of the chemical data (soils: metals, pH, sulphate, PAHs, phenol, TOC, asbestos, TPH CWG, VOCs and SVOCs; and, groundwater/surface water: metals, pH, sulphate, ammonia, PAHs, phenol, PRO, DRO, MRO, electrical conductivity) was undertaken against Generic Assessment Criteria (GAC) for derived residential without plant uptake for human health (CLEA v1.04) and drinking water standards for controlled waters. Reassessment of the data in accordance with current guidance has not been undertaken as the location of the samples are outside the development boundary or relate to different strata.

In conclusion, the 2009 report highlighted:

- A potential risk to human health associated with PAHs (benzo(a)pyrene) and asbestos within shallow soils;
- A ground gas risk from landfill materials in the east and south but no significant gas sources in the central or western parts;
- No significant risk to controlled waters or ecological receptors;
- Potential risk to structures/utilities from aggressive ground conditions and hydrocarbon contamination.

### 3.3.4. Ground Gas Risk

A number of gas monitoring boreholes were present around the leisure centre. These were, monitored on a regular basis by Premier Waste Ltd. These were not located adjacent to the swimming pool area proposed for redevelopment; however, the monitoring well immediately to the west of the site boundary reported elevated methane. Further information was not provided.

The report states that the leisure centre was constructed with due consideration of the potential risk from landfill gas and includes appropriate construction details and an active gas alarm. No further design information was provided for the measures and these construction details have not been corroborated.

## 3.4. 2011 Ground Gas Assessment

In 2011, supplementary window sample boreholes with monitoring wells were installed by Sirius followed by ground gas monitoring. Sirius issued various letters pertaining to the borehole logs, exploratory hole plan and ground gas results. The September 2011 ground gas risk addendum letter pertains to a total of 18 no. visits over 1 year (including 6 of the initial visits over 6 months utilising wells installed in 2009 prior to installation of the additional monitoring wells).

The site was divided into three gas zones (zones 1 to 3) for assessment, with the leisure centre being on the boundary of Zones 1 and 2. The leisure centre as a receptor was discounted from the assessment due to the assumption that it contained acceptable gas protection measures within its foundation design.

Peak gas concentrations were recorded for Zone 1 (72% methane, 27% carbon dioxide, 4.2ppm VOCs) and a maximum flow for Zone 2 (11l/h). Assessment by Sirius was undertaken using the NHBC traffic light system for the risk of off site migration to adjacent residential properties, which was determined to be red (high risk) for Made Ground to Amber 1/Green associated with pathways in the natural strata for Zones 1 and 2.

## 3.5. 2012 Investigation

Solmek was commissioned by South Tyneside Council in 2012 to undertake a ground investigation at the Temple Park Leisure Centre associated with the refurbishment of the existing pool area. The report summarises a desk study undertaken by Solmek in 2011 which was not provided for review.

Salient information contained within the Solmek 2012 report has been included in this report with pertinent information given in summary below.

### 3.5.1. Ground Investigation

Solmek undertook a site walkover in November 2011 and a ground investigation in May 2012. The investigation comprised:

- 3 no. cable percussive boreholes (BH1 to BH3) to depths of between 9.15m and 14.65m below ground level (bgl) externally around the existing swimming pool building with installation of a gas monitoring well in BH1;
- 3 no. ground gas monitoring visits in June/July 2012;
- Chemical laboratory analysis (5 no. samples) for metals (As, B, Cd, Cr, Cr VI, Cu, Pb, Hg, Ni, Zn, Se), cyanide, sulphate, sulphide, pH, phenol, speciated Polyaromatic Hydrocarbons (PAHs), Total Petroleum Hydrocarbons (TPH) and an asbestos screen; and,
- Geotechnical laboratory testing.

### 3.5.2. Ground Conditions

Ground conditions comprised topsoil over Made Ground (to depths between 0.5m and 1.35m bgl) comprising gravelly Clay or clayey gravelly Sand with sandstone, brick and limestone and occasional glass fragments (BH2), slag and fabric (BH3). The thickest Made Ground was encountered to the east of the Leisure centre building (BH3), where Made Ground was noted as being potential landfilled material. The Made Ground was underlain by firm to stiff thinly laminated Clay with weathered sandstone encountered beneath the Clay from 8.7m to 14.2m bgl. Shallow groundwater was not observed.

### 3.5.3. Risk Assessment

Solmek compared the soil chemical results with Generic Assessment Criteria (GAC) derived using EA CLEA V1.06 for a residential without homegrown produce and in their absence Atkins SSV for a residential land use with home grown produce. Solmek did not highlight any significant exceedances of these values. Rescreening undertaken by Atkins of this data for this report using the current Atkins SSVs for a residential without plant uptake end use (as a conservative estimate) also does not highlight any exceedances (a copy of the assessment is provided in Appendix E).

Solmek reported the analysis for asbestos in 5 no. soil samples. None reported the presence of asbestos.

### 3.5.4. Ground Gas Risk

Solmek did not report significantly elevated ground gases during the monitoring period (max. methane <0.1%, carbon dioxide 0.7%) with no significant flows of gases recorded. They concluded that the site was classified as Characteristic Situation 1 (CS1) and no precautionary measures were required. However, this conclusion is based on a limited amount of gas monitoring data taken from only one location.

## 3.6. 2013 Investigation

Shadbolt Environmental were commissioned by South Tyneside Council to undertake a site investigation in connection with refurbishment of an all-weather football pitch including footlight replacement. The football pitch is located immediately east of the site.

### 3.6.1. Ground Investigation and Ground Conditions

The investigation comprised 10 no. window sample boreholes drilled to a maximum of 3.45m bgl. Made Ground was encountered between 1.4m and 3.1m bgl of clayey sandy gravel/cobbles of ash/slag, brick, concrete, sandstone with occasional plastic and rubber fragments; underlain by sandy gravelly Clay. This composition is similar to the demolition/ashy waste identified by Sirius surrounding the leisure centre.

### 3.6.2. Risk Assessment

Comparison of chemical results by Shadbolt compared to commercial GAC did not indicate elevated concentrations. Evidence of perched hydrocarbon contamination was noted.

Asbestos was identified and one WAC sample was reported as hazardous.

The report recommended the works be undertaken with awareness of the presence of asbestos, reuse of soils with use of a cover system.

# 4. Environmental Context

## 4.1. Geology

The geological sequence beneath the site and the surrounding area has been established from the BGS online geology of Britain viewer (British Geological Survey, 2017) and the solid and drift maps for Sunderland, Sheet 21 (British Geological Society, 1978).

This site is located on Made Ground (Landslip) underlain by superficial deposits of the Pelaw Clay Member (Clay), in turn by Glacial Till (clay) and lithologies of the Pennine Middle Coal Measures Formation bedrock. BGS information pertains to the absence of the superficial deposits in the area where Made Ground is present, presumably associated with the historical clay pit.

The BGS Lexicon of Named Rock Units (British Geological Survey, 2017) describes the underlying westerly dipping bedrock geology to comprise mudstone, siltstone and sandstone. A coal seam (Hebburn Fell, up to 0.79m thick) outcrops on the eastern periphery of the site and the Dean coal seam is at depth beneath the site.

To Atkins knowledge, previous ground investigations have been undertaken at the site in 1973, 1983, 2009, 2011 and 2013. Ground conditions reported in 1973 and 1983 encountered the presence of landfill materials up to 2.4m thick on the site and up to 3m thick in the north. The Made Ground was reported to comprise of less 'domestic-like' landfill material in 2009 and 2012. In 2009, the area surrounding the leisure centre was reported to be underlain by demolition materials, reworked natural soils and thin bands of ashy waste and of topsoil, clay fill with brick, glass and fabric up to 1.35m in 2012. It is considered possible, that earthwork activities during development of the leisure centre some of the Made Ground could have been removed as the thickness of the Made Ground is generally less than reported in 1973.

Based on the 2009 ground investigation CSM, minimal Made Ground is present surrounding the leisure centre, with Made Ground increasing in thickness to the west associated with the infilled former clay pit. Based on the 2009 investigation, it is likely that domestic-type landfill material is present to the west and south of the site which could be present in the proposed new service trench locations.

## 4.2. Mining and Mineral Sites

The Envirocheck Report (Landmark Information Group, 2017) indicates that site is in an area which may be affected by coal mining activity. The Coal Authority interactive map viewer illustrates the following:

- The site is in a coal mining reporting area;
- High risk development areas associated with a coal outcrop located immediately east of the site and probable shallow working noted in the northeastern periphery of the site; and,
- The site is in a surface coal resource area.

A coal mining report for the site has been obtained from The Coal Authority, reproduced in Appendix D. Salient points in the report are:

- The site is in a surface area that could be affected by underground mining in 6 seams of coal at 290m to 460m depth, and last worked in 1969.
- The site is in an area where the Coal Authority believe there is coal at or close to the surface. This coal may have been worked at some time in the past. The potential presence of coal workings at or close to the surface should be considered prior to any site works or future development.
- There are no known coal mine entries at or within 20m of the boundary of the site.

There are no BGS Recorded Mineral Sites indicated to be within 500 m of the site.

## 4.3. Hydrogeology and Hydrology

### 4.3.1. Groundwater

The Envirocheck Report (Landmark Information Group, 2017) indicates that the site is underlain by Superficial deposits of unknown permeability (lakes and landslip). However, the surrounding superficial clay is classified as Unproductive Strata and the underlying bedrock is classified as a Secondary A Aquifer.

The Environment Agency (EA) classification of aquifers indicates (Environment Agency, 2017):

- Unproductive Strata - These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.
- Secondary A Aquifer - 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.

Previous ground investigation have indicated that shallow groundwater may be present at the base of the Made Ground.

### 4.3.2. Groundwater Abstractions

The site is not located in a Source Protection Zone (SPZ) for a potable groundwater supply.

An Outer Zone SPZ is located approximately 230m southeast of the site associated with a groundwater abstraction approximately 1.5km southeast of the site operated by Northumbrian Water associated with an abstraction borehole from the limestone bedrock in this area (Landmark Information Group, 2017).

### 4.3.3. Surface Waters

The nearest surface water feature is an un-named watercourse present approximately 200m west of the site. There are no main watercourses within 500m of the site.

It is unknown whether the historical watercourse, previously located to the east of the site has been completely culverted or infilled.

There are no active surface water discharge or abstraction consents located within 500 m of the site.

### 4.3.4. Flooding

The Environment Agency website indicates that the site is in Flood Zone 1 and has a low probability of flooding from rivers. The website shows a low risk of flooding from surface water

Envirocheck Report (Landmark Information Group, 2017) indicates that the site has potential risk from groundwater flooding, including at surface.

## 4.4. Contaminated Land Register

The Envirocheck Report (Landmark Information Group, 2017) indicates that there are no contaminated land register entries or notices within 500 m of the site.

## 4.5. Pollution Prevention Control

The Envirocheck Report (Landmark Information Group, 2017) lists no significantly Integrated Pollution Prevention and Controls within 500m of the site.

## 4.6. Contemporary Trade Directory

The Envirocheck Report (Landmark Information Group, 2017) lists no significantly potentially contaminative activities within 250m of the site.

## 4.7. Fuel Stations

There are no active or obsolete fuel stations recorded in the Envirocheck Report (Landmark Information Group, 2017) within 500 km of site.

## 4.8. Landfills and Waste Management Facilities

According to the Envirocheck Report (Landmark Information Group, 2017), there are three records of historical landfill sites for the site and one other recorded BGS/historical landfill located approximately 374m to the south, as summarised in Table 3-3.

There are two records of infilled land (water) 104m and 124m southeast of the site.

Licensed waste management facilities are recorded 353m southwest of the site. These were associated with household, commercial and industrial waste landfills adjacent to John Reid Road; issued in 1977 and surrendered in 1978.

**Table 4-1 Recorded Landfills at or within 500 m**

| Distance (m) | Name | Date | Waste Accepted | Comments |
|---|---|---|---|---|
| On site | Temple Memorial Park No. 1 – John Reid Road | 1957-1994 | inert, industrial, commercial and household | EA website states that gas control measures present. No further details given |
| | Temple Park No. 2 | 1950 - Unknown | inert, industrial, commercial | |
| | Temple Park No. 3 Nevinson Avenue | Unknown | industrial, commercial and household | |
| 374m south | Temple Memorial Park/Temple Mermaid Bank – King George Road | 1969-1971 | inert, industrial, commercial | |

## 4.9. Hazardous Substances

The Envirocheck Report (Landmark Information Group, 2017) indicates that there are no other COMAH, Explosive Sites, Notification of Installations Handling Hazardous Substances (NIHHS) or Planning Hazardous Substance Enforcements sites within 500m of the site. Registered Radioactive Substances are held associated with the hospital to the north of the site.

## 4.10. Radon

The Public Health England Interactive Radon Map (Public Health England, 2017). indicates that the site is in a maximum radon potential area, between 1-3%. The Envirocheck Report (Landmark Information Group, 2017) indicates that no radon protective measures are necessary in the construction of new buildings.

## 4.11. UXO Risk

According to the Zetica Tyne and Wear Map, the South Sheilds area is at high risk associated with unexploded Ordnance (UXO) risk. It is recommended that a UXO desk study is obtained.

## 4.12. Ecological and Sensitive Land Uses

The Envirocheck Report (Landmark Information Group, 2017) and MAGIC website (DEFRA, 2017) indicates the site is not located within 500 m of ecological sites of national/international importance, e.g. sites of

special scientific interest (SSSI), special areas of conservation (SAC), or Nature Reserves, etc. However, the MAGIC website indicates that the adjacent Memorial Park is part of a community forest.

# 5. Anecdotal Information

## 5.1. The Shields Gazette

An article in The Shields Gazette (19 September 2009) reported the findings of an investigation in 2009 of the children's playground located immediately east of the site. This stated that asbestos was reported in the soil sampled. Further investigations indicated that the asbestos was confined within the boundary of the play park. The article reports that the play park was built on a landfill, which is understood to have been capped with safe material and that the mounded areas of the play park were imported following closure of the landfill. The investigation referred to in the article is presumed to be the one undertaken by Sirius in 2009.

During the walkover survey (Section 1.2), adjacent playing field to the south was fenced and locked. It was overgrown with fly tipping. The topography was also raised by approximately 3-4m above the surrounding playing fields.

## 5.2. South Tyneside Council

Michelle Hogg, Environmental Protection Officer has been contacted by Atkins (28 September 2017). She has provided the third-party site investigation reports reviewed in Section 2.

Michelle also stated that any works at the site would require a remediation statement to ensure that any current ground gas protection measures incorporated into the leisure centre would not be adversely impacted. Michelle did not have any information on the EA record that the Temple Park Landfill has a gas protection system.

Ian Seales, Construction Project Manager has indicated that it is considered that there is a gas membrane below the floor construction with a gas detection system. He has no further details on the system installed at the time of this report.

# 6. Preliminary Conceptual Site Model & Risk Assessment

## 6.1. Introduction

This report has been prepared to assist in identification of potential constraints that contamination might pose to the site and redevelopment works and to provide a preliminary risk assessment for inclusion with the planning submission. Primary guidance for assessing and managing land contamination is presented in CLR11 (Environment Agency, 2004). This provides a technical framework for identifying and remediating contamination through the application of a risk management process. The question of whether risk is unacceptable in any particular case involves not only scientific and technical assessments, but also appropriate criteria by which to judge the risk and conclude exactly what risk would be unacceptable.

A preliminary conceptual site model (PCSM) has been developed, and presented in Table 6-1 below, based on the available information, to enable the assessment of the potential land contamination. A CSM describes the relationship between potential sources of contamination (resulting from both on- and off-site historical and recent activities) and receptors to the potential contamination. As part of the CSM development, three elements are identified and assessed:

- Source of contamination and associated contaminants;
- Receptors – human beings, controlled waters (surface water/groundwater), ecological systems and property, to that contamination; and
- Pathways between the sources and receptors.

Where all three elements are present or are likely to be present, they are described as potential contaminant linkages (PCLs), which can then be subjected to the risk assessment and risk management process.

## 6.2. Preliminary Conceptual Site Model

The preliminary risk categorisations presented below are based on an assessment of the potential consequence of each PCL occurring along with the likelihood that each PCL will occur in accordance with the framework provided in Appendix F. Potential contaminants that might be present have been identified through knowledge of historical land uses on or adjoining the site.

Under current health and safety legislation, construction and maintenance staff are required to carry out their own appropriate risk assessments and mitigation to protect their staff, other human receptors and the environment from potential contamination. Such risks must be adequately mitigated by law, specifically the Construction Design Management (CDM) Regulation 2015, that require potential risks to human health and the environment from construction activities are appropriately identified and all necessary steps taken to eliminate/manage that risk. Therefore, construction/maintenance workers have been discounted as human receptors from the PCSM.

**Table 6-1 Preliminary Conceptual Site Model and Risk Assessment**

| Sources | Pathway | Receptor | *(Consequence/Probability)* Classification of Risk |
|---|---|---|---|
| **Potential contaminants in soil/groundwater on-site, originating from the following <u>on-site</u> sources:**<br>Made Ground<br>Boiler/Plant rooms<br>Chemical storage<br>Asbestos<br><br>***Possible contaminants include:***<br>*Asbestos*<br>*Heavy metals*<br>*Polycyclic aromatic hydrocarbons (PAHs)*<br>*Hydrocarbons*<br>*Organic compounds*<br>*Polychlorinated Biphenyls (PCBs)*<br>Ground gases (methane, carbon dioxide, hydrogen sulphide or carbon monoxide) | Inhalation, ingestion and dermal contact with contaminants in soil and soil derived dust.<br><br>Organic contaminants in soil migrating into water supply pipes – ingestion. | Current and future users of site (leisure/open space) | *(Medium/Low Likelihood)* **Moderate/Low Risk**<br>Made Ground is present, although previous chemical testing did not highlight significant contamination. Site investigation from beneath the swimming pool has not been undertaken. It is unlikely to be significant Made Ground present, nor that significant spillage/leakage from chemical use at the site be present.<br><br>Mobile organic contaminants are not considered to be present within the subsurface, which are likely to present a risk through the diffusion into drinking water pipes present on-site. |
| | Inhalation of airborne asbestos fibres. | | *(Severe/Low likelihood)* **Moderate Risk**<br>Asbestos was not reported in samples of Made Ground at the site but has been reported in soils surrounding the site. |
| | Migration of gases/vapours into confined spaces/buildings and accumulation (explosion). Inhalation of vapours or ground gas (asphyxiation). | Current and future site users and property | *(Medium/Likely)* **Moderate Risk**<br>Previous ground gas monitoring at the site has indicated ground gas migration across the site associated with landfilled material. It is presumed that the leisure centre was installed with gas protection measures (unknown design details) and that the proposed development could impact on this without further mitigation during development of the gable wall and new services. |
| | Direct contact of foundations/services with aggressive soils and or groundwater.<br><br>Chemical attack to buried structures | Property | *(Mild/Low)* **Low Risk**<br>Foundation materials that are chemically resistant can be developed to provide further protection. |
| | Leaching of contaminants to groundwater in bedrock. Also, via preferential pathways (e.g. along piled foundations).<br><br>Surface water run-off | Secondary A Aquifer (bedrock)<br>Surface Water Receptors (Possible culverted watercourse to the east and un-named water feature 200m west) | *(Mild/Low likelihood)* **Low Risk**<br>It is unlikely that there will be a widespread source of contamination present on-site from past/present activities. The site is not located in a sensitive locations with respect to controlled waters, nor is significant shallow groundwater likely to be present. |
| **Potential contaminants in soil/groundwater on-site, originating from the following <u>off-site</u> sources:**<br>Landfilling<br><br>***Possible contaminants include:***<br>*Asbestos*<br>*Heavy metals*<br>*Polycyclic aromatic hydrocarbons (PAHs)*<br>*Hydrocarbons*<br>*Organic compounds*<br>*Polychlorinated Biphenyls (PCBs)*<br>Ground gases (methane, carbon dioxide, hydrogen sulphide or carbon monoxide) | Leaching of contaminants from soil and non-aqueous phase liquid (NAPL) migration to groundwater, followed by lateral migration beneath the site. | Current and future site users (leisure/open space) | *(Medium/Low Likelihood)* **Moderate/Low Risk**<br>There is the potential for contamination to migrate onto site from adjacent landfill materials; however, this was not identified from previous ground investigations. |
| | Inhalation, ingestion and dermal contact with contaminants in soil derived dust. | | *(Medium/Low Likelihood)* **Moderate/Low Risk**<br>The majority of the site is covered in hardstanding or will be landscaped; therefore, exposure to the underlying soils is limited; there is a risk from windblown dust from adjacent landscaped areas. Previous Part 2 A investigations did not identify this as a significant risk. |
| | Direct contact of foundations/services with aggressive soils and or groundwater.<br><br>Chemical attack to buried structures | Property | *(Mild/Low)* **Low Risk**<br>Mobile organic contaminants may be present within the subsurface, which are likely to present a risk through the diffusion into drinking water pipes present on-site.<br>Foundation materials that are chemically resistant can be developed to provide further protection. |
| | Migration of gases/vapours into confined spaces/buildings and accumulation (explosion). Inhalation of vapours or ground gas (asphyxiation). | Current and future site users and property | *(Medium/Likely)* **Moderate Risk**<br>There is a significant potential for the off-site landfills to produce ground gas which could migrate on to the site. It has been presumed that the leisure centre was built with gas measures but the new works will require measures so these are not impacted. The status of the current gas protection system is unknown. |

# 7. Conclusion and Recommendations

Following a review of the available data, potential sources of contamination have been identified on and near the site, specifically associated with historical landfilling at and surrounding the site. Additionally, potential source of contamination was noted during the site visit including chemical storage and boiler/generator areas.

Previous site investigation undertaken near the pool area have indicated that Made Ground may have been excavated during development of the leisure centre but is still present comprising 'demolition type and ashy material up to approximately 1.35m depth. Chemical analysis of the Made Ground present at the site (in 2012) does not indicate significant elevated concentrations of potential contaminants of concern.

Overall, the site poses a low to moderate risk to human health associated with soil contaminants, moderate risk associated with ground gases and a low risk to other identified receptors.

It is recommended that a remedial statement is prepared to incorporate the following:

- Detailed ground gas mitigation measures for buildings including validation requirements;
- Soil cover system for landscaped areas;
- Recommendations of service trenches;
- Recommendations for reuse of soils;
- Recommendations for waste;
- Watching brief for contamination;
- Validation criteria for reuse and imported soils; and,
- Validation report outline.

Asbestos was noted in the building and it is recommended that this is dealt with appropriately under The Control of Asbestos Regulations. It is recommended that a specialist asbestos consultant is employed to provide further advice with regards asbestos in soil.

It is recommended that the landscaping works are undertaken under appropriate Environmental Permit or Materials Management Plan.

It is recommended that an UXO desk study be undertaken to determine any mitigation measures required during construction.

Contractors involved in the redevelopment works should consider the following:

- Made Ground is likely to be present, although this is likely to be <1m thick, comprising of clay or ashy fill with occasional man-made fragments;
- Watching brief and soil testing for potential contaminative sources associated with recent use (inc. PCBs and chlorinated solvents etc);
- Domestic waste type material may be encountered during excavation of service trenches;
- Asbestos may potentially be present in-ground (although investigations in 2012 did not identify any);
- Ground gases should be considered in relation to deriving appropriate methods of working and appropriate PPE, specifically flammability risk during works associated with elevated methane and asphyxiation risk associated with carbon dioxide in confined spaces;
- Determine the status of the current building gas protection measures and install ground gas mitigation measures for the new gable wall to tie into existing building and associated with service trenches; and,
- Excess arisings may be suitable for reuse beneath a soil cover system/hardstanding but may be unsuitable for reuse near surface.

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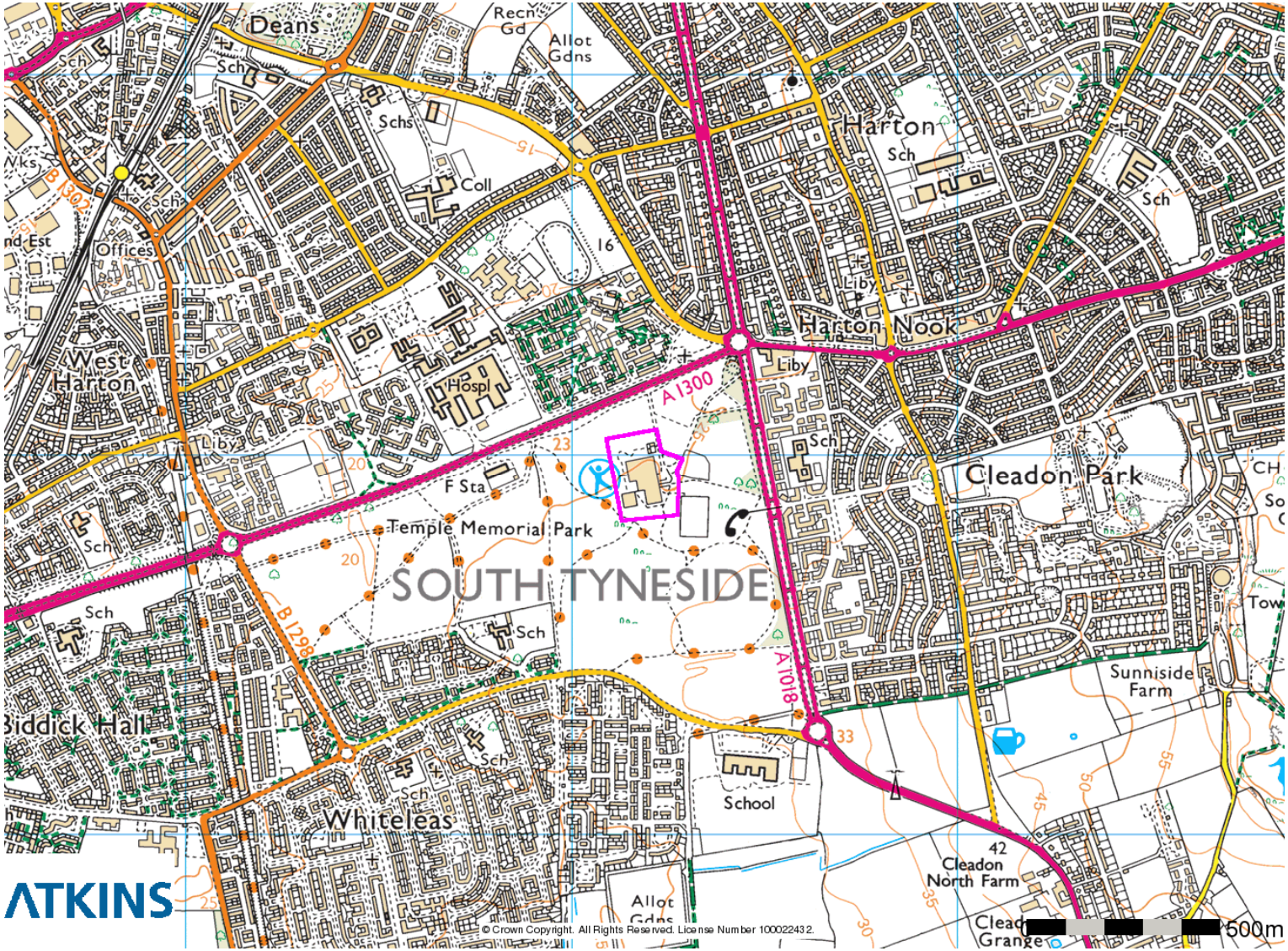
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# Figures & Drawings




ATKINS

CLIENT
South Tyneside Council

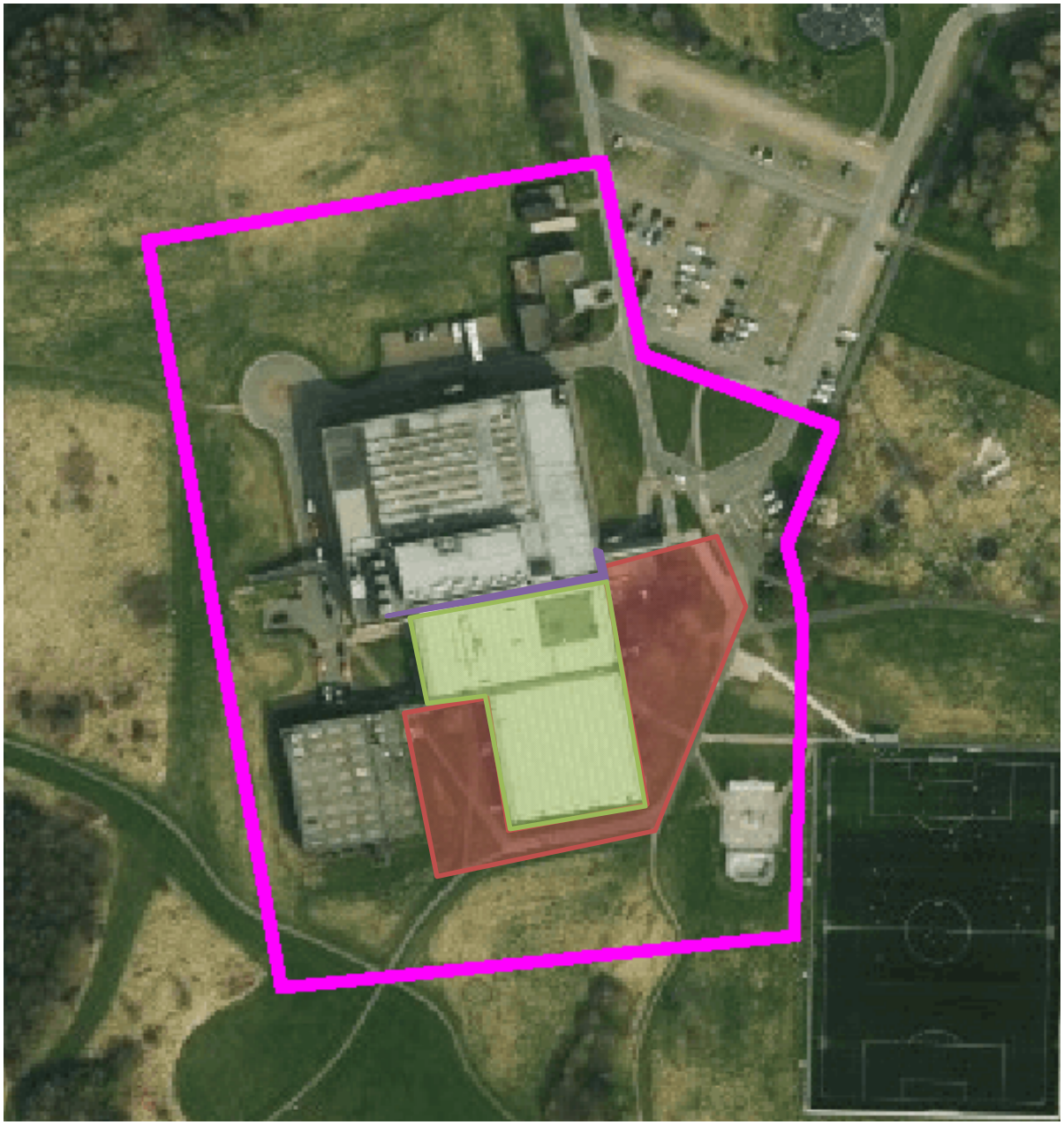
PROJECT
Temple Park Centre

LEGEND

Site boundary

TITLE

Figure 1
Site Location Plan



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CLIENT
South Tyneside Council

PROJECT
Temple Park Centre

LEGEND

- Site boundary
- Area of new services
- Demolition/Post Landscaping
- New Wall

TITLE

Figure 2
Site Plan

Temple Memorial Park

Leisure/Sports Centre

Pool Land Changing

Gymnastic Centre

Coach Park.

Car Park.

Car Park.

Playground

Playground

Sports Ground (all weather)

Fire Station

JOHN REID ROAD

JOHN REID ROAD

KING GEORGE ROAD

KING GEORGE ROAD

Haylands Square

Haylands Square

Bramham Court

Bamford Walk

Bamford Walk

Grindleford Court

Barden Court

Culver Court

Culver Court

Barnard Court

Arthington Way

Hollingdale Way

Nidderdale Gardens

Library

Health Centre

Ridgeway Primary School

Church of Jesus Christ of Latter Day Saints

Foot Bridge

Path

Pond

Pond

Mast

Rail Line

Rail Line

22.3m

22.4m

20.6m

22.6m

24.4m

28.3m

28.2m

28.2m

27.1m

27.1m

28.7m

N


Rev | Date | Description | Chkd

South Tyneside Council
Economic Regeneration

David Cramond - Corporate Director
Gordon House, Gordon Street, South Shields, Tyne & Wear, NE33 4JP
Telephone: (0191) 427 1717 Fax: (0191) 455 7770

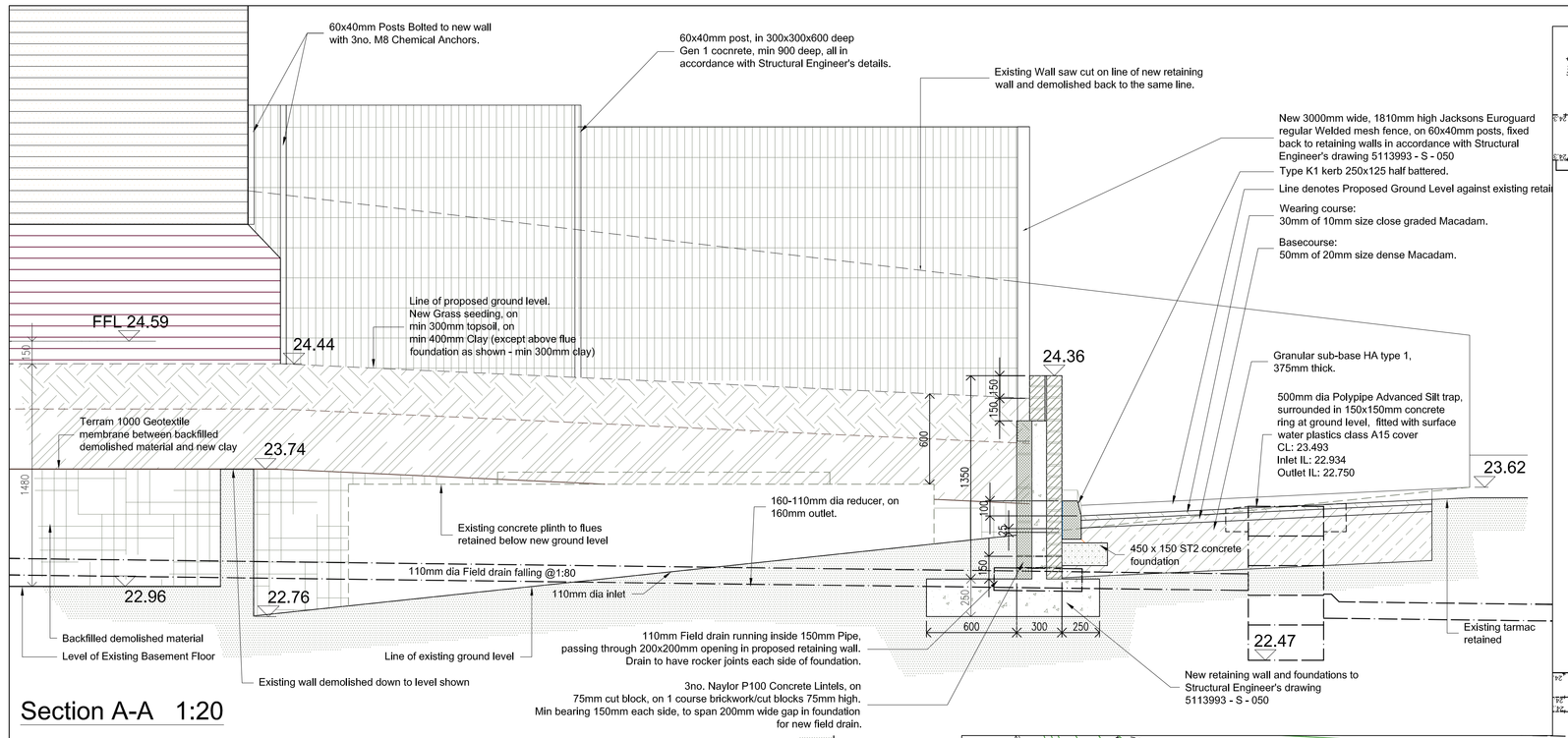

Project
Remodelling of
Temple Park Leisure Ctr.,
South Shields, NE34 8QN

Drawing Title
Location Plan..

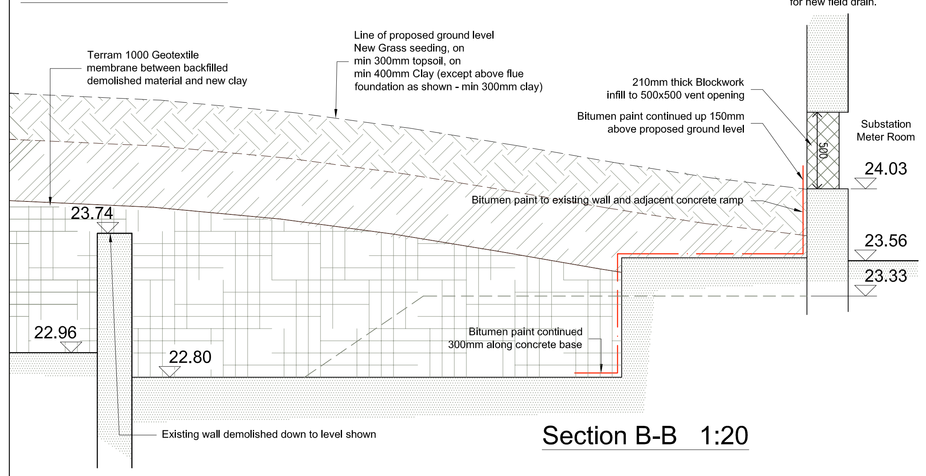
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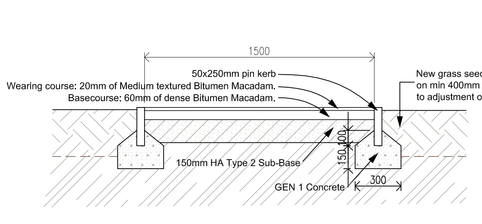
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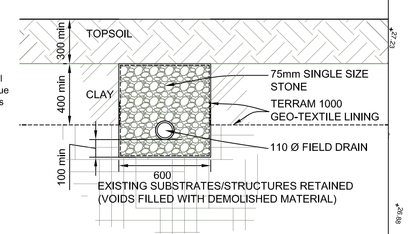

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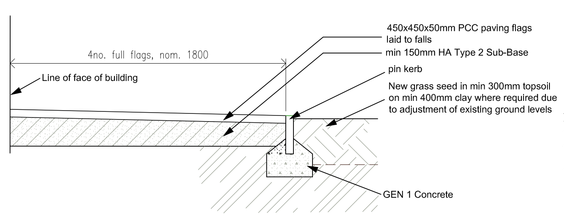

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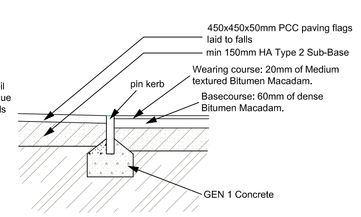

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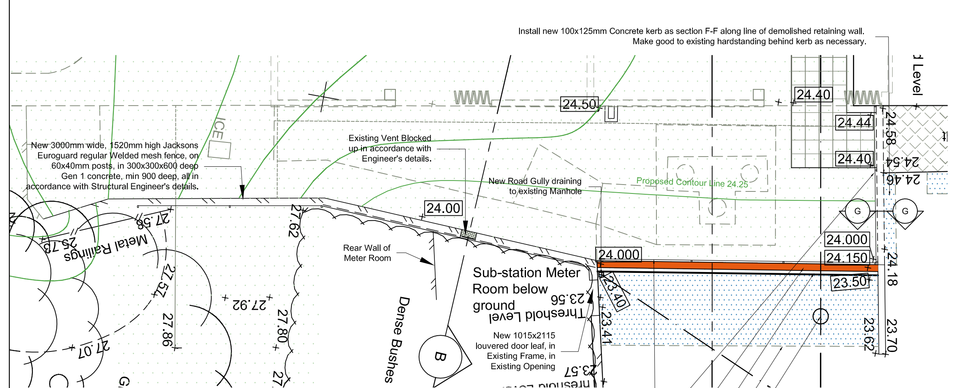

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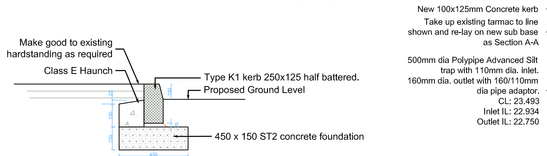

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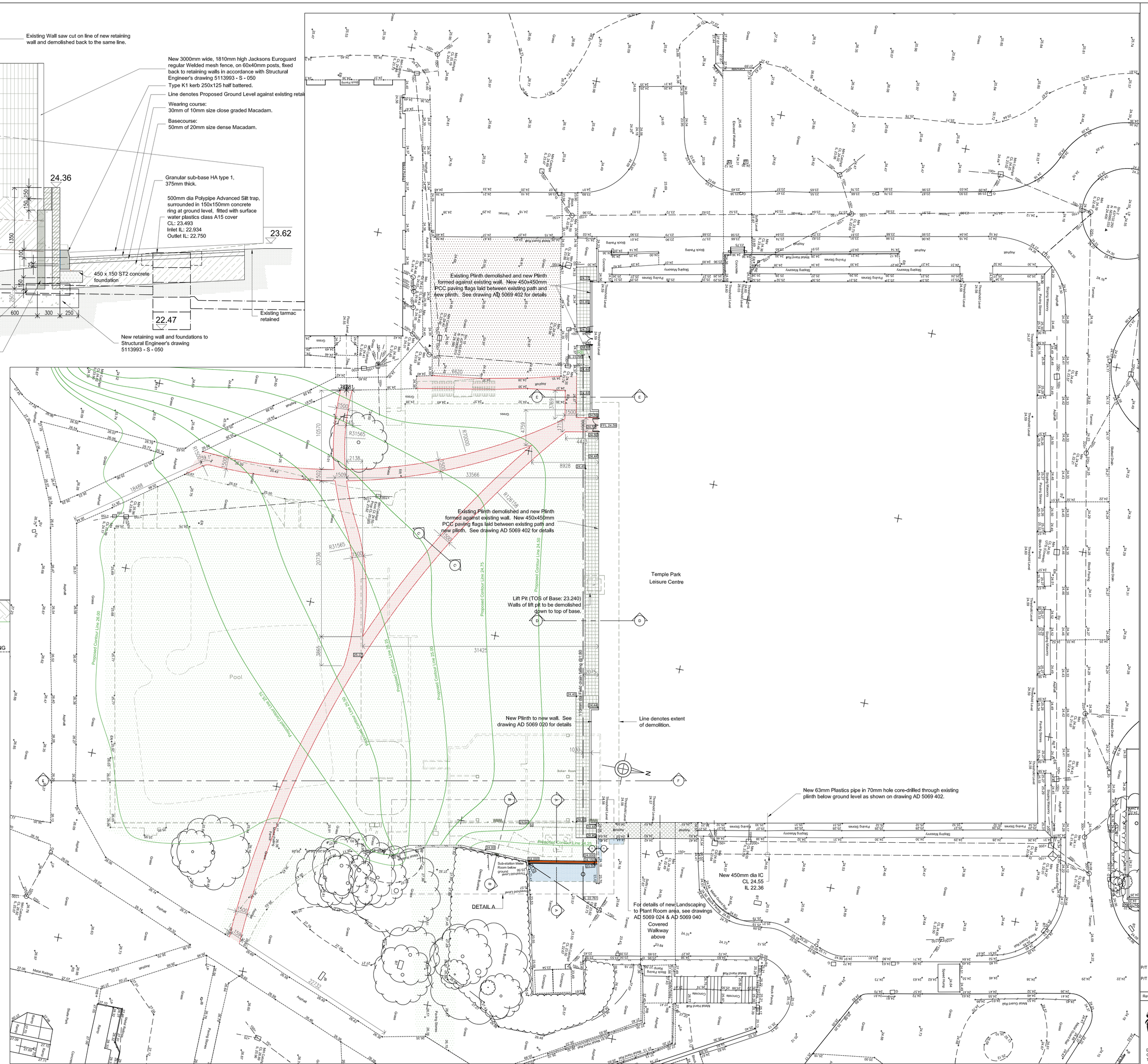

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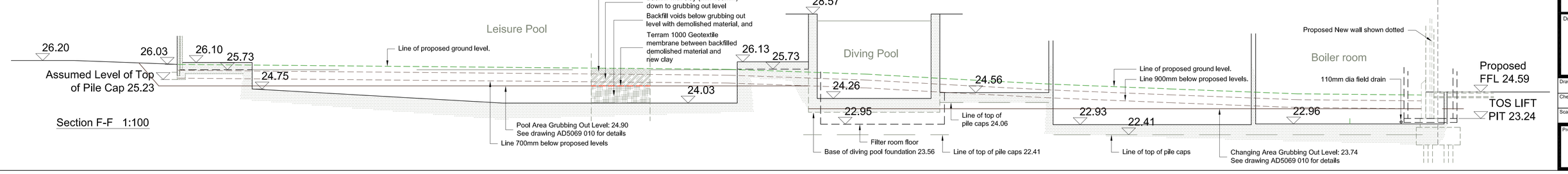

## DETAIL A - 1:100




## Section G-G 1:20




## Section F-F 1:100




**NOTE:**
All drainage to comply with B.S. 8301 1985 `Building Drainage` and relevant manufacturers instructions on installation

**Legend**

- Extent of area to be built up to proposed levels with grass seed as note below, in min 300mm new topsoil. Area of demolished structure to be covered by min 300mm topsoil, on min 400mm clay unless shown otherwise.
- New Macadam hardstanding as Section A-A
- New Macadam paths as Section C-C
- Area to be grubbed out on completion of work to a level 300mm below existing levels and reinstated with grass seed as note below, in 300mm new Topsoil such that existing levels are retained.

Note: Grass seed to be as follows:
60% Lorina Perennial Ryegrass
35% Logro Slender Creeping Red Fescue
5% Highland Brownlop Bent

24.59 Proposed Level
24.16 Existing Level

| Rev | Date | Description | Chkd |
|---|---|---|---|
| P/T 2 | 20/11/12 | Section A-A amended to accord with Engineer's drawings. | |
| P/T 1 | 24/10/12 | Levels adjacent meter room/new retaining wall amended. Existing retaining wall shown as part demolished. Silt trap repositioned. | |

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Project
Remodelling of: -
Temple Park Leisure Centre
South Shields

Drawing Title
Proposed External Works

| | | | |
|---|---|---|---|
| Drawn by | JM | Date | 17/08/12 |
| Checked by | IRS | Date | 17/08/12 |
| Scale | | Size | A0 |

Project Code: AD 5069
Drawing Number: 400

# Appendices

# Appendix A. Site Walkover Photographic Plates











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CLIENT
South Tyneside Council

PROJECT
Temple Park Centre

TITLE

Site Walkover
Photographic Plates

# Appendix B. Previous Reports (CD)

# Appendix C. Envirocheck Report

ATKINS

# Envirocheck® Report:

## Datasheet

### Order Details:

**Order Number:**
140507389_1_1

**Customer Reference:**
5161186

**National Grid Reference:**
437190, 563940

**Slice:**
A

**Site Area (Ha):**
3.52

**Search Buffer (m):**
1000

### Site Details:

Temple Park Centre, John Reid Road
South Shields
NE34 8FS

### Client Details:

Miss L Rutland
Atkins Ltd
Chadwick House
Birchwood Science Park
Risley
Warrington
WA3 6AE

ATKINS

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**Introduction**

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

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

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**Report Version v53.0**

ATKINS

# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m (*up to 2000m) |
|---|---|---|---|---|---|
| **Agency & Hydrological** | | | | | |
| BGS Groundwater Flooding Susceptibility | pg 1 | Yes | Yes | Yes | n/a |
| Contaminated Land Register Entries and Notices | | | | | |
| Discharge Consents | | | | | |
| Prosecutions Relating to Controlled Waters | | | n/a | n/a | n/a |
| Enforcement and Prohibition Notices | | | | | |
| Integrated Pollution Controls | | | | | |
| Integrated Pollution Prevention And Control | | | | | |
| Local Authority Integrated Pollution Prevention And Control | | | | | |
| Local Authority Pollution Prevention and Controls | pg 2 | | | | 3 |
| Local Authority Pollution Prevention and Control Enforcements | | | | | |
| Nearest Surface Water Feature | pg 2 | | Yes | | |
| Pollution Incidents to Controlled Waters | pg 2 | | | | 1 |
| Prosecutions Relating to Authorised Processes | | | | | |
| Registered Radioactive Substances | pg 2 | | | 1 | 9 |
| River Quality | | | | | |
| River Quality Biology Sampling Points | | | | | |
| River Quality Chemistry Sampling Points | | | | | |
| Substantiated Pollution Incident Register | | | | | |
| Water Abstractions | pg 4 | | | | (*1) |
| Water Industry Act Referrals | | | | | |
| Groundwater Vulnerability | pg 4 | Yes | n/a | n/a | n/a |
| Drift Deposits | | | n/a | n/a | n/a |
| Bedrock Aquifer Designations | pg 4 | Yes | n/a | n/a | n/a |
| Superficial Aquifer Designations | pg 4 | Yes | n/a | n/a | n/a |
| Source Protection Zones | pg 5 | | 2 | | 1 |
| Extreme Flooding from Rivers or Sea without Defences | | | | n/a | n/a |
| Flooding from Rivers or Sea without Defences | | | | n/a | n/a |
| Areas Benefiting from Flood Defences | | | | n/a | n/a |
| Flood Water Storage Areas | | | | n/a | n/a |
| Flood Defences | | | | n/a | n/a |
| OS Water Network Lines | pg 5 | | 2 | | 4 |

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# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m (*up to 2000m) |
|---|---|---|---|---|---|
| **Waste** | | | | | |
| BGS Recorded Landfill Sites | pg 7 | | | 1 | |
| Historical Landfill Sites | pg 7 | 3 | | 1 | |
| Integrated Pollution Control Registered Waste Sites | | | | | |
| Licensed Waste Management Facilities (Landfill Boundaries) | | | | | |
| Licensed Waste Management Facilities (Locations) | pg 8 | | | 2 | 1 |
| Local Authority Landfill Coverage | pg 8 | 1 | n/a | n/a | n/a |
| Local Authority Recorded Landfill Sites | | | | | |
| Potentially Infilled Land (Non-Water) | pg 8 | | | | 4 |
| Potentially Infilled Land (Water) | pg 8 | 1 | 2 | 5 | 22 |
| Registered Landfill Sites | pg 10 | | 4 | | |
| Registered Waste Transfer Sites | pg 12 | | | | 1 |
| Registered Waste Treatment or Disposal Sites | | | | | |
| **Hazardous Substances** | | | | | |
| Control of Major Accident Hazards Sites (COMAH) | | | | | |
| Explosive Sites | | | | | |
| Notification of Installations Handling Hazardous Substances (NIHHS) | | | | | |
| Planning Hazardous Substance Consents | | | | | |
| Planning Hazardous Substance Enforcements | | | | | |

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# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m (*up to 2000m) |
|---|---|---|---|---|---|
| **Geological** | | | | | |
| BGS 1:625,000 Solid Geology | pg 13 | Yes | n/a | n/a | n/a |
| BGS Estimated Soil Chemistry | pg 13 | Yes | Yes | Yes | Yes |
| BGS Recorded Mineral Sites | pg 16 | | | | 7 |
| BGS Urban Soil Chemistry | | | | | |
| BGS Urban Soil Chemistry Averages | | | | | |
| CBSCB Compensation District | | | n/a | n/a | n/a |
| Coal Mining Affected Areas | pg 17 | Yes | n/a | n/a | n/a |
| Mining Instability | pg 17 | Yes | n/a | n/a | n/a |
| Man-Made Mining Cavities | | | | | |
| Natural Cavities | | | | | |
| Non Coal Mining Areas of Great Britain | | | | n/a | n/a |
| Potential for Collapsible Ground Stability Hazards | pg 17 | Yes | | n/a | n/a |
| Potential for Compressible Ground Stability Hazards | pg 17 | Yes | | n/a | n/a |
| Potential for Ground Dissolution Stability Hazards | | | | n/a | n/a |
| Potential for Landslide Ground Stability Hazards | pg 17 | Yes | | n/a | n/a |
| Potential for Running Sand Ground Stability Hazards | pg 18 | Yes | | n/a | n/a |
| Potential for Shrinking or Swelling Clay Ground Stability Hazards | pg 18 | | Yes | n/a | n/a |
| Radon Potential - Radon Affected Areas | | | n/a | n/a | n/a |
| Radon Potential - Radon Protection Measures | | | n/a | n/a | n/a |
| **Industrial Land Use** | | | | | |
| Contemporary Trade Directory Entries | pg 19 | | 1 | 2 | 26 |
| Fuel Station Entries | pg 21 | | | | 2 |
| Points of Interest - Commercial Services | pg 21 | | | | 7 |
| Points of Interest - Education and Health | pg 22 | | | 1 | 6 |
| Points of Interest - Manufacturing and Production | pg 22 | | | 2 | 2 |
| Points of Interest - Public Infrastructure | pg 23 | | | 3 | 8 |
| Points of Interest - Recreational and Environmental | pg 24 | | 3 | | 4 |
| Gas Pipelines | | | | | |
| Underground Electrical Cables | | | | | |

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# Summary

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m (*up to 2000m) |
|---|---|---|---|---|---|
| **Sensitive Land Use** | | | | | |
| Ancient Woodland | | | | | |
| Areas of Adopted Green Belt | pg 25 | | | | 1 |
| Areas of Unadopted Green Belt | | | | | |
| Areas of Outstanding Natural Beauty | | | | | |
| Environmentally Sensitive Areas | | | | | |
| Forest Parks | | | | | |
| Local Nature Reserves | | | | | |
| Marine Nature Reserves | | | | | |
| National Nature Reserves | | | | | |
| National Parks | | | | | |
| Nitrate Sensitive Areas | | | | | |
| Nitrate Vulnerable Zones | | | | | |
| Ramsar Sites | | | | | |
| Sites of Special Scientific Interest | | | | | |
| Special Areas of Conservation | | | | | |
| Special Protection Areas | | | | | |
| World Heritage Sites | | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A13SW (E) | 0 | 1 | 437189 563943 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level | A13SW (SW) | 0 | 1 | 437150 563900 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A13NW (NW) | 56 | 1 | 437100 564100 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level | A13SE (SE) | 73 | 1 | 437350 563850 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level | A13NE (N) | 89 | 1 | 437250 564150 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A13NW (NW) | 92 | 1 | 437000 564050 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A13SW (W) | 107 | 1 | 437000 563943 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Limited Potential for Groundwater Flooding to Occur | A13SE (SE) | 116 | 1 | 437350 563750 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Limited Potential for Groundwater Flooding to Occur | A13SE (SE) | 129 | 1 | 437400 563800 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A13SE (S) | 137 | 1 | 437250 563700 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A13NE (N) | 137 | 1 | 437250 564200 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A13NW (W) | 142 | 1 | 436950 563950 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Limited Potential for Groundwater Flooding to Occur | A13SE (SE) | 158 | 1 | 437350 563700 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A13SW (SW) | 289 | 1 | 436900 563650 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Limited Potential for Groundwater Flooding to Occur | A14NW (E) | 362 | 1 | 437650 563950 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level | A8NE (S) | 391 | 1 | 437300 563450 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A12SE (SW) | 400 | 1 | 436750 563700 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level | A14SW (E) | 423 | 1 | 437700 563850 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Limited Potential for Groundwater Flooding to Occur | A9NW (SE) | 436 | 1 | 437550 563500 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Limited Potential for Groundwater Flooding to Occur | A14NW (E) | 476 | 1 | 437750 564100 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Limited Potential for Groundwater Flooding to Occur | A18SW (N) | 490 | 1 | 437150 564550 |
| | **BGS Groundwater Flooding Susceptibility**<br>Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A14NW (E) | 490 | 1 | 437750 564150 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 1 | **Local Authority Pollution Prevention and Controls**<br>Name: South Tyneside District Hospital<br>Location: Harton Lane, SOUTH SHIELDS, Tyne and Wear, NE34 0PL<br>Authority: South Tyneside Metropolitan Borough Council, Environmental Health Department<br>Permit Reference: 003/5.1(A)<br>Dated: Not Supplied<br>Process Type: Local Authority Air Pollution Control<br>Description: PG5/1Clinical waste incineration processes under 1 tonne an hour<br>**Status: Authorisation revokedRevoked**<br>Positional Accuracy: Manually positioned to the address or location | A17SE (NW) | 554 | 2 | 436595 564287 |
| 2 | **Local Authority Pollution Prevention and Controls**<br>Name: Ridgeway Service Station<br>Location: King George Road, SOUTH SHIELDS, Tyne and Wear, NE34 8AQ<br>Authority: South Tyneside Metropolitan Borough Council, Environmental Health Department<br>Permit Reference: STC/009a/1.2(d) B<br>Dated: 14th March 2000<br>Process Type: Local Authority Pollution Prevention and Control<br>Description: PG1/14 Petrol filling station<br>**Status: Permitted**<br>Positional Accuracy: Manually positioned to the address or location | A9NW (SE) | 619 | 2 | 437662 563356 |
| 3 | **Local Authority Pollution Prevention and Controls**<br>Name: Three Mile Garage<br>Location: 8-10 Moor Lane, SOUTH SHIELDS, Tyne and Wear, NE34 6BZ<br>Authority: South Tyneside Metropolitan Borough Council, Environmental Health Department<br>Permit Reference: STC/007/1.2(d)/B<br>Dated: 24th November 1999<br>Process Type: Local Authority Pollution Prevention and Control<br>Description: PG1/14 Petrol filling station<br>**Status: Permitted**<br>Positional Accuracy: Manually positioned to the address or location | A19NW (N) | 904 | 2 | 437562 564903 |
| | **Nearest Surface Water Feature** | A13SW (W) | 203 | - | 436920 563851 |
| 4 | **Pollution Incidents to Controlled Waters**<br>Property Type: Highway/Car Park<br>Location: 174 Harton Lane, SOUTH SHIELDS<br>Authority: Environment Agency, North East Region<br>Pollutant: Not Given<br>Note: Sw Drain<br>Incident Date: 11th December 1991<br>Incident Reference: 235/000986<br>Catchment Area: Not Given<br>Receiving Water: Not Given<br>Cause of Incident: Transport Accident (Not Oil)<br>Incident Severity: Category 3 - Minor Incident<br>Positional Accuracy: Located by supplier to within 100m | A17SW (NW) | 889 | 3 | 436400 564600 |
| 5 | **Registered Radioactive Substances**<br>Name: South Tyneside Nhs Foundation Trust<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, Tyne And Wear, NE34 0PL<br>Authority: Environment Agency, North East Region<br>Permit Reference: By9949<br>Dated: 15th June 2005<br>Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)<br>Description: Minor variation to authorisation under RSA<br>**Status: Authorisation superseded by a substantial or non substantial variationSuperseded**<br>Positional Accuracy: Manually positioned to the address or location | A12NE (NW) | 383 | 3 | 436745 564204 |
| 6 | **Registered Radioactive Substances**<br>Name: South Tyneside Nhs Foundation Trust<br>Location: South Tyneside District Hospital, Harton Lane, SOUTH SHIELDS, Tyne And Wear, NE34 0PL<br>Authority: Environment Agency, North East Region<br>Permit Reference: AJ8311<br>Dated: 31st December 1993<br>Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)<br>Description: Authorisation under RSA<br>**Status: Authorisation superseded by a substantial or non substantial variationSuperseded**<br>Positional Accuracy: Unknown | A17SE (NW) | 552 | 3 | 436596 564283 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 6 | **Registered Radioactive Substances**<br>Name: South Tyneside Nhs Foundation Trust<br>Location: South Tyneside District Hospital, Harton Lane, SOUTH SHIELDS, Tyne And Wear, NE34 0PL<br>Authority: Environment Agency, North East Region<br>Permit Reference: AV6523<br>Dated: 5th July 1996<br>Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)<br>Description: Minor variation to authorisation under RSA<br>**Status: Authorisation superseded by a substantial or non substantial variationSuperseded**<br>Positional Accuracy: Unknown | A17SE (NW) | 556 | 3 | 436596 564293 |
| 6 | **Registered Radioactive Substances**<br>Name: South Tyneside Nhs Foundation Trust<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, Tyne and Wear, NE34 0PL<br>Authority: Environment Agency, North East Region<br>Permit Reference: CA7209<br>Dated: 9th September 2006<br>Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)<br>Description: Minor variation to authorisation under RSA<br>**Status: Application has been authorised and any conditions apply to the operatorAuthorised**<br>Positional Accuracy: Automatically positioned to the address | A17SE (NW) | 558 | 3 | 436591 564288 |
| 6 | **Registered Radioactive Substances**<br>Name: South Tyneside Nhs Foundation Trust<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, Tyne And Wear, NE34 0PL<br>Authority: Environment Agency, North East Region<br>Permit Reference: By9957<br>Dated: 17th May 2005<br>Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1)<br>Description: Minor variation to a registration under the Act of an open source which is also the subject of an authorisation<br>**Status: Application has been authorised and any conditions apply to the operatorAuthorised**<br>Positional Accuracy: Automatically positioned to the address | A17SE (NW) | 558 | 3 | 436591 564288 |
| 6 | **Registered Radioactive Substances**<br>Name: South Tyneside Nhs Foundation Trust<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, Tyne And Wear, NE34 0PL<br>Authority: Environment Agency, North East Region<br>Permit Reference: By4416<br>Dated: 10th November 2004<br>Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)<br>Description: Minor variation to authorisation under RSA<br>**Status: Authorisation superseded by a substantial or non substantial variationSuperseded**<br>Positional Accuracy: Automatically positioned to the address | A17SE (NW) | 558 | 3 | 436591 564288 |
| 6 | **Registered Radioactive Substances**<br>Name: South Tyneside Nhs Foundation Trust<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, Tyne And Wear, NE34 0PL<br>Authority: Environment Agency, North East Region<br>Permit Reference: Bu5011<br>Dated: 30th April 2003<br>Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)<br>Description: Minor variation to authorisation under RSA<br>**Status: Authorisation superseded by a substantial or non substantial variationSuperseded**<br>Positional Accuracy: Automatically positioned to the address | A17SE (NW) | 558 | 3 | 436591 564288 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 6 | **Registered Radioactive Substances**<br>Name: South Tyneside Nhs Foundation Trust<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, Tyne And Wear, NE34 0PL<br>Authority: Environment Agency, North East Region<br>Permit Reference: Bk7846<br>Dated: 2nd October 2001<br>Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)<br>Description: Minor variation to authorisation under RSA<br>**Status: Authorisation superseded by a substantial or non substantial variationSuperseded**<br>Positional Accuracy: Automatically positioned to the address | A17SE (NW) | 558 | 3 | 436591 564288 |
| 6 | **Registered Radioactive Substances**<br>Name: South Tyneside Nhs Foundation Trust<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, Tyne And Wear, NE34 0PL<br>Authority: Environment Agency, North East Region<br>Permit Reference: Bj4671<br>Dated: 24th October 2000<br>Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1)<br>Description: Minor variation to a registration under the Act of an open source which is also the subject of an authorisation<br>**Status: Authorisation superseded by a substantial or non substantial variationSuperseded**<br>Positional Accuracy: Automatically positioned to the address | A17SE (NW) | 558 | 3 | 436591 564288 |
| 6 | **Registered Radioactive Substances**<br>Name: South Tyneside Nhs Foundation Trust<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, Tyne And Wear, NE34 0PL<br>Authority: Environment Agency, North East Region<br>Permit Reference: AJ6246<br>Dated: 31st December 1993<br>Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1)<br>Description: Registration under the Act of multiple open sources which are also the subject of authorisations<br>**Status: Authorisation superseded by a substantial or non substantial variationSuperseded**<br>Positional Accuracy: Automatically positioned to the address | A17SE (NW) | 558 | 3 | 436591 564288 |
| | **Water Abstractions**<br>Operator: Northumbrian Water<br>Licence Number: 1/23/05/001<br>Permit Version: 100<br>Location: Borehole - Magnesian Limestone - Cleadon<br>Authority: Environment Agency, North East Region<br>Abstraction: Public Water Supply: Potable Water Supply - Direct<br>Abstraction Type: Water may be abstracted from a single point<br>Source: Groundwater<br>Daily Rate (m3): 5773<br>Yearly Rate (m3): 1241058<br>Details: Within The Authorised Area Of Supply<br>Authorised Start: 01 April<br>Authorised End: 31 March<br>Permit Start Date: 8th April 1968<br>Permit End Date: Not Supplied<br>Positional Accuracy: Located by supplier to within 10m | A10NE (E) | 1466 | 3 | 438720 563580 |
| | **Groundwater Vulnerability**<br>Soil Classification: Soils of High Leaching Potential (U) - Soil information for restored mineral workings and urban areas is based on fewer observations than elsewhere. A worst case vulnerability classification (H) assumed, until proved otherwise<br>Map Sheet: Sheet 5 Tyne and Tees<br>Scale: 1:100,000 | A13SW (E) | 0 | 3 | 437189 563943 |
| | **Drift Deposits**<br>None | | | | |
| | **Bedrock Aquifer Designations**<br>Aquifer Designation: Secondary Aquifer - A | A13SW (E) | 0 | 1 | 437189 563943 |
| | **Superficial Aquifer Designations**<br>Aquifer Designation: Unknown (Lakes and Landslip) | A13SW (E) | 0 | 1 | 437189 563943 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 7 | **Source Protection Zones**<br>Name: Cleadon<br>Source: Environment Agency, Head Office<br>Reference: Ne029<br>Type: Zone II (Outer Protection Zone): Either 25% of the source area or a 400 day travel time whichever is greater. | A13SE (SE) | 230 | 3 | 437476 563723 |
| 8 | **Source Protection Zones**<br>Name: Cleadon<br>Source: Environment Agency, Head Office<br>Reference: Ne029<br>Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source. | A13SE (SE) | 230 | 3 | 437476 563723 |
| 9 | **Source Protection Zones**<br>Name: Fulwell<br>Source: Environment Agency, Head Office<br>Reference: Ne031<br>Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source. | A7SE (SW) | 905 | 3 | 436686 563037 |
| | **Extreme Flooding from Rivers or Sea without Defences**<br>None | | | | |
| | **Flooding from Rivers or Sea without Defences**<br>None | | | | |
| | **Areas Benefiting from Flood Defences**<br>None | | | | |
| | **Flood Water Storage Areas**<br>None | | | | |
| | **Flood Defences**<br>None | | | | |
| 10 | **OS Water Network Lines**<br>Watercourse Form: Inland river<br>Watercourse Length: 92.7<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Tyne<br>Primacy: 1 | A13SW (W) | 203 | 4 | 436920 563851 |
| 11 | **OS Water Network Lines**<br>Watercourse Form: Lake<br>Watercourse Length: 20.6<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Tyne<br>Primacy: 1 | A13SW (W) | 229 | 4 | 436892 563861 |
| 12 | **OS Water Network Lines**<br>Watercourse Form: Inland river<br>Watercourse Length: 151.7<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Tyne<br>Primacy: 1 | A12SW (W) | 657 | 4 | 436473 563769 |
| 13 | **OS Water Network Lines**<br>Watercourse Form: Lake<br>Watercourse Length: 11.4<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Tyne<br>Primacy: 1 | A12SW (W) | 657 | 4 | 436473 563769 |
| 14 | **OS Water Network Lines**<br>Watercourse Form: Inland river<br>Watercourse Length: 361.1<br>Watercourse Level: Not Supplied<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Tyne<br>Primacy: 1 | A3NE (S) | 934 | 4 | 437313 562905 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 15 | **OS Water Network Lines**<br>Watercourse Form: Inland river<br>Watercourse Length: 651.2<br>Watercourse Level: On ground surface<br>Permanent: True<br>Watercourse Name: Not Supplied<br>Catchment Name: Tyne<br>Primacy: 1 | A3NE (S) | 934 | 4 | 437313 562905 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 16 | **BGS Recorded Landfill Sites**<br>Site Name: Temple Mermaid Bank<br>Location: King George Rd, SOUTH SHIELDS, Tyne & Wear<br>Authority: British Geological Survey, National Geoscience Information Service<br>Ground Water: No threat to ground water<br>Surface Water: No threat to surface water<br>Geology: N/A<br>Positional Accuracy: Positioned by the supplier<br>Boundary Accuracy: Good | A8NE (S) | 374 | - | 437287 563464 |
| 17 | **Historical Landfill Sites**<br>Licence Holder: Borough Of South Tyneside<br>Location: John Reid Road, South Shield, Tyne and Wear<br>Name: Temple Memorial Park No.1<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD06272<br>First Input Date: 1st January 1957<br>Last Input Date: 1st January 1994<br>Specified Waste Type: Deposited Waste included Inert, Industrial, Commercial and Household Waste<br>EA Waste Ref: 0<br>Regis Ref: YO1/L/BOR004<br>WRC Ref: 4500/0035<br>BGS Ref: Not Supplied<br>Other Ref: TW 111 ST ST 039, TW 032 ST, ST 006 | A13SW (E) | 0 | 3 | 437189 563943 |
| 18 | **Historical Landfill Sites**<br>Licence Holder: Borough Of South Tyneside<br>Location: Temple Park, South Shield, Tyne and Wear<br>Name: Temple Park No.2<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD06275<br>First Input Date: 1st January 1950<br>Last Input Date: Not Supplied<br>Specified Waste Type: Deposited Waste included Inert, Industrial and Commercial Waste<br>EA Waste Ref: 0<br>Regis Ref: YO1/L/BOR016<br>WRC Ref: Not Supplied<br>BGS Ref: Not Supplied<br>Other Ref: TW 105 ST, TW 124 ST, ST 041, ST 037 | A13SW (E) | 0 | 3 | 437189 563943 |
| 19 | **Historical Landfill Sites**<br>Licence Holder: Not Supplied<br>Location: Nevinson Avenue, Whiteleas<br>Name: Temple Park No.3<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD06276<br>First Input Date: Not Supplied<br>Last Input Date: Not Supplied<br>Specified Waste Type: Deposited Waste included Industrial, Commercial and Household Waste<br>EA Waste Ref: 0<br>Regis Ref: Not Supplied<br>WRC Ref: Not Supplied<br>BGS Ref: Not Supplied<br>Other Ref: ST 019 | A13SW (E) | 0 | 3 | 437189 563943 |
| 20 | **Historical Landfill Sites**<br>Licence Holder: Not Supplied<br>Location: King George Road, South Shields, Tyne and Wear<br>Name: Temple Memorial Park<br>Operator Location: Not Supplied<br>Boundary Accuracy: As Supplied<br>Provider Reference: EAHLD31781<br>First Input Date: 31st August 1969<br>Last Input Date: 31st March 1971<br>Specified Waste Type: Deposited Waste included Inert, Industrial and Commercial Waste<br>EA Waste Ref: 0<br>Regis Ref: Not Supplied<br>WRC Ref: Not Supplied<br>BGS Ref: 303<br>Other Ref: Not Supplied | A8NE (S) | 374 | 3 | 437287 563464 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 21 | **Licensed Waste Management Facilities (Locations)**<br>Licence Number: 0<br>Location: Land On Temple Memorial Park, Adj To John Reid Road, South Shields, Tyne & Wear<br>Operator Name: Borough Of South Tyneside<br>Operator Location: Central Library Buildings, Catherine Street, South Shields, Tyne & Wear, NE33 2PE<br>Authority: Environment Agency - North East Region, Northumbria Area<br>Site Category: Household, Commercial And Industrial Waste Landfills<br>**Licence Status: Surrendered**<br>Issued: 5th October 1977<br>Last Modified: Not Supplied<br>Expires: Not Supplied<br>Suspended: Not Supplied<br>Revoked: Not Supplied<br>Surrendered: 31st October 1978<br>IPPC Reference: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m | A12SE (SW) | 353 | 3 | 436800 563700 |
| 21 | **Licensed Waste Management Facilities (Locations)**<br>Licence Number: 64444<br>Location: Land On Temple Memorial Park, Adj To John Reid Road, South Shields, Tyne & Wear<br>Operator Name: Borough Of South Tyneside<br>Operator Location: Not Supplied<br>Authority: Environment Agency - North East Region, North East Area<br>Site Category: Household, Commercial And Industrial Waste Landfills<br>**Licence Status: Surrendered**<br>Issued: 5th October 1977<br>Last Modified: Not Supplied<br>Expires: Not Supplied<br>Suspended: Not Supplied<br>Revoked: Not Supplied<br>Surrendered: 31st October 1978<br>IPPC Reference: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m | A12SE (SW) | 353 | 3 | 436800 563700 |
| 22 | **Licensed Waste Management Facilities (Locations)**<br>Licence Number: 67001<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, Tyne & Wear, NE34 OPL<br>Operator Name: South Tyneside Health Care Trust<br>Operator Location: Not Supplied<br>Authority: Environment Agency - North East Region, North East Area<br>Site Category: Clinical Waste Transfer Stations<br>**Licence Status: Surrendered**<br>Issued: 30th September 1992<br>Last Modified: 30th September 1992<br>Expires: Not Supplied<br>Suspended: Not Supplied<br>Revoked: Not Supplied<br>Surrendered: 7th September 1999<br>IPPC Reference: Not Supplied<br>Positional Accuracy: Located by supplier to within 100m | A17SE (NW) | 531 | 3 | 436700 564400 |
| | **Local Authority Landfill Coverage**<br>Name: South Tyneside Metropolitan Borough Council - Has no landfill data to supply | | 0 | 5 | 437189 563943 |
| 23 | **Potentially Infilled Land (Non-Water)**<br>Bearing Ref: W<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1987 | A12SW (W) | 629 | - | 436475 563924 |
| 24 | **Potentially Infilled Land (Non-Water)**<br>Bearing Ref: W<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1987 | A12SW (W) | 711 | - | 436415 563792 |
| 25 | **Potentially Infilled Land (Non-Water)**<br>Bearing Ref: SE<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1987 | A9NE (SE) | 799 | - | 437982 563463 |
| 26 | **Potentially Infilled Land (Non-Water)**<br>Bearing Ref: E<br>Use: Unknown Filled Ground (Pit, quarry etc)<br>Date of Mapping: 1987 | A15NW (E) | 997 | - | 438285 564005 |
| 27 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A13NE (E) | 0 | - | 437287 563964 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 28 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A13SE (SE) | 104 | - | 437377 563813 |
| 29 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1921 | A13SE (SE) | 124 | - | 437397 563810 |
| 30 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1921 | A18SE (N) | 275 | - | 437306 564327 |
| 31 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1921 | A14NW (E) | 405 | - | 437667 564131 |
| 32 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A8NE (S) | 405 | - | 437274 563433 |
| 33 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A12SE (W) | 432 | - | 436687 563853 |
| 34 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A8NE (S) | 472 | - | 437269 563365 |
| 35 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A8NE (S) | 543 | - | 437274 563294 |
| 36 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A18SW (N) | 546 | - | 437131 564604 |
| 37 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A9NW (SE) | 598 | - | 437579 563324 |
| 38 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A8SE (S) | 607 | - | 437278 563230 |
| 39 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A12SW (W) | 664 | - | 436466 563762 |
| 40 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1862 | A14NE (E) | 676 | - | 437964 563987 |
| 41 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A8SE (S) | 684 | - | 437389 563163 |
| 42 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A9SW (SE) | 693 | - | 437586 563220 |
| 43 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A8SW (S) | 748 | - | 437054 563080 |
| 44 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1921 | A18NE (N) | 753 | - | 437314 564813 |
| 45 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A7NW (SW) | 772 | - | 436432 563496 |
| 46 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A8SE (S) | 779 | - | 437287 563058 |
| 47 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A8SW (S) | 794 | - | 437052 563035 |
| 48 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1921 | A18NW (N) | 800 | - | 436978 564834 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 49 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1898 | A17SW (NW) | 849 | - | 436330 564418 |
| 50 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A8SW (S) | 859 | - | 437057 562969 |
| 51 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1862 | A18NW (N) | 873 | - | 436938 564901 |
| 52 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A8SE (S) | 885 | - | 437291 562952 |
| 53 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1921 | A23SE (N) | 918 | - | 437408 564965 |
| 54 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1898 | A17NE (NW) | 958 | - | 436697 564915 |
| 55 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1951 | A16SE (W) | 989 | - | 436145 564328 |
| 56 | **Potentially Infilled Land (Water)**<br>Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc)<br>Date of Mapping: 1938 | A22SE (NW) | 999 | - | 436753 564982 |
| 57 | **Registered Landfill Sites**<br>Licence Holder: South Tyneside B.C.<br>Licence Reference: TW 124 ST<br>Site Location: Temple Memorial Park, South Shields, Tyne And Wear<br>Licence Easting: 437000<br>Licence Northing: 563700<br>Operator Location: Town Hall, South Shields, Tyne And Wear<br>Authority: Environment Agency - North East Region, Northumbria Area<br>Site Category: Landfill<br>Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year)<br>Waste Source Restrictions: No known restriction on source of waste<br>Status: Licence known to be surrenderedSurrendered<br>Dated: 19th April 1984<br>Preceded By Licence: Not Given<br>Superseded By Licence: Not Given<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: Tyne And Wear C, Renfrew C *<br>Tyne And Wear D I, Renfrew D I, *<br>Tyne And Wear D Ii, Renfrew D Ii, *<br>Tyne And Wear E, Renfrew E *<br>Environment Agency must give specific authorisation for this waste to be acceptedWaste requires prior approval: Waste N.O.S | A13SW (SW) | 181 | 3 | 437000 563700 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 57 | **Registered Landfill Sites**<br>Licence Holder: South Tyneside B.C.<br>Licence Reference: TW 111 ST<br>Site Location: Temple Memorial Park, South Shields, Tyne And Wear<br>Licence Easting: 437000<br>Licence Northing: 563700<br>Operator Location: Town Hall, South Shields, Tyne And Wear<br>Authority: Environment Agency - North East Region, Northumbria Area<br>Site Category: Landfill<br>Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year)<br>Waste Source Restrictions: No known restriction on source of waste<br>Status: Licence known to be surrenderedSurrendered<br>Dated: 21st September 1983<br>Preceded By Licence: Not Given<br>Superseded By Licence: Not Given<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: Inert Non-Soluble Waste<br>Rock From Excavated Clay Stratum<br>Tyne And Wear C, Renfrew C *<br>Tyne And Wear D I, Renfrew D I, *<br>Tyne And Wear D Ii, Renfrew D Ii *<br>Tyne And Wear E, Renfrew E, * | A13SW (SW) | 181 | 3 | 437000 563700 |
| 57 | **Registered Landfill Sites**<br>Licence Holder: Borough Of South Tyneside<br>Licence Reference: TW 105 ST<br>Site Location: Temple Memorial Park, South Shields, Tyne And Wear<br>Licence Easting: 437000<br>Licence Northing: 563700<br>Operator Location: As Site Address<br>Authority: Environment Agency - North East Region, Northumbria Area<br>Site Category: Landfill<br>Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year)<br>Waste Source Restrictions: No known restriction on source of waste<br>Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled<br>Dated: 1st February 1983<br>Preceded By Licence: Not Given<br>Superseded By Licence: Not Given<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: Max.Waste Permitted By Licence-Stated<br>Rock<br>Tyne And Wear C -Rubble *<br>Tyne And Wear Di -Coh.Inorg *<br>Tyne And Wear Dii -Coh.Inorg *<br>Tyne And Wear E -Frict.Inorg * | A13SW (SW) | 181 | 3 | 437000 563700 |
| 57 | **Registered Landfill Sites**<br>Licence Holder: Borough Of South Tyneside<br>Licence Reference: TW 32 ST<br>Site Location: Temple Memorial Park, South Shields, Tyne And Wear<br>Licence Easting: 437000<br>Licence Northing: 563700<br>Operator Location: As Site Address<br>Authority: Environment Agency - North East Region, Northumbria Area<br>Site Category: Landfill<br>Max Input Rate: Undefined<br>Waste Source Restrictions: No known restriction on source of waste<br>Status: Licence known to be surrenderedSurrendered<br>Dated: 5th October 1977<br>Preceded By Licence: Not Given<br>Superseded By Licence: Not Given<br>Positional Accuracy: Manually positioned to the address or location<br>Boundary Accuracy: Not Applicable<br>Authorised Waste: Tyne & Wear B.-Dom/Com/Ind. *<br>Tyne And Wear C -Rubble *<br>Tyne And Wear Di -Coh.Inorg *<br>Tyne And Wear Dii -Coh.Inorg *<br>Tyne And Wear E -Frict.Inorg *<br>Prohibited Waste: Putrescible Waste | A13SW (SW) | 181 | 3 | 437000 563700 |

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|---|---|---|---|---|---|
| 58 | **Registered Waste Transfer Sites**<br>Licence Holder: South Tyneside Health Care Trust<br>Licence Reference: TW 262 ST<br>Site Location: South Tyneside District Hospital, Harton Lane, SOUTH SHIELDS, Tyne and Wear, NE34 0PL<br>Operator Location: As Site Address<br>Authority: Environment Agency - North East Region, Northumbria Area<br>Site Category: Transfer<br>Max Input Rate: Very Small (Less than 10,000 tonnes per year)<br>Waste Source Restrictions: No known restriction on source of waste<br>Licence Status: Licence has completion certificateSurrendered<br>Dated: 1st October 1991<br>Preceded By Licence: Not Given<br>Superseded By Licence: Not Given<br>Positional Accuracy: Approximate location provided by supplier<br>Boundary Quality: Not Supplied<br>Authorised Waste: Clinical - As In Coll/Disp.Regs Of '88<br>Gen. Hosp./Dom./House'D On-Site Waste<br>Max.Waste Normally Less Than<br>Surplus Pharmaceutical Products<br>Prohibited Waste: Waste N.O.S. | A17SE (NW) | 531 | 3 | 436700<br>564400 |

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| | **BGS 1:625,000 Solid Geology**<br>Description: Pennine Middle Coal Measures Formation And South Wales Middle Coal Measures Formation (Undifferentiated) | A13SW (E) | 0 | 1 | 437189 563943 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 90 - 120 mg/kg<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A13SW (E) | 0 | 1 | 437189 563943 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 60 - 90 mg/kg<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A13NW (NW) | 98 | 1 | 437085 564148 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 60 - 90 mg/kg<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel Concentration: 30 - 45 mg/kg | A13NE (NE) | 229 | 1 | 437487 564101 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: 15 - 25 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 60 - 90 mg/kg<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A14SW (SE) | 324 | 1 | 437576 563716 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 60 - 90 mg/kg<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A14SW (E) | 405 | 1 | 437686 563884 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 90 - 120 mg/kg<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A18SW (N) | 445 | 1 | 437083 564493 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
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| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 90 - 120 mg/kg<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A18SW (N) | 458 | 1 | 437168 564520 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 60 - 90 mg/kg<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A14NW (NE) | 463 | 1 | 437714 564169 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 60 - 90 mg/kg<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel Concentration: 30 - 45 mg/kg | A12NE (W) | 464 | 1 | 436629 564067 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 60 - 90 mg/kg<br>Lead Concentration: <100 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A12SW (W) | 592 | 1 | 436500 563943 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 60 - 90 mg/kg<br>Lead Concentration: <100 mg/kg<br>Nickel Concentration: 30 - 45 mg/kg | A12NW (W) | 600 | 1 | 436500 564138 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 60 - 90 mg/kg<br>Lead Concentration: <100 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A12NW (W) | 607 | 1 | 436500 564177 |

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| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 90 - 120 mg/kg<br>Lead Concentration: <100 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A12SW (W) | 613 | 1 | 436487 563942 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: 15 - 25 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 60 - 90 mg/kg<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A19SW (NE) | 627 | 1 | 437751 564412 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 90 - 120 mg/kg<br>Lead Concentration: <100 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A12SW (W) | 697 | 1 | 436434 563753 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 60 - 90 mg/kg<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A18NE (N) | 713 | 1 | 437440 564744 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 90 - 120 mg/kg<br>Lead Concentration: <100 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A12NW (W) | 724 | 1 | 436366 564108 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 60 - 90 mg/kg<br>Lead Concentration: <100 mg/kg<br>Nickel Concentration: 30 - 45 mg/kg | A12SW (W) | 921 | 1 | 436220 563686 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 60 - 90 mg/kg<br>Lead Concentration: 100 - 200 mg/kg<br>Nickel Concentration: 30 - 45 mg/kg | A23SW (N) | 952 | 1 | 437116 565012 |
| | **BGS Estimated Soil Chemistry**<br>Source: British Geological Survey, National Geoscience Information Service<br>Soil Sample Type: Sediment<br>Arsenic Concentration: <15 mg/kg<br>Cadmium Concentration: <1.8 mg/kg<br>Chromium Concentration: 90 - 120 mg/kg<br>Lead Concentration: <100 mg/kg<br>Nickel Concentration: 15 - 30 mg/kg | A7SW (SW) | 957 | 1 | 436500 563105 |
| 59 | **BGS Recorded Mineral Sites**<br>Site Name: Harton Colliery New Pit<br>Location: , South Shields, Co. Durham<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 233605<br>Type: Underground<br>**Status: Ceased**<br>Operator: Not Supplied<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Middle Coal Measures Formation<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A12NW (W) | 670 | 1 | 436426 563974 |
| 60 | **BGS Recorded Mineral Sites**<br>Site Name: West Harton Brick Works<br>Location: , West Harton, South Shields, Tyne & Wear<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 99021<br>Type: Opencast<br>**Status: Ceased**<br>Operator: Not Supplied<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Middle Coal Measures Formation<br>Commodity: Common Clay and Shale<br>Positional Accuracy: Located by supplier to within 10m | A12SW (W) | 802 | 1 | 436339 563693 |
| 61 | **BGS Recorded Mineral Sites**<br>Site Name: Cleadon Laws<br>Location: , Cleadon, South Shields, Tyne & Wear<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 99008<br>Type: Opencast<br>**Status: Ceased**<br>Operator: Not Supplied<br>Operator Location: Not Supplied<br>Periodic Type: Permian<br>Geology: Roker Formation (Upper Magnesian Limestone)<br>Commodity: Dolomite<br>Positional Accuracy: Located by supplier to within 10m | A9NE (SE) | 808 | 1 | 437989 563458 |
| 62 | **BGS Recorded Mineral Sites**<br>Site Name: West Harton Brick Works<br>Location: , South Shields, Co. Durham<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 233610<br>Type: Opencast<br>**Status: Ceased**<br>Operator: Not Supplied<br>Operator Location: Not Supplied<br>Periodic Type: Quaternary, Devensian<br>Geology: Pelaw Clay Member<br>Commodity: Common Clay and Shale<br>Positional Accuracy: Located by supplier to within 10m | A7NW (SW) | 828 | 1 | 436343 563569 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
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| 63 | **BGS Recorded Mineral Sites**<br>Site Name: Harton Colliery Old Pit<br>Location: , South Shields, Co. Durham<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 233604<br>Type: Underground<br>**Status: Ceased**<br>Operator: Not Supplied<br>Operator Location: Not Supplied<br>Periodic Type: Carboniferous<br>Geology: Pennine Middle Coal Measures Formation<br>Commodity: Coal - Deep<br>Positional Accuracy: Located by supplier to within 10m | A12NW (W) | 918 | 1 | 436179 564138 |
| 64 | **BGS Recorded Mineral Sites**<br>Site Name: Cleadon Park<br>Location: , Cleadon, South Shields, Tyne & Wear<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 99006<br>Type: Opencast<br>**Status: Ceased**<br>Operator: Not Supplied<br>Operator Location: Not Supplied<br>Periodic Type: Permian<br>Geology: Roker Formation (Upper Magnesian Limestone)<br>Commodity: Dolomite<br>Positional Accuracy: Located by supplier to within 10m | A15SW (E) | 974 | 1 | 438231 563644 |
| 65 | **BGS Recorded Mineral Sites**<br>Site Name: Cleadon Park<br>Location: , Cleadon, South Shields, Tyne & Wear<br>Source: British Geological Survey, National Geoscience Information Service<br>Reference: 99005<br>Type: Opencast<br>**Status: Ceased**<br>Operator: Not Supplied<br>Operator Location: Not Supplied<br>Periodic Type: Permian<br>Geology: Roker Formation (Upper Magnesian Limestone)<br>Commodity: Dolomite<br>Positional Accuracy: Located by supplier to within 10m | A15NW (E) | 986 | 1 | 438274 563990 |
| | **BGS Measured Urban Soil Chemistry**<br>No data available | | | | |
| | **BGS Urban Soil Chemistry Averages**<br>No data available | | | | |
| | **Coal Mining Affected Areas**<br>Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report. | A13SW (E) | 0 | 6 | 437189 563943 |
| | **Mining Instability**<br>Mining Evidence: Inconclusive Coal Mining<br>Source: Ove Arup & Partners<br>Boundary Quality: As Supplied | A13SW (E) | 0 | - | 437189 563943 |
| | **Non Coal Mining Areas of Great Britain**<br>No Hazard | | | | |
| | **Potential for Collapsible Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A13SW (E) | 0 | 1 | 437189 563943 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A13SW (E) | 0 | 1 | 437189 563943 |
| | **Potential for Compressible Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A13NW (NW) | 98 | 1 | 437085 564148 |
| | **Potential for Ground Dissolution Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A13SW (E) | 0 | 1 | 437189 563943 |
| | **Potential for Landslide Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A13SW (E) | 0 | 1 | 437189 563943 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
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| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: Very Low<br>Source: British Geological Survey, National Geoscience Information Service | A13SW (E) | 0 | 1 | 437189 563943 |
| | **Potential for Running Sand Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A13NW (NW) | 98 | 1 | 437085 564148 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: No Hazard<br>Source: British Geological Survey, National Geoscience Information Service | A13SW (E) | 0 | 1 | 437189 563943 |
| | **Potential for Shrinking or Swelling Clay Ground Stability Hazards**<br>Hazard Potential: Low<br>Source: British Geological Survey, National Geoscience Information Service | A13NW (NW) | 98 | 1 | 437085 564148 |
| | **Radon Potential - Radon Affected Areas**<br>Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level).<br>Source: British Geological Survey, National Geoscience Information Service | A13SW (E) | 0 | 1 | 437189 563943 |
| | **Radon Potential - Radon Protection Measures**<br>Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions<br>Source: British Geological Survey, National Geoscience Information Service | A13SW (E) | 0 | 1 | 437189 563943 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 66 | **Contemporary Trade Directory Entries**<br>Name: Sparkling Sandancers<br>Location: 24, Bramham Court, South Shields, NE34 0HP<br>Classification: Cleaning Services - Domestic<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | A18SE (N) | 229 | - | 437194 564293 |
| 67 | **Contemporary Trade Directory Entries**<br>Name: Apollo Blinds<br>Location: 105, Prince Edward Road, South Shields, Tyne and Wear, NE34 8PJ<br>Classification: Blinds, Awnings & Canopies<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A19SW (NE) | 462 | - | 437614 564315 |
| 68 | **Contemporary Trade Directory Entries**<br>Name: Firstequine<br>Location: Tarragon Way, South Shields, Tyne And Wear, NE34 8TA<br>Classification: Horse Boxes & Transporting<br>**Status: Inactive**<br>Positional Accuracy: Manually positioned within the geographical locality | A8NW (S) | 483 | - | 436991 563362 |
| 69 | **Contemporary Trade Directory Entries**<br>Name: Kut Price Decorating<br>Location: 137-141, Prince Edward Road, South Shields, Tyne and Wear, NE34 8PJ<br>Classification: Painting & Decorating Supplies<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A19SW (NE) | 512 | - | 437673 564326 |
| 70 | **Contemporary Trade Directory Entries**<br>Name: South Tyneside District Hospital<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, Tyne and Wear, NE34 0PL<br>Classification: Hospitals<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A17SE (NW) | 558 | - | 436591 564288 |
| 70 | **Contemporary Trade Directory Entries**<br>Name: South Tyneside Nhs Foundation Trust<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, Tyne and Wear, NE34 0PL<br>Classification: Hospitals<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A17SE (NW) | 558 | - | 436591 564288 |
| 71 | **Contemporary Trade Directory Entries**<br>Name: Tech-Mo<br>Location: Unit 2, 254, Sunderland Road, South Shields, Tyne and Wear, NE34 6QY<br>Classification: Mobile Phone Accessories and Car Kits<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A19SW (NE) | 596 | - | 437798 564298 |
| 72 | **Contemporary Trade Directory Entries**<br>Name: K & J Cleaning Services<br>Location: 60, Hawthorne Avenue, South Shields, Tyne and Wear, NE34 8BD<br>Classification: Cleaning Services - Domestic<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | A14SE (SE) | 615 | - | 437865 563661 |
| 73 | **Contemporary Trade Directory Entries**<br>Name: G S Print<br>Location: 320, Sunderland Road, South Shields, Tyne and Wear, NE34 8BP<br>Classification: Printers<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A14SE (E) | 658 | - | 437937 563883 |
| 74 | **Contemporary Trade Directory Entries**<br>Name: Richard Pollard<br>Location: 291, Sunderland Road, South Shields, Tyne and Wear, NE34 6RB<br>Classification: Cleaning Services - Domestic<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A19SW (NE) | 665 | - | 437847 564349 |
| 75 | **Contemporary Trade Directory Entries**<br>Name: Quickshift Rubbish Removals<br>Location: 354, Sunderland Road, South Shields, Tyne and Wear, NE34 8BP<br>Classification: Waste Disposal Services<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A14SE (E) | 701 | - | 437970 563733 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 75 | **Contemporary Trade Directory Entries**<br>Name: Ideal Cleaning Services<br>Location: 354, Sunderland Road, South Shields, Tyne and Wear, NE34 8BP<br>Classification: Cleaning Services - Domestic<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | A14SE (E) | 701 | - | 437970 563733 |
| 76 | **Contemporary Trade Directory Entries**<br>Name: Sunlight Services Ltd<br>Location: 303, Prince Edward Road, South Shields, Tyne and Wear, NE34 7LZ<br>Classification: Dry Cleaners<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned in the proximity of the address | A19SE (NE) | 782 | - | 437987 564338 |
| 77 | **Contemporary Trade Directory Entries**<br>Name: Morpeth Mobiles<br>Location: Harton Centre,52 Harton Lane, South Shields, Tyne And Wear, NE34 0EE<br>Classification: Mobile Phone Accessories and Car Kits<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | A18NW (N) | 785 | - | 437024 564827 |
| 78 | **Contemporary Trade Directory Entries**<br>Name: Rae'S Cleaning Services<br>Location: 82, Nora Street, South Shields, Tyne and Wear, NE34 0RB<br>Classification: Carpet, Curtain & Upholstery Cleaners<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A17SW (NW) | 807 | - | 436398 564455 |
| 79 | **Contemporary Trade Directory Entries**<br>Name: Mowbray Fabrications<br>Location: 6, Oak Avenue, South Shields, Tyne and Wear, NE34 7PB<br>Classification: Metal Products - Fabricated<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | A14NE (E) | 828 | - | 438106 564114 |
| 80 | **Contemporary Trade Directory Entries**<br>Name: All Clean<br>Location: 98, St. Marys Avenue, South Shields, Tyne and Wear, NE34 6AG<br>Classification: Cleaning Services - Commercial<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A19NW (NE) | 866 | - | 437796 564713 |
| 81 | **Contemporary Trade Directory Entries**<br>Name: L Minchella Ltd<br>Location: 363-365, Prince Edward Road, South Shields, Tyne and Wear, NE34 7LZ<br>Classification: Ice Cream Manufacturers & Suppliers<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A19SE (NE) | 879 | - | 438077 564375 |
| 82 | **Contemporary Trade Directory Entries**<br>Name: Moor Lane Service Station<br>Location: 10, Moor Lane, South Shields, NE34 6BZ<br>Classification: Petrol Filling Stations<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | A19NW (N) | 904 | - | 437562 564903 |
| 82 | **Contemporary Trade Directory Entries**<br>Name: Village Car Centre<br>Location: 10, Moor Lane, South Shields, Tyne and Wear, NE34 6BZ<br>Classification: Car Dealers<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A19NW (N) | 904 | - | 437562 564903 |
| 82 | **Contemporary Trade Directory Entries**<br>Name: Village Car Centre<br>Location: 10, Moor Lane, South Shields, NE34 6BZ<br>Classification: Car Dealers - Used<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | A19NW (N) | 917 | - | 437575 564912 |
| 82 | **Contemporary Trade Directory Entries**<br>Name: G & B Garages Ltd<br>Location: 12, Moor Lane, South Shields, Tyne and Wear, NE34 6BZ<br>Classification: Petrol Filling Stations<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A19NW (NE) | 929 | - | 437596 564916 |
| 82 | **Contemporary Trade Directory Entries**<br>Name: Village Car Centre<br>Location: 12, Moor Lane, South Shields, Tyne and Wear, NE34 6BZ<br>Classification: Car Dealers<br>**Status: Inactive**<br>Positional Accuracy: Manually positioned to the address or location | A19NW (NE) | 929 | - | 437596 564916 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
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| 82 | **Contemporary Trade Directory Entries**<br>Name: Posh Wosh<br>Location: 168, Sunderland Road, South Shields, Tyne and Wear, NE34 6AB<br>Classification: Laundries & Launderettes<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | A19NW (NE) | 950 | - | 437625 564926 |
| 83 | **Contemporary Trade Directory Entries**<br>Name: D E M<br>Location: 134, Prince Edward Road, South Shields, Tyne and Wear, NE34 7PJ<br>Classification: Swimming Pool Contractors, Repairers & Service<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A19SE (E) | 930 | - | 438153 564330 |
| 83 | **Contemporary Trade Directory Entries**<br>Name: Mandel Chokes<br>Location: 134, Prince Edward Road, South Shields, Tyne and Wear, NE34 7PJ<br>Classification: Gunsmiths<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | A19SE (E) | 930 | - | 438153 564330 |
| 84 | **Contemporary Trade Directory Entries**<br>Name: Harton Garage<br>Location: 183, Sunderland Road, South Shields, NE34 6AQ<br>Classification: Garage Services<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | A19NW (NE) | 941 | - | 437669 564894 |
| 84 | **Contemporary Trade Directory Entries**<br>Name: Northern Flame<br>Location: 177a, Sunderland Road, South Shields, Tyne and Wear, NE34 6AD<br>Classification: Woodburning Stoves<br>**Status: Active**<br>Positional Accuracy: Automatically positioned to the address | A19NW (NE) | 959 | - | 437664 564917 |
| 84 | **Contemporary Trade Directory Entries**<br>Name: Home Flame Heating<br>Location: 169, Sunderland Road, South Shields, Tyne and Wear, NE34 6AD<br>Classification: Fireplaces & Mantelpieces<br>**Status: Inactive**<br>Positional Accuracy: Automatically positioned to the address | A19NW (NE) | 979 | - | 437661 564941 |
| 85 | **Fuel Station Entries**<br>Name: Ridgeway Service Station<br>Location: King George Road, Harton, South Shields, Tyne & Wear, NE34 8AQ<br>Brand: Jet<br>Premises Type: Petrol Station<br>**Status: Open**<br>Positional Accuracy: Manually positioned to the address or location | A9NW (SE) | 619 | - | 437662 563356 |
| 86 | **Fuel Station Entries**<br>Name: Moor Lane Filling Station<br>Location: 8-10 Moor Lane, Harton, South Shields, Tyne & Wear, NE34 6BZ<br>Brand: Gulf<br>Premises Type: Petrol Station<br>**Status: Open**<br>Positional Accuracy: Manually positioned to the address or location | A19NW (N) | 904 | - | 437562 564903 |
| 87 | **Points of Interest - Commercial Services**<br>Name: Ridgeway Service Station<br>Location: King George Road, Harton, South Shields, Tyne & Wear, NE34 8AQ<br>Category: Personal, Consumer and other Services<br>Class Code: Vehicle Cleaning Services<br>Positional Accuracy: Positioned to address or location | A9NW (SE) | 619 | 7 | 437662 563356 |
| 87 | **Points of Interest - Commercial Services**<br>Name: Car Wash<br>Location: King George Road, Harton, South Shields, Tyne & Wear, NE34 8AQ<br>Category: Personal, Consumer and other Services<br>Class Code: Vehicle Cleaning Services<br>Positional Accuracy: Positioned to address or location | A9NW (SE) | 619 | 7 | 437662 563356 |
| 88 | **Points of Interest - Commercial Services**<br>Name: P Dent Transport<br>Location: 68 Nora Street, South Shields, NE34 0RB<br>Category: Transport, Storage and Delivery<br>Class Code: Distribution and Haulage<br>Positional Accuracy: Positioned to address or location | A17SW (NW) | 798 | 7 | 436415 564464 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
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| 89 | **Points of Interest - Commercial Services**<br>Name: Mobile Car Spa<br>Location: 17 Whiteleas Way, South Shields, NE34 8LJ<br>Category: Personal, Consumer and other Services<br>Class Code: Vehicle Cleaning Services<br>Positional Accuracy: Positioned to address or location | A7NW (SW) | 892 | 7 | 436333 563426 |
| 90 | **Points of Interest - Commercial Services**<br>Name: Harton Garage<br>Location: 183 Sunderland Road, South Shields, NE34 6AQ<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location | A19NW (NE) | 958 | 7 | 437689 564902 |
| 90 | **Points of Interest - Commercial Services**<br>Name: Harton Garage<br>Location: 183 Sunderland Road, South Shields, NE34 6AQ<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location | A19NW (NE) | 959 | 7 | 437689 564903 |
| 91 | **Points of Interest - Commercial Services**<br>Name: Armstrong Auto Services<br>Location: 25 Strathmore Gardens, South Shields, NE34 0LH<br>Category: Repair and Servicing<br>Class Code: Vehicle Repair, Testing and Servicing<br>Positional Accuracy: Positioned to address or location | A11NE (W) | 965 | 7 | 436131 563952 |
| 92 | **Points of Interest - Education and Health**<br>Name: South Tyneside District Hospital<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, NE34 0PL<br>Category: Health Practitioners and Establishments<br>Class Code: Accident & Emergency Department<br>Positional Accuracy: Positioned to address or location | A12NE (NW) | 403 | 7 | 436740 564238 |
| 93 | **Points of Interest - Education and Health**<br>Name: Brinkburn Day Hospital<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, NE34 0PL<br>Category: Health Practitioners and Establishments<br>Class Code: Hospitals<br>Positional Accuracy: Positioned to address or location | A12NE (NW) | 502 | 7 | 436629 564236 |
| 93 | **Points of Interest - Education and Health**<br>Name: South Tyneside District Hospital<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, NE34 0PL<br>Category: Health Practitioners and Establishments<br>Class Code: Hospitals<br>Positional Accuracy: Positioned to address or location | A17SE (NW) | 558 | 7 | 436591 564288 |
| 93 | **Points of Interest - Education and Health**<br>Name: Harton Wing<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, NE34 0PL<br>Category: Health Practitioners and Establishments<br>Class Code: Hospitals<br>Positional Accuracy: Positioned to address or location | A17SE (NW) | 558 | 7 | 436591 564288 |
| 93 | **Points of Interest - Education and Health**<br>Name: South Tyneside District Hospital<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, NE34 0PL<br>Category: Health Practitioners and Establishments<br>Class Code: Accident & Emergency Department<br>Positional Accuracy: Positioned to address or location | A17SE (NW) | 558 | 7 | 436591 564288 |
| 93 | **Points of Interest - Education and Health**<br>Name: South Tyneside District Hospital<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, NE34 0PL<br>Category: Health Practitioners and Establishments<br>Class Code: Hospitals<br>Positional Accuracy: Positioned to address or location | A17SE (NW) | 558 | 7 | 436591 564288 |
| 93 | **Points of Interest - Education and Health**<br>Name: South Tyneside District Hospital<br>Location: South Tyneside District Hospital, Harton Lane, South Shields, NE34 0PL<br>Category: Health Practitioners and Establishments<br>Class Code: Hospitals<br>Positional Accuracy: Positioned to address or location | A17SE (NW) | 559 | 7 | 436590 564287 |
| 94 | **Points of Interest - Manufacturing and Production**<br>Name: Tank<br>Location: NE34<br>Category: Industrial Features<br>Class Code: Tanks (Generic)<br>Positional Accuracy: Positioned to an adjacent address or location | A12NE (W) | 322 | 7 | 436773 564085 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 95 | **Points of Interest - Manufacturing and Production**<br>Name: Tank<br>Location: NE34<br>Category: Industrial Features<br>Class Code: Tanks (Generic)<br>Positional Accuracy: Positioned to an adjacent address or location | A17SE (NW) | 500 | 7 | 436710 564365 |
| 96 | **Points of Interest - Manufacturing and Production**<br>Name: Works<br>Location: Not Supplied<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to an adjacent address or location | A18NW (N) | 779 | 7 | 437025 564821 |
| 96 | **Points of Interest - Manufacturing and Production**<br>Name: Works<br>Location: NE34<br>Category: Industrial Features<br>Class Code: Unspecified Works Or Factories<br>Positional Accuracy: Positioned to an adjacent address or location | A18NW (N) | 779 | 7 | 437025 564821 |
| 97 | **Points of Interest - Public Infrastructure**<br>Name: South Shields Community Fire Station<br>Location: John Reid Road, South Shields, NE34 8FS<br>Category: Central and Local Government<br>Class Code: Fire Brigade Stations<br>Positional Accuracy: Positioned to address or location | A12NE (W) | 294 | 7 | 436808 563958 |
| 97 | **Points of Interest - Public Infrastructure**<br>Name: Fire South Shields Tyne & Wear Fire Rescue Service Fire Stations<br>Location: John Reid Road, Fire Station, South Shields, Tyne And Wear, NE34 8FS<br>Category: Central and Local Government<br>Class Code: Fire Brigade Stations<br>Positional Accuracy: Positioned to address or location | A12NE (W) | 294 | 7 | 436808 563958 |
| 97 | **Points of Interest - Public Infrastructure**<br>Name: South Tyneside East Community Fire Station<br>Location: South Shields Fire Station, John Reid Road, South Shields, NE34 8FS<br>Category: Central and Local Government<br>Class Code: Fire Brigade Stations<br>Positional Accuracy: Positioned to address or location | A12NE (W) | 296 | 7 | 436807 563957 |
| 98 | **Points of Interest - Public Infrastructure**<br>Name: Murco Ridgeway Fs641<br>Location: King George Road, South Shields, NE34 8AQ<br>Category: Road And Rail<br>Class Code: Petrol and Fuel Stations<br>Positional Accuracy: Positioned to address or location | A9NW (SE) | 552 | 7 | 437636 563420 |
| 98 | **Points of Interest - Public Infrastructure**<br>Name: Murco Petroleum<br>Location: Ridgeway Service Station, King George Road, South Shields, NE34 8AQ<br>Category: Road And Rail<br>Class Code: Petrol and Fuel Stations<br>Positional Accuracy: Positioned to address or location | A9NW (SE) | 619 | 7 | 437662 563356 |
| 98 | **Points of Interest - Public Infrastructure**<br>Name: Ridgeway Service Station<br>Location: King George Road, Harton, South Shields, Tyne & Wear, NE34 8AQ<br>Category: Road And Rail<br>Class Code: Petrol and Fuel Stations<br>Positional Accuracy: Positioned to address or location | A9NW (SE) | 619 | 7 | 437662 563356 |
| 99 | **Points of Interest - Public Infrastructure**<br>Name: Quickshift Rubbish Removals<br>Location: 354 Sunderland Road, South Shields, NE34 8BP<br>Category: Infrastructure and Facilities<br>Class Code: Waste Storage, Processing and Disposal<br>Positional Accuracy: Positioned to address or location | A14SE (E) | 701 | 7 | 437970 563733 |
| 100 | **Points of Interest - Public Infrastructure**<br>Name: Smh Fire & Safety Ltd<br>Location: 229 Sunderland Road, South Shields, NE34 6AL<br>Category: Central and Local Government<br>Class Code: Fire Brigade Stations<br>Positional Accuracy: Positioned to address or location | A19NW (NE) | 829 | 7 | 437752 564703 |
| 101 | **Points of Interest - Public Infrastructure**<br>Name: Moor Lane Service Station<br>Location: 10 Moor Lane, South Shields, NE34 6BZ<br>Category: Road And Rail<br>Class Code: Petrol and Fuel Stations<br>Positional Accuracy: Positioned to address or location | A19NW (N) | 903 | 7 | 437562 564902 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 101 | **Points of Interest - Public Infrastructure**<br>Name: Moor Lane Filling Station<br>Location: 8-10 Moor Lane, Harton, South Shields, Tyne & Wear, NE34 6BZ<br>Category: Road And Rail<br>Class Code: Petrol and Fuel Stations<br>Positional Accuracy: Positioned to address or location | A19NW (N) | 904 | 7 | 437562 564903 |
| 102 | **Points of Interest - Public Infrastructure**<br>Name: Harton Police Station<br>Location: Police Station 187-189, Sunderland Road, South Shields, NE34 6AQ<br>Category: Central and Local Government<br>Class Code: Police Stations<br>Positional Accuracy: Positioned to address or location | A19NW (NE) | 924 | 7 | 437681 564867 |
| 103 | **Points of Interest - Recreational and Environmental**<br>Name: Playground<br>Location: Not Supplied<br>Category: Recreational<br>Class Code: Playgrounds<br>Positional Accuracy: Positioned to an adjacent address or location | A13NE (NE) | 28 | 7 | 437310 564005 |
| 103 | **Points of Interest - Recreational and Environmental**<br>Name: Playground<br>Location: Nr King George Road, NE34<br>Category: Recreational<br>Class Code: Playgrounds<br>Positional Accuracy: Positioned to address or location | A13NE (E) | 38 | 7 | 437321 563970 |
| 103 | **Points of Interest - Recreational and Environmental**<br>Name: Playground<br>Location: Not Supplied<br>Category: Recreational<br>Class Code: Playgrounds<br>Positional Accuracy: Positioned to an adjacent address or location | A13NE (E) | 41 | 7 | 437324 563969 |
| 104 | **Points of Interest - Recreational and Environmental**<br>Name: Playground<br>Location: Sunderland Road, NE34<br>Category: Recreational<br>Class Code: Playgrounds<br>Positional Accuracy: Positioned to address or location | A14SE (E) | 699 | 7 | 437984 563931 |
| 105 | **Points of Interest - Recreational and Environmental**<br>Name: Playground<br>Location: Not Supplied<br>Category: Recreational<br>Class Code: Playgrounds<br>Positional Accuracy: Positioned to an adjacent address or location | A22SE (N) | 965 | 7 | 436794 564960 |
| 105 | **Points of Interest - Recreational and Environmental**<br>Name: Playground<br>Location: Temple Park Road, NE34<br>Category: Recreational<br>Class Code: Playgrounds<br>Positional Accuracy: Positioned to address or location | A22SE (NW) | 989 | 7 | 436755 564972 |
| 105 | **Points of Interest - Recreational and Environmental**<br>Name: Playground<br>Location: Not Supplied<br>Category: Recreational<br>Class Code: Playgrounds<br>Positional Accuracy: Positioned to an adjacent address or location | A22SE (N) | 1000 | 7 | 436764 564987 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|---|---|---|---|---|---|
| 106 | **Areas of Adopted Green Belt**<br>Authority: South Tyneside Metropolitan Borough Council, Planning Department<br>Plan Name: Core Strategy<br>**Status: Adopted**<br>Plan Date: 30th June 2007 | A8SE (S) | 583 | 5 | 437305 563257 |

| Agency & Hydrological | Version | Update Cycle |
|---|---|---|
| **Contaminated Land Register Entries and Notices** | | |
| South Tyneside Metropolitan Borough Council - Neighbourhood Services | December 2014 | Annual Rolling Update |
| Gateshead Metropolitan Borough Council - Environmental Health Department | July 2013 | Annual Rolling Update |
| North Tyneside Metropolitan Borough Council - Environmental Health Department | March 2015 | Annual Rolling Update |
| Sunderland City Metropolitan Borough Council - Environmental Health Department | March 2015 | Annually |
| **Discharge Consents** | | |
| Environment Agency - North East Region | July 2017 | Quarterly |
| **Enforcement and Prohibition Notices** | | |
| Environment Agency - North East Region | March 2013 | As notified |
| **Integrated Pollution Controls** | | |
| Environment Agency - North East Region | October 2008 | Not Applicable |
| **Integrated Pollution Prevention And Control** | | |
| Environment Agency - North East Region | July 2017 | Quarterly |
| **Local Authority Integrated Pollution Prevention And Control** | | |
| North Tyneside Metropolitan Borough Council - Environmental Health Department | April 2014 | Annual Rolling Update |
| Gateshead Metropolitan Borough Council - Environmental Health Department | February 2013 | Annual Rolling Update |
| Sunderland City Metropolitan Borough Council - Environmental Health Department | May 2016 | Annual Rolling Update |
| South Tyneside Metropolitan Borough Council - Environmental Health Department | September 2012 | Annual Rolling Update |
| **Local Authority Pollution Prevention and Controls** | | |
| North Tyneside Metropolitan Borough Council - Environmental Health Department | April 2014 | Annual Rolling Update |
| Sunderland City Metropolitan Borough Council - Environmental Health Department | May 2016 | Annual Rolling Update |
| Gateshead Metropolitan Borough Council - Environmental Health Department | October 2014 | Annual Rolling Update |
| South Tyneside Metropolitan Borough Council - Environmental Health Department | September 2012 | Annual Rolling Update |
| **Local Authority Pollution Prevention and Control Enforcements** | | |
| North Tyneside Metropolitan Borough Council - Environmental Health Department | April 2014 | Annual Rolling Update |
| Sunderland City Metropolitan Borough Council - Environmental Health Department | May 2016 | Annual Rolling Update |
| Gateshead Metropolitan Borough Council - Environmental Health Department | October 2014 | Annual Rolling Update |
| South Tyneside Metropolitan Borough Council - Environmental Health Department | September 2012 | Annual Rolling Update |
| **Nearest Surface Water Feature** | | |
| Ordnance Survey | May 2017 | |
| **Pollution Incidents to Controlled Waters** | | |
| Environment Agency - North East Region | December 1998 | Not Applicable |
| **Prosecutions Relating to Authorised Processes** | | |
| Environment Agency - North East Region | March 2013 | As notified |
| **Prosecutions Relating to Controlled Waters** | | |
| Environment Agency - North East Region | March 2013 | As notified |
| **Registered Radioactive Substances** | | |
| Environment Agency - North East Region | January 2015 | |
| **River Quality** | | |
| Environment Agency - Head Office | November 2001 | Not Applicable |
| **River Quality Biology Sampling Points** | | |
| Environment Agency - Head Office | July 2012 | Annually |
| **River Quality Chemistry Sampling Points** | | |
| Environment Agency - Head Office | July 2012 | Annually |
| **Substantiated Pollution Incident Register** | | |
| Environment Agency - North East Region - North East Area | July 2017 | Quarterly |
| Environment Agency - North East Region - Northumbria Area | July 2017 | Quarterly |
| **Water Abstractions** | | |
| Environment Agency - North East Region | July 2017 | Quarterly |
| **Water Industry Act Referrals** | | |
| Environment Agency - North East Region | July 2017 | Quarterly |

| Agency & Hydrological | Version | Update Cycle |
|---|---|---|
| **Groundwater Vulnerability**<br>Environment Agency - Head Office | April 2015 | Not Applicable |
| **Drift Deposits**<br>Environment Agency - Head Office | January 1999 | Not Applicable |
| **Bedrock Aquifer Designations**<br>British Geological Survey - National Geoscience Information Service | August 2015 | As notified |
| **Superficial Aquifer Designations**<br>British Geological Survey - National Geoscience Information Service | August 2015 | As notified |
| **Source Protection Zones**<br>Environment Agency - Head Office | July 2017 | Quarterly |
| **Extreme Flooding from Rivers or Sea without Defences**<br>Environment Agency - Head Office | August 2017 | Quarterly |
| **Flooding from Rivers or Sea without Defences**<br>Environment Agency - Head Office | August 2017 | Quarterly |
| **Areas Benefiting from Flood Defences**<br>Environment Agency - Head Office | August 2017 | Quarterly |
| **Flood Water Storage Areas**<br>Environment Agency - Head Office | August 2017 | Quarterly |
| **Flood Defences**<br>Environment Agency - Head Office | August 2017 | Quarterly |
| **OS Water Network Lines**<br>Ordnance Survey | July 2017 | 6 Weekly |
| **Surface Water 1 in 30 year Flood Extent**<br>Environment Agency - Head Office | October 2013 | As notified |
| **Surface Water 1 in 100 year Flood Extent**<br>Environment Agency - Head Office | October 2013 | As notified |
| **Surface Water 1 in 1000 year Flood Extent**<br>Environment Agency - Head Office | October 2013 | As notified |
| **Surface Water Suitability**<br>Environment Agency - Head Office | October 2013 | As notified |
| **BGS Groundwater Flooding Susceptibility**<br>British Geological Survey - National Geoscience Information Service | May 2013 | Annually |

| Waste | Version | Update Cycle |
|---|---|---|
| **BGS Recorded Landfill Sites** | | |
| British Geological Survey - National Geoscience Information Service | June 1996 | Not Applicable |
| **Historical Landfill Sites** | | |
| Environment Agency - Head Office | May 2017 | Quarterly |
| **Integrated Pollution Control Registered Waste Sites** | | |
| Environment Agency - North East Region | October 2008 | Not Applicable |
| **Licensed Waste Management Facilities (Landfill Boundaries)** | | |
| Environment Agency - North East Region - North East Area | May 2017 | Quarterly |
| Environment Agency - North East Region - Northumbria Area | May 2017 | Quarterly |
| **Licensed Waste Management Facilities (Locations)** | | |
| Environment Agency - North East Region - North East Area | July 2017 | Quarterly |
| Environment Agency - North East Region - Northumbria Area | July 2017 | Quarterly |
| **Local Authority Landfill Coverage** | | |
| Gateshead Metropolitan Borough Council - Development Control | May 2000 | Not Applicable |
| North Tyneside Metropolitan Borough Council - Environmental Health Department | May 2000 | Not Applicable |
| South Tyneside Metropolitan Borough Council - Planning Department | May 2000 | Not Applicable |
| Sunderland City Metropolitan Borough Council - Environmental Health Department | May 2000 | Not Applicable |
| **Local Authority Recorded Landfill Sites** | | |
| Gateshead Metropolitan Borough Council - Development Control | May 2000 | Not Applicable |
| North Tyneside Metropolitan Borough Council - Environmental Health Department | May 2000 | Not Applicable |
| South Tyneside Metropolitan Borough Council - Planning Department | May 2000 | Not Applicable |
| Sunderland City Metropolitan Borough Council - Environmental Health Department | May 2000 | Not Applicable |
| **Potentially Infilled Land (Non-Water)** | | |
| Landmark Information Group Limited | December 1999 | Not Applicable |
| **Potentially Infilled Land (Water)** | | |
| Landmark Information Group Limited | December 1999 | Not Applicable |
| **Registered Landfill Sites** | | |
| Environment Agency - North East Region - North East Area | March 2003 | Not Applicable |
| Environment Agency - North East Region - Northumbria Area | March 2003 | Not Applicable |
| **Registered Waste Transfer Sites** | | |
| Environment Agency - North East Region - North East Area | March 2003 | Not Applicable |
| Environment Agency - North East Region - Northumbria Area | March 2003 | Not Applicable |
| **Registered Waste Treatment or Disposal Sites** | | |
| Environment Agency - North East Region - North East Area | March 2003 | Not Applicable |
| Environment Agency - North East Region - Northumbria Area | March 2003 | Not Applicable |

| Hazardous Substances | Version | Update Cycle |
|---|---|---|
| **Control of Major Accident Hazards Sites (COMAH)** | | |
| Health and Safety Executive | September 2017 | Bi-Annually |
| **Explosive Sites** | | |
| Health and Safety Executive | March 2017 | Bi-Annually |
| **Notification of Installations Handling Hazardous Substances (NIHHS)** | | |
| Health and Safety Executive | November 2000 | Not Applicable |
| **Planning Hazardous Substance Enforcements** | | |
| Gateshead Metropolitan Borough Council - Development Control | February 2016 | Annual Rolling Update |
| North Tyneside Metropolitan Borough Council - Development Function | February 2016 | Annual Rolling Update |
| South Tyneside Metropolitan Borough Council - Planning Department | February 2016 | Annual Rolling Update |
| Sunderland City Metropolitan Borough Council - Planning | February 2016 | Annual Rolling Update |
| **Planning Hazardous Substance Consents** | | |
| Gateshead Metropolitan Borough Council - Development Control | February 2016 | Annual Rolling Update |
| North Tyneside Metropolitan Borough Council - Development Function | February 2016 | Annual Rolling Update |
| South Tyneside Metropolitan Borough Council - Planning Department | February 2016 | Annual Rolling Update |
| Sunderland City Metropolitan Borough Council - Planning | February 2016 | Annual Rolling Update |

| Geological | Version | Update Cycle |
|---|---|---|
| **BGS 1:625,000 Solid Geology** | | |
| British Geological Survey - National Geoscience Information Service | January 2009 | Not Applicable |
| **BGS Estimated Soil Chemistry** | | |
| British Geological Survey - National Geoscience Information Service | October 2015 | As notified |
| **BGS Recorded Mineral Sites** | | |
| British Geological Survey - National Geoscience Information Service | April 2017 | Bi-Annually |
| **CBSCB Compensation District** | | |
| Cheshire Brine Subsidence Compensation Board (CBSCB) | August 2011 | Not Applicable |
| **Coal Mining Affected Areas** | | |
| The Coal Authority - Property Searches | March 2014 | As notified |
| **Mining Instability** | | |
| Ove Arup & Partners | October 2000 | Not Applicable |
| **Non Coal Mining Areas of Great Britain** | | |
| British Geological Survey - National Geoscience Information Service | May 2015 | Not Applicable |
| **Potential for Collapsible Ground Stability Hazards** | | |
| British Geological Survey - National Geoscience Information Service | June 2015 | Annually |
| **Potential for Compressible Ground Stability Hazards** | | |
| British Geological Survey - National Geoscience Information Service | June 2015 | Annually |
| **Potential for Ground Dissolution Stability Hazards** | | |
| British Geological Survey - National Geoscience Information Service | June 2015 | Annually |
| **Potential for Landslide Ground Stability Hazards** | | |
| British Geological Survey - National Geoscience Information Service | June 2015 | Annually |
| **Potential for Running Sand Ground Stability Hazards** | | |
| British Geological Survey - National Geoscience Information Service | June 2015 | Annually |
| **Potential for Shrinking or Swelling Clay Ground Stability Hazards** | | |
| British Geological Survey - National Geoscience Information Service | June 2015 | Annually |
| **Radon Potential - Radon Affected Areas** | | |
| British Geological Survey - National Geoscience Information Service | July 2011 | As notified |
| **Radon Potential - Radon Protection Measures** | | |
| British Geological Survey - National Geoscience Information Service | July 2011 | As notified |

| Industrial Land Use | Version | Update Cycle |
|---|---|---|
| **Contemporary Trade Directory Entries**<br>Thomson Directories | June 2017 | Quarterly |
| **Fuel Station Entries**<br>Catalist Ltd - Experian | August 2017 | Quarterly |
| **Gas Pipelines**<br>National Grid | July 2014 | Quarterly |
| **Points of Interest - Commercial Services**<br>PointX | September 2017 | Quarterly |
| **Points of Interest - Education and Health**<br>PointX | September 2017 | Quarterly |
| **Points of Interest - Manufacturing and Production**<br>PointX | September 2017 | Quarterly |
| **Points of Interest - Public Infrastructure**<br>PointX | September 2017 | Quarterly |
| **Points of Interest - Recreational and Environmental**<br>PointX | September 2017 | Quarterly |
| **Underground Electrical Cables**<br>National Grid | December 2015 | Bi-Annually |

| Sensitive Land Use | Version | Update Cycle |
|---|---|---|
| **Ancient Woodland** | | |
| Natural England | May 2017 | Bi-Annually |
| **Areas of Adopted Green Belt** | | |
| Gateshead Metropolitan Borough Council - Development Control | May 2017 | As notified |
| North Tyneside Metropolitan Borough Council | May 2017 | As notified |
| South Tyneside Metropolitan Borough Council - Planning Department | May 2017 | As notified |
| Sunderland City Metropolitan Borough Council - Planning | May 2017 | As notified |
| **Areas of Unadopted Green Belt** | | |
| Gateshead Metropolitan Borough Council - Development Control | May 2017 | As notified |
| North Tyneside Metropolitan Borough Council | May 2017 | As notified |
| South Tyneside Metropolitan Borough Council - Planning Department | May 2017 | As notified |
| Sunderland City Metropolitan Borough Council - Planning | May 2017 | As notified |
| **Areas of Outstanding Natural Beauty** | | |
| Natural England | August 2017 | Bi-Annually |
| **Environmentally Sensitive Areas** | | |
| Natural England | January 2017 | Annually |
| **Forest Parks** | | |
| Forestry Commission | April 1997 | Not Applicable |
| **Local Nature Reserves** | | |
| Natural England | August 2017 | Bi-Annually |
| **Marine Nature Reserves** | | |
| Natural England | August 2017 | Bi-Annually |
| **National Nature Reserves** | | |
| Natural England | August 2017 | Bi-Annually |
| **National Parks** | | |
| Natural England | August 2017 | Bi-Annually |
| **Nitrate Vulnerable Zones** | | |
| Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) | October 2015 | |
| **Ramsar Sites** | | |
| Natural England | August 2017 | Bi-Annually |
| **Sites of Special Scientific Interest** | | |
| Natural England | August 2017 | Bi-Annually |
| **Special Areas of Conservation** | | |
| Natural England | August 2017 | Bi-Annually |
| **Special Protection Areas** | | |
| Natural England | August 2017 | Bi-Annually |

# Data Suppliers

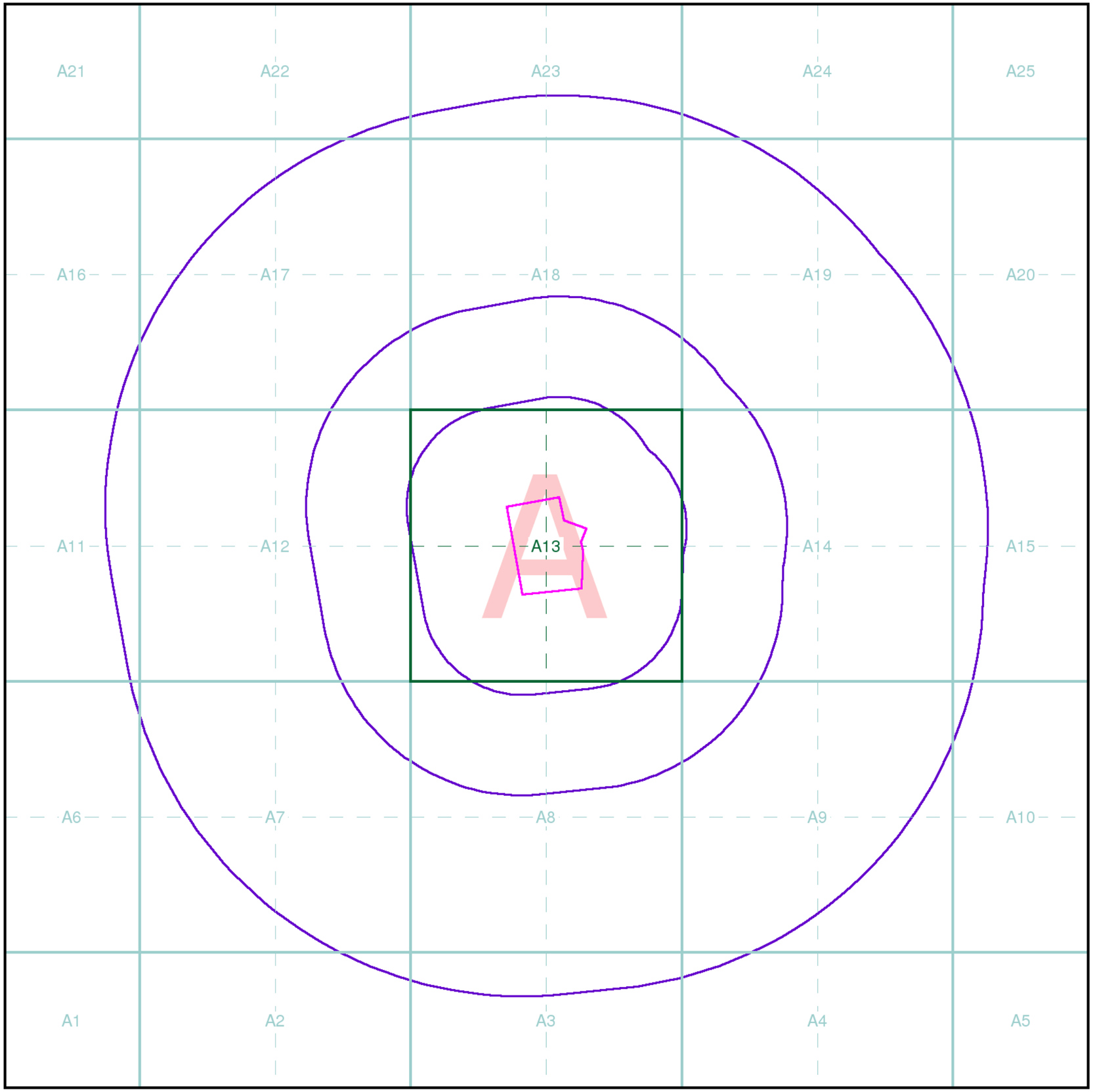
A selection of organisations who provide data within this report

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

# Useful Contacts

| Contact | Name and Address | Contact Details |
|---|---|---|
| 1 | **British Geological Survey - Enquiry Service**<br>British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG | Telephone: 0115 936 3143<br>Fax: 0115 936 3276<br>Email: enquiries@bgs.ac.uk<br>Website: www.bgs.ac.uk |
| 2 | **South Tyneside Metropolitan Borough Council - Environmental Health Department**<br>Central Library Building, Prince George Square, South Shields, Tyne And Wear, NE33 2PE | Telephone: 0191 427 1717<br>Fax: 0191 427 7171<br>Website: www.s-tyneside-mbc.gov.uk |
| 3 | **Environment Agency - National Customer Contact Centre (NCCC)**<br>PO Box 544, Templeborough, Rotherham, S60 1BY | Telephone: 03708 506 506<br>Email: enquiries@environment-agency.gov.uk |
| 4 | **Ordnance Survey**<br>Adanac Drive, Southampton, Hampshire, SO16 0AS | Telephone: 023 8079 2000<br>Email: customerservices@ordnancesurvey.co.uk<br>Website: www.ordnancesurvey.gov.uk |
| 5 | **South Tyneside Metropolitan Borough Council - Planning Department**<br>Town Hall & Civic Offices, Westoe Road, South Shields, Tyne & Wear, NE33 2RL | Telephone: 0191 427 1717<br>Fax: 0191 427 7171<br>Website: www.s-tyneside-mbc.gov.uk |
| 6 | **The Coal Authority - Property Searches**<br>200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG | Telephone: 0345 762 6848<br>Fax: 01623 637 338<br>Email: groundstability@coal.gov.uk<br>Website: www2.groundstability.com |
| 7 | **PointX**<br>7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY | Website: www.pointx.co.uk |
| 8 | **Natural England**<br>County Hall, Spetchley Road, Worcester, WR5 2NP | Telephone: 0300 060 3900<br>Email: enquiries@naturalengland.org.uk<br>Website: www.naturalengland.org.uk |
| 9 | **Environment Agency - Head Office**<br>Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD | Telephone: 01454 624400<br>Fax: 01454 624409 |
| - | **Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards**<br>Chilton, Didcot, Oxfordshire, OX11 0RQ | Telephone: 01235 822622<br>Fax: 01235 833891<br>Email: radon@phe.gov.uk<br>Website: www.ukradon.org |
| - | **Landmark Information Group Limited**<br>Imperium, Imperial Way, Reading, Berkshire, RG2 0TD | Telephone: 0844 844 9952<br>Fax: 0844 844 9951<br>Email: customerservices@landmarkinfo.co.uk<br>Website: www.landmarkinfo.co.uk |

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




ATKINS

## Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

**Slice**
Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

**Segment**
A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

**Quadrant**
A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

---

A selection of organisations who provide data within this report:

Map data

British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

Environment Agency

NATURAL ENGLAND

Envirocheck reports are compiled from 136 different sources of data.

## Client Details

Miss L Rutland, Atkins Ltd, Chadwick House, Birchwood Science Park, Risley, Warrington, WA3 6AE

## Order Details

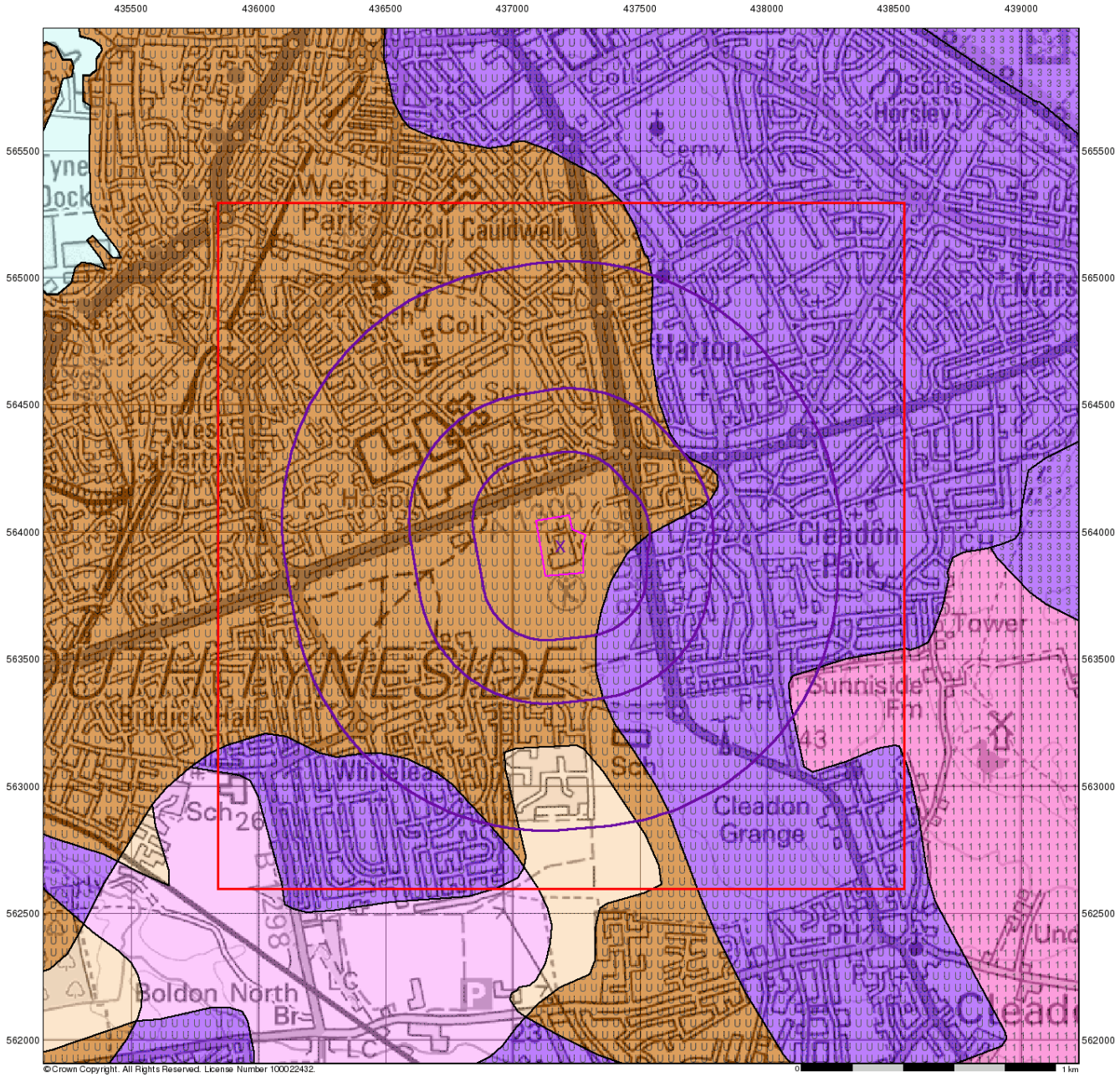
| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

## Site Details

Temple Park Centre, John Reid Road, South Shields, NE34 8FS

**Full Terms and Conditions can be found on the following link:**
http://www.landmarkinfo.co.uk/Terms/Show/515

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




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# Groundwater Vulnerability

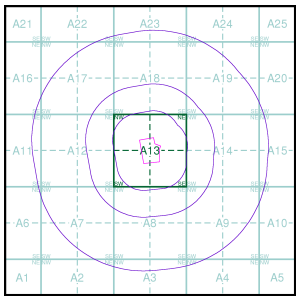
## General

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

## Agency and Hydrological

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

## Site Sensitivity Context Map - Slice A



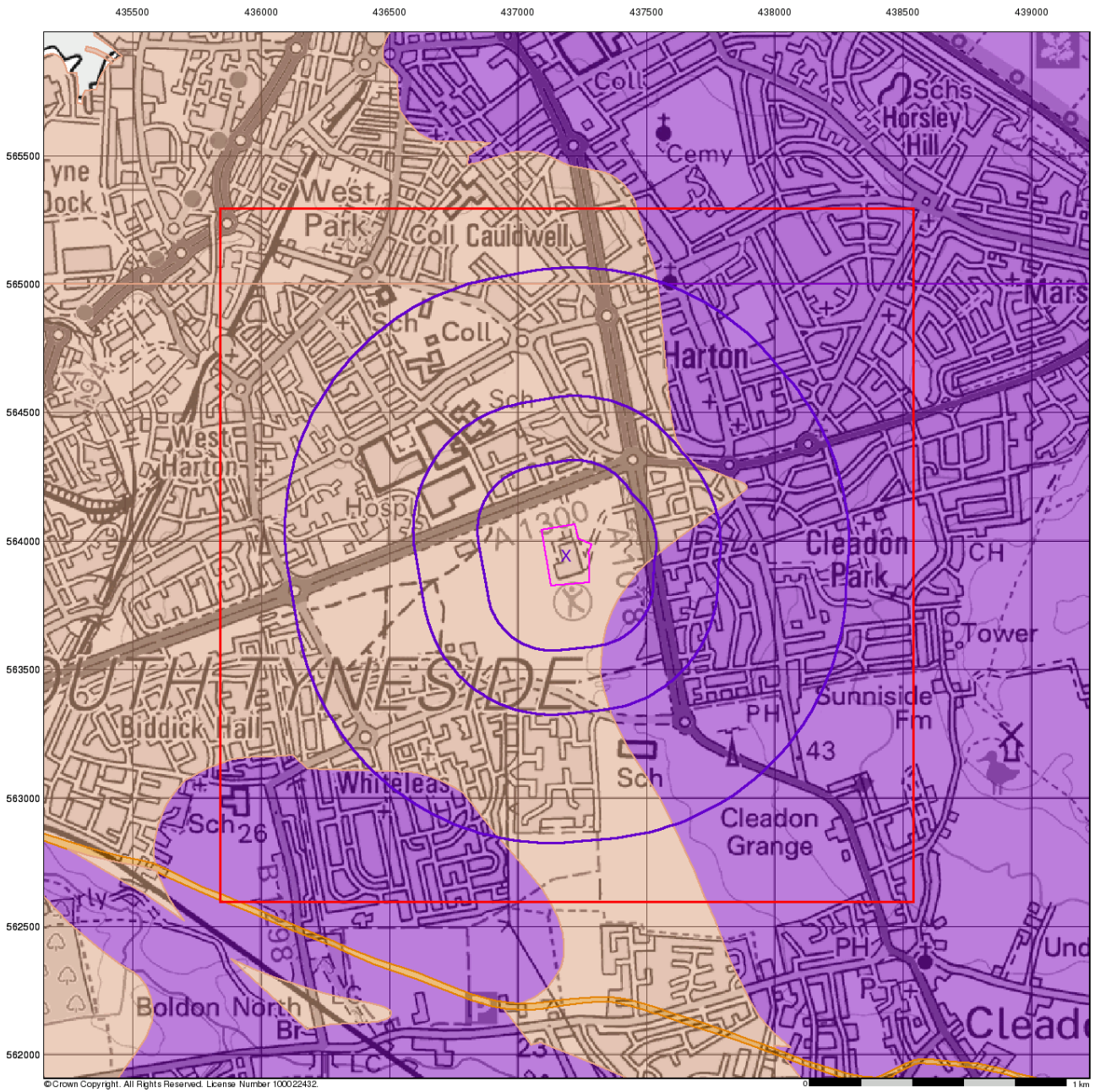

## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

## Site Details

Temple Park Centre, John Reid Road, South Shields, NE34 8FS

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




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# Bedrock Aquifer Designation

## General

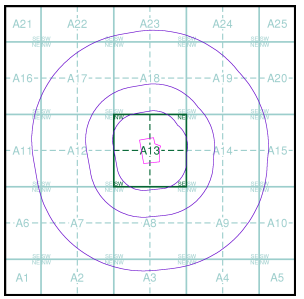
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

## Agency and Hydrological

**Geological Classes**

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

## Site Sensitivity Context Map - Slice A

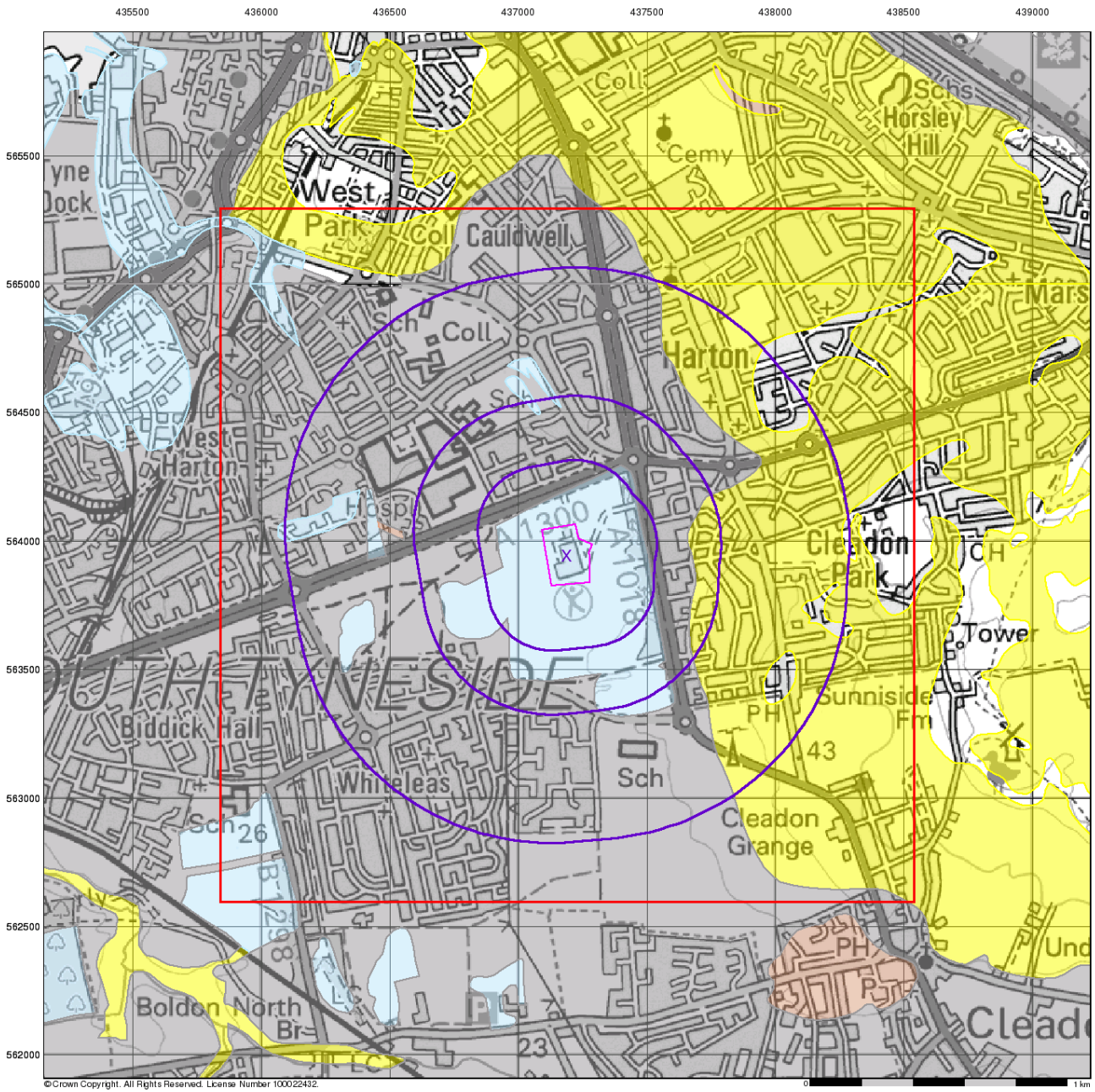



## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

## Site Details

Temple Park Centre, John Reid Road, South Shields, NE34 8FS




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## Superficial Aquifer Designation

### General

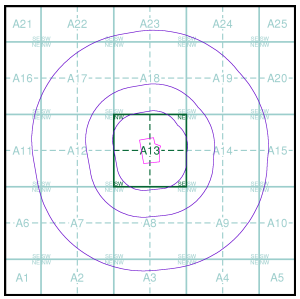
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

### Agency and Hydrological

**Geological Classes**

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

### Site Sensitivity Context Map - Slice A

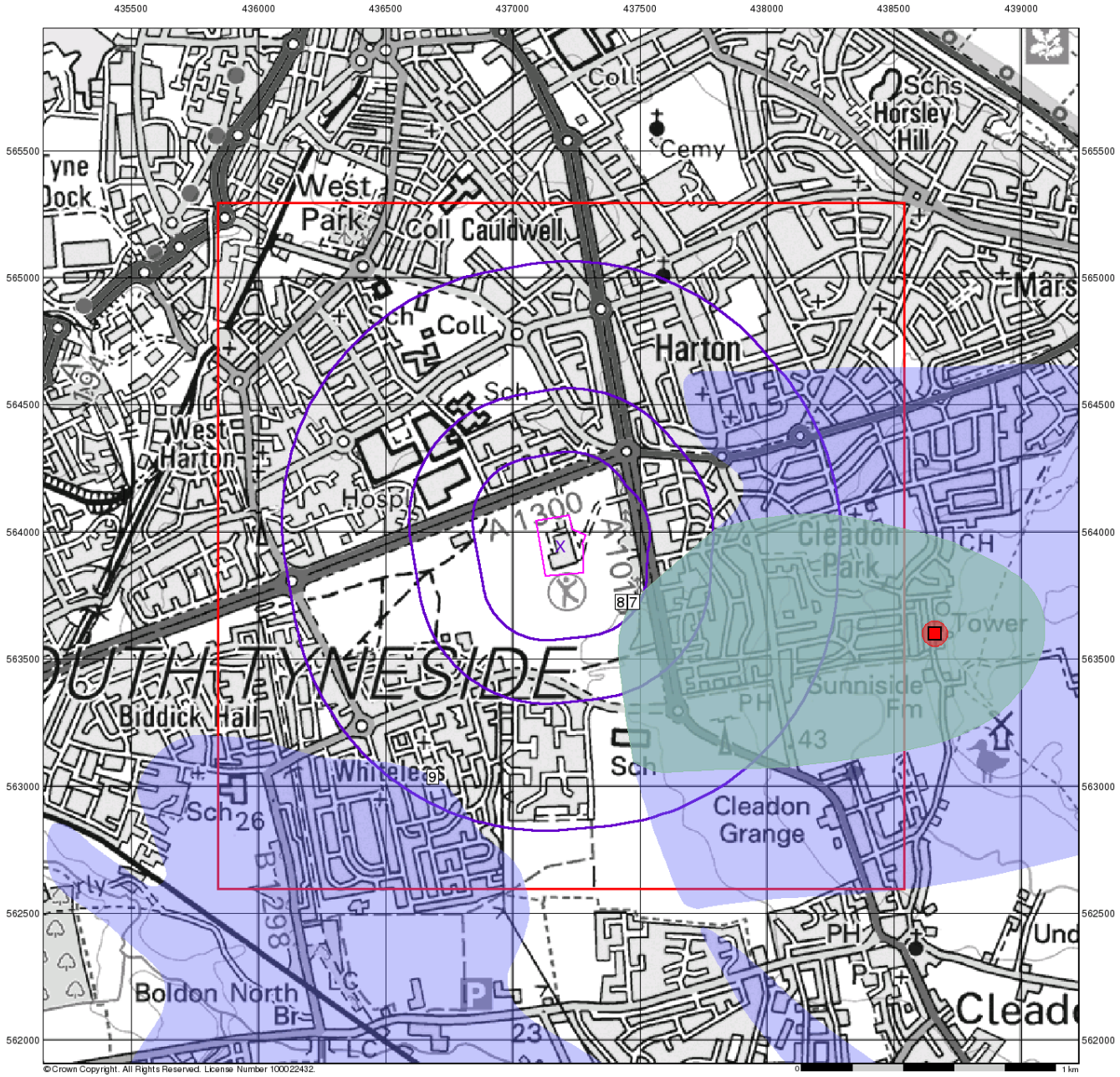



### Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

### Site Details

Temple Park Centre, John Reid Road, South Shields, NE34 8FS




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## Source Protection Zones

### General

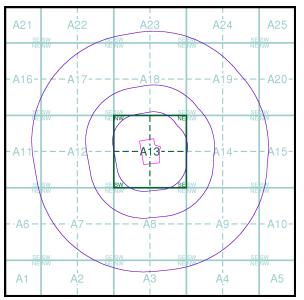
Specified Site | Specified Buffer(s) | Bearing Reference Point

Slice | Map ID

### Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)
- Source Protection Zone Borehole

### Site Sensitivity Context Map - Slice A

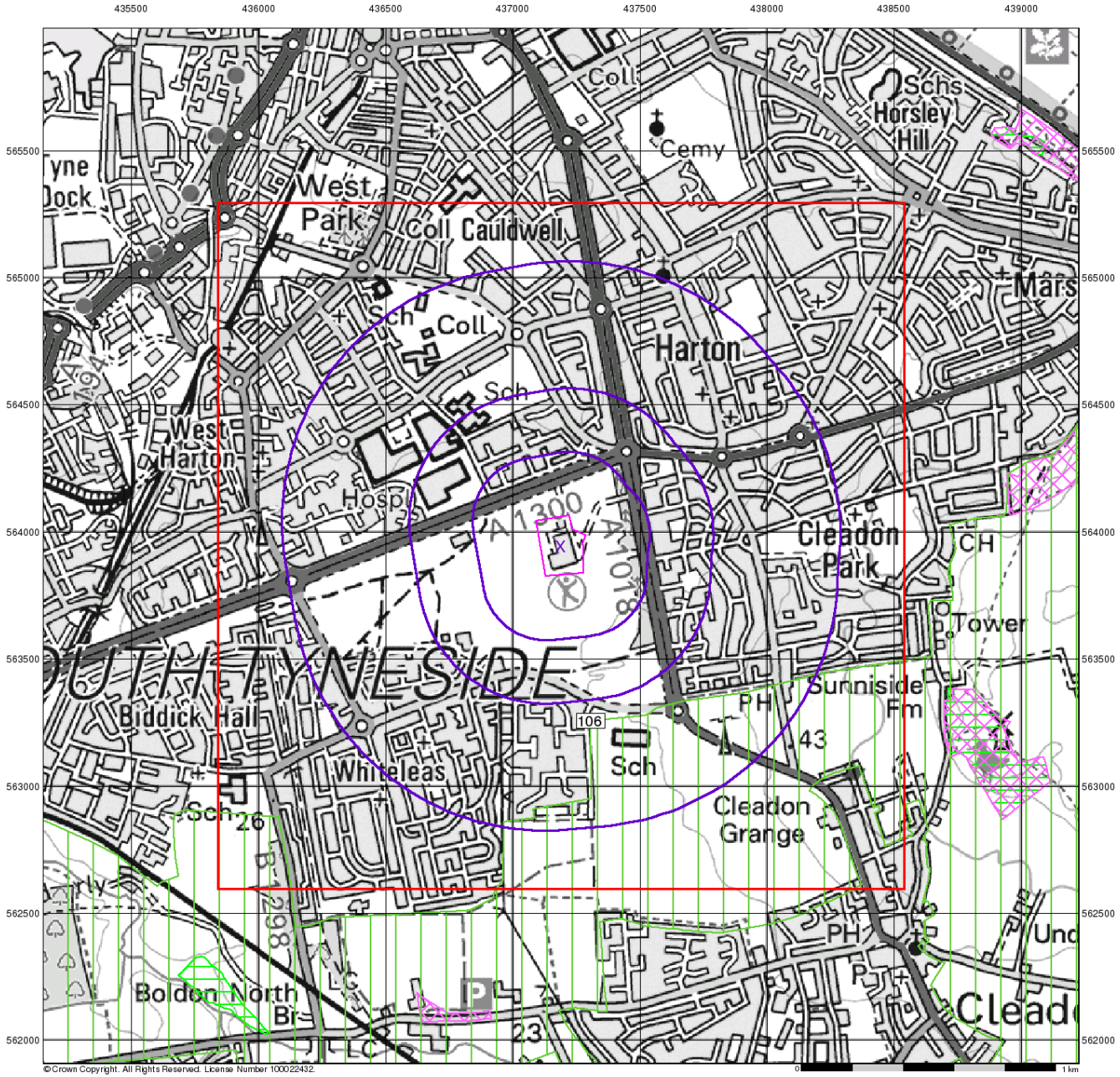



### Order Details

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|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

### Site Details

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## Sensitive Land Uses

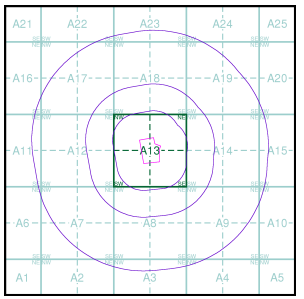
### General

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

### Sensitive Land Uses

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

### Site Sensitivity Context Map - Slice A

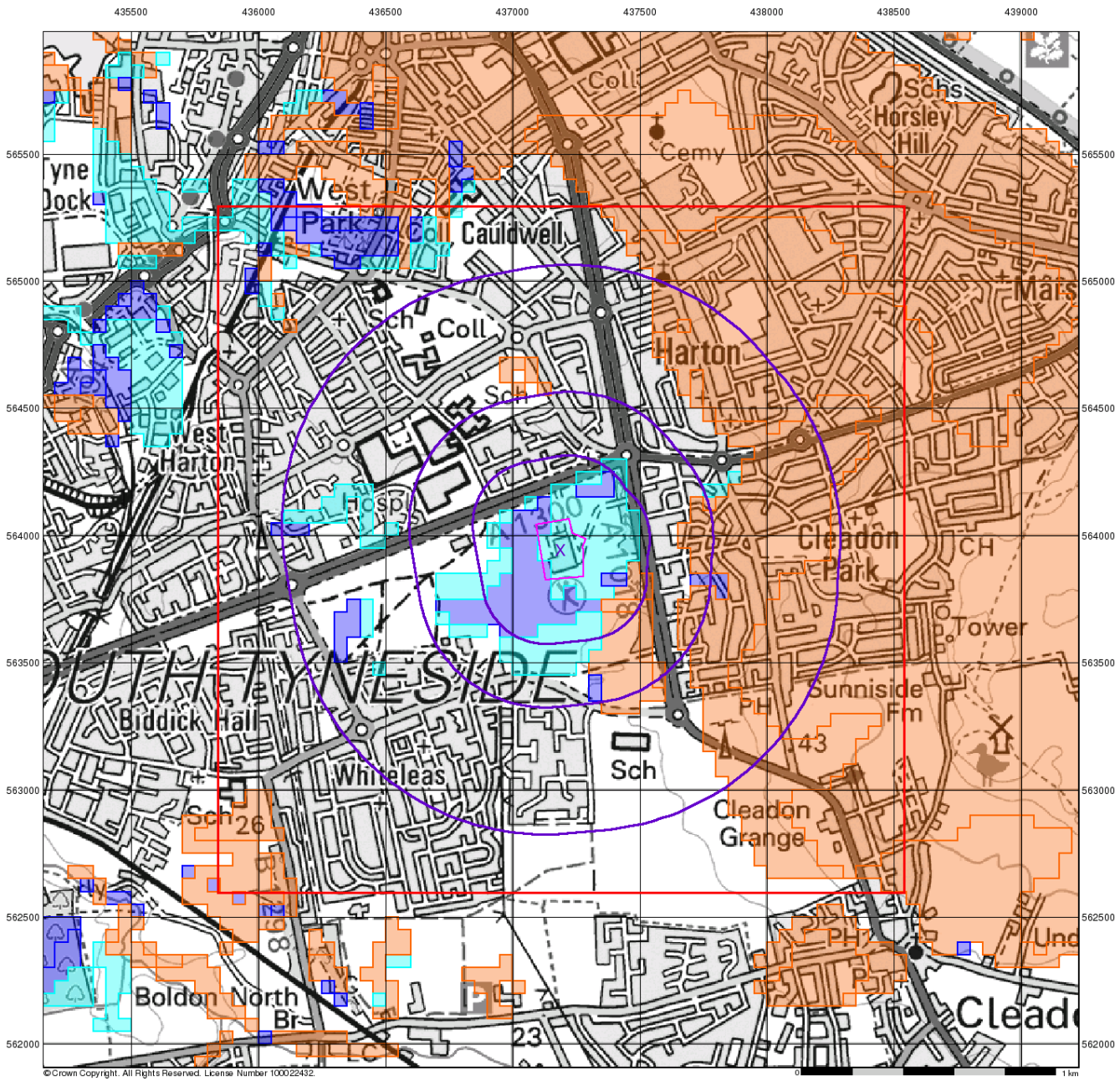



### Order Details

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| Slice: | A |
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| Search Buffer (m): | 1000 |

### Site Details

Temple Park Centre, John Reid Road, South Shields, NE34 8FS




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## BGS Flood GFS Data

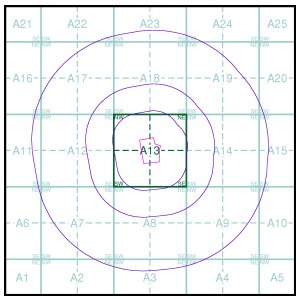
### General

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

### Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

## Site Sensitivity Context Map - Slice A




## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
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| National Grid Reference: | 437190, 563940 |
| Slice: | A |
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## Site Details

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# Geology 1:50,000 Maps Legends

## Artificial Ground and Landslip

| Map Colour | Lex Code | Rock Name | Rock Type | Min and Max Age |
|---|---|---|---|---|
| | MGR | Made Ground (Undivided) | Artificial Deposit | Holocene - Holocene |

| Map Colour | Lex Code | Rock Name | Rock Type | Min and Max Age |
|---|---|---|---|---|
| | | Rock Segments | | |
| | | Faults | | |

## Superficial Geology

| Map Colour | Lex Code | Rock Name | Rock Type | Min and Max Age |
|---|---|---|---|---|
| | SUPNM | Superficial Theme Not Mapped [For Digital Map Use Only] | Unknown/Unclassified Entry | Not Supplied - Not Supplied |
| | ALV | Alluvium | Clay, Silt, Sand and Gravel | Flandrian - Flandrian |
| | PELC | Pelaw Clay Member | Clay | Devensian - Devensian |
| | TILLD | Till, Devensian | Diamicton | Devensian - Devensian |
| | GLLDD | Glaciolacustrine Deposits, Devensian | Clay and Silt | Devensian - Devensian |
| | GFDUD | Glaciofluvial Deposits, Devensian | Sand and Gravel | Devensian - Devensian |

## Bedrock and Faults

| Map Colour | Lex Code | Rock Name | Rock Type | Min and Max Age |
|---|---|---|---|---|
| | HBDY | Hebburn Dyke | Microgabbro | Palaeogene - Palaeogene |
| | RML | Raisby Formation | Dolostone | Late Permian - Late Permian |
| | ROD | Roker Formation | Dolostone | Late Permian - Late Permian |
| | FML | Ford Formation | Dolostone | Late Permian - Late Permian |
| | YWS | Yellow Sands Formation | Sandstone | Late Permian - Cisuralian |
| | GNP | Grindstone Post Member | Sandstone | Bolsovian - Bolsovian |
| | PUCM | Pennine Upper Coal Measures Formation | Mudstone, Siltstone and Sandstone | Westphalian D - Bolsovian |
| | PUCM | Pennine Upper Coal Measures Formation | Sandstone | Westphalian D - Bolsovian |
| | PMCM | Pennine Middle Coal Measures Formation | Mudstone, Siltstone and Sandstone | Bolsovian - Duckmantian |
| | PMCM | Pennine Middle Coal Measures Formation | Sandstone | Bolsovian - Duckmantian |

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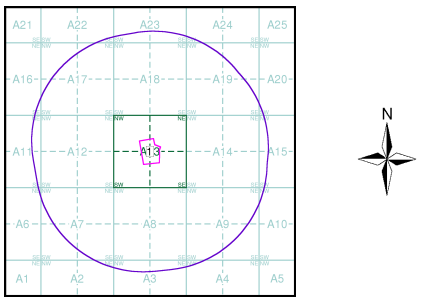
## Geology 1:50,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.
The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

## Geology 1:50,000 Maps Coverage

| | |
|---|---|
| **Map ID:** | **1** |
| **Map Sheet No:** | **021** |
| **Map Name:** | **Sunderland** |
| **Map Date:** | **1978** |
| **Bedrock Geology:** | **Available** |
| **Superficial Geology:** | **Available** |
| **Artificial Geology:** | **Available** |
| **Faults:** | **Not Supplied** |
| **Landslip:** | **Available** |
| **Rock Segments:** | **Not Supplied** |

## Geology 1:50,000 Maps - Slice A



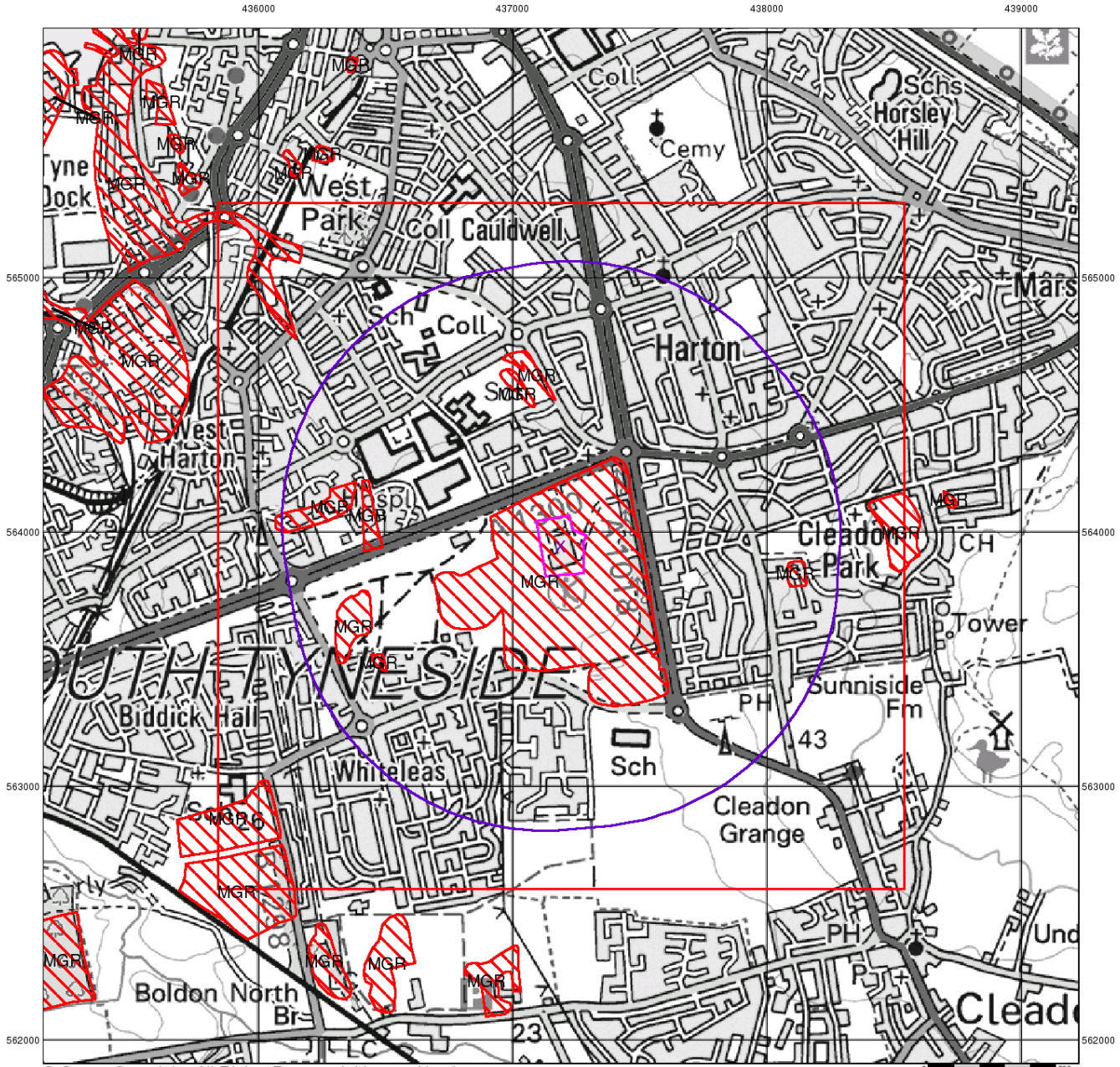

## Order Details:

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Reference: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

## Site Details:

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## Artificial Ground and Landslip

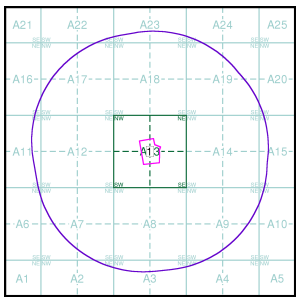
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

## Artificial Ground and Landslip Map - Slice A



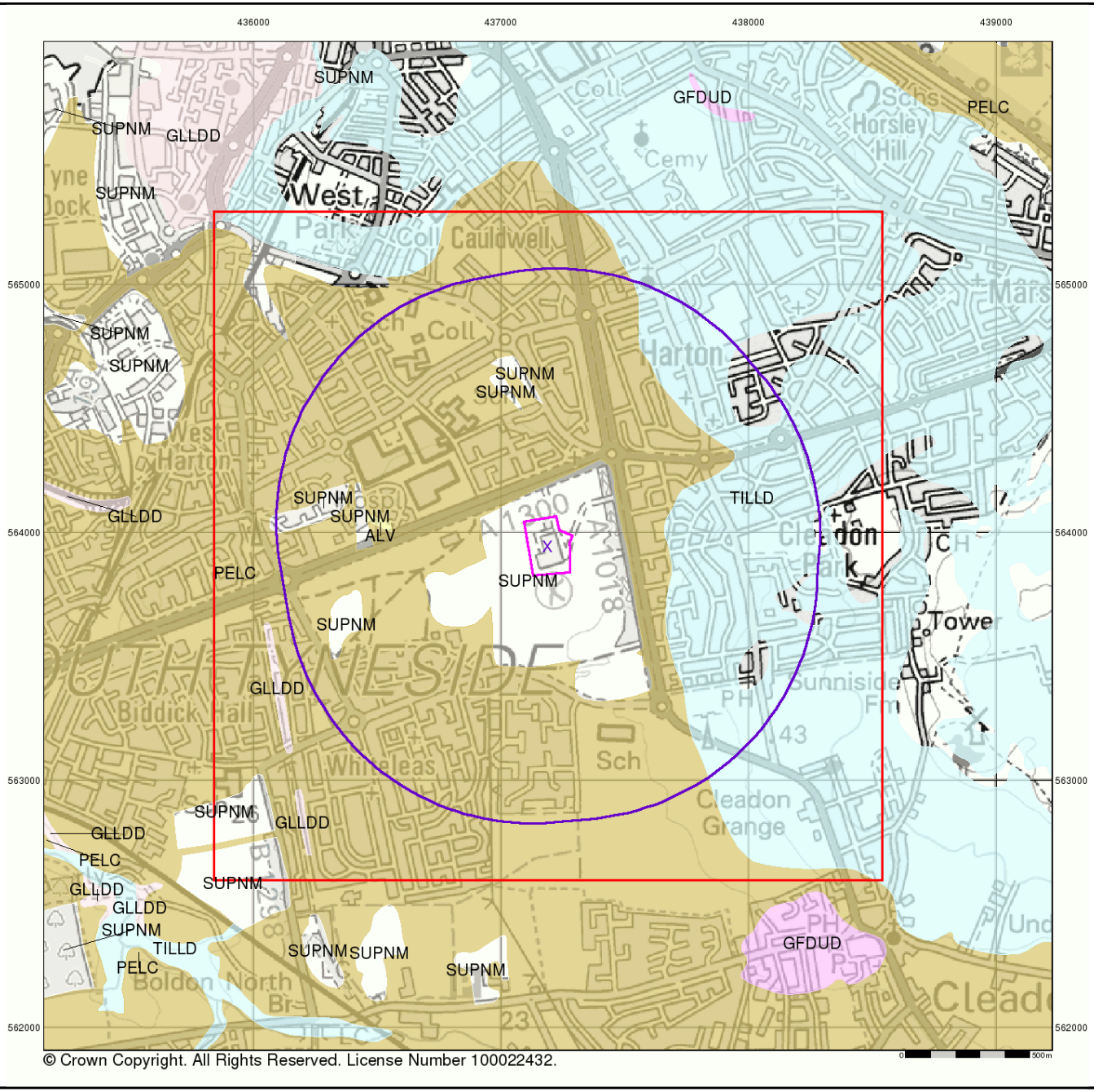

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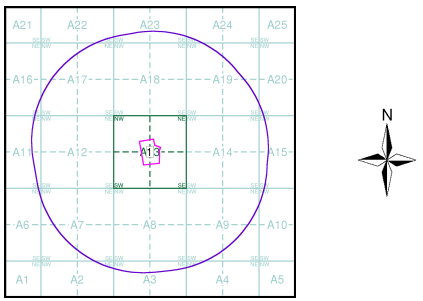
## Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

## Superficial Geology Map - Slice A



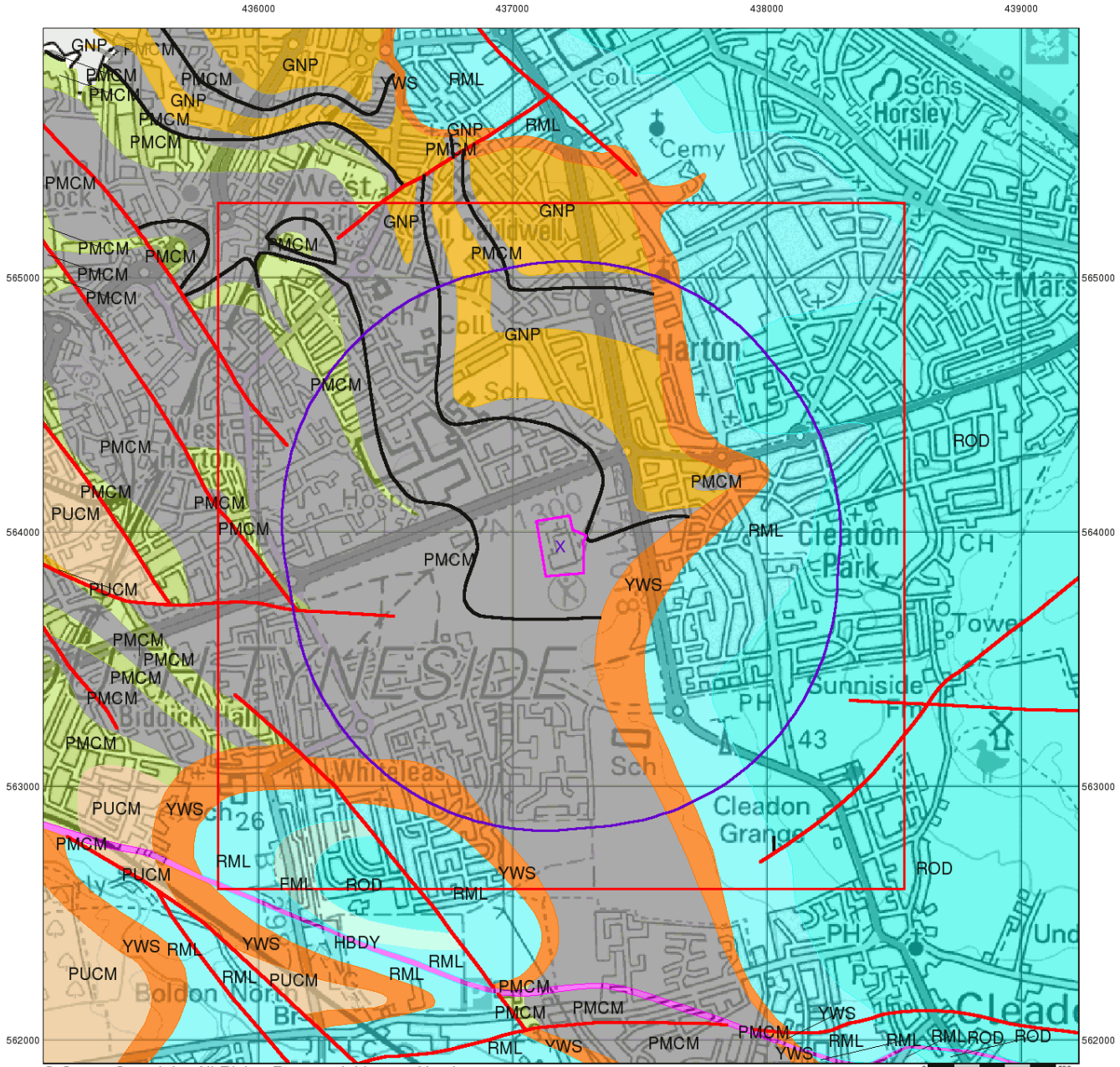

## Order Details:

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|---|---|
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| Customer Reference: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
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## Bedrock and Faults

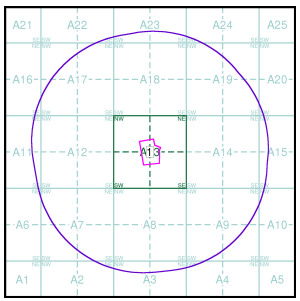
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

## Bedrock and Faults Map - Slice A



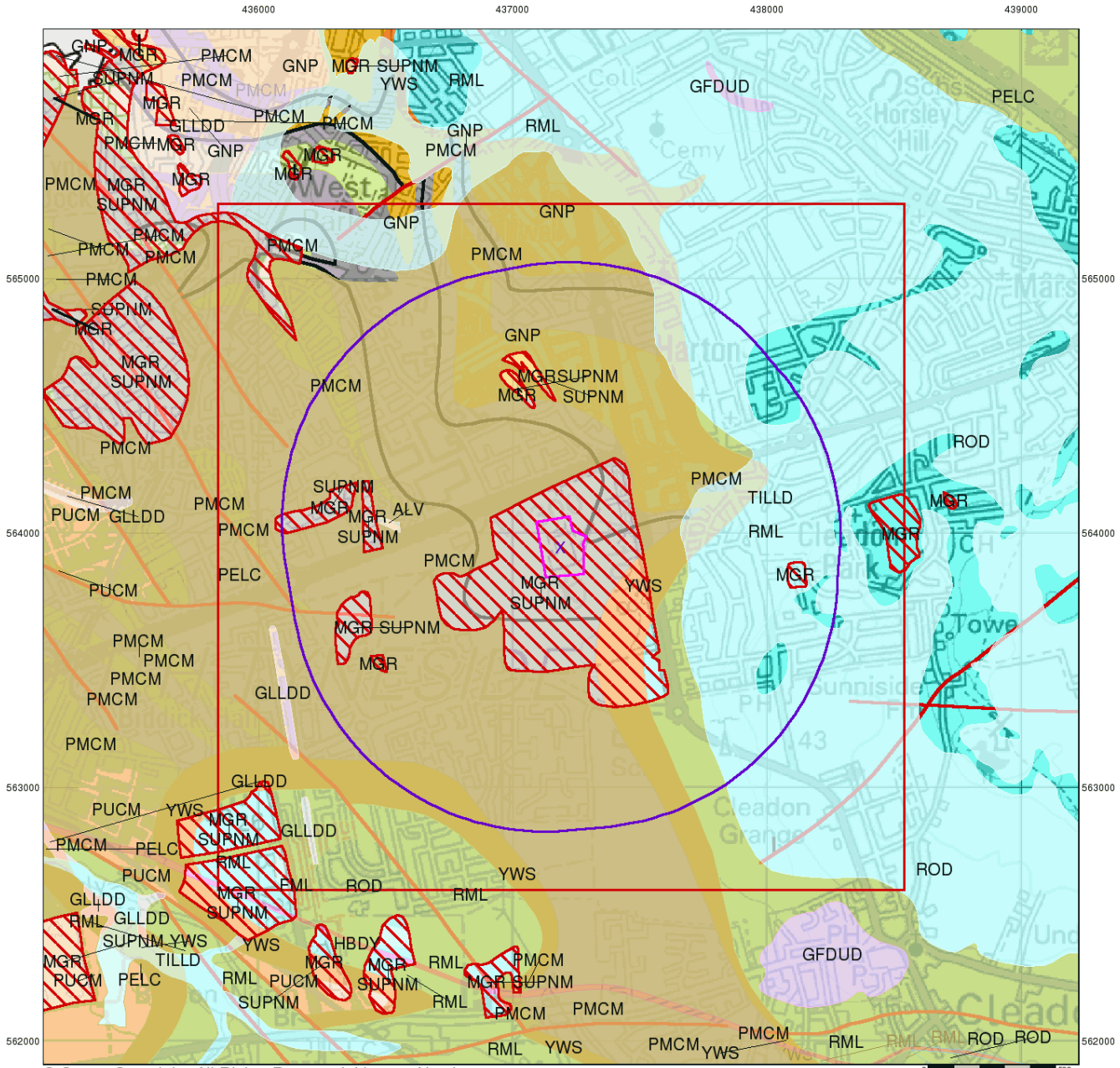

## Order Details:

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Reference: | 5161186 |
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| Slice: | A |
| Site Area (Ha): | 3.52 |
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## Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

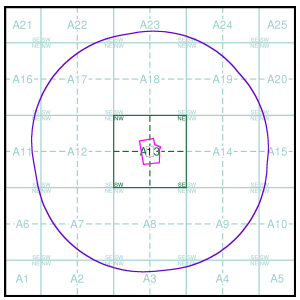
## Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

## Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

## Combined Geology Map - Slice A

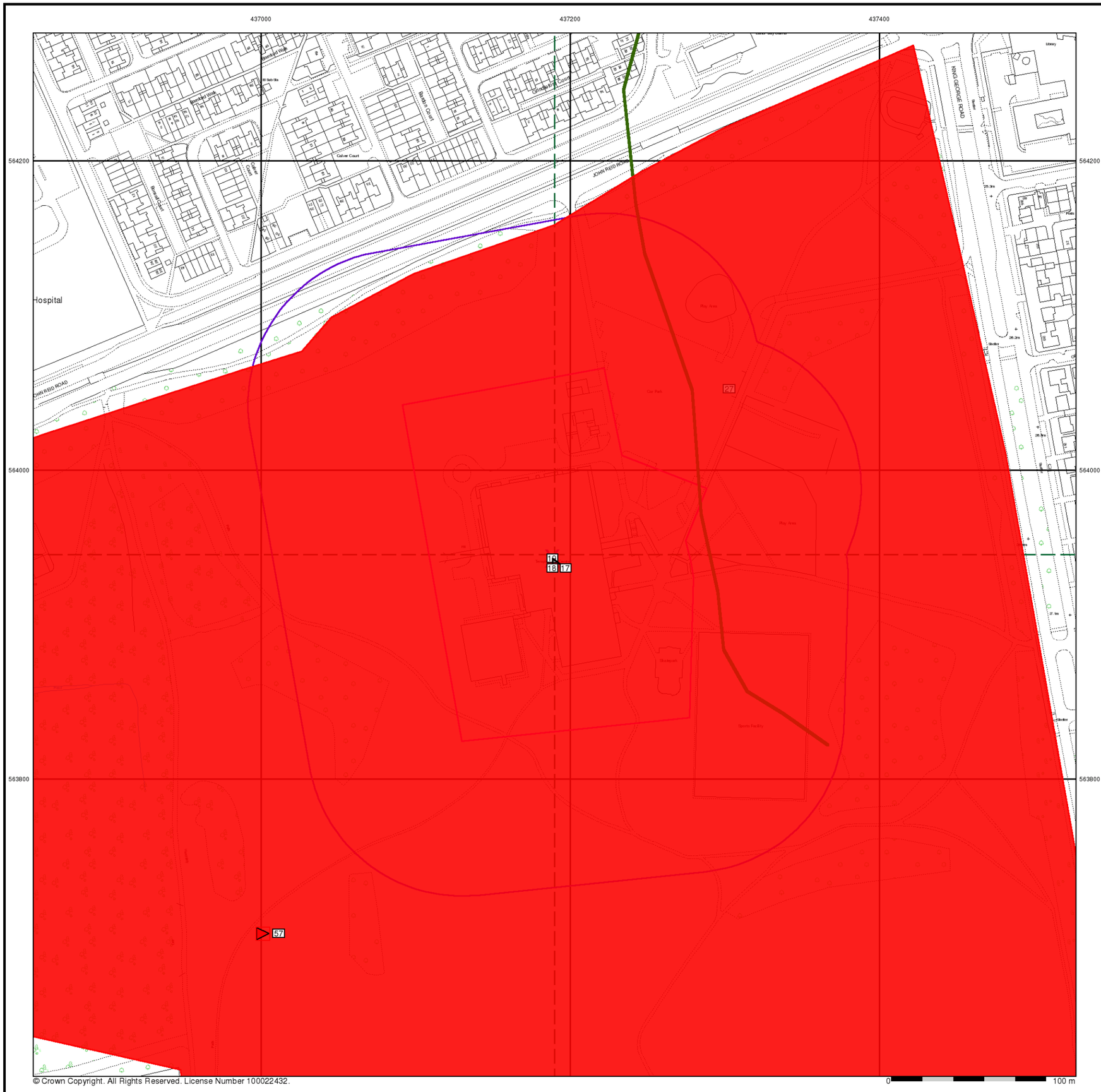



## Order Details:

| | |
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| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

## Site Details:

Temple Park Centre, John Reid Road, South Shields, NE34 8FS




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## General

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

## Agency and Hydrological

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

## Hazardous Substances

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

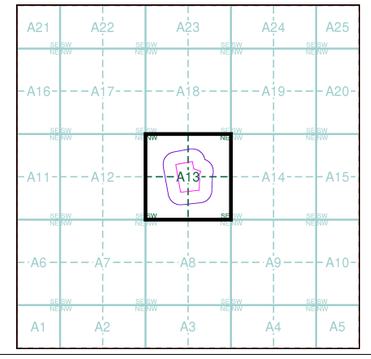
## Geological

- BGS Recorded Mineral Site

## Waste

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

## Site Sensitivity Map - Segment A13



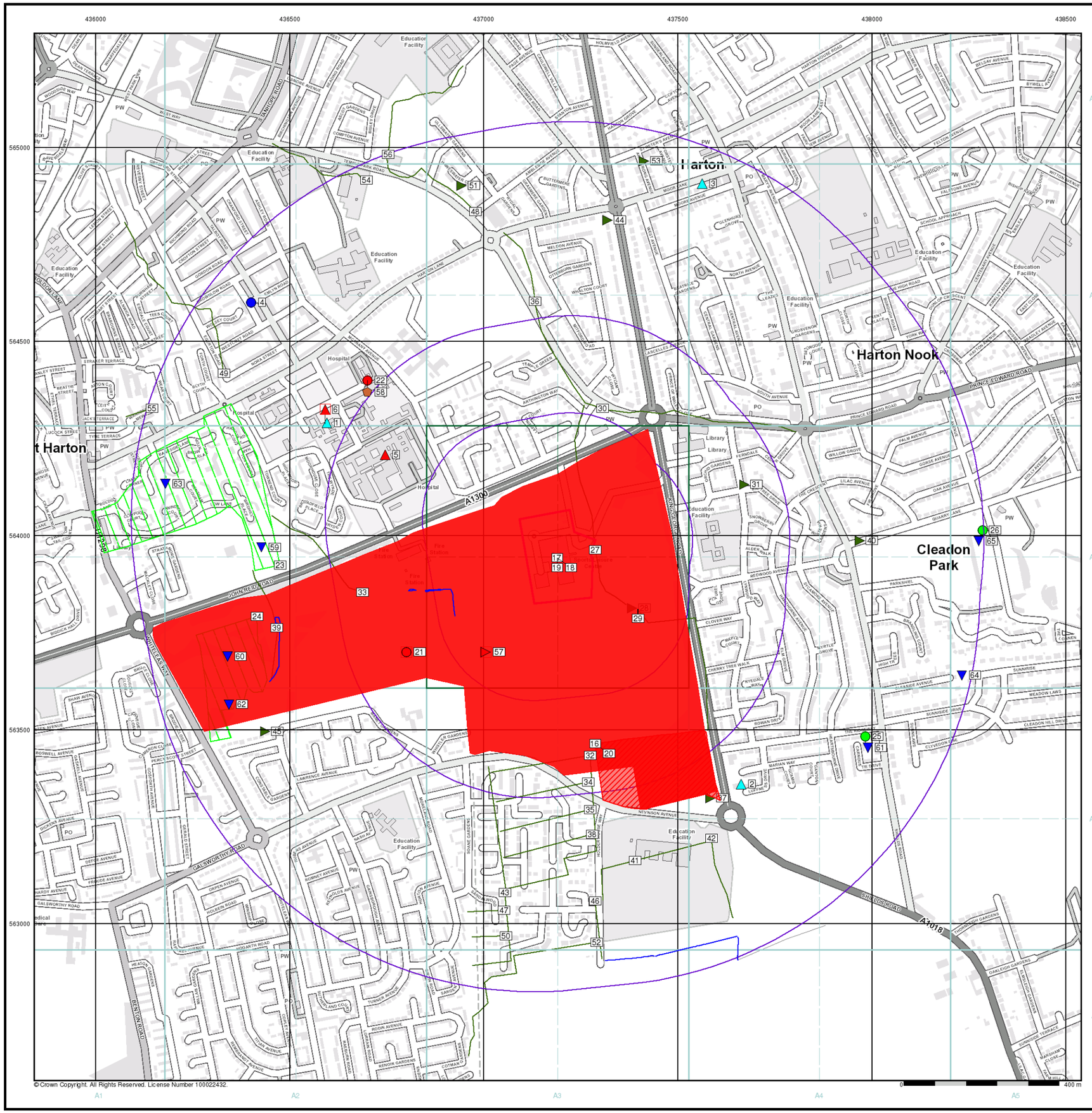

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|---|---|
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| Customer Ref: | 5161186 |
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| Slice: | A |
| Site Area (Ha): | 3.52 |
| Plot Buffer (m): | 100 |

## Site Details

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## General

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

Several of Type at Location

## Agency and Hydrological

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

## Hazardous Substances

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

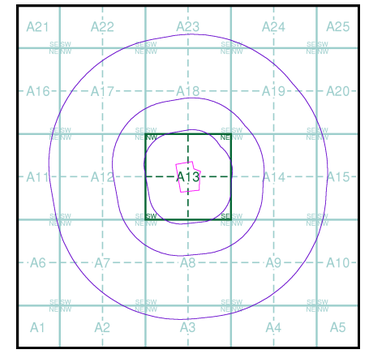
## Geological

- BGS Recorded Mineral Site

## Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
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- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

## Site Sensitivity Map - Slice A




## Order Details

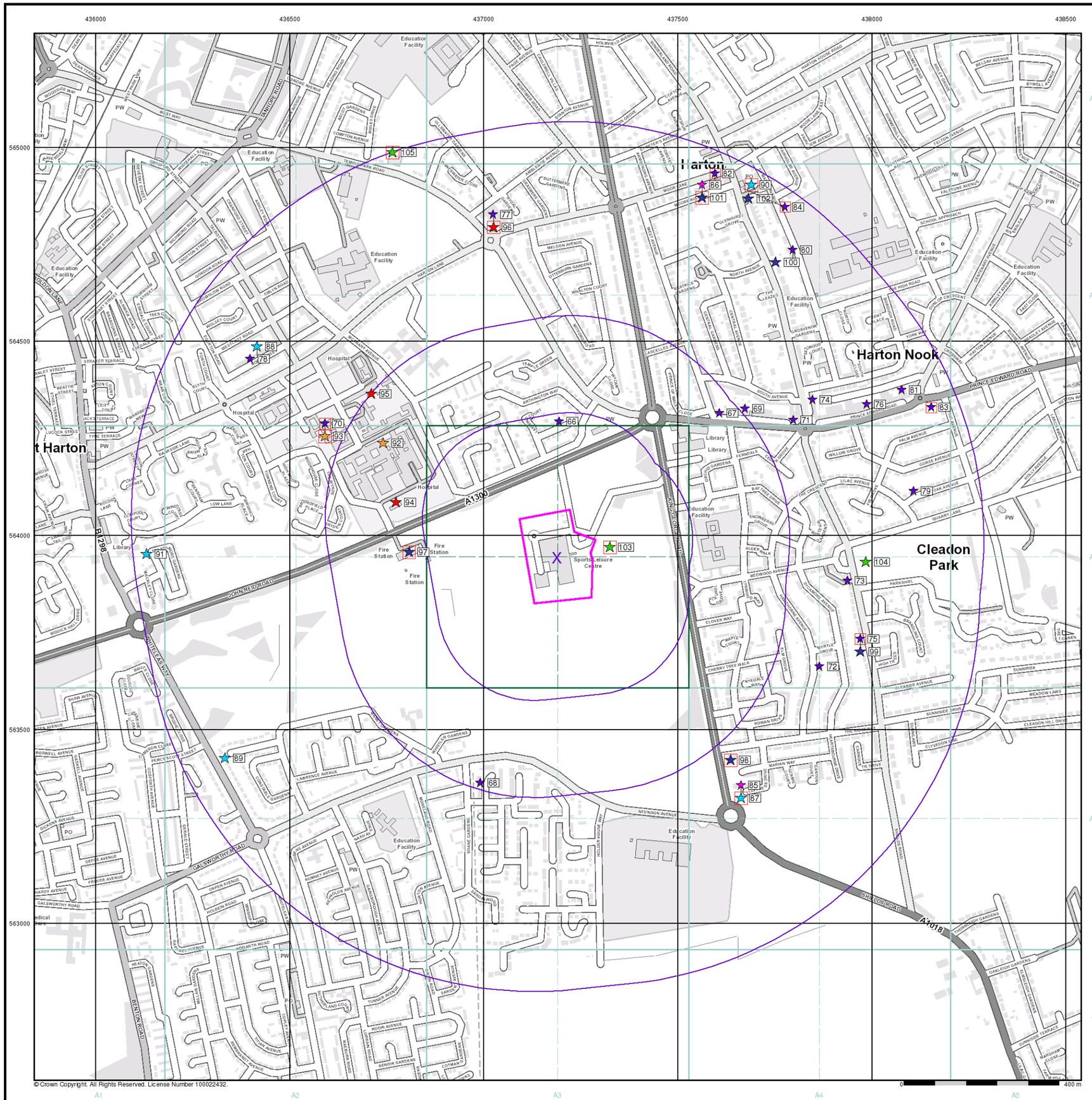
| | |
|---|---|
| Order Number: | 140507389_1_1 |
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| Slice: | A |
| Site Area (Ha): | 3.52 |
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Web: www.envirocheck.co.uk




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# Industrial Land Use Map

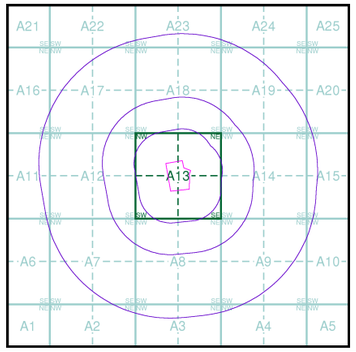
## General

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

## Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

## Industrial Land Use Map - Slice A




## Order Details

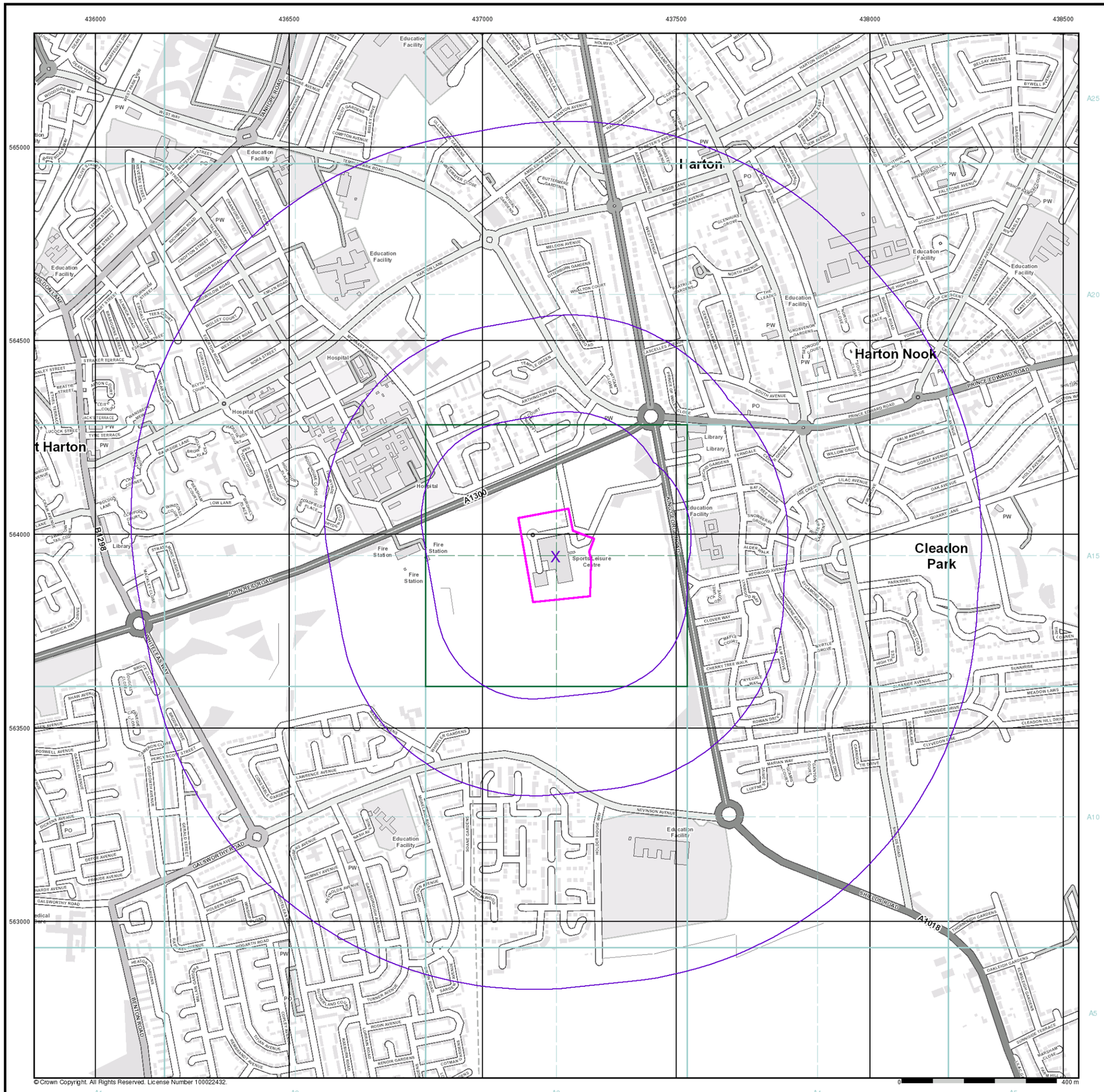
| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

## Site Details

Temple Park Centre, John Reid Road, South Shields, NE34 8FS


Landmark INFORMATION GROUP

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




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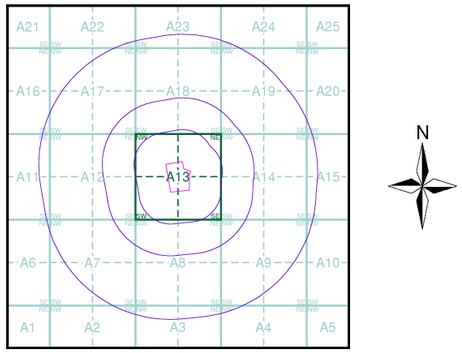
## General

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

## Agency and Hydrological (Flood)

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

## Flood Map - Slice A



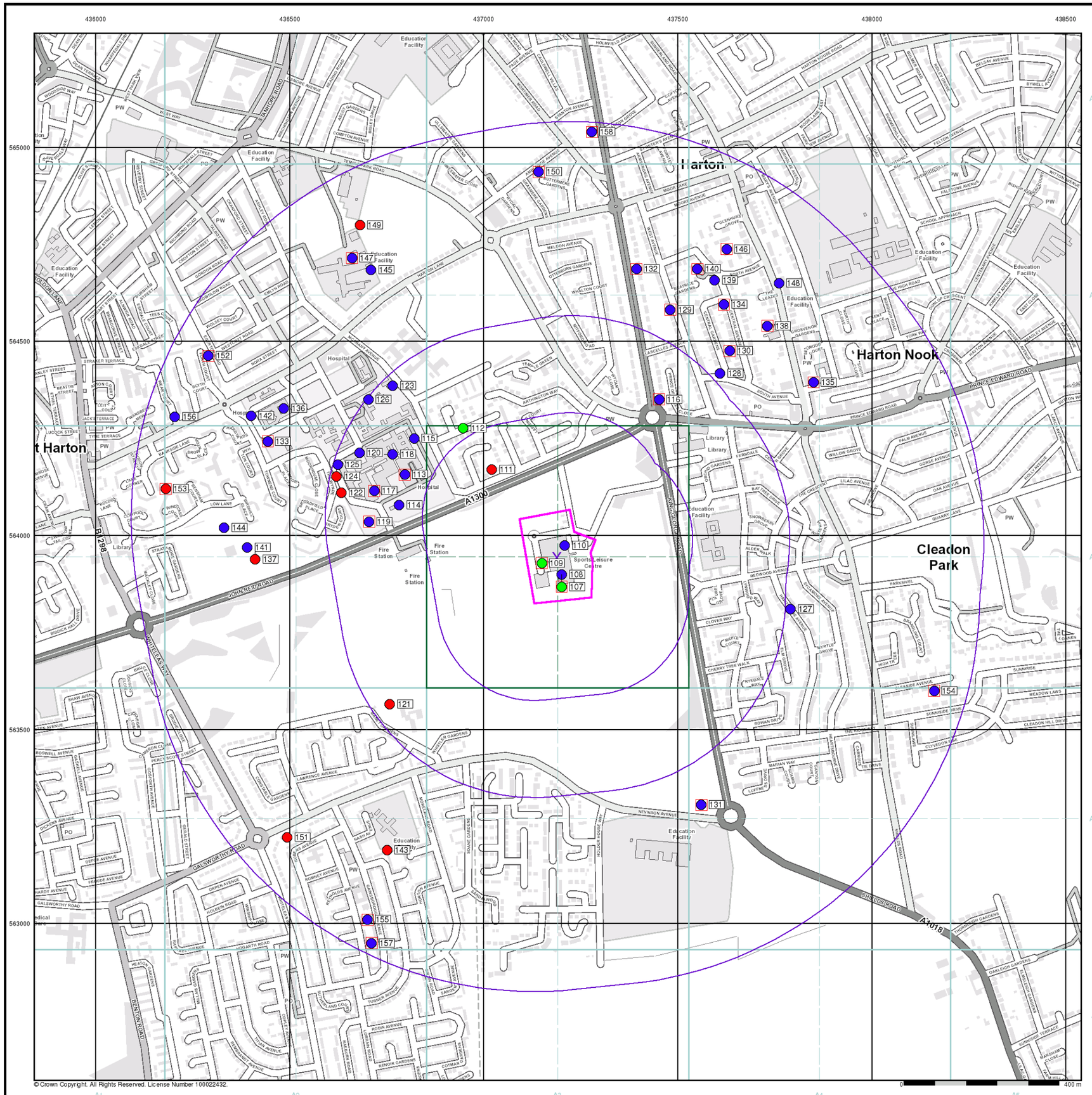

## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
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## General

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

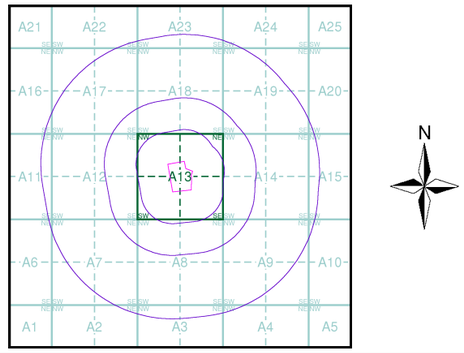
## Agency and Hydrological (Boreholes)

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

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

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

## Borehole Map - Slice A




## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
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## Site Details

Temple Park Centre, John Reid Road, South Shields, NE34 8FS




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## General

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

## OS Water Network Data

- Canal
- Reservoir
- Foreshore
- Marsh
- Tidal River
- Inland River
- Drain
- Other
- Lake
- Transfer
- Lock Or Flight Of Locks
- Sea

## Contours (height in meters)

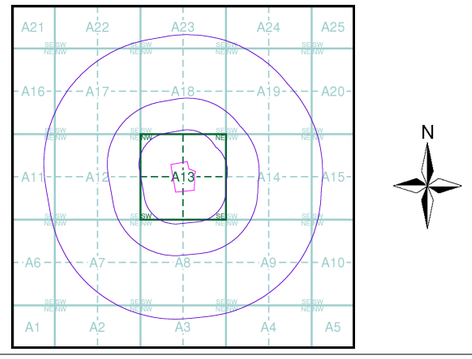
Standard Contour 105 100 95

Master Contour

Spot Height 167.3

- MLW Mean Low Water
- MHW Mean High Water

## OS Water Network Map - Slice A




## Order Details

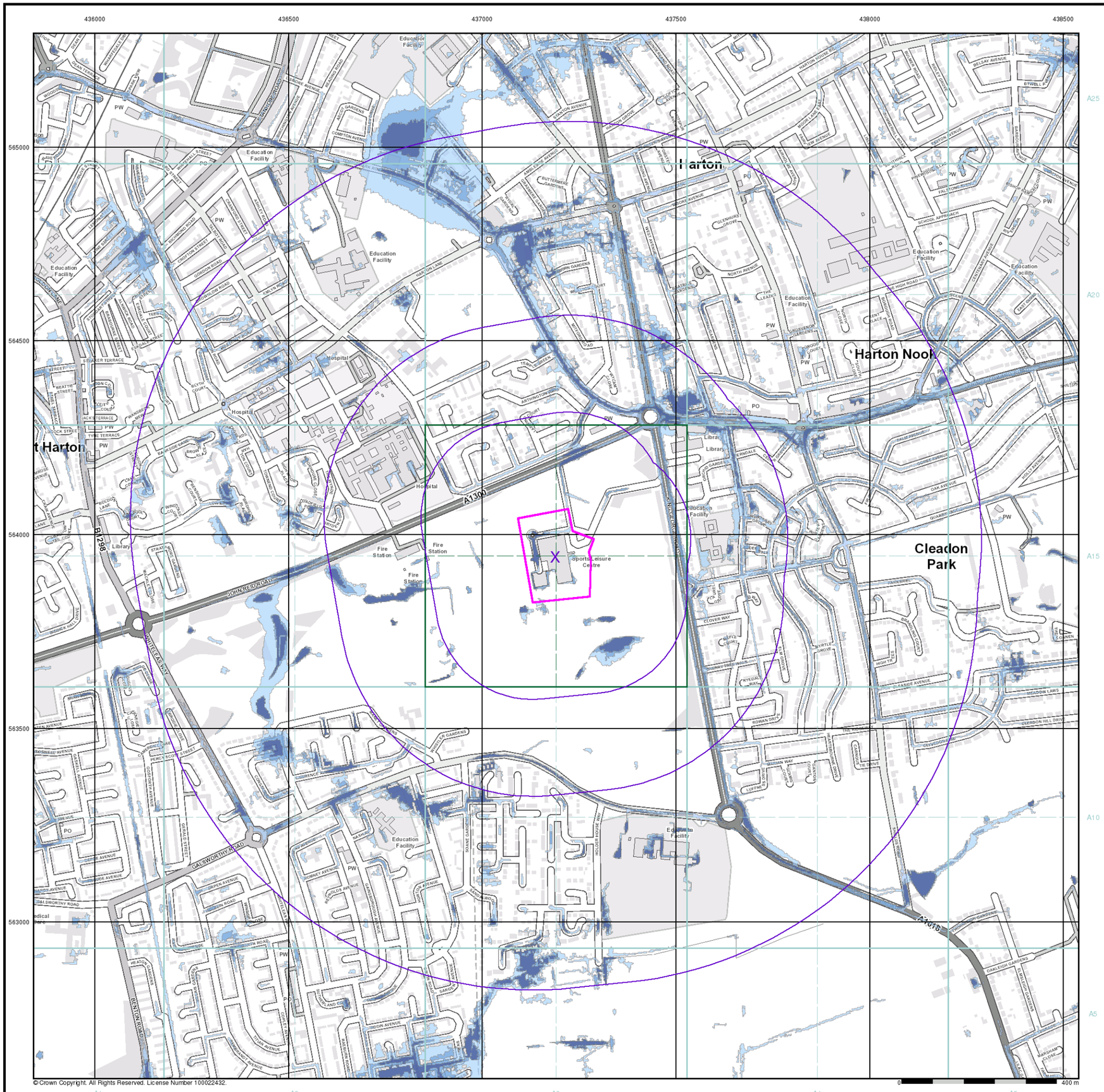
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|---|---|
| Order Number: | 140507389_1_1 |
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## General

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

## Risk of Flooding from Surface Water

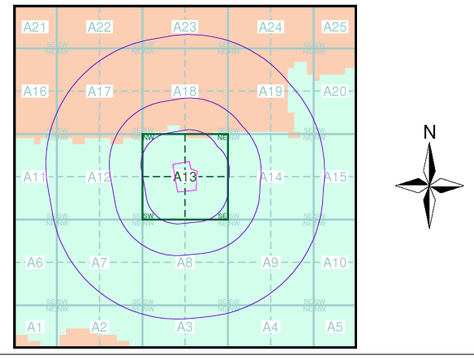
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

## Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

## EA/NRW Suitability Map - Slice A




## Order Details

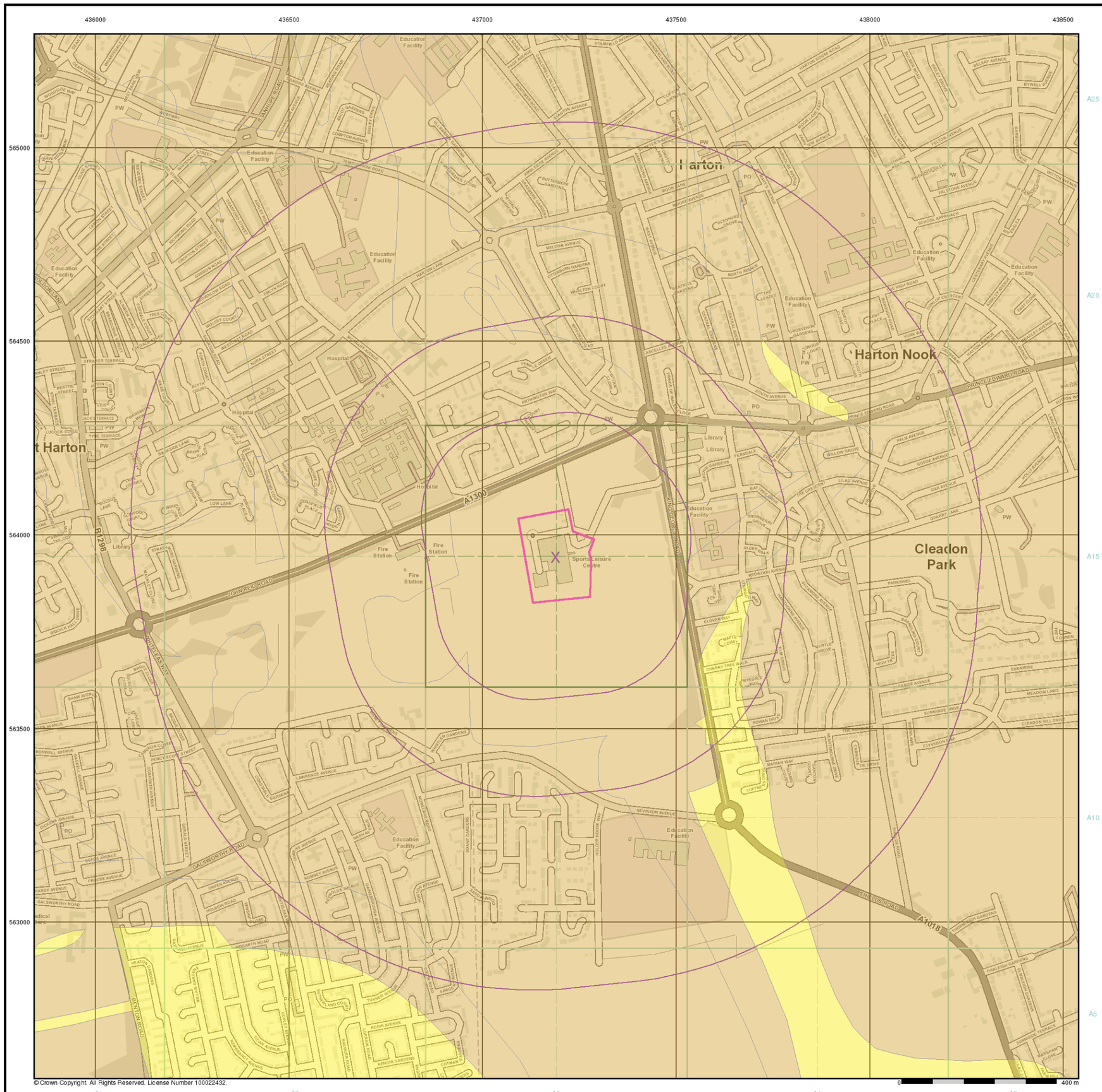
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| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
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## General

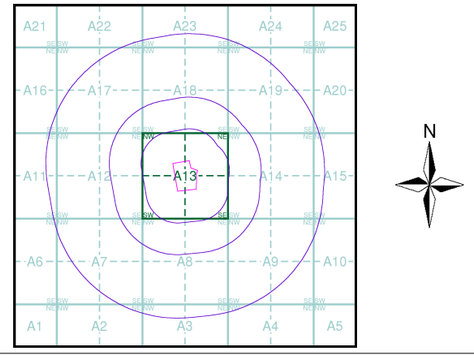
Specified Site | Specified Buffer(s) | X Bearing Reference Point

## Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg

- < 15
- 15 - 25
- 25 - 35
- 35 - 45
- 45 - 60
- 60 - 120
- > 120

## Estimated Soil Chemistry Arsenic - Slice A




## Order Details

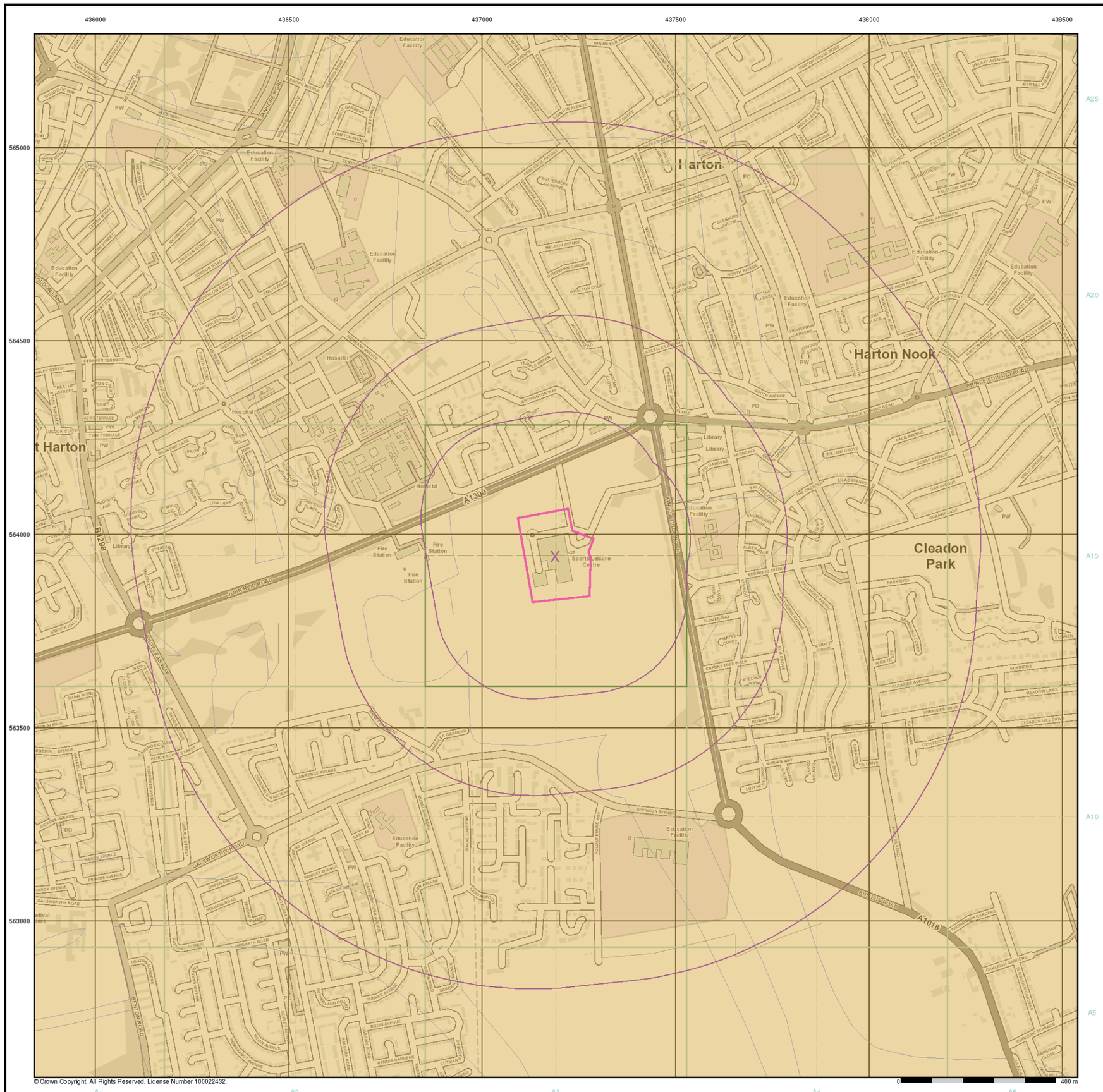
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|---|---|
| Order Details: | 140507389_1_1 |
| Customer Ref: | 5161186 |
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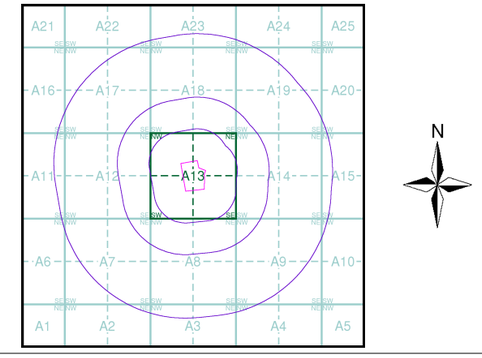
Specified Site | Specified Buffer(s) | X Bearing Reference Point

## Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg

- < 1.8
- 1.8 - 2.2
- 2.2 - 3.0
- > 3.0

## Estimated Soil Chemistry Cadmium - Slice A




## Order Details

| | |
|---|---|
| Order Details: | 140507389_1_1 |
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## General

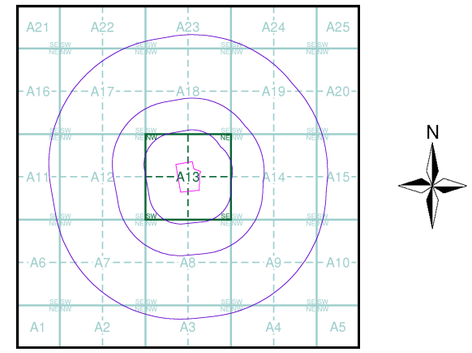
Specified Site | Specified Buffer(s) | X Bearing Reference Point

## Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg

- < 20
- 20 - 40
- 40 - 60
- 60 - 90
- 90 - 120
- 120 - 180
- > 180

## Estimated Soil Chemistry Chromium - Slice A




## Order Details

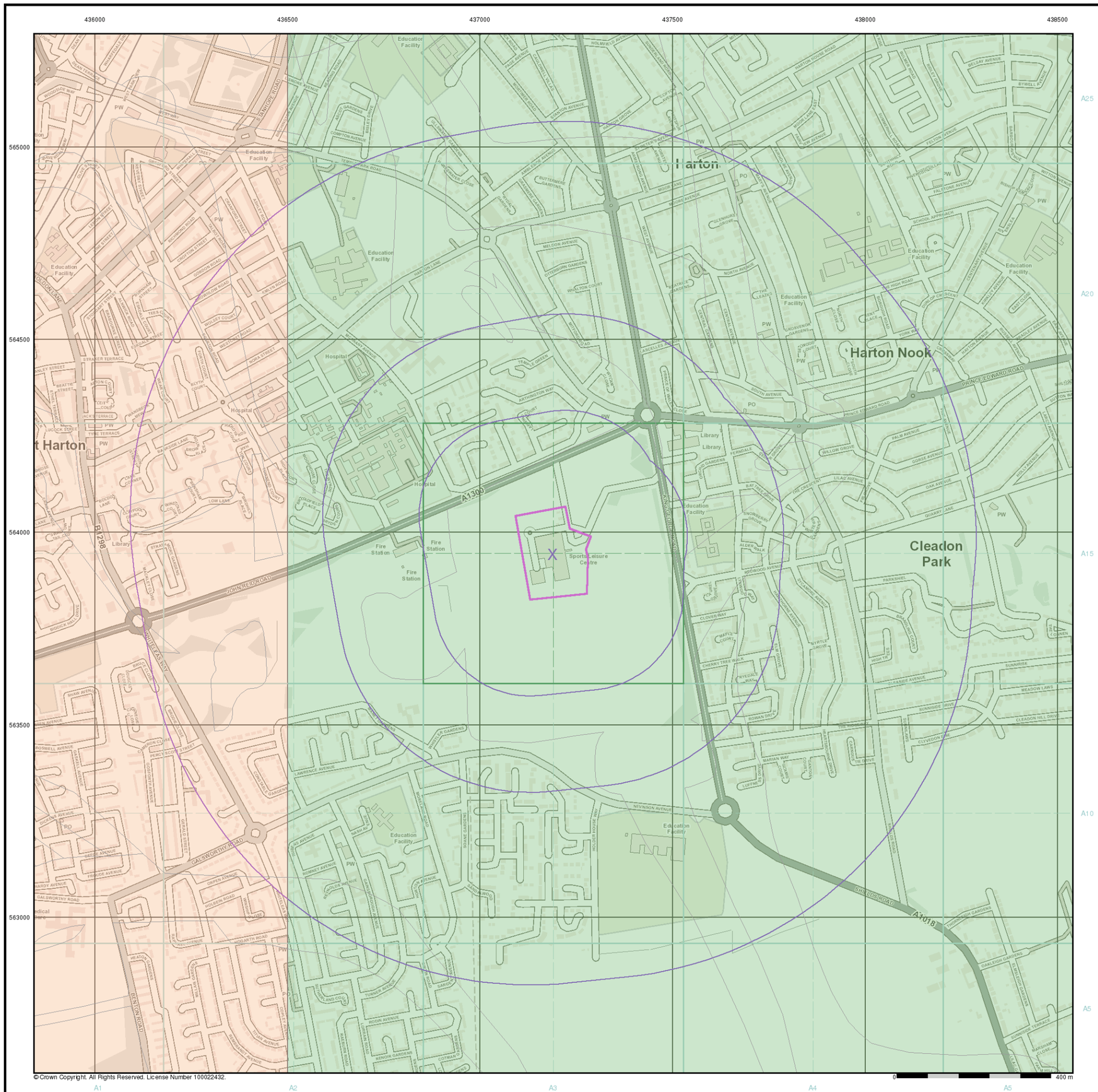
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|---|---|
| Order Details: | 140507389_1_1 |
| Customer Ref: | 5161186 |
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## General

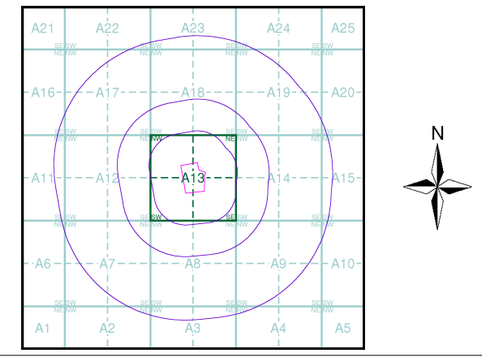
Specified Site | Specified Buffer(s) | X Bearing Reference Point

## Estimated Soil Chemistry Lead

Lead Concentrations mg/kg

- <100 mg/kg
- 100 - 200
- 200 - 300
- 300 - 600
- 600 - 1200
- >1200

## Estimated Soil Chemistry Lead - Slice A




## Order Details

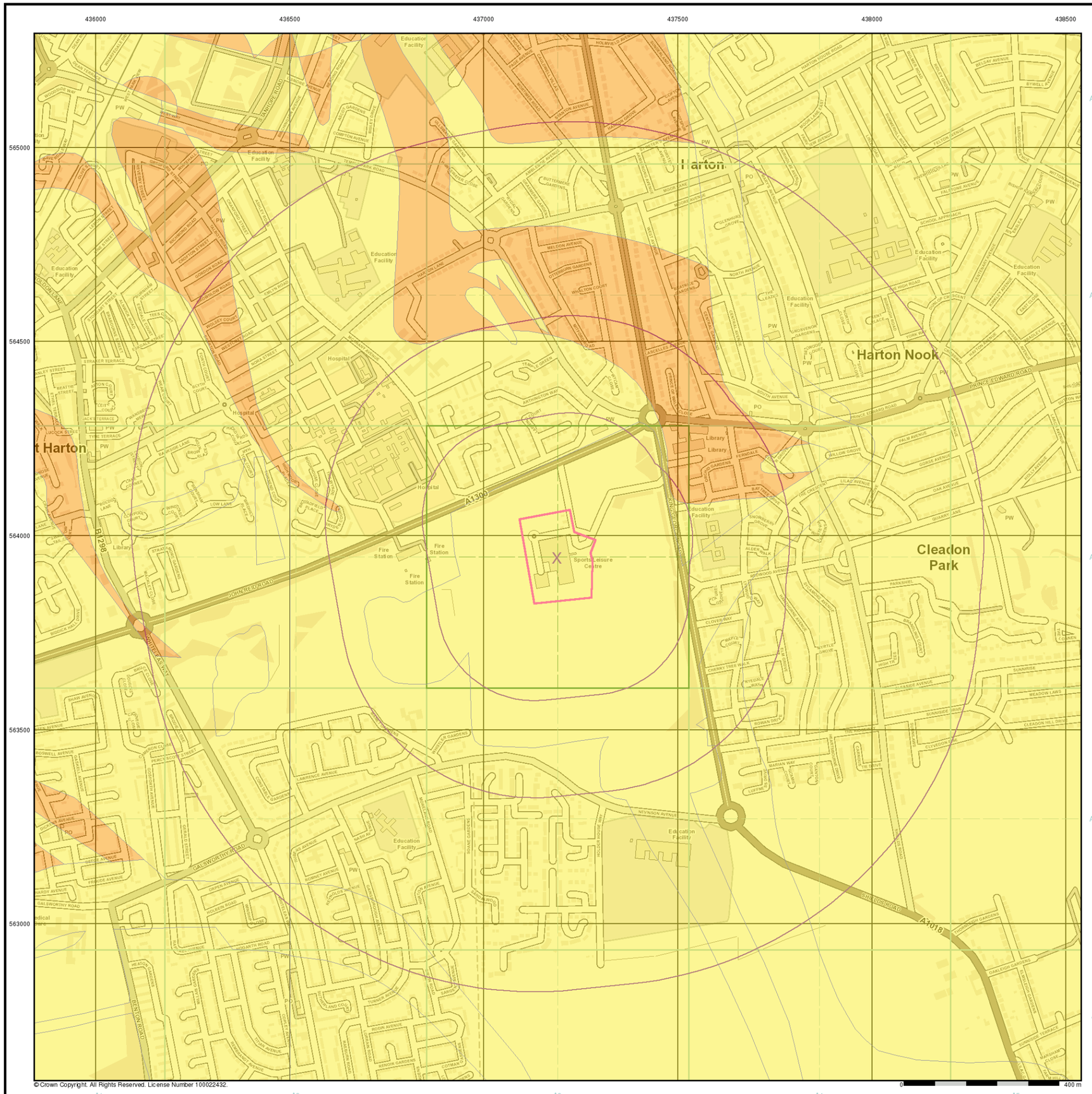
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|---|---|
| Order Details: | 140507389_1_1 |
| Customer Ref: | 5161186 |
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## General

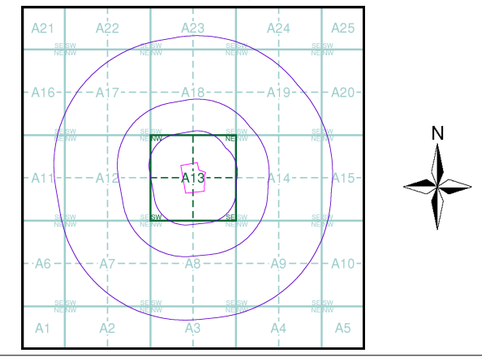
Specified Site | Specified Buffer(s) | X Bearing Reference Point

## Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg

- < 15
- 15 - 30
- 30 - 45
- 45 - 60
- 60 - 80
- 80 - 100
- > 100

## Estimated Soil Chemistry Nickel - Slice A




## Order Details

| | |
|---|---|
| Order Details: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
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## Site Details

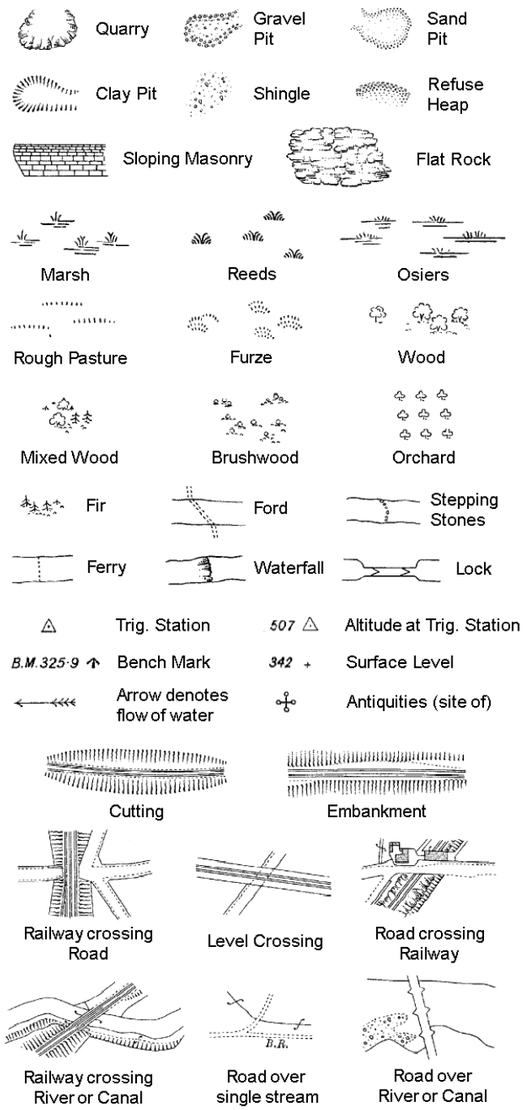
Temple Park Centre, John Reid Road, South Shields, NE34 8FS


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# Historical Mapping Legends

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




County Boundary (Geographical)

County & Civil Parish Boundary

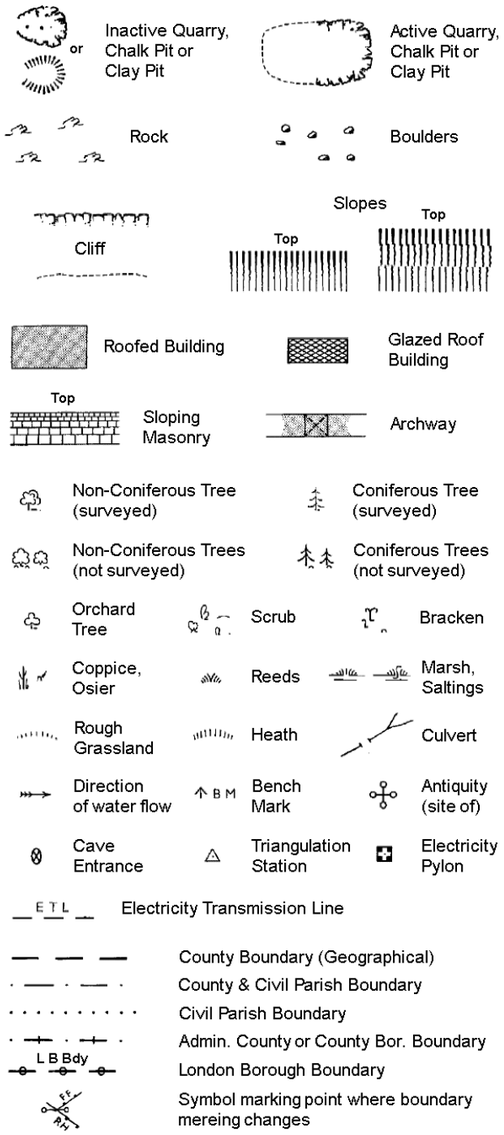
Administrative County & Civil Parish Boundary

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

Co. Burgh Bdy. County Burgh Boundary (Scotland)

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

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




County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

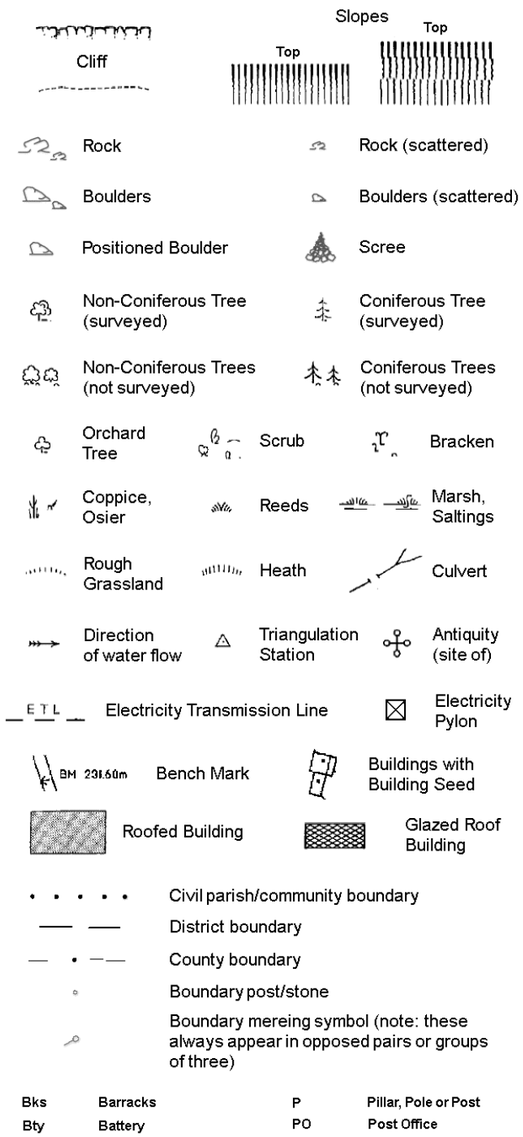
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

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

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




Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

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

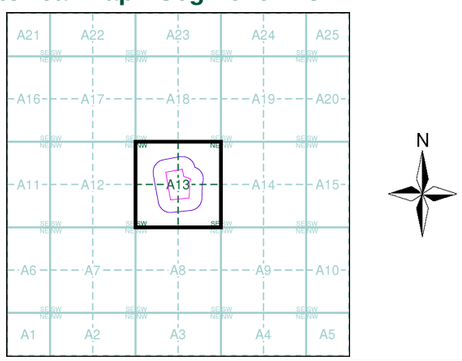
| | | | |
|---|---|---|---|
| Bks | Barracks | P | Pillar, Pole or Post |
| Bty | Battery | PO | Post Office |
| Cemy | Cemetery | PC | Public Convenience |
| Chy | Chimney | Pp | Pump |
| Cis | Cistern | Ppg Sta | Pumping Station |
| Dismtd Rly | Dismantled Railway | PW | Place of Worship |
| El Gen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

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## Historical Mapping & Photography included:

| Mapping Type | Scale | Date | Pg |
|---|---|---|---|
| Durham | 1:2,500 | 1874 - 1886 | 2 |
| Durham | 1:2,500 | 1897 | 3 |
| Durham | 1:2,500 | 1915 - 1916 | 4 |
| Durham | 1:2,500 | 1942 | 5 |
| Ordnance Survey Plan | 1:2,500 | 1956 - 1959 | 6 |
| Ordnance Survey Plan | 1:1,250 | 1956 - 1959 | 7 |
| Additional SIMs | 1:1,250 | 1958 - 1985 | 8 |
| Ordnance Survey Plan | 1:1,250 | 1966 - 1970 | 9 |
| Ordnance Survey Plan | 1:2,500 | 1970 | 10 |
| Ordnance Survey Plan | 1:1,250 | 1970 - 1971 | 11 |
| Supply of Unpublished Survey Information | 1:1,250 | 1974 | 12 |
| Additional SIMs | 1:1,250 | 1983 | 13 |
| Ordnance Survey Plan | 1:1,250 | 1985 | 14 |
| Large-Scale National Grid Data | 1:1,250 | 1993 | 15 |
| Large-Scale National Grid Data | 1:1,250 | 1994 | 16 |
| Historical Aerial Photography | 1:2,500 | 1999 | 17 |

## Historical Map - Segment A13




## Order Details

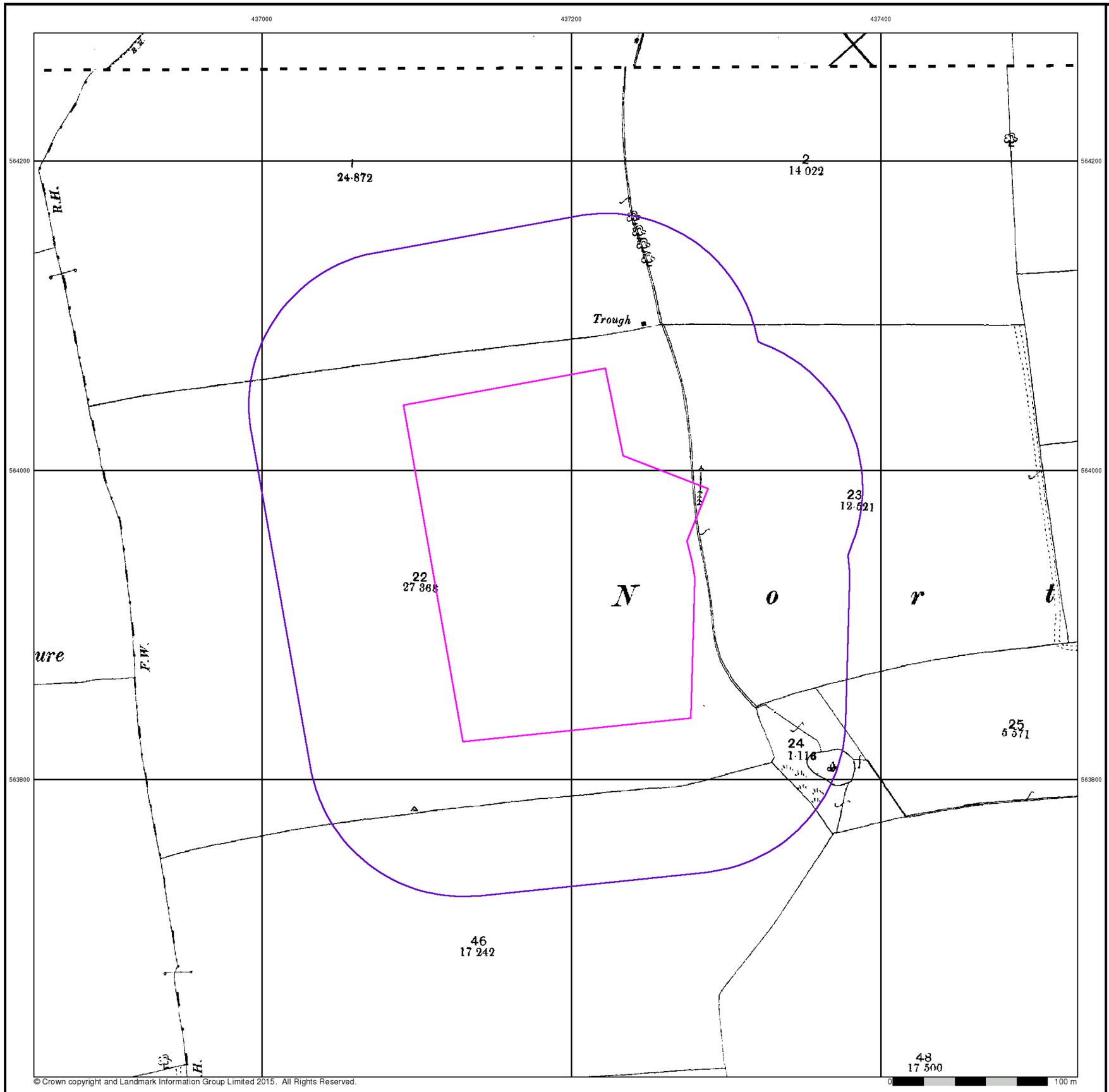
| | |
|---|---|
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| National Grid Reference: | 437190, 563940 |
| Slice: | A |
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## Durham

## Published 1874 - 1886

## Source map scale - 1:2,500

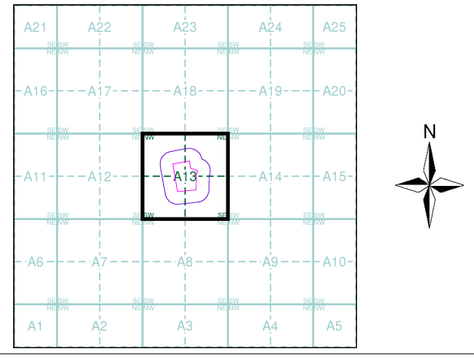
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain.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

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

004_09
1874
1:2,500

004_13
1886
1:2,500

## Historical Map - Segment A13




## Order Details

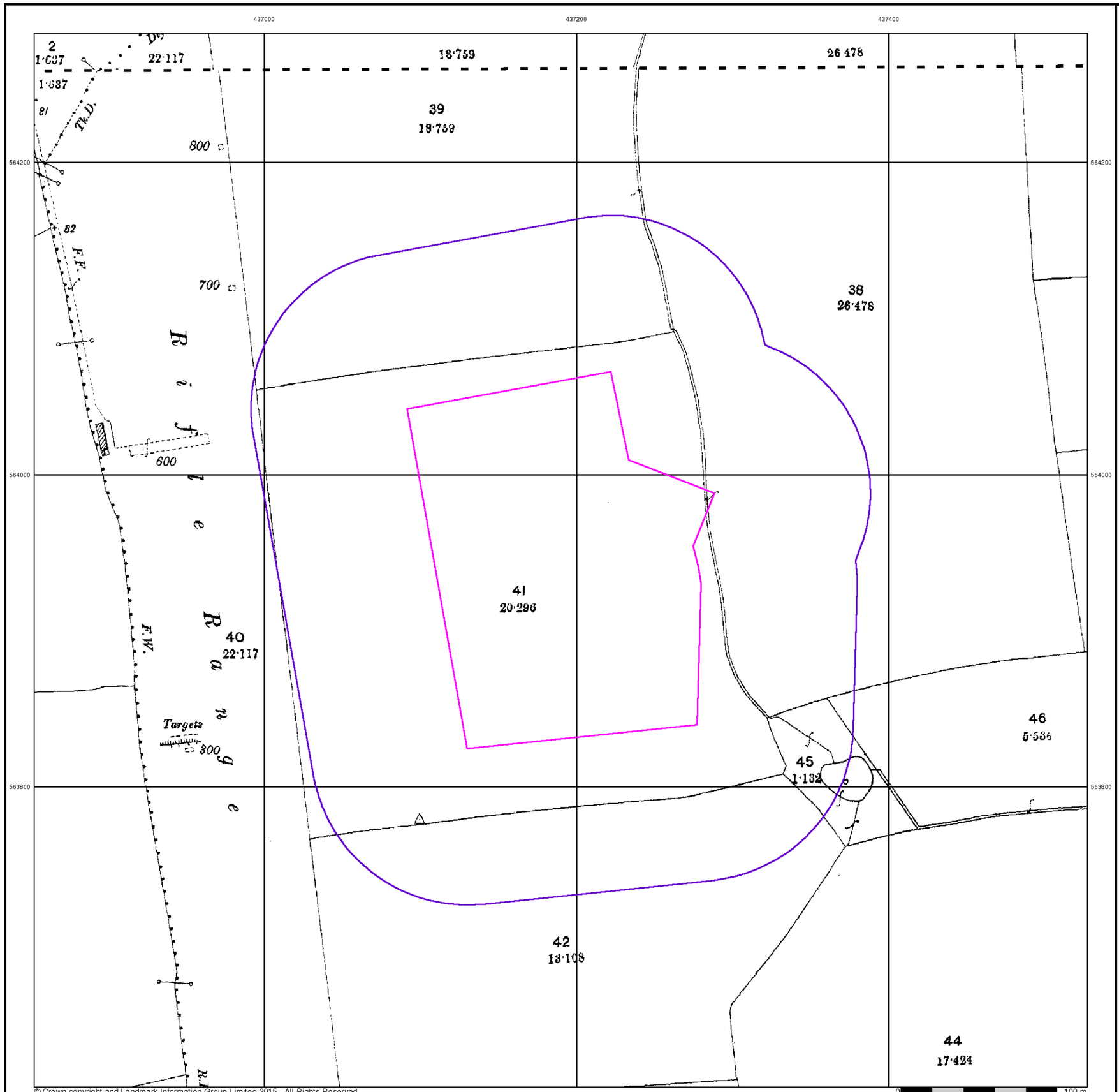
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## Durham

## Published 1897

## Source map scale - 1:2,500

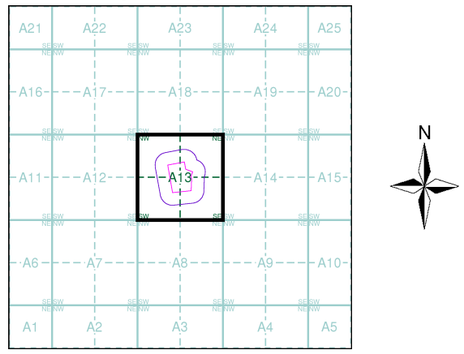
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## Map Name(s) and Date(s)

004_09
1897
1:2,500

004_13
1897
1:2,500

## Historical Map - Segment A13



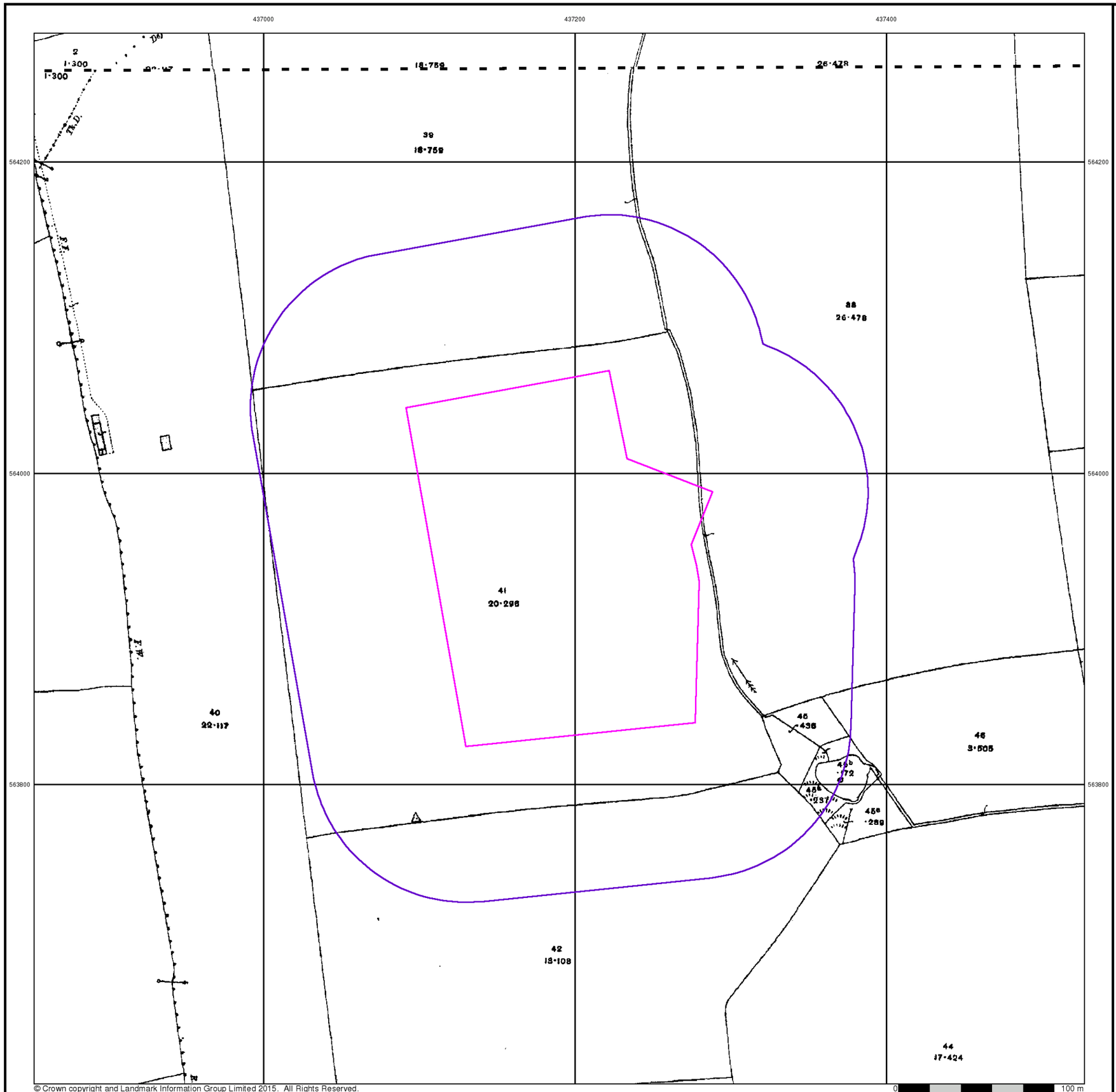

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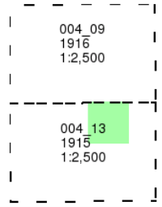
## Durham

## Published 1915 - 1916

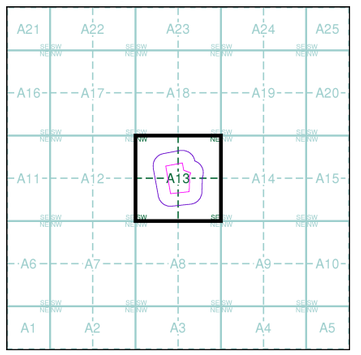
## Source map scale - 1:2,500

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

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




## Historical Map - Segment A13

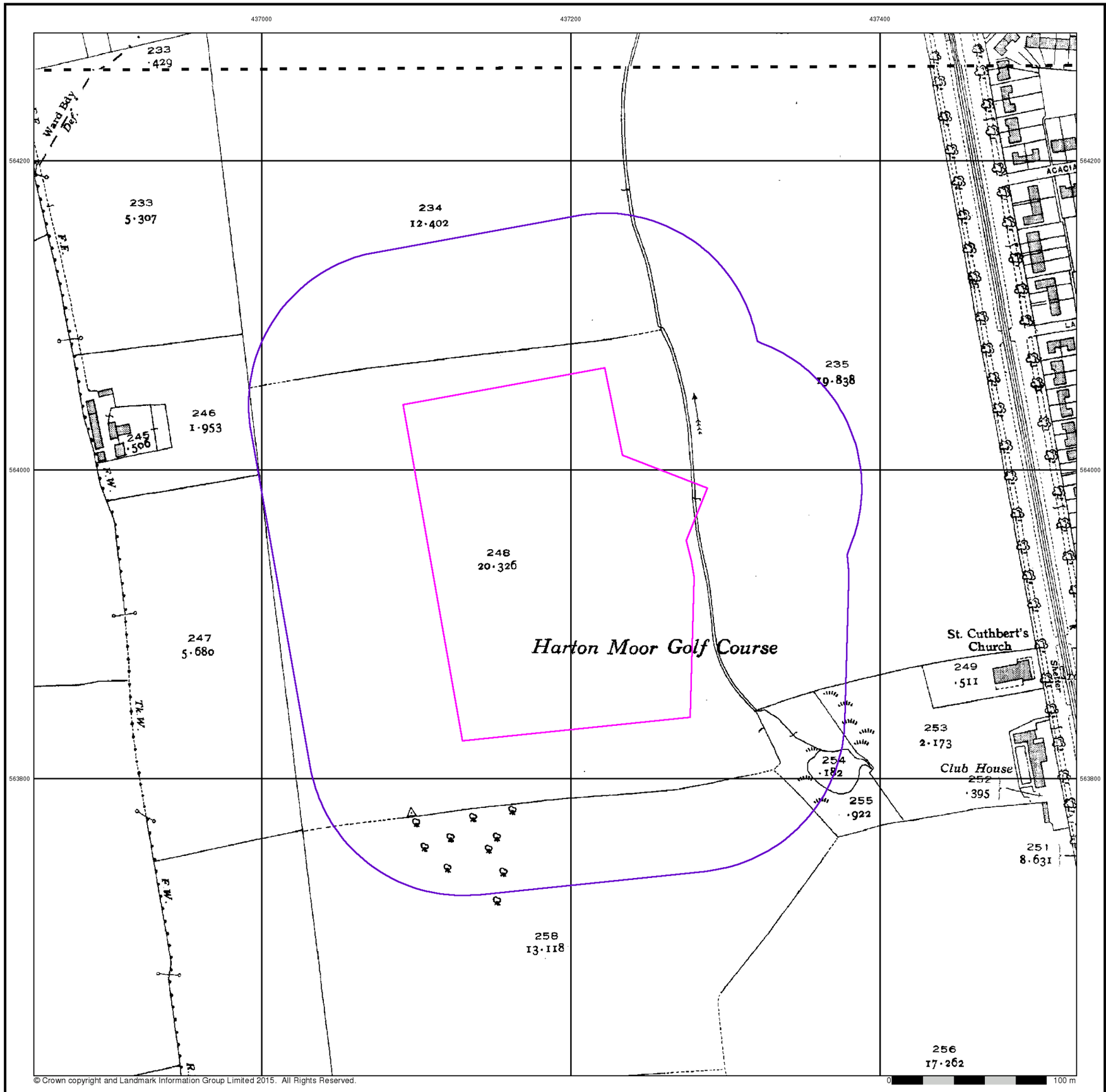



## Order Details

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| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 100 |

## Site Details

Temple Park Centre, John Reid Road, South Shields, NE34 8FS



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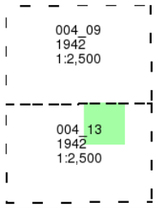
## Durham

## Published 1942

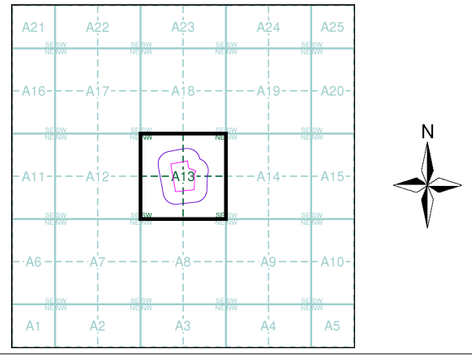
## Source map scale - 1:2,500

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

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




## Historical Map - Segment A13




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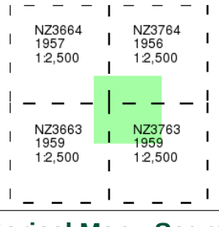
## Ordnance Survey Plan

**Published 1956 - 1959**

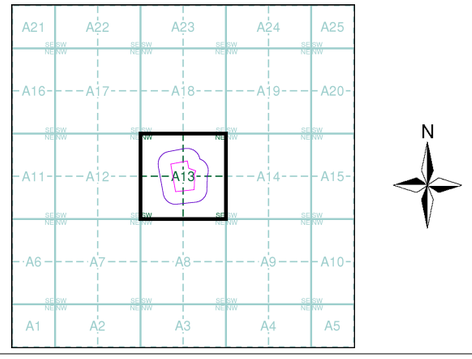
**Source map scale - 1:2,500**

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




## Historical Map - Segment A13




## Order Details

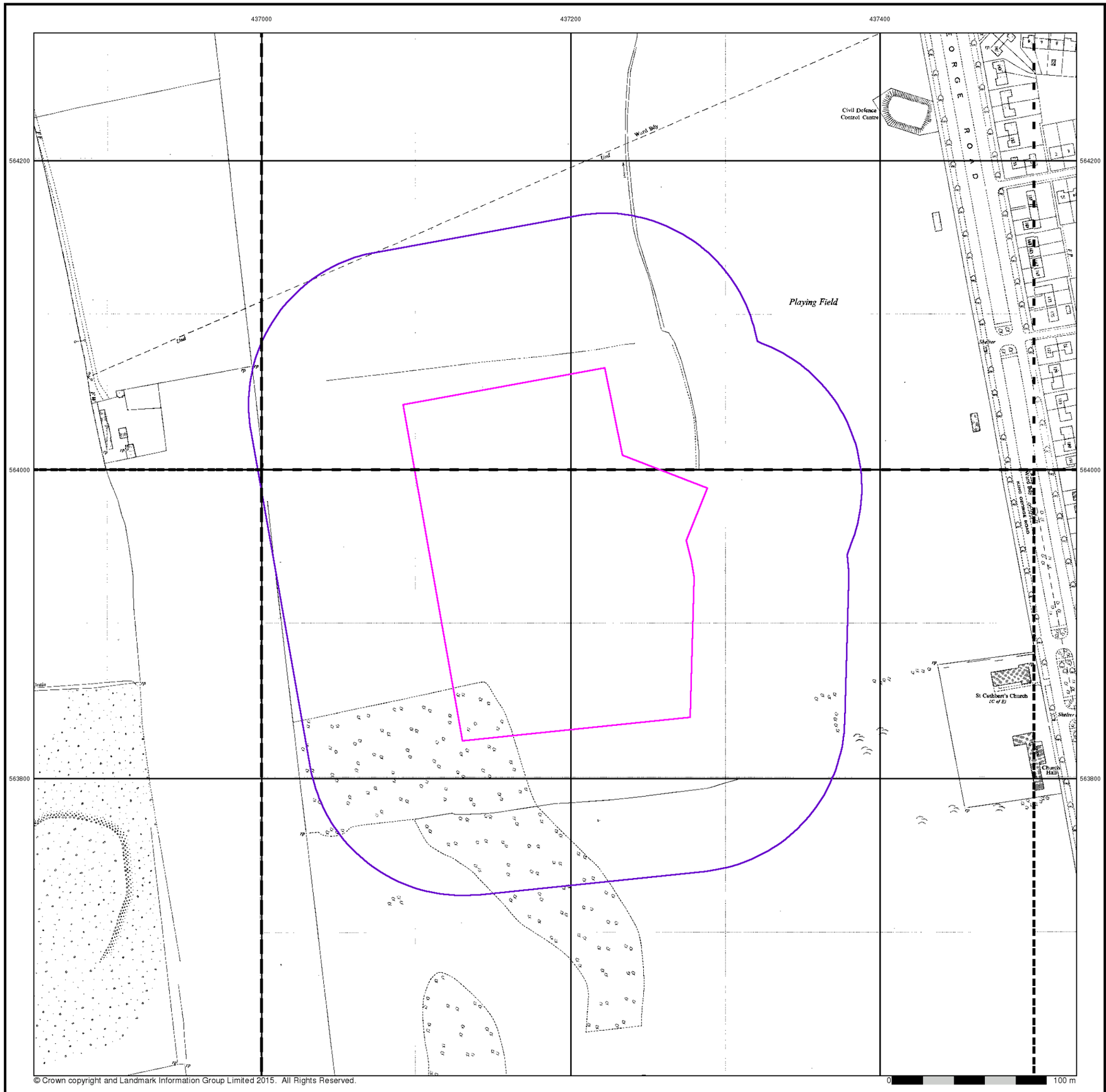
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| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
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| Search Buffer (m): | 100 |

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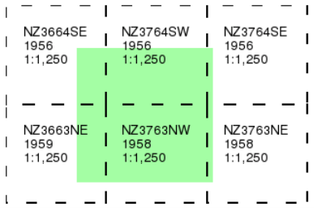
## Ordnance Survey Plan

## Published 1956 - 1959

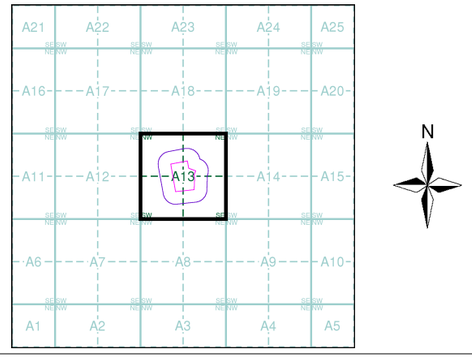
## Source map scale - 1:1,250

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

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




## Historical Map - Segment A13




## Order Details

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437000 437200 437400

564200 564000 563800

Bamford Walk
Calver Court
Bennell Court
Path
Track
Sir F.D.R. Ward Bay
JOHN REID ROAD
Temple Memorial Park
Playing Field
Issues
St Cuthbert's Church (C of E)
Church Hall

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0 100 m

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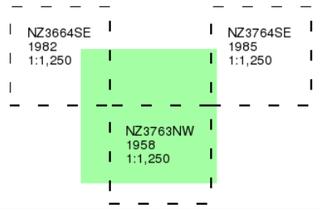
## Additional SIMs

**Published 1958 - 1985**

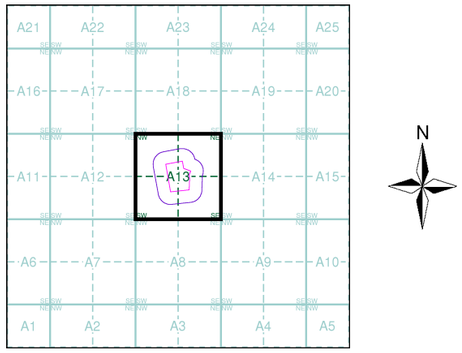
**Source map scale - 1:1,250**

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

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




## Historical Map - Segment A13




## Order Details

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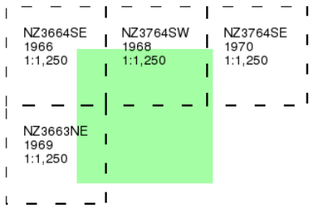
## Ordnance Survey Plan

**Published 1966 - 1970**

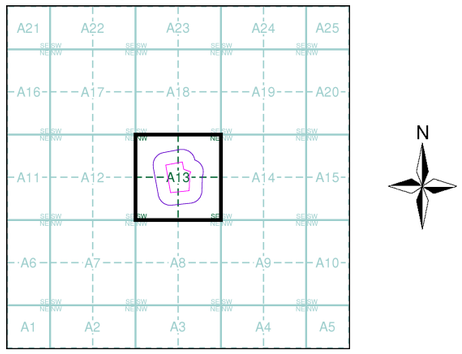
**Source map scale - 1:1,250**

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

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




## Historical Map - Segment A13




## Order Details

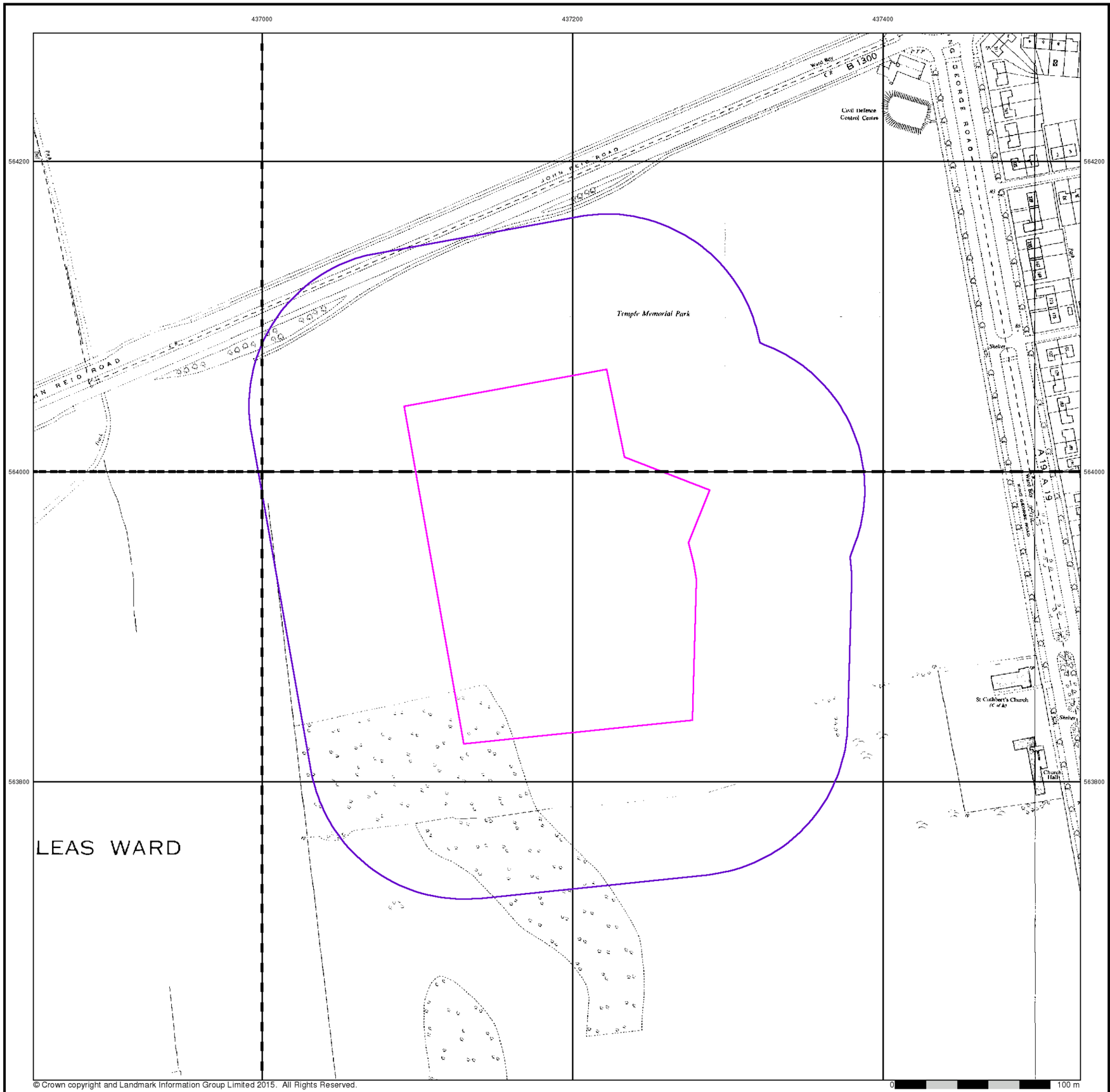
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| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
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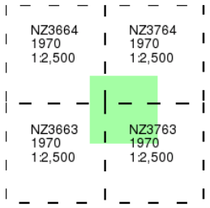
## Ordnance Survey Plan

**Published 1970**

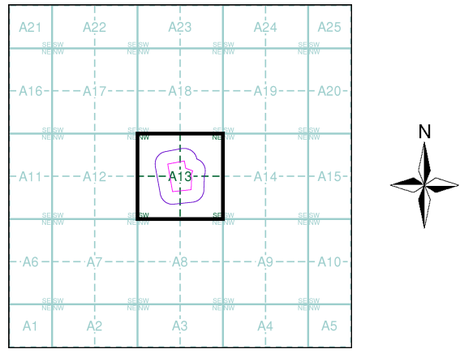
**Source map scale - 1:2,500**

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

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




## Historical Map - Segment A13



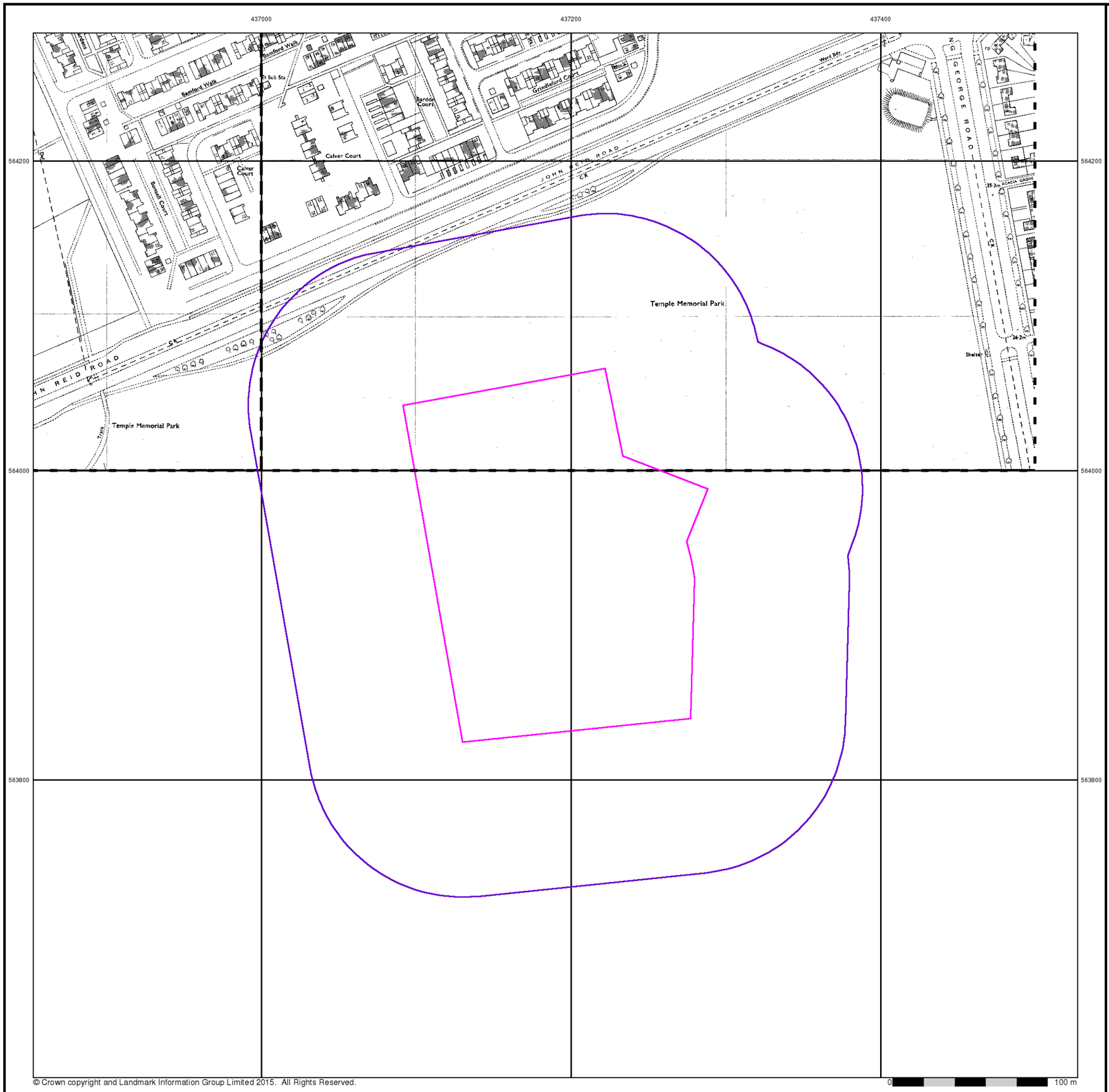

## Order Details

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| Order Number: | 140507389_1_1 |
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| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 100 |

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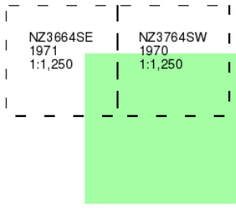
## Ordnance Survey Plan

**Published 1970 - 1971**

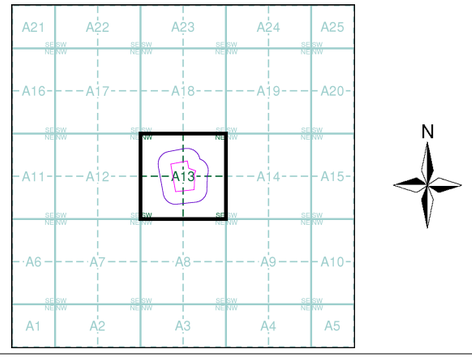
**Source map scale - 1:1,250**

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

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




## Historical Map - Segment A13




## Order Details

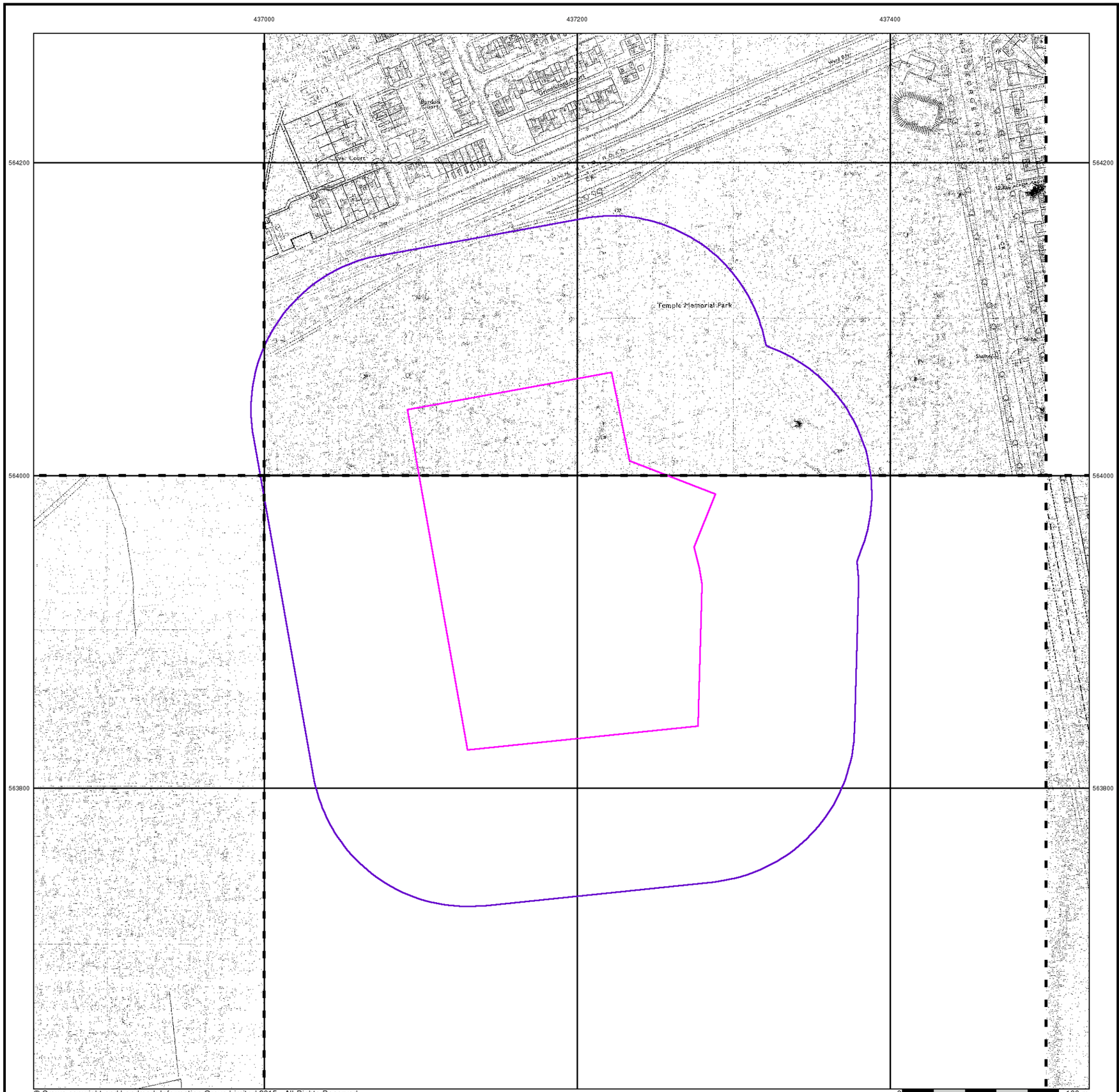
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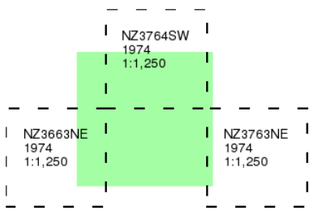
## Supply of Unpublished Survey Information

**Published 1974**

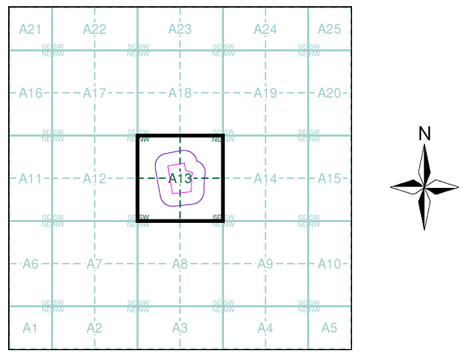
**Source map scale - 1:1,250**

SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a `work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

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




## Historical Map - Segment A13



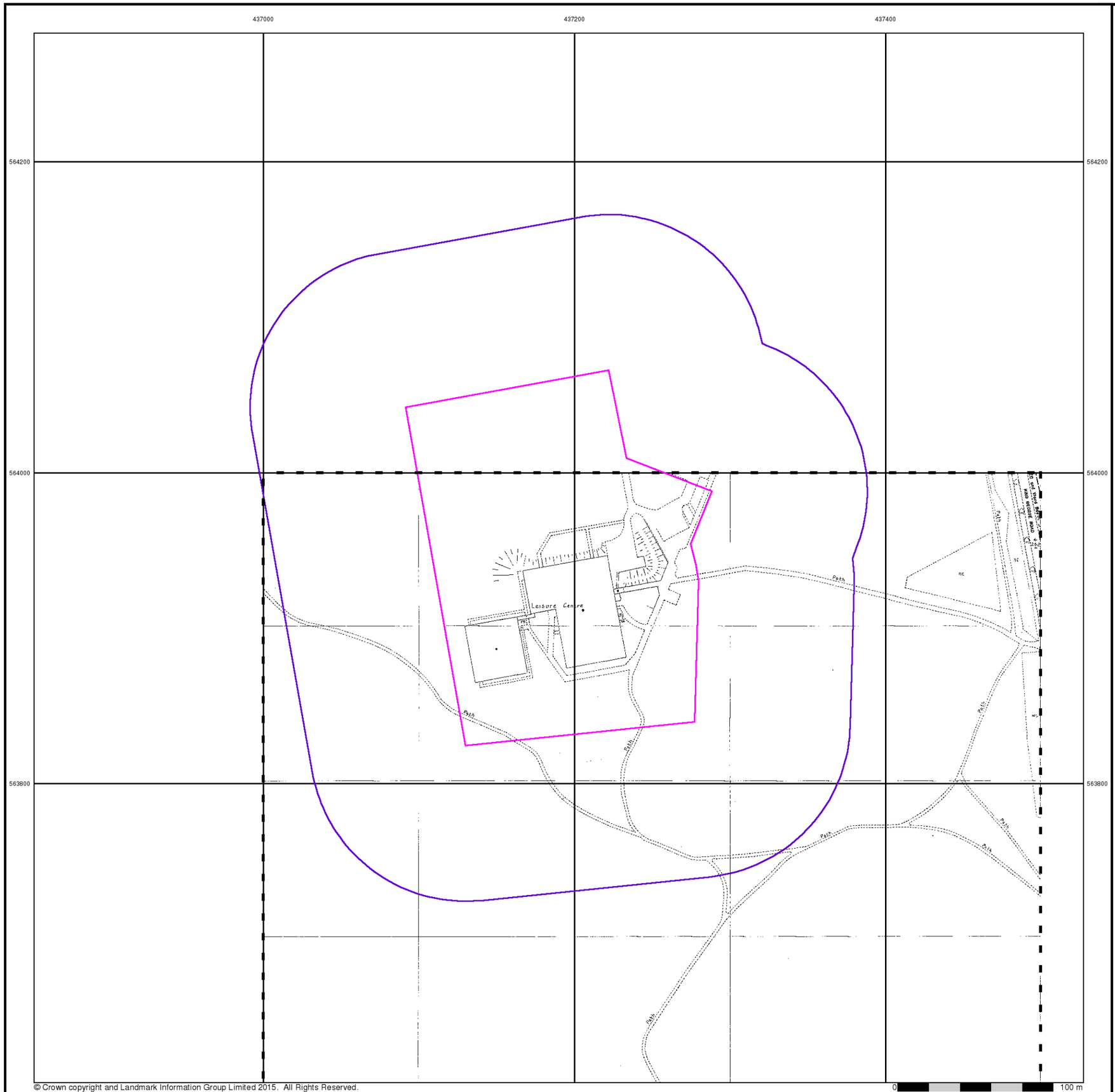

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## Additional SIMs

**Published 1983**

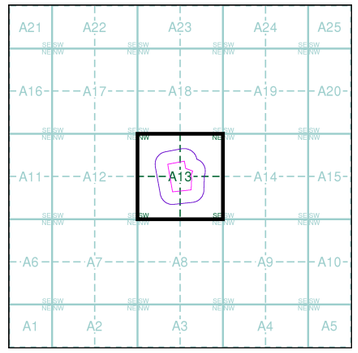
**Source map scale - 1:1,250**

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

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

NZ3763NW
1983
1:1,250

## Historical Map - Segment A13



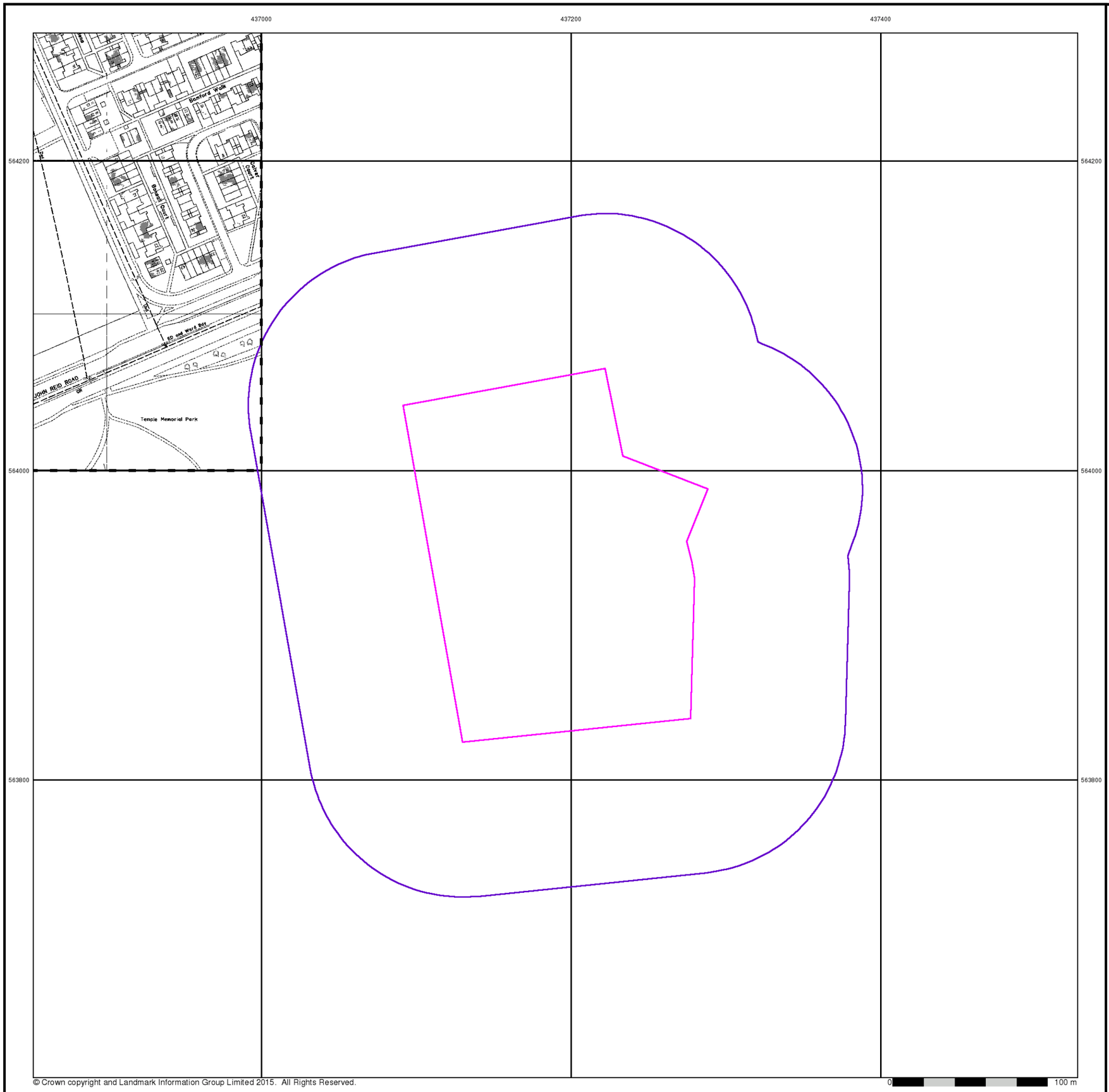

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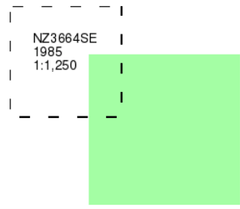
## Ordnance Survey Plan

## Published 1985

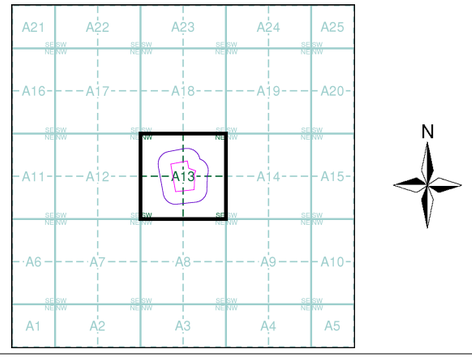
## Source map scale - 1:1,250

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




## Historical Map - Segment A13



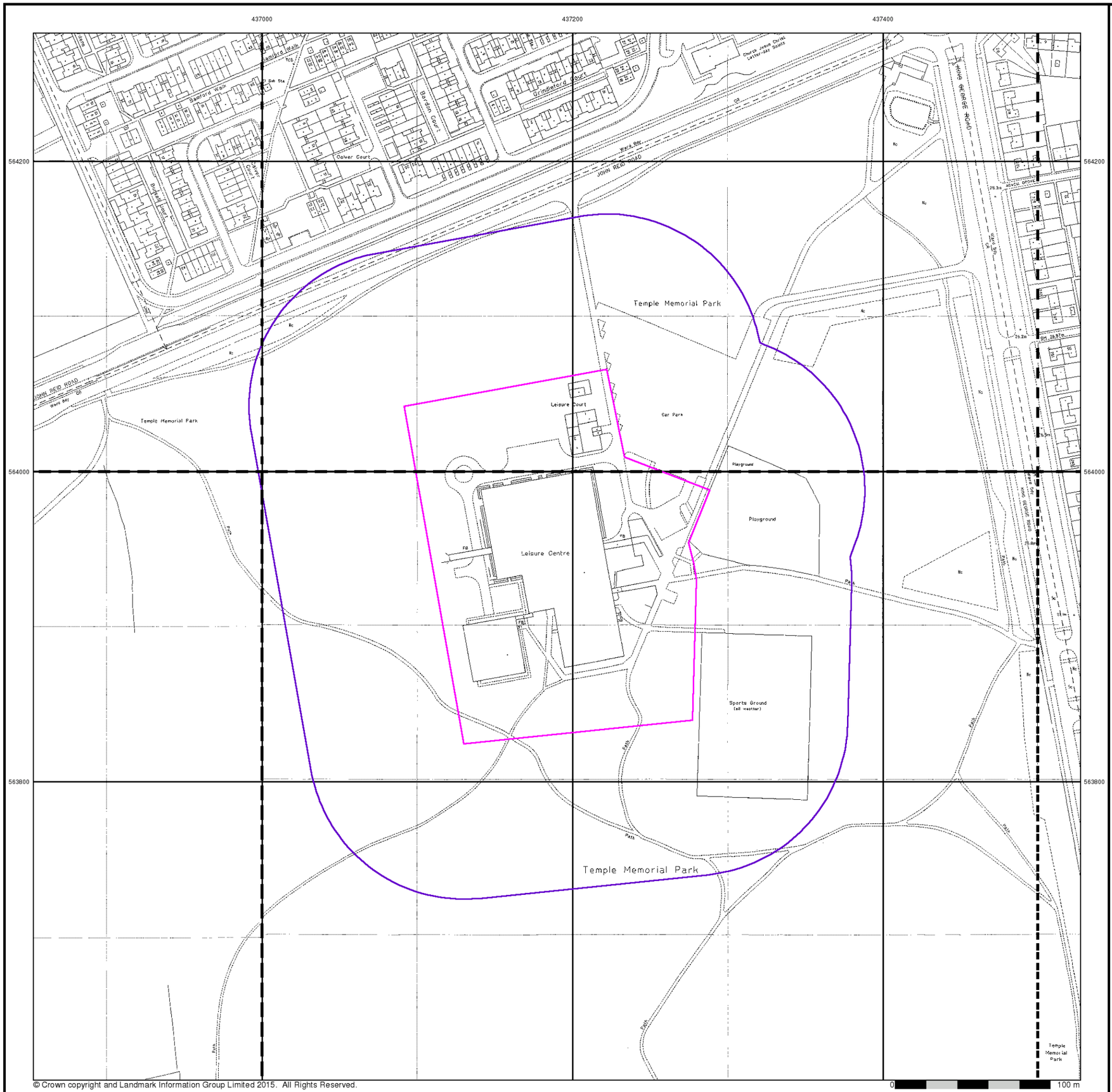

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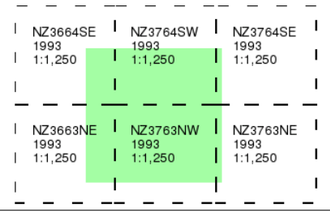
## Large-Scale National Grid Data

**Published 1993**

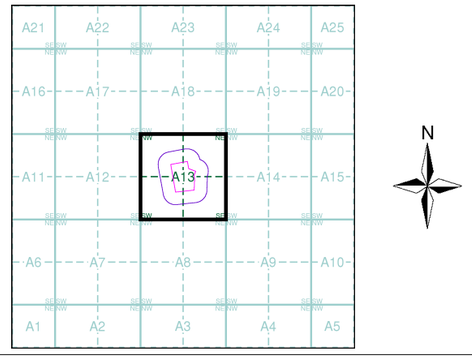
**Source map scale - 1:1,250**

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

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




## Historical Map - Segment A13




## Order Details

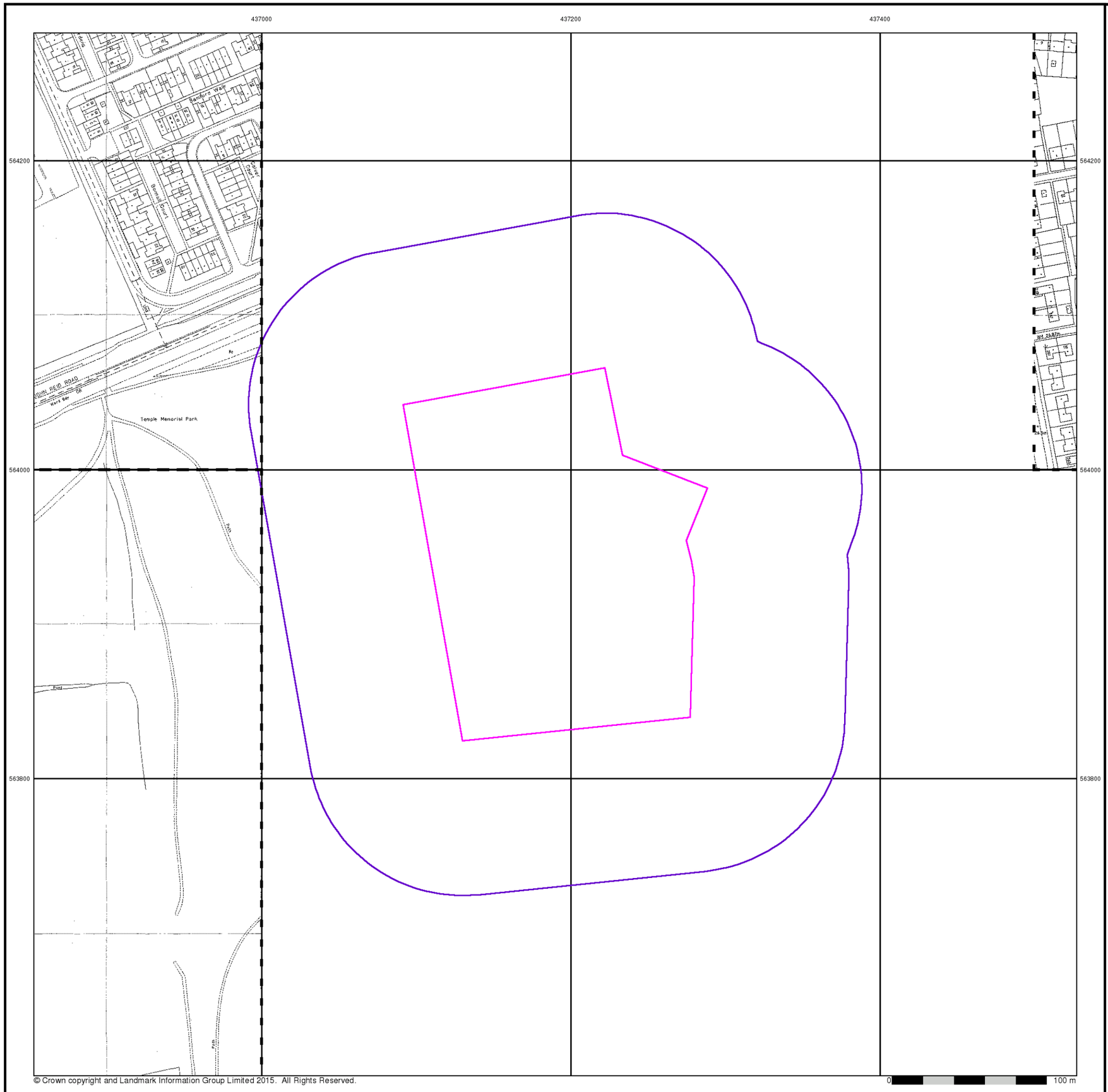
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0 100 m

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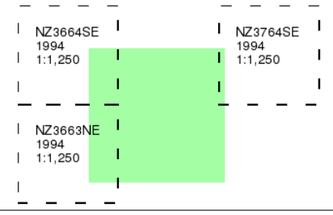
## Large-Scale National Grid Data

**Published 1994**

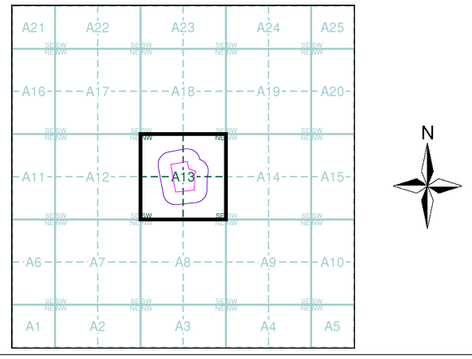
**Source map scale - 1:1,250**

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

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




## Historical Map - Segment A13




## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 100 |

## Site Details

Temple Park Centre, John Reid Road, South Shields, NE34 8FS

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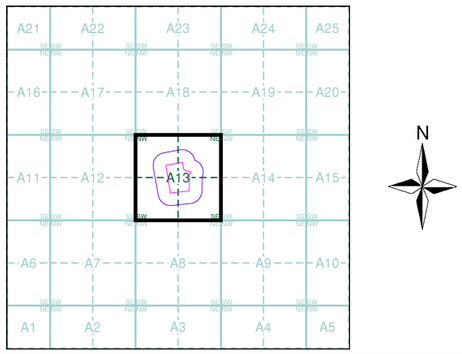

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## Historical Aerial Photography

**Published 1999**

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

### Historical Aerial Photography - Segment A13




### Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
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# Historical Mapping Legends

## Ordnance Survey County Series 1:10,560

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

## Ordnance Survey Plan 1:10,000

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

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

## 1:10,000 Raster Mapping

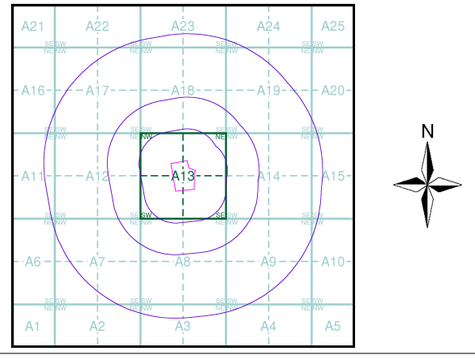
Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community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

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## Historical Mapping & Photography included:

| Mapping Type | Scale | Date | Pg |
|---|---|---|---|
| Durham | 1:10,560 | 1862 | 3 |
| Northumberland | 1:10,560 | 1864 | 4 |
| Durham | 1:10,560 | 1898 | 5 |
| Northumberland | 1:10,560 | 1899 | 6 |
| Durham | 1:10,560 | 1921 | 7 |
| Durham | 1:10,560 | 1938 | 8 |
| Ordnance Survey Plan | 1:10,000 | 1951 - 1952 | 9 |
| Ordnance Survey Plan | 1:10,000 | 1967 - 1968 | 10 |
| Ordnance Survey Plan | 1:10,000 | 1976 - 1977 | 11 |
| Sunderland | 1:10,000 | 1976 | 12 |
| Newcastle-upon-Tyne | 1:25,000 | 1977 | 13 |
| Ordnance Survey Plan | 1:10,000 | 1986 - 1987 | 14 |
| Ordnance Survey Plan | 1:10,000 | 1993 | 15 |
| 10K Raster Mapping | 1:10,000 | 2000 | 16 |
| 10K Raster Mapping | 1:10,000 | 2006 | 17 |
| VectorMap Local | 1:10,000 | 2017 | 18 |

## Historical Map - Slice A




## Order Details

Order Number: 140507389_1_1
Customer Ref: 5161186
National Grid Reference: 437190, 563940
Slice: A
Site Area (Ha): 3.52
Search Buffer (m): 1000

## Site Details

Temple Park Centre, John Reid Road, South Shields, NE34 8FS


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# Russian Military Mapping Legends

## 1:5,000 and 1:10,000 mapping

a. Not drawn to scale b. Drawn to scale

- Government and Administrative Buildings
- Military and Industrial Buildings
- Military and Communication Areas
- Subway Entrance
- Fireproof Building
- Prominent Fireproof Building
- Non-fireproof Building
- Non-fireproof Building (non-dwelling)
- Factory, mill, and flour mill, with chimneys
- Factory, mill, and flour mill, without chimneys
- Power Station, drawn to scale
- Hydroelectric Power Station
- Radio Station, drawn to scale
- Telephone Station, drawn to scale
- Abandoned Open-pit Mine or Quarry
- Open-pit Salt Mine
- Pit
- Oil Deposit or Well
- Oil Seepage
- Tailings Pile
- Fuel Storage Tanks
- Natural Gas Tank
- Bench Mark
- Drill Hole
- Burial Mound
- Triangulation Point on Burial Mound
- Single-track Railroad
- Double-track Railroad and Station Building
- Coniferous Forest
- Deciduous Forest
- Mixed Forest
- Lawns
- Citrus Orchard
- Wet Ground
- Scattered Vegetation

243,8 — Values for prominent elevations

186.0 — Numbers for spot elevations, depth soundings, contour lines, etc.

0,2 — Velocity of the current, width of river bed, depth of river

Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

### Russian Alphabet (For reference and phonetic interpretation of map text)

| | | | |
|---|---|---|---|
| А а (A) | З з (Z) | П п (P) | Ч ч (CH) |
| Б б (B) | И и (I) | Р р (R) | Ш ш (SH) |
| В в (V) | Й й (Y) | С с (S) | Щ щ (SHCH) |
| Г г (G) | К к (K) | Т т (T) | ъ (–) |
| Д д (D) | Л л (L) | У у (U) | ы (Y) |
| Е е (E) | М м (M) | Ф ф (F) | ь (') |
| Ё ё (YO) | Н н (N) | Х х (KH) | Э э (E) |
| Ж ж (ZH) | О о (O) | Ц ц (TS) | Ю ю (YU or IU) |
| | | | Я я (YA or IA) |

## 1:25,000 mapping

a. Not drawn to scale b. Drawn to scale

- Government and Administrative Buildings
- Military and Industrial Buildings
- Military and Communication Areas
- Subway Entrance
- Partly Demolished Buildings
- Demolished Buildings
- Built-Up Area with Fireproof Buildings Predominant
- Built-Up Area with Non-Fireproof Buildings Predominant
- Individual Fireproof Building
- Prominent Industrial Building
- Individual Dwelling, Fireproof
- Ruins of an Individual Dwelling
- Factory or Mill Chimney
- Factory or Mill with Chimney
- Factory or Mill without Chimney
- Mine or Open Pit Mine
- Operating Shaft or Mine
- Non-Operating Shaft or Mine
- Salt Mine
- Tailings Pile
- Pit
- Stone Quarry
- Gas Pump or Service Station
- Fuel Storage or Natural Gas Tank
- Oil or Natural Gas Derrick
- Small Hydroelectric Power Station
- Power Station
- Transformer Station
- Cemetery
- Burial Mound (height in metres)
- Triangulation Point on Burial Mound
- Triangulation Point
- Bench Mark
- Bench Mark (monumented)
- Telegraph Office
- Telephone Station
- Radio Station
- Radio Tower
- Airfield or Seaplane Base
- Landing Strip
- Main Highway
- Highway under Construction
- Improved Dirt Road (former truck road)
- Double-track Railroad with First Class Station
- Dismantled Railroad
- Railroad Under Construction
- Shore Embankment
- River or Ditch with Embankment
- Well
- Water Reservoir or Rain Water Pit
- Spring
- Isobath with value
- Heavy (Index) Contour Line
- Contour Line and Value
- Half Contour Line
- Spot Elevation Value
- Coniferous
- Deciduous
- Mixed
- Scrub

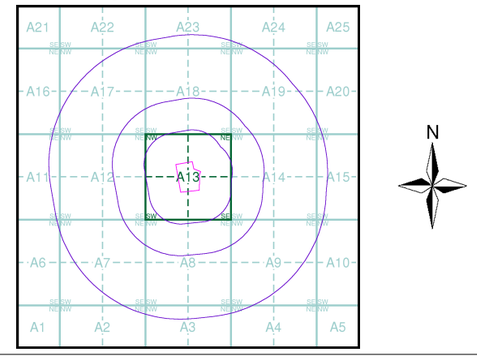
## Key to Numbers on Mapping

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## Historical Mapping & Photography included:

| Mapping Type | Scale | Date | Pg |
|---|---|---|---|
| Durham | 1:10,560 | 1862 | 3 |
| Northumberland | 1:10,560 | 1864 | 4 |
| Durham | 1:10,560 | 1898 | 5 |
| Northumberland | 1:10,560 | 1899 | 6 |
| Durham | 1:10,560 | 1921 | 7 |
| Durham | 1:10,560 | 1938 | 8 |
| Ordnance Survey Plan | 1:10,000 | 1951 - 1952 | 9 |
| Ordnance Survey Plan | 1:10,000 | 1967 - 1968 | 10 |
| Ordnance Survey Plan | 1:10,000 | 1976 - 1977 | 11 |
| Sunderland | 1:10,000 | 1976 | 12 |
| Newcastle-upon-Tyne | 1:25,000 | 1977 | 13 |
| Ordnance Survey Plan | 1:10,000 | 1986 - 1987 | 14 |
| Ordnance Survey Plan | 1:10,000 | 1993 | 15 |
| 10K Raster Mapping | 1:10,000 | 2000 | 16 |
| 10K Raster Mapping | 1:10,000 | 2006 | 17 |
| VectorMap Local | 1:10,000 | 2017 | 18 |

## Russian Map - Slice A




## Order Details

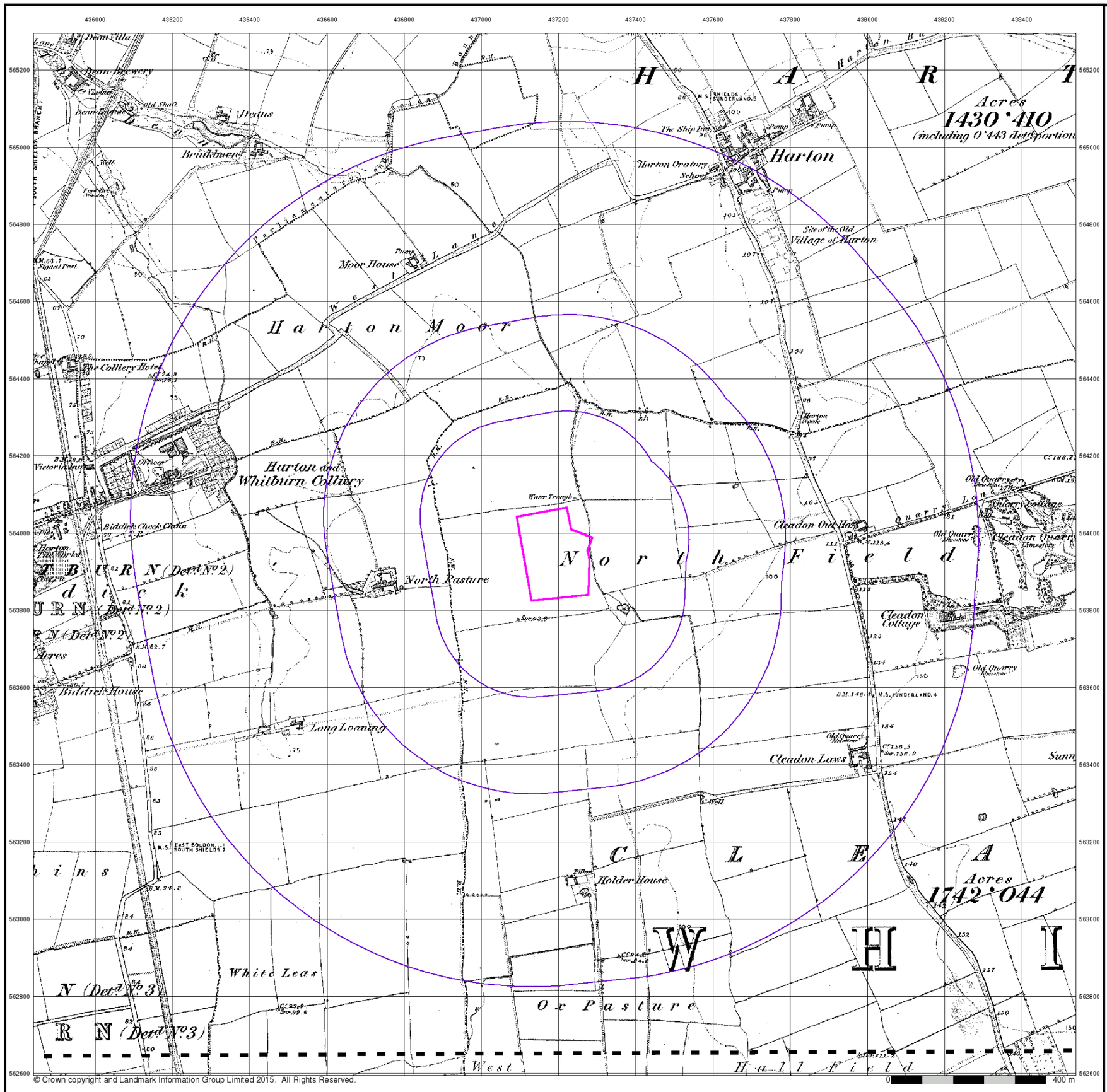
| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

## Site Details

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## Durham

## Published 1862

## Source map scale - 1:10,560

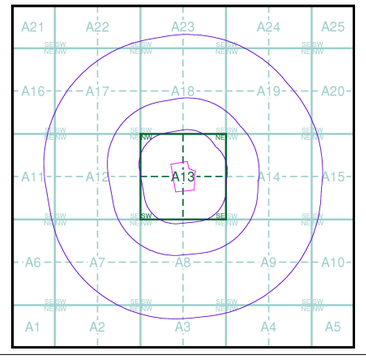
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

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

00400
1862
1:10,560

00800
1862
1:10,560

## Historical Map - Slice A

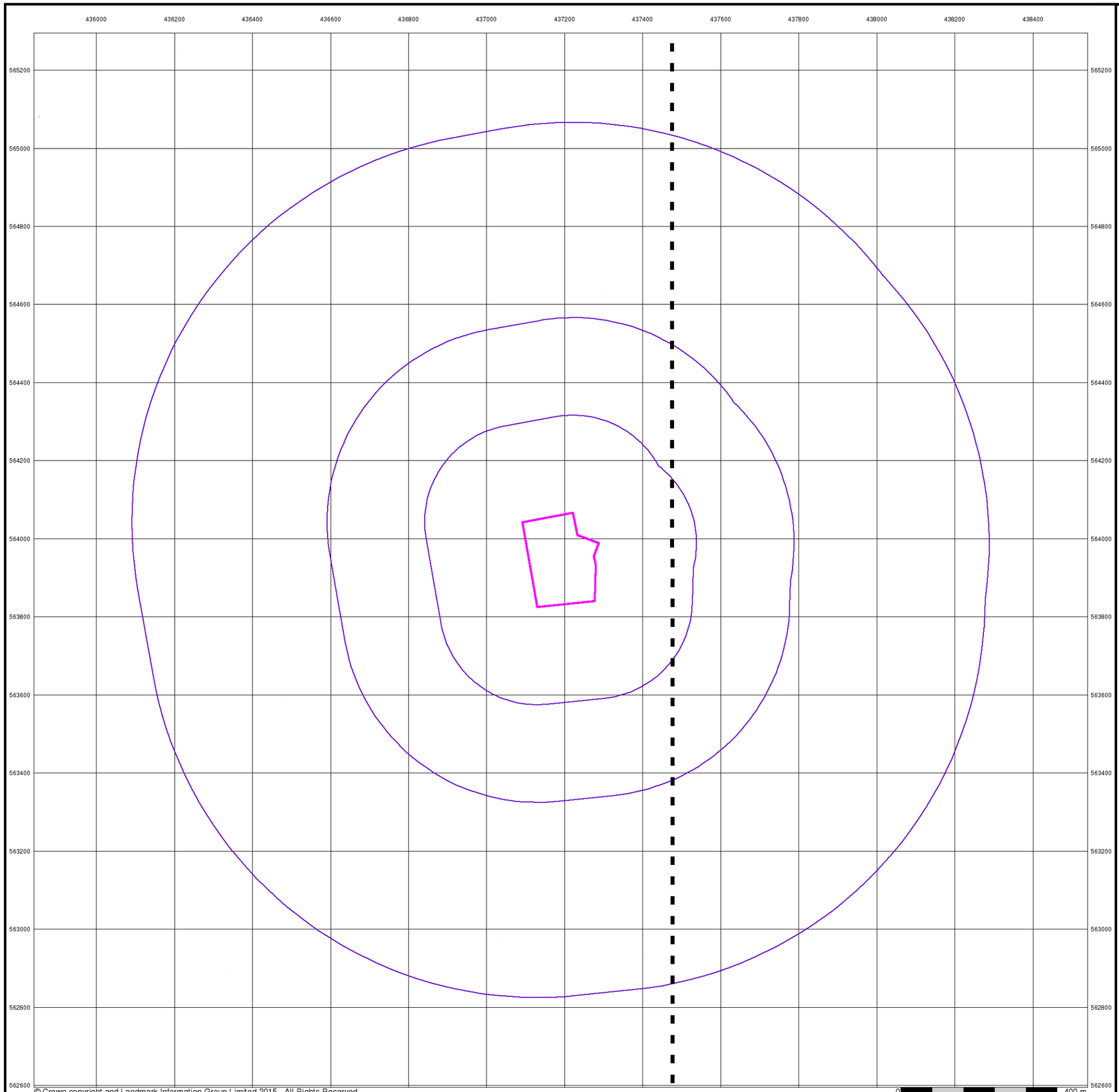



## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

## Site Details

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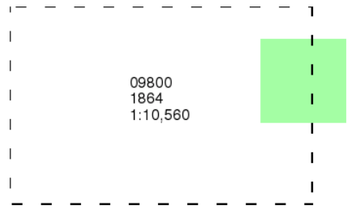
## Northumberland

## Published 1864

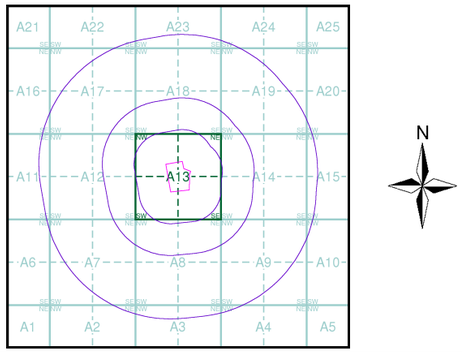
## Source map scale - 1:10,560

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

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




## Historical Map - Slice A




## Order Details

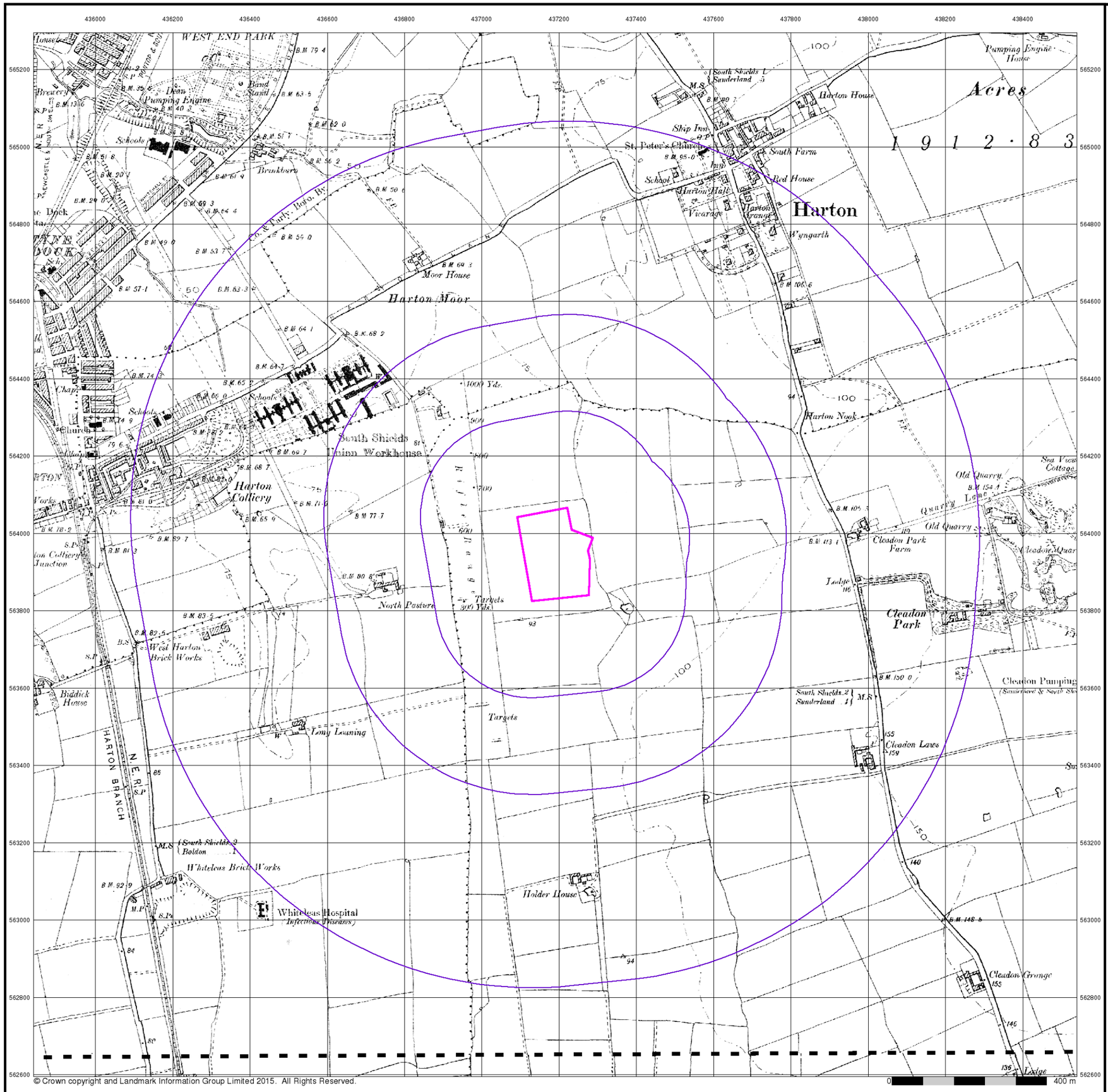
| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

## Site Details

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## Durham

## Published 1898

## Source map scale - 1:10,560

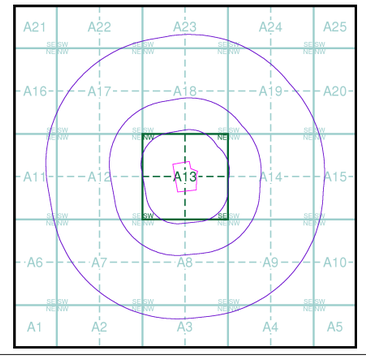
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

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

004SW
1898
1:10,560

008NW
1898
1:10,560

## Historical Map - Slice A




## Order Details

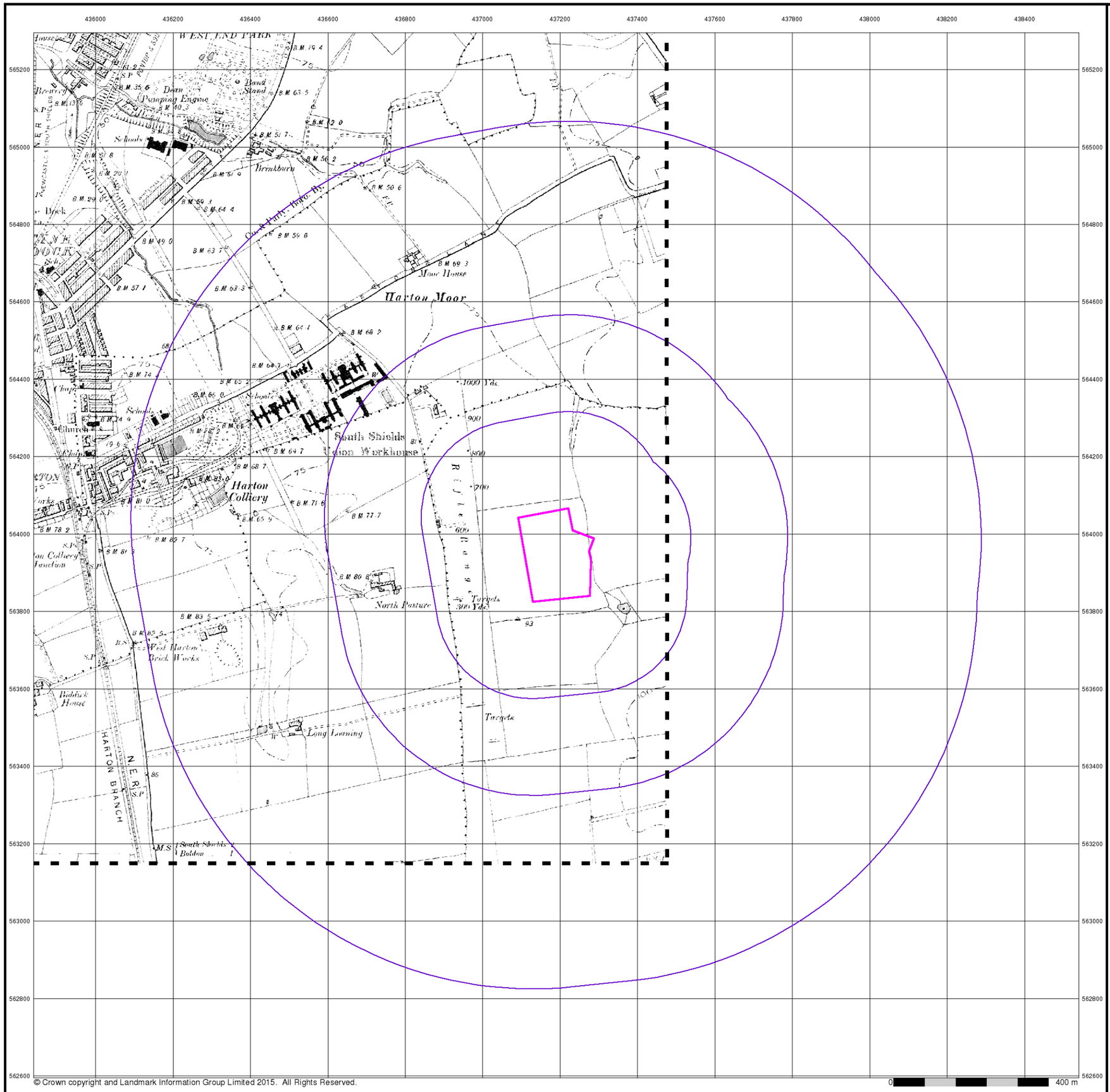
| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

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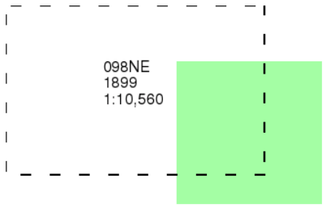
## Northumberland

## Published 1899

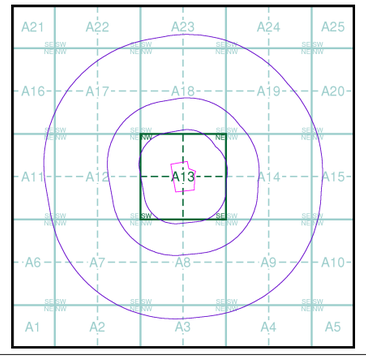
## Source map scale - 1:10,560

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

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




## Historical Map - Slice A



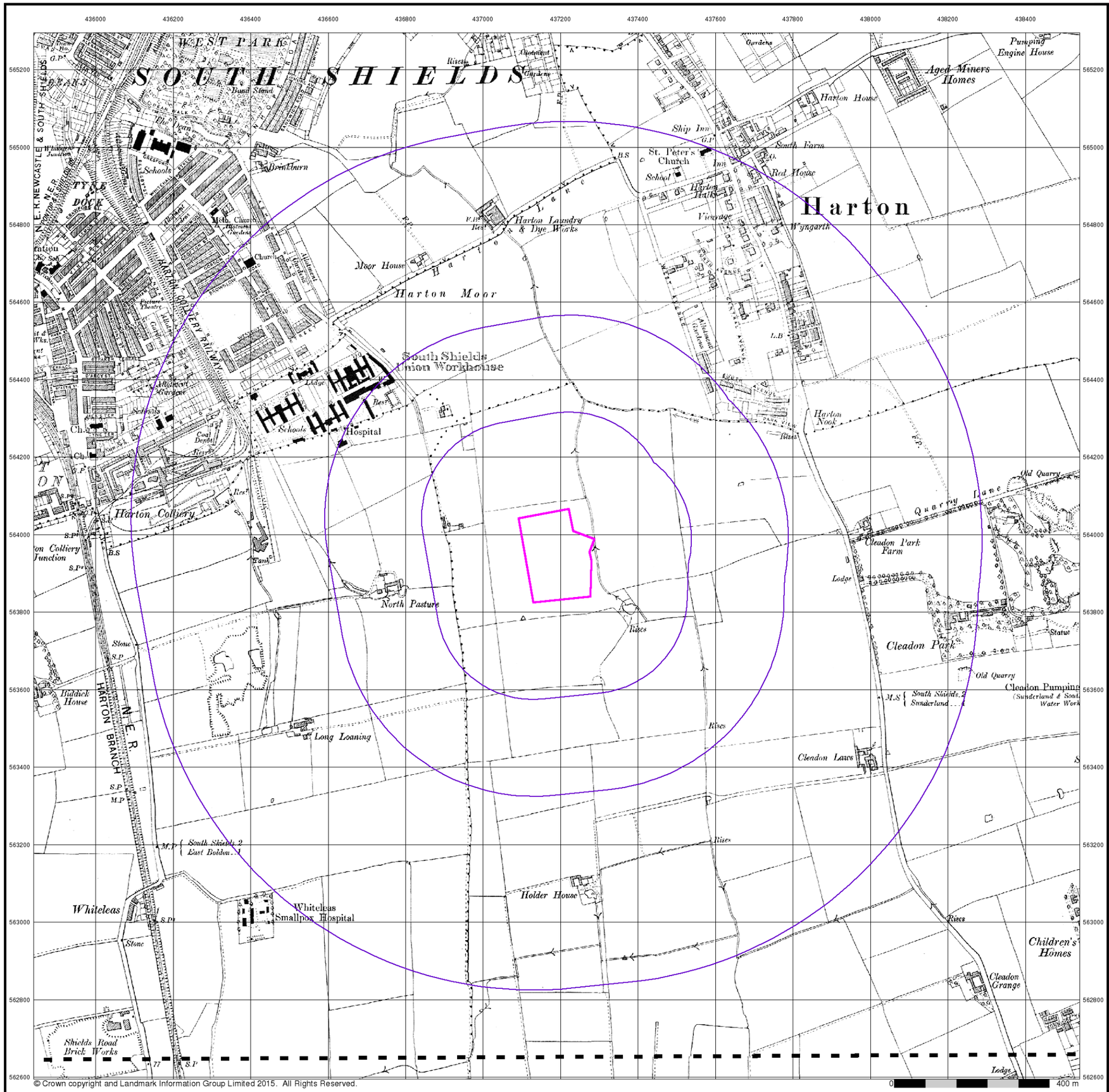

## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
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ATKINS

## Durham

## Published 1921

## Source map scale - 1:10,560

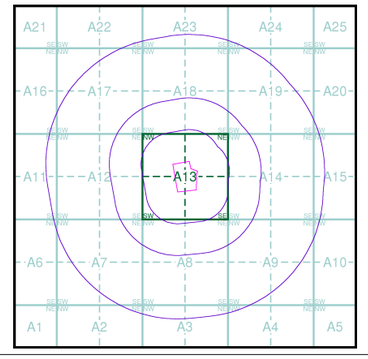
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

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

004SW
1921
1:10,560

008NW
1921
1:10,560

## Historical Map - Slice A



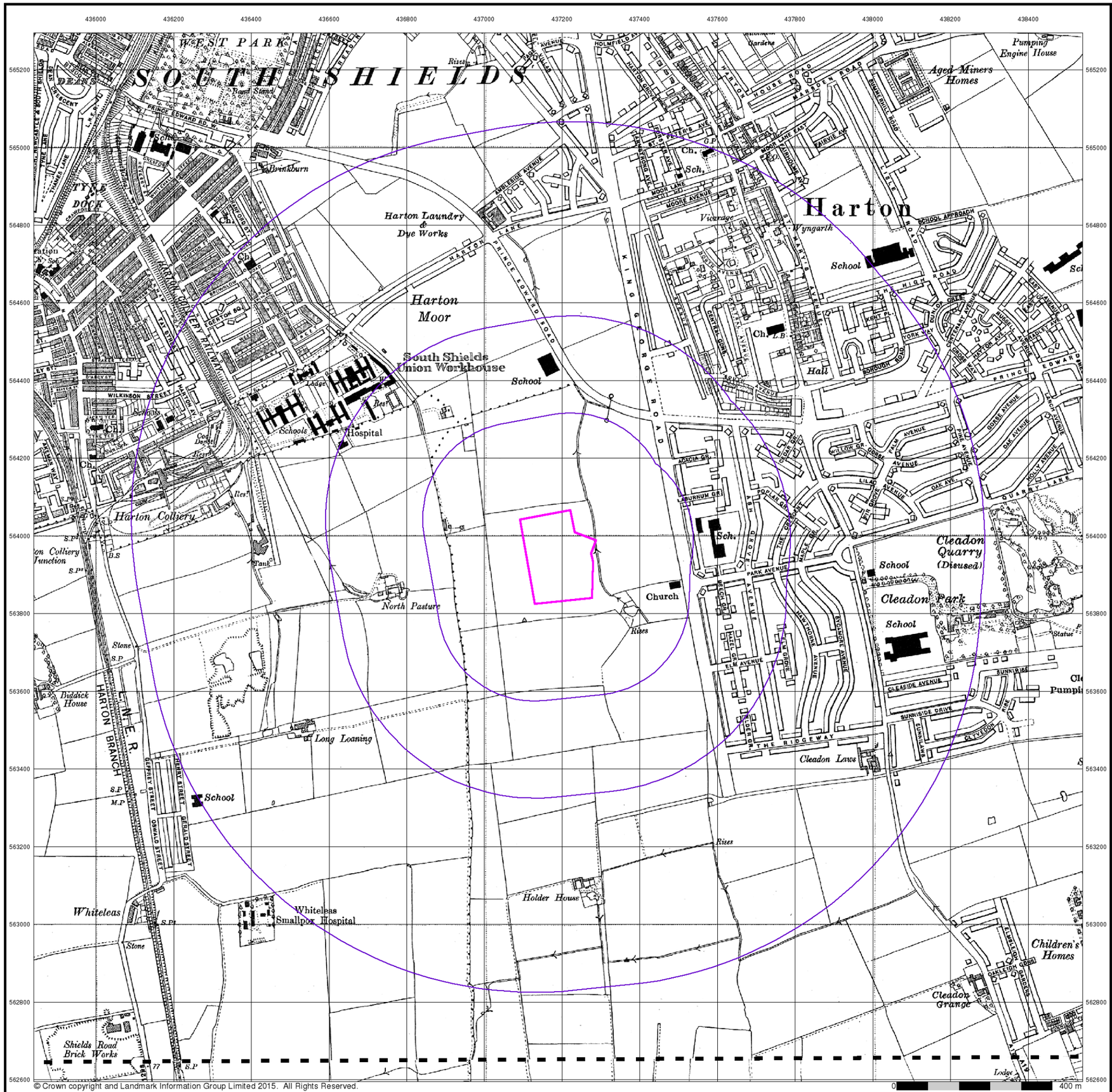

## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

## Site Details

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## Durham

## Published 1938

## Source map scale - 1:10,560

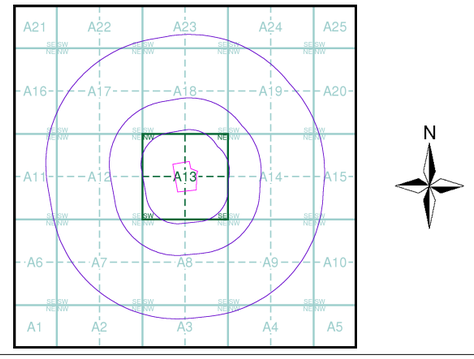
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

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

004SW
1938
1:10,560

008NW
1938
1:10,560

## Historical Map - Slice A



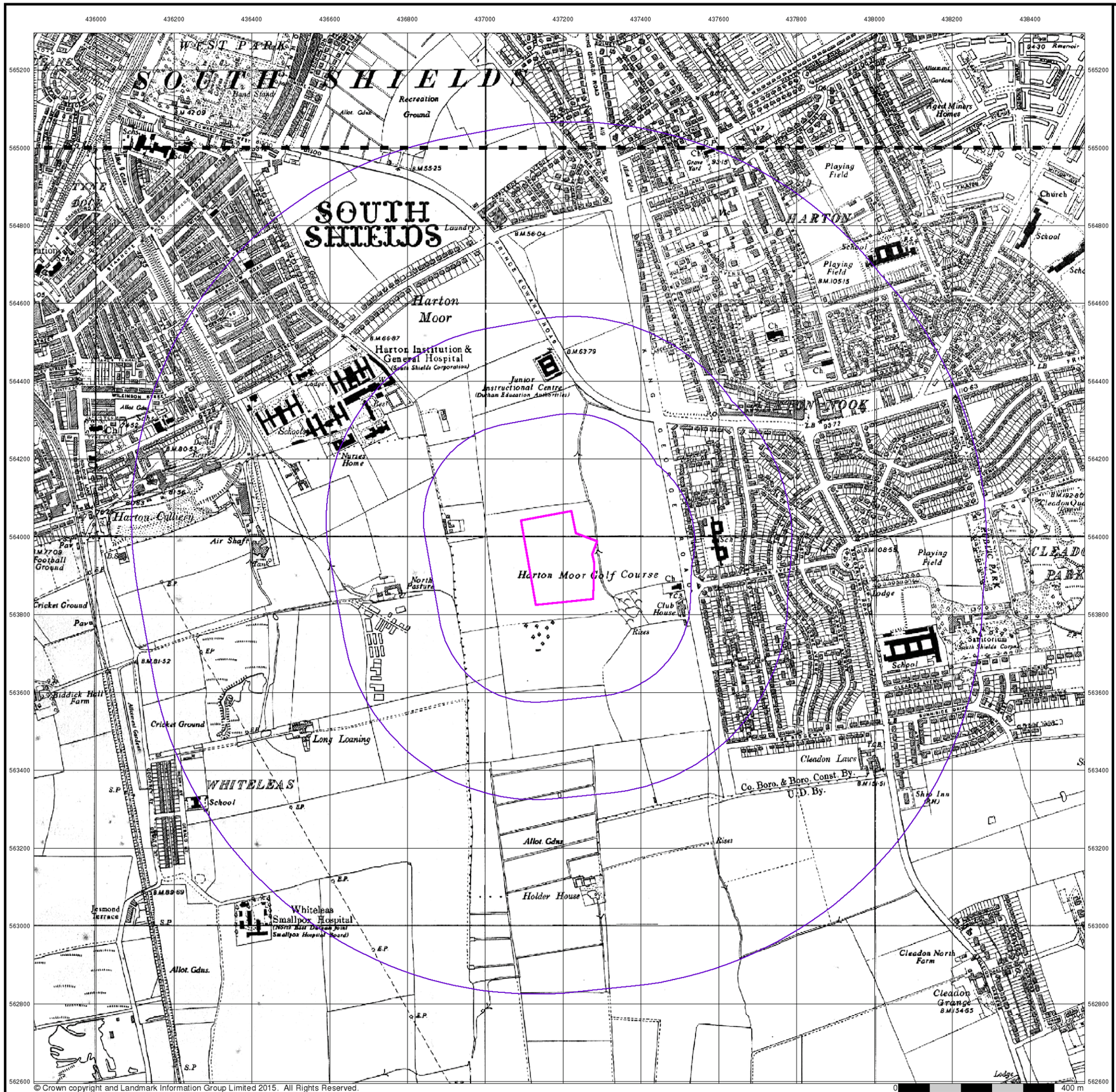

## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

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## Ordnance Survey Plan

**Published 1951 - 1952**

**Source map scale - 1:10,000**

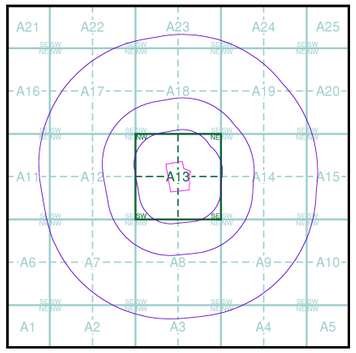
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

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

NZ36NE
1952
1:10,560

NZ36SE
1951
1:10,560

## Historical Map - Slice A




## Order Details

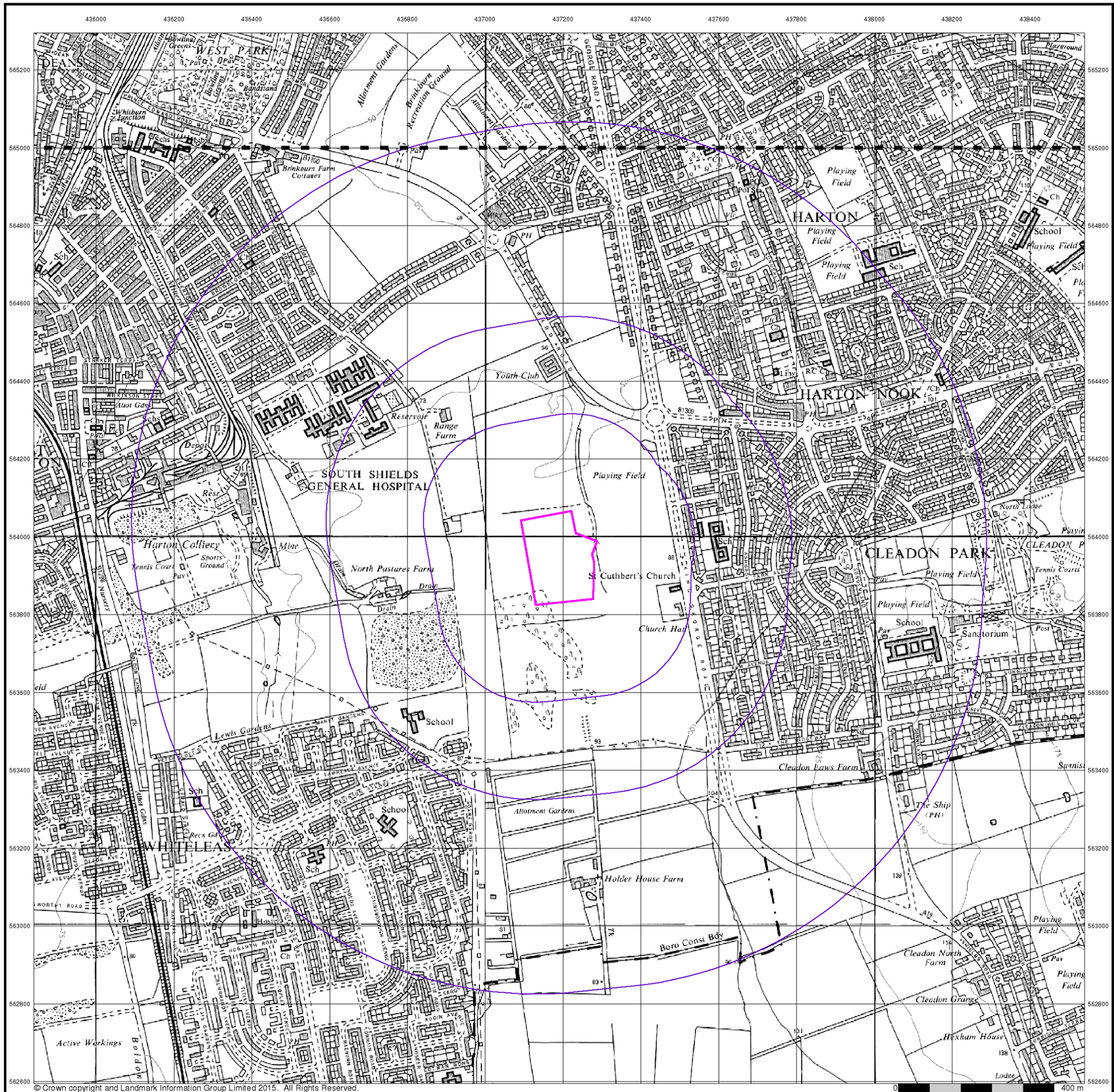
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|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

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## Ordnance Survey Plan

**Published 1967 - 1968**

**Source map scale - 1:10,000**

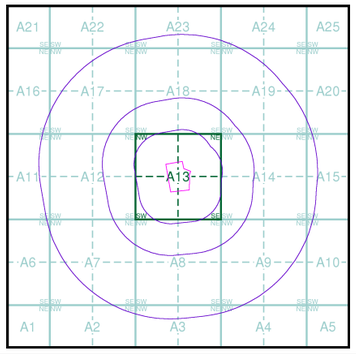
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

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

NZ36NE
1967
1:10,560

NZ36SE
1968
1:10,560

## Historical Map - Slice A




## Order Details

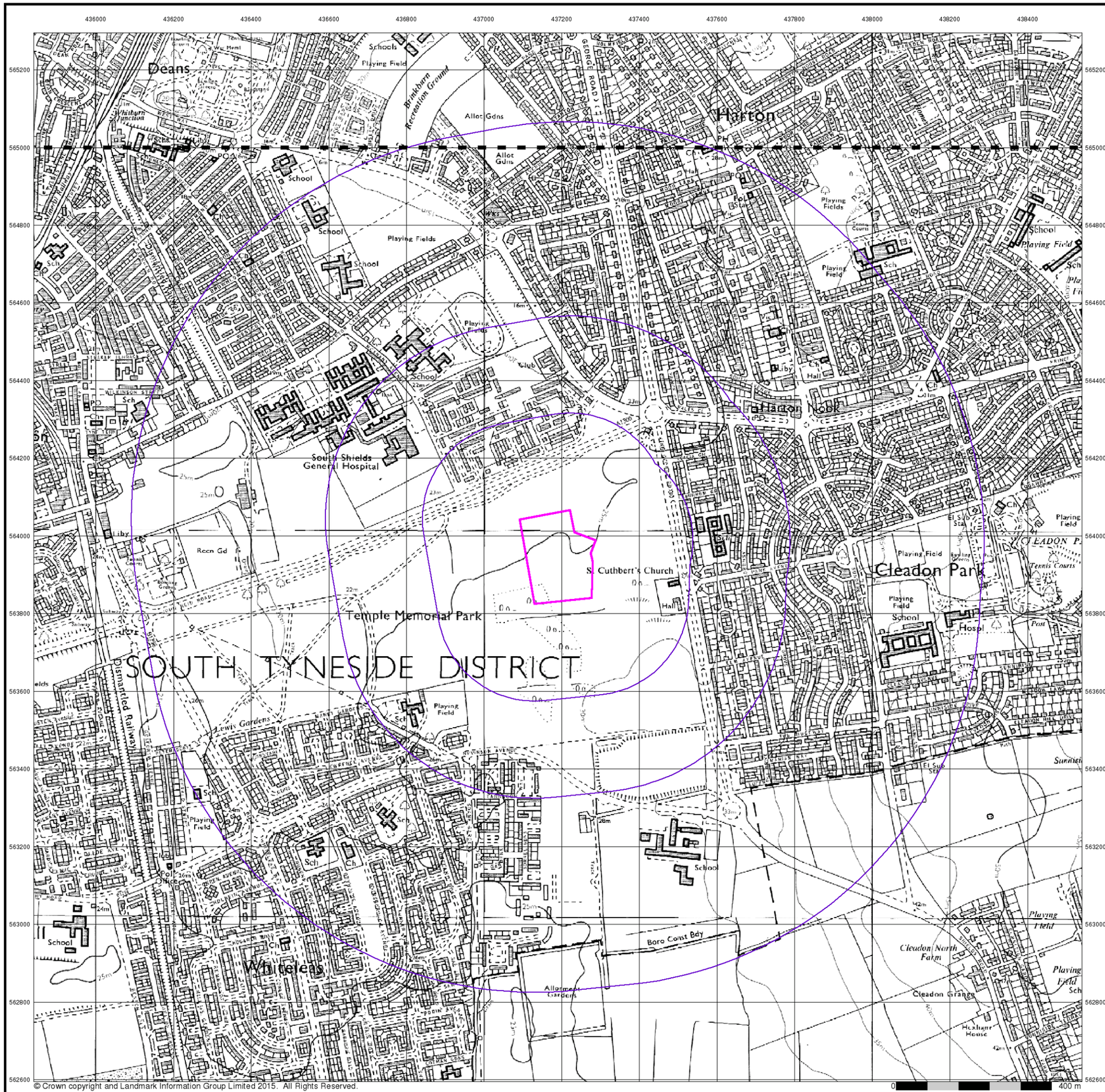
| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
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## Ordnance Survey Plan

**Published 1976 - 1977**

**Source map scale - 1:10,000**

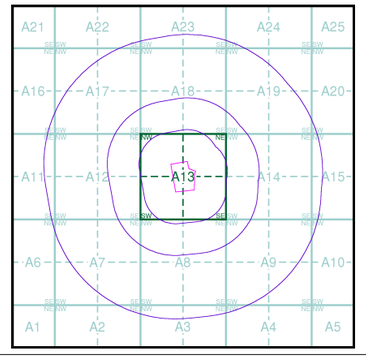
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

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

NZ36NE
1976
1:10,000

NZ36SE
1977
1:10,000

## Historical Map - Slice A




## Order Details

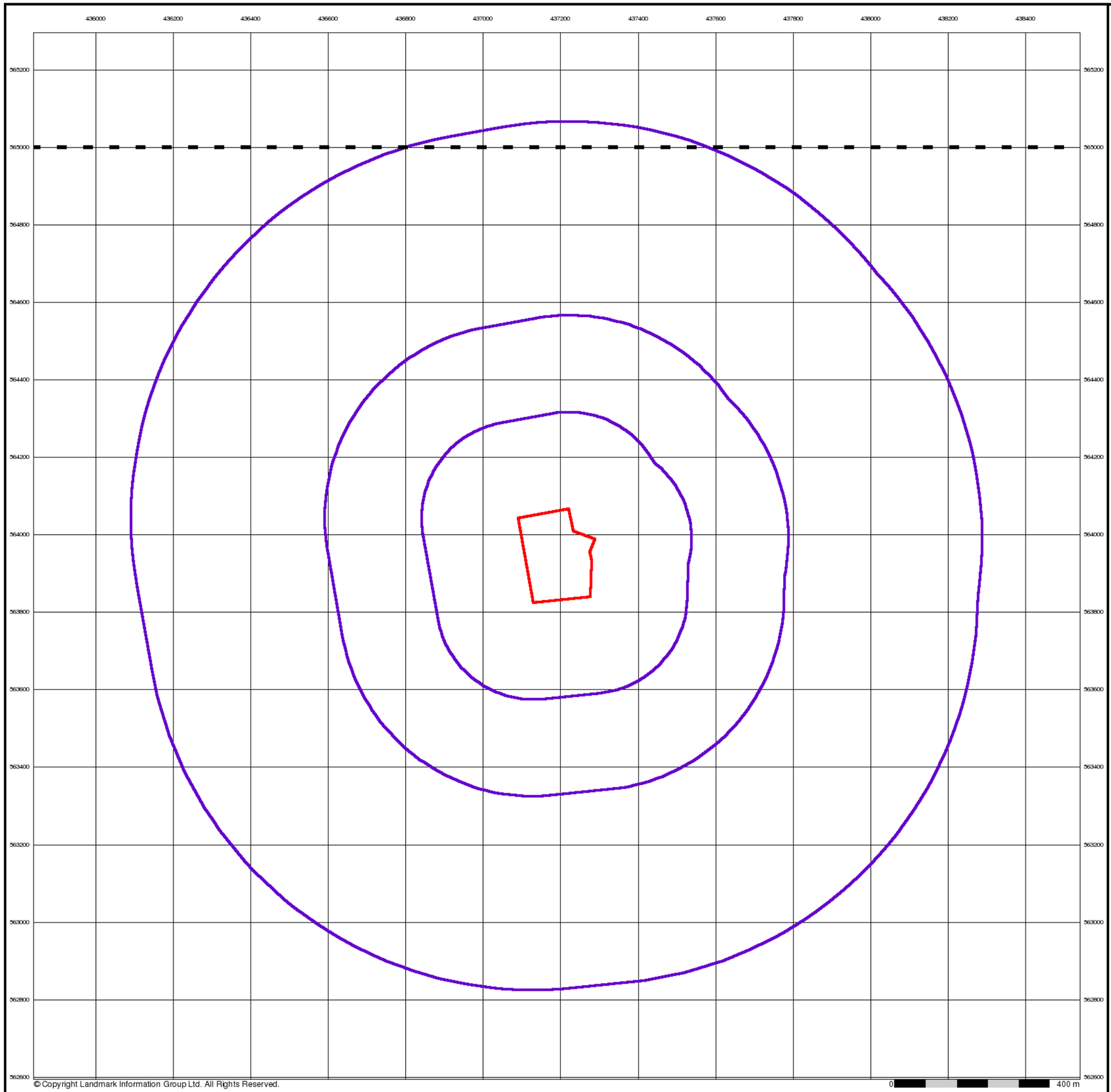
| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

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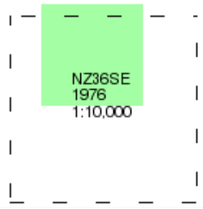
## Sunderland

## Published 1976

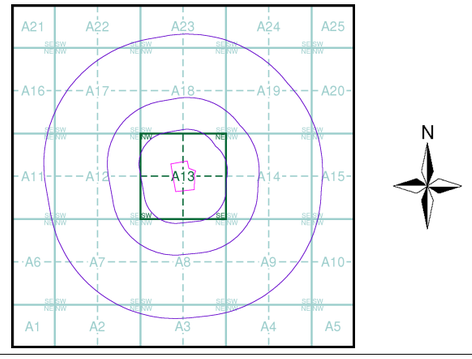
## Source map scale - 1:10,000

These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use.
They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

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




## Russian Map - Slice A




## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
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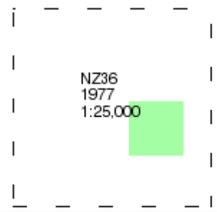
## Newcastle-upon-Tyne

**Published 1977**

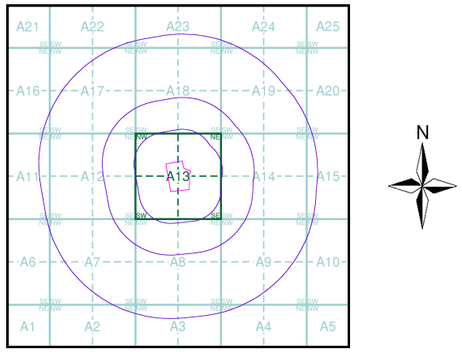
**Source map scale - 1:25,000**

These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use.
They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

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




## Russian Map - Slice A



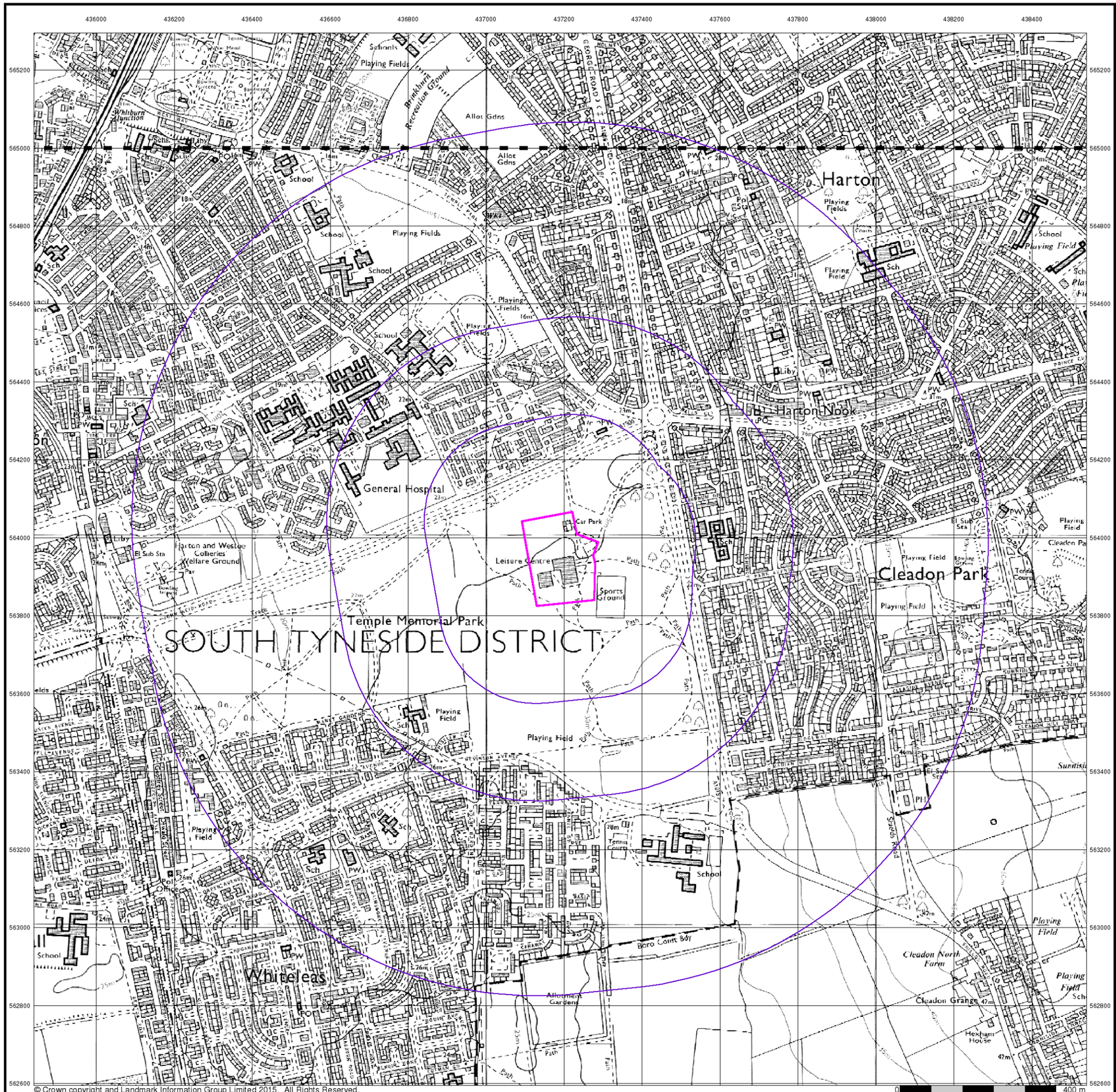

## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

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## Ordnance Survey Plan

### Published 1986 - 1987

### Source map scale - 1:10,000

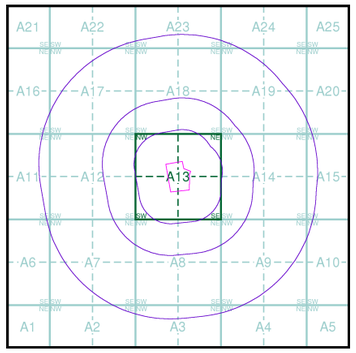
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

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

NZ36NE
1986
1:10,000

NZ36SE
1987
1:10,000

## Historical Map - Slice A



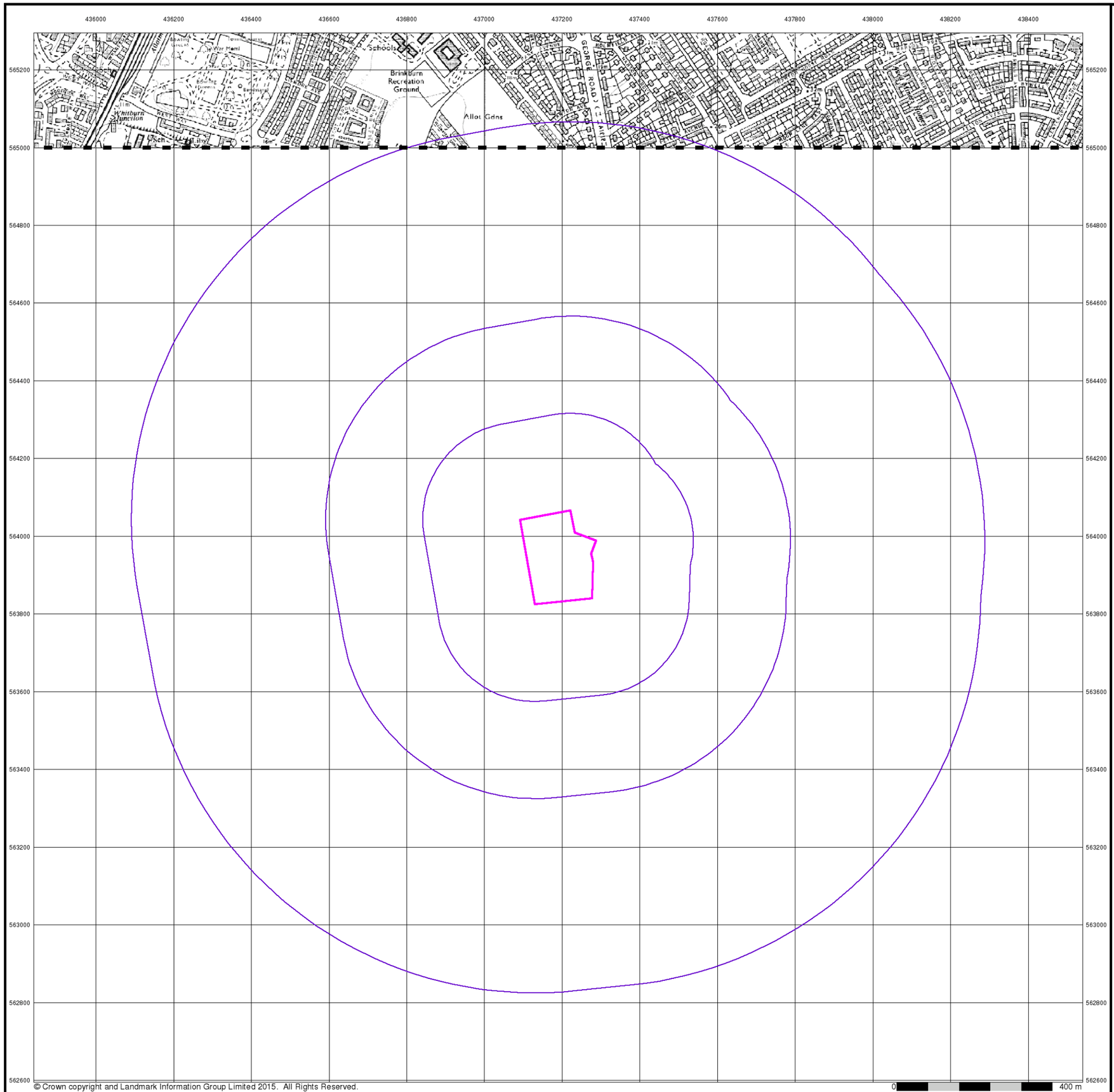

## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

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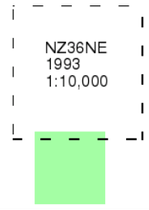
## Ordnance Survey Plan

**Published 1993**

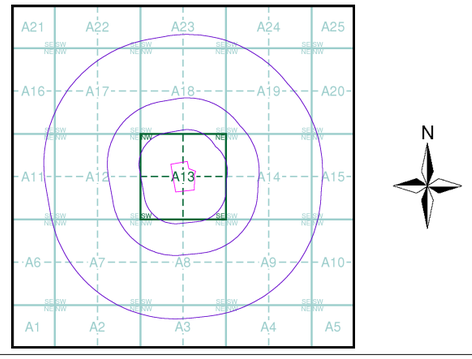
**Source map scale - 1:10,000**

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

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




## Historical Map - Slice A




## Order Details

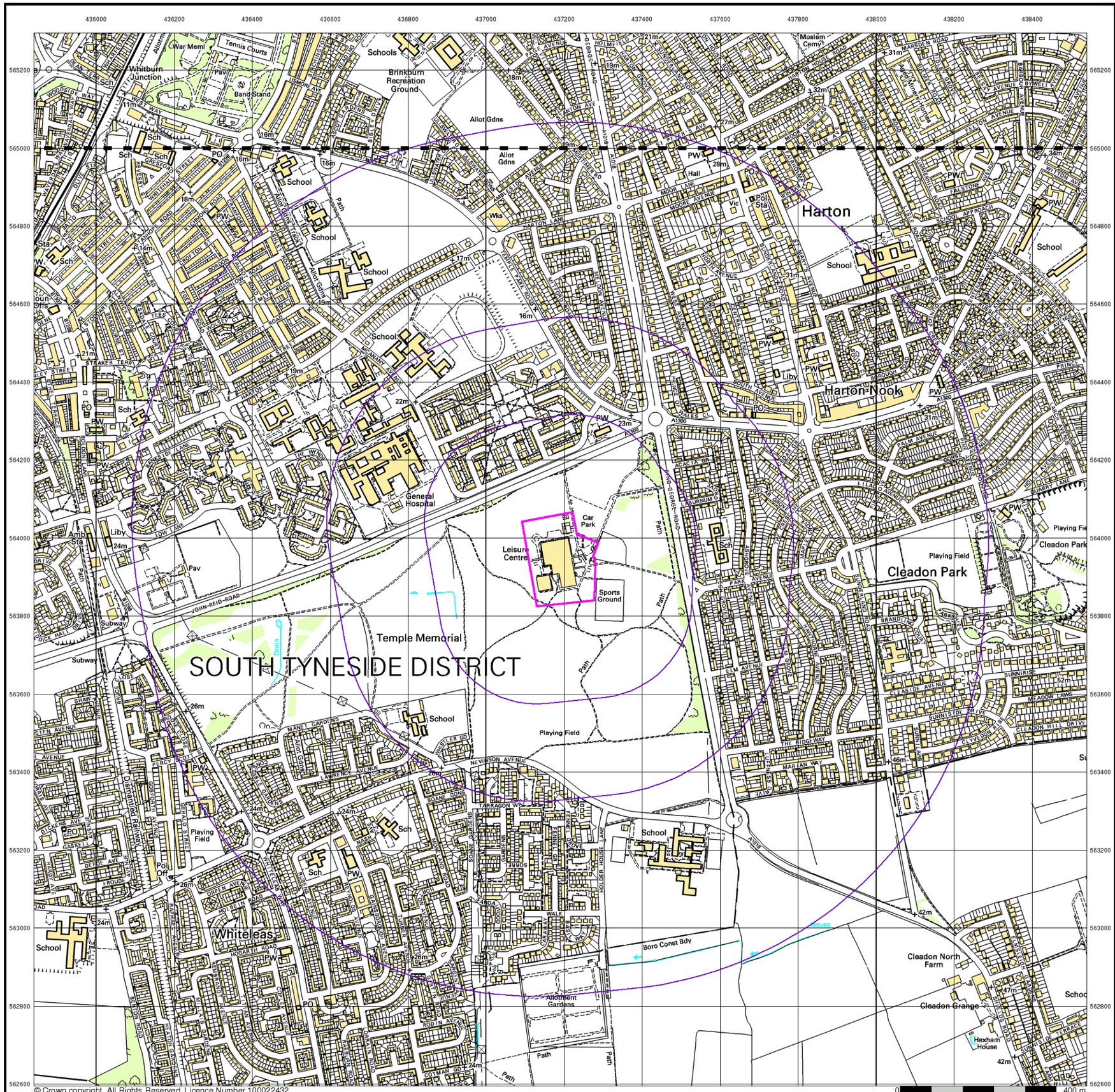
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|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
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# ATKINS

## 10k Raster Mapping

## Published 2000

## Source map scale - 1:10,000

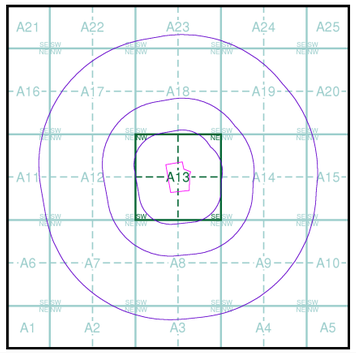
The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks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

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

NZ36NE
2000
1:10,000

NZ36SE
2000
1:10,000

## Historical Map - Slice A




## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
| National Grid Reference: | 437190, 563940 |
| Slice: | A |
| Site Area (Ha): | 3.52 |
| Search Buffer (m): | 1000 |

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## 10k Raster Mapping

## Published 2006

## Source map scale - 1:10,000

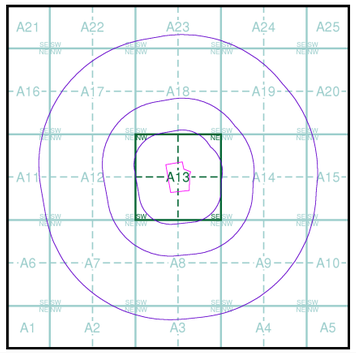
The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks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

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

NZ36NE
2006
1:10,000

NZ36SE
2006
1:10,000

## Historical Map - Slice A



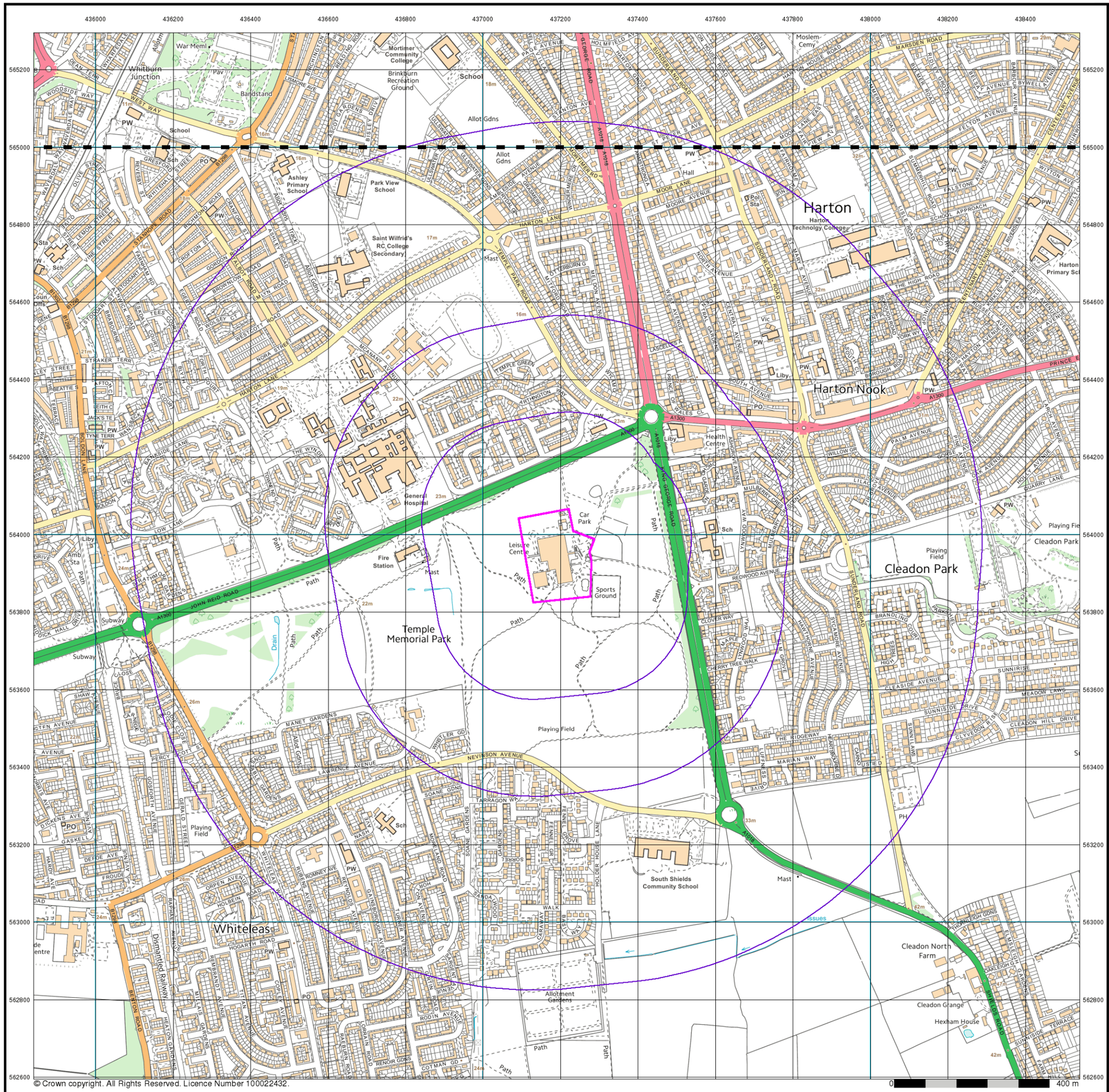

## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
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| Site Area (Ha): | 3.52 |
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## VectorMap Local

## Published 2017

## Source map scale - 1:10,000

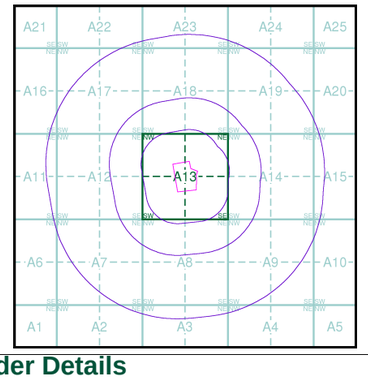
VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap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

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

NZ36NE
2017
Variable

NZ36SE
2017
Variable

## Historical Map - Slice A




## Order Details

| | |
|---|---|
| Order Number: | 140507389_1_1 |
| Customer Ref: | 5161186 |
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| Slice: | A |
| Site Area (Ha): | 3.52 |
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# Appendix D. Coal Mining Report

The Coal Authority

Resolving the impacts of mining

# CON29M Non-Residential Mining Report





## TEMPLE PARK CENTRE, JOHN REID ROAD
## SOUTH SHIELDS
## TYNE & WEAR




| | |
|---|---|
| Date of enquiry: | 25 September 2017 |
| Date enquiry received: | 25 September 2017 |
| Issue date: | 25 September 2017 |
| Our reference: | 51001620225001 |
| Your reference: | 140507389_2\| |

# CON29M Non-Residential Mining Report

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.

**Client name**

LANDMARK INFORMATION GROUP LIMITED

**Enquiry address**

TEMPLE PARK CENTRE, JOHN REID ROAD, SOUTH SHIELDS, TYNE & WEAR




Approximate position of property

Map data

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## How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

/company/the-coal-authority
/thecoalauthority
/coalauthority

# Summary

| Has the search report highlighted evidence or potential of | | |
|---|---|---|
| 1 | Past underground coal mining | Yes |
| 2 | Present underground coal mining | No |
| 3 | Future underground coal mining | Yes |
| 4 | Mine entries | Yes |
| 5 | Coal mining geology | No |
| 6 | Past opencast coal mining | No |
| 7 | Present opencast coal mining | No |
| 8 | Future opencast coal mining | No |
| 9 | Coal mining subsidence | No |
| 10 | Mine gas | No |
| 11 | Hazards related to coal mining | No |
| 12 | Withdrawal of support | No |
| 13 | Working facilities order | No |
| 14 | Payments to owners of former copyhold land | No |
| 15 | Information from the Cheshire Brine Subsidence Compensation Board | No |

**For detailed findings, please go to page 4.**

# Detailed findings

### 1. Past underground coal mining

The property is in a surface area that could be affected by underground mining in 6 seams of coal at 290m to 460m depth, and last worked in 1969.

Any movement in the ground due to coal mining activity should have stopped.

In addition the property is in an area where the Coal Authority believe there is coal at or close to the surface. This coal may have been worked at some time in the past. The potential presence of coal workings at or close to the surface should be considered prior to any site works or future development activity. Your attention is drawn to the Comments on the Coal Authority information section of the report.

### 2. Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

### 3. Future underground coal mining

The property is not in an area where the Coal Authority has plans to grant a licence to remove coal using underground methods.

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

The property is not in an area likely to be affected from any planned future underground coal mining.

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

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

### 4. Mine entries

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

There may however be mine entries/additional mine entries in the local area which the Coal Authority has no knowledge of.

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

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

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

### 8. Future opencast coal mining
There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

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.

### 9. 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 31 October 1994.

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

The Coal 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.

### 10. Mine gas
The Coal Authority has no record of a mine gas emission requiring action.

### 11. 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.

### 12. Withdrawal of support
The property is not in an area where a notice to withdraw support has been given.

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

### 13. Working facilities order

The property is not in an area where 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.

### 14. Payments to owners of former copyhold land

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

### 15. Information from the Cheshire Brine Subsidence Compensation Board

The property lies outside the Cheshire Brine Compensation District.

# Comments on the Coal Authority information

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In view of the mining circumstances a prudent developer would seek appropriate technical advice before any works are undertaken.

Therefore if  development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply good engineering practice developed for mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or mines of coal without the permission of the Coal Authority. Developers should be aware that the investigation of coal seams/former mines of coal may have the potential to generate and/or displace underground gases and these risks both under and adjacent to the development should be fully considered in developing any proposals.  The need for effective measures to prevent gases entering into public properties either during investigation or after development also needs to be assessed and properly addressed.  This is necessary due to the public safety implications of any development in these circumstances.

## Additional remarks

Information provided by the Coal Authority in this report is compiled in response to the Law Society's Con29M Coal Mining and Brine Subsidence Claim enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL. Please note that Brine Subsidence Claim enquiries are only relevant for England and Wales. 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 applicable at the time the report was produced.

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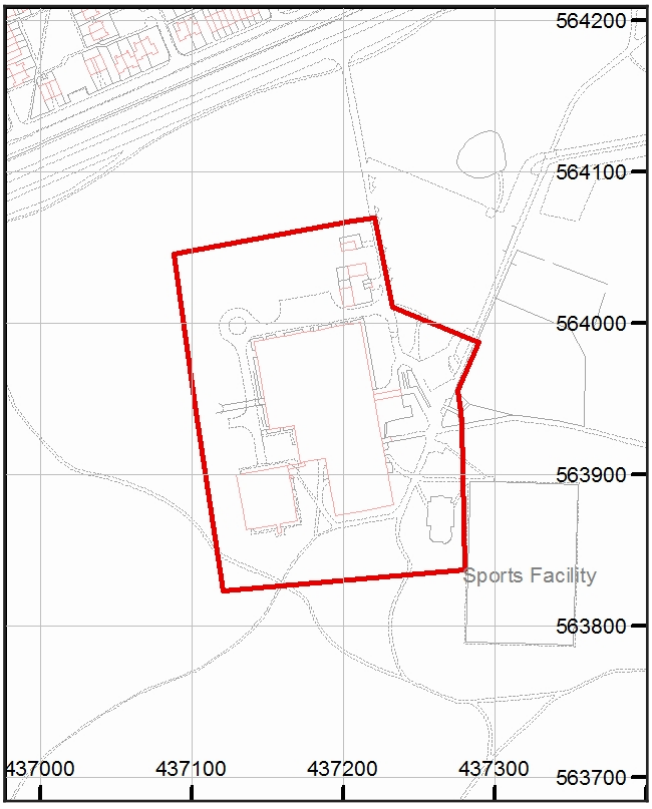
## Alternative formats

If you would like this report in an alternative format, please contact our communications team.

# Enquiry boundary

**Key**

Approximate position of enquiry boundary shown




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Map data

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# Appendix E. Soil Assessment

Temple Park

| Assessment Criteria : | *Please choose a criteria from this list.* |
|---|---|
| ☐ Use MRL Values? | |

| Constituent | Unit | Generic Assessment Criteria (mg/kg) | Number of Samples | Minimum Value | Maximum Value | Number of Exceedences | Locations of Exceedences | Sample ID | | BH1 | BH2 | BH2 | BH3 | BH3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Depth | | 0.10 - 0.50 | 0.1 | 0.3 | 0.01 | 1.20-1.35 |
| | | | | | | | | Strata | | | | | | |
| | | | | | | | | | Zone | | | | | |
| Arsenic | mg/kg | | 5 | 2.2 | 15 | | | | | 12 | 15 | 15 | 2.2 | 3.5 |
| Cadmium | mg/kg | | 5 | 0.2 | 0.9 | | | | | 0.8 | 0.8 | 0.9 | 0.3 | 0.2 |
| Chromium | mg/kg | | 5 | 5.7 | 30 | | | | | 30 | 25 | 26 | 5.7 | 6.7 |
| Chromium VI | mg/kg | | 5 | 0 | <1 | | | | | <1 | <1 | <1 | <1 | <1 |
| Copper | mg/kg | | 5 | 12 | 71 | | | | | 40 | 69 | 71 | 18 | 12 |
| Lead | mg/kg | | 5 | 6.1 | 130 | | | | | 90 | 130 | 120 | 6.1 | 19 |
| Mercury | mg/kg | | 5 | <0.05 | 0.97 | | | | | 0.21 | 0.41 | 0.31 | 0.97 | <0.05 |
| Nickel | mg/kg | | 5 | 6.9 | 26 | | | | | 22 | 26 | 23 | 7.5 | 6.9 |
| Selenium | mg/kg | | 5 | <0.5 | 0.8 | | | | | <0.5 | <0.5 | <0.5 | 0.8 | <0.5 |
| Zinc | mg/kg | | 5 | 34 | 140 | | | | | 110 | 140 | 140 | 34 | 51 |
| Boron | mg/kg | | 5 | 1.3 | 2 | | | | | 1.9 | 1.4 | 1.3 | 2 | 1.3 |
| Cyanide (Total) | mg/kg | | 5 | <0.1 | 0.7 | | | | | 0.7 | 0.4 | 0.4 | <0.1 | <0.1 |
| Organic Matter | % | | 4 | 0.7 | 11 | | | | | 6 | 11 | 9.4 | | 0.7 |
| Sulphide | mg/kg | | 5 | <10 | 1800 | | | | | 16 | <10 | 20 | 1800 | 39 |
| Sulphate (SO4) | mg/l | | 5 | 22 | 1300 | | | | | 37 | 22 | 24 | 1300 | 67 |
| pH | | | 5 | 8.1 | 10.3 | | | | | 8.2 | 8.1 | 8.2 | 10.3 | 9.3 |
| TPH aliphatic C5-C6 | mg/kg | | 5 | 0 | <0.01 | | | | | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| TPH aliphatic C6-C8 | mg/kg | | 5 | 0 | <0.01 | | | | | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| TPH aliphatic C8-C10 | mg/kg | | 5 | <0.01 | 0.03 | | | | | <0.01 | <0.01 | <0.01 | 0.03 | <0.01 |
| TPH aliphatic C10-C12 | mg/kg | | 5 | <1.5 | 1.7 | | | | | <1.5 | <1.5 | <1.5 | 1.7 | <1.5 |
| TPH aliphatic C12-C16 | mg/kg | | 5 | <1.2 | 63 | | | | | <1.2 | <1.2 | <1.2 | 63 | <1.2 |
| TPH aliphatic C16-C21 | mg/kg | | 5 | <1.5 | 180 | | | | | <1.5 | <1.5 | <1.5 | 180 | <1.5 |
| TPH aliphatic C21-C35 | mg/kg | | 5 | <3.4 | 600 | | | | | <3.4 | <3.4 | <3.4 | 600 | <3.4 |
| TPH aromatic C5-C7 | mg/kg | | 5 | 0 | <0.01 | | | | | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| TPH aromatic C7-C8 | mg/kg | | 5 | 0 | <0.01 | | | | | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| TPH aromatic C8-C10 | mg/kg | | 5 | <0.01 | 0.24 | | | | | <0.01 | <0.01 | <0.01 | 0.24 | <0.01 |
| TPH aromatic C10-C12 | mg/kg | | 5 | <0.9 | 3.3 | | | | | <0.9 | <0.9 | <0.9 | 3.3 | <0.9 |
| TPH aromatic C12-C16 | mg/kg | | 5 | <0.5 | 19 | | | | | <0.5 | <0.5 | <0.5 | 19 | <0.5 |
| TPH aromatic C16-C21 | mg/kg | | 5 | <0.6 | 100 | | | | | <0.6 | <0.6 | <0.6 | 100 | <0.6 |
| TPH aromatic C21-C35 | mg/kg | | 5 | <1.4 | 850 | | | | | <1.4 | <1.4 | <1.4 | 850 | <1.4 |
| Aliphatic C5-C35 | mg/kg | | 5 | <10 | 850 | | | | | <10 | <10 | <10 | 850 | <10 |
| Aromatic C5-C35 | mg/kg | | 5 | <10 | 980 | | | | | <10 | <10 | <10 | 980 | <10 |
| TPH Ali/Aro | mg/kg | | 5 | <10 | 1800 | | | | | <10 | <10 | <10 | 1800 | <10 |
| Acenaphthene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Acenaphthylene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Anthracene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Benzo(a)anthracene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Benzo(a)pyrene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Benzo(b)fluoranthene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Benzo(k)fluoranthene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Benzo(g,h,i)perylene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Chrysene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Dibenzo(a,h)anthracene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Fluoranthene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Fluorene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Indeno(1,2,3-c,d)pyrene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Naphthalene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Phenanthrene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Pyrene | mg/kg | | 5 | 0 | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| PAH | mg/kg | | 5 | 0 | <1.6 | | | | | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 |
| Phenol | mg/kg | | 5 | <0.3 | 1.2 | | | | | 1.2 | 1 | 0.6 | <0.3 | <0.3 |

# Appendix F. Risk Assessment Methodology

## Conceptual Site Model

Primary guidance for assessing and managing ground contamination is presented in Contaminated Land Report (CLR)11. This provides a technical framework for identifying and remediating contamination through the application of a risk management process. The question of whether risk is unacceptable in any particular case involves not only scientific and technical assessments, but also appropriate criteria by which to judge the risk and conclude exactly what risk would be unacceptable.

Development of a Conceptual Site Model (CSM) is central to the risk assessment process. A CSM describes the relationship between potential sources of contamination (resulting from both on-and off-site historical and recent activities) and receptors to the potential contamination. As part of the CSM development, three elements are identified and assessed;

1. source of contamination and associated contaminants;
2. receptors (human beings, surface water/groundwater, ecological systems and property) to the contamination; and
3. pathways between the sources and receptors.

Where all three elements are present, or are likely to be present, they are described as potential contaminant linkages (PCLs), which can then be subjected to the risk assessment and risk management process.

## Risk Evaluation

The contaminated land risk, a function of the probability and the consequence, has been defined using the risk matrix given in Table 1 which is taken from the NHBC and Environment Agency's guide National House-Building Council & Environment Agency, 2008, Guidance on the Safe Development of Housing on Land Affected by Contamination. London: NHBC and Environment Agency (R&D66).

**Table 1 - Estimation of the Level of Risk by Comparison of Consequence and Probability**

| | | **Consequence** | | | |
|---|---|---|---|---|---|
| | | **Severe** | **Medium** | **Mild** | **Minor** |
| **Probability** | **High Likelihood** | Very High Risk | High Risk | Moderate Risk | Moderate/Low Risk |
| | **Likely** | High Risk | Moderate Risk | Moderate/Low Risk | Low Risk |
| | **Low Likelihood** | Moderate Risk | Moderate/Low Risk | Low Risk | Very Low Risk |
| | **Unlikely** | Moderate/Low Risk | Low Risk | Very Low Risk | Very Low Risk |

The descriptions of the classified risks as given in R&D66 are as follows:

### Very High Risk

There is a high probability that severe harm could arise to a designated receptor from an identified hazard at the site without remediation action OR there is evidence that severe harm to a designated receptor is already occurring. Realisation of that risk is likely to present a substantial liability to the site owner / or occupier. Investigation is required as a matter of urgency and remediation works likely to follow in the short-term.

**High Risk**

Harm is likely to arise to a designated receptor from an identified hazard at the site without remediation action. Realisation of the risk is likely to present a substantial liability to the site owner / occupier. Investigation is required as a matter of urgency and remediation works likely to follow in the short-term.

**Moderate Risk**

It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, and if any harm were to occur it is more likely that the harm would be relatively mild. Further investigative work is normally required to clarify the risk and to determine the potential liability to site owner/occupier. Some remediation works may be required in the longer term.

**Low Risk**

It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely at worst, that this harm if realised would normally be mild. It is unlikely that the site owner/or occupier would face substantial liabilities from such a risk. Further investigative work (which is likely to be limited) to clarify the risk may be required. Any subsequent remediation works are likely to be relatively limited.

**Very Low Risk**

It is a low possibility that harm could arise to a designated receptor, but it is likely at worst, that this harm if realised would normally be mild or minor.

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