PHASE 1 ENVIRONMENTAL SITE ASSESSMENT

Shell Whitemare Pool



21 August 2019
60608750 / 10019383
GB-10019383-20190821-SA-1.docm

Prepared for
Shell UK Oil Products Ltd

Issue	Date	Details	Prepared by	Checked by	Verified by	Approved by
1-Draft	20 August 2019	Shell Whitemare Pool PHASE 1 ENVIRONMENTAL SITE ASSESSMENT GB-10019383-20190820-SA-1.docm	Laura McMurtry Graduate Environmental Consultant [redacted]	Sophie Hooper Project Manager [redacted]	Geoff Jones Project Director [redacted]	Sophie Hooper Project Manager [redacted]
1-Final	21 August 2019	Shell Whitemare Pool PHASE 1 ENVIRONMENTAL SITE ASSESSMENT GB-10019383-20190821-SA-1.docm	Laura McMurtry Graduate Environmental Consultant [redacted]	Sophie Hooper Project Manager [redacted]	Geoff Jones Project Director [redacted]	Sophie Hooper Project Manager [redacted]

AECOM Infrastructure and Environment UK Limited
6th Floor
1 New York Street,
Manchester,
M1 4HD

Limitations

AECOM Infrastructure & Environment UK Limited ("AECOM") has prepared this Report for the sole use of **Shell UK Oil Products Ltd** ("Client") in accordance with the Agreement under which our services were performed [GESS2015 Framework Agreement]. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by AECOM. This Report is confidential and may not be disclosed by the Client nor relied upon by any other party without the prior and express written agreement of AECOM.

The conclusions and recommendations contained in this Report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested and that such information is accurate. Information obtained by AECOM has not been independently verified by AECOM, unless otherwise stated in the Report.

The methodology adopted and the sources of information used by AECOM in providing its services are outlined in this Report. The work described in this Report was undertaken between **July 2019** and **August 2019** and is based on the conditions encountered and the information available during the said period of time. The scope of this Report and the services are accordingly factually limited by these circumstances.

Where assessments of works or costs identified in this Report are made, such assessments are based upon the information available at the time and where appropriate are subject to further investigations or information which may become available.

AECOM disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to AECOM's attention after the date of the Report.

Certain statements made in the Report that are not historical facts may constitute estimates, projections or other forward-looking statements and even though they are based on reasonable assumptions as of the date of the Report, such forward-looking statements by their nature involve risks and uncertainties that could cause actual results to differ materially from the results predicted. AECOM specifically does not guarantee or warrant any estimate or projections contained in this Report.

Unless otherwise stated in this Report, the assessments made assume that the sites and facilities will continue to be used for their current purpose without significant changes.

Copyright

© This Report is the copyright of AECOM Infrastructure & Environment UK Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

1. INTRODUCTION 2

1.1 Objectives 2
1.2 Scope of Work 3
1.3 Sustainability 3

2. DESK STUDY INFORMATION 4

2.1 Site History and Regulatory Information 4
2.2 Regulatory Information 5
2.3 Previous Reports 10
2.4 Fuel Infrastructure 12
2.5 Environmental Setting 15

3. PRELIMINARY CONCEPTUAL SITE MODEL AND RISK ASSESSMENT 20

3.1 Potential Sources 20
3.2 Chemicals of Potential Concern (COPC) 20
3.3 Potential Pathways 21
3.4 Potential Receptors - Human Health 21
3.5 Potential Receptors -Controlled Waters 21
3.6 Review of Potential Source-Pathway-Receptor Linkages 22

4. CONCLUSIONS 24

5. REFERENCES 25

TABLE OF FIGURES

Figure 1 - Site Location Map
Figure 2 - Site Ownership Plan
Figure 3 - Site Features Plan
Figure 4 - Initial Conceptual Site Model

APPENDICES

Appendix A – Photographs
Appendix B – Envirocheck Report
Appendix C – Petroleum Officer Response
Appendix D – GeoDelft / BGS Logs
Appendix E – PPG21 Drainage Figure

EXECUTIVE SUMMARY

AECOM Infrastructure and Environment UK Limited undertook a Phase 1 Environmental Site Assessment (ESA) of Shell Whitemare Pool, Whitemare Pool, Gateshead, Tyne & Wear, NE10 8YB. This report has been collated to support Shell UK Oil Products Limited (Shell) with its environmental asset management activities. This Phase 1 report was produced to provide an initial conceptual site model for a continued petroleum usage.

The site is currently an active petrol filling station located at a service station area adjacent to a dual carriageway, with a hotel and restaurants located adjacent to site. A substation is located within the north western area of the site.

There are six (6) vessels at the site with six (6) active tank compartments.

There is not known to have been any previous remediation undertaken at the site.

The site area was undeveloped land until c.1973 when buildings appeared on the historical mapping. Information provided by Shell indicates that five (5) of the current single walled tanks were installed in 1987, with another tank installed in 1990.

The site geology comprises superficial deposits of Pelaw Clay Member – Clay (Unproductive Strata), underlain by the Pennine Middle Coal Measures Formation – Mudstone, Siltstone and Sandstone and Pennine Middle Coal Measures Formation - Sandstone (Secondary A Aquifer). A fault (Claxheugh Fault) runs through the northern portion of the site, east to west. There are no known groundwater abstractions within 1kilometre (km) of the site, and the site is not located within a Source Protection Zone (SPZ).

The nearest surface water feature is a potential surface water drain located approximately 68m west of site which possibly continues 30 metres (m) from the site boundary to the north west (running north east to south west) based on the line of vegetation. It was not possible to confirm whether the drainage channel contained running water during the AECOM site visit, due to the presence of dense vegetation. Monkton Burn is situated 280m south east of site, with ponds located 155m south west and 300m north east of site.

A preliminary risk assessment has been completed, the following potential pollutant linkages identified for the site, summarised as follows:

- Potentially impacted soils / groundwater, followed by permeation through plastic pipes into the site potable water supply.
- Potentially impacted soils / groundwater, followed by soil particulate dermal contact, inhalation or ingestion by visiting contractors excavating the ground.
- Potentially impacted soils from the site, followed by leaching of hydrocarbon substances into perched groundwater of the Pelaw Clay Member (Unproductive Strata) or groundwater of the Pennine Middle Coal Measures Formation Secondary A Aquifer.
- Potentially impacted soils/groundwater from the site, followed by migration of impacted groundwater to the identified surface water receptors (drain 68m west but potentially as close as 30m north west, Monkton Burn 280m south east and ponds 155m south west and 300m north east of site).

1. INTRODUCTION

AECOM was requested by Shell UK Oil Products (Shell) to undertake a Phase 1 Environmental Site Assessment (ESA) at Shell Whitemare Pool located at Whitemare Pool, Gateshead, Tyne & Wear, NE10 8YB.

Table A – Site Information	
Site Name	Shell Whitemare Pool
Site Operation	The site is currently an active petroleum filling station.
GSAP ID Number	10019383
Site Address	The site is located at Whitemare Pool, Gateshead, Tyne & Wear, NE10 8YB (**Figure 1)**.
Grid Reference (easting and northing)	431200, 561570
Reported Site Area	Approximately 4,600 square metres (m^2)
Freehold/Leasehold	Freehold. AECOM understands that the site is owned by Shell. A Right of Way is present across the site for access and egress to the adjacent hotel on the service station area. AECOM understands that a section of the road (Roman Road) adjacent to the west of the petrol filling station forms part of the wider site boundary and that a Public Right of Way is present along this section.
Sources of Information	**1.** AECOM Site Visit (9 July 2019). As part of the inspection a series of photographs were taken and are presented in **Appendix A.** 2. Envirocheck Report commissioned from Landmark Information Group Ltd (Report Ref: 209721675_1_1, dated 3 July 2019) (**Appendix B**). 3. Petroleum Officer's report 9 July 2019 (**Appendix C**). 4. BGS Geology of Britain Viewer, accessed at http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html, on 29 July 2019. 5. BGS Geological Map – Sheet 21 Sunderland. 1:50,000 Series, Solid and Drift Edition, dated 1978. 6. Magic Map Application (DEFRA), accessed at https://magic.defra.gov.uk/MagicMap.aspx on 29 July 2019. 7. GeoDelft, Tier 1 Soil Gas Survey, report ref. C928.SG356.8975, dated April 1998. 8. GeoDelft, Tier 2 Environmental Survey, report ref. C1443.SG356, dated September 1999. 9. RSK, Soil Verification Report, report ref. 310714- R1(01), dated April 2009. 10. The Coal Authority CON29M Coal Mining Report, ref 209721675_2. Dated 04 July 2019. 11. Gateshead Metropolitan Borough Council, Environmental Health department, email received regarding private water abstraction information, 4 January 2019. 12. South Tyneside Council, Environmental Health department, email received regarding private water abstraction information, 3 July 2019.

1.1 Objectives

This report has been collated to support Shell with its environmental asset management activities.

The objective of the Phase 1 Investigation detailed herein was to develop a preliminary Conceptual Site Model (CSM) for the site.

This was undertaken by:

- Evaluation of the likelihood of occurrence, nature and potential magnitude of impacted ground at the site.
- Evaluation of potential transport mechanisms and migration pathways by which chemicals of potential concern (COPC) could migrate off-site.
- Estimation of the potential effects of impacted ground on the subject property and surrounding areas.

1.2 Scope of Work

The Scope of Work for this Phase 1 Assessment includes:

- Completion of a desktop investigation of relevant data sources.
- A site inspection / walkover.
- Development of a Preliminary Conceptual Site Model.
- Preliminary Risk Assessment for Controlled Waters and Human Health.

1.3 Sustainability

In implementing the scope of works outlined in Section 1.2, AECOM made the following considerations of sustainability:

- The Phase 1 site walkover was staffed at the same time as other field works in the area and AECOM stayed in a local hotel during the works to reduce travel impact.

2. DESK STUDY INFORMATION

2.1 Site History and Regulatory Information

A summary of the information about the on and off site history site is provided in Tables B and C below. Copies of the historical maps are provided in **Appendix B**.

Table B – History of On-Site Activities

Map Date	On-site Features
1895	The site was undeveloped land with the Roman Road running north east to south west across the western edge of site. From 1919, a slope is marked on the road, sloping down towards the western site boundary.
1973	Three small buildings labelled as a substation are noted in the northern area of site and a building is present in the centre of site, with vegetated areas present in the south and south west of site.
1992 - Present	The site was developed into its current configuration as a petrol filling station. One small building associated with the substation still present in the north western area of the site.

Table C – History of Off-Site Activities

Map Date	Off Site Features	Distance	Direction
1862 - 1975	Wardley Colliery. Associated reservoirs and mineral railway by 1898. Mine located 800m north west of site.	500 – 1,000m	North West
1862 - present	Railway (North Eastern)	200m	West
1897 – 1919	Smithy	250m	South West
1862 - Present	Public House	250m	South West
1919 - 1993	Railway (Mineral)	150m	West
1921 - 2006	Follonsby Colliery (annotated as Boldon Fell from 1967). Mine located 800m south of site. Expanded and labelled as Wardley Colliery from 1975, with opencast workings.	600 – 1,000m	South

Table C – History of Off-Site Activities			
1898 – c. 1975	Pelaw Brick Works	800m	North
1952 – c. 1967	Nursery Gardens	350m	South
1959 – c. 1993	Electricity Pylons	180m	North East
1967 – c. 1975	Coal Cleaning Plant	600m	North West
1975 - Present	Clay pit, depot and works in former area of Wardley Colliery, with the workings annotated as disused.	900m	North West
1992 – Present	Clay Pit and workings	25 – 400m	North
1992 – 2006	Poultry Farm	400m	North East

2.2 Regulatory Information

A summary of regulatory information is provided in Tables D and E below. Full details are provided in **Appendix B**.

Table D – On Site Regulatory Information	
Discharge Consents	No entries.
Pollution Incidents	No entries.
Integrated Pollution Controls	No entries.
Integrated Pollution Prevention Controls	No entries.
Local Authority Pollution Prevention Control	One (1) Local Authority Pollution Prevention and Control was identified on-site: Four Acres Filling Station, Topspot Services Ltd, PG1/14 Petrol Filling station, Status at the time of writing: Authorised. However, this is considered to relate to a Jet petrol filling station located approximately 480m west of the site, with the following entry relating to the site: Whitemare Pool Filling Station, listed as located 492m west of site, PG1/14 Petrol Filling Station, Status at the time of writing: Permitted.
Substantiated Pollution Incident Register	No entries

Table D – On Site Regulatory Information	
Prosecutions relating to Authorised Processes	No entries.
Registered Radioactive Substances	No entries.
BGS Recorded Landfill Sites	No entries.
Historical Landfill Sites	No entries.
Local Authority Recorded Landfill Sites	No entries.
Registered Landfill Sites	No entries.
Registered Waste Transfer Sites	No entries.
Licensed Waste Management Facilities	No entries.
Registered Waste Treatment or Disposal Sites	No entries.
Control of Major Accident Hazards Sites (COMAH)	No entries.
Notification of Installations Handling Hazardous Substances (NIHHS)	No entries.
Contemporary Trade Directory Entries	One (1) contemporary trade directory entry was listed on the site as Shell Whitemare Pool: Petrol Filling Station. Status listed as Inactive. An active entry listed in the Envirocheck report as follows, is considered to relate to the site: Shell Service Station, Whitemare Pool, Petrol Filling Station, located 479m west of the site.
Fuel Station Entries	One (1) on-site entry listed for Shell Whitemare Pool.

Table E – Off Site Regulatory Information	
Discharge Consents	Twelve (12) current discharge consents were identified within 1 kilometre (km) of the site, with seven (7) within 500m of site: Northumbrian Water Ltd, located 294m south west of site. Discharge of Storm Sewerage. Issue Date: 21 September 1989, Revocation Date: Not Supplied. Status: Not Supplied. Laverick Hall Farm Prop Man Ltd, located 351m east of site. Discharge of Sewage Discharges - Final/Treated Effluent - Not Water Company. Issue Date: 01 July 2015. Revocation Date: Not Supplied. Status: New issued under EPR 2010. Keenleyside N Mr & Mrs, located 356m south of site. Discharge of Sewage Discharges - Final/Treated Effluent - Not Water Company. Issued Date: 04 July 2012. Revocation Date: Not Supplied. Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995). Mr and Mrs M Walton, located 371m and 376m east and 379m south east of site. Discharge Type: Unknown and Septic Tank. Issue Date and Revocation Date: Not Supplied. Status: Not Supplied. Ms Tracy Ann Wardle, located 376m east of site. Discharge of Sewage Discharges - Final/Treated Effluent - Not Water Company. Issue Date: 17 June 1997. Revocation Date: Not Supplied. Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995). Henderson Jw & Thompson E, located 481m south of site. Discharge of Sewage Discharges - Final/Treated Effluent - Not Water Company. Issue Date: 01 April 1997, Revocation Date: Not Supplied. Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995). - Discharge consents also listed as operated at the same location with the same issue and discharge details by operators 'Railton K Mr' 'The Occupier' and ''Miss B Andersen'. Signmakers Limited, located 483m south of site. Discharge: Sewage – Final/Treated Effluent (Not Water Company). Issue Date: 04 November 1998, Revocation Date: Not Supplied. Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995).
Pollution Incidents	One (1) incident to controlled waters was identified within 500m of the site: Property Type: Pumping Station Overflow, located 458m south of the site. Pollutant: Not Given. Incident Date: 31 Oct 1994. Incident severity: Category 3 – Minor Incident. A further 3 incidents to controlled waters were identified within 1km of the site between August 1991 and November 1996. Pollutant types included Miscellaneous: Inert suspended solids and Not Given. Of these, two (2) incidents were classified as Category 3 – Minor Incident, with the following classified as Category 2 – Significant Incident: Property Type: Other General Premises, located 875m north of the site. Pollutant: Not Give. Incident Date: 29 August 1991.
Integrated Pollution Controls	No entries.

Table E – Off Site Regulatory Information	
Integrated Pollution Prevention Controls	No entries.
Local Authority Pollution Prevention Control	One (1) Local Authority Pollution Prevention Control was identified within 1km of the site: Whitemare Pool Filling Station located approximately 492m west, relating to PG1/14 petrol filling station. Status at the time of writing; permitted. However, as discussed in Table D, this is considered to relate to the site, with the petrol filling station entry listed on site actually being located approximately 480m west of the site. R J Budge (Mining) Ltd located 935m south of site, relating to PG3/5 Coal, coke and coal product processes. Status at the time of writing: authorisation revoked.
Substantiated Pollution Incident Register	No entries.
Prosecutions relating to Authorised Processes	No entries.
Registered Radioactive Substances	No entries.
BGS Recorded Landfill Sites	No entries.
Historical Landfill Sites	Two (2) historical landfill entries were identified within 1km of the site: Steetley Construction Materials Limited – Steetley Wardley Quarry located 531m north west of site. Last Input Date: 31 March 1994. Deposited Waste included Inert, Industrial, Commercial, Household and Special Waste, and Liquid Sludge. Common Services Committee – Pelaw Quarry located 784m north of site. Last Input Date: 8 January 1993. Deposited Waste included Industrial, Inert, Commercial and Household Waste.
Local Authority Recorded Landfill Sites	Three (3) local authority recorded landfill site entries were identified within 1km of the site: Red Barns located 14m north west of site. Last Reported Status: Unknown. Wardley Quarry located 529m north west of site. Last Reported Status: Unknown. Pelaw Quarry located 771m north of site. Last Reported Status: Unknown.

Table E – Off Site Regulatory Information	
Registered Landfill Sites	Three (3) registered landfill sites were identified within 1km of the site: Redland Aggregates Ltd – Wardley Quarry, 781m north west of site. 25 October 1989 – Status: Site Closed. Waste: Construction and Demolition Wastes, Sewage Sludge, Household, Commercial and Industrial Waste. Steetley Construction Materials Ltd – Wardley Quarry, 781m north west of site. 07 October 1985 and 01 May 1984 – Status: Surrendered. Waste: Contaminated Rubbish, Metal, Mineral Processing Wastes, Slags, Waste Treated Timber, iron compounds, boiler/flue cleanings and scrap rubber under two licenses. Gateshead Metropolitan Borough Council - Pelaw Quarry Landfill Site, 930m north of site. 01 July 1989.019 – Status: Cancelled. Waste: Drums, Household, Commercial and Industrial Wastes.
Registered Waste Transfer Sites	No entries.
Licensed Waste Management Facilities	The following Licensed Waste Management Facilities were identified within 1km of the site: Sirius Remediation Ltd - Wardley Colliery Disposal Point, 620m south east of site. 06 July 2009 – Status: Surrendered. Site Category: HCl Waste TS and asbestos. Tarmac Aggregates Limited - Wardley Quarry Landfill Site, site location 714m north west with the landfill boundary 528m north west of site. 25 October 1989 – Status: Modified. Site Category: Household, Commercial and Industrial Waste Landfill. J W Coats & Sons Ltd - Welfare Garage, No 2 Colliery, 728m north west of site. 27 April 1995 – Status: Transferred. Site Category: Metal Recycling Sites (Vehicle Dismantlers). Steetley Construction Materials Ltd, 781m north west of site. 26 November 1984 – Status: Surrendered. Site Category: Household, Commercial and Industrial Waste Landfill. Northern Powergrid (Northeast) Limited, 885m south of site. 19 October 2019 – Status: Issued. Site Category: Storage of Electrical Insulating Oils. Highways England – Wardley Coal Disposal Point, 969m south of site. 20 December 2018 – Status: Issued. Site Category: Transfer Stations Taking Non-biodegradable Wastes. Homes and Communities Agency - Former Monkton Cokeworks, landfill boundary 984m north of site. 20 August 1998 – Status: Closure. Site Category: Other Landfill Sites Taking Special Waste.
Registered Waste Treatment or Disposal Sites	One (1) Registered Waste Treatment or Disposal Site was identified within 1km of the site: J J & W A Coats - Welfare Garage, located 593m north west of site. 27 April 1995 – Status: Operational as far as is known. Waste: Motor Vehicles and associated parts.
Control of Major Accident Hazards Sites (COMAH)	No entries.

Table E – Off Site Regulatory Information	
Notification of Installations Handling Hazardous Substances (NIHHS)	No entries.
Contemporary Trade Directory Entries	Forty-one (41) off-site entries were listed within 1km of the site, of which twenty-four (24) were 'inactive'. Of the 'active' entries, four (4) were located within 500m of the site as detailed below: • Shell Service Station, 479m north west of site, Petrol Filling Station. However, as discussed in Table D, this is considered to relate to the on-site petrol filling station. • Four Aces Filling Station, 479m north west of site, Petrol Filling Station. • Doorstep Print & Advertising, 492m west of site, Printers – Glass, Metal, Plastics Etc. • Wardley MOT Centre, 492m west of site, MOT Testing Certificates.
Fuel Station Entries	One (1) off-site fuel station entry was identified within 1km of the site, detailed below; • Four Aces Filling Station, 491m west of site – Jet station. Status: Open.

2.3 Previous Reports

Table F – Previous Site Investigations and Remedial Works	
Previous Site Investigations	GeoDelft, Tier 1 Soil Gas Survey, report ref. C928.SG356.8975, dated April 1998 (Ref. 1) GeoDelft undertook a soil gas survey on site in 1998 and identified a Volatile Organic Compound (VOC) plume around the pumps and forecourt, with VOC readings recorded as more than 100ppm) in this area. The report does not list any accidental releases in the site history.
	GeoDelft, Tier 2 Environmental Survey, report ref. C1443.SG356, dated September 1999 (Ref. 2) GeoDelft drilled five (5) boreholes on the site to a maximum depth of 3.0m below ground level (bgl) in 1999. The geology encountered was reported to comprise Made Ground to a maximum depth of 1.0m bgl. Beneath the Made Ground, sand or silt was encountered, underlain by peaty/sandy/gravelly/silty clay to the maximum drilled depth. Weathered siltstone was reported in three of the boreholes, encountered between 2.5m and 2.7m bgl and reported to the maximum drilled depth of 3.0m bgl. Groundwater was identified in two boreholes, with a strike identified at 2.0m bgl in SS01 and resting water level reported to be 2.3m bgl. A strike was encountered at 1.65m bgl in SS02, with resting water level reported as 0.75m bgl. The boreholes were not installed with monitoring wells and were backfilled with bentonite.

Table F – Previous Site Investigations and Remedial Works	
	RSK, Soil Verification Report, report ref. 310714- R1(01), dated April 2009 RSK undertook soil verification sampling during site redevelopment in May 2008, which comprised the reconfiguration of the underground storage tanks, and removal and replacement of the forecourt interceptor, fuel islands and associated pipework. Fourteen (14) soil samples were collected for laboratory analysis, with samples collected to a maximum depth of 1.0m bgl. Samples were collected from the shallow excavations created to reconfigure the tanks, the sides of the interceptor excavation and from beneath two of the fuel pumps. Visual and olfactory observations of hydrocarbon impact were noted on one side wall of the interceptor excavation, close to a drainage gulley and an olfactory observation was reported for the soil sample collected from beneath pump 4. As part of the redevelopment works, approximately 400 tonnes of inert material from the excavations was removed from site and disposed of at a suitable licensed waste facility. Samples were screened against Generic Assessment Criteria (GAC) with benzo(a)pyrene and naphthalene concentrations reported to exceed the GAC in soil samples collected from the interceptor excavation. Further risk assessment was undertaken and naphthalene concentrations were assessed via Detailed Quantitative Risk Assessment. The site was considered suitable for its current use.
Historical Site Boreholes	During the AECOM site walkover, no monitoring wells were identified on site.
Historical Remedial Activities	AECOM is not aware of any remedial activities having been undertaken on site.

2.4 Fuel Infrastructure

Table G – General Information Regarding Fuel Infrastructure	
Site age	Information provided by Shell indicated that five (5) vessels with seven (7) tank compartments were installed on-site in 1987 and one more single compartment tank was installed in 1990. Historical mapping indicated that the site first operated as a garage c.1992. Information from Shell indicates that tanks were first installed at the site in 1987.
Known redevelopment on the site	Information provided in the PO report indicates that Stage 1B and Stage 2 vapour recovery was installed on site in approximately 1997, with new fuel lines installed from pump islands 3/4 and 5/6. Based on records provided, overfill protection was fitted on four tanks in 2003. Information provided by RSK (ref. 3) indicated that the site underwent a re-pump in 2008 with associated pipework and the interceptor removed and replaced at the same time. The Soil Verification Report also indicates that two (2) dual compartment tanks had the baffles removed at this time, for future operation as single compartment tanks. As such, there are currently six (6) vessels with six (6) tank compartments in operation at the site.
Number of fuel islands and dispensers (Cars and Heavy Goods Vehicles - HGVs)	Cars: Eight (8) dispensers on four (4) pump islands. HGVs: Two (2) dispensers on two (2) pump islands.
Gauge system currently operating	Gilbarco Veeder Root model TLS 350R.
LPG on the site	There is no LPG stored on site.
Number of above ground storage tanks, capacity and contents	There are no above ground storage tanks on site.
Number of underground vessels / tank compartments	Six (6) vessels and six (6) tank compartments.
Number of off-set fill points	Six (6) above ground off-set fill points were identified adjacent to the HGV fuel lane in the western area of the site.
Evidence of abandoned underground tanks on-site	During the site walkover no visual evidence of abandoned tanks was noted.
Underground tanks installation strata	Based on desk study information presented in this report, the tanks and fuel infrastructure are considered likely to be installed in superficial Pelaw Clay deposits and weathered Pennine Middle Coal Measures Bedrock.

Table G – General Information Regarding Fuel Infrastructure	
Design of the tanks	Information provided by Shell / the PO report indicates that all tanks are of single wall steel construction.
Tank manholes	There are eight (8) tank manholes in the western part of the site and it is unknown whether the chambers are brick or plastic lined. Two (2) of the manhole lids are considered likely to have become redundant following the removal of the baffle in former Tanks 2/3 and Tanks 7/8.
Site interceptor	The site was identified to have one (1) Class 1 / Class 2 interceptor. It is located to the north west of site between the shop building and site boundary.
Interceptor drainage	Based on the PPG21 drawing for the site (presented in Appendix E), the interceptor located to the north west of site drains towards the west and discharges in to a main sewer off site.
Soakaway on the site	No soakaways have been identified on-site.
Drainage on the site	Based on the PPG21 drawing, foul water from the retail shop drains to a cesspit behind the shop building in the north east corner of the site. Canopy and roof drainage and surface water drainage from the egress route to the north of the retail building drains to a surface water drain and discharges off site to the same main sewer as the forecourt interceptor, located to the west of site.
Asbestos on the site	AECOM understands that soil samples collected from the site during previous site investigations were not analysed for asbestos. Based on records obtained from VINCI, asbestos-containing materials are not known to have been used during construction of the site shop building.
Known accidental release on-site or wet stock variance	The PO report indicates there have been no accidental releases on site. Tank and line testing provided in the PO report indicates that the line between tank 2 and pump 5/6 failed testing on 31 May 1995 and 9 June 1995, with the same line passing testing later in June 1995. The lines between tank 5 and pumps 5/6 and 7/8 were also tested in June 1995 and passed. Further reports of tank and line testing undertaken in 1996 and 1997 indicated that all tanks and lines passed testing. Fairbanks Environmental have been monitoring wetstock records on behalf of Shell since November 2012. According to information received from Fairbanks on 1 July 2019, there are no historical or current concerns regarding wetstock variance at Shell Whitemare Pool. As such, there are no tank testing records available for the site since wetstock monitoring began in 2012.

Table H – Summary of On-site Fuel Vessel / Tank Compartments			
Vessel number or ID	**Vessel 1**	**Vessel 2**	**Vessel 3**
Tank Compartment number or ID	**Tank Compartment 1**	**Tank Compartment 2**	**Tank Compartment 3**
Tank type(1)	Single Walled Steel	Single Walled Steel	Single Walled Steel
Tank compartment size (litres) (2)	34,580	21,660	12,920
Product stored(2)	Unleaded	Diesel	VP-Unleaded
Status(2,3)	Active	Active	Active
Date of installation(1)	1987	1987	1987
Removal date or abandonment date	Not Applicable	Not Applicable	Not Applicable
Relative level (RL) of tank base	Assumed to be 4.5m bgl	Assumed to be 4.5m bgl	Assumed to be 4.5m bgl
Vessel number or ID	**Vessel 4**	**Vessel 5**	**Vessel 6**
Tank Compartment number or ID	**Tank Compartment 4**	**Tank Compartment 5**	**Tank Compartment 6**
Tank type(1)	Single Walled Steel	Single Walled Steel	Single Walled Steel
Tank compartment size (litres) (2)	24,700	21,660	12,920
Product stored(2)	Diesel	Diesel	VP-Diesel
Status(2,3)	Active	Active	Active
Date of installation(1)	1987	1987	1990
Removal date or abandonment date	Not Applicable	Not Applicable	Not Applicable
Relative level (RL) of tank base	Assumed to be 4.5m bgl	Assumed to be 4.5m bgl	Assumed to be 4.5m bgl

NOTES:

1 - Based on information provided by Shell

2 - Tank gauge print out obtained 09 July 2019 during site walkover

3 - Petroleum officer response dated 09 July 2019

2.5 Environmental Setting

Table I – Site Surface	
Site Surface	Forecourt Area (area under canopy, next to all fuel islands, tank farm and fill points): The area is surfaced with concrete. Access Routes and behind the shop: The site is covered with asphalt.
Presence of Open Ground	Forecourt Area: No open ground was observed in the forecourt area. Adjacent to the site boundary and sign area: Open ground covered with grass was observed behind the shop to the north of site and around the cesspit and along the eastern boundary adjacent to the road. The area immediately adjacent to the west of the site and HGV fuel island is covered with well-established vegetation.
Integrity of the surface	Forecourt Area: The concrete and tarmac was generally observed to be in good condition with some scarring observed around manholes. Access Routes and north of the shop: The concrete and tarmac was generally observed to be in good condition with some minor cracking and scarring present.
Evidence of superficial chemicals of potential concern (COPC)	Minor staining around the pump islands was observed during the site walkover.
Location of fences and retaining walls (and sheet piling)	The site is bounded by a low wooden fence and vegetation on the western side of the site, the remaining boundaries are open.

Table J – Surrounding Land Use	
North	The site is immediately bound by Roman Road and dense vegetation, within which is a potential drainage ditch approximately 30m north west of site. It was not possible to assess the presence of any ditch during the AECOM site visit due to the vegetation. The land approximately 115m north east of site is currently part of Red Barns Quarry, which extracts brick shale.
South	The site is bounded by the A194 dual carriageway (Leam Lane) and a landscaped vegetated area. A roundabout and the A184 (Newcastle Road) are located approximately 135m south of site.
East	The site is bound by the A194 dual carriageways (Leam Lane) to the east of site (5m), beyond which are agricultural fields (approximately 30m from the site boundary).

Table J – Surrounding Land Use	
West	The site is bound by commercial buildings which include a service station and Travelodge, with the nearest hotel buildings 24m south west of site. Food outlets (Subway and Burger King) situated 68m south west.

Table K – Site Specific Information – Topography, Hydrology, Hydrogeology and Geology	
Site Elevation	The site is located at an approximate elevation of 50 metres Above Ordnance Datum (m AOD).
Topography	**On-site:** The forecourt is relatively flat in comparison to the rest of site. **North**: Similar elevation to site. **South:** Similar elevation to site. **East:** Similar elevation to site. **West:** Similar elevation to site.
Other Information Environmentally sensitive areas (e.g. SSSI)	The Envirocheck report (**Appendix B**) indicates that the following sensitive land uses are within 1km of the site: There is one Local Nature Reserve within 1km of the site: • Pelaw Quarry Pond, 771m north of the site. There are three Areas of Adopted Green Belt within 1km of the site: • Adopted by South Tyneside Metropolitan Borough Council, on site (south east area) of the site. • Adopted by Gateshead Metropolitan Borough Council, 171m west of the site. • Adopted by South Tyneside Metropolitan Borough Council, 261m south of the site. The Envirocheck report indicates that there are none of the following within 1km of the site; Ancient Woodland, Area of Outstanding Natural Beauty, Areas of Unadopted Green Belt, Special Area of Conservation, Site of Special Scientific Interest, Nitrate Vulnerable Zones, Environmentally Sensitive Areas, Forest Parks, Marine Nature Reserves, National Nature Reserves, National Parks, Nitrate Sensitive Areas, Ramsar Sites, World Heritage Sites and Special Protection Areas.
Surface Water Features and Surface Water Abstractions	The nearest surface water features are an unnamed drain approximately 68m west of the site and Monkton Burn approximately 280m south east of site. It was not possible to ascertain whether the drain contained surface water during the AECOM site visit, due to the presence of dense vegetation. However, the line of the vegetation suggested that the drain may extend to approximately 30m north west of the site boundary, running north east to south west. There is also a small pond situated approximately 155m south west of site and another pond situated in the quarry workings 300m north east of site at Red Barn quarry.
Flood Vulnerability	The site does not lie within an area that is likely to suffer flooding from rivers or reservoirs.
Made Ground and Superficial Geology	It is anticipated that made ground may be present associated with the site's development. GeoDelft identified Made Ground to a maximum depth of 1.0m bgl during intrusive investigation in 1999 (Ref. 2). British Geological Survey (BGS) mapping shows the site to be underlain by superficial deposits of the Pelaw Clay Member overlying bedrock. The Pelaw Clay is classified by the Environment Agency as Unproductive Strata. The thickness of the clay beneath the site is unknown; however GeoDelft reported peaty/sandy/gravelly/silty clay to depths between 2.5m bgl and the maximum drilled depth of 3.0m bgl in two of

Table K – Site Specific Information – Topography, Hydrology, Hydrogeology and Geology	
	the boreholes drilled on site in 1999 (Ref. 2)Three (3) boreholes logs located between 45m south west of the site (BGS reference NZ36SW654 and NZ36SW655) and 300m north east (BGS reference NZ36SW136) were obtained from the BGS and these generally identified superficial deposits of clay to a maximum exploratory depth of 3.0m bgl. BGS borehole log NZ36SW654 located approximately 60m south west of site reported superficial clay deposits to 5.3m bgl, with BGS borehole log NZ36SW133 located approximately 50m west of site encountering clay deposits to a maximum depth of 4.5m bgl.
Solid Geology	BGS mapping shows the site to be underlain by bedrock of the Pennine Middle Coal Measures Formation, comprising sandstone across the majority of the site and mudstone, siltstone and sandstone in the northernmost section of the site. A fault (Claxheugh Fault) runs through the northern portion of the site, east to west. During the intrusive investigation undertaken by GeoDelft in 1999 (Ref. 2), weathered siltstone was reported in three (3) of the five (5) boreholes drilled and was reported between 2.5m and 2.7m bgl to the maximum drilled depth of 3.0m bgl. BGS borehole logs were obtained from locations within the mapped sandstone bedrock and the mapped mudstone, siltstone and sandstone bedrock. Three (3) boreholes located between 45m and 60m south west of site and in the sandstone bedrock encountered sandy shale from depths between 2.1m bgl and 5.3m bgl. BGS borehole NZ36SW136 located within the interbedded bedrock 300m north east of the site encountered soft sandstone from 2.5m bgl, with bands of mudstone, siltstone and shale identified to 10.18m bgl, where the first coal seam was encountered and borehole log NZ36SW133 approximately 50m west of site identified soft shale from 4.5m bgl, with the first coal seam encountered at 8.5m bgl. The Pennine Middle Coal Measures Formation is classified by DEFRA Magic Map as a Secondary A Aquifer.
Groundwater	Perched groundwater may be present within the shallow superficial deposits. During the intrusive investigation undertaken by GeoDelft in 1999 (Ref. 2), groundwater was identified in two boreholes within the superficial clay during drilling, with a strike identified at 2.0m bgl in SS01 and resting water level reported to be 2.3m bgl. A strike was encountered at 1.65m bgl in SS02, with resting water level reported as 0.75m bgl. Based upon records provided by British Geological Survey (NERC), borehole log NZ36SW656 (located approximately 45m south west of the site) reported that groundwater was struck at a depth of 3.0m bgl in the fill material and standing water level was at 1.4m bgl in the superficial clayey sand deposits. Groundwater was struck at 4.80m bgl in BGS borehole log NZ36SW654 (60m south west of site) and rose to 1.45m bgl within the superficial clay deposits.
Groundwater Abstractions	No licensed records of groundwater abstractions were identified within 2km of the site. South Tyneside Council confirmed that the council does not have any records of private groundwater abstraction within 1km radius of the site. The 1km radius also falls within the boundary of Gateshead Metropolitan Borough Council, who also confirmed that there are no private groundwater abstractions within 1km radius of the site.
Source Protection Zones	The site is not located within a Source Protection Zone (SPZ). There are no SPZ within 2km of site.

Table K – Site Specific Information – Topography, Hydrology, Hydrogeology and Geology	
Other Information Coal Mining; Radon; Ground Stability Hazards; Landslides.	The site was considered to be located in an area likely affected by coal mining but not Radon gas. As such a report was obtained from the Coal Authority: The Coal Authority CON29M Coal Mining Report, ref 209721675_2. Dated 04 July 2019. Historically the property is in a surface area that could be affected by underground mining in 4 seams of coal at 320m to 460m depth, which were last worked in 1968. Any movement in the ground due to coal mining activity associated to these workings should have stopped now. The site is not within an area where coal has been removed by opencast methods. There are no recorded coal mine entries known to the Coal Authority on site, or within 20m of the boundary of the property. The Envirocheck report gives the following information regarding ground stability hazards: • Collapsible ground – very low. • Landslide – very low. • Running sand – no hazard. • Shrink-swell clays – low. • Non-coal mining – no hazard. • Compressible ground – no hazard. • Ground dissolution – no hazard.

3. PRELIMINARY CONCEPTUAL SITE MODEL AND RISK ASSESSMENT

A preliminary conceptual site model (CSM) and risk assessment (PRA) has been completed for the site. This identifies the potential sources, pathways, and receptors for the site, in order to assess the potential risks posed by identified Potential Sources to Human Health and / or Controlled Waters Receptors. When required, the viability of the Source-Pathway-Receptor pollutant linkage must be evaluated further to determine whether an actual risk is present.

The methodology adopted in this report is based upon the UK Defra and EA "best practice" in regard to the assessment of contaminated land. The approach taken reflects that promoted in CLR11 **(Ref 5)** and R&D Publication 66 **(Ref 6)** and the supporting guidance referenced within them.

3.1 Potential Sources

On-site - Historical

- Historical use of the site as a petrol filling station since c.1987
- Substation located in the north western area of site since c. 1973

On-site - Current

- Operational underground storage tanks serving the car forecourt and HGVs (AECOM understands there are no historical /decommissioned storage tanks on-site).
- Accidental releases to ground from off-set fill points located in the west of the site.
- Accidental releases to ground from dispenser pumps: four car fuel islands and two HGV pumps.
- Accidental releases from fuel lines present between the tanks, off-set fill points and fuel islands.
- The forecourt interceptor located in the northern portion of the site and associated drainage lines.
- Made Ground.
- Substation located in the north west of the site.

Off-site - Historical

- Brick shale quarry situated 14m north west of site, which may be operational again in the future.

Off-site - Current

- Operational quarry situated 115m north east of site.

However, the quarry has only been operational since c. 1994 and therefore any source of COPC is likely to have been controlled and continue to be controlled by implementation of health, safety and environmental control measures to reduce any risk of accidental releases.

3.2 Chemicals of Potential Concern (COPC)

- TPH - Petroleum hydrocarbons.
- BTEX - Benzene, toluene, ethylbenzene and xylenes.
- Petroleum Additives - Methyl tertiary butyl ether (MTBE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), di-isopropyl ether (DIPE), and tertiary butyl alcohol (TBA).
- PAHs - Polycyclic aromatic hydrocarbons.
- Metals – arsenic, boron, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium and zinc.
- 2-methylnaphthalene and n-hexane.
- Asbestos.
- Ground gases including methane and carbon dioxide.
- PCBs and oils in the north western area of the site, associated with the substation.

3.3 Potential Pathways

Human Health - Vapours

USEPA Guidance (**Ref. 7**) has been used to determine potential vapour intrusion receptors that require assessment.

The site shop has been assessed primarily as a vapour receptor for potential acute risks, however chronic risks to site workers have also been considered.

No factors that preclude the use of the USEPA guidance have been identified. Receptors that have been PVI screened in for further assessment include:

- Off-site workers and visitors to commercial properties located adjacent to the south west of the site, with the nearest building a hotel 24m south west. The commercial property has been screened in for assessment as it is not currently known whether a shallow dissolved phase source of COPC is present on site, based on available historical information.

Human Health – Other pathways

- Particulate – Ingestion, inhalation, dermal contact, with soil particulates.
- Permeation – Migration of hydrocarbon substances through plastic potable water supply pipes.

Controlled Waters

- Leaching – Migration of hydrocarbon substances from soils into groundwater.
- Migration of impacted shallow groundwater.

3.4 Potential Receptors - Human Health

The potential receptors include;

- On-site shop staff.
- On-site general public and visiting staff (such as contractors, including those conducting excavation works).
- Off-site workers and visitors in commercial properties immediately south west of the site.

Given that only limited previous site investigation data is available (limited soil samples generally 1.0m or shallower) it has been assumed for the purpose of vapour risk assessment screening that groundwater could be shallow and that hydrocarbon impact, potentially including mobile or residual Light Non Aqueous Phase Liquids (LNAPL) could be present. Shallow groundwater was identified by GeoDelft in the 1999 intrusive investigation in the superficial deposits but not sampled. In the absence of any known precluding factors a lateral screening distance of 10m has been applied to screen buildings in or out for further assessment, in line with USEPA guidance for assessing vapour risk from retail petrol stations (**Ref. 8**).

- The nearest building to the site is 24m south west and therefore has been screened out of the vapour risk assessment.

The site shop has been assessed as a potential vapour receptor for potential acute and chronic risks although chronic risks to site workers are addressed by occupational Health & Safety controls. No indictors of acute risk are known to have been reported to Shell such as hydrocarbon odours within the site shop or adjacent buildings

3.5 Potential Receptors -Controlled Waters

- Perched groundwater within the Pelaw Clay Member (Unproductive Strata).
- Groundwater within Pennine Middle Coal Measures Formation (Secondary A Aquifer).
- Surface water (drain located 68m west but potentially as close as 30m north west of site), Monkton Burn, 280m south east of site and ponds located 155m south west and 300m north east of site.

3.6 Review of Potential Source-Pathway-Receptor Linkages

The following pollutant linkages have been identified. The Initial Conceptual Site Model is presented in **Figure 4**.

Table L – Human Health CSM

Source	Pathway	Receptor	Likelihood of Pollutant Linkage Presenting an Unacceptable Risk
Potentially impacted soils / groundwater from the site	Vapours - Lateral and vertical vapour migration through made ground to above ground on- and off-site buildings and subsequent inhalation.	On-site shop staff, visiting staff and general public.	Unlikely based on USEPA vapour screening assessment.
		Off-site workers and visitors in adjacent commercial properties (nearest building 24m south west).	
	Particulate - Ingestion, inhalation, dermal contact with soil particulates.	On-site shop staff, visiting staff and general public.	Unlikely as site is covered in hardstanding.
		Visiting on-site contractors excavating ground.	**Possible***
	Permeation – Migration of hydrocarbon substances through plastic potable water supply pipes.	On-site shop staff (ingestion of drinking water on-site).	**Potential linkage.**

* Potential risks to visiting contractors undertaking intrusive works should be managed by appropriate PPE, risk assessment and method statements.

Table M – Controlled Waters CSM

Source	Pathway	Receptor	Likelihood of Pollutant Linkage Presenting an Unacceptable Risk
Potentially impacted soils / groundwater from the site and identified potential off-site sources.	• Partitioning between soil and pore water. • Leaching of impacted soils into perched water (if present), groundwater. • Lateral migration of impacted perched water (if present), or groundwater.	Surface water (Unnamed drain approximately 68m west of site but potentially as close as 30m north west of site, Monkton Burn 280m south east and ponds 155m south west and 300m north east from site).	**Potential linkage.**
		Perched groundwater within the Pelaw Clay Member (Unproductive Strata) and Pennine Middle Coal Measures Formation (Secondary A Aquifer).	**Potential linkage.**

4. CONCLUSIONS

The site is located in an area of commercial land use at a service station area adjacent to a dual carriageway. A substation is located within the north western area of the site. The site was operated as a garage from c.1987 based on historical information for the site. Information provided by Shell indicates five (5) of the current tanks were installed in 1987 and one (1) in 1990.

Six (6) active underground storage vessels with six (6) tank compartments were identified at the site. Historical reports indicated eight (8) storage compartments were previously in operation at the site, with the baffle removed from tanks 2 and 3 and 7 and 8 in 2008 to create the current layout with six (6) single compartment tanks.

Information supplied by the Petroleum Officer indicated there have been no accidental releases at the site and there is not known to have been any previous remediation.

The site geology comprises superficial deposits of Pelaw Clay Member (Unproductive Strata), underlain by the Pennine Middle Coal Measures Formation (Secondary A Aquifer). The site is not located within an SPZ. The nearest surface water features included a surface water drain located approximately 68m west which possibly extends to approximately 30m north west of site, Monkton Burn 280m south east of site and ponds located 155m south west and 300m north east from the site.

A report obtained from the Coal Authority indicated that the site may be located in an area affected by underground mining of four (4) seams of coal at 320m to 460m depth, which were last worked in 1968. Any movement in the ground due to coal mining activity associated to these workings should have stopped and there are no recorded mine entries within the site boundary.

The preliminary risk assessment identified a number of potential pollutant linkages, summarised as follows:

Human Health

- Potentially impacted soils / groundwater, followed by permeation through plastic pipes into the site potable water supply.
- Potentially impacted soils / groundwater, followed by soil particulate dermal contact, inhalation or ingestion by visiting contractors excavating the ground.

Controlled Waters

- Potentially impacted soils from the site, followed by leaching into perched groundwater of the Pelaw Clay Member (Unproductive Strata) or groundwater of the Pennine Middle Coal Measures Formation (Secondary A Aquifer).
- Potentially impacted soils/groundwater from the site, followed by migration of impacted groundwater to the identified surface water receptors (drain 68m west but potentially as close as 30m north west, Monkton Burn 280m south east of site and ponds located 155m south west and 300m north east from site).

5. REFERENCES

Ref. 1 GeoDelft, Tier 1 Soil Gas Survey, report ref. C928.SG356.8975, dated April 1998.

Ref. 2 GeoDelft, Tier 2 Environmental Survey, report ref. C1443.SG356, dated September 1999.

Ref. 3 RSK, Soil Verification Report, report ref. 310714- R1(01), dated April 2009.

Ref. 4 The Coal Authority CON29M Coal Mining Report, ref 209721675_2. Dated 04 July 2019.

Ref. 5 Model Procedures for the Management of Land Contamination, Contaminated Land Report (CLR) 11, Environment Agency & DEFRA, Dated September 2004.

Ref. 6 Guidance for the Safe Development of Housing on Land Affected by Contamination, R&D Publication 66: 2008 (Volume 1), NHBC and the Environment Agency 2008.

Ref. 7 Technical Guide For Addressing Petroleum Vapor Intrusion At Leaking Underground Storage Tank Sites, EPA 510-R-15-001. USEPA. June 2015.

Ref. 8 USEPA. OSWER Technical Guide For Assessing And Mitigating The Vapor Intrusion Pathway From Subsurface Vapor Sources To Indoor Air, Office of Solid Waste and Emergency Response, June 2015.

FIGURES

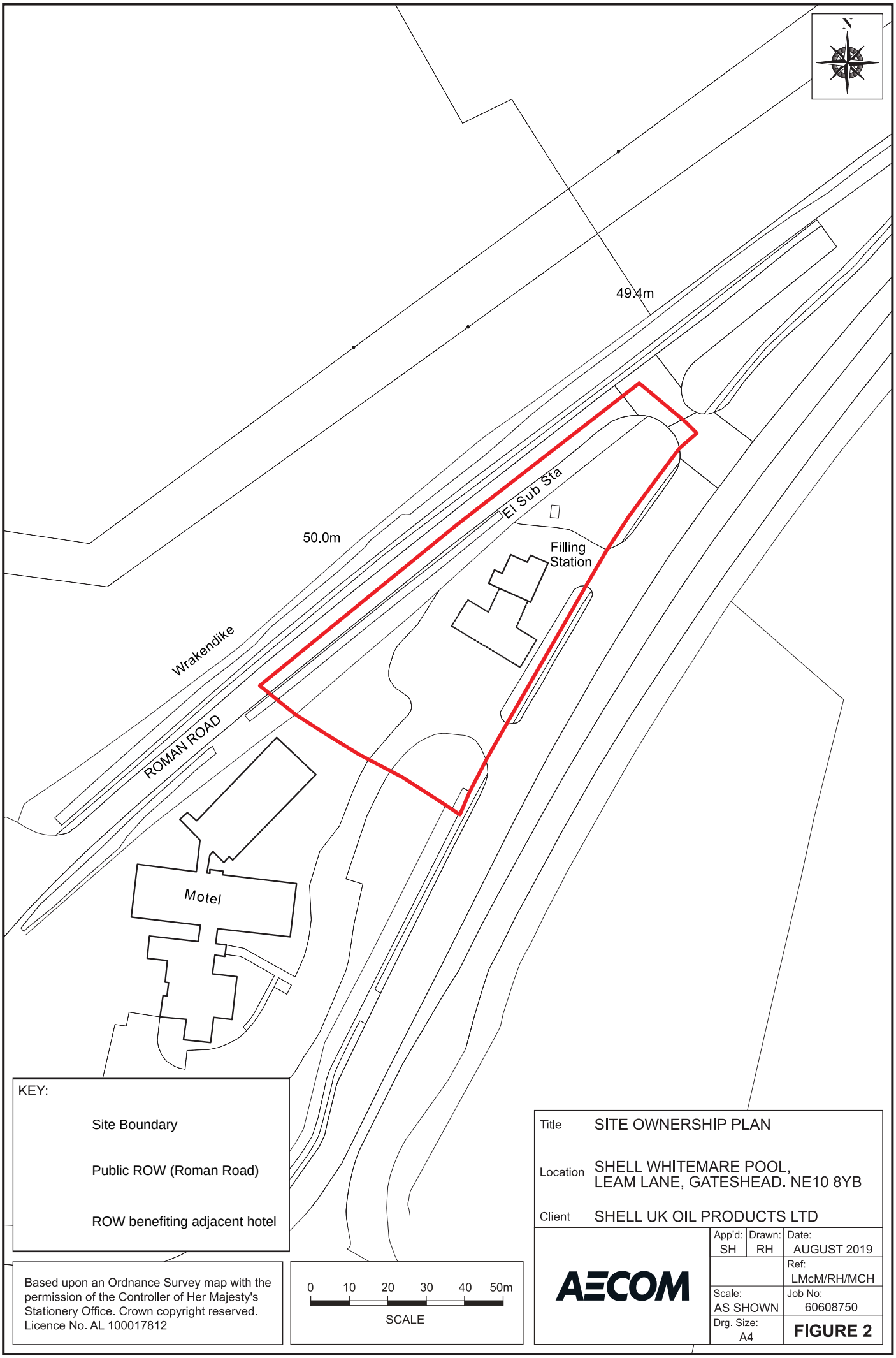
Figure 1 - Site Location Map

Figure 2 - Red Line Boundary Plan

Figure 3 - Site Features Plan

Figure 4 - Initial Conceptual Site Model


Gateshead
N
SITE LOCATION
HEBBURN
Hebburn New Town
Campbell Park
Hebburn Hall Ponds
Monkton
Primrose
Bill Quay
Pelaw
Wardley
Monkton Fell
Fellgate
Red Barns Farm
West Fellgate Farm
Clay Pit
Motel
Pool Bridge
Laverick Hall Farm
White Mare Pool
Pikes Hole Farm
Boldon Fellgate Farm
Newcastle Road
High House Farm
Boldon Fell
Scot's House
Leam Lane
Heworth Golf Club
Opencast Workings
Follingsby
South Follingsby Farm
Follingsby Lane
Strother House Farm
Hylton Grove Farm
The Leam
Whytle Burn
George Washington Golf Club
Usworth House Farm
Usworth Hall
Heugh Hill
Playing Fields
Dismantled Railway
River Tyne Trail
Met Dist Bdy
A194(M)
A184
A195
A185
B1288
Based upon an Ordnance Survey map with the permission of the Controller of Her Majesty's Stationery Office. Crown copyright reserved. Licence No. AL 100017812
0
1Km
SCALE (1:25,000)
Title SITE LOCATION MAP
Location SHELL WHITEMARE POOL, LEAM LANE, GATESHEAD. NE10 8YB
Client SHELL UK OIL PRODUCTS LTD
AECOM
App'd: SH
Drawn: RH
Date: AUGUST 2019
Ref: LMcM/RH/MCH
Scale: AS SHOWN
Job No: 60608750
Drg. Size: A4
FIGURE 1



KEY:

Site Boundary

Public ROW (Roman Road)

ROW benefiting adjacent hotel

Based upon an Ordnance Survey map with the permission of the Controller of Her Majesty's Stationery Office. Crown copyright reserved. Licence No. AL 100017812

0 10 20 30 40 50m

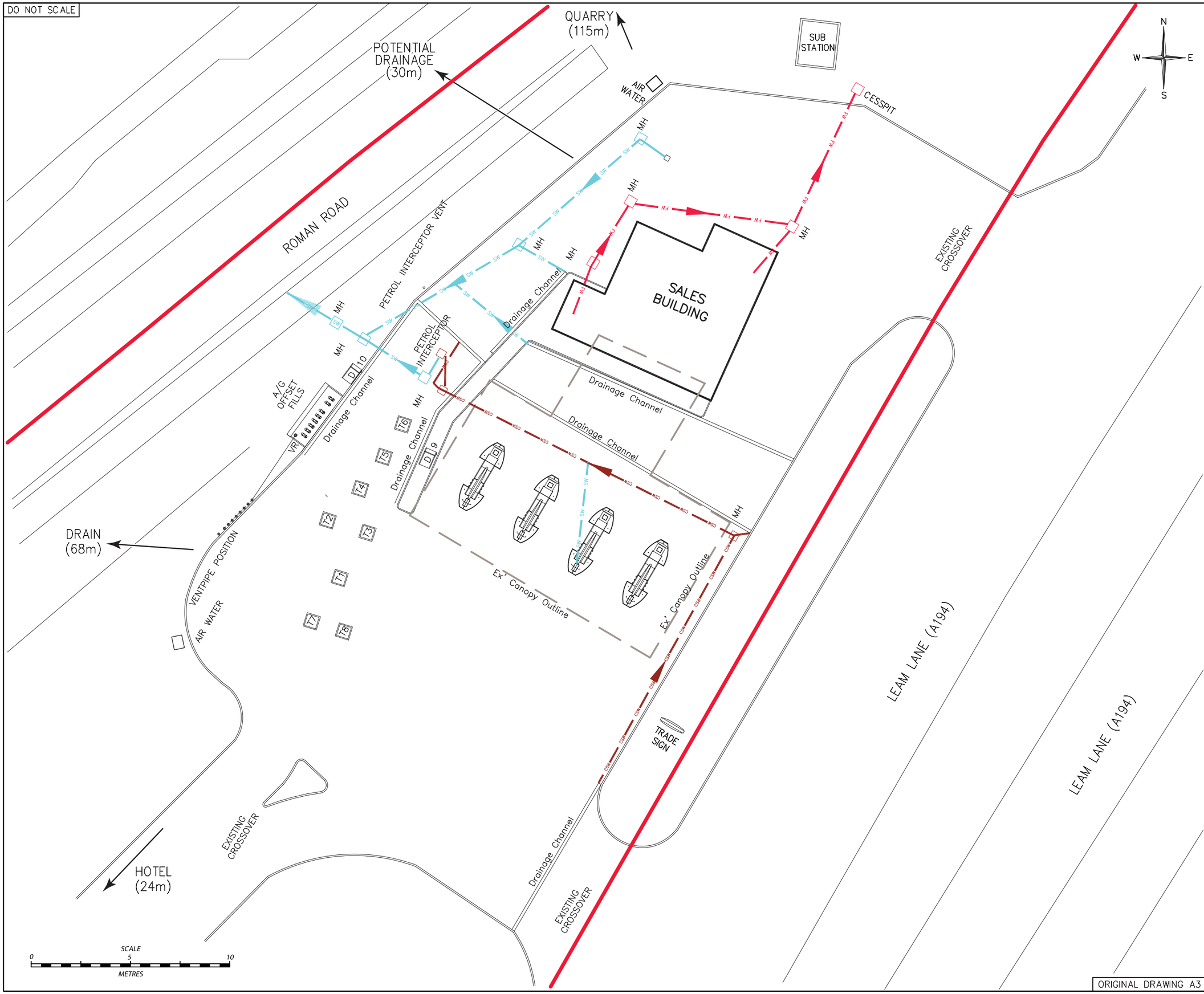
SCALE

Title	SITE OWNERSHIP PLAN
Location	SHELL WHITEMARE POOL, LEAM LANE, GATESHEAD. NE10 8YB
Client	SHELL UK OIL PRODUCTS LTD

AECOM

App'd:	Drawn:	Date:
SH	RH	AUGUST 2019
		Ref: LMcM/RH/MCH
Scale: AS SHOWN		Job No: 60608750
Drg. Size: A4		**FIGURE 2**

DO NOT SCALE



NOTES

KEY:

Approximate Site Boundary

MH Manhole

MW Monitoring Well

SU Drainage Channel Sump Unit

Gulley

Storm Water Sewer (Blue)

Storm Water Sewer(Brown)

Foul Water Sewer (Red))

BROWN SW DRAIN

SURFACE WATER DRAIN

FOUL WATER DRAIN

COMBINED WATER DRAIN

DRAINAGE DESCRIPTION

There are three seperate drainage systems on this site.
1 x Foul,2 x Surface water.
One surface system takes all non petrol drainage and discharges into a main sewer
The second surface system takes all forecourt drainage through a interceptor and discharges into same main sewer
The foul system takes all toilet waste to a ceespit

REV	DESCRIPTION	BY/AM	APPROVED	DATE

STATUS
FOR INFORMATION

CONSULTING ENGINEERS

AECOM

6th FLOOR, 1 NEW YORK STREET, MANCHESTER, M1 4HD
TEL 0161-601-1700

CLIENT
SHELL UK OIL PRODUCTS LTD

PROJECT
Shell Whitemare Pool,
Leam Lann, Gateshead.
NE10 8YB

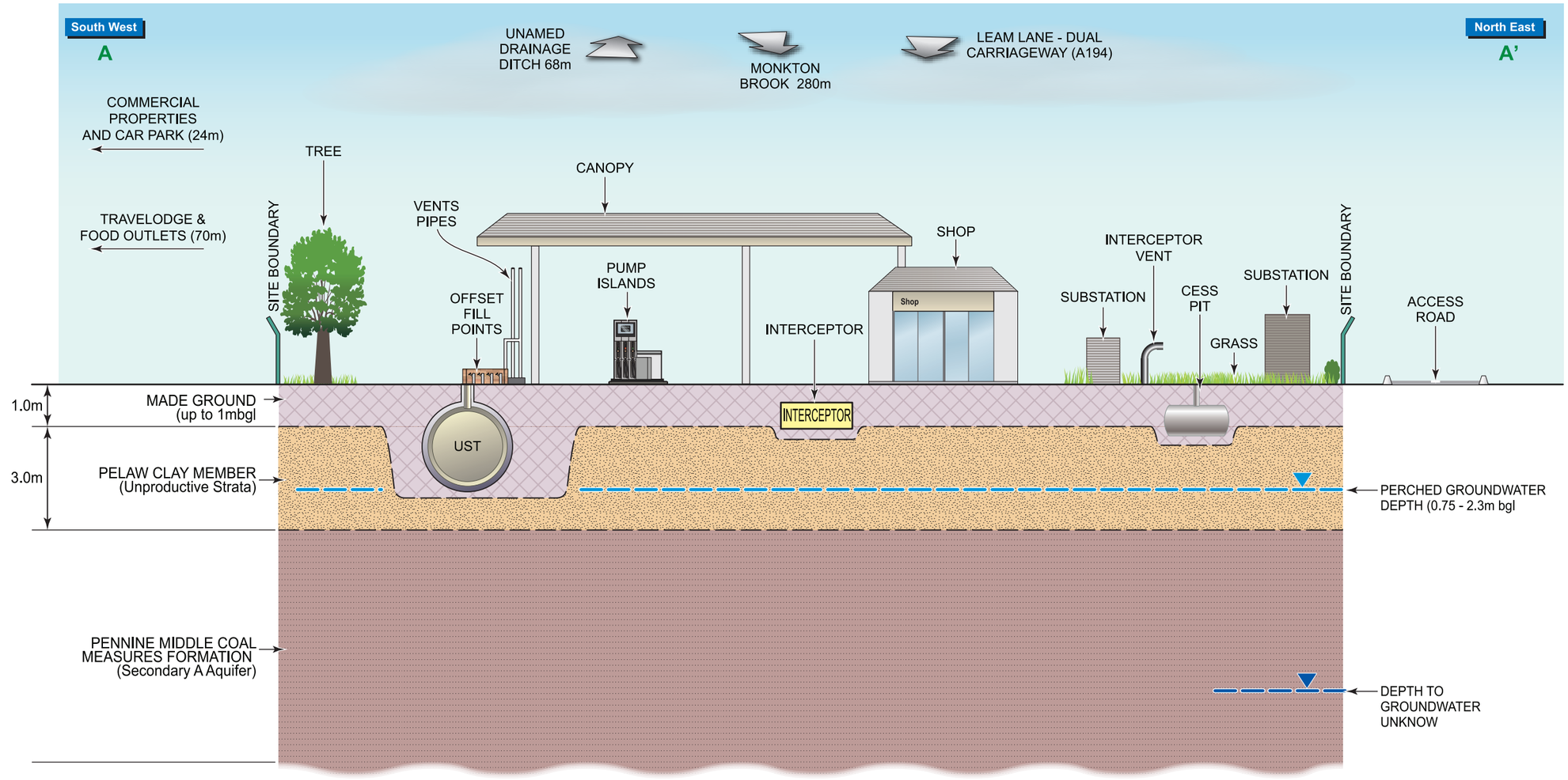
DRAWING TITLE
Figure 3
Site Features Plan

DRAWN		CHECKED	APPROVED	DATE
RH		LMcM	DW	AUG 2019

SCALE	DRG No.	REV.
AS SHOWN	60608750	

ORIGINAL DRAWING A3

DO NOT SCALE



AREA OF POTENTIAL CONCERN

On-site - Historical

- Historical use of the site as a petrol filling station since c.1987
- Substation located in the north western area of the site since c. 1973

On-site - Current

- Operational underground storage tanks serving the car forecourt and HGVs (AECOM understands there are no historic /decommissioned storage tanks on-site).
- Accidental releases to ground from off-set fill points located in the west of the site.
- Accidental releases to ground from dispenser pumps: four car fuel islands and two HGV pumps
- Accidental releases from fuel lines present between the tanks, off-set fill points and fuel islands.
- The forecourt interceptor located in the northern portion of the site and associated drainage lines.
- Made Ground.
- Substation located in the north west of the site.

CHEMICALS OF POTENTIAL CONCERN (COPC)

- TPH - Petroleum hydrocarbons.
- BTEX - Benzene, toluene, ethylbenzene and xylenes.
- Petroleum Additives - Methyl tertiary butyl ether (MTBE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), di-isopropyl ether (DIPE), and tertiary butyl alcohol (TBA).
- PAHs - Polycyclic aromatic hydrocarbons.
- Metals – arsenic, boron, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium and zinc.
- 2-methylnaphthalene and n-hexane.
- Asbestos.
- Ground gases including methane and carbon dioxide.
- PCBs and oils in the north western area of the site, associated with the substation.

POTENTIAL PATHWAYS

Human Health

- Particulate – Ingestion, inhalation, dermal contact, with soil particulates.
- Permeation – Migration of hydrocarbon substances through plastic potable water supply pipes.

Controlled Waters

- Leaching – Migration of hydrocarbon substances from soils into groundwater.
- Migration of impacted shallow groundwater.

POTENTIAL RECEPTORS

Human Health

- On-site shop staff.
- On-site general public and visiting staff (such as contractors, including those conducting excavation works).
- Off-site workers in commercial properties west of the site (nearest building 24m south west of site).

Controlled Waters

- Perched groundwater within the Pelaw Clay Member (Unproductive Strata) and groundwater within Pennine Middle Coal Measures Formation (Secondary A Aquifer).
- Surface water (drain located 68m west but potentially as close as 30m north west of site, Monkton Burn 280m south east of site and ponds 155m south west and 300m north east of site.

POSSIBLE COMPLETE POLLUTANT LINKAGES

Human Health

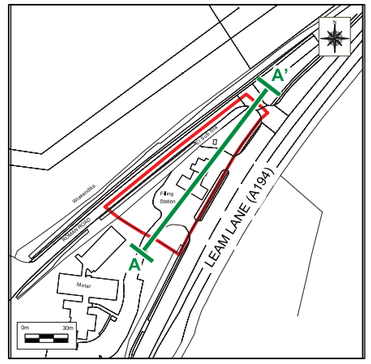
- Potentially impacted soils / groundwater, followed by permeation through plastic pipes into the site potable water supply.
- Potentially impacted soils / groundwater, followed by soil particulate dermal contact, inhalation or ingestion by visiting contractors excavating the ground.

Controlled Waters

- Potentially impacted soils from the site, followed by leaching into perched groundwater of the Pelaw Clay Member (Unproductive Strata) or groundwater of the Pennine Middle Coal Measures Formation (Secondary A Aquifer).
- Potentially impacted soils/groundwater from the site, followed by migration of impacted groundwater to the identified surface water receptors (drain 68m west but potentially as close as 30m north west, Monkton Burn 280m south east of site and ponds 155m south west and 300m north east of site).

ORIGINAL DRAWING A3

NOTES



REV	DESCRIPTION	DRAWN	APPROVED	DATE

STATUS

FOR INFORMATION

CONSULTING ENGINEERS

AECOM

6th FLOOR, 1 NEW YORK STREET, MANCHESTER, M1 4HD
TEL 0161-601-1700

CLIENT
SHELL UK OIL PRODUCTS LTD

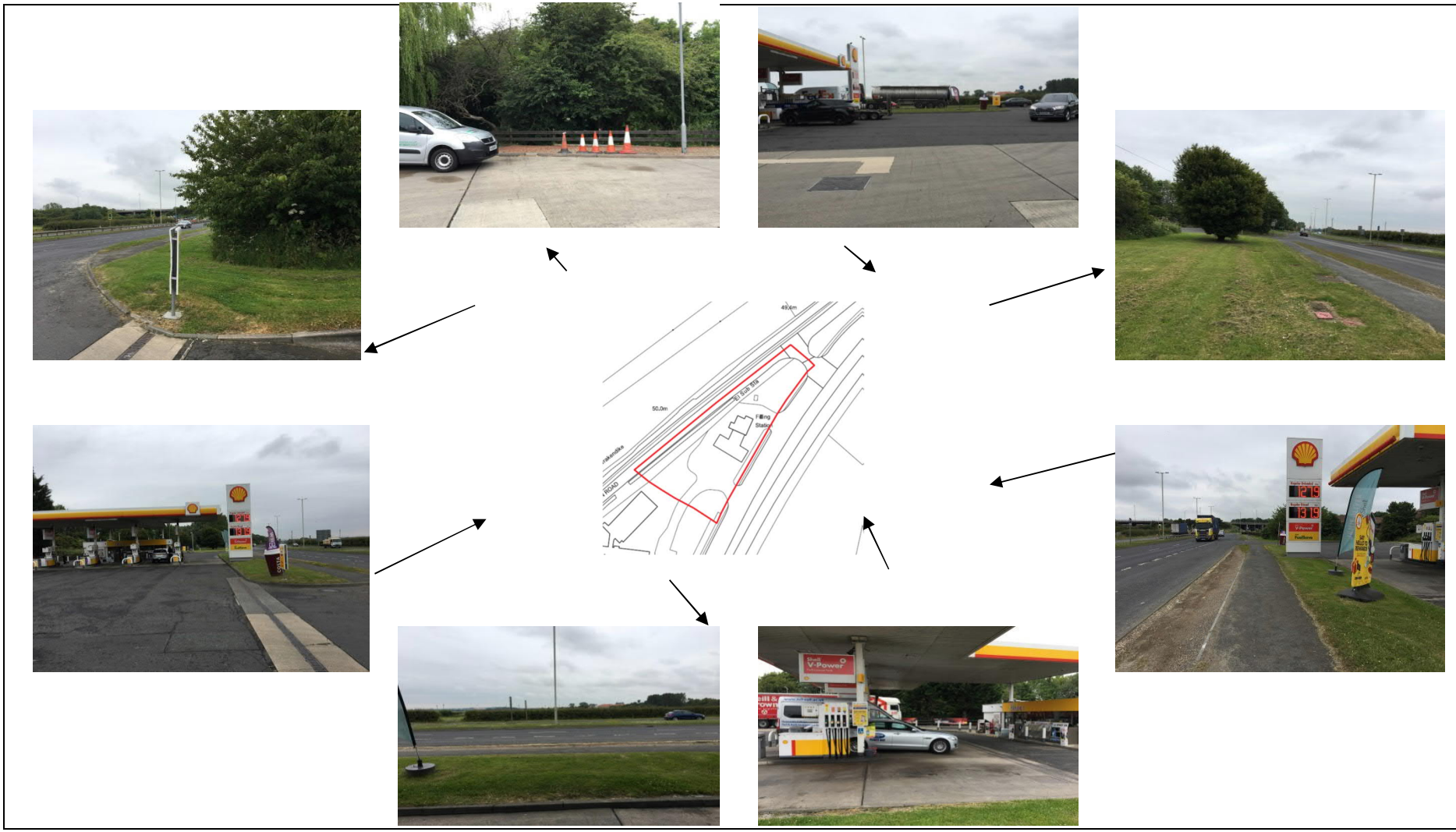
PROJECT
Shell Whitemare Pool,
Leam Lane, Gateshead.
NE10 8YB

DRAWING TITLE
Figure 4
Conceptual Site Model

DRAWN		CHECKED	APPROVED	DATE
RH		LMcM	SH	AUG 2019

SCALE	DRG No.	REV.
AS SHOWN	60608750	

APPENDIX A PHOTOGRAPHS


50.0m
Filling Station

				
	Photograph No: 1		Description: Site forecourt, aspect is north	
				
	Photograph No: 2		Description: Substations situated in north western corner of site.	



	Photograph No: 3		Description: Tank Farm location adjacent to western boundary



	Photograph No: 4		Description: Off Set Fills adjacent to tank farm



	Photograph No: 5		Description: Interceptor vent pipes at north eastern site boundary and cesspit.



	Photograph No: 6		Description: Class 1/ Class 2 interceptor in HGV lane



	Photograph No: 7		Description: Air and Water Area in south western corner of site.



	Photograph No: 8		Description: Air and Water Area in north eastern part of site.



Photograph No: 9		Description: View of shop front, facing north east



Photograph No: 10		Description: Bin storage to north of shop

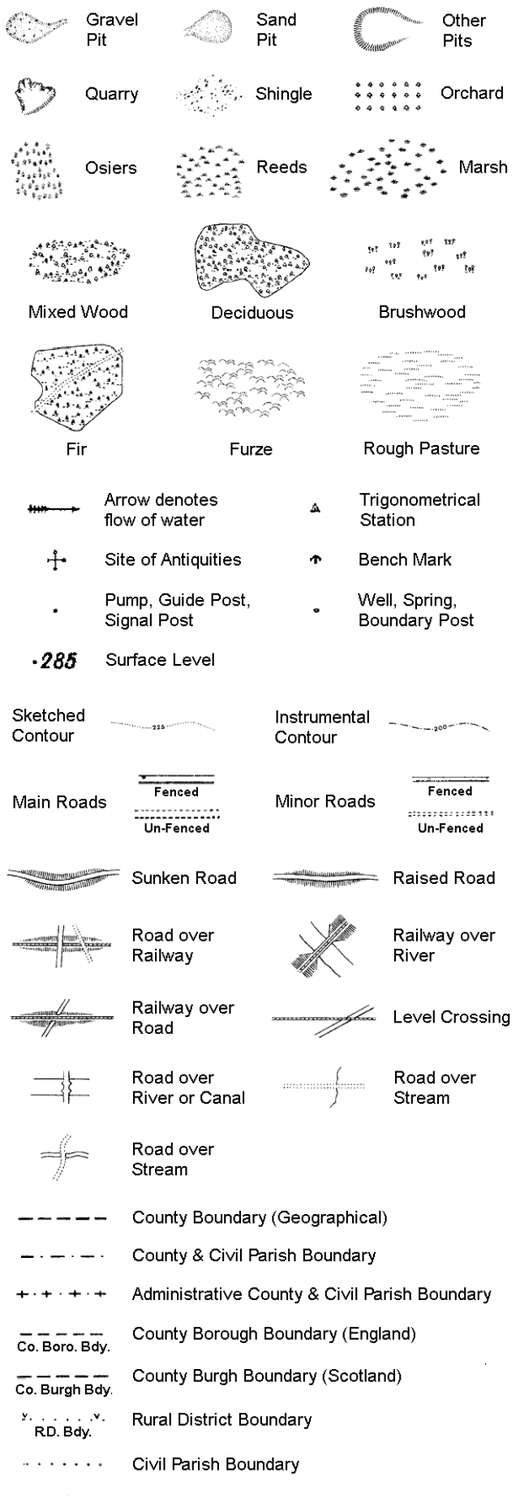
				
	Photograph No: 11		Description: Drainage gully adjacent to west of forecourt area	
				
	Photograph No: 12		Description: Drainage gully adjacent to north east of forecourt area	

	Off-Site Receptors			
				
	Photograph No: 13		Description: Unnamed drain potentially 30m north west of the site (covered by dense vegetation)	
				
	Photograph No: 14		Description: Commercial properties to the south west.	

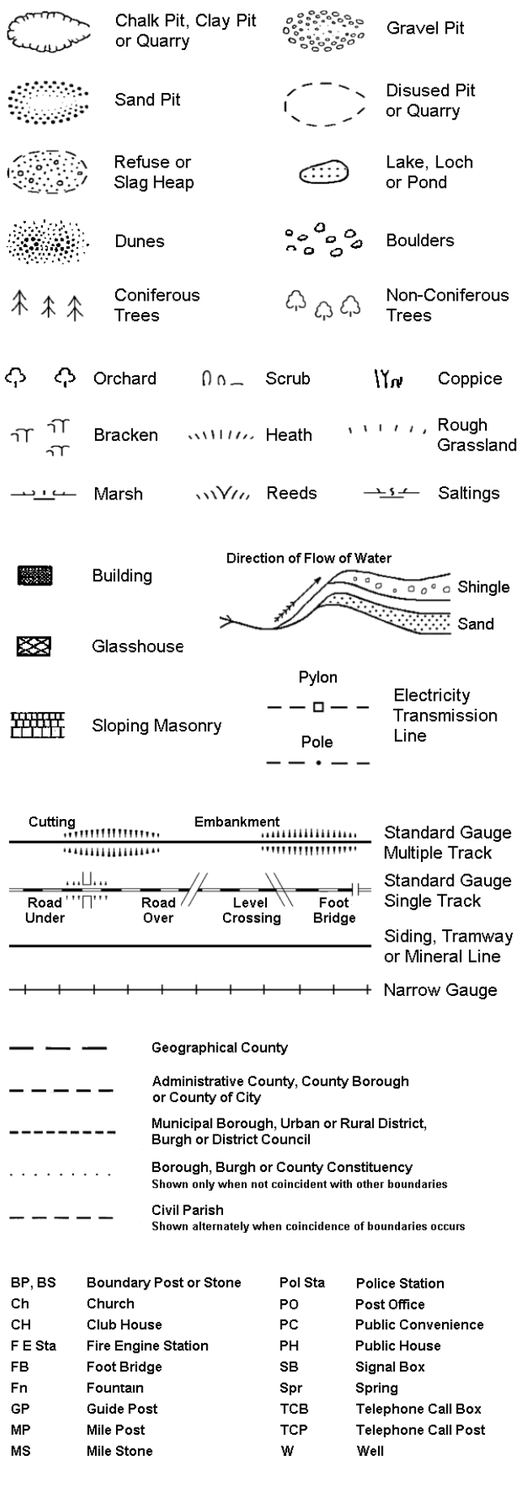
APPENDIX B ENVIROCHECK REPORT

Historical Mapping Legends

Ordnance Survey County Series 1:10,560



Ordnance Survey Plan 1:10,000



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



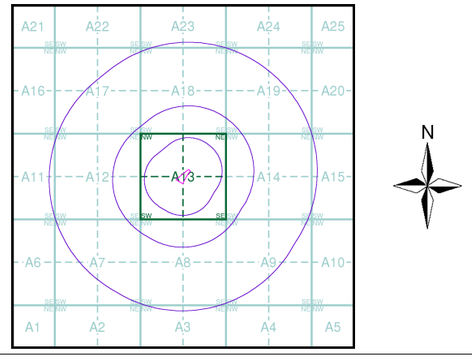
Envirocheck®

LANDMARK INFORMATION GROUP®

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
Durham	1:10,560	1938	9
Ordnance Survey Plan	1:10,000	1951 - 1952	10
Ordnance Survey Plan	1:10,000	1957	11
Ordnance Survey Plan	1:10,000	1958	12
Ordnance Survey Plan	1:10,000	1967	13
Ordnance Survey Plan	1:10,000	1973 - 1975	14
Newcastle-upon-Tyne	1:25,000	1977	15
Ordnance Survey Plan	1:10,000	1984	16
Ordnance Survey Plan	1:10,000	1991 - 1992	17
10K Raster Mapping	1:10,000	2000	18
10K Raster Mapping	1:10,000	2006	19
VectorMap Local	1:10,000	2019	20

Historical Map - Slice A



Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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

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
- Direction and velocity of current
- 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

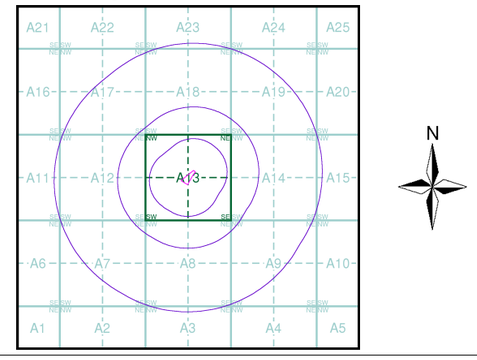
Envirocheck®

LANDMARK INFORMATION GROUP®

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
Durham	1:10,560	1938	9
Ordnance Survey Plan	1:10,000	1951 - 1952	10
Ordnance Survey Plan	1:10,000	1957	11
Ordnance Survey Plan	1:10,000	1958	12
Ordnance Survey Plan	1:10,000	1967	13
Ordnance Survey Plan	1:10,000	1973 - 1975	14
Newcastle-upon-Tyne	1:25,000	1977	15
Ordnance Survey Plan	1:10,000	1984	16
Ordnance Survey Plan	1:10,000	1991 - 1992	17
10K Raster Mapping	1:10,000	2000	18
10K Raster Mapping	1:10,000	2006	19
VectorMap Local	1:10,000	2019	20

Russian Map - Slice A



Order Details

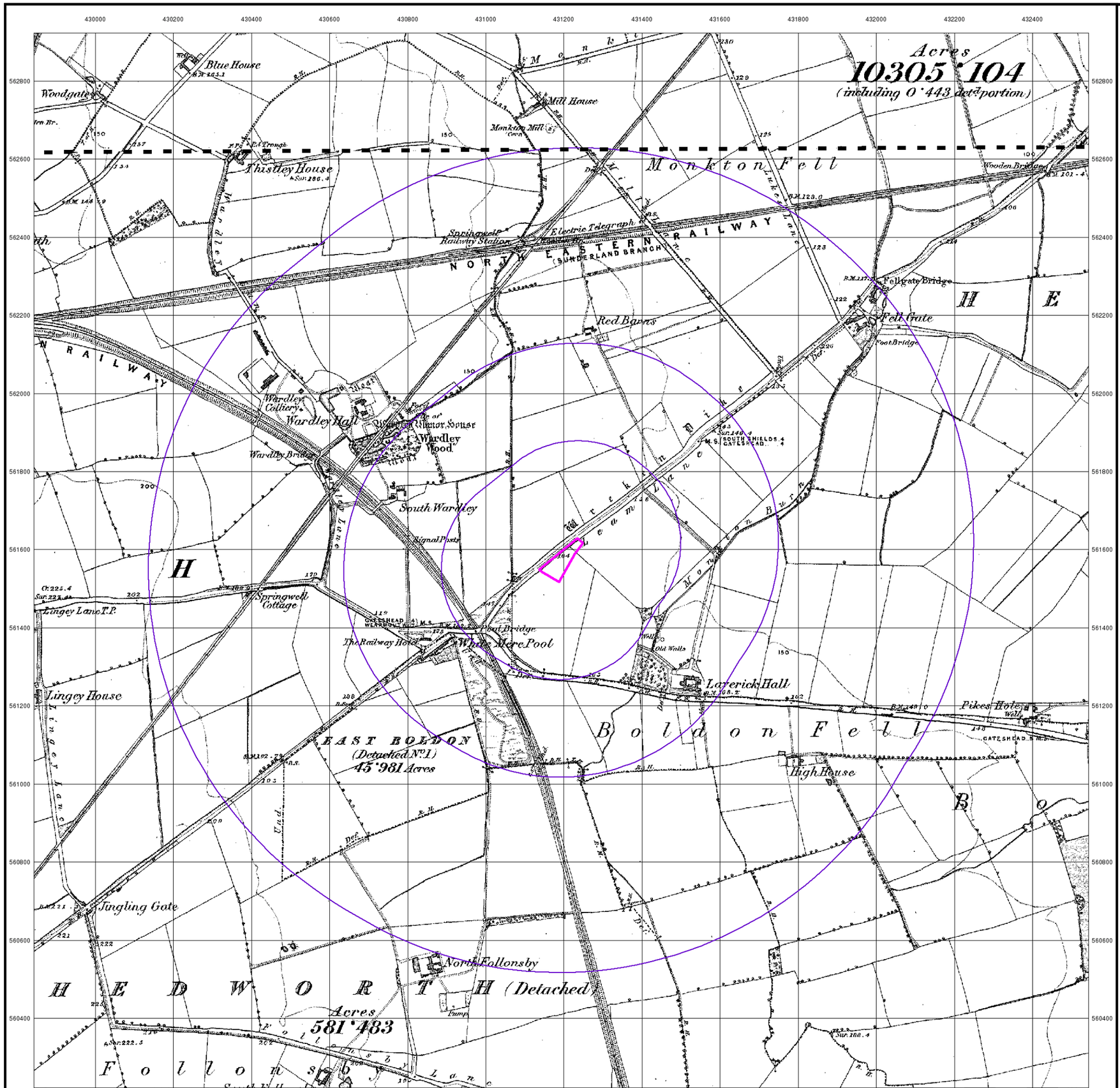
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

Durham

Published 1862

Source map scale - 1:10,560

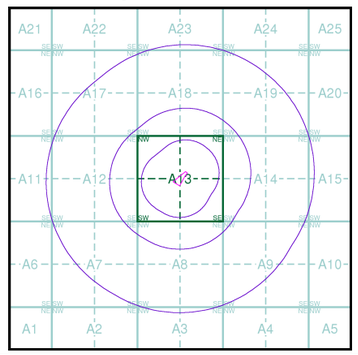
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

00300
1862
1:10,560

00700
1862
1:10,560

Historical Map - Slice A



Order Details

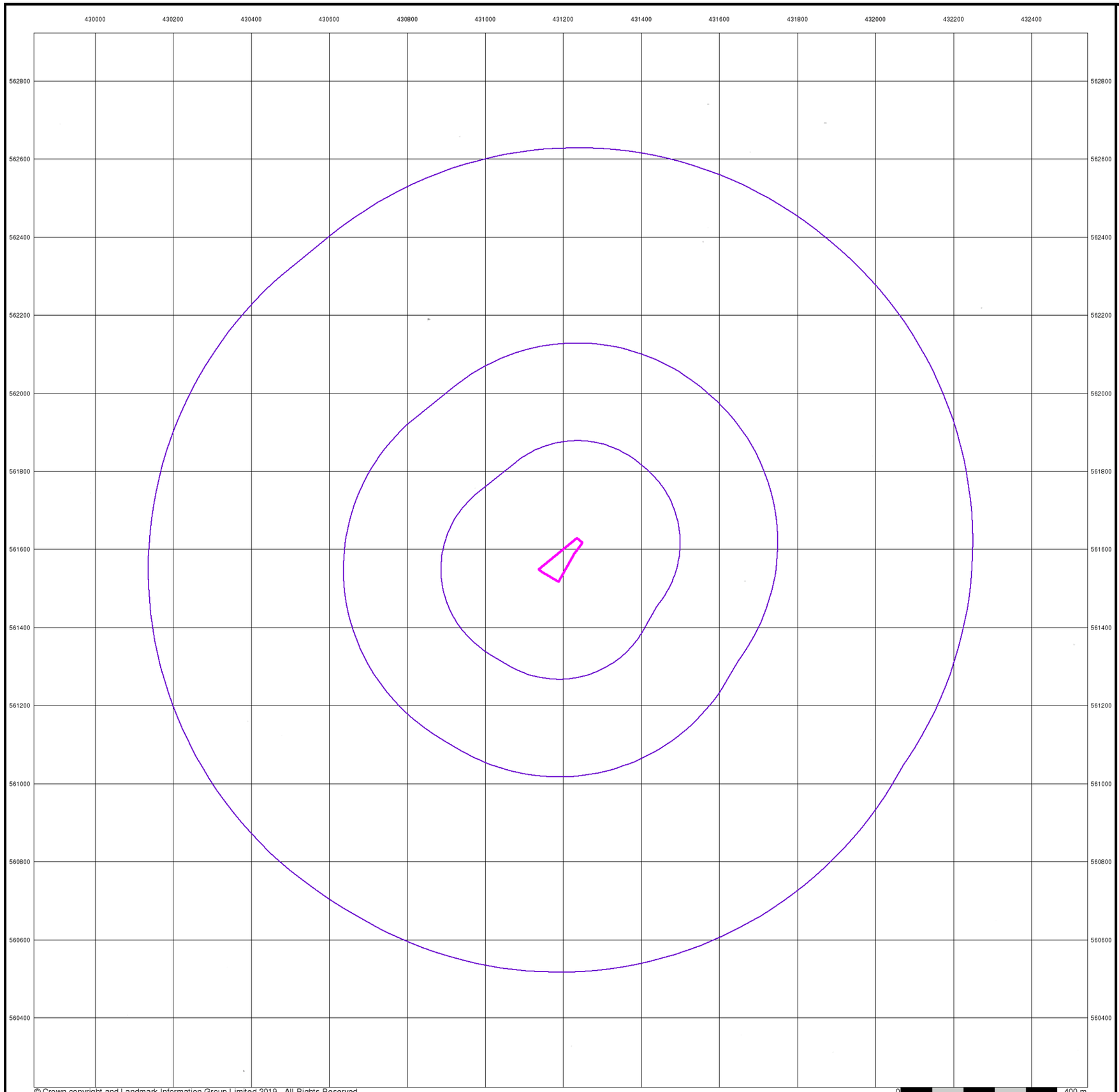
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

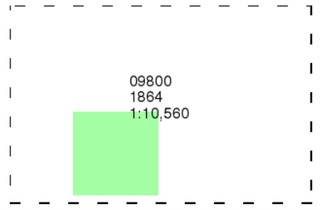
Northumberland

Published 1864

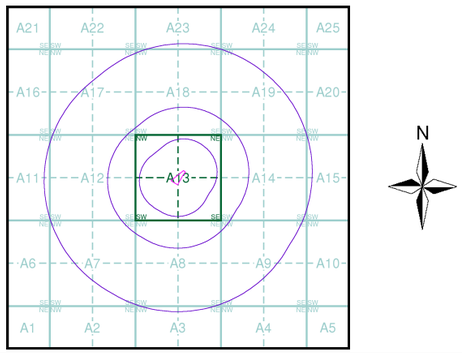
Source map scale - 1:10,560

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

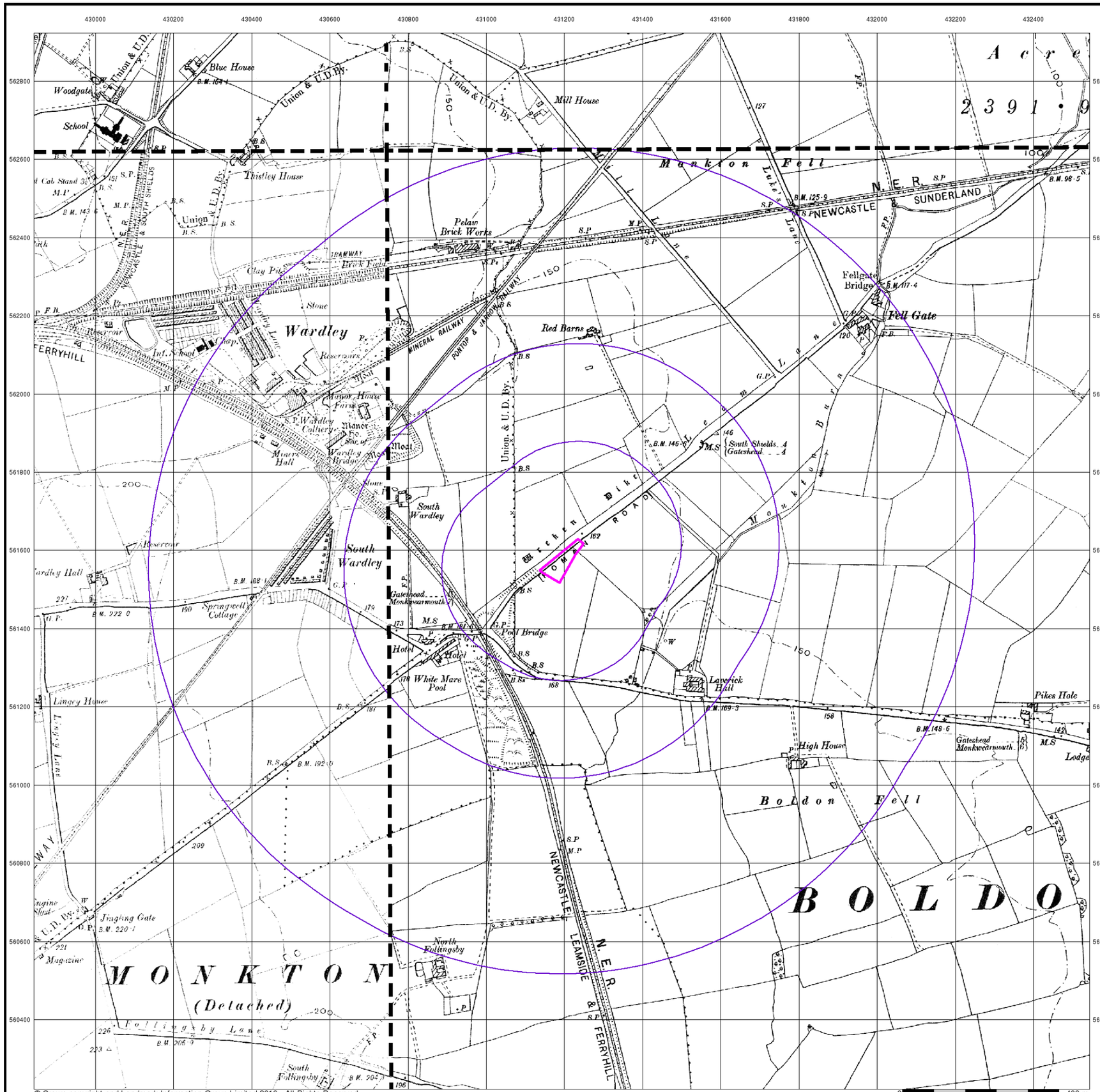
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

0 400 m

Envirocheck®

LANDMARK INFORMATION GROUP®

Durham

Published 1898

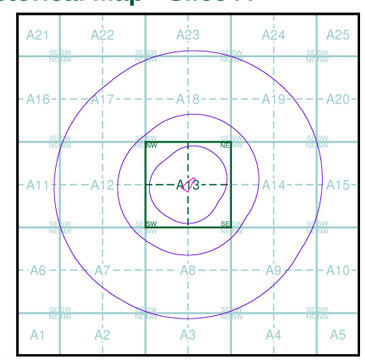
Source map scale - 1:10,560

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)

003SW 1898 1:10,560	003SE 1898 1:10,560
007NW 1898 1:10,560	007NE 1898 1:10,560

Historical Map - Slice A



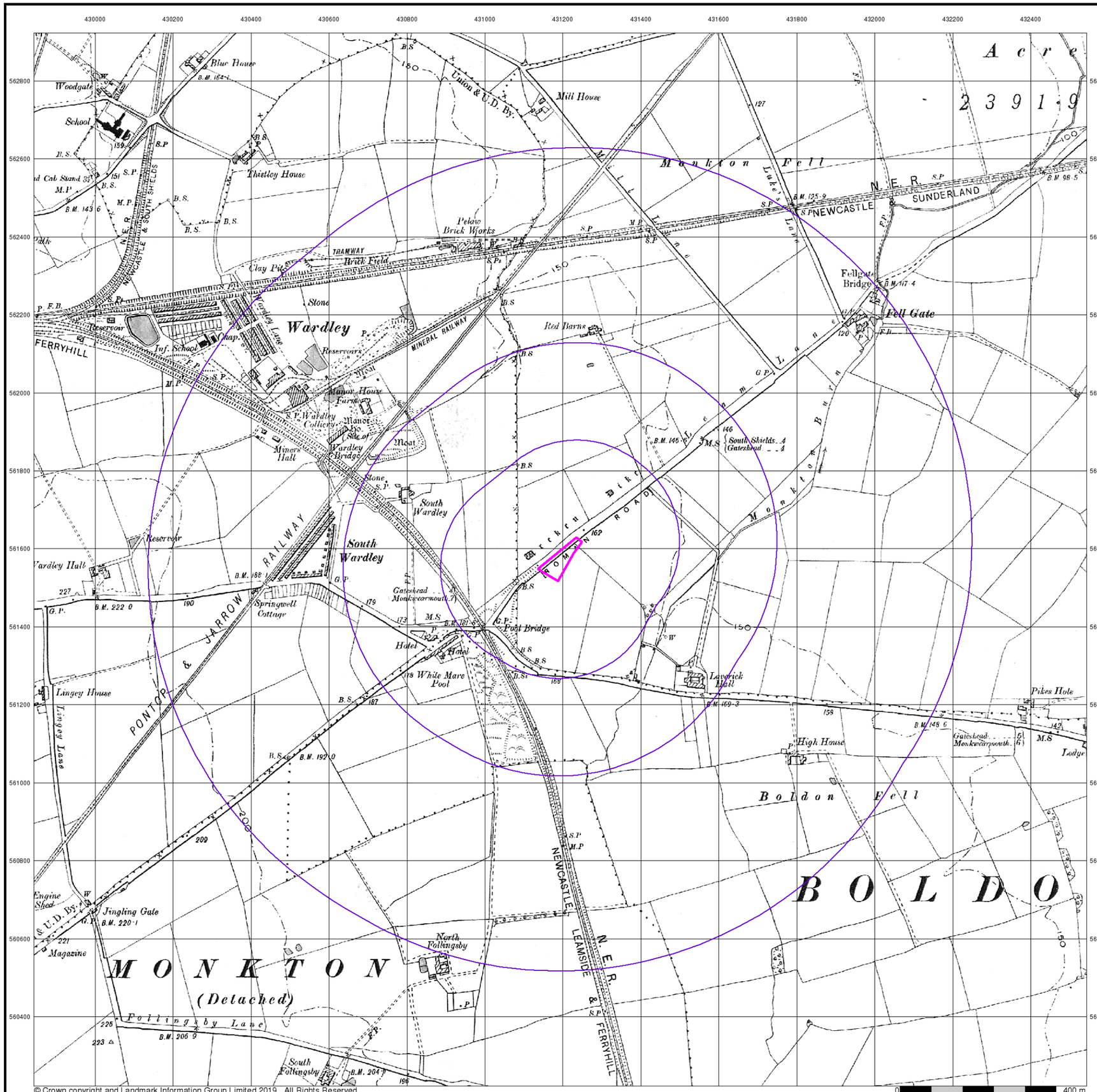
Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

Northumberland

Published 1899

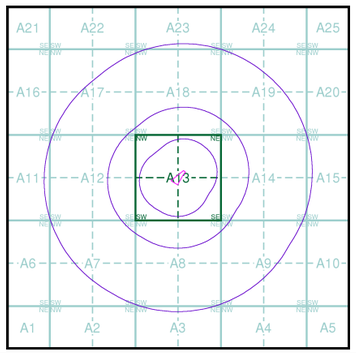
Source map scale - 1:10,560

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



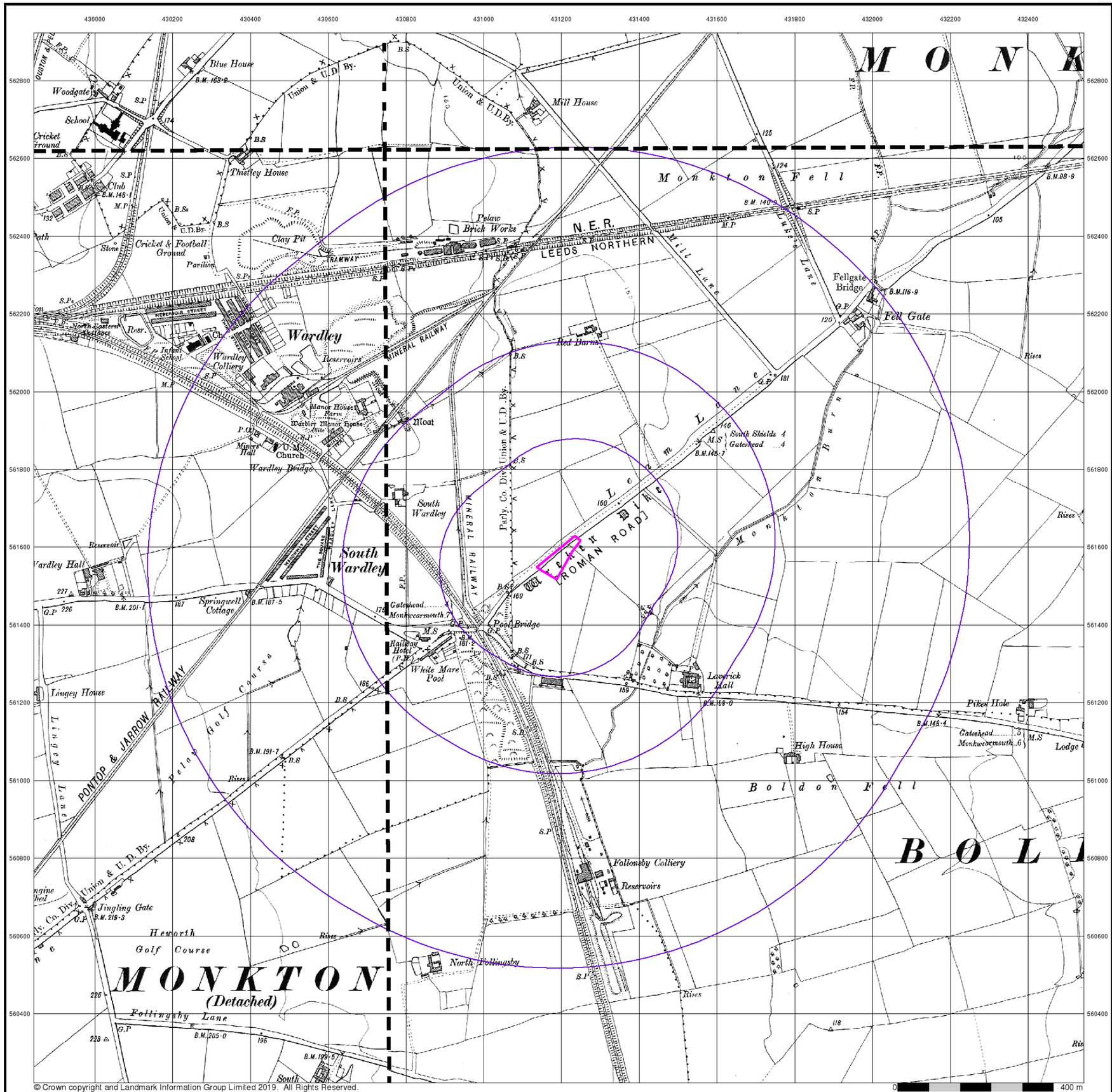
Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

Durham

Published 1921

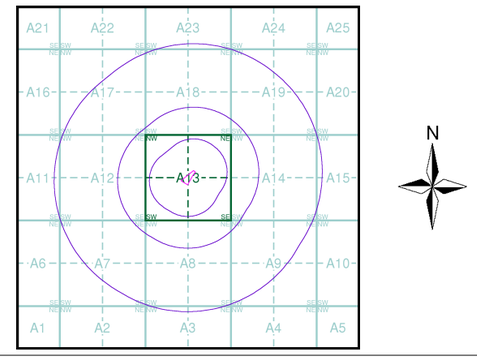
Source map scale - 1:10,560

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)

003SW 1921 1:10,560	003SE 1921 1:10,560
007NW 1921 1:10,560	007NE 1921 1:10,560

Historical Map - Slice A



Order Details

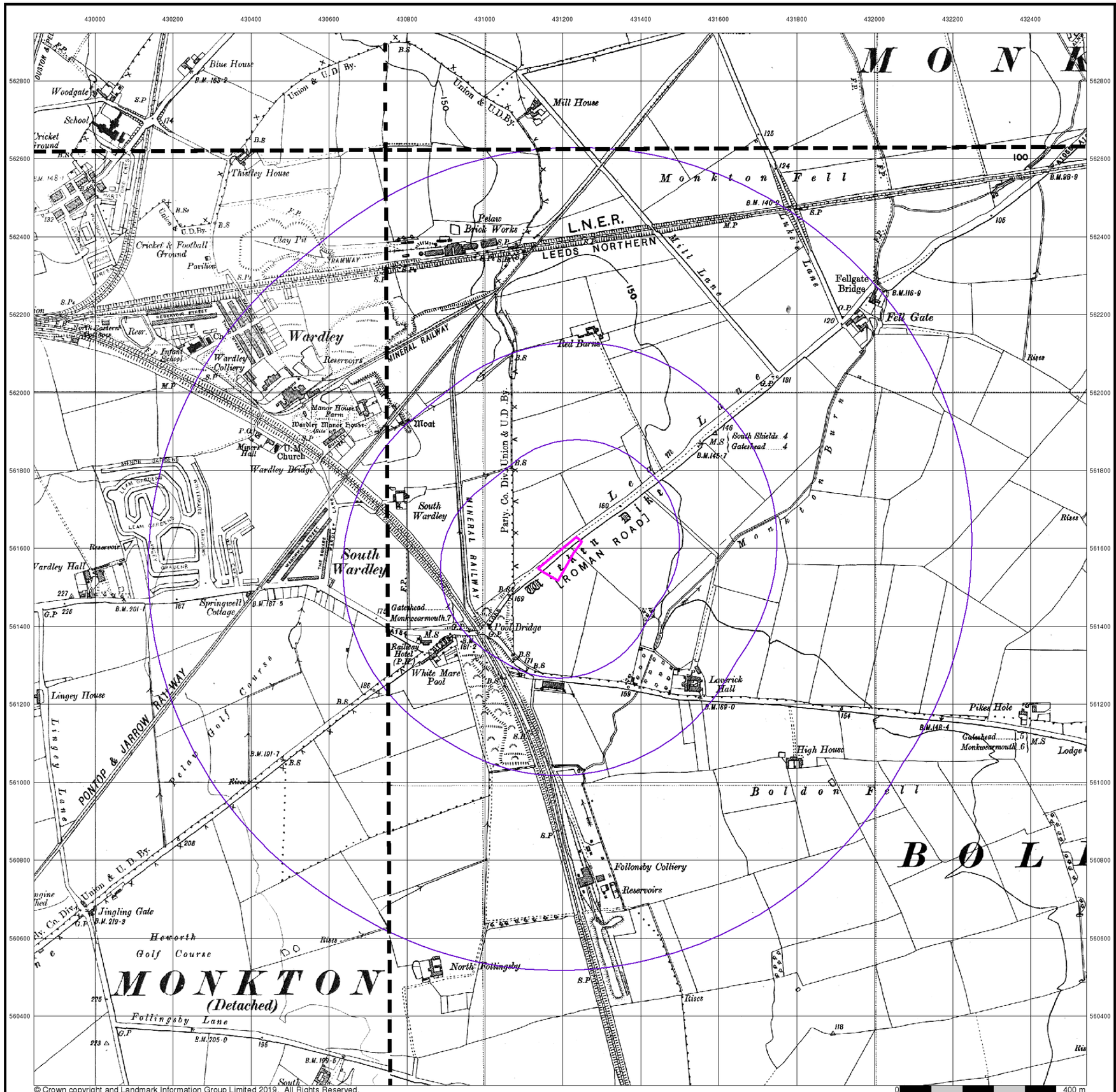
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

0 400 m

Envirocheck®

LANDMARK INFORMATION GROUP®

Durham

Published 1938

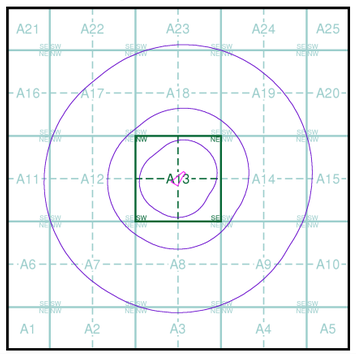
Source map scale - 1:10,560

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)

003SW 1938 1:10,560	003SE 1938 1:10,560
007NW 1938 1:10,560	007NE 1938 1:10,560

Historical Map - Slice A



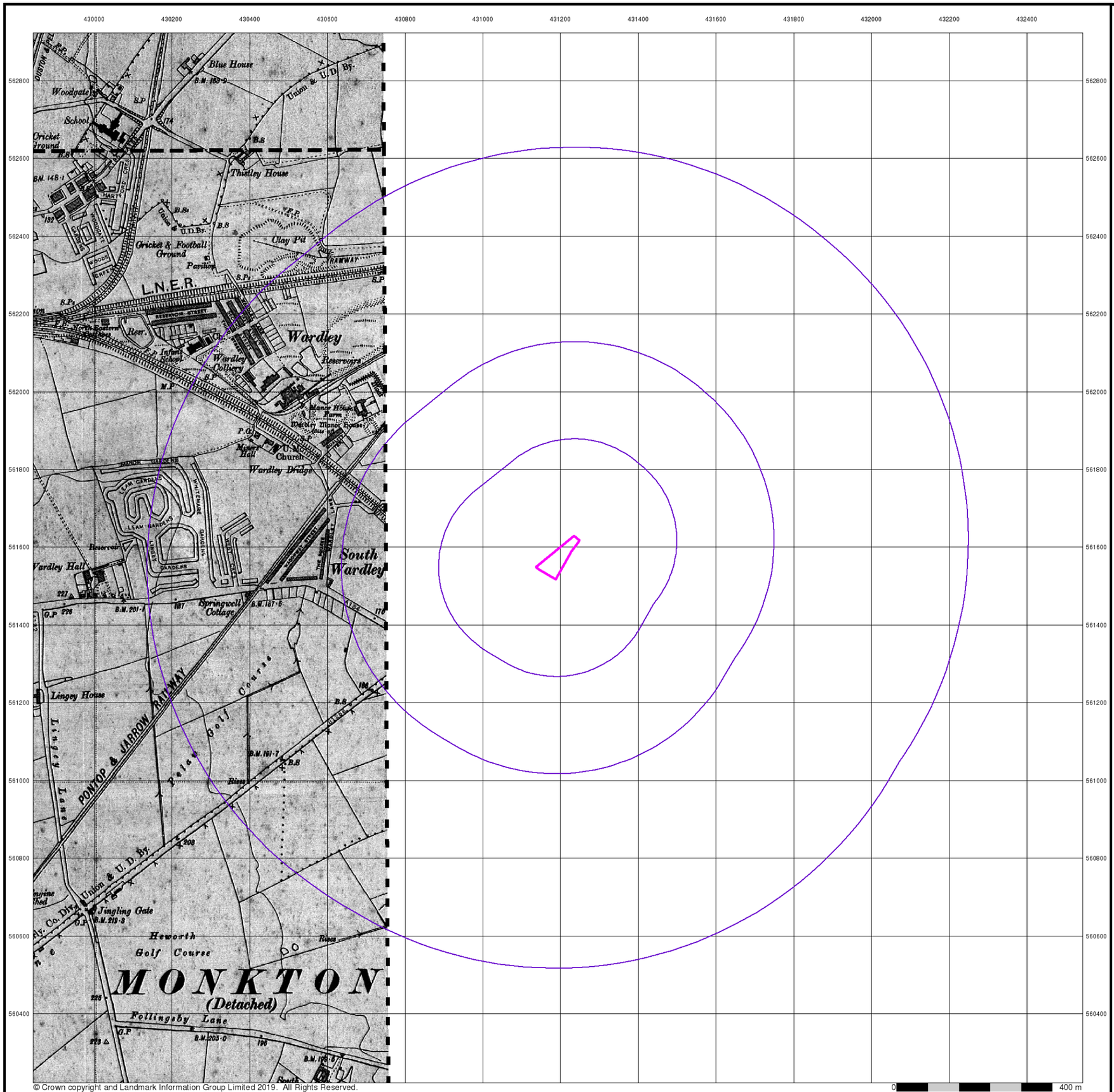
Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

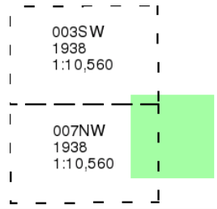
Durham

Published 1938

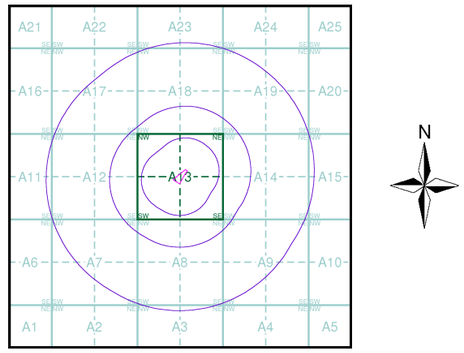
Source map scale - 1:10,560

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)



Historical Map - Slice A



Order Details

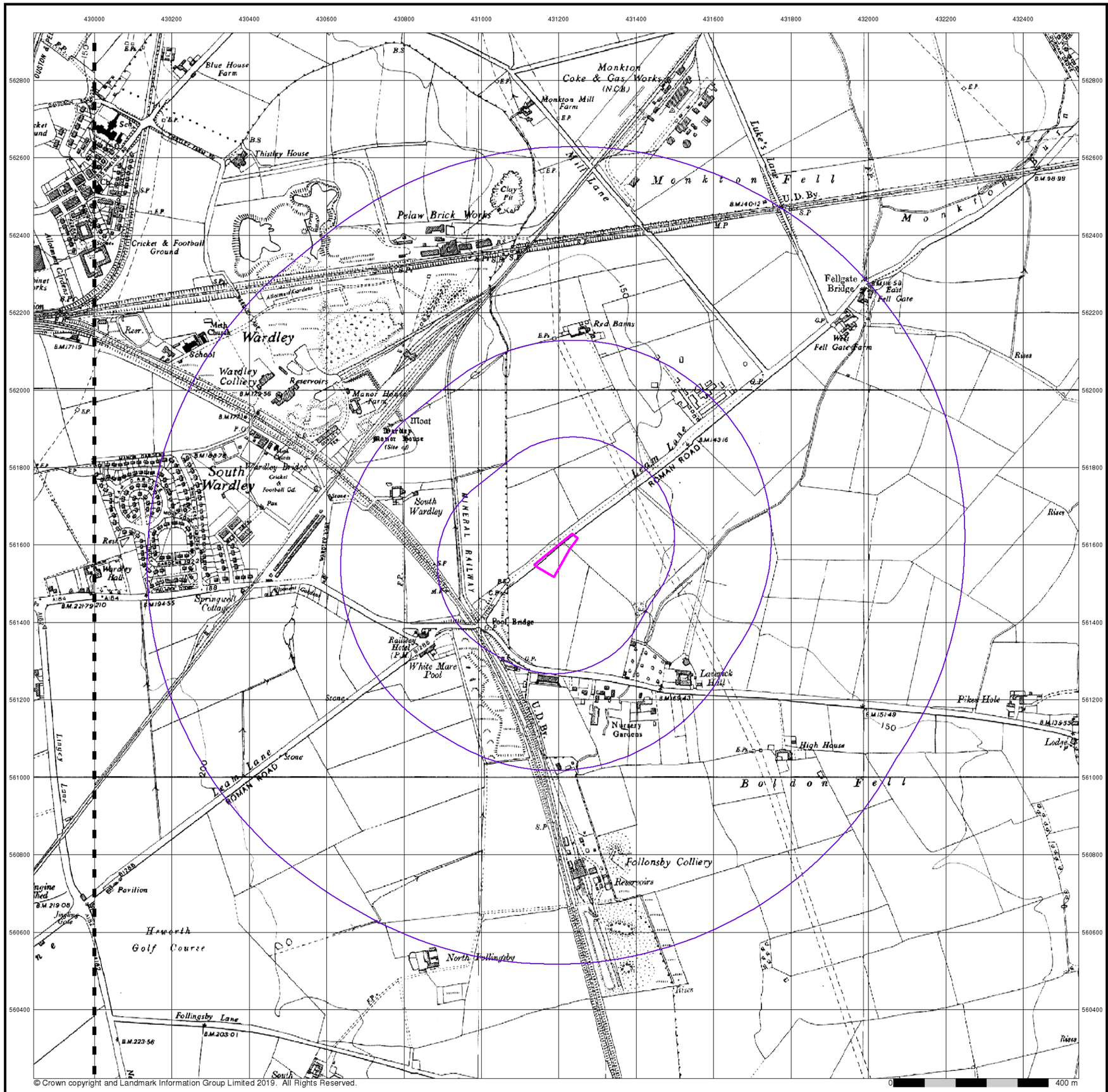
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

0 400 m

Envirocheck®

LANDMARK INFORMATION GROUP®

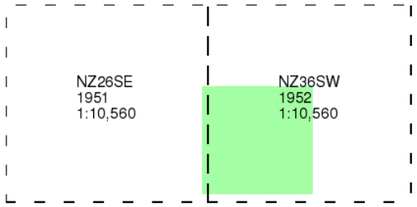
Ordnance Survey Plan

Published 1951 - 1952

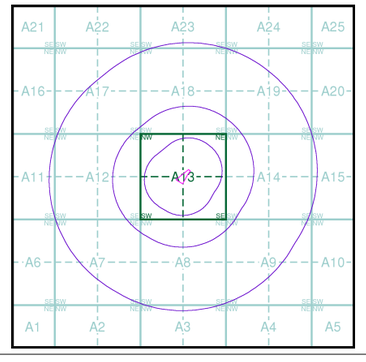
Source map scale - 1:10,000

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)



Historical Map - Slice A



Order Details

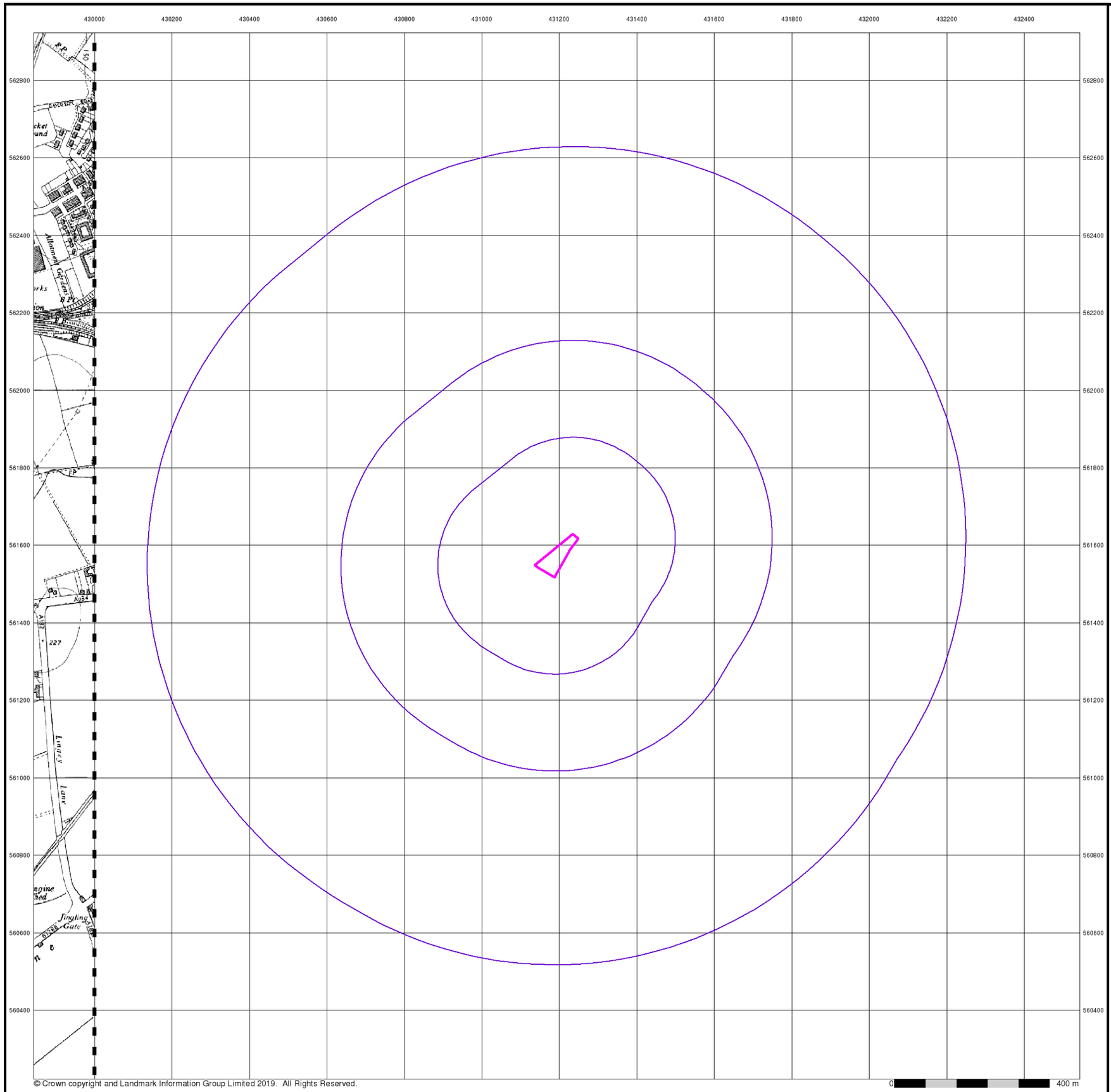
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

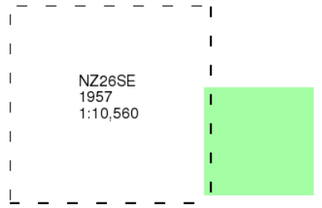
Ordnance Survey Plan

Published 1957

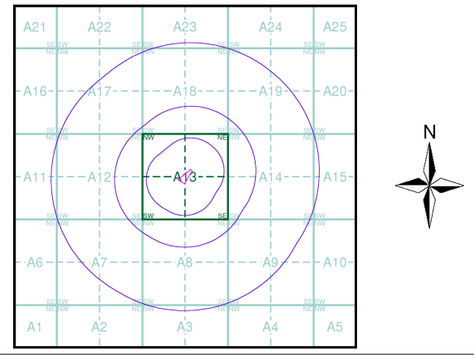
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

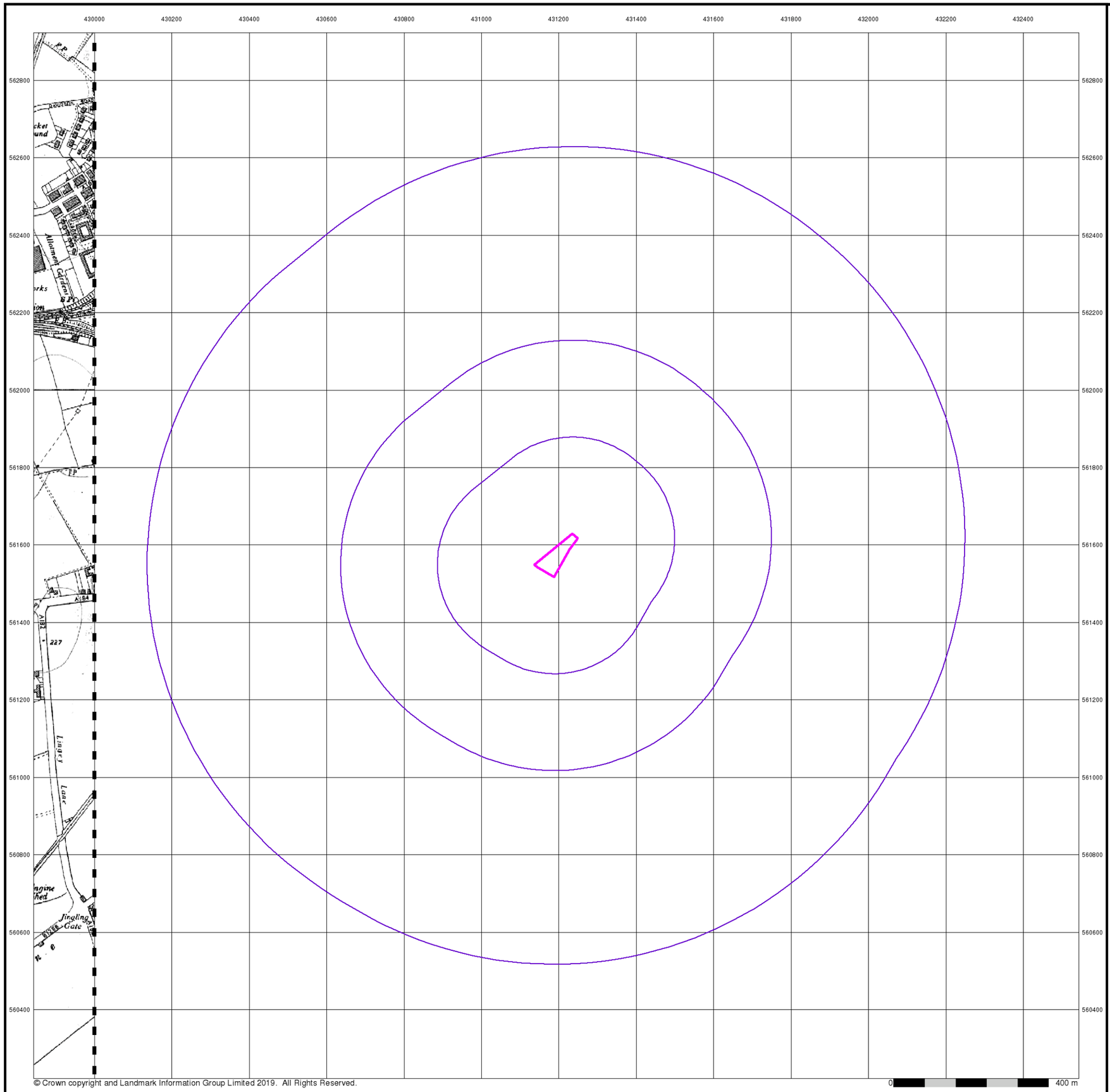
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

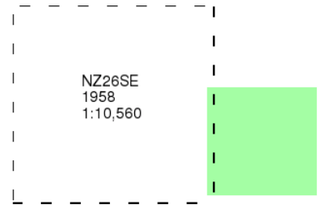
Ordnance Survey Plan

Published 1958

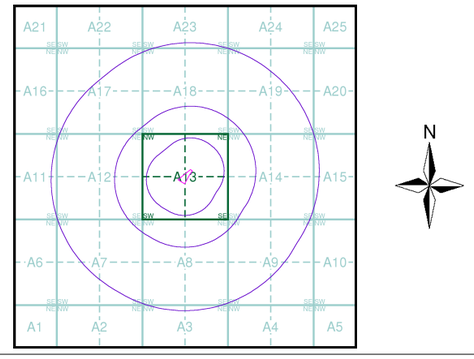
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

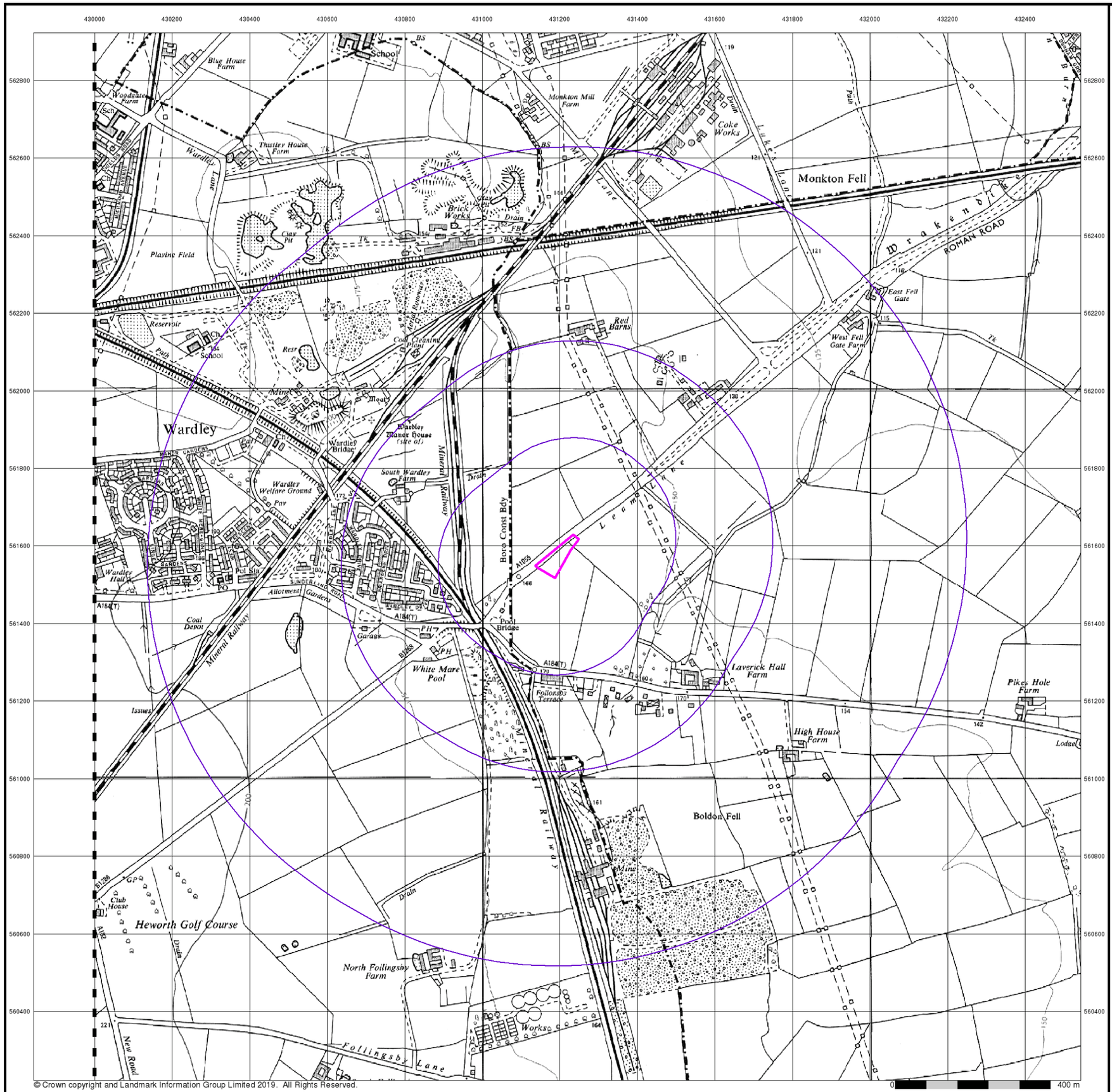
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

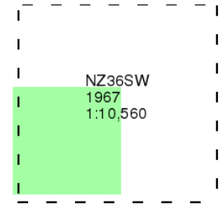
Ordnance Survey Plan

Published 1967

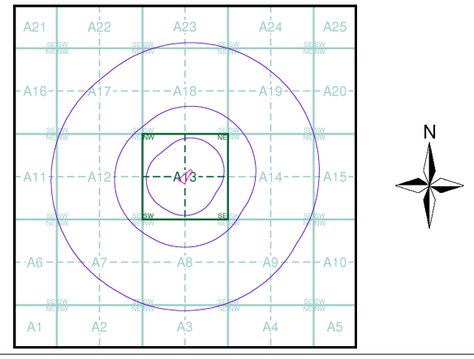
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

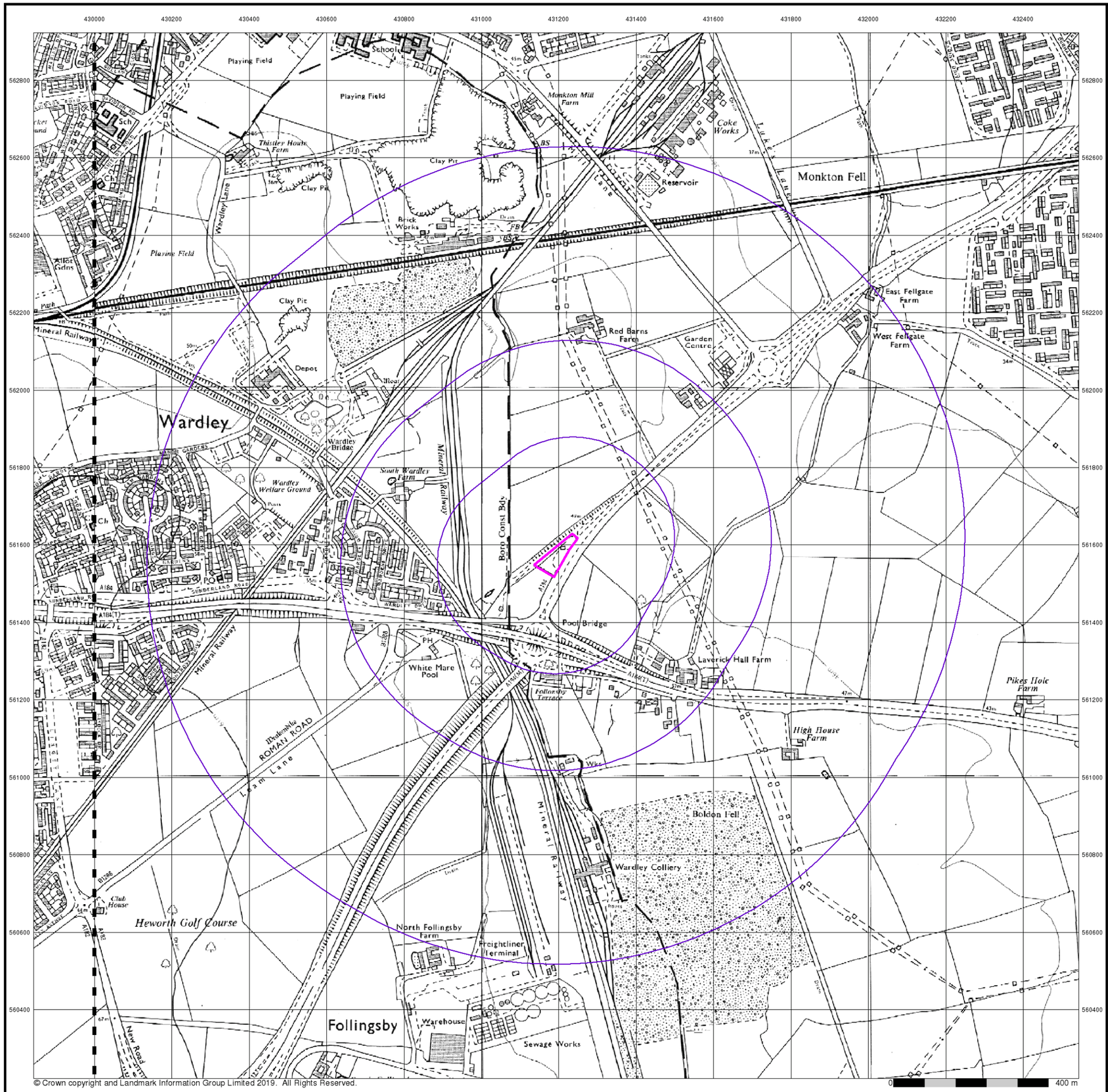
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

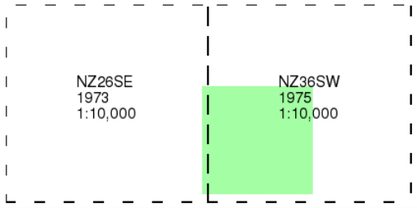
Ordnance Survey Plan

Published 1973 - 1975

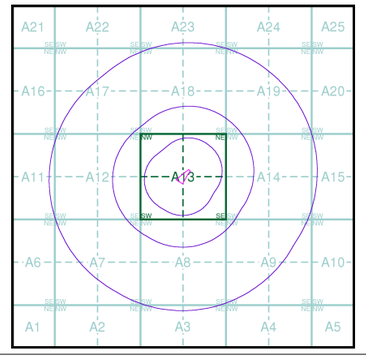
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

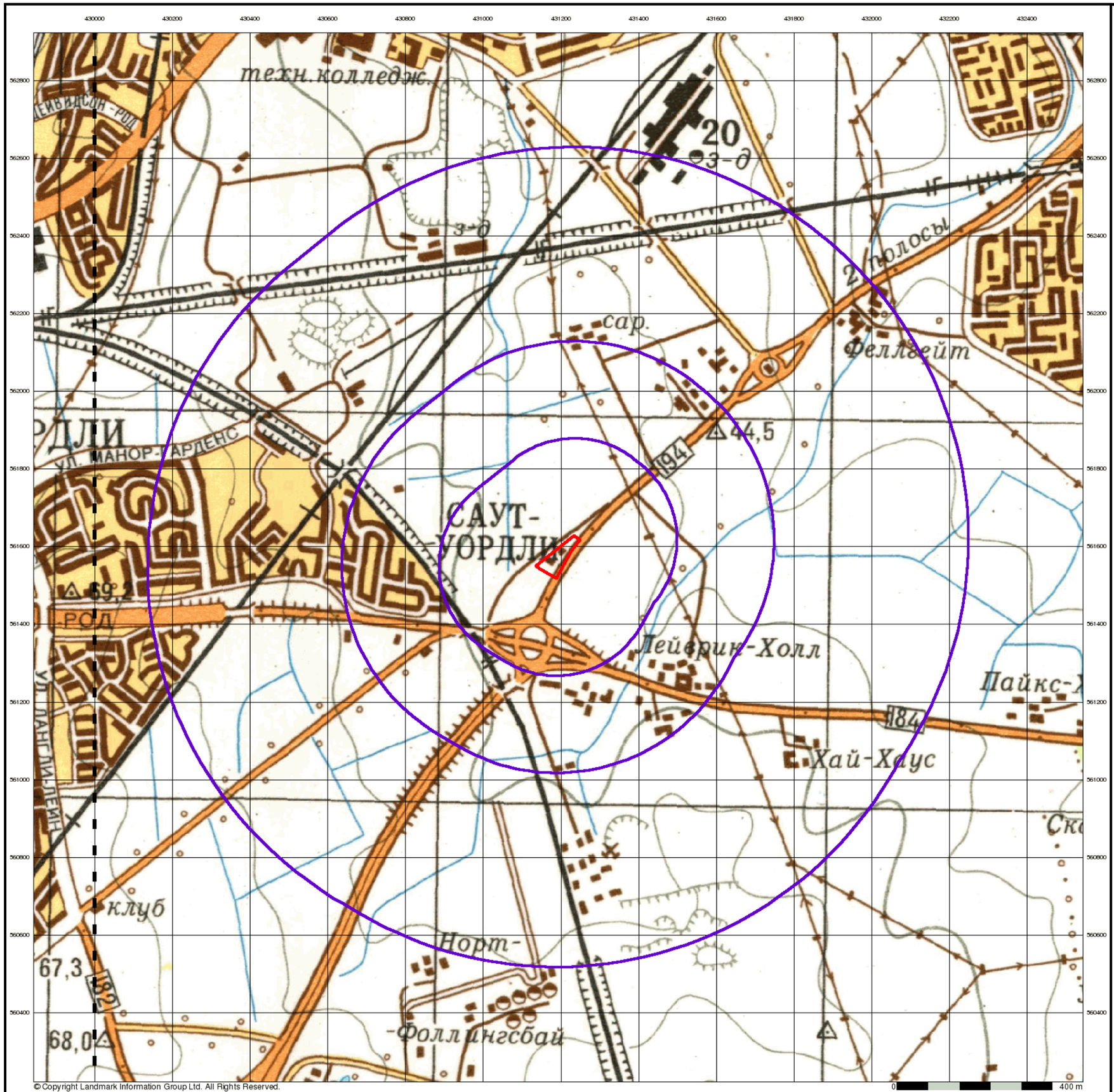
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

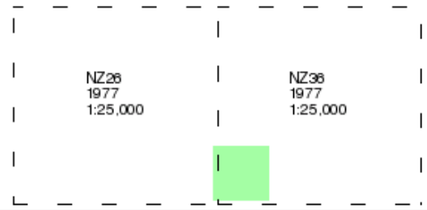
Newcastle-upon-Tyne

Published 1977

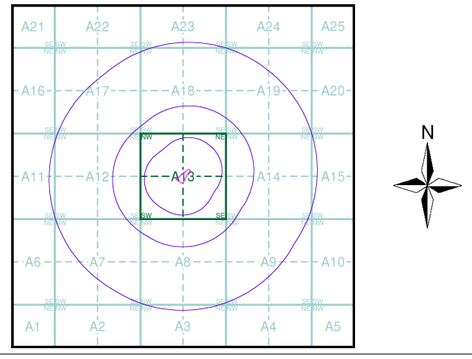
Source map scale - 1:25,000

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

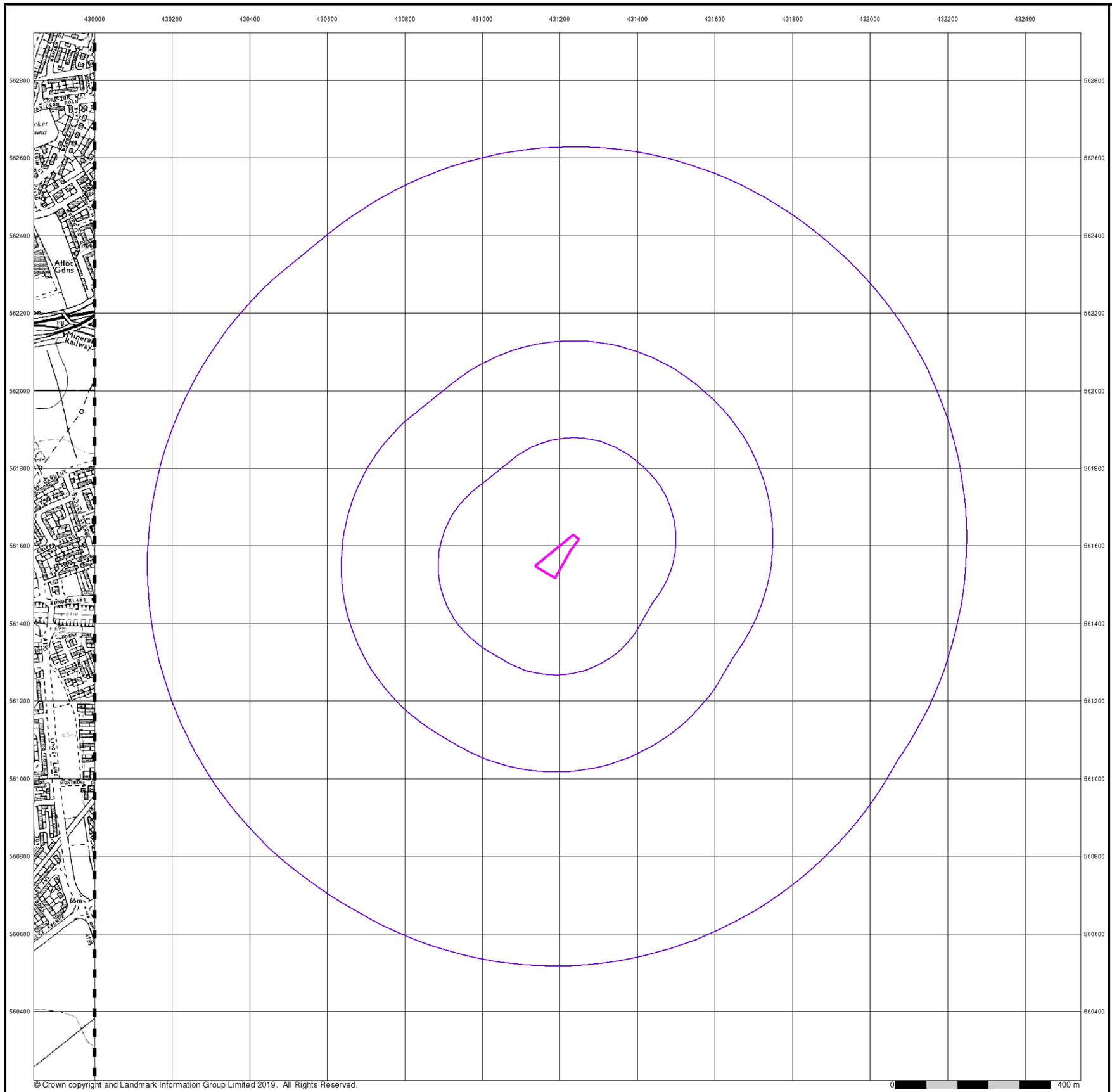
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

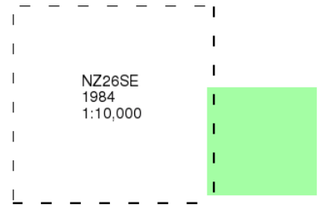
Ordnance Survey Plan

Published 1984

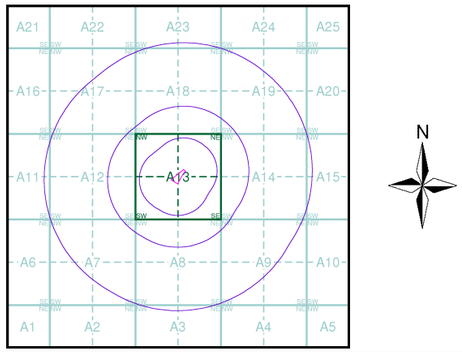
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A

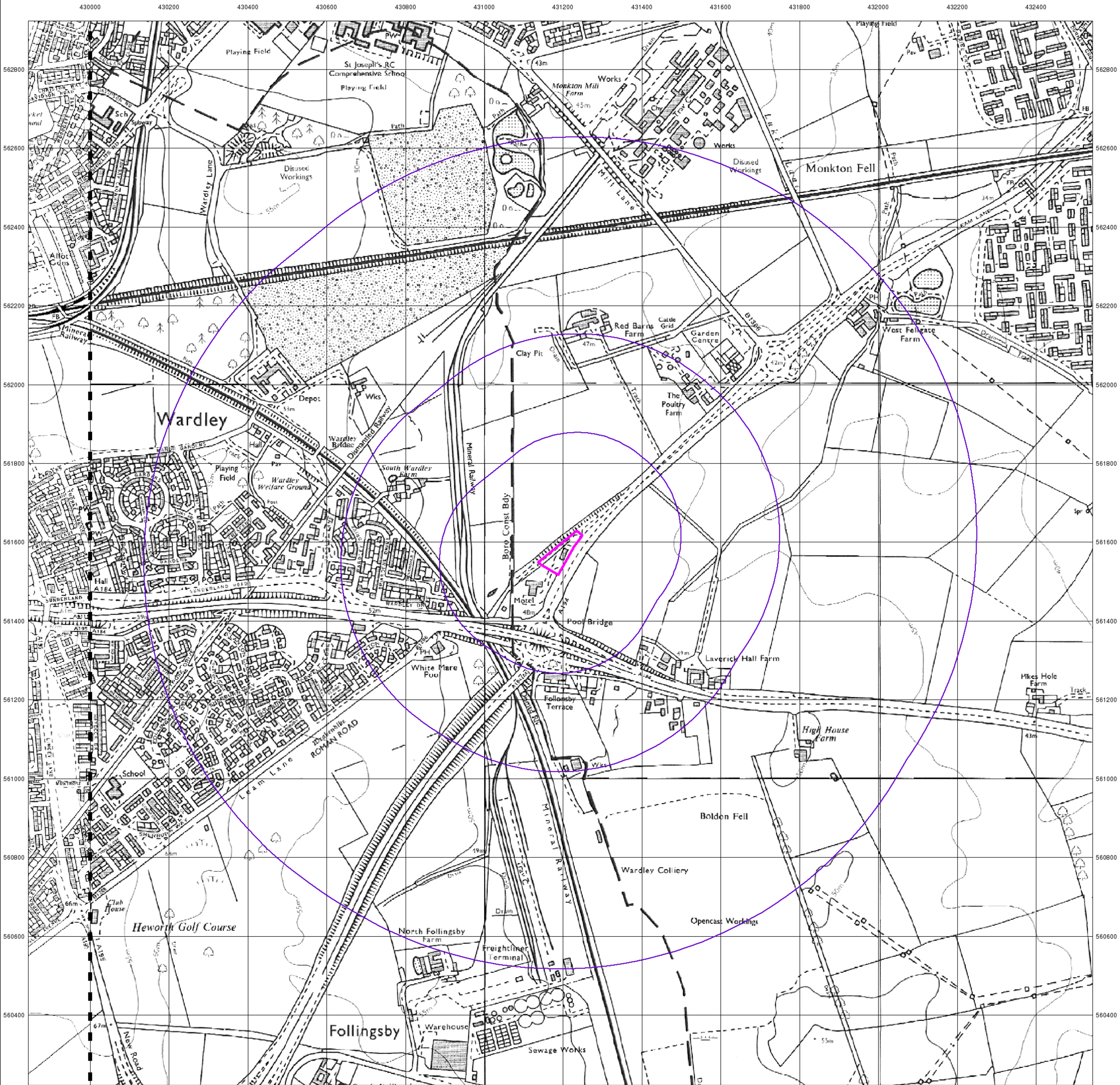


Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

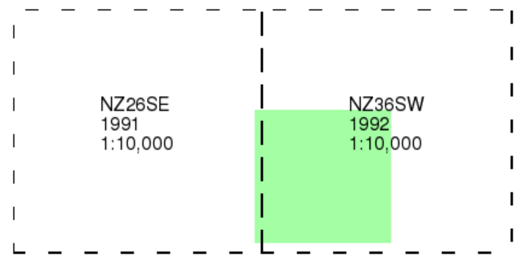
Ordnance Survey Plan

Published 1991 - 1992

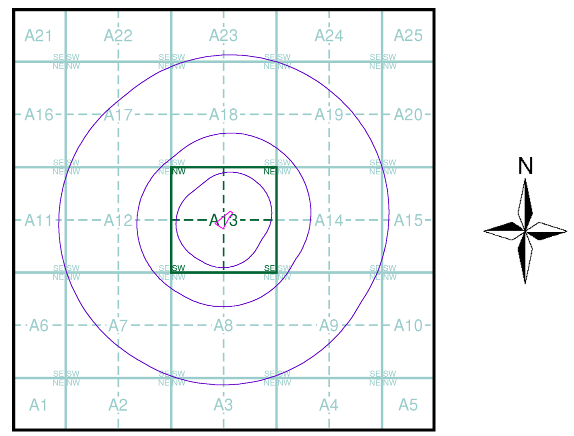
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

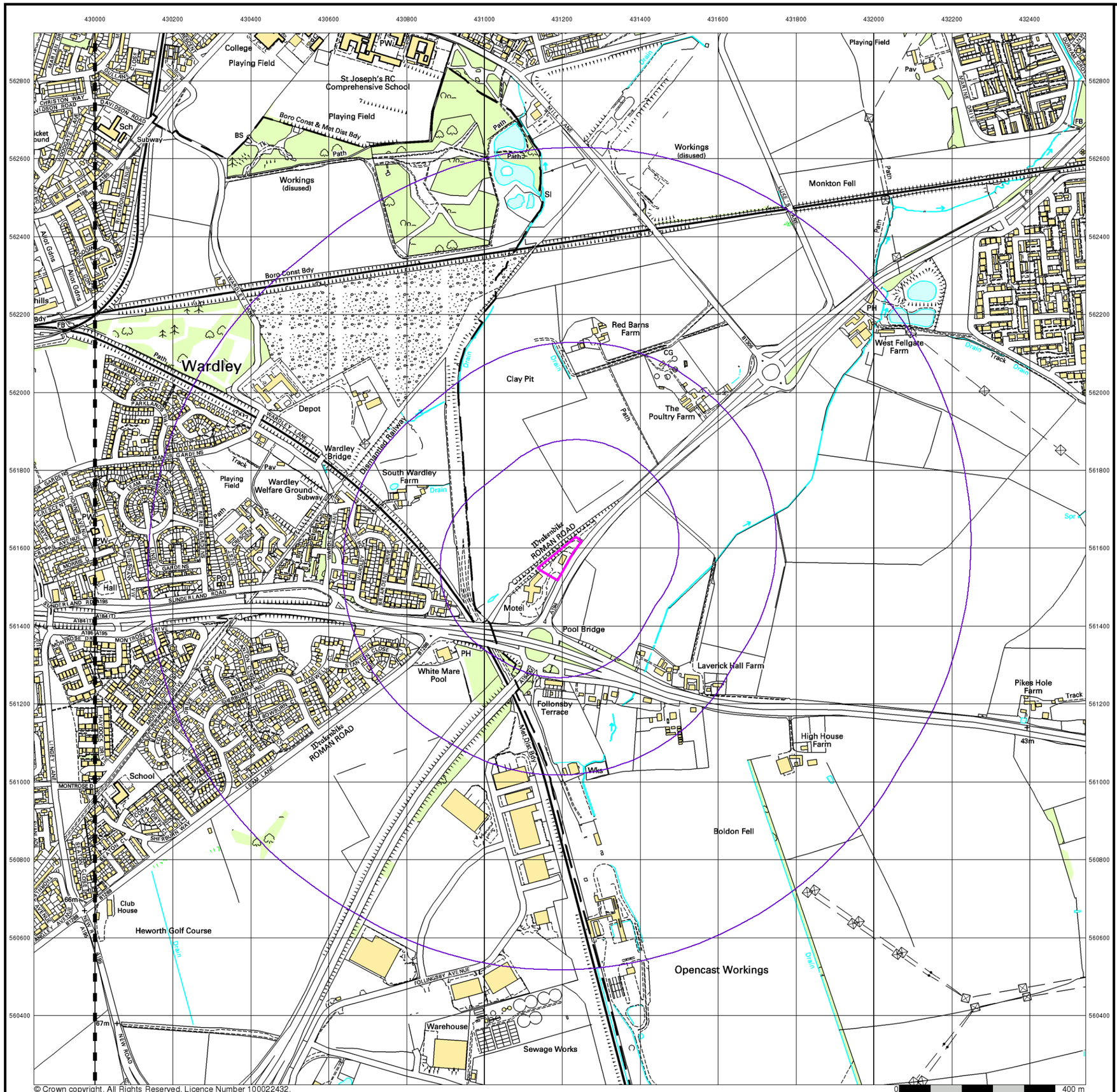
Order Number: 209721675_1_1
Customer Ref: Shell Whitemare Pool - 60608750
National Grid Reference: 431200, 561570
Slice: A
Site Area (Ha): 0.46
Search Buffer (m): 1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark®
INFORMATION GROUP

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



© Crown copyright. All Rights Reserved. Licence Number 100022432.

Envirocheck®

LANDMARK INFORMATION GROUP®

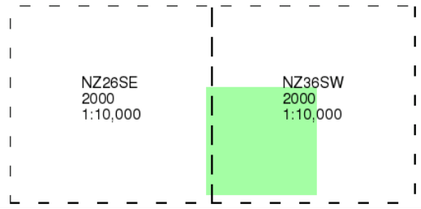
10k Raster Mapping

Published 2000

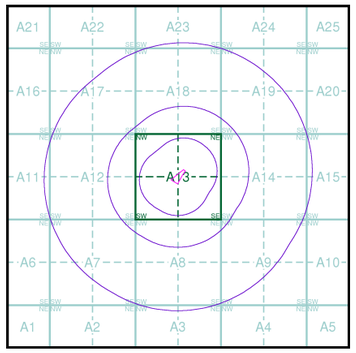
Source map scale - 1:10,000

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)



Historical Map - Slice A



Order Details

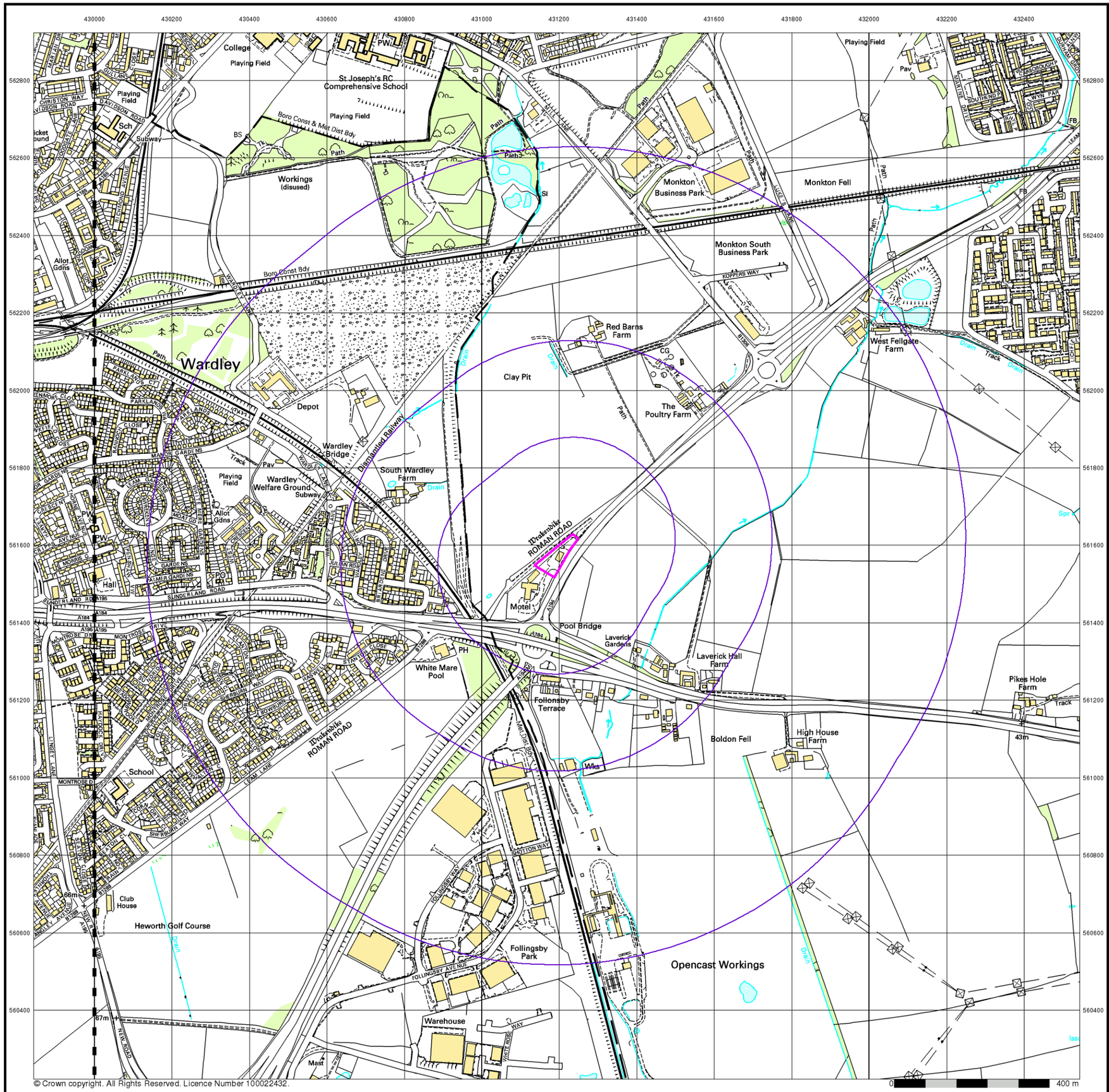
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown copyright. All Rights Reserved. Licence Number 100022432.

Envirocheck®

LANDMARK INFORMATION GROUP®

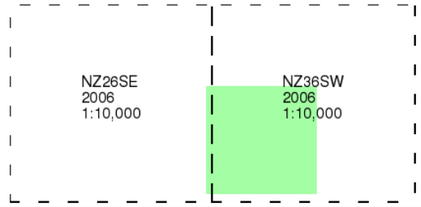
10k Raster Mapping

Published 2006

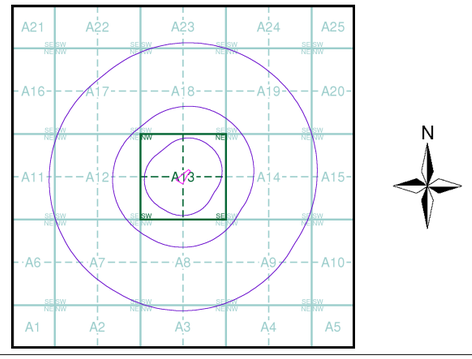
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

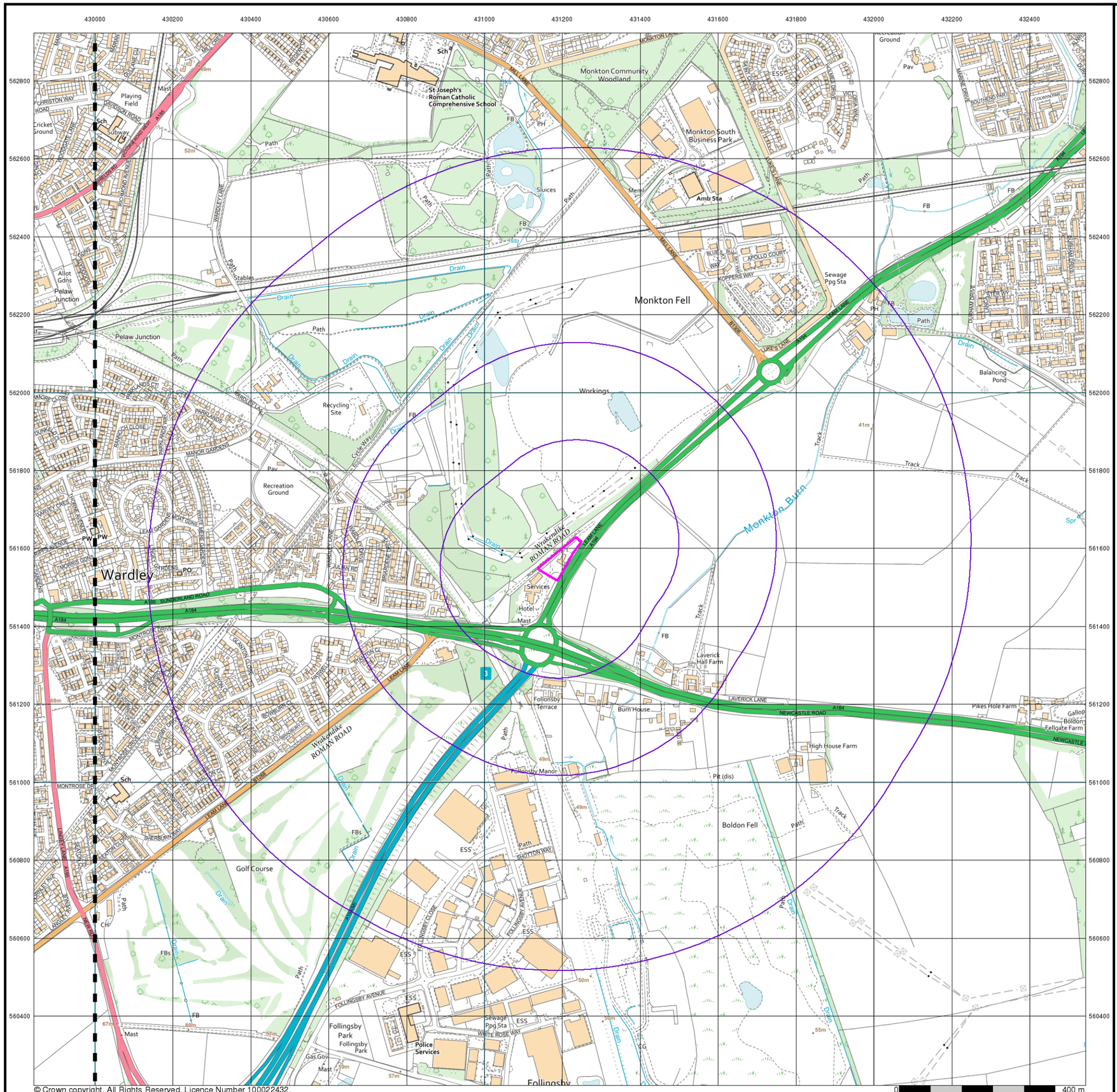
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown copyright. All Rights Reserved. Licence Number 100022432.

0 400 m

Envirocheck®

LANDMARK INFORMATION GROUP®

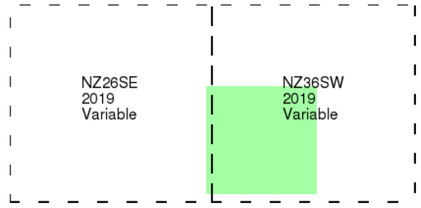
VectorMap Local

Published 2019

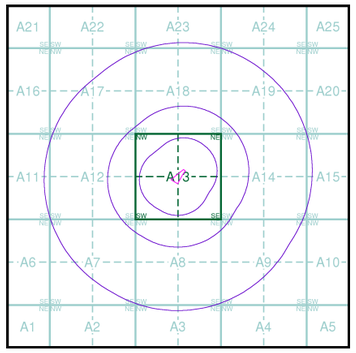
Source map scale - 1:10,000

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)



Historical Map - Slice A



Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

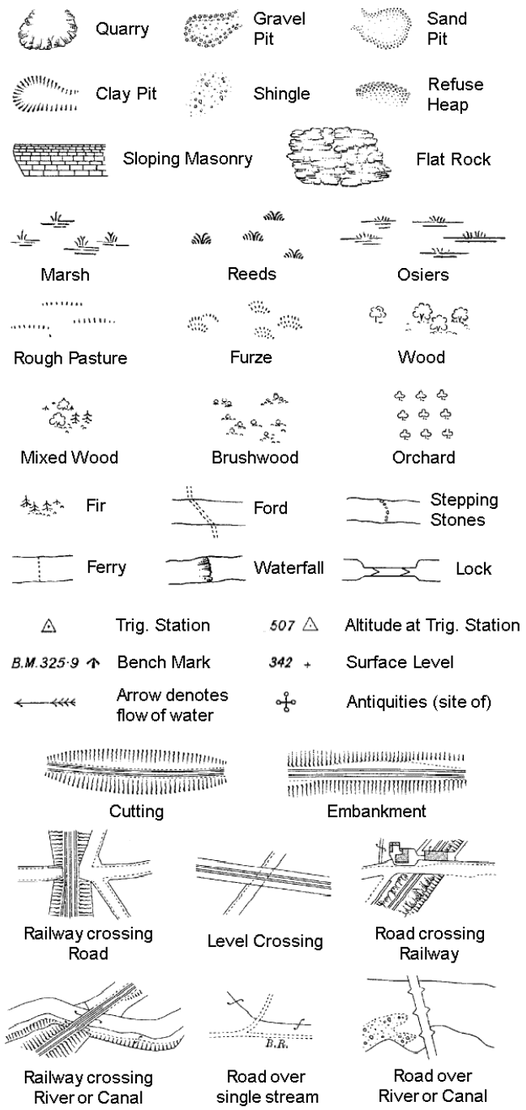
Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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

Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

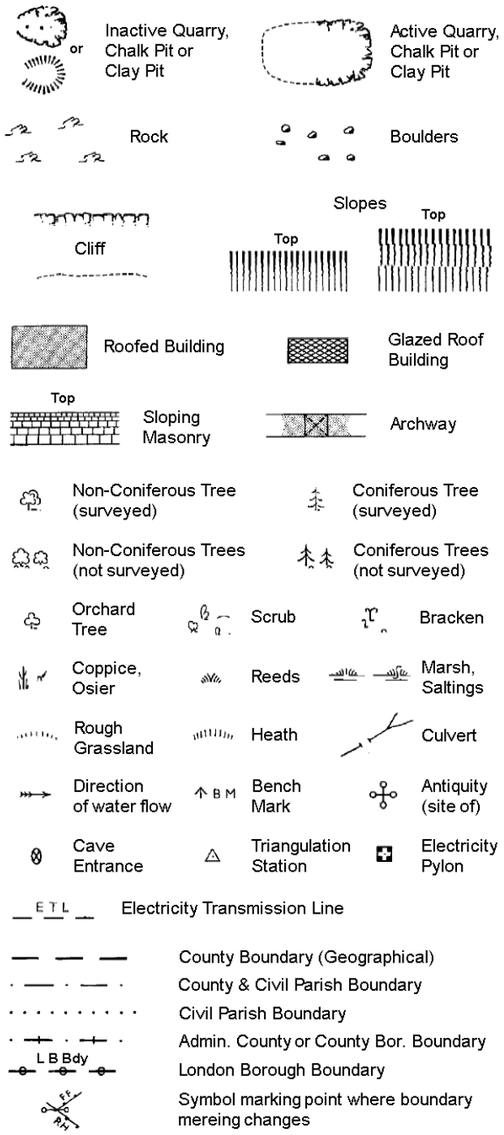
Administrative County & Civil Parish Boundary

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

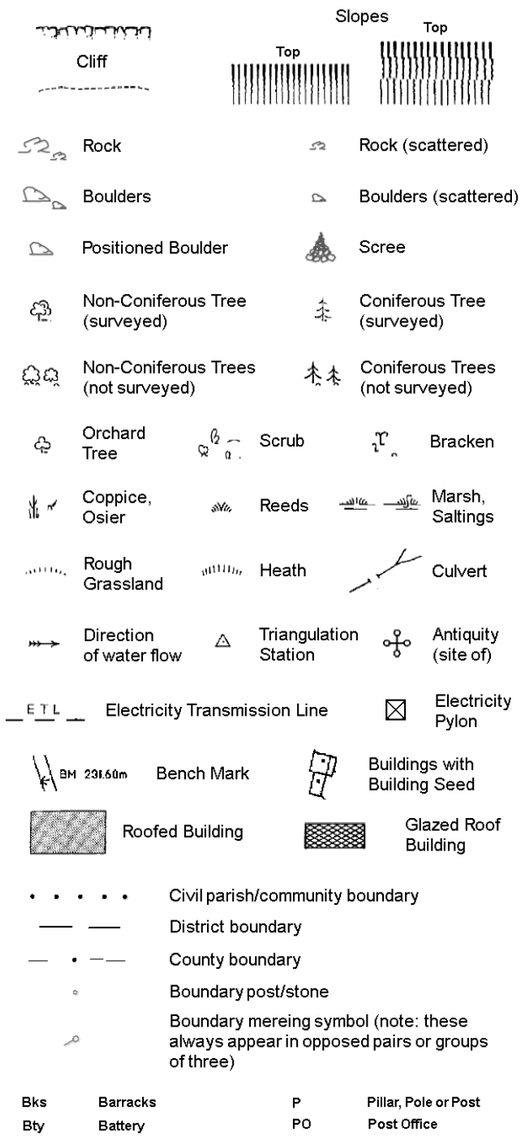
Admin. County or County Bor. Boundary

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

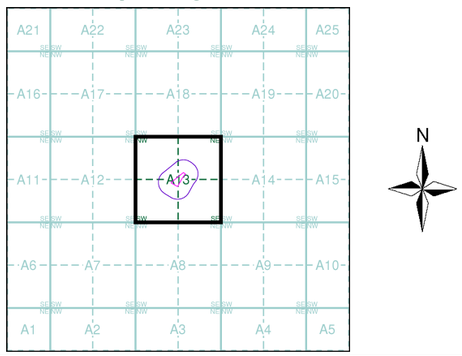
Envirocheck®

LANDMARK INFORMATION GROUP®

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Durham	1:2,500	1857	2
Durham	1:2,500	1895	3
Durham	1:2,500	1897	4
Durham	1:2,500	1919	5
Durham	1:2,500	1939	6
Ordnance Survey Plan	1:1,250	1956	7
Additional SIMs	1:2,500	1957	8
Ordnance Survey Plan	1:2,500	1959	9
Ordnance Survey Plan	1:1,250	1963	10
Ordnance Survey Plan	1:1,250	1972 - 1975	11
Ordnance Survey Plan	1:2,500	1973	12
Supply of Unpublished Survey Information	1:1,250	1974	13
Additional SIMs	1:1,250	1982 - 1987	14
Additional SIMs	1:1,250	1984	15
Ordnance Survey Plan	1:1,250	1987	16
Large-Scale National Grid Data	1:2,500	1993	17
Large-Scale National Grid Data	1:1,250	1993	18
Large-Scale National Grid Data	1:2,500	1994	19
Historical Aerial Photography	1:2,500	1999	20

Historical Map - Segment A13



Order Details

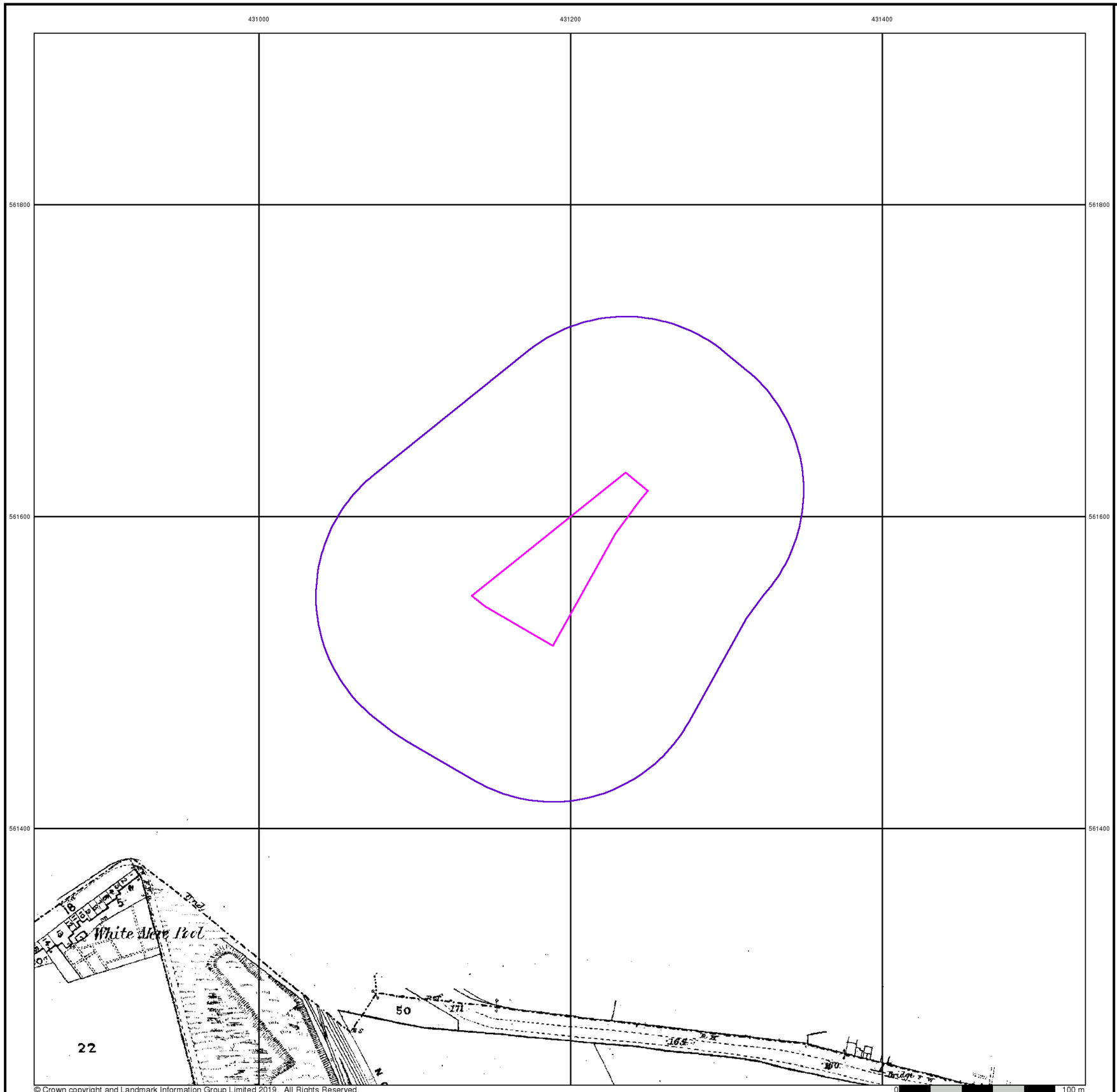
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

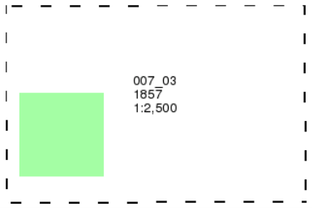
Durham

Published 1857

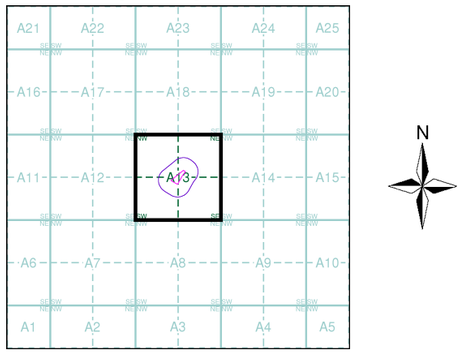
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

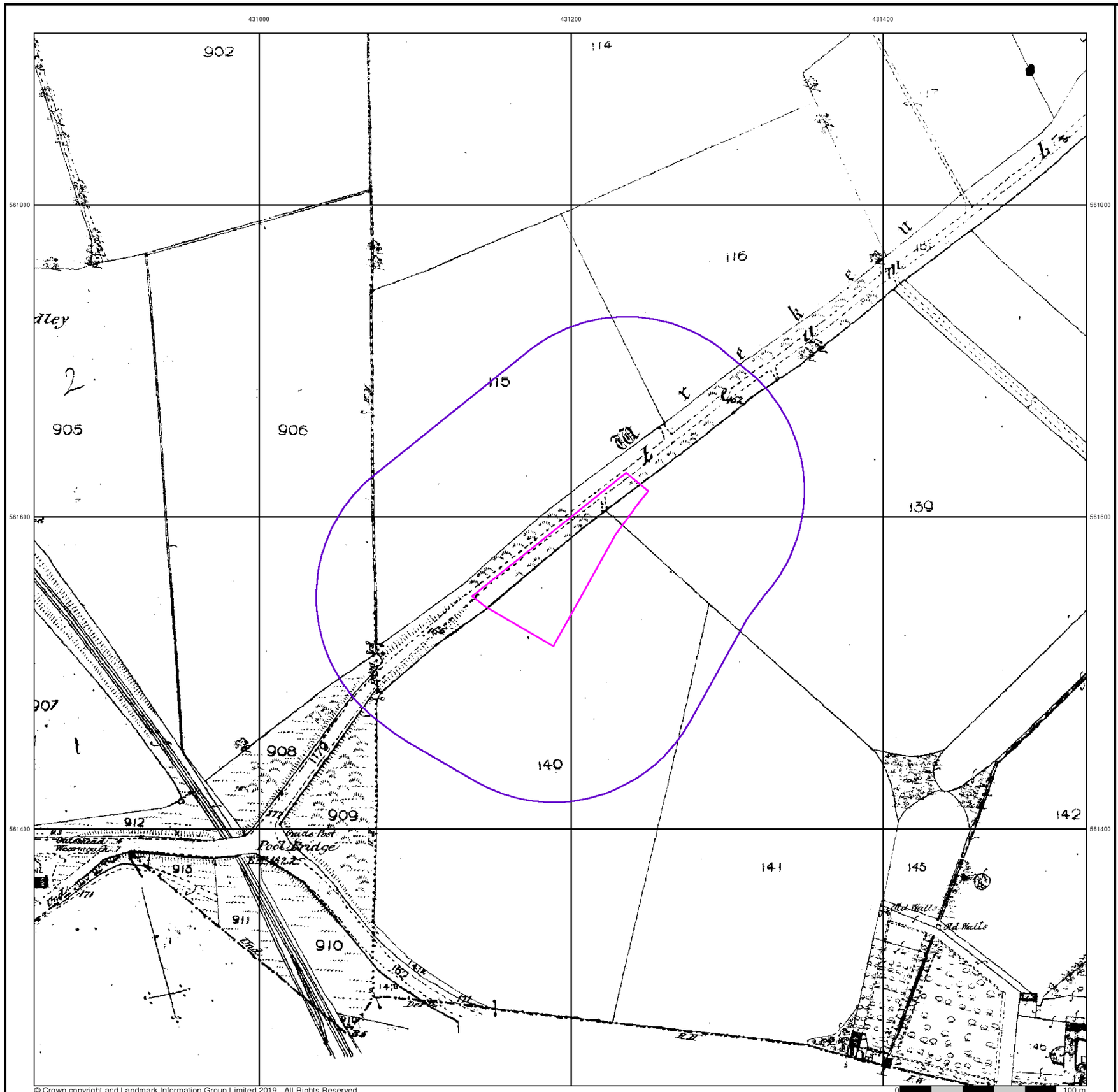
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

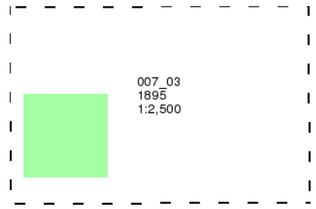
Durham

Published 1895

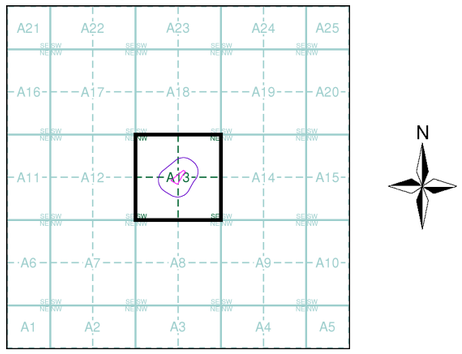
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

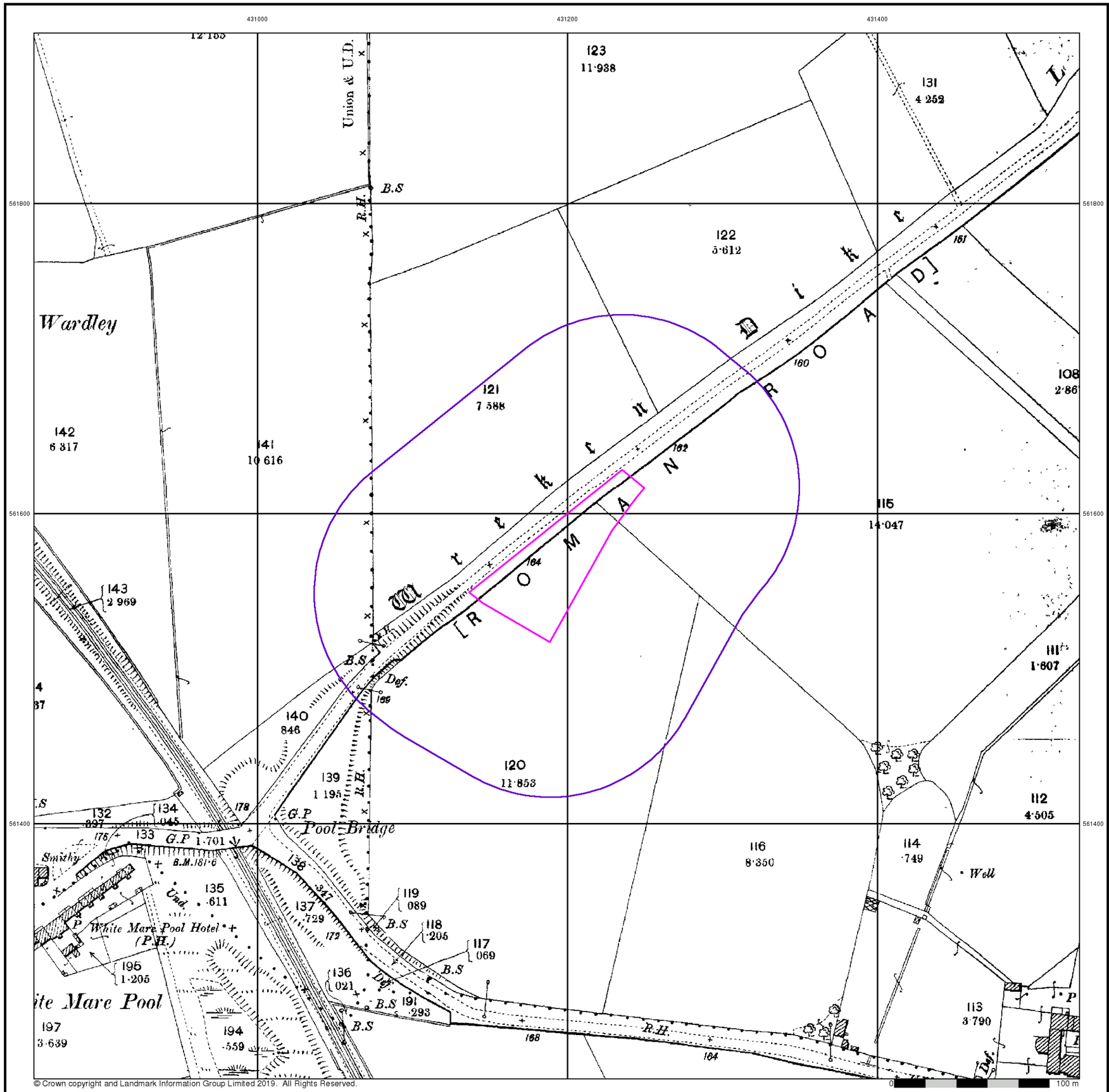
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

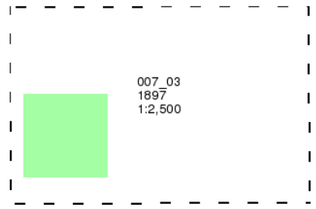
Durham

Published 1897

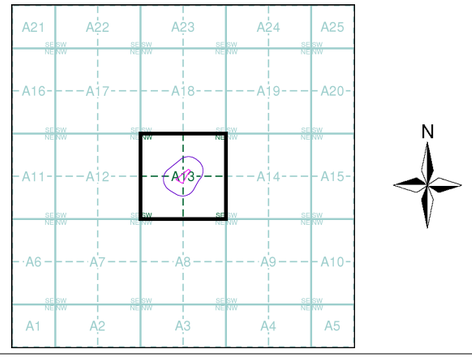
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



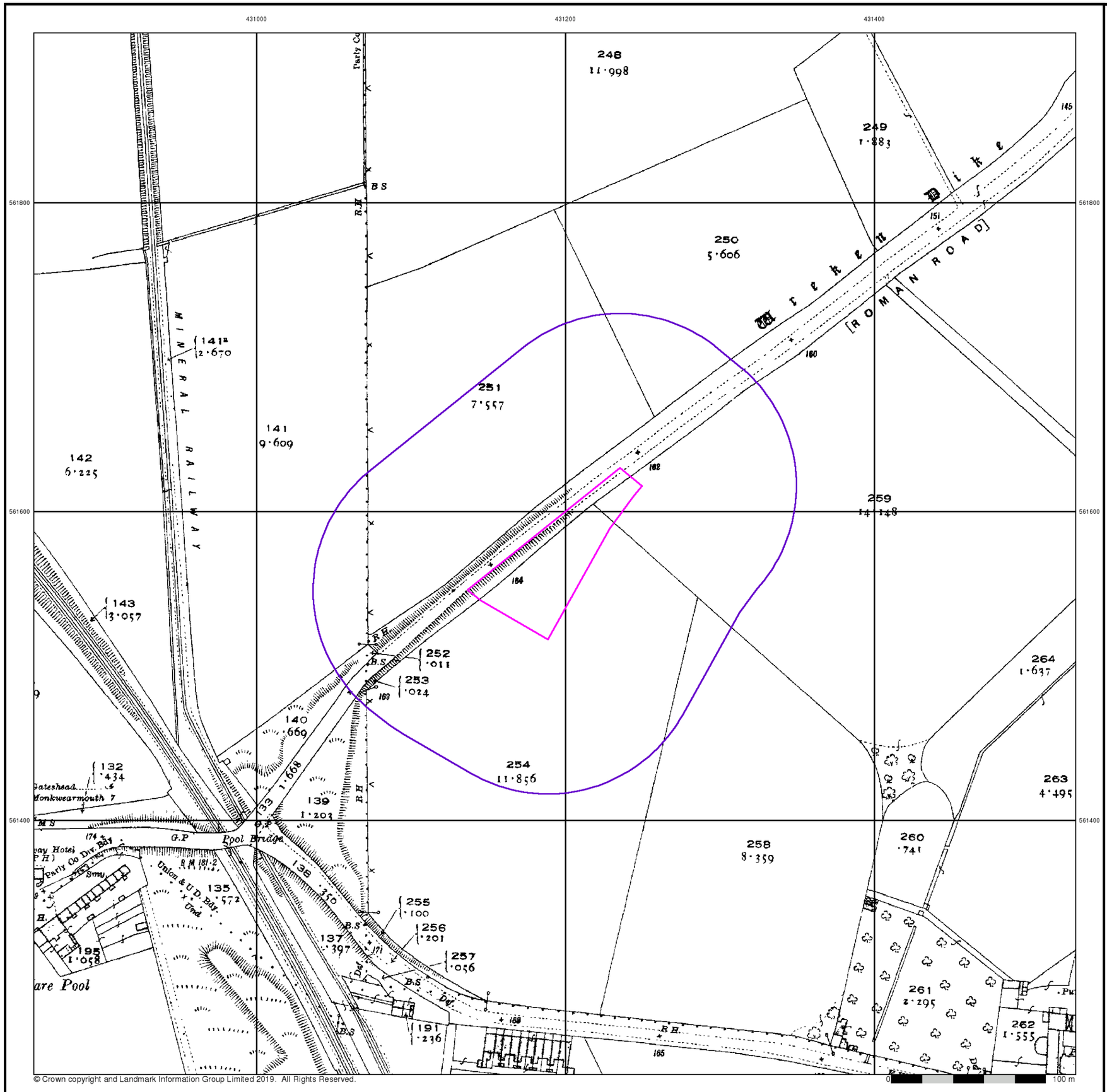
Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

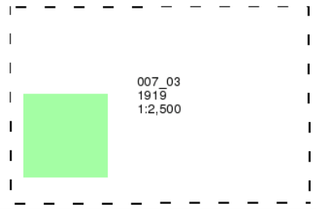
Durham

Published 1919

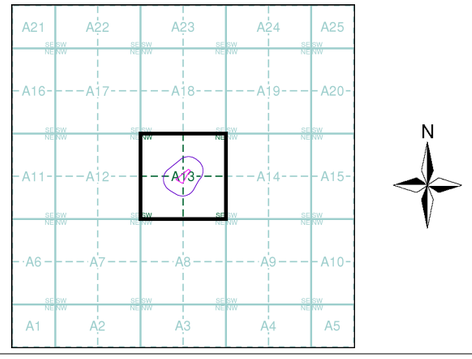
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

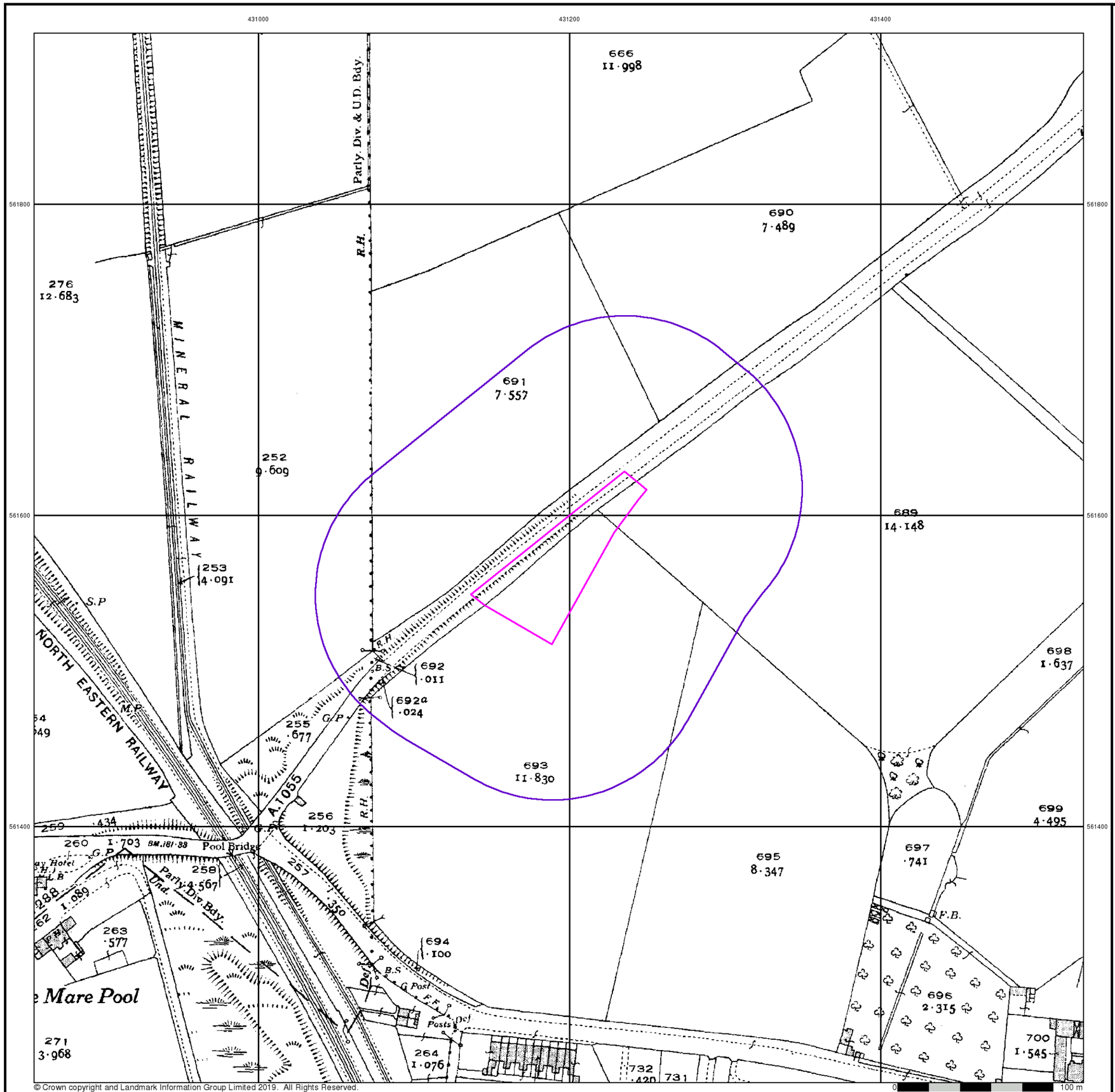
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

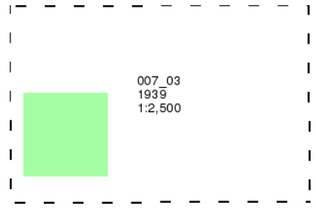
Durham

Published 1939

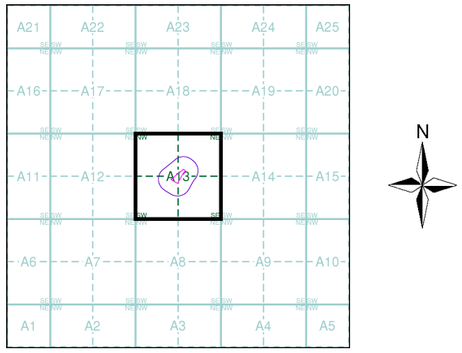
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

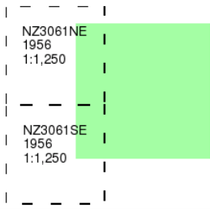
Ordnance Survey Plan

Published 1956

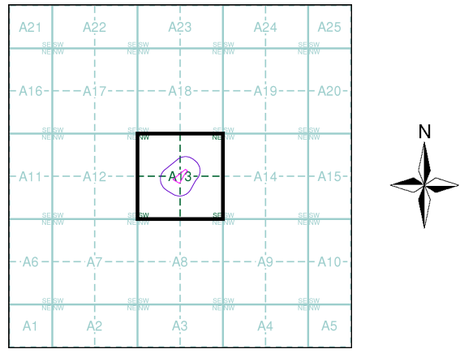
Source map scale - 1:1,250

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

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

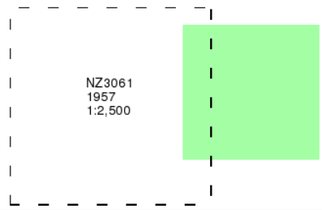
Additional SIMs

Published 1957

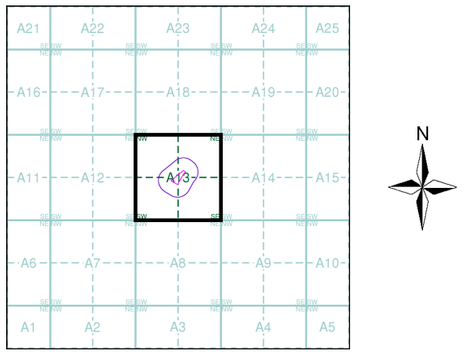
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

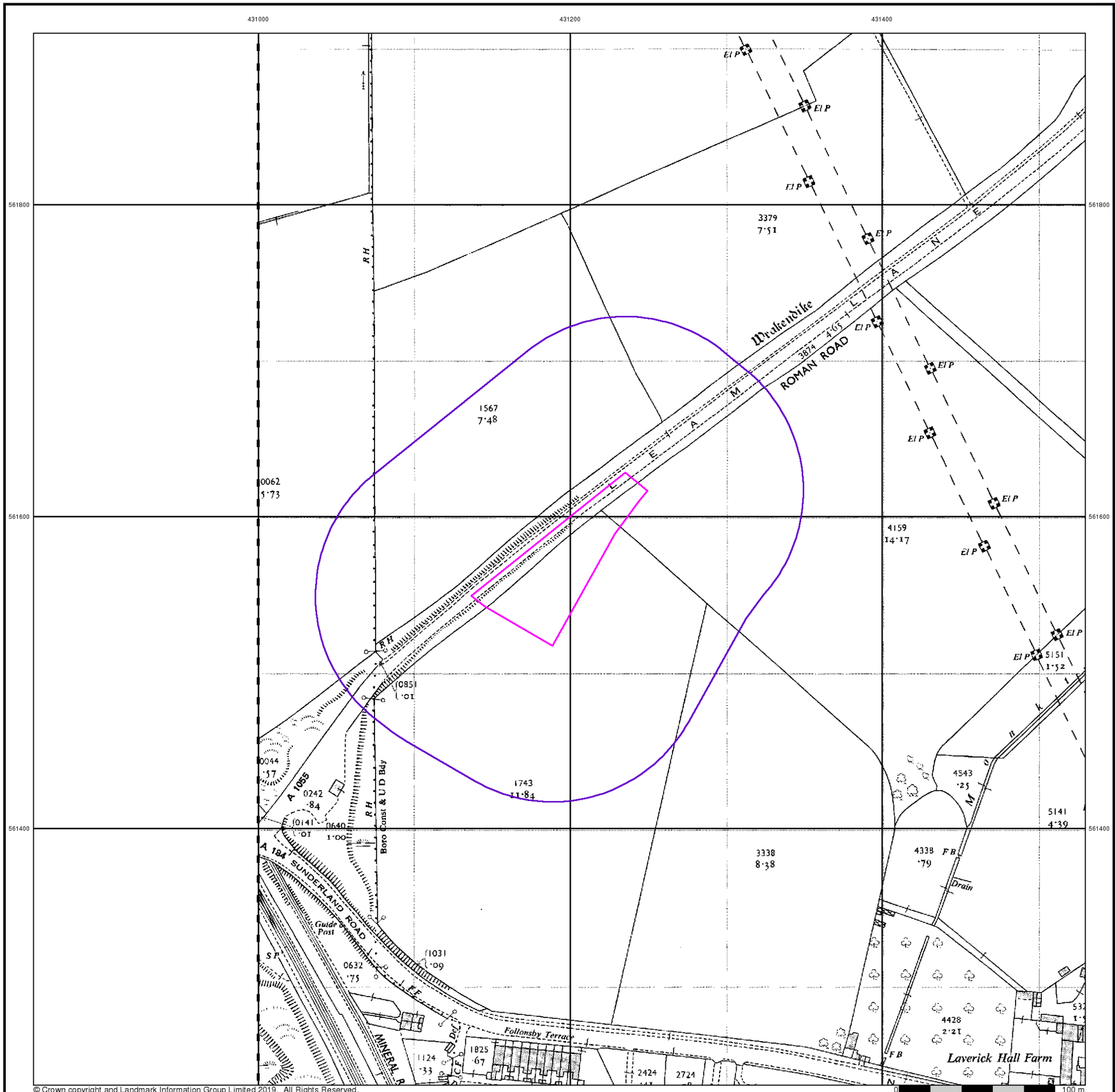
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

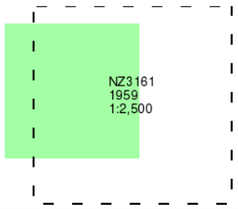
Ordnance Survey Plan

Published 1959

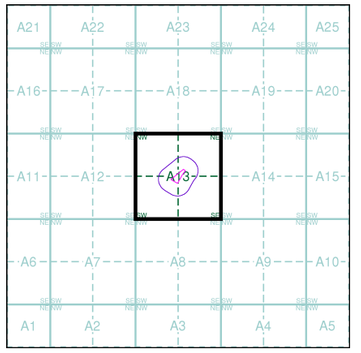
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

0 100 m

Envirocheck®

LANDMARK INFORMATION GROUP®

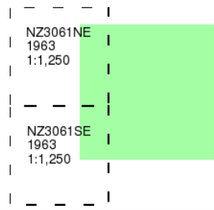
Ordnance Survey Plan

Published 1963

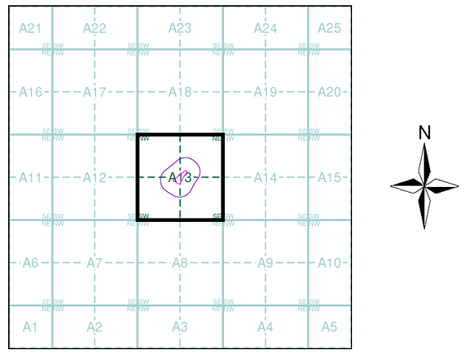
Source map scale - 1:1,250

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

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

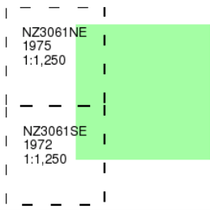
Ordnance Survey Plan

Published 1972 - 1975

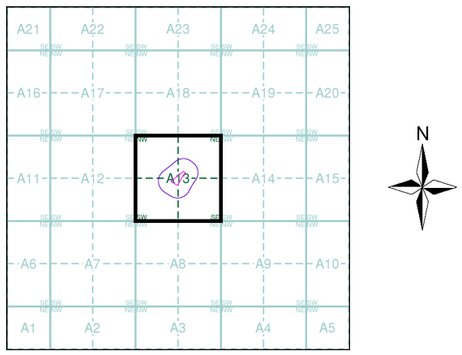
Source map scale - 1:1,250

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

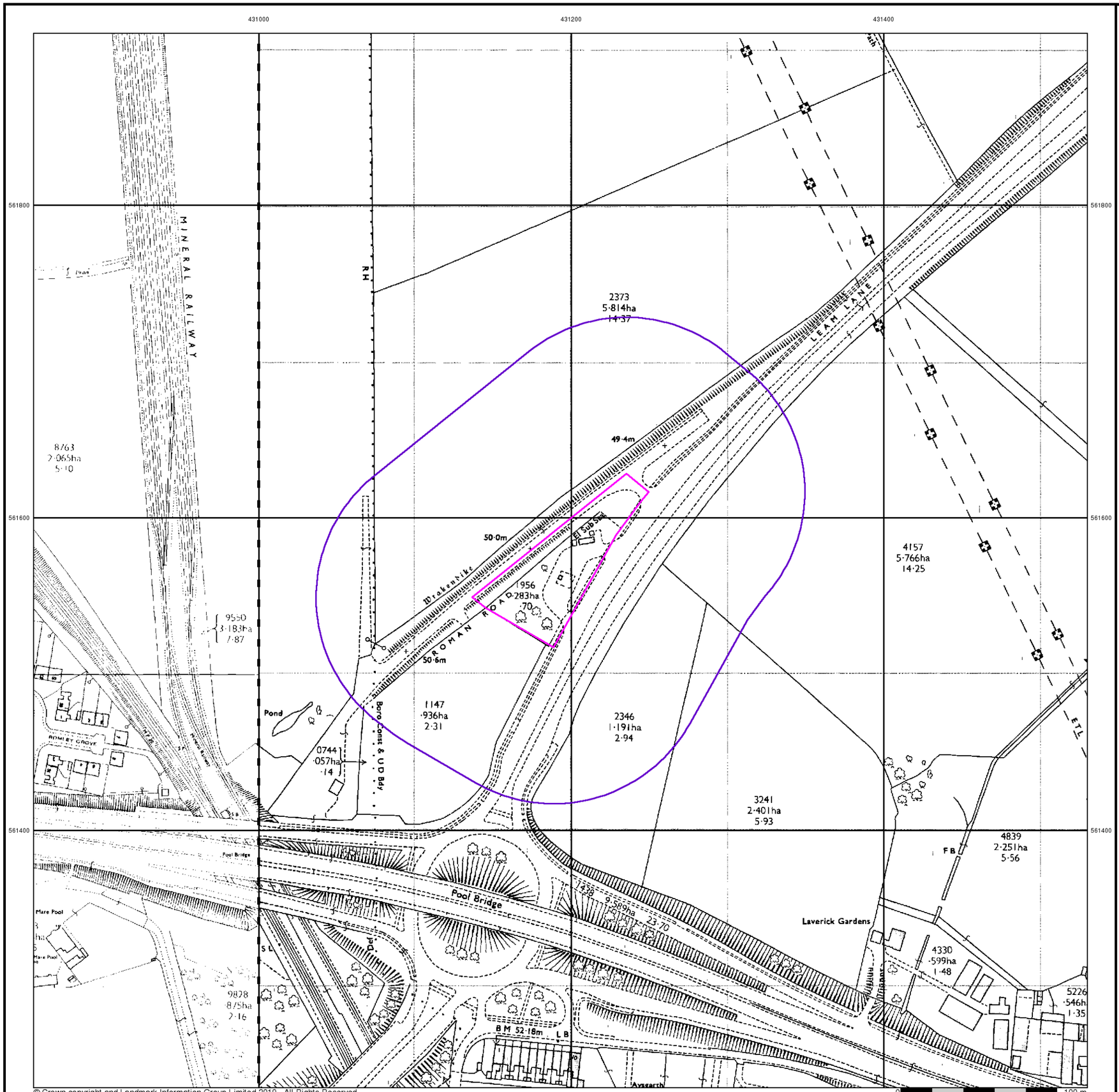
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

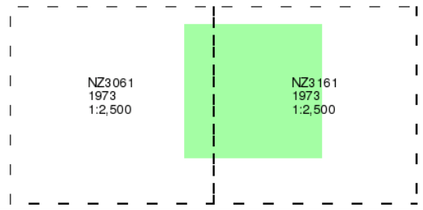
Ordnance Survey Plan

Published 1973

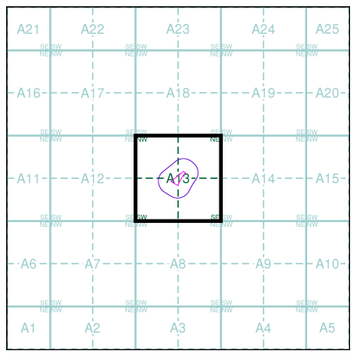
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



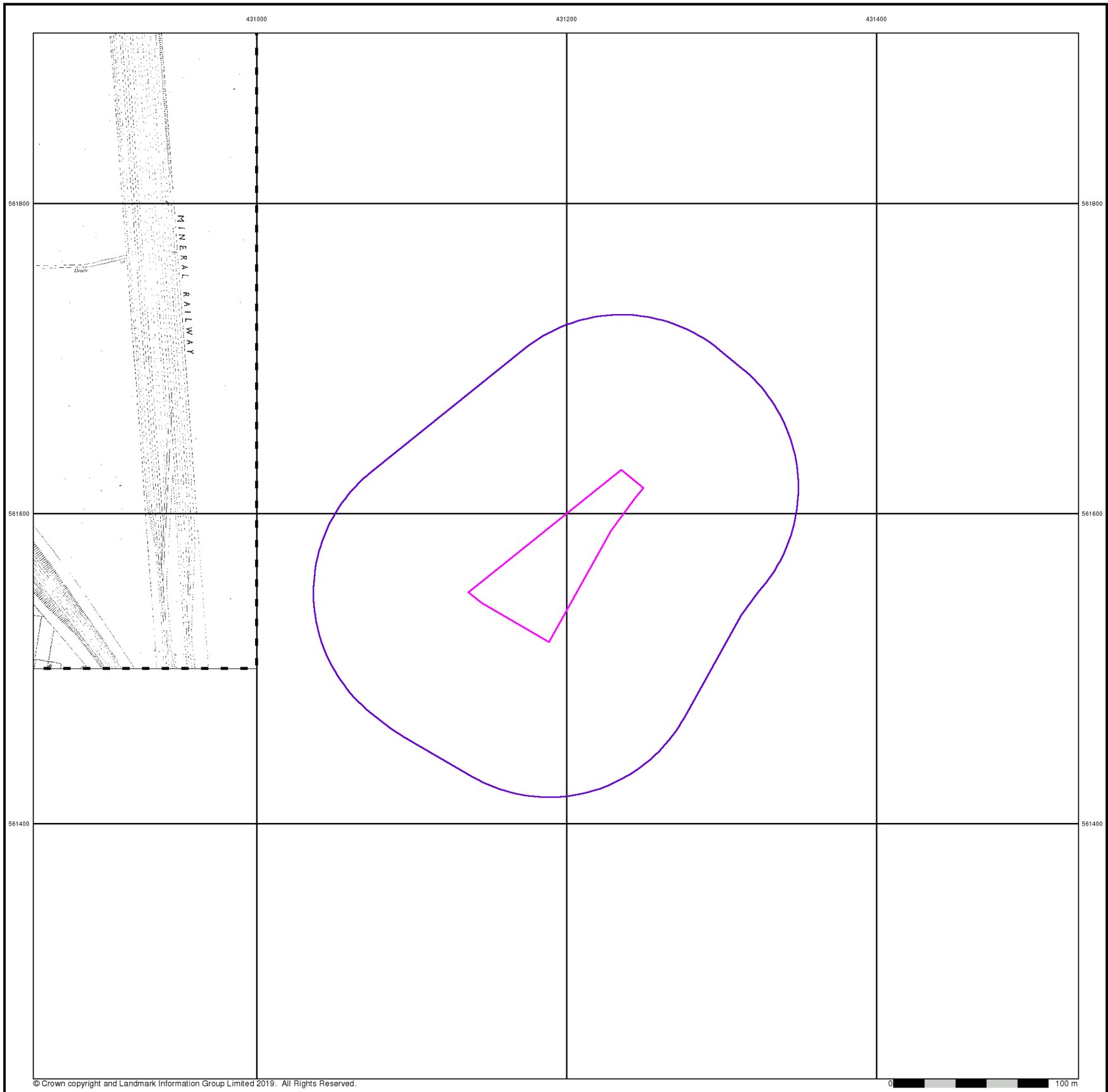
Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

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



Envirocheck®

LANDMARK INFORMATION GROUP®

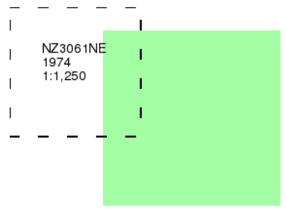
Supply of Unpublished Survey Information

Published 1974

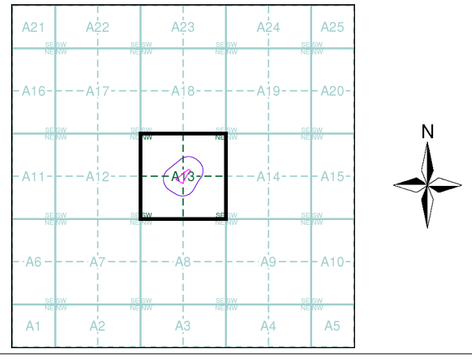
Source map scale - 1:1,250

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



Order Details

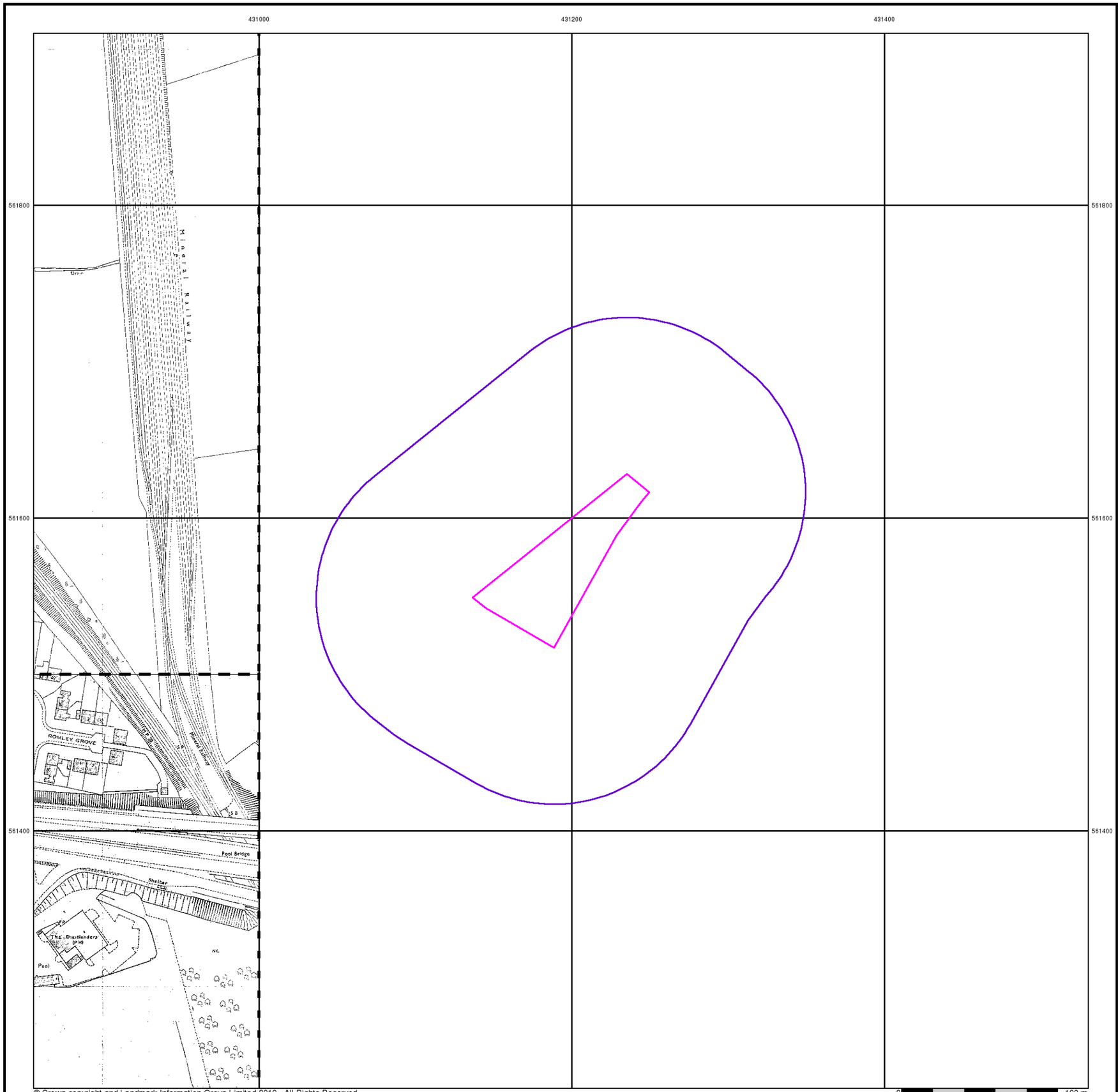
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

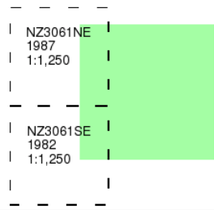
Additional SIMs

Published 1982 - 1987

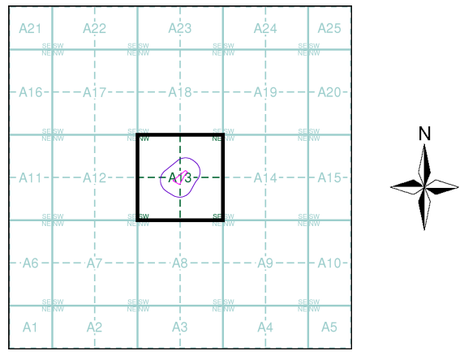
Source map scale - 1:1,250

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

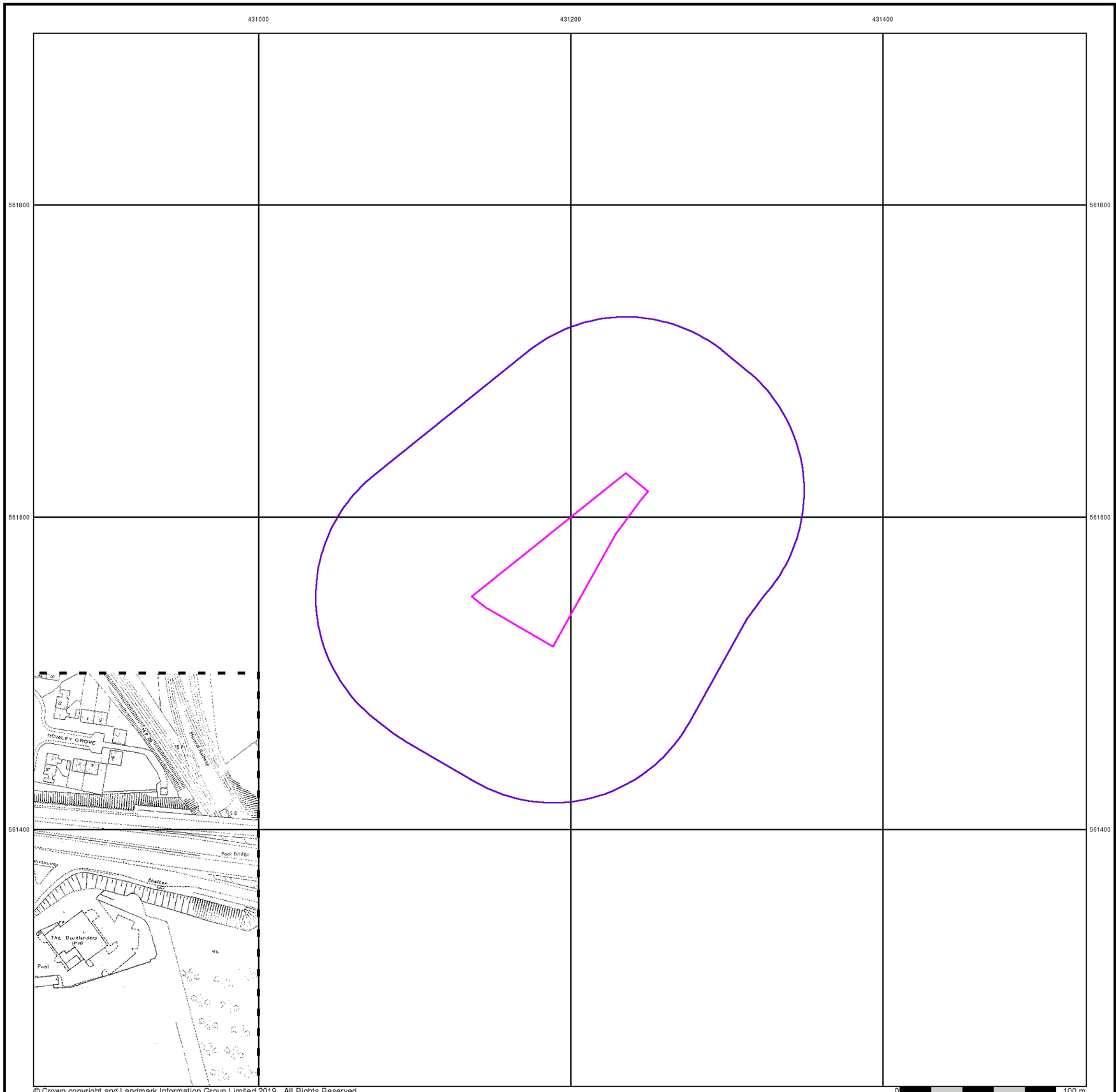
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

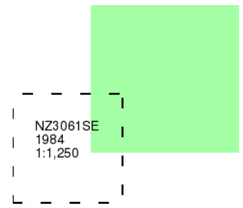
Additional SIMs

Published 1984

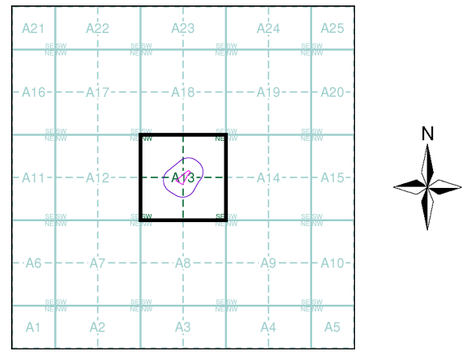
Source map scale - 1:1,250

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

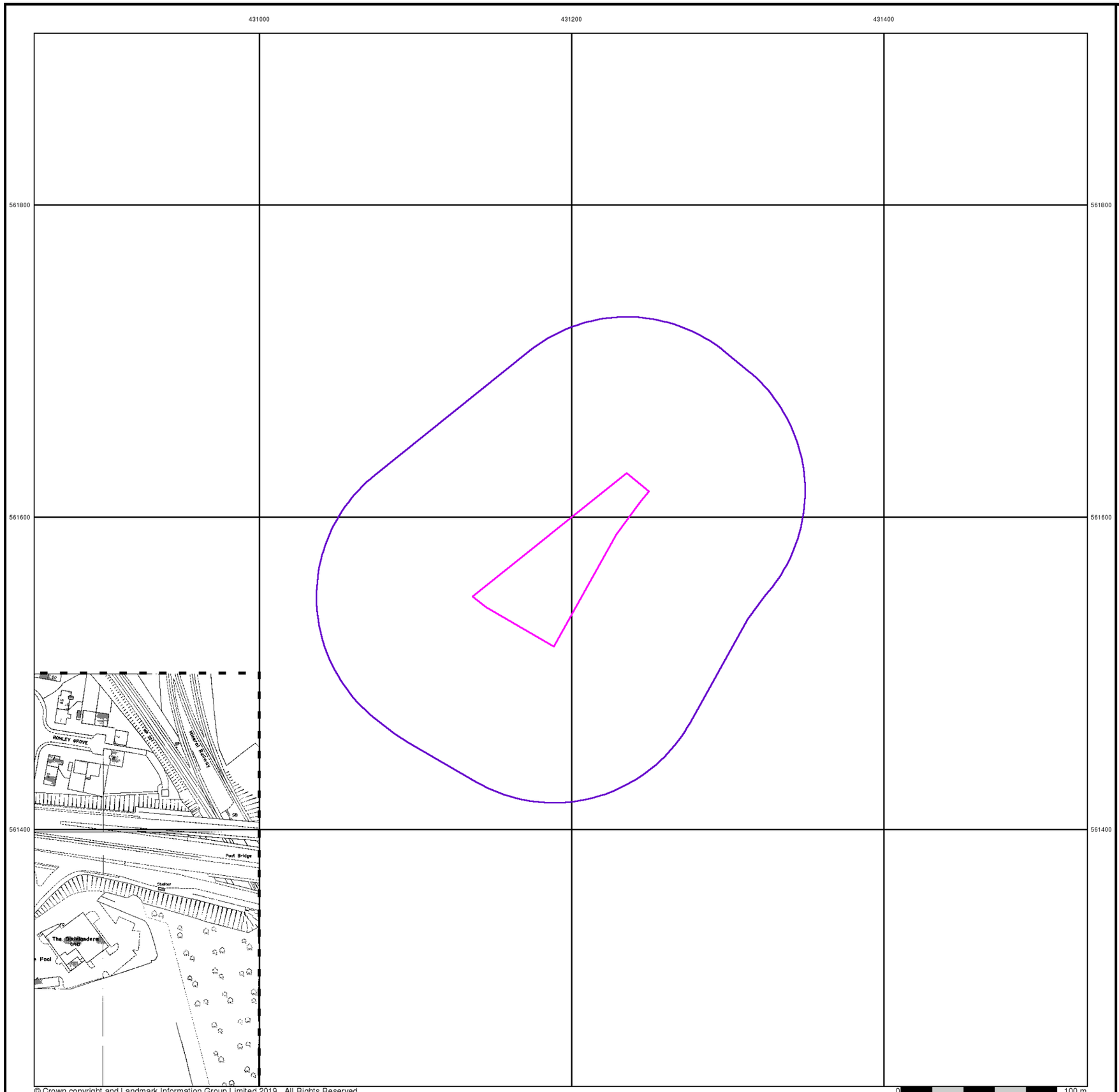
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

0 100 m

Envirocheck®

LANDMARK INFORMATION GROUP®

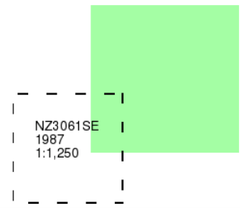
Ordnance Survey Plan

Published 1987

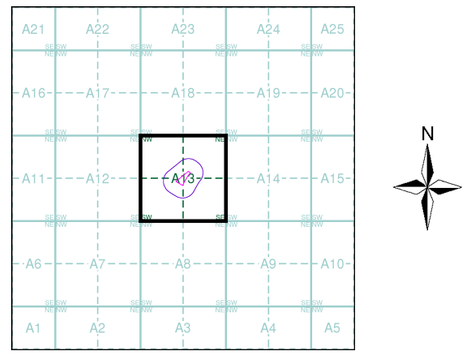
Source map scale - 1:1,250

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

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

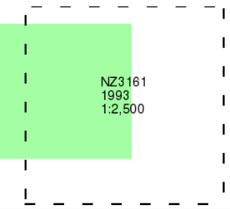
Large-Scale National Grid Data

Published 1993

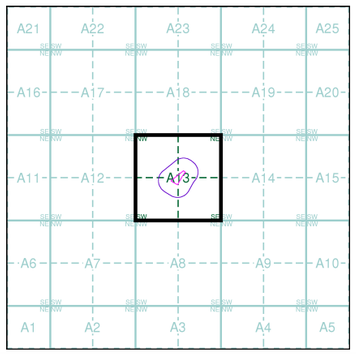
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

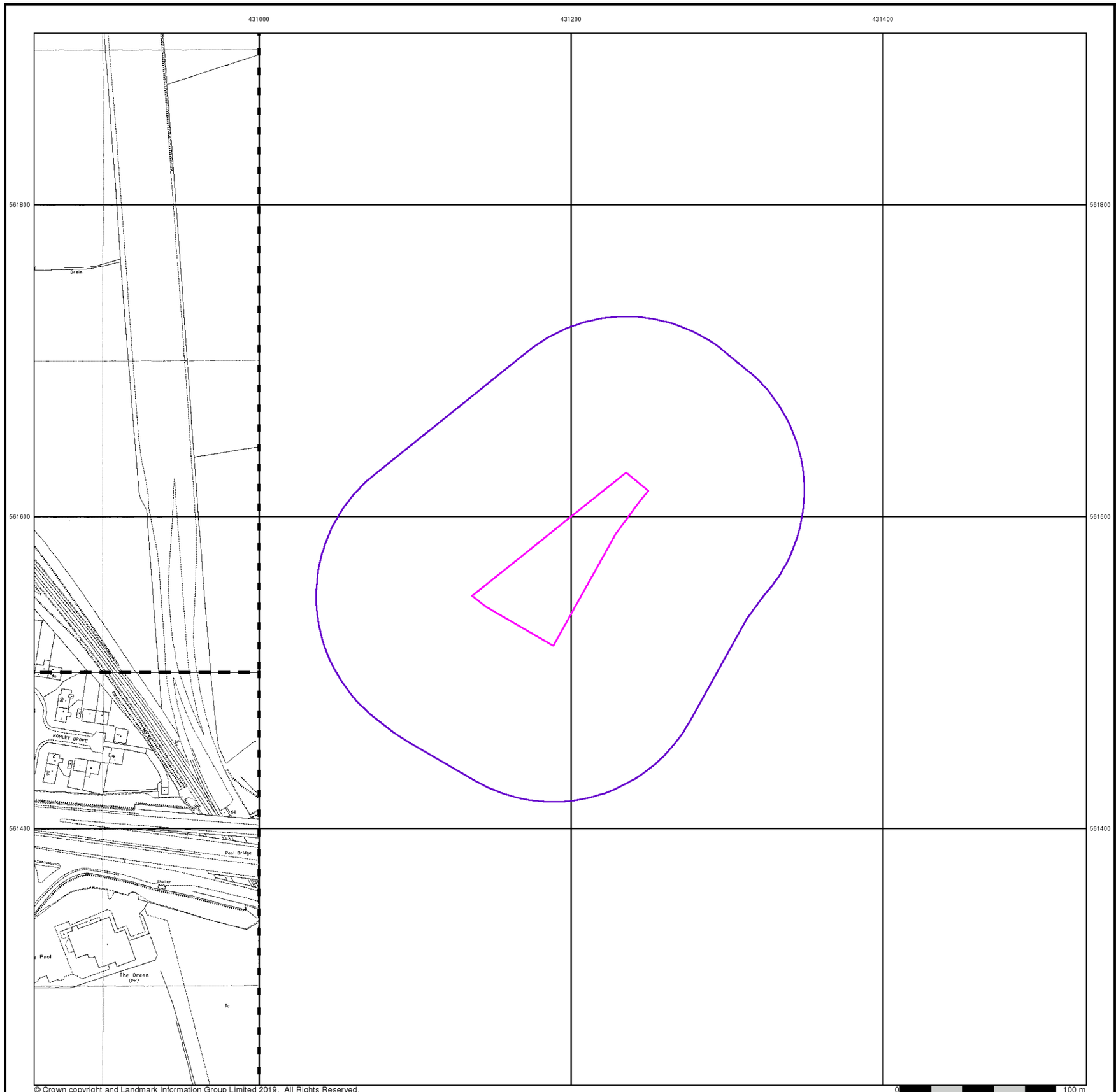
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

0 100 m

Envirocheck®

LANDMARK INFORMATION GROUP®

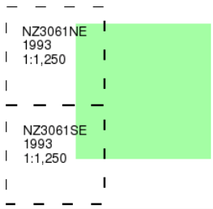
Large-Scale National Grid Data

Published 1993

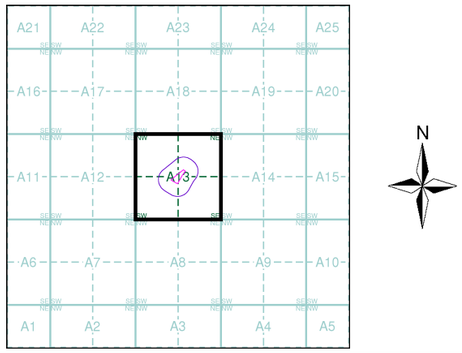
Source map scale - 1:1,250

'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

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2019. All Rights Reserved.

Envirocheck®

LANDMARK INFORMATION GROUP®

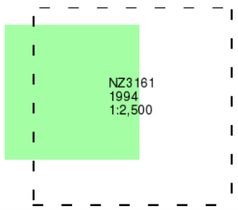
Large-Scale National Grid Data

Published 1994

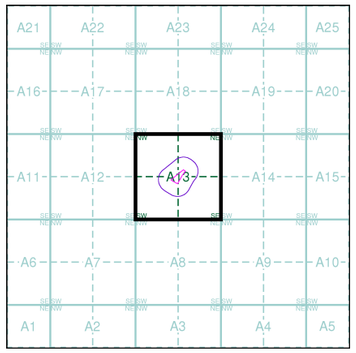
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



Envirocheck®

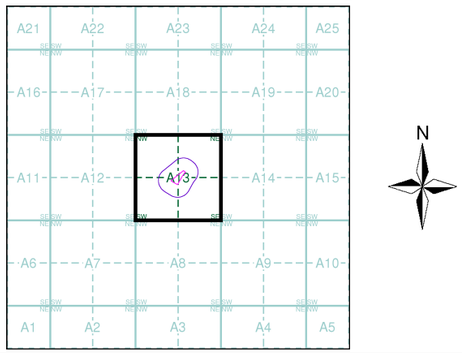
LANDMARK INFORMATION GROUP®

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

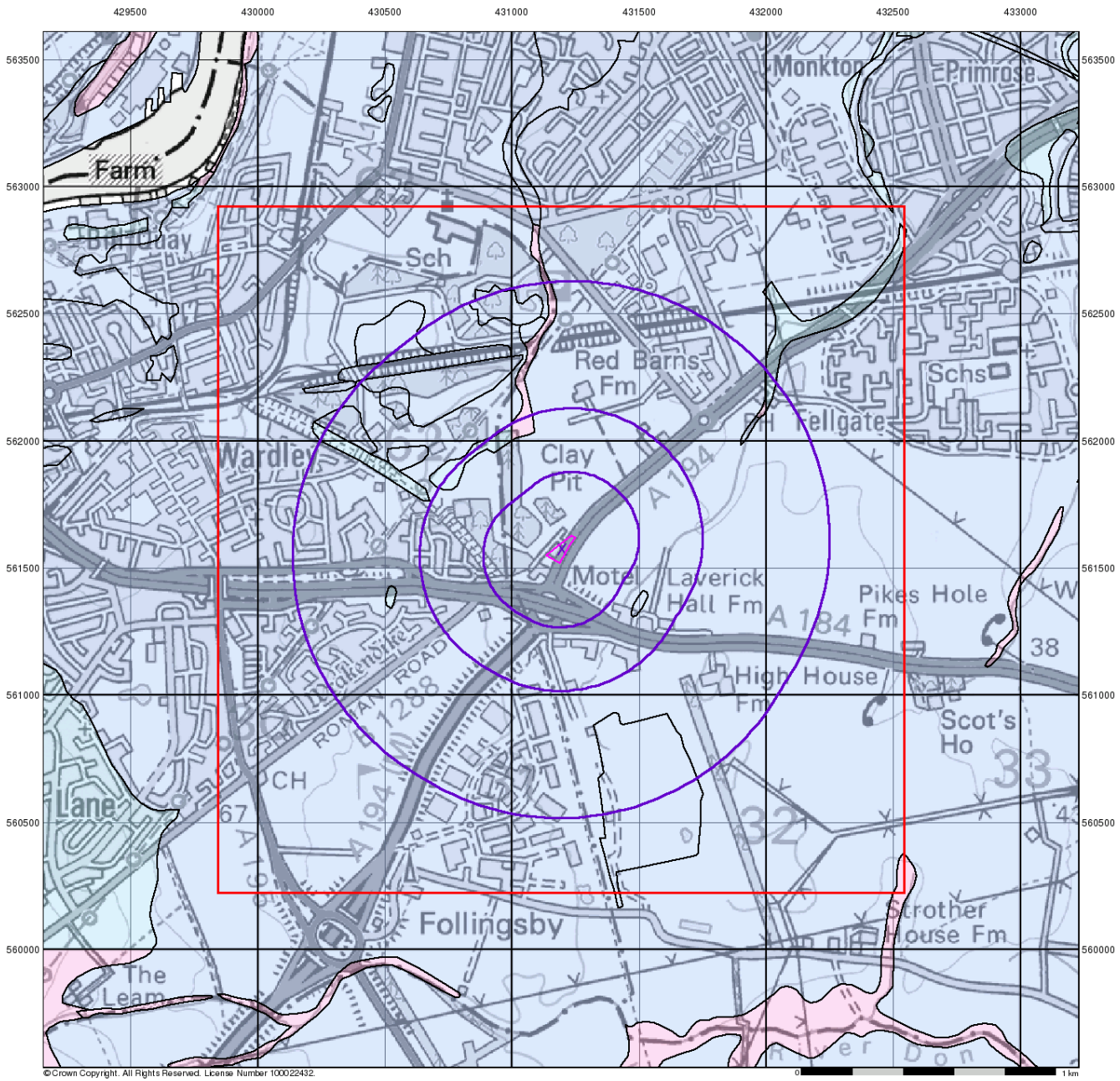
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Groundwater Vulnerability

General

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

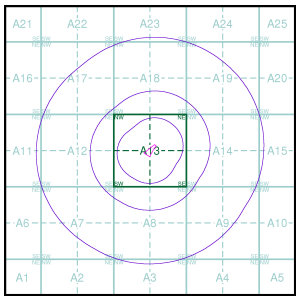
Agency and Hydrological

Bedrock Aquifers	Superficial Aquifers
High Vulnerability, Principal Aquifer	High Vulnerability, Principal Aquifer
High Vulnerability, Secondary Aquifer	High Vulnerability, Secondary Aquifer
Medium Vulnerability, Principal Aquifer	Medium Vulnerability, Principal Aquifer
Medium Vulnerability, Secondary Aquifer	Medium Vulnerability, Secondary Aquifer
Low Vulnerability, Principal Aquifer	Low Vulnerability, Principal Aquifer
Low Vulnerability, Secondary Aquifer	Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



Order Details

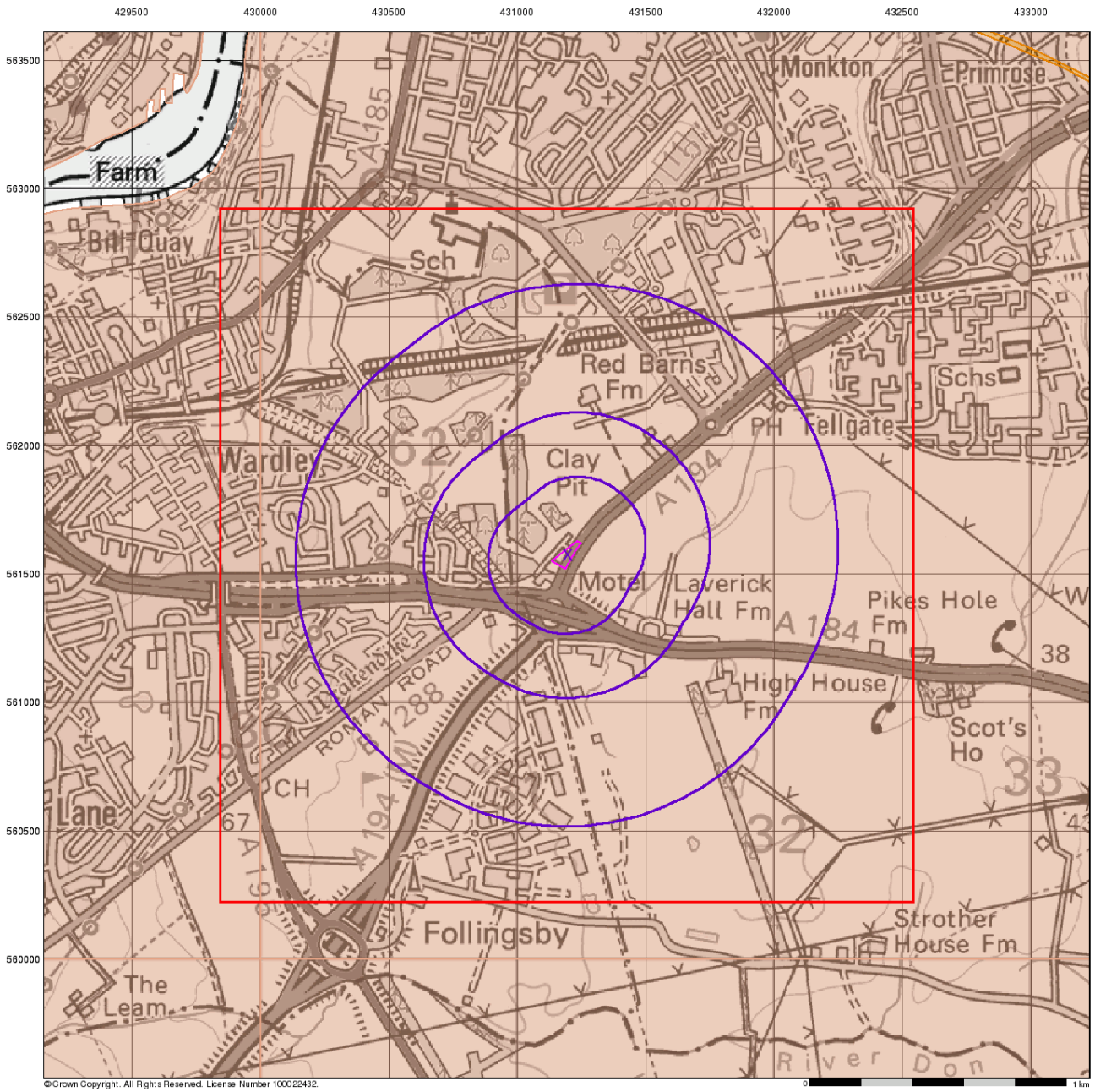
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Bedrock Aquifer Designation

General

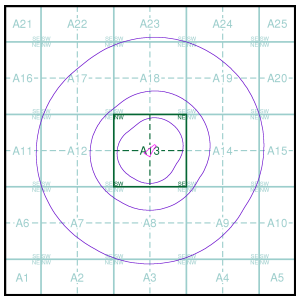
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

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

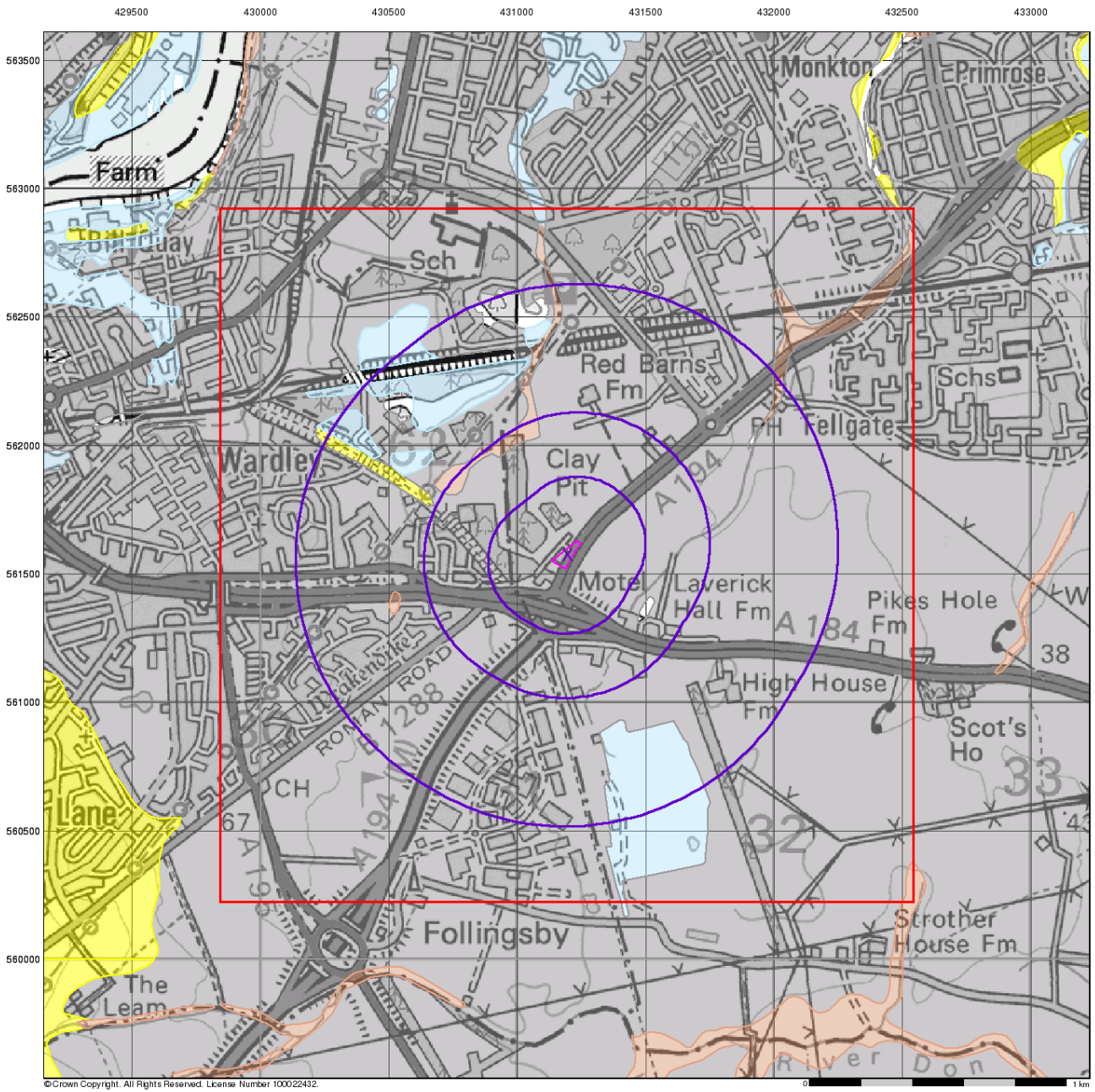
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Superficial Aquifer Designation

General

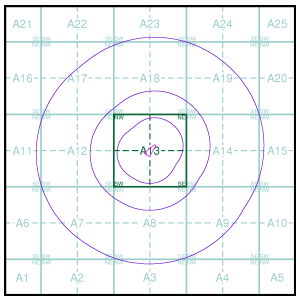
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

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

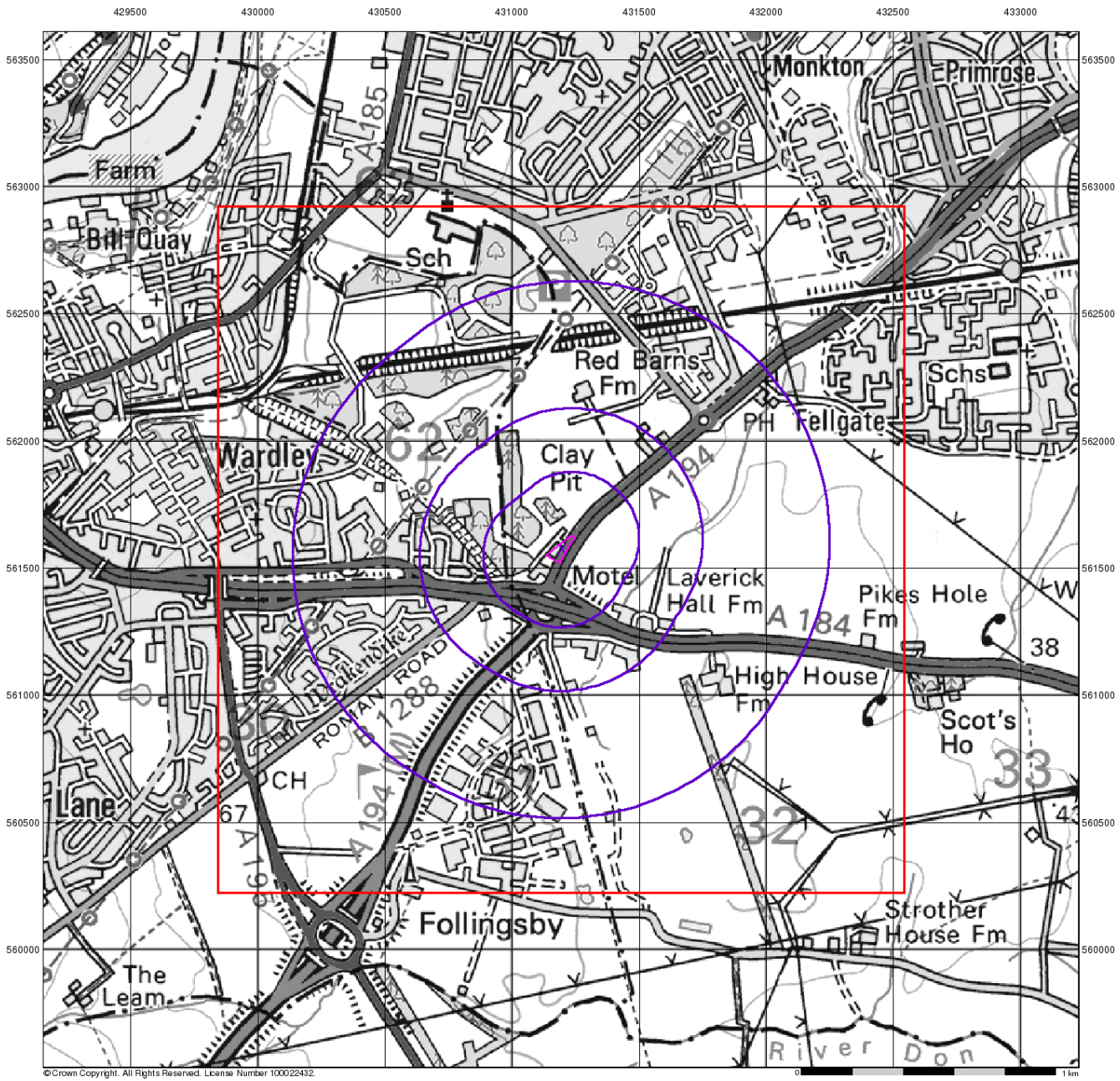
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Source Protection Zones

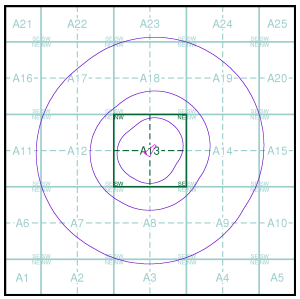
General

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)

Site Sensitivity Context Map - Slice A



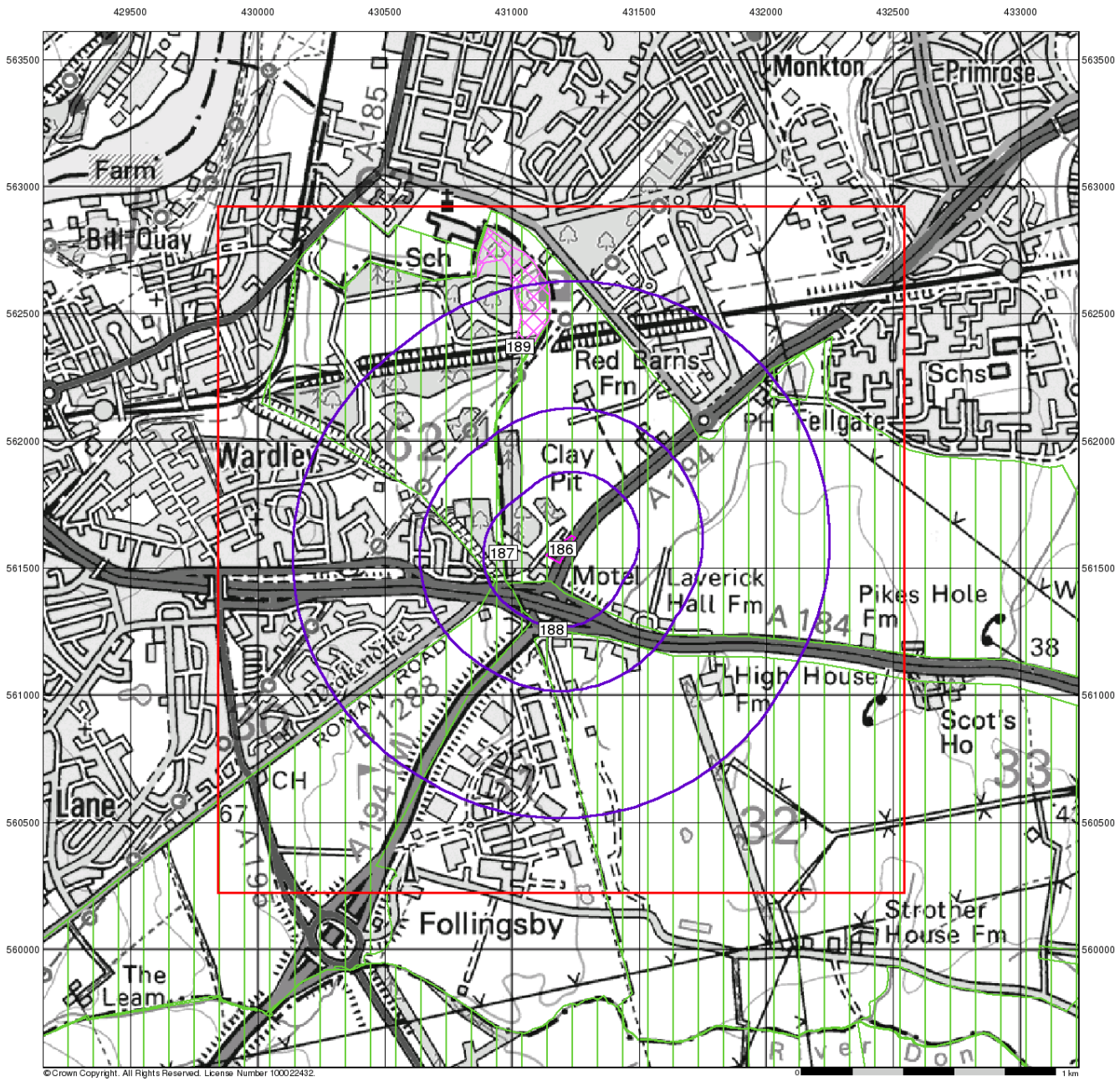
Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Sensitive Land Uses

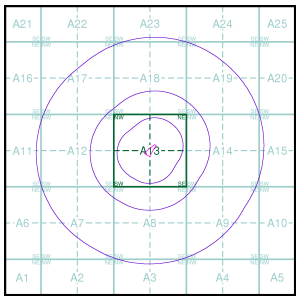
General

- 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

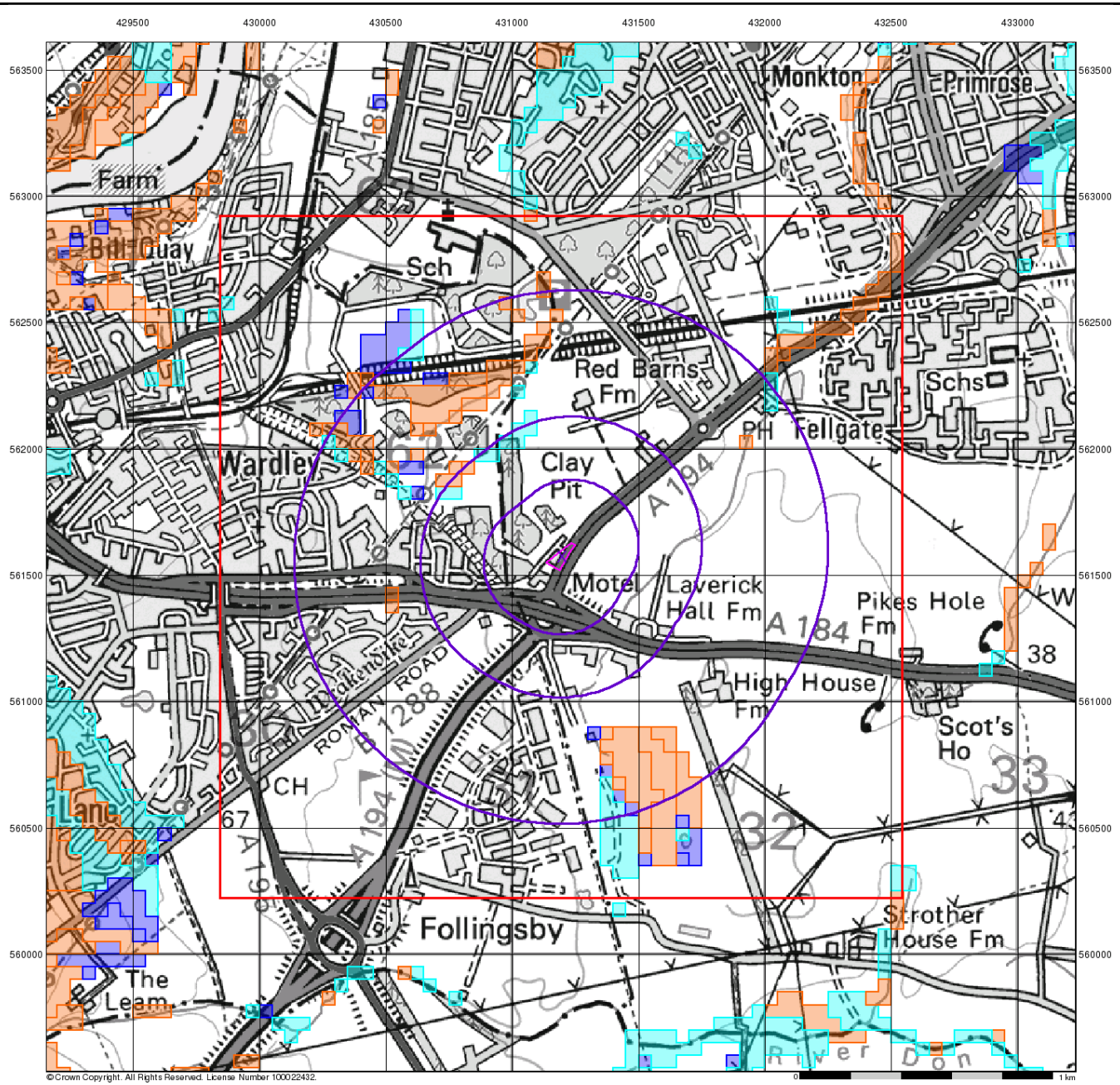
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

BGS Flood GFS Data

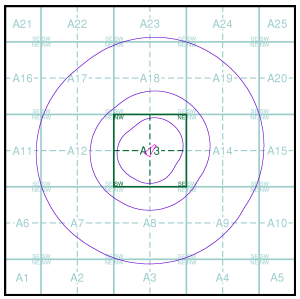
General

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:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
209721675_1_1

Customer Reference:
Shell Whitemare Pool - 60608750

National Grid Reference:
431200, 561570

Slice:
A

Site Area (Ha):
0.46

Search Buffer (m):
1000

Site Details:

Shell Filling Station, White Mare Pool
GATESHEAD
NE10 8YB

Client Details:

Miss S Hooper
Aecom Infrastructure & Environment UK Ltd
4th Floor
Bridgewater House
Whitworth Street
Manchester
M1 6LT

Envirocheck®
LANDMARK INFORMATION GROUP®

Contents

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	19
Hazardous Substances	-
Geological	26
Industrial Land Use	35
Sensitive Land Use	42
Data Currency	43
Data Suppliers	49
Useful Contacts	50

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

Copyright Notice

© Landmark Information Group Limited 2019. The Copyright on the information and data and its format as contained in this Envirocheck® Report ("Report") is the property of Landmark Information Group Limited ("Landmark") and several other Data Providers, including (but not limited to) Ordnance Survey, British Geological Survey, the Environment Agency/Natural Resources Wales and Natural England, and must not be reproduced in whole or in part by photocopying or any other method. The Report is supplied under Landmark's Terms and Conditions accepted by the Customer.
A copy of Landmark's Terms and Conditions can be found with the Index Map for this report. Additional copies of the Report may be obtained from Landmark, subject to Landmark's charges in force from time to time. The Copyright, design rights and any other intellectual rights shall remain the exclusive property of Landmark and /or other Data providers, whose Copyright material has been included in this Report.
© Environment Agency & United Kingdom Research and Innovation 2019. © Natural Resources Wales & United Kingdom Research and Innovation 2019.

Natural England Copyright Notice

Site of Special Scientific Interest, National Nature Reserve, Ramsar, Special Protection Area, Special Conservation Area, Marine Nature Reserve data (derived from Ordnance Survey 1:10000 raster) is provided by, and used with the permission of, Natural England who retain the copyright and Intellectual Property Rights for the data.

Scottish Natural Heritage Copyright

Contains SNH information licensed under the Open Government Licence v3.0.

Ove Arup Copyright Notice

The Mining Instability data was obtained on licence from Ove Arup & Partners Limited (for further information, contact mining.review@arup.com). No reproduction or further use of such Data is to be made without the prior written consent of Ove Arup & Partners Limited. The supplied Mining Instability data is derived from publicly available records and other third party sources and neither Ove Arup & Partners nor Landmark warrant the accuracy or completeness of such information or data.

Peter Brett Associates Copyright Notice

The cavity data presented has been extracted from the PBA enhanced version of the original DEFRA national cavity databases. PBA/DEFRA retain the copyright & intellectual property rights in the data. Whilst all reasonable efforts are made to check that the information contained in the cavity databases is accurate we do not warrant that the data is complete or error free. The information is based upon our own researches and those collated from a number of external sources and is continually being augmented and updated by PBA. In no event shall PBA/DEFRA or Landmark be liable for any loss or damage including, without limitation, indirect or consequential loss or damage arising from the use of this data.

Radon Potential dataset Copyright Notice

Information supplied from a joint dataset compiled by The British Geological Survey and Public Health England.

Natural Resources Wales Copyright Notice

Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number 100019741. Crown Copyright and Database Right. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2019. Land & Property Services © Crown copyright and database right.

Report Version v53.0

Envirocheck®
LANDMARK INFORMATION GROUP®

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	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1		2	18	8
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 8	1		1	1
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 8		Yes		
Pollution Incidents to Controlled Waters	pg 8			1	3
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 9				1
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 9	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 9	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 9	Yes	n/a	n/a	n/a
Source Protection Zones					
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 10		1	20	59

Envirocheck®
LANDMARK INFORMATION GROUP®

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 19				2
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)	pg 19				2
Licensed Waste Management Facilities (Locations)	pg 19				9
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites	pg 22		1		2
Potentially Infilled Land (Non-Water)	pg 22				2
Potentially Infilled Land (Water)	pg 22		1		5
Registered Landfill Sites	pg 23				5
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites	pg 25				1
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					

Envirocheck®
LANDMARK INFORMATION GROUP®

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 26	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 26	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 31		1	1	8
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 33	Yes	n/a	n/a	n/a
Mining Instability	pg 33	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 33	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 33		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 33	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards				n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 34	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 35	1		8	33
Fuel Station Entries	pg 38	1		1	
Points of Interest - Commercial Services	pg 39			3	7
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 39			4	2
Points of Interest - Public Infrastructure	pg 40	3		5	3
Points of Interest - Recreational and Environmental	pg 41				2
Gas Pipelines					
Underground Electrical Cables					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland					
Areas of Adopted Green Belt	pg 42	1	1	1	
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves	pg 42				1
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 Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SW (N)	416	1	431050 562000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A12NE (NW)	420	1	430800 561800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SW (NW)	430	1	430950 561950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (NW)	452	1	430800 561850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (NW)	454	1	430850 561900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (NW)	487	1	430800 561900
1	**Discharge Consents** Operator: Ringway Infrastructure Services Limited Property Type: CONSTRUCTION OF BUILDINGS Location: Whitemoor Pool Bridges A184/A194 Junction, Wardley, Gateshead, Tyne And Wear, Ne36 0bz Authority: Environment Agency, North East Region Catchment Area: Tyne (Lower)/Team/Don Reference: Eprdp3926xe Permit Version: 1 Effective Date: 1st September 2010 Issued Date: 20th August 2010 Revocation Date: 22nd June 2012 Discharge Type: Trade Discharges - Site Drainage (Contaminated Surface Water, Not Waste Sites) Discharge Environment: Freshwater Stream/River Receiving Water: Highway Drain To Monkton Burn **Status: Surrendered under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A13SW (S)	153	2	431120 561381
2	**Discharge Consents** Operator: Redundant - Northumbrian Water Ltd Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Wardley (Romily Grove) P.S., Wardley Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: 235/1020 Permit Version: 1 Effective Date: 21st September 1989 Issued Date: 21st September 1989 Revocation Date: 10th June 1993 Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Don **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	236	2	430940 561420
3	**Discharge Consents** Operator: Northumbrian Water Ltd Property Type: Not Given Location: Wardley (Whitemare Pool) P.S., WARDLEY Authority: Environment Agency, North East Region Catchment Area: Tyne (Lower)/Team/Don Reference: 235/1021 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: 21st September 1989 Revocation Date: Not Supplied Discharge Type: Storm Sewage Discharge Environment: Freshwater Stream/River Receiving Water: Don **Status: Not Supplied** Positional Accuracy: Located by supplier to within 100m	A13SW (SW)	294	2	430930 561340

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	**Discharge Consents** Operator: Redundant - Northumbrian Water Ltd Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Wardley (Whitemare Pool) P.S., Wardley Authority: Environment Agency, North East Region Catchment Area: Tyne (Lower)/Team/Don Reference: 235/1021 Permit Version: 1 Effective Date: 21st September 1989 Issued Date: 21st September 1989 Revocation Date: 28th November 1995 Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Don **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	294	2	430930 561340
4	**Discharge Consents** Operator: Laverick Hall Farm Prop Man Ltd Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: Laverick Hall Farm, Laverick Lane, Newcastle Road, Tyne And Wear, Ne36 0by Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: Eprdb3093ww Permit Version: 1 Effective Date: 1st July 2015 Issued Date: 1st July 2015 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn **Status: New issued under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A14SW (E)	351	2	431597 561567
5	**Discharge Consents** Operator: Keenleyside N Mr & Mrs Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: The Horseshoe, Follonsby Terrace, West Boldon Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: 235/1848 Permit Version: 1 Effective Date: 4th July 2002 Issued Date: 4th July 2002 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A8NE (S)	356	2	431350 561200
5	**Discharge Consents** Operator: Henderson Mr Jw & Thompson Ms E Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Follonsby Tce, 10 Houses, Wardley, County Durham Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: 235/G/0104 Permit Version: 1 Effective Date: 21st April 1956 Issued Date: 21st April 1956 Revocation Date: 1st April 1993 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 10m	A8NE (SE)	382	2	431400 561200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	**Discharge Consents** Operator: Mr And Mrs M Walton Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Laverick Hall Cottage, West Boldon Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: 235/1606 Permit Version: 1 Effective Date: 15th April 1997 Issued Date: 15th April 1997 Revocation Date: 18th June 1997 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn Trib **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 10m	A14SW (E)	370	2	431600 561500
6	**Discharge Consents** Operator: Unknown, Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Laverick Hall Cottage, West Boldon Authority: Environment Agency, North East Region Catchment Area: Tyne (Lower)/Team/Don Reference: 235/F/0618 Permit Version: 1 Effective Date: 12th October 1964 Issued Date: 12th October 1964 Revocation Date: 30th September 1996 Discharge Type: Agriculture - Livestock Farming Discharge Environment: Freshwater Stream/River Receiving Water: Monckton Burn, Tributary Of **Status: Lapsed (under Environment Act 1995, Schedule 23)** Positional Accuracy: Located by supplier to within 100m	A14SW (E)	370	2	431600 561500
6	**Discharge Consents** Operator: Mr And Mrs M Walton Property Type: Undefined Or Other Location: Laverick Hall Cottage, WEST BOLDON Authority: Environment Agency, North East Region Catchment Area: Not Given Reference: 235/1617 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Unknown Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn Tributary **Status: Not Supplied** Positional Accuracy: Located by supplier to within 100m	A14SW (E)	371	2	431600 561495
6	**Discharge Consents** Operator: Mr And Mrs M Walton Property Type: Undefined Or Other Location: Laverick Hall Cottage, WEST BOLDON Authority: Environment Agency, North East Region Catchment Area: Not Given Reference: 235/1617 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Septic tank Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn Tributary **Status: Not Supplied** Positional Accuracy: Located by supplier to within 100m	A14SW (E)	376	2	431605 561495

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Discharge Consents** Operator: Ms Tracy Ann Wardle Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Laverick Hall Farm Cottage, West Boldon, Tyne & Wear Authority: Environment Agency, North East Region Catchment Area: Not Given Reference: 235/1617 Permit Version: 1 Effective Date: 18th June 1997 Issued Date: 18th June 1997 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn Trib **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A14SW (E)	376	2	431570 561420
7	**Discharge Consents** Operator: Mr And Mrs M Walton Property Type: Undefined Or Other Location: Laverick Hall Cottage, WEST BOLDON Authority: Environment Agency, North East Region Catchment Area: Not Given Reference: 235/1617 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Septic tank Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn Tributary **Status: Not Supplied** Positional Accuracy: Located by supplier to within 100m	A14SW (SE)	379	2	431570 561415
8	**Discharge Consents** Operator: Henderson Mr Jw & Thompson Ms E Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Follonsby Tce, Gateshead Authority: Environment Agency, North East Region Catchment Area: Tyne (Lower)/Team/Don Reference: 235/1374 Permit Version: 1 Effective Date: 1st April 1993 Issued Date: 1st April 1993 Revocation Date: 30th September 1996 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn **Status: Lapsed (under Environment Act 1995, Schedule 23)** Positional Accuracy: Located by supplier to within 100m	A8NE (S)	384	2	431300 561150
9	**Discharge Consents** Operator: Henderson Jw & Thompson E Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Follonsby Terrace No.S 1-10, Wardley, Gateshead Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: 235/1612 Permit Version: 1 Effective Date: 1st April 1997 Issued Date: 1st April 1997 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A8NE (S)	481	2	431300 561050

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	**Discharge Consents** Operator: Railton K Mr Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Follonsby Terrace No.S 1-10, Wardley, Gateshead Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: 235/1612 Permit Version: 1 Effective Date: 1st April 1997 Issued Date: 1st April 1997 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A8NE (S)	481	2	431300 561050
9	**Discharge Consents** Operator: The Occupier Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Follonsby Terrace No.S 1-10, Wardley, Gateshead Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: 235/1612 Permit Version: 1 Effective Date: 1st April 1997 Issued Date: 1st April 1997 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A8NE (S)	481	2	431300 561050
9	**Discharge Consents** Operator: Miss B Andersen Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Follonsby Terrace No.S 1-10, Wardley, Gateshead Authority: Environment Agency, North East Region Catchment Area: Not Given Reference: 235/1612 Permit Version: 1 Effective Date: 1st April 1997 Issued Date: 1st April 1997 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A8NE (S)	481	2	431300 561050
9	**Discharge Consents** Operator: Henderson Mr Jw & Thompson Ms E Property Type: Sewage Disposal Works - Other Location: Follonsby Terrace No.S 1-10, Wardley, Gateshead Authority: Environment Agency, North East Region Catchment Area: Not Given Reference: 235/1612* Permit Version: 1 Effective Date: 1st April 1997 Issued Date: 1st April 1997 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A8NE (S)	481	2	431300 561050

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	**Discharge Consents** Operator: Signmakers Limited Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Signmakers Ltd, White Mare Pool, Wardley, Tyne And Wear, Ne10 8yb Authority: Environment Agency, North East Region Catchment Area: Tyne (Lower)/Team/Don Reference: 235/A/0976 Permit Version: 1 Effective Date: 26th July 1983 Issued Date: 26th July 1983 Revocation Date: 4th November 1998 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn, Tributary Of **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A8NE (S)	529	2	431300 561000
10	**Discharge Consents** Operator: Signmakers Limited Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Signmakers Limited Septic Tank Signmakers Limited, Wardley, Gateshead, Tyne & Wear, Ne10 8yb Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: 235/1678 Permit Version: 1 Effective Date: 4th November 1998 Issued Date: 4th November 1998 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A8NE (S)	483	2	431260 561040
11	**Discharge Consents** Operator: Northumbrian Water Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Whitemare Pool Pumping Station, Wardley, Gateshead Authority: Environment Agency, North East Region Catchment Area: Tyne (Lower)/Team/Don Reference: 235/1390 Permit Version: 1 Effective Date: 28th November 1995 Issued Date: 28th November 1995 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Don **Status: New Consent, by Application (Water Resources Act 1991, Section 88)** Positional Accuracy: Located by supplier to within 10m	A8NW (S)	513	2	431030 561030
12	**Discharge Consents** Operator: Ibstock Bricks Property Type: Undefined Or Other Location: Red Barns Quarry, Wardley, Gateshead, Tyne And Wear Authority: Environment Agency, North East Region Catchment Area: Tyne (Lower)/Team/Don Reference: 235/1422 Permit Version: 1 Effective Date: 28th July 1993 Issued Date: 28th July 1993 Revocation Date: Not Supplied Discharge Type: Trade Discharge - Mineral Workings Discharge Environment: Freshwater Stream/River Receiving Water: Hebburn Hall Ponds **Status: New Consent, by Application (Water Resources Act 1991, Section 88)** Positional Accuracy: Located by supplier to within 100m	A18NW (N)	649	2	431050 562250

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
12	**Discharge Consents** Operator: Ibstock Bricks Property Type: Undefined Or Other Location: Red Barns Quarry, Wardley, Gateshead, Tyne And Wear Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: 235/1154 Permit Version: 1 Effective Date: 19th May 1992 Issued Date: 19th May 1992 Revocation Date: 28th July 1993 Discharge Type: Trade Discharge - Mineral Workings Discharge Environment: Freshwater Stream/River Receiving Water: Hebburn Hall Ponds Trib (Don) **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 10m	A18NW (N)	649	2	431050 562250
13	**Discharge Consents** Operator: Messrs T And W Alderslade Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: West Fellgate Farm Cottage, Wardley, Tyne And Wear Authority: Environment Agency, North East Region Catchment Area: Tyne (Lower)/Team/Don Reference: 235/0295 Permit Version: 1 Effective Date: 7th July 1986 Issued Date: 7th July 1986 Revocation Date: 19th September 2000 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Underground Water Receiving Water: Land **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A19SE (NE)	874	2	431900 562200
14	**Discharge Consents** Operator: Messrs T And W Alderslade Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: West Fellgate Farm, Wardley, Gateshead, Tyne & Wear Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: 235/1774 Permit Version: 1 Effective Date: 14th January 2000 Issued Date: 14th January 2000 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	913	2	431990 562150
15	**Discharge Consents** Operator: Messrs T And W Alderslade Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: West Fellgate Farm, Wardley, Gateshead Authority: Environment Agency, North East Region Catchment Area: Tyne (Lower)/Team/Don Reference: 235/1790 Permit Version: 1 Effective Date: 19th September 2000 Issued Date: 19th September 2000 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Underground Water Receiving Water: Groundwater **Status: Consent without application (Water Resources Act 1991, Schedule 10)** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	921	2	432000 562150

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	**Discharge Consents** Operator: Messrs T And W Alderslade Property Type: FARMS (NOT HOUSE)/CROP + ANIMAL REARING/PLANT NURSERY Location: West Fellgate Farm, Wardley, Gateshead, Tyne And Wear Authority: Environment Agency, North East Region Catchment Area: Tyne (Lower)/Team/Don Reference: 235/F/0108 Permit Version: 1 Effective Date: 29th July 1963 Issued Date: 29th July 1963 Revocation Date: 14th January 2000 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Monkton Burn **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A19SE (NE)	951	2	432000 562200
16	**Local Authority Pollution Prevention and Controls** Name: Four Acres Filling StationTopspot Services Ltd Location: Whitemare Pool, WARDLEY, NE10 8YB Authority: Gateshead Metropolitan Borough Council, Environmental Health Department Permit Reference: 4/98 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A13NE (NE)	0	3	431204 561578
17	**Local Authority Pollution Prevention and Controls** Name: Whitemare Pool Filling Station Location: Leam Lane, Wardley, GATESHEAD, Tyne and Wear, NE10 8YB Authority: South Tyneside Metropolitan Borough Council, Environmental Health Department Permit Reference: STC/014/1.2(d&e)/Pt B Dated: 27th September 1999 Process Type: Local Authority Pollution Prevention and Control Description: PG1/14 Petrol filling station **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A12SE (W)	492	4	430674 561384
18	**Local Authority Pollution Prevention and Controls** Name: R J Budge (Minning) Ltd Location: Medley Lane, Opencast Site, Sunniside, GATESHEAD, TYNE AND WEAR, NE Authority: Gateshead Metropolitan Borough Council, Environmental Health Department Permit Reference: 1/92 Dated: 5th June 1992 Process Type: Local Authority Air Pollution Control Description: PG3/5 Coal, coke and coal product processes **Status: Authorisation revoked** Positional Accuracy: Manually positioned within the geographical locality	A8SE (S)	935	3	431449 560620
	Nearest Surface Water Feature	A13SW (W)	68	-	431072 561570
19	**Pollution Incidents to Controlled Waters** Property Type: Pumping Station Overflow Location: White Mare Pool Authority: Environment Agency, North East Region Pollutant: Not Given Note: River Don Incident Date: 31st October 1994 Incident Reference: 235/002527 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Water Company Pumping Station Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	458	2	431000 561100
20	**Pollution Incidents to Controlled Waters** Property Type: Clay (General) Location: Redbarnes Quarry, WARDLEY, Tyne And Wear Authority: Environment Agency, North East Region Pollutant: Miscellaneous - Inert Suspended Solids Note: Pollution Found; No Fish Killed Incident Date: 13th November 1996 Incident Reference: NT960290 Catchment Area: Lower Tyne Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18NW (N)	686	2	431100 562300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
21	**Pollution Incidents to Controlled Waters** Property Type: Highway/Car Park Location: Mill Lane Hebburn Outside Monkton Works Authority: Environment Agency, North East Region Pollutant: Not Given Note: Don Incident Date: 31st August 1991 Incident Reference: 235/000840 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Transport Accident (Not Oil) Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18NE (N)	873	2	431200 562500
22	**Pollution Incidents to Controlled Waters** Property Type: Other General Premises Location: HEBBURN Authority: Environment Agency, North East Region Pollutant: Not Given Note: Pond Incident Date: 29th August 1991 Incident Reference: 235/000834 Catchment Area: Not Given Receiving Water: Pond/Lake Cause of Incident: Other Cause Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A18NE (N)	875	2	431300 562500
23	**Water Abstractions** Operator: Cookson Inns Limited Licence Number: 01/23/5/024 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North East Region Abstraction: Fish Farming Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 11 Yearly Rate (m3): 4148 Details: Monkton Beck; Status: Revoked; Lapsed Or Cancelled Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A19SE (NE)	893	2	432000 562100
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - Low Vulnerability Combined Vulnerability: Low Combined Aquifer: Productive Bedrock Aquifer, Unproductive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: <300 mm/year Baseflow Index: <40% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	A13NE (SE)	0	5	431197 561573
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13NE (SE)	0	5	431197 561573
	Superficial Aquifer Designations Aquifer Designation: Unproductive Strata	A13NE (SE)	0	5	431197 561573
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Flood Water Storage Areas None				
	Flood Defences None				
24	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 125.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A13SW (W)	68	6	431072 561570
25	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 964.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A13SE (SE)	281	6	431469 561439
26	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A13SE (SE)	302	6	431432 561339
27	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 52.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A13SE (SE)	304	6	431428 561331
28	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 55.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A13NW (NW)	312	6	430911 561764
29	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 229.6 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A13NW (NW)	312	6	430911 561764
30	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 57.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A13SE (SE)	324	6	431411 561282
31	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 47.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A8NE (SE)	348	6	431386 561230

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
32	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 26.5 Watercourse Level: Underground Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A8NE (SE)	362	6	431354 561196
33	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 14.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A8NE (S)	366	6	431333 561181
34	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 4.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A8NE (S)	378	6	431333 561168
35	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 169.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A8NE (S)	381	6	431331 561164
36	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 282.0 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18SE (N)	407	6	431221 562035
37	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 80.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8NE (S)	468	6	431222 561050
38	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 29.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18SW (NW)	476	6	430929 561993
39	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 76.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18SW (NW)	477	6	430929 561993
40	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8NE (S)	482	6	431254 561040

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
41	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 133.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A8NE (S)	483	6	431256 561039
42	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.8 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18SW (NW)	489	6	430862 561955
43	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 120.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18SW (NW)	490	6	430859 561954
44	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 225.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18SW (NW)	493	6	430935 562019
45	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 149.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A17SE (NW)	550	6	430784 561970
46	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A17SE (NW)	550	6	430791 561976
47	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 317.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A17SE (NW)	550	6	430791 561976
48	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 23.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A19SW (NE)	562	6	431636 562024
49	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A19SW (NE)	585	6	431654 562039

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
50	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A19SW (NE)	590	6	431655 562045
51	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A19SW (NE)	592	6	431655 562047
52	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A19SW (NE)	595	6	431656 562051
53	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 21.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A12NE (W)	599	6	430590 561792
54	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 134.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8NE (S)	621	6	431284 560904
55	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 108.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18SW (N)	631	6	431024 562222
56	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 36.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18SW (N)	650	6	430986 562228
57	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 187.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A17SE (NW)	653	6	430740 562067
58	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18NW (N)	658	6	431016 562248

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
59	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18NW (N)	658	6	431016 562248
60	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18NW (N)	661	6	431014 562251
61	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 358.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18SW (NW)	663	6	430923 562215
62	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 578.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A9NW (SE)	671	6	431674 561055
63	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 21.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18NW (N)	699	6	431060 562305
64	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 365.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18NW (N)	716	6	431065 562323
65	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 54.2 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18NW (N)	716	6	431065 562323
66	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 224.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A7NE (SW)	726	6	430574 561091
67	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 24.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	739	6	431353 560797

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
68	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A17SE (NW)	741	6	430579 562036
69	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 163.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A17SE (NW)	744	6	430573 562034
70	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 137.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	754	6	431338 560779
71	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 136.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18NW (N)	760	6	431086 562373
72	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A7SE (SW)	794	6	430686 560896
73	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 167.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A7SE (SW)	796	6	430689 560890
74	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 425.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A17NE (NW)	844	6	430698 562278
75	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.8 Watercourse Level: Underground Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A19SE (NE)	862	6	431967 562094
76	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 27.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A19SE (NE)	865	6	431969 562096

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
77	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 37.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18NW (N)	867	6	431152 562491
78	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 15.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 2	A18NW (N)	867	6	431152 562491
79	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 263.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 2	A18NW (N)	881	6	431145 562504
80	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.4 Watercourse Level: Underground Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A19SE (NE)	888	6	431980 562120
81	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 66.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	888	6	431383 560651
82	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 12.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	888	6	431383 560651
83	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	892	6	431368 560644
84	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 58.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A19SE (NE)	893	6	431985 562123
85	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 63.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	893	6	431372 560643

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
86	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	893	6	431372 560643
87	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	893	6	431373 560644
88	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 21.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	894	6	431369 560642
89	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 18.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	895	6	431345 560636
90	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	895	6	431349 560637
91	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	896	6	431327 560632
92	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 32.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	897	6	431325 560631
93	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 184.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A18NW (N)	905	6	431148 562528
94	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 25.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	927	6	431330 560601

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
95	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 2	A8SE (S)	929	6	431301 560595
96	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	930	6	431305 560595
97	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A8SE (S)	931	6	431304 560594
98	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.5 Watercourse Level: Underground Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A19SE (NE)	940	6	432005 562175
99	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A19SE (NE)	945	6	432009 562179
100	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 322.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Monkton Burn Catchment Name: Tyne Primacy: 1	A19SE (NE)	954	6	432016 562185
101	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 180.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A19SE (NE)	954	6	432016 562184
102	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A3NE (S)	986	6	431301 560538
103	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 37.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Tyne Primacy: 1	A3NE (S)	999	6	431288 560524

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
104	**Historical Landfill Sites** Licence Holder: Steetley Construction Materials Limited Location: Wardley Lane, Wardley Name: Steetley - Wardley Quarry Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD06205 First Input Date: 30th May 1984 Last Input Date: 31st March 1994 Specified Waste Type: Deposited Waste included Inert, Industrial, Commercial, Household and Special Waste, and Liquid Sludge EA Waste Ref: 0 Regis Ref: YO1/L/STE001 WRC Ref: 4500/0059 BGS Ref: Not Supplied Other Ref: TW 141 GH, GH 099, TW 109 GH, GH 082, 4500/0079	A17SE (NW)	531	2	430770 561933
105	**Historical Landfill Sites** Licence Holder: Common Services Committee Location: Wardley, Gateshead Name: Pelaw Quarry Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD06204 First Input Date: 28th November 1985 Last Input Date: 8th January 1993 Specified Waste Type: Deposited Waste included Inert, Industrial, Commercial and Household Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 4500/0143 BGS Ref: Not Supplied Other Ref: TWR 22, GH 047	A18NW (N)	784	2	431008 562378
106	**Licensed Waste Management Facilities (Landfill Boundaries)** Name: Wardley Quarry Landfill Site Licence Number: 67460 Location: Wardley Quarry Landfill Site, Wardley Lane, Gateshead, Tyne & Wear, NE10 8AA Licence Holder: Tarmac Aggregates Limited Authority: Environment Agency - North East Region, North East Area Site Category: Household, Commercial And Industrial Waste Landfills Max Input Rate: Not Supplied **Licence Status: Modified** Issued: 25th October 1989 Positional Accuracy: Positioned by the supplier Boundary Accuracy: As Supplied	A17SE (NW)	528	2	430772 561930
107	**Licensed Waste Management Facilities (Landfill Boundaries)** Name: Former Monkton Cokeworks Licence Number: 64000 Location: Monkton Cokeworks, Mill Lane, Hebburn, Tyne & Wear, NE31 Licence Holder: Homes And Community Agency Authority: Environment Agency - North East Region, North East Area Site Category: Other Landfill Sites Taking Special Waste Max Input Rate: Not Supplied **Licence Status: Closure** Issued: 20th August 1998 Positional Accuracy: Positioned by the supplier Boundary Accuracy: As Supplied	A23SE (N)	984	2	431303 562610
108	**Licensed Waste Management Facilities (Locations)** Licence Number: 101054 Location: Wardley Colliery Disposal Point, Follingsby, Gateshead, Tyne & Wear, NE10 8YR Operator Name: Sirius Remediation Ltd Operator Location: Not Supplied Authority: Environment Agency - North East Region, North East Area Site Category: HCI Waste TS + asbestos **Licence Status: Surrendered** Issued: 6th July 2009 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 22nd November 2010 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NE (SE)	620	2	431460 560960

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
109	**Licensed Waste Management Facilities (Locations)** Licence Number: 67460 Location: Wardley Quarry Landfill Site, Wardley Lane, Gateshead, Tyne & Wear, NE10 8AA Operator Name: Tarmac Aggregates Limited Operator Location: Not Supplied Authority: Environment Agency - North East Region, North East Area Site Category: Household, Commercial And Industrial Waste Landfills **Licence Status: Modified** Issued: 25th October 1989 Last Modified: 8th January 2016 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	714	2	430743 562148
110	**Licensed Waste Management Facilities (Locations)** Licence Number: 67575 Location: Welfare Garage, No 2 Colliery, Wardley, Gateshead, Tyne & Wear, NE10 8YE Operator Name: J W Coats & Sons Ltd Operator Location: Not Supplied Authority: Environment Agency - North East Region, North East Area Site Category: Metal Recycling Sites (Vehicle Dismantlers) **Licence Status: Transferred** Issued: 27th April 1995 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	728	2	430558 561990
111	**Licensed Waste Management Facilities (Locations)** Licence Number: 0 Location: Gateshead, Tyne & Wear Operator Name: Steetley Construction Materials Ltd Operator Location: Gibbet Lane, Shawell, Lutterworth, Leicestershire, LE17 6AA Authority: Environment Agency - North East Region, Northumbria Area Site Category: Household, Commercial And Industrial Waste Landfills **Licence Status: Surrendered** Issued: 7th October 1985 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 31st March 1994 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	781	2	430700 562200
111	**Licensed Waste Management Facilities (Locations)** Licence Number: 64527 Location: Gateshead, Tyne & Wear Operator Name: Steetley Construction Materials Ltd Operator Location: Not Supplied Authority: Environment Agency - North East Region, North East Area Site Category: Household, Commercial And Industrial Waste Landfills **Licence Status: Surrendered** Issued: 7th October 1985 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 31st March 1994 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	781	2	430700 562200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
111	**Licensed Waste Management Facilities (Locations)** Licence Number: 0 Location: Wardley, Gateshead, Tyne & Wear Operator Name: Steetley Construction Materials Ltd Operator Location: Gibbet Lane, Shawell, Lutterworth, Leicestershire, LE17 6AA Authority: Environment Agency - North East Region, Northumbria Area Site Category: Household, Commercial And Industrial Waste Landfills **Licence Status: Surrendered** Issued: 26th November 1984 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 31st March 1994 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	781	2	430700 562200
111	**Licensed Waste Management Facilities (Locations)** Licence Number: 64504 Location: Wardley, Gateshead, Tyne & Wear Operator Name: Steetley Construction Materials Ltd Operator Location: Not Supplied Authority: Environment Agency - North East Region, North East Area Site Category: Household, Commercial And Industrial Waste Landfills **Licence Status: Surrendered** Issued: 26th November 1984 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 31st March 1994 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	781	2	430700 562200
112	**Licensed Waste Management Facilities (Locations)** Licence Number: 405704 Location: Unit 16 F, Folingsby Avenue, Gateshead, NE10 8YF Operator Name: Northern Powergrid (Northeast) Limited Operator Location: Not Supplied Authority: Environment Agency - North East Region, North East Area Site Category: Storage of electrical insulating oils **Licence Status: Issued** Issued: 19th October 2018 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8SW (S)	885	2	431018 560649
113	**Licensed Waste Management Facilities (Locations)** Licence Number: 404646 Location: Wardley Coal Disposal Point, Follingsby Lane, Wardley, Gateshead, Tyne & Wear, NE10 8YR Operator Name: Highways England Operator Location: Not Supplied Authority: Environment Agency - North East Region, North East Area Site Category: Transfer Stations Taking Non-biodegradable Wastes **Licence Status: Issued** Issued: 20th December 2018 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8SE (S)	969	2	431363 560564
	Local Authority Landfill Coverage Name: South Tyneside Metropolitan Borough Council - Has no landfill data to supply		0	7	431197 561573
	Local Authority Landfill Coverage Name: Gateshead Metropolitan Borough Council - Has supplied landfill data		171	8	430965 561556

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
114	**Local Authority Recorded Landfill Sites** Location: Red Barns Reference: 3 Authority: Gateshead Metropolitan Borough Council, Development Control **Last Reported Status:** **Unknown** Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Positioned by the supplier Boundary Quality: Good	A13NW (NW)	14	8	431175 561600
115	**Local Authority Recorded Landfill Sites** Location: Wardley Quarry Reference: 21 Authority: Gateshead Metropolitan Borough Council, Development Control **Last Reported Status:** **Unknown** Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Positioned by the supplier Boundary Quality: Moderate	A17SE (NW)	529	8	430773 561932
116	**Local Authority Recorded Landfill Sites** Location: Pelaw Quarry Reference: 1 Authority: Gateshead Metropolitan Borough Council, Development Control **Last Reported Status:** **Unknown** Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Positioned by the supplier Boundary Quality: Moderate	A18NW (N)	771	8	431019 562369
117	**Potentially Infilled Land (Non-Water)** Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A17SE (NW)	539	-	430754 561932
118	**Potentially Infilled Land (Non-Water)** Bearing Ref: N Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A18NW (N)	760	-	431083 562373
119	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1862	A13SW (W)	192	-	430945 561558
120	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1862	A12NE (NW)	505	-	430763 561889
121	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1862	A12NE (NW)	513	-	430722 561851
122	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1952	A12SE (W)	608	-	430532 561496
123	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1862	A8SE (S)	858	-	431216 560660
124	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A19SE (NE)	934	-	431994 562180

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
125	**Registered Landfill Sites** Licence Holder: Redland Aggregates Ltd Licence Reference: TW 201 GH Site Location: Wardley Quarry, Wardley, Felling, GATESHEAD, Tyne and Wear, NE10 8AA Licence Easting: 430700 Licence Northing: 562200 Operator Location: Bradgate House, Groby, LEICESTER, Leicestershire, LE6 0FA Authority: Environment Agency - North East Region, Northumbria Area Site Category: Landfill Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Site Closed Dated: 25th October 1989 Preceded By Licence: TW 141 GH Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Construction And Demolition Wastes; Gulley Emptyings; Household + Commercial Waste; Industrial Wastes; Sewage Sludge & Screenings; Street Sweepings From Normal Clean.Ops Prohibited Waste: Asbestos Containing Waste; Drummed Waste; Liquid Waste Other Than Below; Spec.Waste (Epa'90:S62/1996 Regs)N.O.S	A17SE (NW)	781	2	430700 562200
125	**Registered Landfill Sites** Licence Holder: Steetley Construction Materials Ltd Licence Reference: TW 141 GH Site Location: Wardley Quarry, Felling, Gateshead, Tyne And Wear Licence Easting: 430700 Licence Northing: 562200 Operator Location: Gibbet Lane, Shawell, LUTTERWORTH, Leicestershire, LE17 6AA Authority: Environment Agency - North East Region, Northumbria Area Site Category: Landfill Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Licence known to be surrenderedSurrendered Dated: 7th October 1985 Preceded By Licence: Tw 109 Gh Superseded By Licence: TW 201 GH Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Contaminated Rubbish/Bags/Sacks; Empty Used Containers; Metal Scrap; Mineral Processing Wastes; Polymeric Material, Products/Scrap; Precip.Metal Hydroxide Filter Cake-C10; Precip.Metal Hydroxide Filter Cake-E10; Scrap Rubber; Slags Etc.; Tyne & Wear A, Renfrew A. *; Tyne & Wear B, Renfrew B. *; Tyne And Wear C, Renfrew C *; Tyne And Wear D I, Renfrew D I, *; Tyne And Wear D Ii, Renfrew D Ii, *; Tyne And Wear E, Renfrew E, *; Tyne And Wear F, Renfrew F *; Used Filter Materials $; Waste Treated Timber Prohibited Waste: Monomers,Precursors; Solvents Environment Agency must give specific authorisation for this waste to be acceptedWaste requires prior approval: Waste N.O.S	A17SE (NW)	781	2	430700 562200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
125	**Registered Landfill Sites** Licence Holder: Steetley Construction Materials Ltd Licence Reference: TW 109 GH Site Location: Wardley Quarry, Wardley, Felling, Gateshead, Tyne And Wear Licence Easting: 430700 Licence Northing: 562200 Operator Location: Gibbet Lane, Shawell, LUTTERWORTH, Leicestershire, LE17 6AA Authority: Environment Agency - North East Region, Northumbria Area Site Category: Landfill Max Input Rate: Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Licence known to be surrenderedSurrendered Dated: 1st May 1984 Preceded By Licence: Not Given Superseded By Licence: TW 201 GH Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Tyne & Wear A, Renfrew A. * Tyne & Wear B, Renfrew B. * Tyne And Wear C, Renfrew C * Tyne And Wear D I, Renfrew D I, * Tyne And Wear D Ii, Renfrew D Ii, * Tyne And Wear E, Renfrew E, * Environment Agency requires prior notification before waste can be acceptedWaste requires approval: Alkali Metal Oxides/Hydroxides $ Empty Used Containers Iron Compounds Metal Scrap Mineral Processing Wastes Polymeric Material, Products/Scrap Scrap Rubber (Including Tyres) Slag, Boiler/Flue Cleanings Tyne And Wear G * Tyne And Wear H * Used Filter Materials $ Prohibited Waste: Biodegradable/Putrescible Waste	A17SE (NW)	781	2	430700 562200
126	**Registered Landfill Sites** Licence Holder: Gateshead M.B.C. Licence Reference: TW9 22 GH Site Location: Pelaw Quarry Landfill Site, Wardley Lane, Pelaw, Gateshead, Tyne And Wear Licence Easting: 430900 Licence Northing: 562495 Operator Location: Central Depot, Park Road, GATESHEAD, Tyne and Wear, NE8 3HN Authority: Environment Agency - North East Region, Northumbria Area Site Category: Landfill Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st July 1989 Preceded By Licence: TW9 22 GH Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Drums Over 25 L.Cap To Be Open/Inspect Household + Commercial Waste Industrial Wastes Max.Waste Permitted By Licence-Stated Prohibited Waste: Liquid Wastes - In Drums Or Not Special Wastes	A18NW (N)	930	2	430900 562495

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Registered Landfill Sites				
126	Licence Holder: Gateshead M.B.C. Licence Reference: TW9 22 GH Site Location: Pelaw Quarry Landfill Site, Wardley Lane, Pelaw, Gateshead, Tyne And Wear Licence Easting: 430900 Licence Northing: 562500 Operator Location: Central Depot, Park Road, GATESHEAD, Tyne and Wear, NE8 3HN Authority: Environment Agency - North East Region, Northumbria Area Site Category: Landfill Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Record supersededSuperseded Dated: 1st November 1985 Preceded By Licence: Not Given Superseded By Licence: TW9 22 GH Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Tyne & Wear A, Renfrew A. * Tyne & Wear B, Renfrew B. * Tyne And Wear C, Renfrew C * Tyne And Wear D I, Renfrew D I, * Tyne And Wear D Ii, Renfrew D Ii, * Tyne And Wear E, Renfrew E, * Tyne And Wear F, Renfrew F * Environment Agency must give specific authorisation for this waste to be acceptedWaste requires prior approval: Waste N.O.S	A18NW (N)	934	2	430900 562500
	Registered Waste Treatment or Disposal Sites				
127	Licence Holder: J J & W A Coats Licence Reference: TW 400 GH Site Location: Welfare Garage No.2 Colliery, Wardley, Felling, GATESHEAD, Tyne and Wear, NE10 8YE Operator Location: 2 Wentworth Drive, Usworth, WASHINGTON, Tyne and Wear, NE37 1PX Authority: Environment Agency - North East Region, Northumbria Area Site Category: Scrapyard Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Operational as far as is knownOperational Dated: 27th April 1995 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Motor Vehicles & Assoc.Parts Prohibited Waste: Spec.Waste (Epa'90:S62/1996 Regs)N.O.S Waste N.O.S.	A17SE (NW)	593	2	430700 561950

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Pennine Middle Coal Measures Formation And South Wales Middle Coal Measures Formation (Undifferentiated)	A13NE (SE)	0	1	431197 561573
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SW (SW)	0	1	431186 561563
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NE (SE)	0	1	431197 561573
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NE (NE)	11	1	431235 561640
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13SE (S)	18	1	431197 561500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SW (SW)	102	1	431048 561500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (SE)	124	1	431340 561500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (SE)	135	1	431340 561512
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13SE (E)	173	1	431378 561500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13SE (E)	249	1	431454 561475
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13SE (SE)	333	1	431495 561383
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (SE)	333	1	431477 561352
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 30 - 45 mg/kg	A14NW (E)	360	1	431610 561641

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 30 - 45 mg/kg	A14SW (E)	364	1	431562 561431
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A12NE (W)	414	1	430735 561646
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 30 - 45 mg/kg	A12SE (W)	501	1	430638 561500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A12NE (W)	553	1	430595 561659
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14SW (SE)	577	1	431754 561337
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A12NW (NW)	726	1	430485 561869

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A17SE (NW)	742	1	430608 562069
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A18NW (N)	742	1	430997 562330
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A19SE (NE)	747	1	431900 561982
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A17SE (NW)	783	1	430585 562104
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A12NW (W)	785	1	430363 561677
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 30 - 45 mg/kg	A18NE (N)	800	1	431500 562382

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 30 - 45 mg/kg	A19SE (NE)	821	1	431937 562064
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A18NE (N)	850	1	431500 562436
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A18NW (N)	863	1	431099 562480
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A17SE (NW)	878	1	430534 562187
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 30 - 45 mg/kg	A19NW (NE)	907	1	431787 562347
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A9NE (SE)	963	1	432000 561000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A11SE (W)	974	1	430164 561500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A9NE (SE)	982	1	432000 560965
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A11NE (W)	988	1	430171 561756
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A17NW (NW)	992	1	430451 562265
128	**BGS Recorded Mineral Sites** Site Name: Red Barns Extension Location: Wardley, Gateshead, Tyne And Wear Source: British Geological Survey, National Geoscience Information Service Reference: 5486 Type: Opencast **Status: Ceased** Operator: Ibstock Brick Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Middle Coal Measures Formation Commodity: Common Clay and Shale Positional Accuracy: Unknown	A13NE (N)	176	1	431200 561800
129	**BGS Recorded Mineral Sites** Site Name: Red Barns Quarry Location: Wardley, Gateshead, Tyne And Wear Source: British Geological Survey, National Geoscience Information Service Reference: 4062 Type: Opencast **Status: Active** Operator: Ibstock Brick Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Middle Coal Measures Formation Commodity: Common Clay and Shale Positional Accuracy: Unknown	A18SW (N)	491	1	431100 562100

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
130	**BGS Recorded Mineral Sites** Site Name: Church Pit Location: Earsdon, Shiremoor, North Tyneside Source: British Geological Survey, National Geoscience Information Service Reference: 67106 Type: Underground **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Middle Coal Measures Formation Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	741	1	431645 562245
131	**BGS Recorded Mineral Sites** Site Name: Wardley Red Barns Location: Felling, Gateshead, Tyne And Wear Source: British Geological Survey, National Geoscience Information Service Reference: 4061 Type: Opencast **Status: Ceased** Operator: Ibstock Building Products Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Middle Coal Measures Formation Commodity: Coal - Opencast Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	774	1	430650 562150
131	**BGS Recorded Mineral Sites** Site Name: Wardley Red Barns Location: Felling, Gateshead, Tyne And Wear Source: British Geological Survey, National Geoscience Information Service Reference: 4061 Type: Opencast **Status: Ceased** Operator: Ibstock Building Products Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Middle Coal Measures Formation Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	774	1	430650 562150
132	**BGS Recorded Mineral Sites** Site Name: Wardley Colliery No.1 Location: Hebburn, Gateshead, Tyne And Wear Source: British Geological Survey, National Geoscience Information Service Reference: 5441 Type: Underground **Status: Ceased** Operator: British Coal - North East Area Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Coal Measures Group Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 100m	A8SE (S)	825	1	431300 560700
133	**BGS Recorded Mineral Sites** Site Name: Wardley Colliery No.2 Location: Hebburn, Gateshead, Tyne And Wear Source: British Geological Survey, National Geoscience Information Service Reference: 5440 Type: Underground **Status: Ceased** Operator: British Coal - North East Area Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Coal Measures Group Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	864	1	430400 562000
134	**BGS Recorded Mineral Sites** Site Name: Pelaw Location: Felling, Gateshead, Tyne And Wear Source: British Geological Survey, National Geoscience Information Service Reference: 5484 Type: Opencast **Status: Ceased** Operator: Gateshead M.B.C. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Middle Coal Measures Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 100m	A18NW (N)	934	1	430900 562500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
134	**BGS Recorded Mineral Sites** Site Name: Pelaw Location: Felling, Gateshead, Tyne And Wear Source: British Geological Survey, National Geoscience Information Service Reference: 5484 Type: Opencast **Status: Ceased** Operator: Gateshead M.B.C. Operator Location: Not Supplied Periodic Type: Quaternary Geology: Pelaw Clay Member, Tyne & Wear Glaciolacustrine Formation Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 100m	A18NW (N)	934	1	430900 562500
135	**BGS Recorded Mineral Sites** Site Name: Wardley Clay Pit Location: Wardley, Wardley, Gateshead, Tyne And Wear Source: British Geological Survey, National Geoscience Information Service Reference: 99197 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Middle Coal Measures Formation Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A17NW (NW)	994	1	430506 562317
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas 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.	A13NE (SE)	0	9	431197 561573
	Mining Instability Mining Evidence: Inconclusive Coal Mining Source: Ove Arup & Partners Boundary Quality: As Supplied	A13NE (SE)	0	-	431197 561573
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	431197 561573
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	431197 561573
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	168	1	431003 561448
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	431197 561573
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	431197 561573
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	142	1	431162 561378
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	158	1	431091 561391
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	160	1	431168 561773
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	206	1	431268 561327

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	211	1	431165 561827
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	246	1	431298 561297
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	431197 561573
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	431197 561573
	Radon Potential - Radon Affected Areas 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). Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	431197 561573
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	1	431197 561573

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
136	**Contemporary Trade Directory Entries** Name: Shell Whitemare Pool Location: Whitemare Pool, Gateshead, Tyne And Wear, NE10 8YB Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A13NE (NE)	0	-	431204 561578
137	**Contemporary Trade Directory Entries** Name: Priory Garages Location: White Mare Pool, Gateshead, Tyne and Wear, NE10 8YB Classification: Petrol Filling Stations - 24 Hour **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A12SE (SW)	373	-	430815 561362
138	**Contemporary Trade Directory Entries** Name: Shell Service Station Location: Whitemare Pool, Gateshead, Tyne And Wear, NE10 8YB Classification: Petrol Filling Stations **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SE (W)	479	-	430688 561382
138	**Contemporary Trade Directory Entries** Name: Four Aces Filling Station Location: White Mare Pool, GATESHEAD, Tyne and Wear, NE10 8YB Classification: Petrol Filling Stations **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SE (W)	479	-	430687 561384
138	**Contemporary Trade Directory Entries** Name: Wardley Garages Ltd Location: Sunderland Road, Gateshead, Tyne and Wear, NE10 8AU Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A12SE (W)	489	-	430671 561400
138	**Contemporary Trade Directory Entries** Name: Doorstep Print & Advertising Location: Palmers Bank, Sunderland Road, Gateshead, Tyne And Wear, NE10 8AU Classification: Printers - Glass, Metal, Plastics Etc. **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A12SE (W)	492	-	430674 561384
138	**Contemporary Trade Directory Entries** Name: Wardley M O T Centre Location: Sunderland Road, Gateshead, Tyne and Wear, NE10 8AU Classification: Mot Testing Centres **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SE (W)	492	-	430674 561384
138	**Contemporary Trade Directory Entries** Name: Shell Location: Follonsby Manor, White Mare Pool, Gateshead, Tyne and Wear, NE10 8YB Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A12SE (W)	492	-	430674 561384
139	**Contemporary Trade Directory Entries** Name: Auto Assist Location: Wardley House, Laverick Lane, Newcastle Road, West Boldon, East Boldon, Tyne and Wear, NE36 0BY Classification: Car Breakdown & Recovery Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (SE)	497	-	431606 561249
140	**Contemporary Trade Directory Entries** Name: North East Chemicals Ltd Location: 2, Stanton Close, Gateshead, Tyne and Wear, NE10 8UJ Classification: Chemicals - Distributors & Wholesalers **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SE (SW)	526	-	430664 561318
141	**Contemporary Trade Directory Entries** Name: Gazelle Transport Services Ltd Location: 14, Follingsby Avenue, Gateshead, NE10 8YF Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	535	-	431042 561003

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
142	**Contemporary Trade Directory Entries** Name: J W Coats & Sons Location: Welfare Garage, Wardley, Gateshead, NE10 8YE Classification: Commercial Vehicle Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	611	-	430686 561961
143	**Contemporary Trade Directory Entries** Name: Rentokil Pest Control Location: 17a Follingsby Av, Gateshead, Tyne And Wear, NE10 8YF Classification: Pest & Vermin Control **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A8SW (S)	723	-	431002 560819
144	**Contemporary Trade Directory Entries** Name: Hydro Dynamix Location: 65, West Crescent, Gateshead, Tyne and Wear, NE10 8AZ Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	759	-	430397 561718
145	**Contemporary Trade Directory Entries** Name: T S G Marine Location: 11, Blue Sky Way, Monkton Business Park South, Hebburn, NE31 2EQ Classification: Marine Engineering Equipment Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	760	-	431561 562315
145	**Contemporary Trade Directory Entries** Name: Europa Location: 10, Blue Sky Way, Monkton Business Park South, Hebburn, NE31 2EQ Classification: Freight Forwarders **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	760	-	431580 562305
146	**Contemporary Trade Directory Entries** Name: Bunzl Cleaning & Hygiene Supplies Location: Follaingbsy Avenue, Wardley, Gateshead, Tyne And Wear, NE10 8YS Classification: Cleaning Materials & Equipment **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A9NW (SE)	763	-	431819 561088
147	**Contemporary Trade Directory Entries** Name: Tom Welsh Location: Stanton, Gateshead, Tyne And Wear, NE10 8UG Classification: Cleaning Materials & Equipment **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A7NW (SW)	774	-	430450 561193
148	**Contemporary Trade Directory Entries** Name: R H Marine Uk Ltd Location: 9, Merchant Court, Monkton Business Park South, Hebburn, Tyne and Wear, NE31 2EX Classification: Marine Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	776	-	431757 562204
149	**Contemporary Trade Directory Entries** Name: Uk Coal Ltd Location: Wardley Colliery, Gateshead, Tyne & Wear, NE10 8YR Classification: Coal Mining **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A12NW (W)	798	-	430408 561874
150	**Contemporary Trade Directory Entries** Name: Blackburns Metals Location: Unit 16b, Follingsby Close, Gateshead, NE10 8YG Classification: Non-Ferrous Metals **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	805	-	430960 560746
151	**Contemporary Trade Directory Entries** Name: Select Control Systems Ltd Location: Unit 19i Follingsby Park, Gateshead, Tyne And Wear, NE10 8YF Classification: Control Panels **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A8SW (S)	822	-	431095 560701

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
152	**Contemporary Trade Directory Entries** Name: Oakfield'S Online Location: 3, Merchant Court, Monkton Business Park South, Hebburn, NE31 2EX Classification: Pharmaceutical Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	830	-	431773 562260
152	**Contemporary Trade Directory Entries** Name: Global Substation Solutions Ltd Location: 1, Merchant Court, Monkton Business Park South, Hebburn, NE31 2EX Classification: Electrical Engineers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	838	-	431748 562291
153	**Contemporary Trade Directory Entries** Name: Scholle I P N Uk Ltd Location: 12a, Follingsby Close, Gateshead, NE10 8YG Classification: Packaging Materials Manufacturers & Suppliers **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	836	-	430842 560757
154	**Contemporary Trade Directory Entries** Name: First Composites Location: 18c Follingsby Cl, Gateshead, Tyne And Wear, NE10 8YG Classification: Window Frame Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A8SW (S)	854	-	430992 560686
154	**Contemporary Trade Directory Entries** Name: Bastion Location: Unit 16e, Follingsby Close, Gateshead, Tyne and Wear, NE10 8YG Classification: Joinery Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	854	-	430992 560686
154	**Contemporary Trade Directory Entries** Name: Bluebay Building Products Location: 16G Follingsby Av, Gateshead, Tyne and Wear, NE10 8YF Classification: Builders' Merchants **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8SW (S)	854	-	431022 560680
154	**Contemporary Trade Directory Entries** Name: Fila Uk Ltd Location: Fila Ho,Follingsby Clo,Follingsby Park, Gateshead, Tyne & Wear, NE10 8YG Classification: Sports Equipment Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A8SW (S)	866	-	431031 560666
154	**Contemporary Trade Directory Entries** Name: Briggs Equipment Uk Location: 16f, Follingsby Avenue, GATESHEAD, Tyne and Wear, NE10 8YF Classification: Fork Lift Trucks **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	877	-	431014 560658
154	**Contemporary Trade Directory Entries** Name: Crane Express Services Ltd Location: 19b Follingsby Park,White Rose Way, Gateshead, Tyne And Wear, NE10 8YF Classification: Crane Manufacturers **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A8SW (S)	885	-	431018 560649
155	**Contemporary Trade Directory Entries** Name: Ajs Recovery Location: 40, Whitemere Gardens, Gateshead, Tyne and Wear, NE10 8BE Classification: Car Breakdown & Recovery Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	858	-	430288 561672
156	**Contemporary Trade Directory Entries** Name: Turn Key Air Conditioning Location: 2 Apollo Court,Koppers Way, Monkton Business Park South, Hebburn, Tyne And Wear, NE31 2ES Classification: Air Conditioning & Refrigeration Contractors **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A19NW (NE)	876	-	431706 562366

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
157	**Contemporary Trade Directory Entries** Name: Queensbury Shelters Ltd Location: 16a, Follingsby Close, Gateshead, Tyne and Wear, NE10 8YG Classification: Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	882	-	430912 560681
158	**Contemporary Trade Directory Entries** Name: Invate Location: 9, Apollo Court, Koppers Way, Monkton Business Park South, HEBBURN, Tyne and Wear, NE31 2ES Classification: Computer Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	889	-	431720 562372
158	**Contemporary Trade Directory Entries** Name: 21 Degrees Ltd Location: 10 Apollo Court, Koppers Way, Monkton Business Park South, Hebburn, NE31 2ES Classification: Air Conditioning & Refrigeration Contractors **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	912	-	431759 562374
158	**Contemporary Trade Directory Entries** Name: Wares Teeside Location: 10, Apollo Court, Koppers Way, Monkton Business Park South, Hebburn, Tyne and Wear, NE31 2ES Classification: Electrical Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	915	-	431757 562379
159	**Contemporary Trade Directory Entries** Name: Household Advertising Ltd Location: 28, Manor Gardens, Gateshead, Tyne and Wear, NE10 8UZ Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	918	-	430274 561864
160	**Contemporary Trade Directory Entries** Name: A Four Business Equipment Ltd Location: 61, Follingsby Drive, Gateshead, Tyne and Wear, NE10 8YH Classification: Photocopiers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SW (W)	930	-	430257 561248
161	**Contemporary Trade Directory Entries** Name: Rentokil Property Care Location: Follingsby Ave, Gateshead, Tyne and Wear, NE10 8YF Classification: Damp & Dry Rot Control **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A8SW (S)	936	-	431010 560599
162	**Contemporary Trade Directory Entries** Name: Summit Platforms Location: 15c, Follingsby Close, Gateshead, NE10 8YG Classification: Crane Hire, Sales & Service **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	955	-	430877 560615
163	**Contemporary Trade Directory Entries** Name: Afi Aerial Platforms Location: 16, Follingsby Drive, Gateshead, Tyne and Wear, NE10 8YH Classification: Lifting Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (SW)	988	-	430264 561086
164	**Fuel Station Entries** Name: Shell Whitemare Pool Location: Leam Lane , , Gateshead, Tyne And Wear, NE10 8YB Brand: SHELL Premises Type: Petrol Station **Status: Open** Positional Accuracy: Manually positioned to the address or location	A13NE (NE)	0	-	431204 561578
165	**Fuel Station Entries** Name: Four Aces Filling Station Location: Newcastle Road , Wardley , Gateshead, Tyne And Wear, NE10 8YB Brand: Jet Premises Type: Petrol Station **Status: Open** Positional Accuracy: Manually positioned to the address or location	A12SE (W)	491	-	430674 561387

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
166	**Points of Interest - Commercial Services** Name: C & P Location: 9 Follonsby Terrace, West Boldon, East Boldon, NE36 0BZ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SE (S)	267	10	431196 561250
167	**Points of Interest - Commercial Services** Name: Four Aces Filling Station Location: White Mare Pool, Gateshead, NE10 8YB Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A12SE (W)	491	10	430674 561387
167	**Points of Interest - Commercial Services** Name: Car Wash Location: White Mare Pool, Gateshead, NE10 8YB Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A12SE (W)	491	10	430674 561387
168	**Points of Interest - Commercial Services** Name: Gazelle Transport Services Ltd Location: Unit 14, Follingsby Avenue, Gateshead, NE10 8YF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A8NW (S)	524	10	431064 561009
169	**Points of Interest - Commercial Services** Name: Scrap Yard Location: NE10 Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A17SE (NW)	584	10	430712 561950
169	**Points of Interest - Commercial Services** Name: Scrap Yard Location: Not Supplied Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	585	10	430713 561952
170	**Points of Interest - Commercial Services** Name: Europa Location: 10 Blue Sky Way, Monkton Business Park South, Hebburn, NE31 2EQ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19NW (NE)	756	10	431580 562301
171	**Points of Interest - Commercial Services** Name: A P E C Environmental Location: 7 Apollo Court, Koppers Way, Monkton Business Park South, Hebburn, NE31 2ES Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A19NW (NE)	858	10	431675 562365
172	**Points of Interest - Commercial Services** Name: Ajs Recovery Location: 40 Whitemere Gardens, Gateshead, NE10 8BE Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A12NW (W)	858	10	430288 561672
173	**Points of Interest - Commercial Services** Name: Nichol Associates Location: 1 Apollo Court, Koppers Way, Monkton Business Park South, Hebburn, NE31 2ES Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A19NW (NE)	886	10	431760 562341
174	**Points of Interest - Manufacturing and Production** Name: Clay Pit Location: NE10 Category: Extractive Industries Class Code: Sand, Gravel and Clay Extraction and Merchants Positional Accuracy: Positioned to an adjacent address or location	A18SW (N)	367	10	431122 561977

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
175	**Points of Interest - Manufacturing and Production** Name: Clay Pit Location: NE10 Category: Extractive Industries Class Code: Sand, Gravel and Clay Extraction and Merchants Positional Accuracy: Positioned to an adjacent address or location	A18SW (NW)	413	10	430969 561944
176	**Points of Interest - Manufacturing and Production** Name: Works Location: NE10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A8NE (S)	490	10	431221 561029
177	**Points of Interest - Manufacturing and Production** Name: Clay Pit Location: NE10 Category: Extractive Industries Class Code: Sand, Gravel and Clay Extraction and Merchants Positional Accuracy: Positioned to an adjacent address or location	A18SW (N)	499	10	431117 562113
178	**Points of Interest - Manufacturing and Production** Name: Clay Pit Location: NE10 Category: Extractive Industries Class Code: Sand, Gravel and Clay Extraction and Merchants Positional Accuracy: Positioned to an adjacent address or location	A18SW (NW)	511	10	430974 562067
179	**Points of Interest - Manufacturing and Production** Name: Monkton Business Park Location: NE31 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A19NW (N)	985	10	431562 562557
180	**Points of Interest - Public Infrastructure** Name: Shell Whitemare Pool Location: White Mare Pool, Gateshead, NE10 8YB Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A13NE (NE)	0	10	431204 561578
180	**Points of Interest - Public Infrastructure** Name: Shell Whitemare Pool Location: Whitemare, Pool, Gateshead, NE10 8YB Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A13NE (NE)	0	10	431204 561578
180	**Points of Interest - Public Infrastructure** Name: Shell Whitemare Pool Location: Whitemare Pool, Gateshead, NE10 8YB Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A13NE (NE)	0	10	431204 561578
181	**Points of Interest - Public Infrastructure** Name: Shell Service Station Location: Whitemare Pool, Gateshead, NE10 8YB Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A12SE (W)	479	10	430688 561382
181	**Points of Interest - Public Infrastructure** Name: Four Aces Filling Station Location: White Mare Pool, Gateshead, NE10 8YB Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A12SE (W)	479	10	430687 561384
181	**Points of Interest - Public Infrastructure** Name: Four Aces Filling Station Location: White Mare Pool, Gateshead, NE10 8YB Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A12SE (W)	491	10	430674 561387
181	**Points of Interest - Public Infrastructure** Name: Penny Petroleum Location: White Mare Pool, Gateshead, NE10 8YB Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A12SE (W)	493	10	430672 561386

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
181	**Points of Interest - Public Infrastructure** Name: Four Aces Filling Station Location: White Mare Pool, Gateshead, NE10 8YB Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A12SE (W)	493	10	430672 561386
182	**Points of Interest - Public Infrastructure** Name: Refuse Tip Location: NE10 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A18NW (N)	721	10	431013 562314
183	**Points of Interest - Public Infrastructure** Name: Refuse Tip Location: NE10 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	754	10	430750 562205
184	**Points of Interest - Public Infrastructure** Name: Refuse Tip Location: NE10 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A17SW (NW)	940	10	430450 562191
185	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	871	10	430311 561825
185	**Points of Interest - Recreational and Environmental** Name: Playground Location: Manor Gardens, NE10 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	871	10	430311 561824

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
186	**Areas of Adopted Green Belt** Authority: South Tyneside Metropolitan Borough Council, Planning Department Plan Name: Core Strategy **Status:** **Adopted** Plan Date: 30th June 2007	A13NE (SE)	0	7	431197 561573
187	**Areas of Adopted Green Belt** Authority: Gateshead Metropolitan Borough Council, Development Control Plan Name: Core Strategy And Urban Core Plan **Status:** **Adopted** Plan Date: 26th March 2015	A13SW (W)	171	8	430965 561559
188	**Areas of Adopted Green Belt** Authority: South Tyneside Metropolitan Borough Council, Planning Department Plan Name: Core Strategy **Status:** **Adopted** Plan Date: 30th June 2007	A13SW (S)	261	7	431161 561258
189	**Local Nature Reserves** Name: Pelaw Quarry Pond Multiple Area: N Area (m2): 52248.31 Source: Natural England Designation Date: 26th January 2003	A18NW (N)	771	12	431031 562371

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
South Tyneside Metropolitan Borough Council - Neighbourhood Services	December 2014	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
City of Newcastle upon Tyne Council - Environmental Health Department	November 2017	Annual Rolling Update
Gateshead Metropolitan Borough Council - Environmental Health Department	October 2017	Annual Rolling Update
Discharge Consents		
Environment Agency - North East Region	April 2019	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - North East Region	March 2013	Annual Rolling Update
Integrated Pollution Controls		
Environment Agency - North East Region	October 2008	Variable
Integrated Pollution Prevention And Control		
Environment Agency - North East Region	April 2019	Quarterly
Local Authority Integrated Pollution Prevention And Control		
North Tyneside Metropolitan Borough Council - Environmental Health Department	April 2014	Variable
Gateshead Metropolitan Borough Council - Environmental Health Department	February 2013	Variable
City of Newcastle upon Tyne Council - Environmental Health Department	June 2013	Variable
Sunderland City Metropolitan Borough Council - Environmental Health Department	May 2016	Variable
South Tyneside Metropolitan Borough Council - Environmental Health Department	September 2012	Variable
Local Authority Pollution Prevention and Controls		
North Tyneside Metropolitan Borough Council - Environmental Health Department	April 2014	Annual Rolling Update
City of Newcastle upon Tyne Council - Environmental Health Department	January 2015	Not Applicable
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	Variable
City of Newcastle upon Tyne Council - Environmental Health Department	January 2015	Variable
Sunderland City Metropolitan Borough Council - Environmental Health Department	May 2016	Variable
Gateshead Metropolitan Borough Council - Environmental Health Department	October 2014	Variable
South Tyneside Metropolitan Borough Council - Environmental Health Department	September 2012	Variable
Nearest Surface Water Feature		
Ordnance Survey	January 2019	
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	Annual Rolling Update
Prosecutions Relating to Controlled Waters		
Environment Agency - North East Region	March 2013	Annual Rolling Update
Registered Radioactive Substances		
Environment Agency - North East Region	June 2016	
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	April 2019	Quarterly
Environment Agency - North East Region - Northumbria Area	April 2019	Quarterly

Data Currency

Agency & Hydrological	Version	Update Cycle
Water Abstractions Environment Agency - North East Region	April 2019	Quarterly
Water Industry Act Referrals Environment Agency - North East Region	October 2017	Quarterly
Groundwater Vulnerability Map Environment Agency - Head Office	June 2018	Annually
Bedrock Aquifer Designations Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations Environment Agency - Head Office	January 2018	Annually
Source Protection Zones Environment Agency - Head Office	January 2019	Quarterly
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	May 2019	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	May 2019	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	May 2019	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	May 2019	Quarterly
Flood Defences Environment Agency - Head Office	May 2019	Quarterly
OS Water Network Lines Ordnance Survey	January 2019	Quarterly
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water Suitability Environment Agency - Head Office	October 2013	Annually
BGS Groundwater Flooding Susceptibility 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	July 2018	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	July 2018	Quarterly
Environment Agency - North East Region - Northumbria Area	July 2018	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - North East Region - North East Area	April 2019	Quarterly
Environment Agency - North East Region - Northumbria Area	April 2019	Quarterly
Local Authority Landfill Coverage		
City of Newcastle upon Tyne Council - Environmental Health Department	May 2000	Not Applicable
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		
City of Newcastle upon Tyne Council - Environmental Health Department	May 2000	Not Applicable
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	April 2018	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		
City of Newcastle upon Tyne Council	February 2016	Variable
Gateshead Metropolitan Borough Council - Development Control	February 2016	Variable
North Tyneside Metropolitan Borough Council - Development Function	February 2016	Variable
South Tyneside Metropolitan Borough Council - Planning Department	February 2016	Variable
Sunderland City Metropolitan Borough Council - Planning	February 2016	Variable
Planning Hazardous Substance Consents		
City of Newcastle upon Tyne Council	February 2016	Variable
Gateshead Metropolitan Borough Council - Development Control	February 2016	Variable
North Tyneside Metropolitan Borough Council - Development Function	February 2016	Variable
South Tyneside Metropolitan Borough Council - Planning Department	February 2016	Variable
Sunderland City Metropolitan Borough Council - Planning	February 2016	Variable

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	Annually
BGS Recorded Mineral Sites		
British Geological Survey - National Geoscience Information Service	April 2019	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	Annual Rolling Update
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	January 2019	Annually
Potential for Compressible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas		
British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures		
British Geological Survey - National Geoscience Information Service	July 2011	Annually

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	April 2019	Quarterly
Fuel Station Entries Catalist Ltd - Experian	May 2019	Quarterly
Gas Pipelines National Grid	July 2014	
Points of Interest - Commercial Services PointX	November 2018	Quarterly
Points of Interest - Education and Health PointX	November 2018	Quarterly
Points of Interest - Manufacturing and Production PointX	November 2018	Quarterly
Points of Interest - Public Infrastructure PointX	November 2018	Quarterly
Points of Interest - Recreational and Environmental PointX	November 2018	Quarterly
Underground Electrical Cables National Grid	December 2015	

Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	August 2018	Bi-Annually
Areas of Adopted Green Belt		
City of Newcastle upon Tyne Council	March 2019	As notified
Gateshead Metropolitan Borough Council - Development Control	March 2019	As notified
North Tyneside Metropolitan Borough Council	March 2019	As notified
South Tyneside Metropolitan Borough Council - Planning Department	March 2019	As notified
Sunderland City Metropolitan Borough Council - Planning	March 2019	As notified
Areas of Unadopted Green Belt		
City of Newcastle upon Tyne Council	March 2019	As notified
Gateshead Metropolitan Borough Council - Development Control	March 2019	As notified
North Tyneside Metropolitan Borough Council	March 2019	As notified
South Tyneside Metropolitan Borough Council - Planning Department	March 2019	As notified
Sunderland City Metropolitan Borough Council - Planning	March 2019	As notified
Areas of Outstanding Natural Beauty		
Natural England	June 2019	Bi-Annually
Environmentally Sensitive Areas		
Natural England	January 2017	
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Natural England	March 2019	Bi-Annually
Marine Nature Reserves		
Natural England	January 2018	Bi-Annually
National Nature Reserves		
Natural England	June 2019	Bi-Annually
National Parks		
Natural England	April 2017	Bi-Annually
Nitrate Vulnerable Zones		
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	October 2015	
Ramsar Sites		
Natural England	April 2019	Bi-Annually
Sites of Special Scientific Interest		
Natural England	March 2019	Bi-Annually
Special Areas of Conservation		
Natural England	June 2019	Bi-Annually
Special Protection Areas		
Natural England	April 2019	Bi-Annually

Data Suppliers

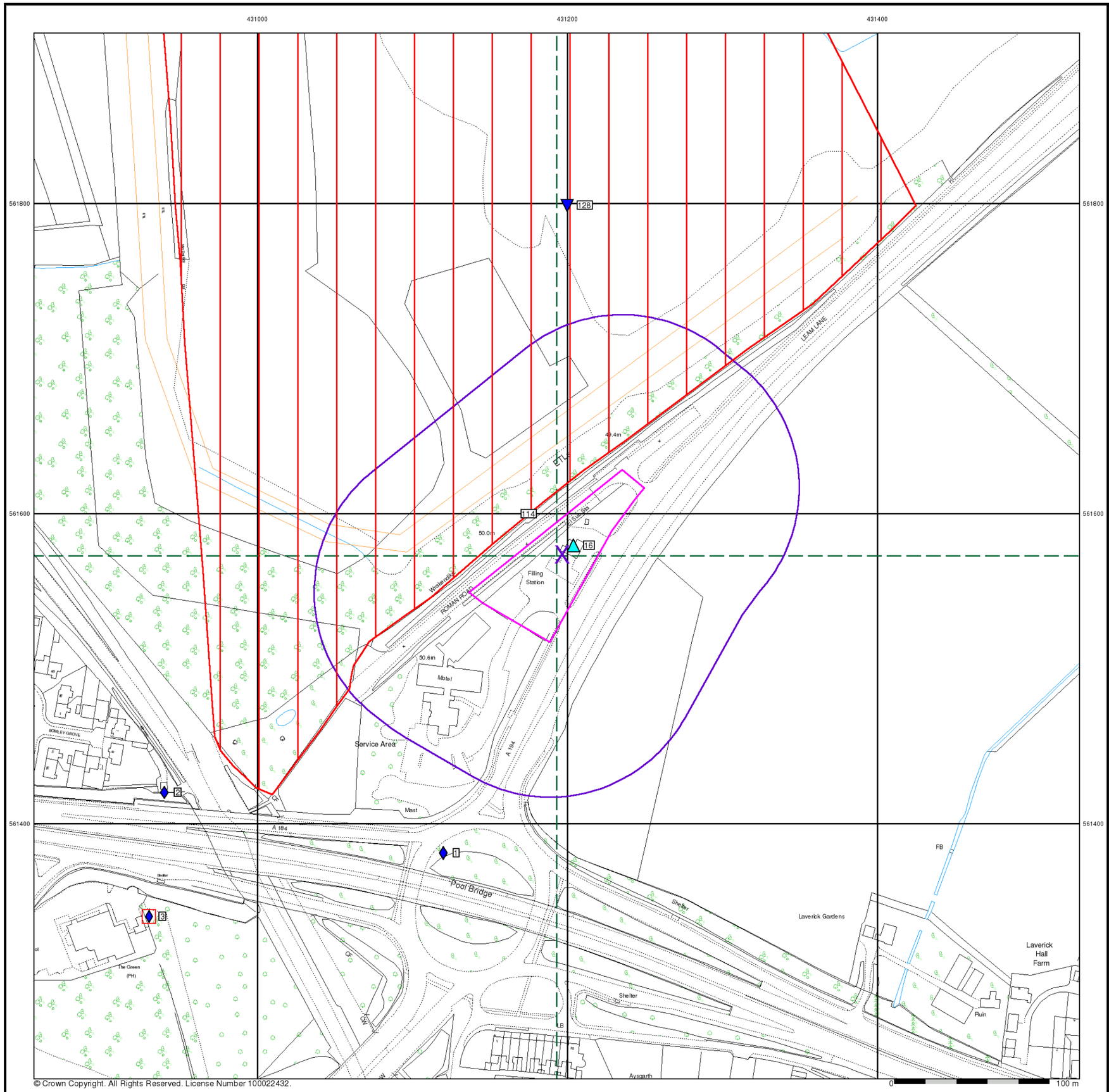
A selection of organisations who provide data within this report

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** British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	**Gateshead Metropolitan Borough Council - Environmental Health Department** Civic Centre, Regent Street, Gateshead, Tyne And Wear, NE8 1HH	Telephone: 0191 433 3000 Fax: 0191 477 4827 Website: www.gateshead.gov.uk
4	**South Tyneside Metropolitan Borough Council - Environmental Health Department** Central Library Building, Prince George Square, South Shields, Tyne And Wear, NE33 2PE	Telephone: 0191 427 1717 Fax: 0191 427 7171 Website: www.s-tyneside-mbc.gov.uk
5	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
6	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
7	**South Tyneside Metropolitan Borough Council - Planning Department** Town Hall & Civic Offices, Westoe Road, South Shields, Tyne & Wear, NE33 2RL	Telephone: 0191 427 1717 Fax: 0191 427 7171 Website: www.s-tyneside-mbc.gov.uk
8	**Gateshead Metropolitan Borough Council - Development Control** Civic Centre, Regent Street, Gateshead, Tyne & Wear, NE8 1HH	Telephone: 0191 477 1011 Fax: 0191 478 3495 Website: www.gateshead.gov.uk
9	**The Coal Authority - Property Searches** 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
10	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
11	**Sunderland City Metropolitan Borough Council - Planning** PO Box 107, Civic Centre, Sunderland, Tyne & Wear, SR2 7DN	Telephone: 0191 553 1000 Fax: 0191 553 1099 Website: www.sunderland.gov.uk
12	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

Envirocheck®

LANDMARK INFORMATION GROUP®

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

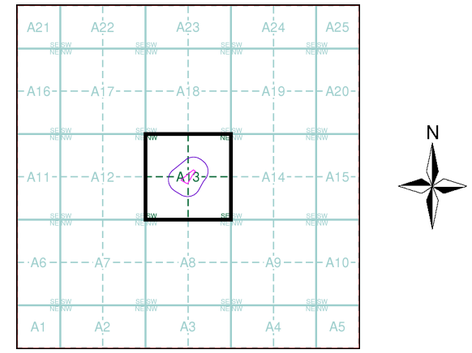
Geological

- 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



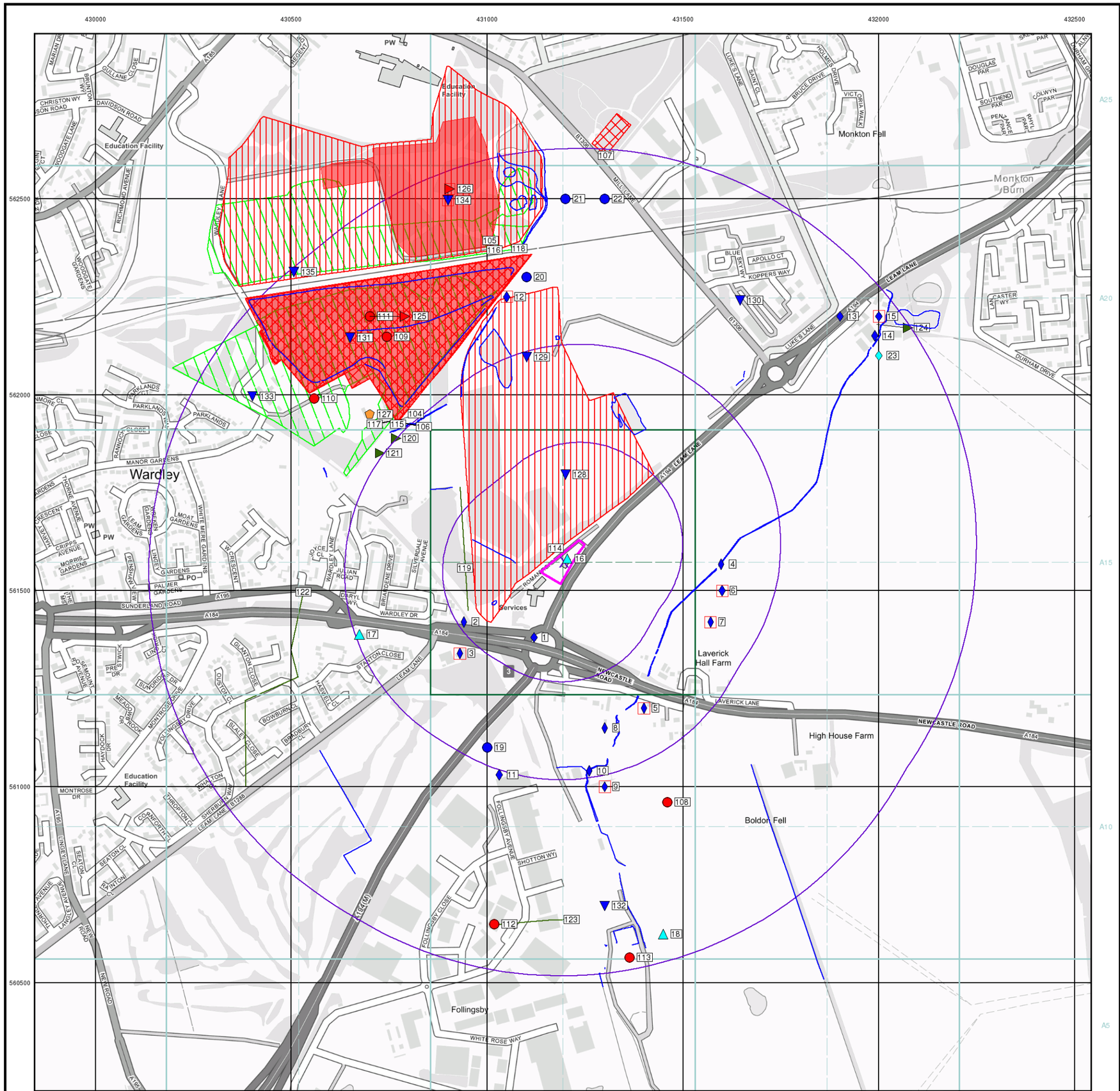
Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Plot Buffer (m):	100

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

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



Envirocheck®

LANDMARK INFORMATION GROUP®

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

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

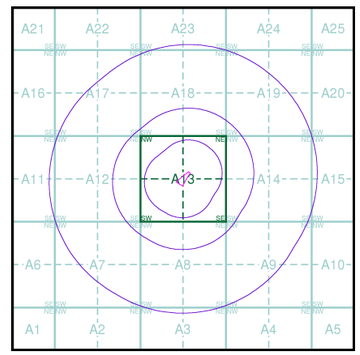
Geological

- 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 - Slice A



Order Details

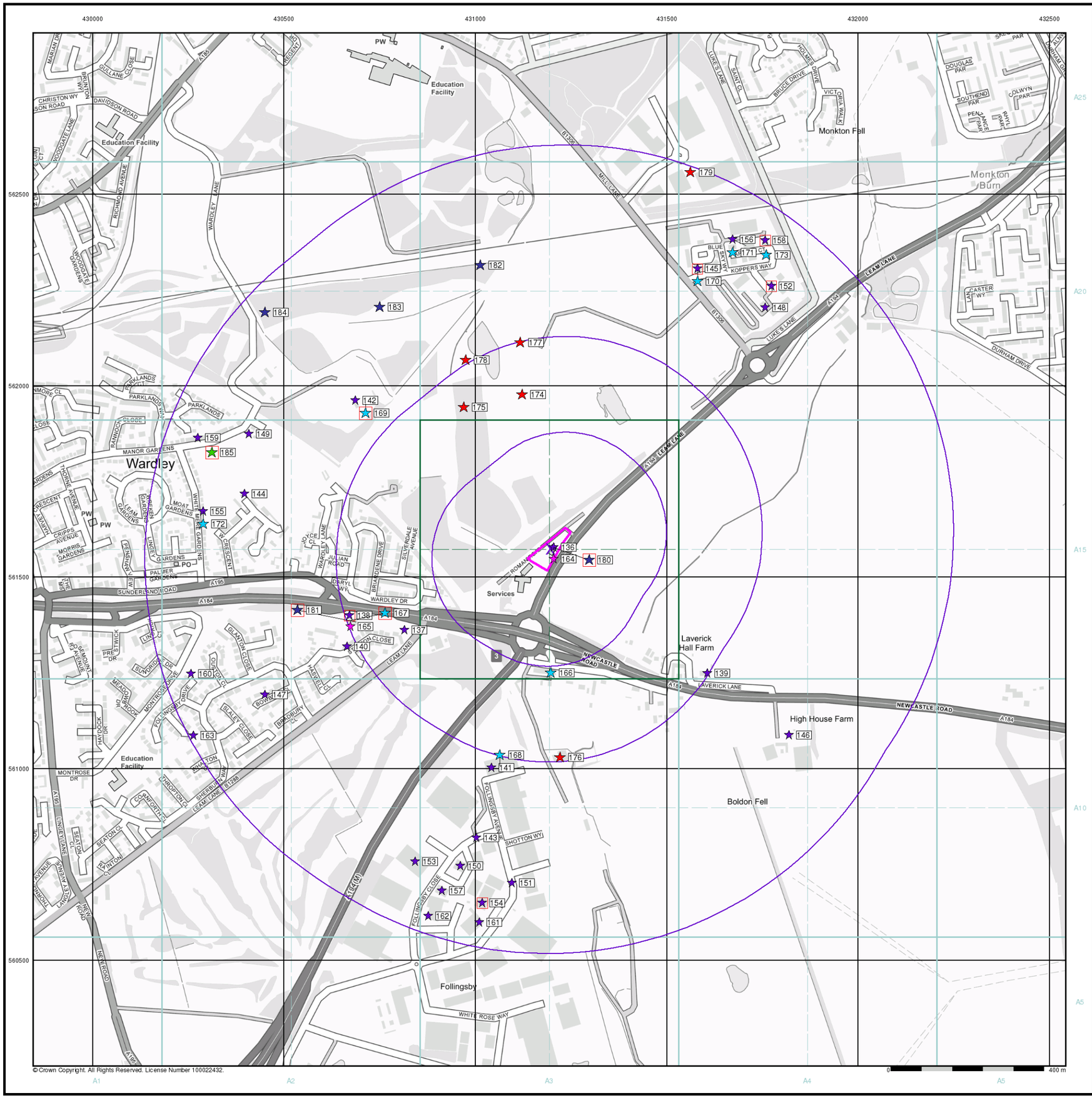
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Industrial Land Use Map

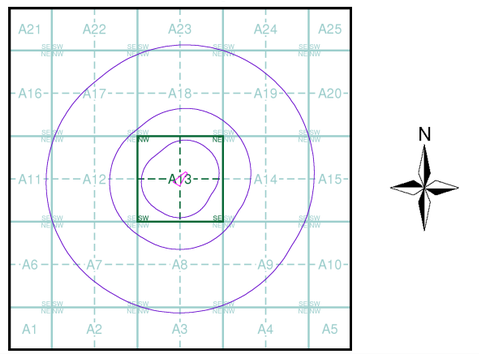
General

- 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:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

Envirocheck®

LANDMARK INFORMATION GROUP®

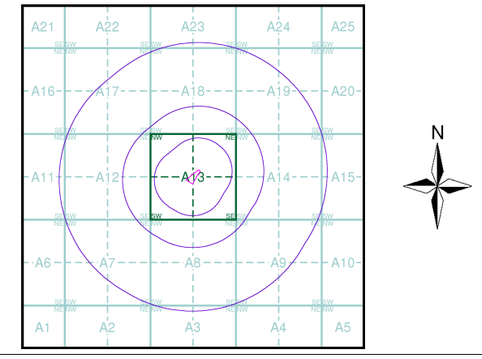
General

- 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

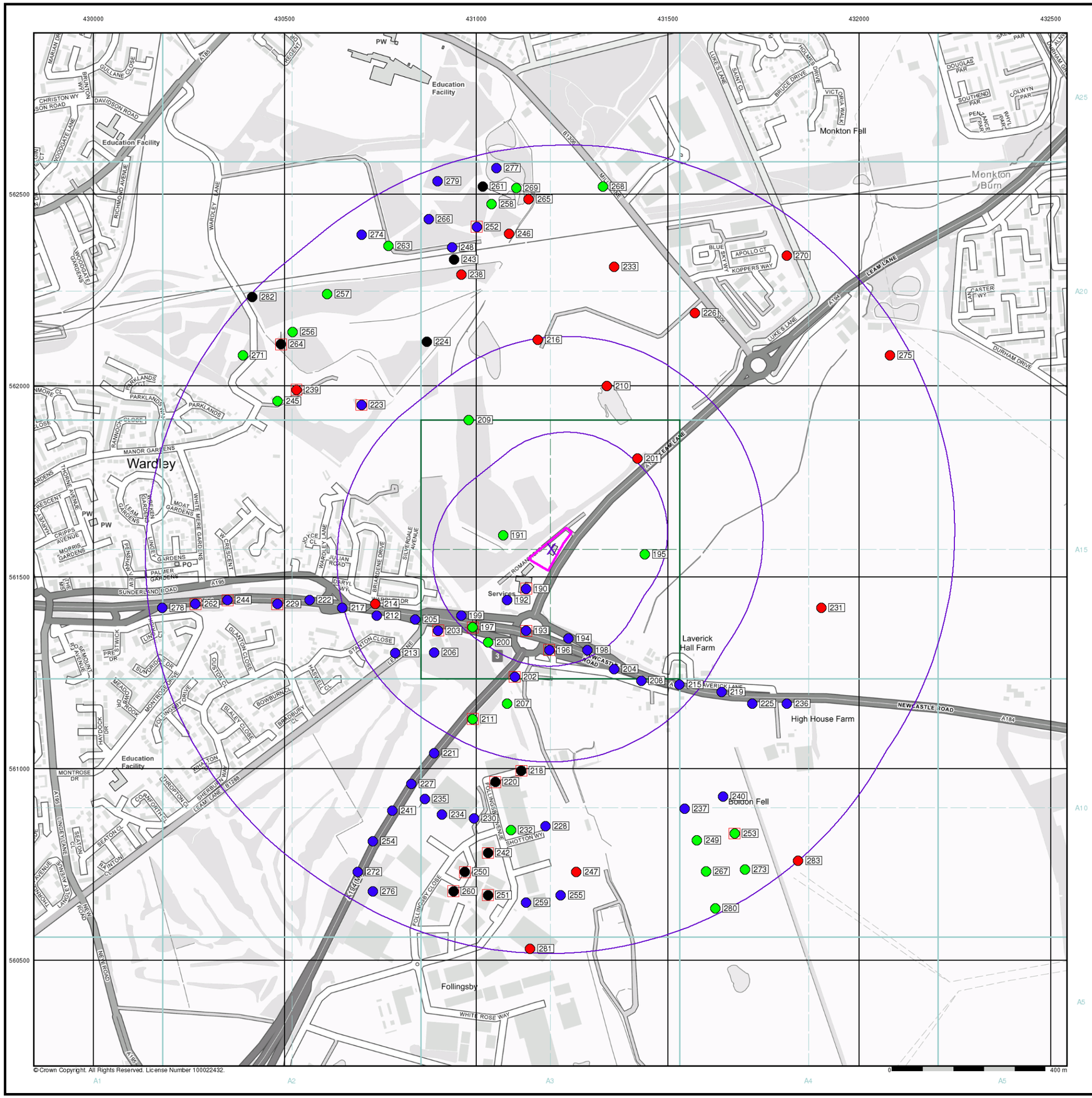
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

General

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

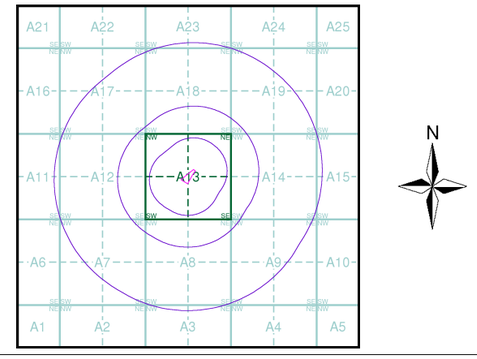
Agency and Hydrological (Boreholes)

- 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

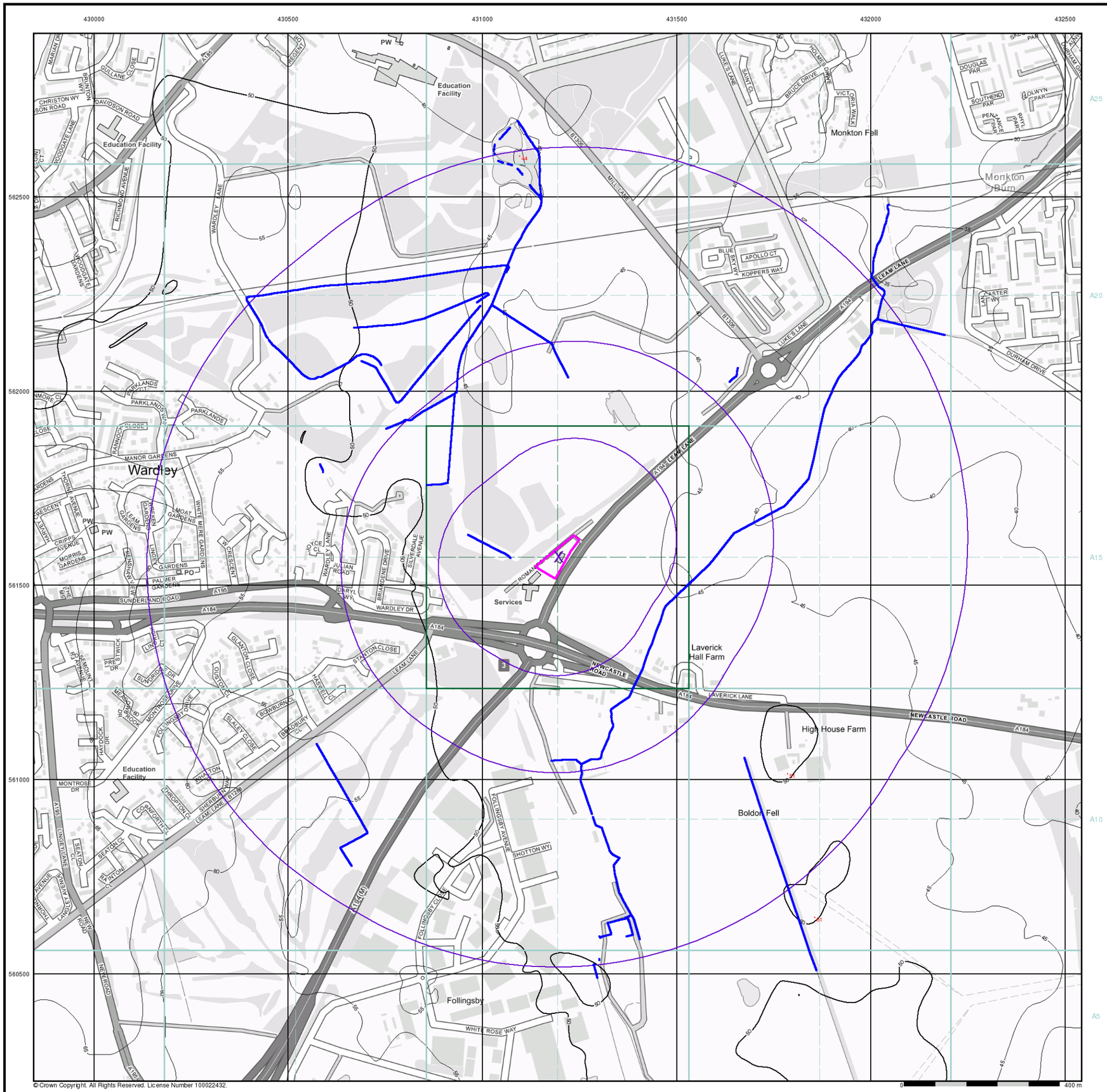
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

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)

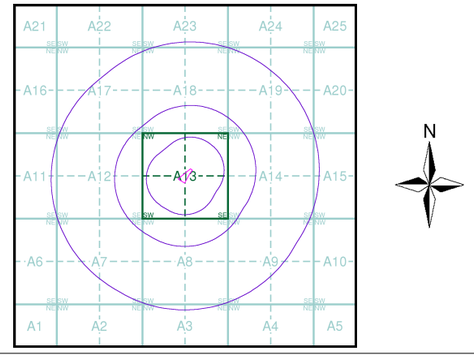
Standard Contour 105 100 95

Master Contour

Spot Height 167.3

- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



Order Details

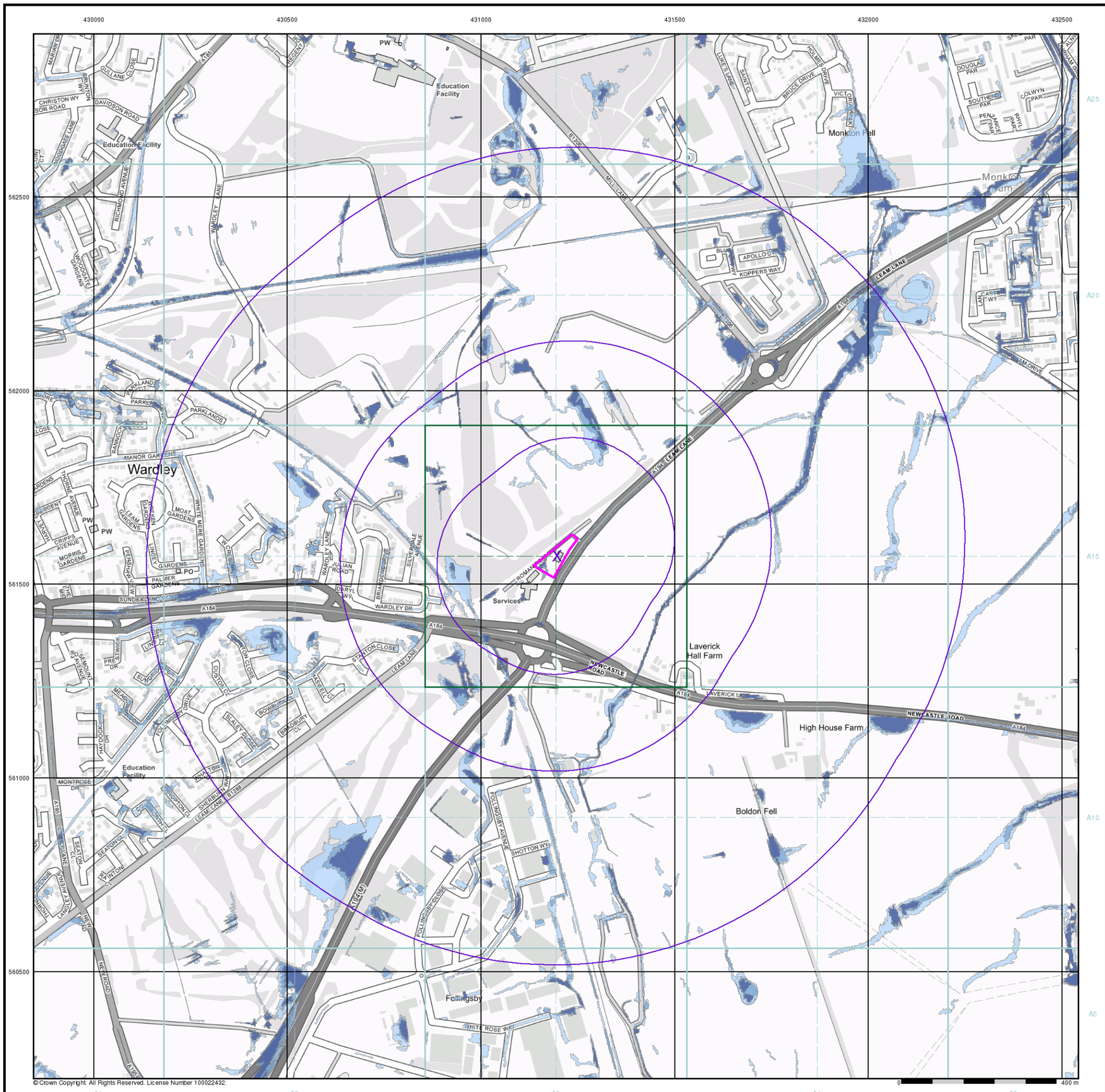
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

General

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

Risk of Flooding from Surface Water

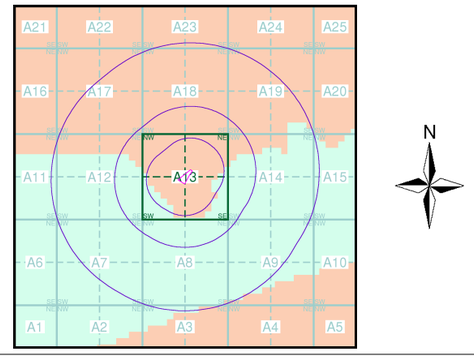
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

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

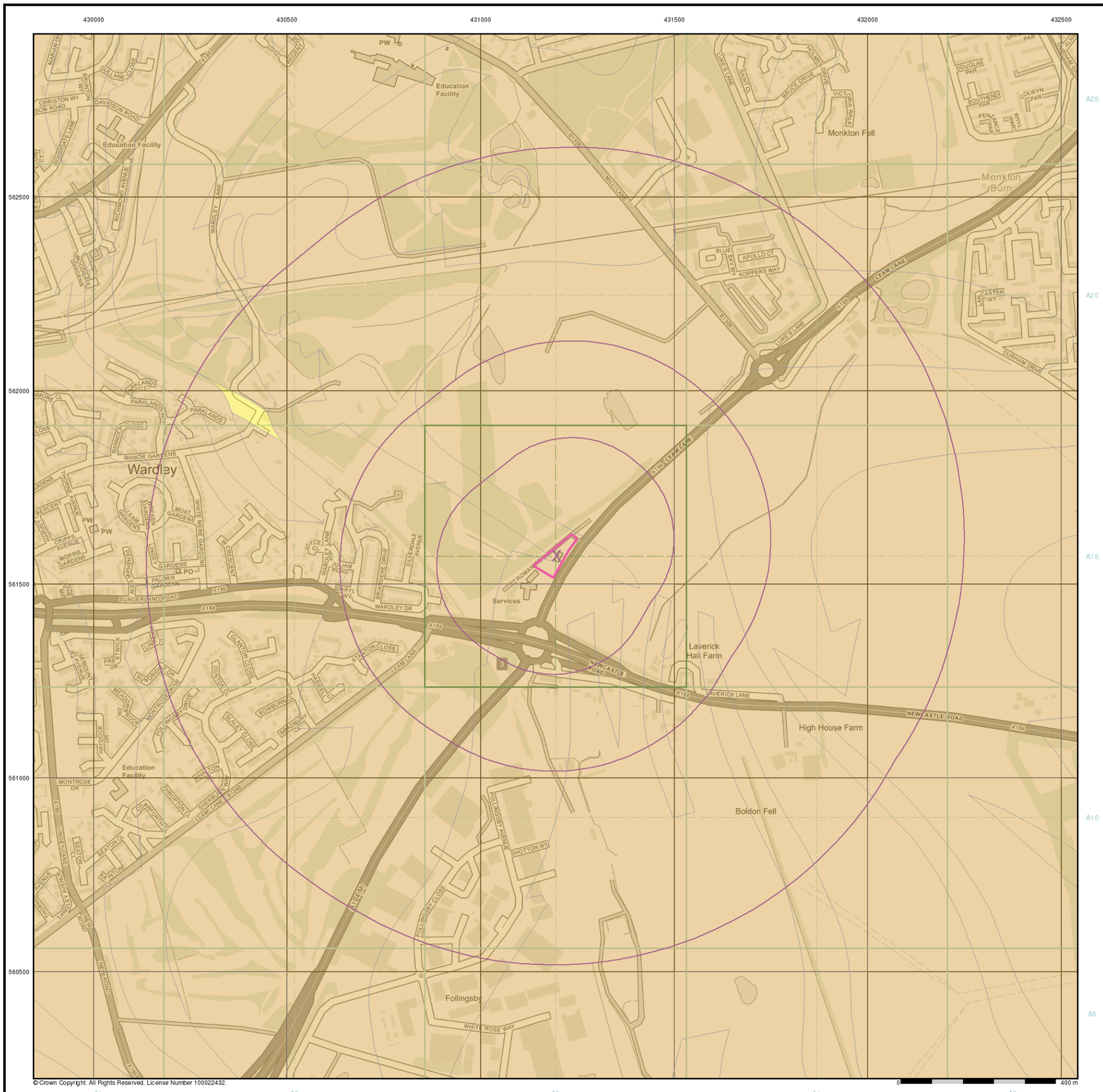
Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

Envirocheck®

LANDMARK INFORMATION GROUP®

General

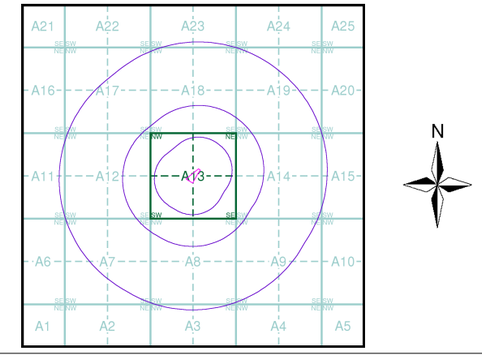
Specified Site Specified Buffer(s) X Bearing Reference Point

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

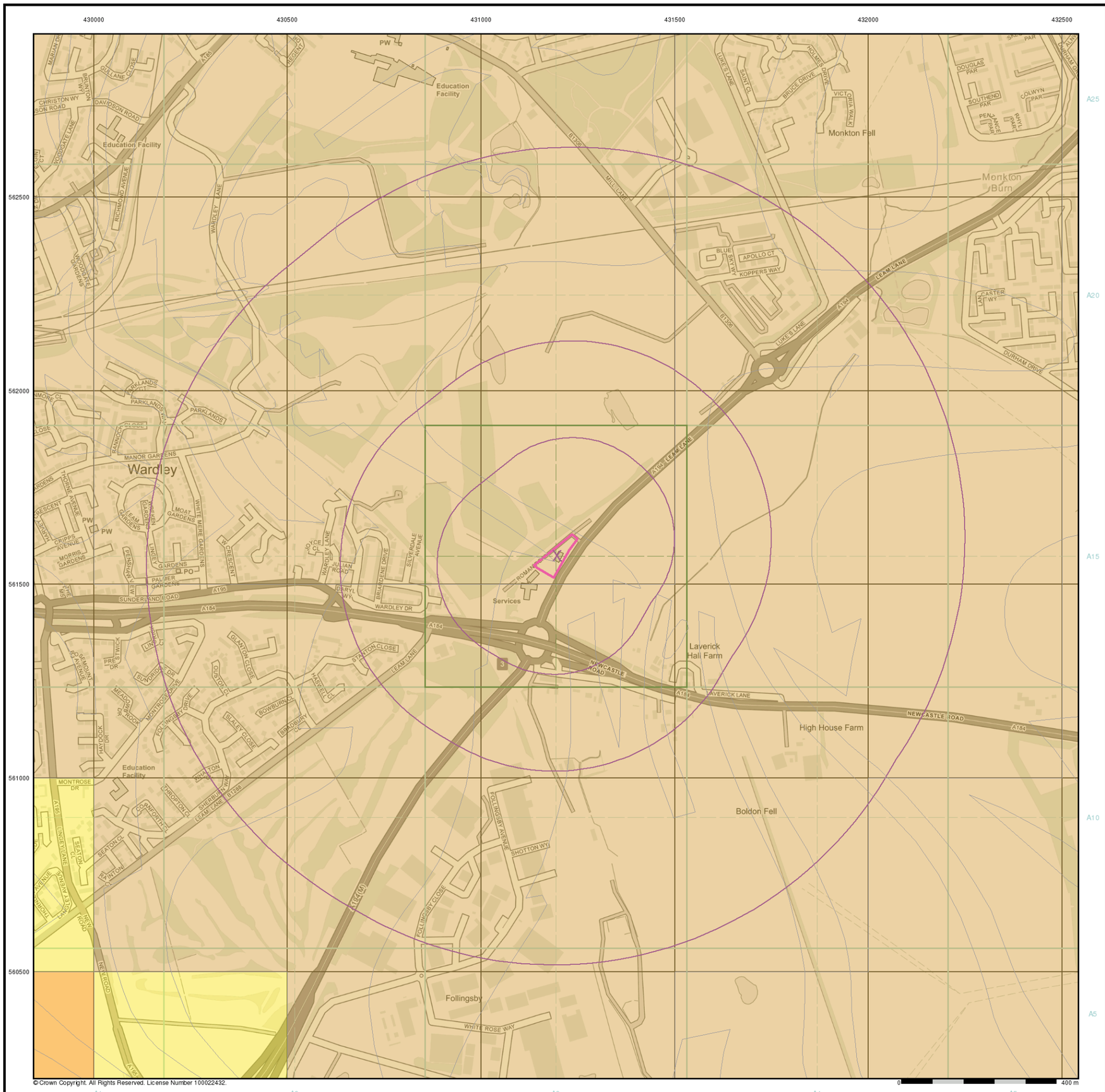
Order Details:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

Envirocheck®

LANDMARK INFORMATION GROUP®

General

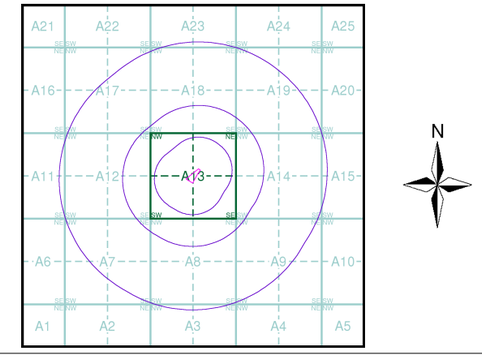
Specified Site | Specified Buffer(s) | X Bearing Reference Point

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

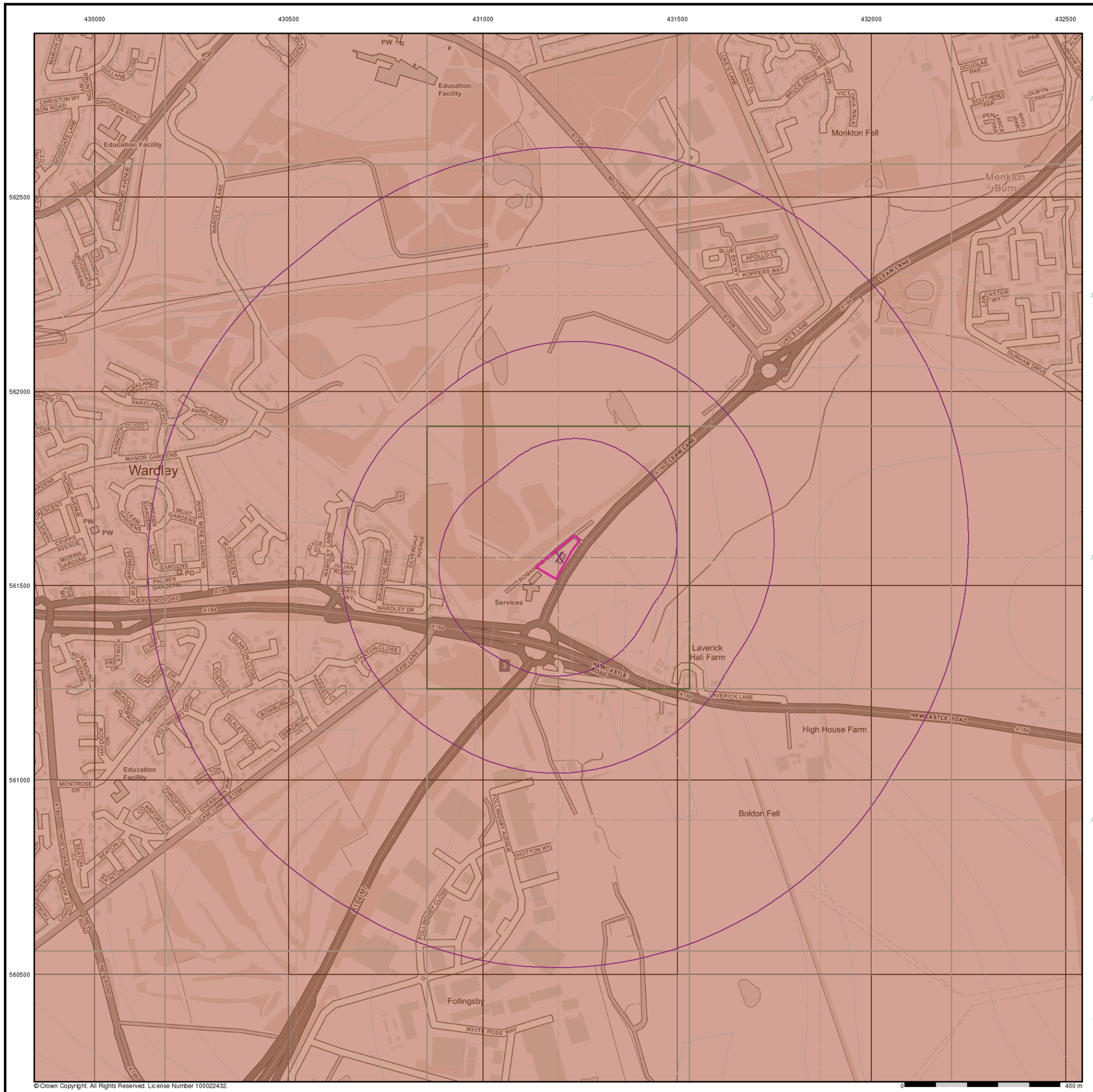
Order Details:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

Envirocheck®

LANDMARK INFORMATION GROUP®

General

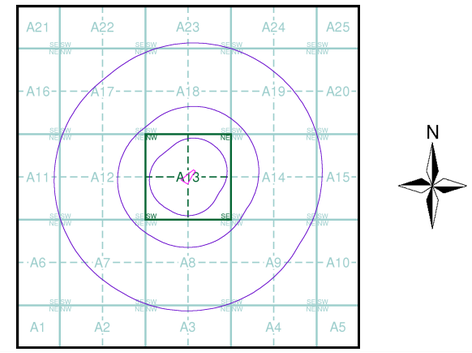
Specified Site | Specified Buffer(s) | X Bearing Reference Point

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

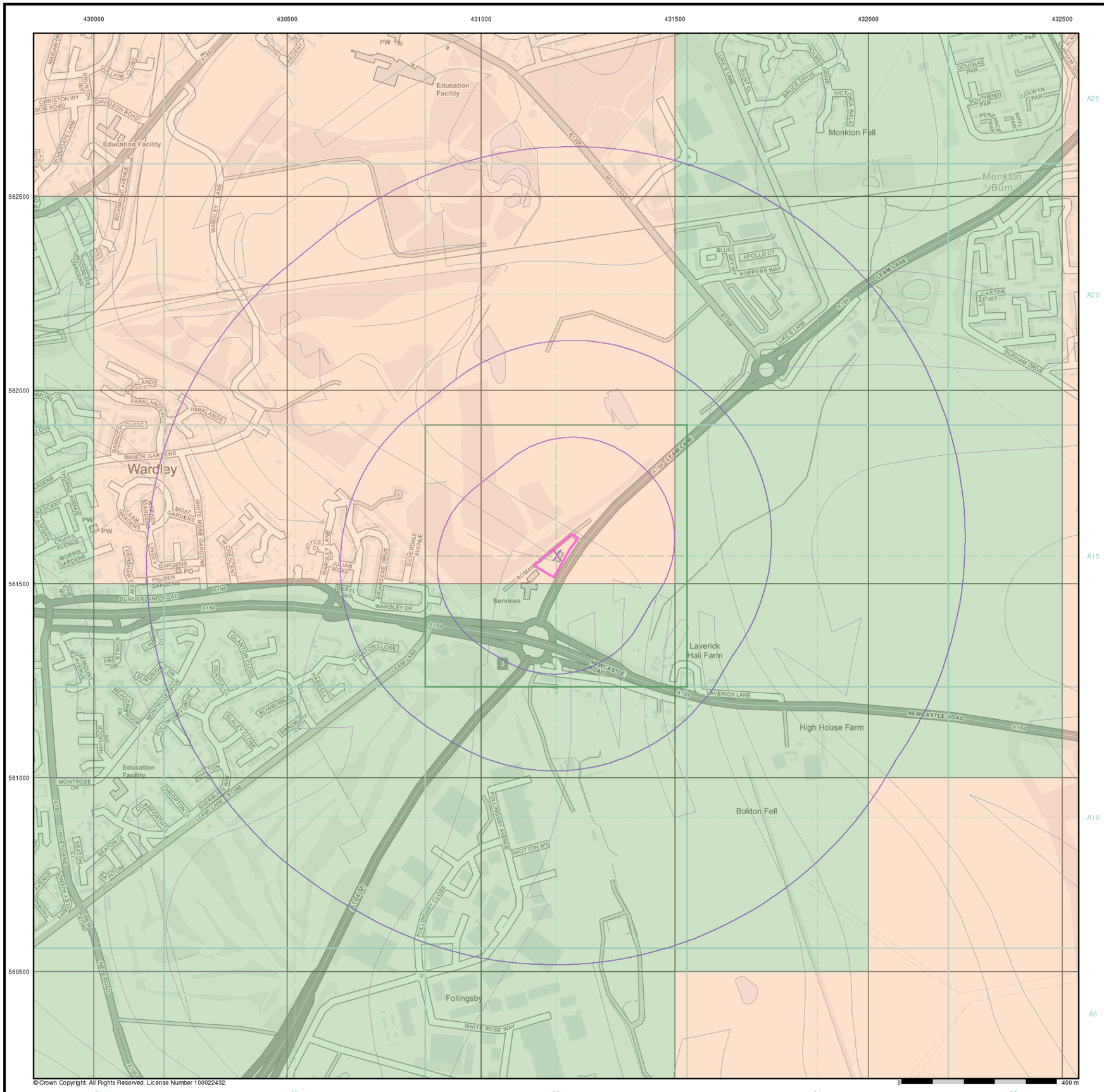
Order Details:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

Envirocheck®

LANDMARK INFORMATION GROUP®

General

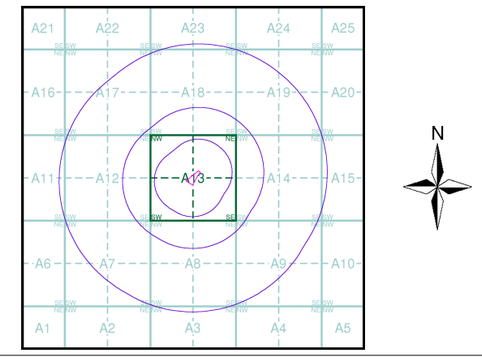
Specified Site | Specified Buffer(s) | X Bearing Reference Point

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

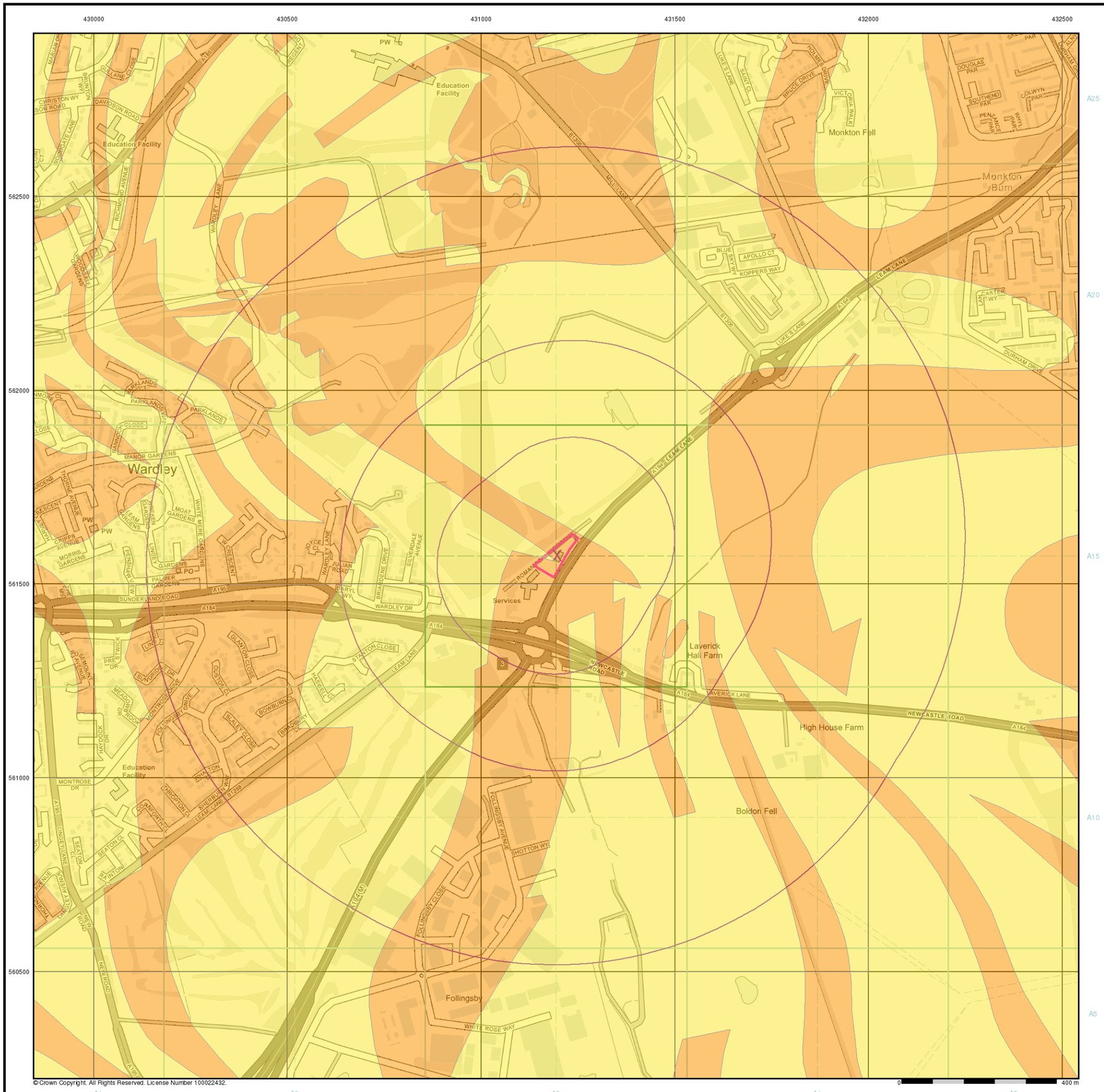
Order Details:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

Envirocheck®

LANDMARK INFORMATION GROUP®

General

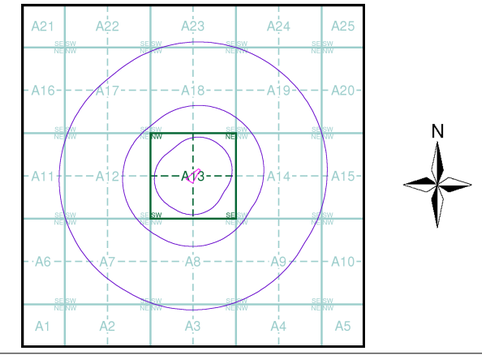
Specified Site | Specified Buffer(s) | X Bearing Reference Point

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

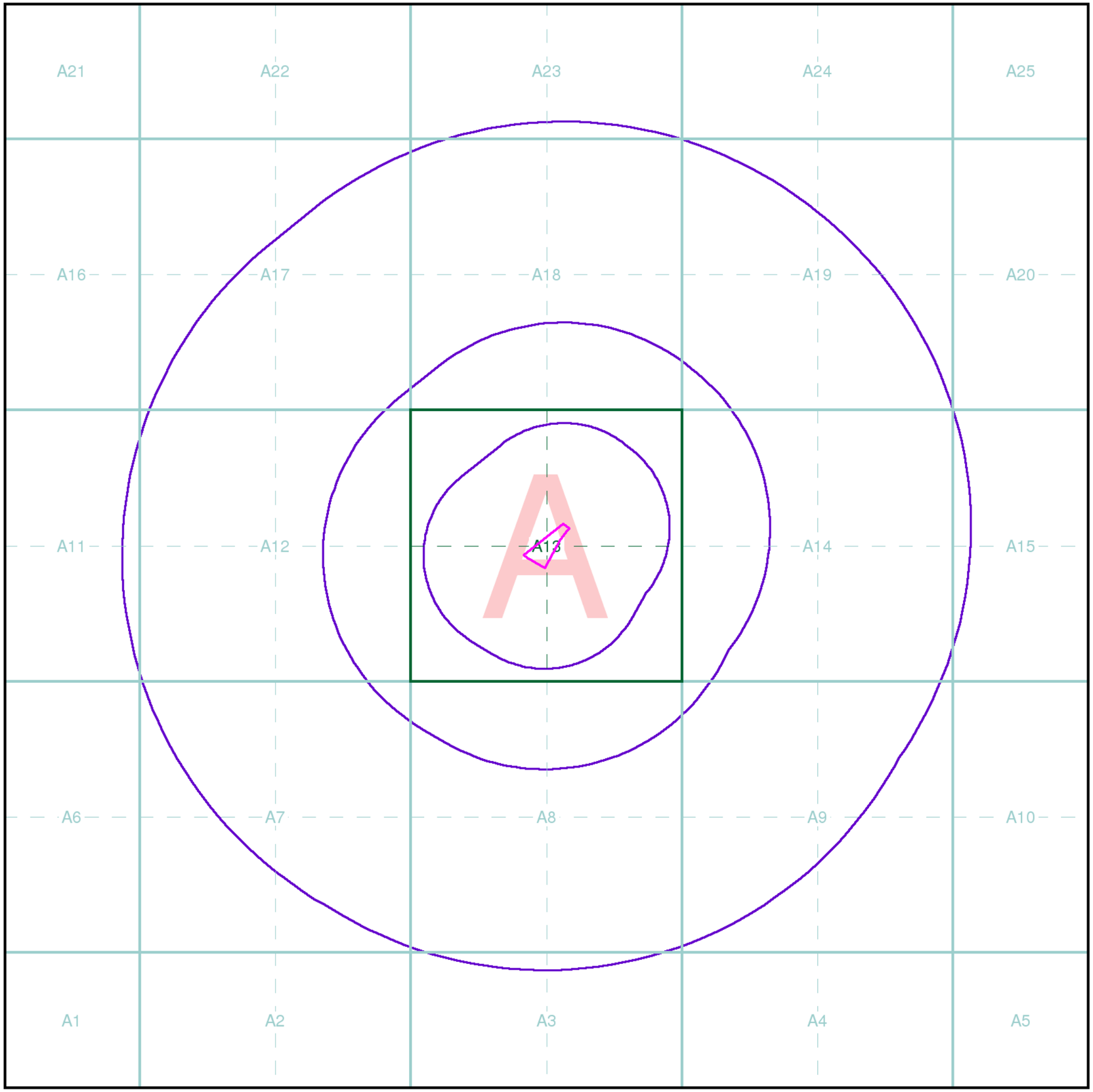
Order Details:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431200, 561570
Slice:	A
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

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 S Hooper, Aecom Infrastructure & Environment UK Ltd, 4th Floor, Bridgewater House, Whitworth Street, Manchester, M1 6LT

Order Details

Order Number:	209721675_1_1
Customer Ref:	Shell Whitemare Pool - 60608750
National Grid Reference:	431190, 561570
Site Area (Ha):	0.46
Search Buffer (m):	1000

Site Details

Shell Filling Station, White Mare Pool, GATESHEAD, NE10 8YB

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

The Coal Authority

CON29M
coal mining report

SHELL FILLING STATION, WHITE MARE POOL, GATESHEAD, TYNE & WEAR NE10 8YB

Known or potential coal mining risks

Past underground coal mining	Page 3
Future underground coal mining	Page 3

Further action

No further reports from the Coal Authority are required. Further information on any next steps can be found in our Professional opinion.

For more information on our reports please visit www.groundstability.com

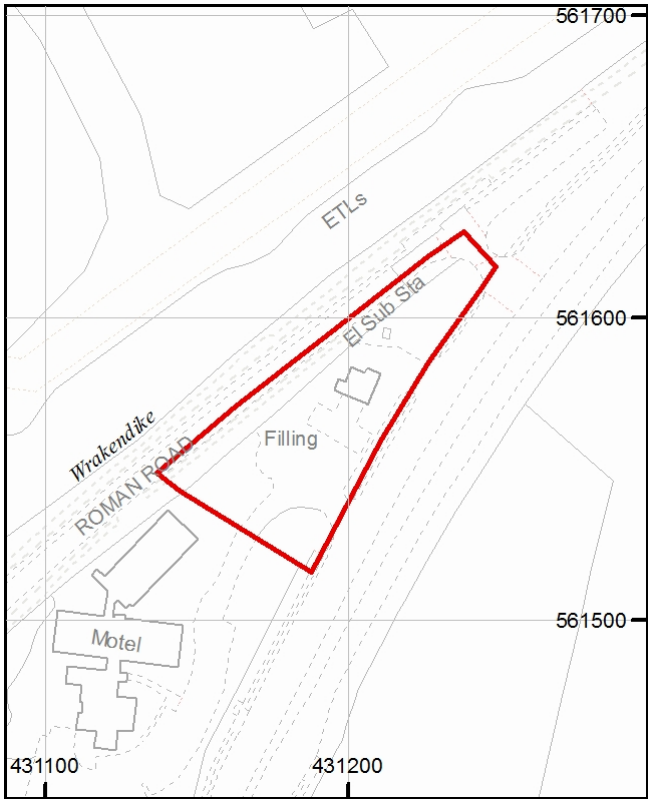
Professional opinion

According to the official mining information records held by the Coal Authority at the time of this search, evidence of, or the potential for, coal mining related features have been identified. It is unlikely that these features will impact on the stability of the enquiry boundary.

Enquiry boundary

Key

Approximate position of enquiry boundary shown



We can confirm that the location is **on the coalfield**

Map data

Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2018. All rights reserved. Ordnance Survey Licence number: 100020315.

This report is prepared in accordance with the latest Law Society's Guidance Notes 2018, the User Guide 2018 and the Coal Authority's Terms and Conditions applicable at the time the report was produced.

Accessibility

If you would like this information in an alternative format, please contact our communications team on 0345 762 6848 or email communications@coal.gov.uk.

Detailed findings

Information provided by the Coal Authority in this report is compiled in response to the Law Society's CON29M Coal Mining enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL.

The Coal Authority owns the copyright in this report and the information used to produce this report is protected by our database rights. All rights are reserved and unauthorised use is prohibited. If we provide a report for you, this does not mean that copyright and any other rights will pass to you. However, you can use the report for your own purposes.

1 Past underground coal mining

The property is in a surface area that could be affected by underground mining in 4 seams of coal at 320m to 460m depth, and last worked in 1968.

Any movement in the ground due to coal mining activity associated with these workings should have stopped by now.

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 received an application for, and is currently considering whether to grant a licence to remove or work coal by 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 recorded coal mine entries known to the Coal Authority within, or within 20 metres, of the boundary of the property.

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 of the enquiry boundary, 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 Coal 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.

Statutory cover



Coal mining subsidence

In the unlikely event of any coal mining related subsidence damage, the Coal Authority or the mine operator has a duty to take remedial action in respect of subsidence caused by the withdrawal of support from land or property in connection with lawful coal mining operations.

When the works are the responsibility of the Coal Authority, our dedicated public safety and subsidence team will manage the claim. The house or land owner ("the owner") is covered for these works under the terms of the Coal Mining Subsidence Act 1991 (as amended by the Coal Industry Act 1994). Please note, this Act does not apply where coal was worked or gotten by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester.

If you believe your land or property is suffering from coal mining subsidence damage and you need more information on what to do next, please use the following link to our website which sets out what your rights are and what you need to consider before making a claim.
www.gov.uk/government/publications/coal-mining-subsidence-damage-notice-form



Coal mining hazards

Our public safety and subsidence team provide a 24 hour a day, 7 days a week hazard reporting service, to help protect the public from hazards caused by past coal workings, such as a mine shaft or shallow working collapse. To report any hazards please call 01623 646 333. Further information can be found on our website: www.gov.uk/coalauthority.

Glossary

Key terms

adit - horizontal or sloped entrance to a mine

coal mining subsidence - ground movement caused by the removal of coal by underground mining

Coal Mining Subsidence Act 1991 - the Act setting out the duties of the Coal Authority to repair damage caused by coal mining subsidence

coal mining subsidence damage - damage to land, buildings or structures caused by the removal of coal by underground mining

coal seams - bed of coal of varying thickness

future opencast coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal from the surface

future underground coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal underground. Although it is unlikely, remaining coal reserves could create a possibility for future mining, which would be licensed by the Coal Authority

mine entries - collective name for shafts and adits

payments to owners of former copyhold land - historically, copyhold land gave rights to coal to the copyholder. Legislation was set up to allow others to work this coal, but they had to issue a notice and pay compensation if a copyholder came forward

shaft - vertical entry into a mine

site investigation - investigations of coal mining risks carried out with the Coal Authority's permission

stop notice - a delay to repairs because further coal mining subsidence damage may occur and it would be unwise to carry out permanent repairs

subsidence claim - a formal notice of subsidence damage to the Coal Authority since it was established on 31 October 1994

withdrawal of support - a historic notice informing landowners that the coal beneath their property was going to be worked

working facilities orders - a court order which gave permission, restricted or prevented coal mine workings

APPENDIX C PETROLEUM OFFICER RESPONSE

Tyne and Wear Fire and Rescue Service
Creating the Safest Community

www.twfire.gov.uk

Chief Fire Officer Chris Lowther

AECOM
6th Floor
1 New York Street
Manchester
M1 4HD

This matter is being dealt with by:
Watch Manager Agnew

Direct Dial: 0191 444 1267

E-mail: john.agnew@twfire.gov.uk

Your Ref:

Our Ref: 00000107

Date: 9 July 2019

Dear Sir

PETROLEUM (CONSOLIDATION) REGULATIONS 2014
Whitemare Pool Filling Station, Leam Lane, Gateshead, Tyne And Wear, NE10 8YB

In reply to your letter dated 2 July 2019 and your request for information relating to the petroleum fuel storage at the above premises, I acknowledge receipt of the letter from the occupier of the site authorising the release of information and your acceptance of the administration charges.

As instructed, I enclose all relevant information relating to the petroleum site.

As you were informed, a fee will be charged to cover the cost of administration and production of this information that you requested. You will be invoiced by Sunderland City Council.

Should you require any further assistance please do not hesitate to contact me.

Yours faithfully

Watch Manager

Enc.

FIRE & RESCUE SERVICE EQUALITY FRAMEWORK EXCELLENT
Stonewall TOP 100 EMPLOYERS 2015
FIRE KILLS YOU CAN PREVENT IT
INVESTORS IN PEOPLE | Champion
POSITIVE ABOUT DISABLED PEOPLE
ROSPA 2015 PRESIDENT'S Award

Appendix B - Petroleum Site Search

Name of Site:	**Whitemare Pool Filling Station.**					**ID No:**	**00000107**
Address of Site:	**Leam Lane, Gateshead, Tyne and Wear, NE10 8YB**					**Date of Last Licence/Certificate Renewal:**	**01/04/2017**
No of Tanks:	**6**					**Date Site Stopped Trading:**	**Certificate still current until 01/04/2020**
Tank Capacities & Product:	**1**	**2**	**3**	**4**	**5**	**6**	**7**
	34580 MWC Petrol SSS	**21660 MWC Petrol SSS**	**12920 MWC Petrol SSS**	**24700 MWC Diesel SSS**	**21660 MWC Diesel SSS**	**12920 MWC Diesel SSS**	
Tank State:	**Active**	**Water Seal**	**Water Fill**	**Foam Fill**	**Concrete Fill**	**Removed**	
	All tanks still active						
Details of Previous Leaks or Spillages:	**We do not have any information identified from our file history as showing any tanks having previously leaked at this site.**						
Any Other Relevant Information:	**Maximum Working Capacity (MWC)** **Single Skin Steel tanks (SSS)**						

From our file history works were carried out commencing on 06/05/2008 at the above site to reduce the number of tanks operating at this site from 8 to 6, confirmation provided of works within the stated records identified below.

Index of information provided.

1) Current petroleum certificate issued to the site, valid until 01/04/2020, identifying 6 tanks currently in use.
2) Previous petroleum Licence dated April 2007 to March 2008, identifying 4 x petroleum tanks and identifying tanks numbered up to 8 on site.
3) Previous petroleum Licence dated April 2008 to March 2009, identifying 4 x petroleum tanks and identifying tanks numbered up to 8 on site, previously only petroleum tanks were identified on licence and not diesel tanks.
4) Previous petroleum Licence dated April 2009 to March 20010, identifying 4 x petroleum tanks and identifying tanks numbered up to 8 on site, previously only petroleum tanks were identified on licence and not diesel tanks.
5) Previous petroleum Licence dated April 2009 to March 2010, identifying 3 x petroleum tanks and identifying tanks numbered only up to tank, 3, previously only petroleum tanks were identified on licence and not diesel tanks.
6) Previous petroleum Licence dated April 2010 to March 2011, identifying 3 x petroleum tanks and identifying tanks numbered only up to tank, 3, previously only petroleum tanks were identified on licence and not diesel tanks.
7) Previous petroleum Licence dated April 2011 to March 2014, identifying 3 x petroleum tanks and identifying tanks numbered only up to tank, 3, previously only petroleum tanks were identified on licence and not diesel tanks.
8) Previous petroleum Licence dated April 2014 to March 2017, identifying 3 x petroleum tanks and identifying tanks numbered only up to tank, 3, previously only petroleum tanks were identified on licence and not diesel tanks, capacity of tanks 2 and 3 have changed but we do not have information as to why they were changed.
9) Letter from A.J Bayliss Petroleum Engineers Ltd dated 12/03/2008 identifying schedule of works at this site including debaffleing tanks 2 & 3, 7 & 8 to convert them into single compartment tanks.
10) Programme of works table for the changes to the site as identified in letter from point 9.
11) Plan Drawing dated 03/05/07 identifying proposed site development which will change of tank layout at this site in accordance with works identified in point 9 of this report.
12) Plan drawing dated 06/06/2007 identifying tank to pump scematic at this site and also confirming new numbered tank layout at this site.
13) Letter from A.J Bayliss Petroleum Engineers Ltd dated 20/06/2007 identifying schedule of works at this site.

14) Plan drawing dated 03/05/2007 identifying proposed site development
15) Letter dated 14/01/2003 identifying fitting of overfill prevention devices for tanks at this site.
16) Letter from A.J Bayliss Petroleum Engineers Ltd dated 05/09/2002 identifying grade changes of the tanks at this site.
17) Letter from A.J Bayliss Petroleum Engineers Ltd dated 25/06/2001 identifying grade changes of the tanks at this site.
18) Method statement letter by DG Environmental Ltd dated 22/01/1999 identifying proposed works at this site.
19) Letter from David Mclean contractor's ltd dated 08/07/1997 and 27/08/1997 regarding development works to be carried out at this site.
20) Plan drawing number 366342 DMC 001 dated August 97 proposed site re-pump in accordance with point 19 above.
21) Letter dated 30/07/1997 from Chem Safe tank testing with certification of results of Tank Tests at these premises.
22) Letter from 18/11/1996 from Chem Safe tank testing with certification of results of Tank Tests at these premises.
23) Letter dated 01/09/1995 from Clovemead Ltd with certification of results of works carried out at these premises.
24) Spreadsheet received from A.J Bayliss Petroleum Engineers Ltd detailing existing layout of 8 tanks and proposed layout of 6 tanks, no date was present on this spreadsheet.
25) 31 x Generic Work Statements received from A.J. Petroleum Engineers ltd detailing works carried out by this company at this site ranging from 01/03/2001 to 07/05/2007.

This is all the information we have available from our records and file history regarding any works which were carried out on the tanks and forecourt of this site.

(1)

TYNE AND WEAR FIRE AND RESCUE AUTHORITY

Petroleum Certificate Number: C1/107/17

1 PETROLEUM ENFORCEMENT AUTHOURITY (PEA) AND SITE DETAILS

This certificate has been issued by **Tyne and Wear Fire & Rescue Authority** being the PEA for the petrol filling station located at:

Shell, Whitemare Pool Filling Station, Leam Lane, Felling, Tyne And Wear, NE10 8YB

2 STORAGE ARRANGEMENTS

The storage arrangements below have been registered with the PEA named in section 1 of this certificate.

A	General site layout	As in place on 01/04/2017
B	Fuel and vapour containment systems, including storage tanks pipework and dispensers	As in place on 01/04/2017
C	Spillage containment / drainage systems	As in place on 01/04/2017

Table 1 [1,2]

Tank ID	Maximum Working Capacity (MWC) (litres)	Contents
1	34580	Petrol
2	21660	Petrol
3	12920	Petrol
4	24700	Diesel
5	21660	Diesel
6	12920	Diesel

3 CHANGES TO THE REGISTERED STORAGE ARRANGEMENTS

Changes to any of the storage arrangements contained in this certificate must be notified to the PEA named in this certificate.

[1] Table 1 provides a record of those tanks registered to store petrol at the site.

[2] The fee payable to the PEA is based on the MWC of the tanks in which petrol is stored, not the WC of the tanks in which petrol may be stored.

4 PERIOD OF REGISTRATION

This certificate remains valid until:

a) There is/are prescribed material changes to the register arrangements relevant to this certificate: OR

b) Operations at the site cease for a period exceeding 12 months, i.e. the site having been made temporary safe, or control measures identified and implemented to maintain the site in a safe condition.

Issued by:



Chief Fire Officer
Tyne and Wear Fire and Rescue Service

Dated: **01 April 2017**

Certification Guidance

		NEW PSC TO BE ISSUED?		
Prescribed material changes to the registered arrangements	**Notify PEA**	**YES**	**NO**	**POSSIBLY**
The installation of any tank, pipeline or vapour pipeline associated with the storage and dispensing of petrol	✓	✓		
The installation of any pump/dispenser in a new location	✓	✓		
Cessation of use of the petrol storage tanks (for up to 12 months)	✓	✓		
The removal or permanent decommissioning of the petrol storage tanks	✓		✓	

		CERTIFICATE NO LONGER VALID?		
Other changes (including Mode(s) of Operation to the registered arrangements)	**Notify PEA**	**YES**	**NO**	**POSSIBLY**
A change or additional Mode(s) of Operation or Petrol Tanker Delivery	✓		✓	
Any alteration to the site layout that would or could effect of change the operation of the site.	✓			✓
The storage or cessation of storage of any other vehicle fuel on the petrol filling station.	✓			✓

(2)

PETROLEUM (CONSOLIDATION) ACT 1928
PETROLEUM (TRANSFER OF LICENCES) ACT 1936
PETROLEUM (MIXTURES) ORDER 1929

LICENCE TO KEEP PETROLEUM SPIRIT

(The term "PETROLEUM SPIRIT" must in every case be taken to include the term "PETROLEUM MIXTURES" wherever it occurs in this licence and in the conditions attached or added hereto)

Licence Number: 352 File Reference:00000107

TYNE AND WEAR FIRE AND RESCUE AUTHORITY in pursuance of the powers conferred upon it by or under the Petroleum Acts 1928 and 1936, as amended

Hereby Licences: White Mare Pool Filling Station

Hereinafter called "THE LICENSEE" to keep petroleum spirit

On the premises situated at:

Leam Lane
Felling
Tyne And Wear

(Hereinafter called "THE LICENSED PREMISES")

For the period From: 1 April 2007 To: 31 March 2008

THE LICENCE is granted subject to the following conditions:

1. The quantity of petroleum spirit kept on the Licensed Premises shall at no time exceed 70110 litres.

2. Petroleum spirit kept on the premises shall be stored in tanks, with the following Tank ID and capacity.

Tank ID	Capacity (litres)	Fueltype
1	34580	P
3	10830	P
7	12350	P
8	12350	P

3. The Schedule of Standard conditions attached hereto.

RB

03/07/2019 Chief Fire Officer

(3)

PETROLEUM (CONSOLIDATION) ACT 1928
PETROLEUM (TRANSFER OF LICENCES) ACT 1936
PETROLEUM (MIXTURES) ORDER 1929

LICENCE TO KEEP PETROLEUM SPIRIT

(The term "PETROLEUM SPIRIT" must in every case be taken to include the term "PETROLEUM MIXTURES" wherever it occurs in this licence and in the conditions attached or added hereto)

Licence Number: 352 File Reference:00000107

TYNE AND WEAR FIRE AND RESCUE AUTHORITY in pursuance of the powers conferred upon it by or under the Petroleum Acts 1928 and 1936, as amended

Hereby Licences: White Mare Pool Filling Station

Hereinafter called "THE LICENSEE" to keep petroleum spirit

On the premises situated at:

Leam Lane
Felling
Tyne And Wear

(Hereinafter called "THE LICENSED PREMISES")

For the period From: 1 April 2008 To: 31 March 2009

THE LICENCE is granted subject to the following conditions:

1. The quantity of petroleum spirit kept on the Licensed Premises shall at no time exceed 70110 litres.

2. Petroleum spirit kept on the premises shall be stored in tanks, with the following Tank ID and capacity.

Tank ID	Capacity (litres)
1	34580
3	10830
7	12350
8	12350

3. The Schedule of Standard conditions attached hereto.

D. Bellingham

03/07/2019 Chief Fire Officer

NOTES

1. If any person to whom a Petroleum Spirit Licence is granted contravenes any condition of this licence, he shall be guilty of an offence.

2. The attention of the Licensee is drawn to the requirement to comply with the Notification of Accidents and Dangerous Occurrences Regulations 1980 in the case of any accident that which occasions loss of life or personal injury in or about, or in connection with, the Licensed Premises.

(4)

PETROLEUM (CONSOLIDATION) ACT 1928
PETROLEUM (TRANSFER OF LICENCES) ACT 1936
PETROLEUM (MIXTURES) ORDER 1929

LICENCE TO KEEP PETROLEUM SPIRIT

(The term "PETROLEUM SPIRIT" must in every case be taken to include the term "PETROLEUM MIXTURES" wherever it occurs in this licence and in the conditions attached or added hereto)

Licence Number: 352 File Reference:00000107

TYNE AND WEAR FIRE AND RESCUE AUTHORITY in pursuance of the powers conferred upon it by or under the Petroleum Acts 1928 and 1936, as amended

Hereby Licences: White Mare Pool Filling Station

Hereinafter called "THE LICENSEE" to keep petroleum spirit

On the premises situated at:

Leam Lane
Felling
Tyne And Wear

(Hereinafter called "THE LICENSED PREMISES")

For the period From: 1 April 2009 To: 31 March 2010

THE LICENCE is granted subject to the following conditions:

1. The quantity of petroleum spirit kept on the Licensed Premises shall at no time exceed 70110 litres.

2. Petroleum spirit kept on the premises shall be stored in tanks, with the following Tank ID and capacity.

Tank ID	Capacity (litres)
1	34580
3	10830
7	12350
8	12350

3. The Schedule of Standard conditions attached hereto.

D. Bellingham

03/07/2019 Chief Fire Officer

NOTES

1. If any person to whom a Petroleum Spirit Licence is granted contravenes any condition of this licence, he shall be guilty of an offence.

2. The attention of the Licensee is drawn to the requirement to comply with the Notification of Accidents and Dangerous Occurrences Regulations 1980 in the case of any accident that which occasions loss of life or personal injury in or about, or in connection with, the Licensed Premises.

(5)

PETROLEUM (CONSOLIDATION) ACT 1928
PETROLEUM (TRANSFER OF LICENCES) ACT 1936
PETROLEUM (MIXTURES) ORDER 1929

LICENCE TO KEEP PETROLEUM SPIRIT

(The term "PETROLEUM SPIRIT" must in every case be taken to include the term "PETROLEUM MIXTURES" wherever it occurs in this licence and in the conditions attached or added hereto)

Licence Number: 352 File Reference:00000107

TYNE AND WEAR FIRE AND RESCUE AUTHORITY in pursuance of the powers conferred upon it by or under the Petroleum Acts 1928 and 1936, as amended

Hereby Licences: White Mare Pool Filling Station

Hereinafter called "THE LICENSEE" to keep petroleum spirit

On the premises situated at:

Leam Lane
Felling
Tyne And Wear

(Hereinafter called "THE LICENSED PREMISES")

For the period From: 1 April 2009 To: 31 March 2010

THE LICENCE is granted subject to the following conditions:

1. The quantity of petroleum spirit kept on the Licensed Premises shall at no time exceed 70110 litres.

2. Petroleum spirit kept on the premises shall be stored in tanks, with the following Tank ID and capacity.

Tank ID	Capacity (litres)
1	34580
2	34580
3	12920

3. The Schedule of Standard conditions attached hereto.

03/07/2019 Chief Fire Officer

NOTES

1. If any person to whom a Petroleum Spirit Licence is granted contravenes any condition of this licence, he shall be guilty of an offence.

2. The attention of the Licensee is drawn to the requirement to comply with the Notification of Accidents and Dangerous Occurrences Regulations 1980 in the case of any accident that which occasions loss of life or personal injury in or about, or in connection with, the Licensed Premises.

PETROLEUM (CONSOLIDATION) ACT 1928
PETROLEUM (TRANSFER OF LICENCES) ACT 1936
PETROLEUM (MIXTURES) ORDER 1929

LICENCE TO KEEP PETROLEUM SPIRIT

(The term "PETROLEUM SPIRIT" must in every case be taken to include the term "PETROLEUM MIXTURES" wherever it occurs in this licence and in the conditions attached or added hereto)

Licence Number: LA1/107/10 File Reference:00000107

TYNE AND WEAR FIRE AND RESCUE AUTHORITY in pursuance of the powers conferred upon it by or under the Petroleum Acts 1928 and 1936, as amended

Hereby Licences: White Mare Pool Filling Station

Hereinafter called "THE LICENSEE" to keep petroleum spirit

On the premises situated at:

Leam Lane
Felling
Tyne And Wear

(Hereinafter called "THE LICENSED PREMISES")

For the period From: 1 April 2010 To: 31 March 2011

THE LICENCE is granted subject to the following conditions:

1. The quantity of petroleum spirit kept on the Licensed Premises shall at no time exceed 70110 litres.

2. Petroleum spirit kept on the premises shall be stored in tanks, with the following Tank ID and capacity.

Tank ID	Capacity (litres)
1	34580
2	34580
3	12920

3. The Schedule of Standard conditions attached hereto.

05/07/2019 Chief Fire Officer

NOTES

1. If any person to whom a Petroleum Spirit Licence is granted contravenes any condition of this licence, he shall be guilty of an offence.

2. The attention of the Licensee is drawn to the requirement to comply with the Notification of Accidents and Dangerous Occurrences Regulations 1980 in the case of any accident that which occasions loss of life or personal injury in or about, or in connection with, the Licensed Premises.

(7)

PETROLEUM (CONSOLIDATION) ACT 1928
PETROLEUM (TRANSFER OF LICENCES) ACT 1936
PETROLEUM (MIXTURES) ORDER 1929

LICENCE TO KEEP PETROLEUM SPIRIT

(The term "PETROLEUM SPIRIT" must in every case be taken to include the term "PETROLEUM MIXTURES" wherever it occurs in this licence and in the conditions attached or added hereto)

Licence Number: 1/107/11 File Reference:00000107

TYNE AND WEAR FIRE AND RESCUE AUTHORITY in pursuance of the powers conferred upon it by or under the Petroleum Acts 1928 and 1936, as amended

Hereby Licences: White Mare Pool Filling Station

Hereinafter called "THE LICENSEE" to keep petroleum spirit

On the premises situated at:

Leam Lane
Felling
Tyne And Wear

(Hereinafter called "THE LICENSED PREMISES")

For the period From: 1 April 2011 To: 31 March 2014

THE LICENCE is granted subject to the following conditions:

1. The quantity of petroleum spirit kept on the Licensed Premises shall at no time exceed 70110 litres.

2. Petroleum spirit kept on the premises shall be stored in tanks, with the following Tank ID and capacity.

Tank ID	Capacity (litres)
1	34580
2	34580
3	12920

3. The Schedule of Standard conditions attached hereto.

D. Bellingham

05/07/2019 Chief Fire Officer

NOTES

1. If any person to whom a Petroleum Spirit Licence is granted contravenes any condition of this licence, he shall be guilty of an offence.

2. The attention of the Licensee is drawn to the requirement to comply with the Notification of Accidents and Dangerous Occurrences Regulations 1980 in the case of any accident that which occasions loss of life or personal injury in or about, or in connection with, the Licensed Premises.

8

PETROLEUM (CONSOLIDATION) ACTS 1928 & 1936
PETROLEUM (TRANSFER OF LICENCES) ACT 1936

LICENCE TO KEEP PETROLEUM SPIRIT

(The term "PETROLEUM SPIRIT" must in every case be taken to include the term "PETROLEUM MIXTURES" wherever it occurs in this licence and in the conditions attached or added hereto)

Licence Number: 1/107/14 File Reference: 00000107

TYNE AND WEAR FIRE AND RESCUE AUTHORITY in pursuance of the powers conferred upon it by or under the Petroleum Acts 1928 and 1936, as amended

Hereby Licences: Shell UK Oil Products Ltd

Hereinafter called "THE LICENSEE" to keep petroleum spirit

On the premises situated at:

White Mare Pool Filling Station (Shell), Leam Lane, Felling, Tyne And Wear, NE10 8YB

(Hereinafter called "THE LICENSED PREMISES")

For the period From: 1 April 2014 To: 31 March 2017

THE LICENCE is granted subject to the following conditions:

1. The quantity of petroleum spirit kept on the Licensed Premises shall at no time exceed 67070 litres.

2. Petroleum spirit kept on the premises shall be stored in tanks, with the following Tank ID and capacity.

Tank ID	Capacity (litres)
1	34580
2	21660
3	10830

3. The Schedule of Standard conditions attached hereto.

05/07/2019 Chief Fire Officer

NOTES

1. If any person to whom a Petroleum Spirit Licence is granted contravenes any condition of this licence, he shall be guilty of an offence.

2. The attention of the Licensee is drawn to the requirement to comply with the Notification of Accidents and Dangerous Occurrences Regulations 1980 in the case of any accident that which occasions loss of life or personal injury in or about, or in connection with, the Licensed Premises.

9

A. J. Bayliss
Petroleum Engineers Ltd.

Petroleum, Fuel Oil and Electrical Installations

Unit 128 Sandy Lane, Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire DY13 9QB
Telephone: 01299 824541 - 2 *Fax:* 01299 827638 *E-mail:* enquiries@ajbayliss.com

March 12, 2008

TYNE AND WEAR FIRE AND RESCUE SERVICES
PROTECTION AND TECHNICAL
25 MAR 2008
PREM:ID 107
OFFICER Huntley.

Mr. S. Huntley
Fire & Petroleum Officer
Tyne & Wear Fire Service
South Division Headquarters
Railway Row
Sunderland
SR1 3HE

Shell Whitemare Pool, Wardley, Gateshead, Tyne & Wear, NE10 8YB

Dear Sir,

We have been requested by Shell to carry out the following works at the above site, commencing **Tuesday May 6, 2008** as follows:

- Removal of the existing fuel dispensers & installation of new Gilbarco SK700 8 hose dispensers
- Installation of new electrical cables & switchgear as necessary. On completion of the electrical installation a new electrical certificate will be issued
- Installation of all new pipework system comprising of 63mm UPP suction lines, 63mm UPP vent lines, 110mm offset fill lines & 63mm stage 2 vapour recovery lines. The vents will be manifolded together at low level with a vent master system incorporating stage 1 vapour recovery. The offset fills will terminate using a fill master system as shown on the enclosed drawing
- All new tank manhole chambers will be installed complete with Fibrelite or similar tank manhole covers & frames
- Tanks 2 & 3, 7 & 8 will be debaffled making them into single compartment tanks as apposed to a double compartment. The debaffling works will be carried out by L.I.S (North Western) Limited. On completion of the works the tanks will be tested and copies of the certificates will be issued
- Forecourt resurfacing works as required as shown on the enclosed drawing
- Modification will be carried out to the tank gauge & POS systems

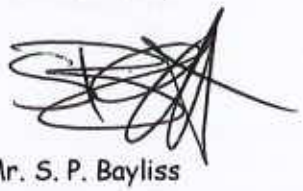
A. J. Bayliss

- The project will also include a shop re-fit

I have enclosed a copy of the programme of works, truth tables & our Works Instructions/Method Statements for your file.

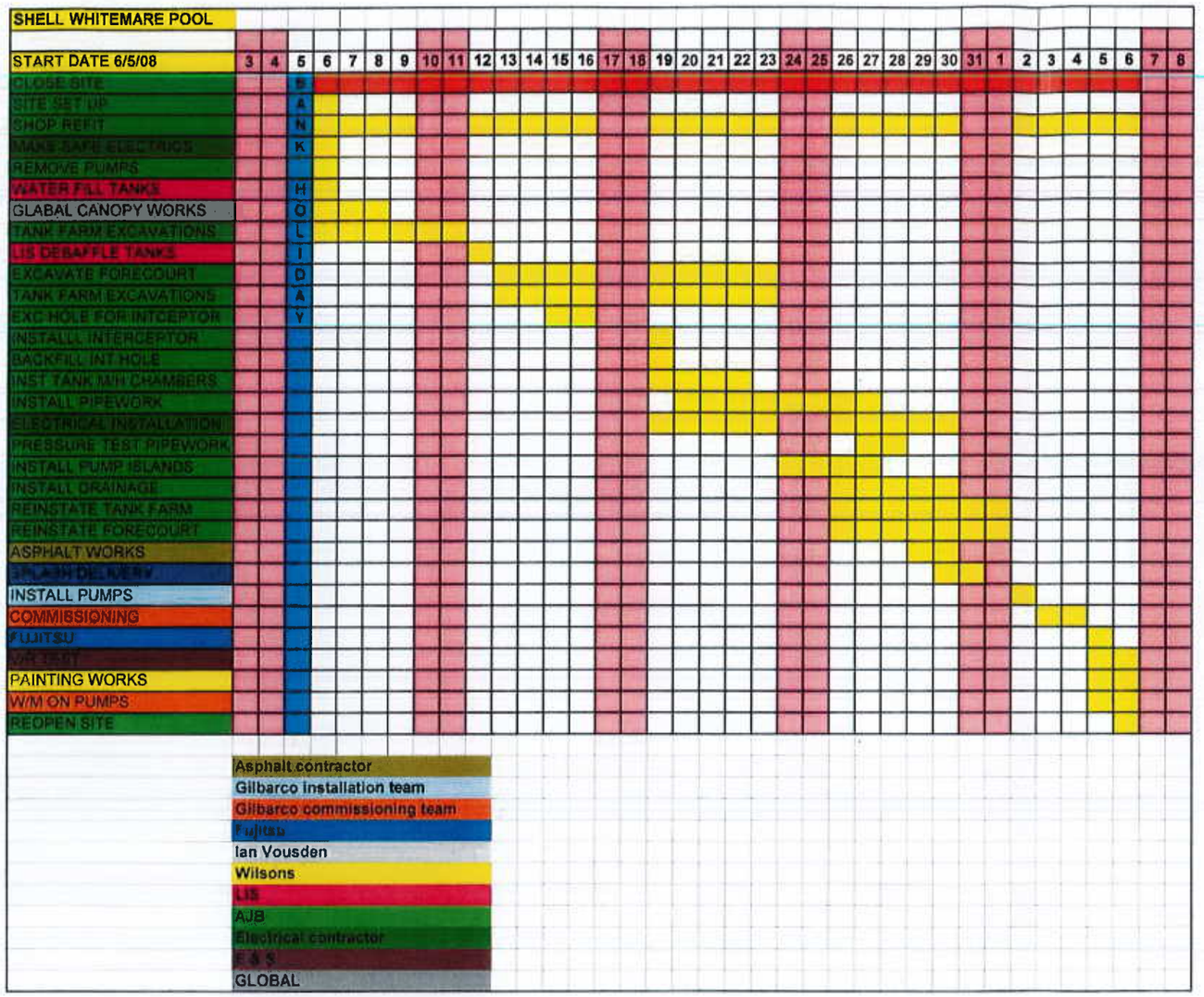
If you have any queries, please do not hesitate to contact me, alternatively should you have no objections please forward written approval for our records.

Yours sincerely



Mr. S. P. Bayliss
Director.

10


SHELL WHITEMARE POOL
START DATE 6/5/08
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8
BANK HOLIDAY
CLOSE SITE
SITE SET UP
SHOP REFIT
MAKE SAFE ELECTRICS
REMOVE PUMPS
WATER FILL TANKS
GLABAL CANOPY WORKS
TANK FARM EXCAVATIONS
LIS DEBAFFLE TANKS
EXCAVATE FORECOURT
TANK FARM EXCAVATIONS
EXC HOLE FOR INTCEPTOR
INSTALL INTERCEPTOR
BACKFILL INT HOLE
INST TANK MH CHAMBERS
INSTALL PIPEWORK
ELECTRICAL INSTALLATION
PRESSURE TEST PIPEWORK
INSTALL PUMP ISLANDS
INSTALL DRAINAGE
REINSTATE TANK FARM
REINSTATE FORECOURT
ASPHALT WORKS
SPLASH DELIVERY
INSTALL PUMPS
COMMISSIONING
FUJITSU
VAT TEST
PAINTING WORKS
W/M ON PUMPS
REOPEN SITE
Asphalt contractor
Gilbarco installation team
Gilbarco commissioning team
Fujitsu
Ian Vousden
Wilsons
LIS
AJB
Electrical contractor
E & S
GLOBAL

VR

D 10

D 9

T2 T4 T5 T6

T1 T3 T7 T8

8
7

6
5

4
3

2
1

PETROL INTERCEPTOR
Remove existing GRP interceptor and replace with Class 1 incl up & downstream valves

TANKER STAND
To be renewed on completion of pipework installation & be fully DUD compliant

AIR WATER

CANOPY SOFFIT
Remove u/c troughs and completely reline canopy
f required allow for new lights/boxes subject to present type

EXISTING BLOCK FORECOURT
Take up existing block forecourt and replace with impermeable concrete surfacing

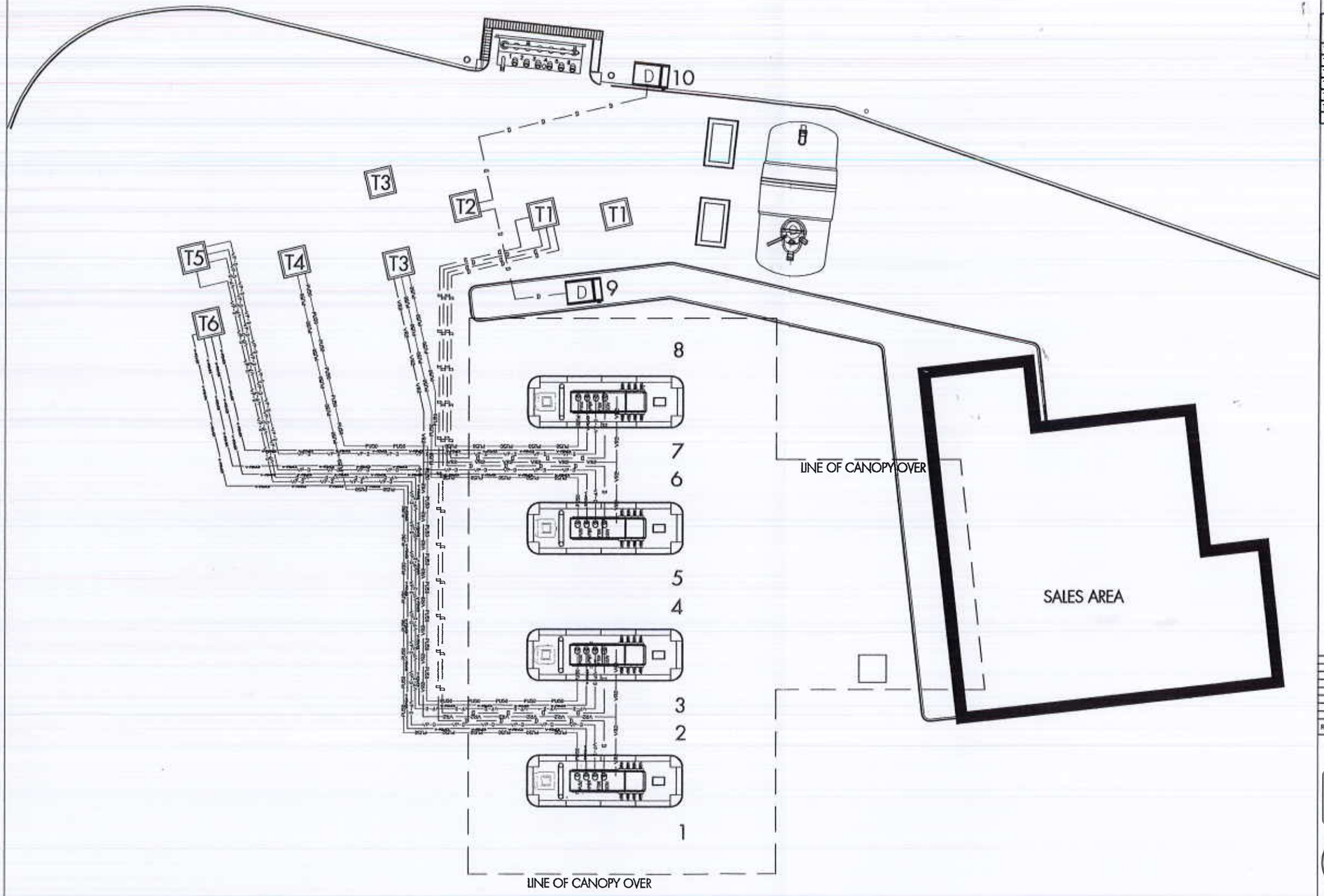
MANHOLE SURROUND
Form concrete surround inclu new frame & lid

PU50, VP, 4TH, DERV

) MARGIN REPAIRS
new aco and concrete edgings

NG CHARCON DRAIN REPAIRS
fitting units as required to site entrance

12



RL dm architects

COPYRIGHT ©
Details of this drawing are the copyright of A J Bayliss Petroleum Engineers Ltd. and must not be reproduced or copied without prior written consent. Do not scale from this drawing. Any errors or omissions are to be reported to the contractor and Architect immediately. All proposed road and junction alterations subject ann to highways engineers detailed design. Removal of any existing tree and landscaped areas subject negotiations with Local Authority Planning dept. and other statutory controls. All drawings to be read in conjunction with structural engineers drawings and all related Architects and consultant drawings and other relevant design information.

TANK No	GRADE	CAPACITY LITRES	PUMP NUMBERS 1/2	3/4	5/6	7/8	9	10
TANK No 1	DIESEL	25840	●	●	●	●		
TANK No 2	HGV DIESEL	21660					●	●
TANK No 3	PU50	21660			●	●		
TANK No 4	PU50	34680	●	●				
TANK No 5	4TH DIESEL	12350	●	●	●	●		
TANK No 6	V POWER	12350	●	●	●	●		

REV No	DATE	DESCRIPTION	BY	CHKD BY

A. J. Bayliss
Petroleum Engineers Ltd.
Petroleum, Fuel Oil and Electrical Installations
Unit 126 , Sandy Lane, Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire DY13 9QB
Telephone: 01299 826541-2 Fax: 01299 827636 E-mail: enquiries@ajbayliss.com

PROJECT
SHELL WHITEMARE POOL
WARDLEY
GATESHEAD
NE10 8YB

DRAWING TITLE
TANK TO PUMP SCEMATIC
SHELL WHITEMARE POOL

DRAWN BY	CHECKED BY	DRAWING No.	REV
SMR		1110 - TTP	
SCALE NTS	DATE 6 JUN 07		

(13)

A. J. Bayliss
Petroleum Engineers Ltd.

Petroleum, Fuel Oil and Electrical Installations

Unit 128 Sandy Lane, Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire DY13 9QB
Telephone: 01299 824541 - 2 *Fax:* 01299 827638 *E-mail:* enquiries@ajbayliss.com

June 19, 2007

T. & W. MET F. B.
SOUTH DIV. H.Q.
20 JUN 2007
FS 701
OPS
OFFICER
Smith.

Fire & Petroleum Officer
Tyne & Wear Fire Service
South Division Headquarters
Railway Row
Sunderland
SR1 3HE

Shell Whitemare Pool, Wardley, Gateshead, Tyne & Wear, NE10 8YB

Dear Sir,

We have been requested by Shell to carry out the forecourt upgrade works at the above site as follows:

- Removal & disposal of the existing fuel dispensers
- Uplift all fuel from tanks and water fill
- Uplifting all block paving, existing concrete forecourt & laying concrete pads
- Installation of 4No. new Gilbarco SK700 8 hose dispensers. All petrol pumps will be stage two vapour recovery compatible.
- Install new fibreglass tank manhole chambers
- Install new 9000 litre interceptor & drainage system.
- New concrete kerb pump islands, new concrete tanker stand & forecourt area, including aco drainage as shown on the attached plan
- Installation of new 63mm suction lines, vent lines, 110mm UPP offset fills & Stage 1 & 2 vapour recovery as shown on the enclosed drawing.
- Re-programme the existing POS unit & upgrade the existing Veeder Root TLS350R tank gauge system. Install a TLS2

A. J. Bayliss

- Existing tanks 5 & 6 to be decommissioned and filled with RG22 foam rendering them redundant.

- Electrical installation as necessary

The site & the shop will be closed for the duration of the works, which are due to start July 23, 2007, for a five-week duration.

I have enclosed a copy of the pipework drawing, programme of works & truth table for your reference & copies of our Works Instructions/Method Statements for your file.

If you have any questions/queries, please do not hesitate to contact me, alternatively should you have no objections, please forward written approval for our records.

Yours sincerely

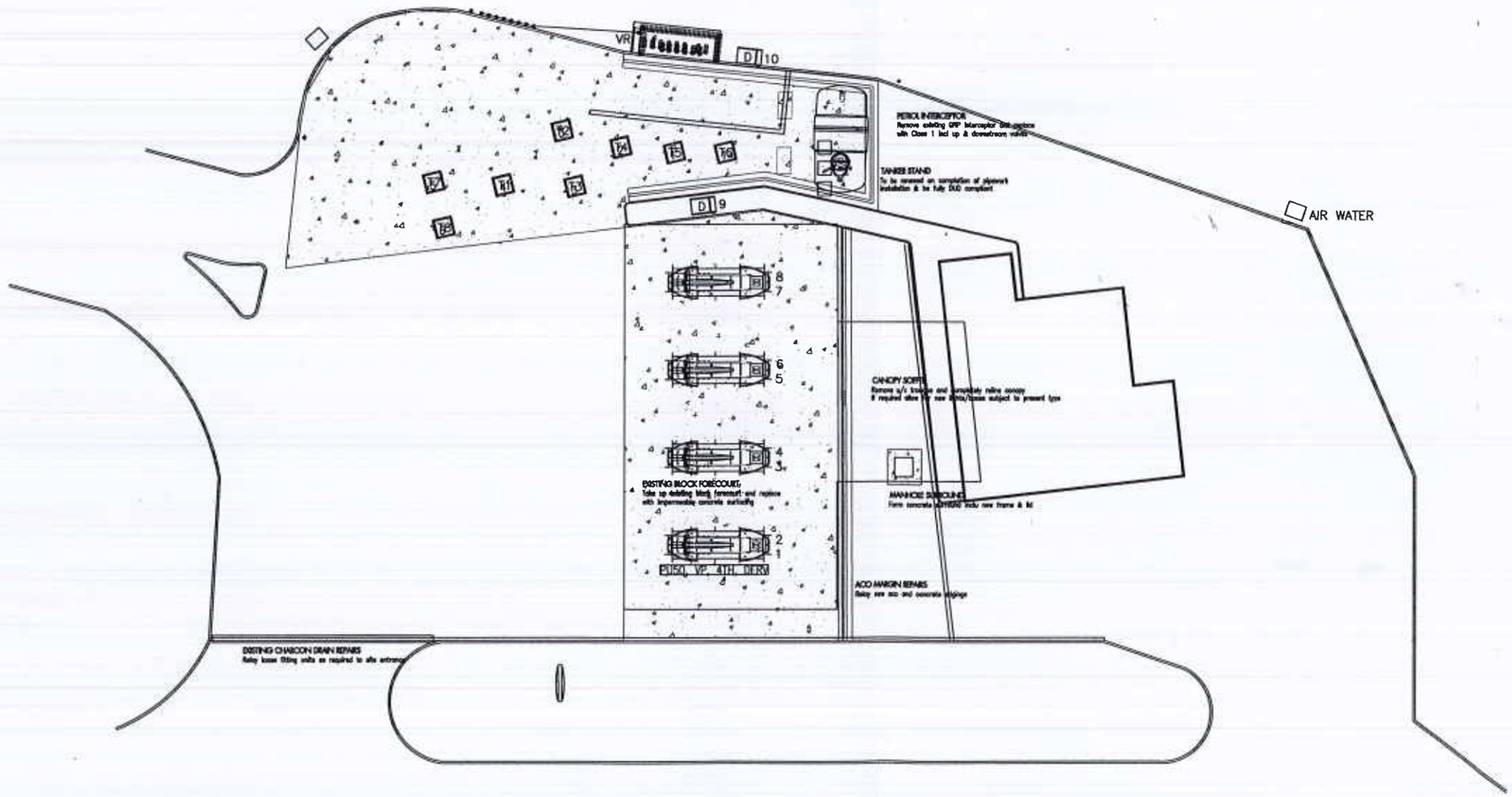


Mr. S. P. Bayliss
Director.

14

THIS IS A CAD DRAWING – HAND AMENDMENTS SHOULD BE CARRIED OUT IN ACCORDANCE WITH Q.A. PROCEDURES

NOTE : THIS DRAWING IS FOR THE PURPOSES OF DEPICTING THE EXTENT OF WORKS WITHIN THE SCOPING DOCUMENT. IT DOES NOT CONSTITUTE ANY PART OF THE FORECOURT DESIGN WHICH IS THE RESPONSIBILITY OF THE DESIGN AND BUILD CONTRACTOR THEREFORE HAS NO DESIGN LIABILITY. ONLY A CONSTRUCTION DRAWING SUBMITTED AND APPROVED BY SHELL OR THEIR AGENT IS TO BE USED FOR THE WORKS ON SITE. THE CONTRACTOR IS REMINDED THAT THE THIS SCOPE IS PRODUCED TO ASSIST THEM TO PREPARE A DESIGN AND BUILD PROPOSAL COMPLYING WITH CURRENT SHELL STANDARDS USING VALUE ENGINEERING WHILE MEETING ALL RELEVANT LEGISLATION AND SHALL BE FIT FOR PURPOSE.



EXISTING TANK TO PUMP

TANK No	GRADE	CAPACITY LITRES	PUMP NUMBERS 1/3	2/4	5/6	7/8	9	10
TANK No 1	PU50	34,580	●	●	●			
TANK No 2	DERV	10,830			●			
TANK No 3	VP UL	10,830	●					
TANK No 4	DERV	21,600		●		●		
TANK No 5	DERV	12,920					●	●
TANK No 6	DERV	12,920	●					
TANK No 7	PU50	12,350				●		
TANK No 8	VP UL	12,350		●	●	●		

INFORMATION TAKEN FROM BACK OFFICE INFO SUPPLIED FROM BACK OFFICE DATED 15/02/07

TANK No	GRADE	CAPACITY LITRES	1/3	2/4	5/6	7/8	9	10
Ex T1 to be T4	PU50	34,580	O	O				
Ex T2&3 to be T3	PU50	21,660			O	O		
Ex T4 to be T2	HGV DERV	21,660					O	O
Ex T5&6 to be T1	DERV	25,840	O	O	O	O		
Ex T7 to be T5	4TH	12,350	O	O	O	O		
Ex T8 to be T6	VP UL	12,350	O	O	O	O		

F DENOTES PROPOSED FUTURE SUCTION FEED ● DENOTES EXISTING SUCTION FEED ○ DENOTES PROPOSED SUCTION FEED

ATKINS

Rev.	Description	By	Date	Chk'd	Auth

Purpose of issue	Rev	Date	Authorised

ATKINS ©
Consulting Engineers,
Woodcote Grove,
Ashley Road,
Epsom, KT18 5BW
United Kingdom
Fax (01372) 740055
Tel. (01372) 726140

Client

PO Box 480,
Sirdrew
TW16 5XB
United Kingdom

Project

SHELL WHITEMARE POOL
WARDLEY
GATESHEAD

Title

PROPOSED SITE DEVELOPMENT PLAN

Original Scale	Drawn	Checked	Authorised
1:200	DPS		
	Date 03-05-07	Date	Date

Drawing Number: 366342 040 07 Rev -
Job Sub Unique No.

(15)

Confirmation of	OPV Testing	DrillSafe 2000 Limited
Job No.	1589/1	
Date 14/1/03		

Ordered By	Order No.	Site Details
	TBA	Shell Whitemare Pool
		Wardley
		Gateshead
		Tyne and Wear
		NE10 8YB

T. & W. MET F.B.
NORTH DIV. H.Q.
17 JAN 2003

We have pleasure in confirming that our Engineers will be at the above site, as requested on: 21/01/2003

Our Engineers have been requested, on arrival, to liaise with:

TTWHI 1/2

The tanks to be drilled (and the details we have) are:

Tank	Split with	Capacity	Grade	Standard drill	Over Drill	Internal removal	OPV
8		0	Optimax	«standard drill»		Yes	Yes
7		0	Unleaded	«standard drill»		Yes	Yes
3		0	Optimax	«standard drill»		Yes	Yes
1		0	Unleaded	«standard		Yes	Yes

FITTING OF OVER-FILL PREVENTION DEVICES

In order to ensure that there is minimum disruption to your site during the testing period we would be grateful if you would observe the following:-

Under NO circumstances should deliveries be scheduled on the above date.
During installation of overfill prevention valves please ensure no fuel deliveries are scheduled.
The keys to the filler caps should be available to our engineers on arrival to enable them to access the tanks.
Tank lids should be clear of obstruction.
The manhole chamber is clear of water and debris.

IF ANY OF THE ABOVE INFORMATION IS INCORRECT, PLEASE CONTACT DRILLSAFE 01977 676767

(16)

A.J. Bayliss Petroleum Engineers Limited

Units 1 & 2 Hodfar House, Hodfar Road
Sandy Lane Industrial Estate
Stourport on Severn
Worcestershire DY13 9QB
Tel 01299 824541 Fax 01299 827638
E mail simon@ajbayliss.demon.co.uk

5 September 2002

Fire Officer
Tyne & Wear Fire Service
South Division Headquarters
Railway Row
Sunderland
SR1 3HE

Shell Whitemare Pool, Wardley, Gateshead, Tyne & Wear, NE10 8YB

Dear Sir/Madam,

We have been instructed by Shell to carry out the grade changes at the above site as per the attached truth table.

The work will entail pumping out the fuel from the tanks to be changed, re-grading the tanks, dispensers & lighter boxes & re-programming the pump controller & gauge systems.

The start date for the work has not yet been confirmed, we shall let you know in due course.

If you queries, please call.

Yours sincerely

Simon Bayliss
Director.

T/WH1 1/2

T. & W. MET F. B
SOUTH DIV. H.Q.
- 6 SEP 2002
FS
OPS
OFFICER
Dyder

RE: SHELL WHITEMARE POOL

EXISTING TRUTH TABLE.

TANK NO:	CAPACITY	GRADE	P1/2	P3/4	P5/6	P7/8	P9	P10
1	34,580	UNLEADED	U	U	U			
2	10,830	LRP			4			
3	10,830	LRP	4					
4	21,600	DIESEL		D		D		
5	12,920	DIESEL				X	D	
6	12,920	DIESEL	D					D
7	12,350	UNLEADED				U		
8	12,350	OPTIMAX		MX	MX	MX		

PROPOSED TRUTH TABLE.

TANK NO:	CAPACITY	GRADE	P1/2	P3/4	P5/6	P7/8	P9	P10
1	34,580	UNLEADED	U	U	U			
2	10,830	DIESEL			D			
3	10,830	OPTIMAX	MX					
4	21,600	DIESEL		D		D		
5	12,920	DIESEL				X	D	
6	12,920	DIESEL	D					D
7	12,350	UNLEADED				U		
8	12,350	OPTIMAX		MX	MX	MX		

(17)

T/WHII/2.

A. J. Bayliss Petroleum Engineers Ltd,

Unit 2 Hodfar House, Sandy Lane W,
Stourport On Severn, Worcestershire.
DY13 9QB.
Tel: 01299 824541
Fax: 01299 827638
E-Mail: simon@ajbayliss.demon.co.uk

25 June, 2001

Mr. Trotter
Tyne & wear Fire Brigade
South Division Fire Brigade
Railway Rd
Sunderland
Tyne & Wear
SR1 3HE.

Re: Shell Whitemare Pool, Wordley, Gateshead, Tyne & Wear.

Dear Sir:

We have been instructed by Shell to carry out the grade changes at the above site as follows.

Tank 1 will be converted from Lrp to Unleaded.
Tank 2 will be converted from Unleaded to Lrp.
Tank 3 will be converted from Unleaded to Lrp.
Tank 4 will be converted from Unleaded to Diesel.
Tank 7 will be converted from Lrp to Unleaded.

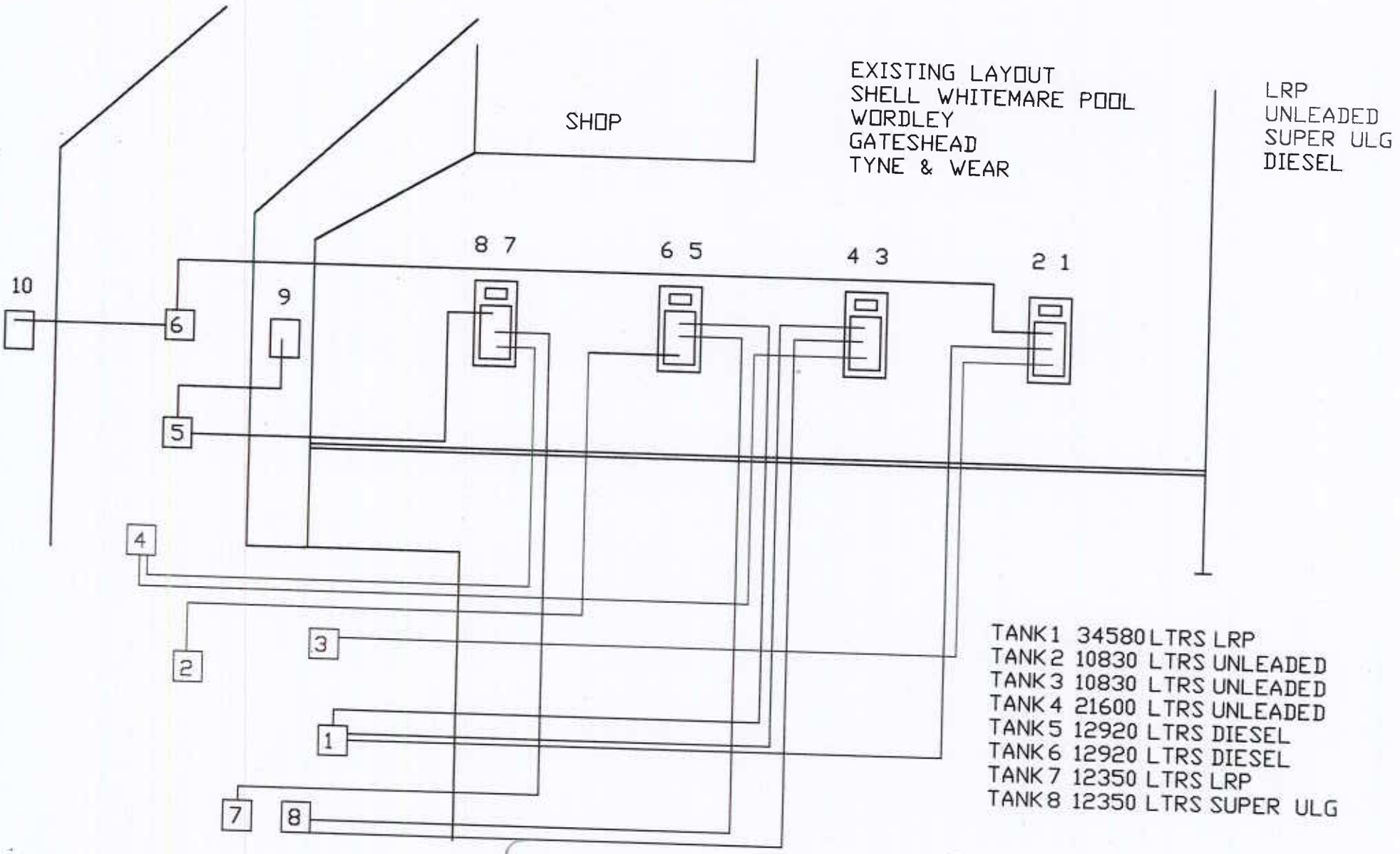
The work will also entail re programming the tank gauge system & edacom system. The tanks & dispensers will be re graded accordingly, & the vapour recovery system will be altered to suit the new tank grades. Alterations will be carried out to the existing pipework as shown on the sketch in galvanised steel.

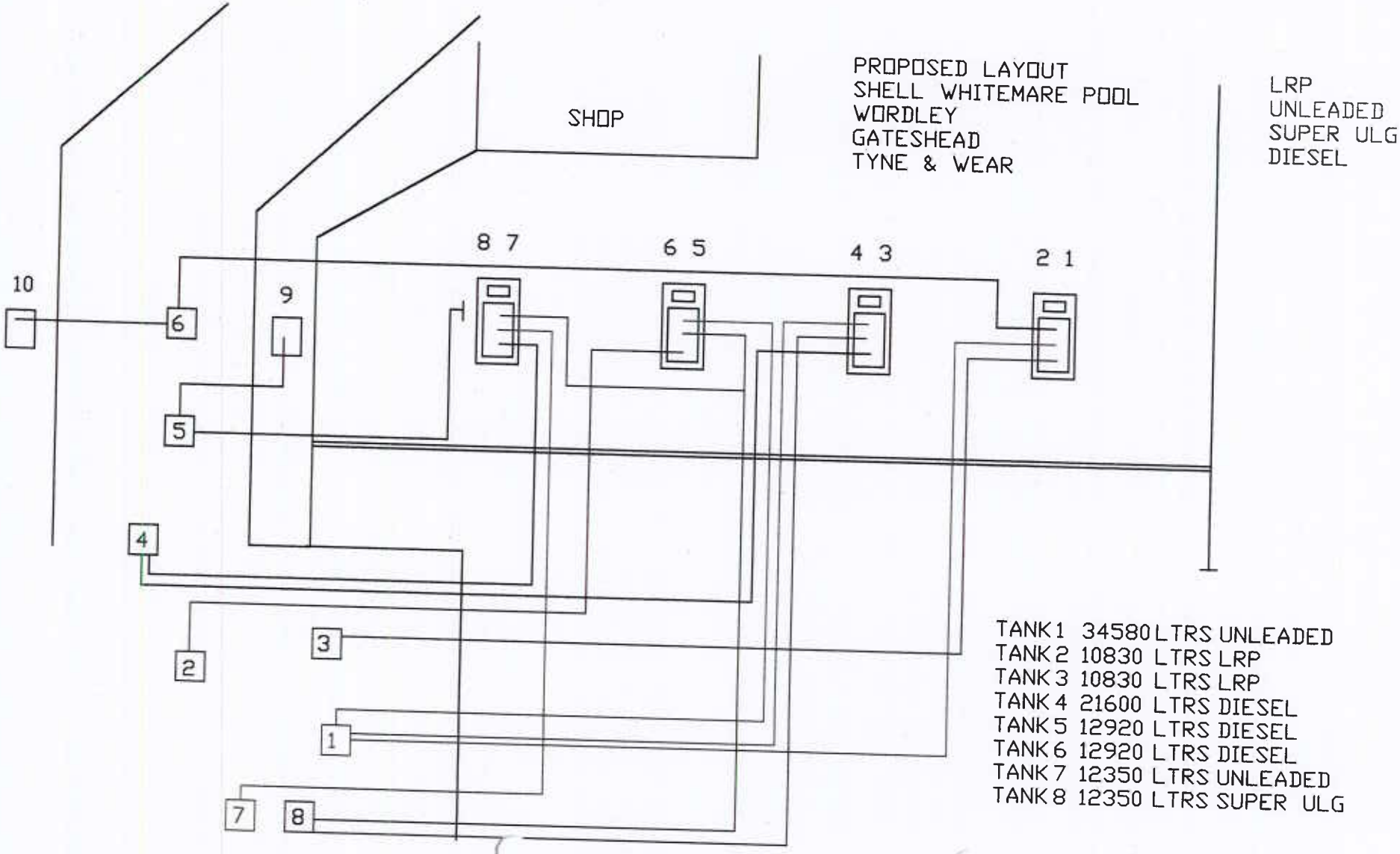
The start date for the grade change is ~~[illegible]~~. 20/8/01

If you have any queries please do not hesitate to call.

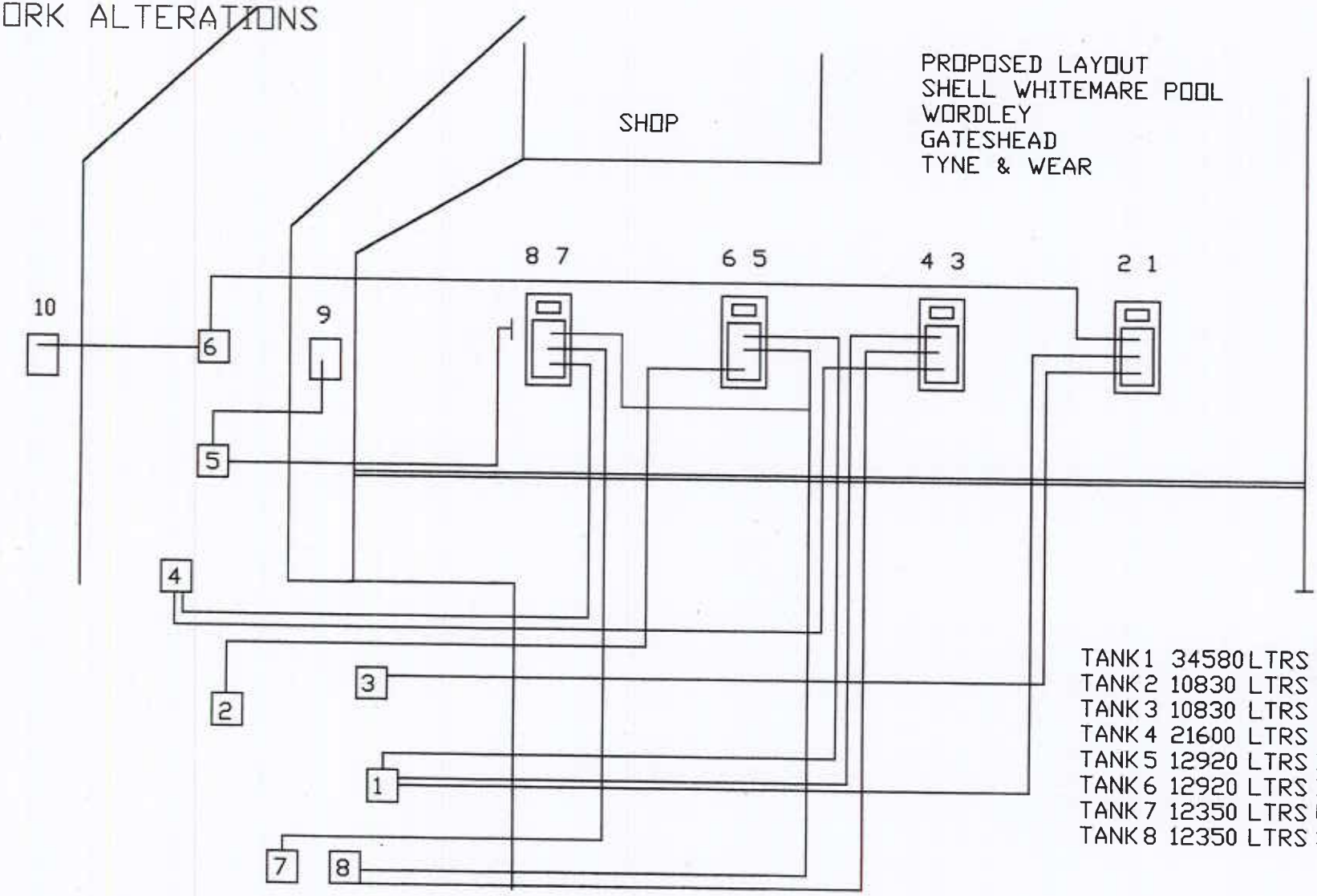
Yours Sincerely,

Simon Bayliss
Director.


EXISTING LAYOUT
SHELL WHITEMARE POOL
WORDLEY
GATESHEAD
TYNE & WEAR
SHOP
LRP
UNLEADED
SUPER ULG
DIESEL
8 7
6 5
4 3
2 1
10
9
6
5
4
2
3
1
7
8
TANK 1 34580 LTRS LRP
TANK 2 10830 LTRS UNLEADED
TANK 3 10830 LTRS UNLEADED
TANK 4 21600 LTRS UNLEADED
TANK 5 12920 LTRS DIESEL
TANK 6 12920 LTRS DIESEL
TANK 7 12350 LTRS LRP
TANK 8 12350 LTRS SUPER ULG


SHOP
PROPOSED LAYOUT
SHELL WHITEMARE POOL
WORDLEY
GATESHEAD
TYNE & WEAR
LRP
UNLEADED
SUPER ULG
DIESEL
8 7
6 5
4 3
2 1
10
9
6
5
4
3
2
1
7
8
TANK 1 34580 LTRS UNLEADED
TANK 2 10830 LTRS LRP
TANK 3 10830 LTRS LRP
TANK 4 21600 LTRS DIESEL
TANK 5 12920 LTRS DIESEL
TANK 6 12920 LTRS DIESEL
TANK 7 12350 LTRS UNLEADED
TANK 8 12350 LTRS SUPER ULG

PIPEWORK ALTERATIONS



TANK 1 34580 LTRS UNLEADED
TANK 2 10830 LTRS LRP
TANK 3 10830 LTRS LRP
TANK 4 21600 LTRS DIESEL
TANK 5 12920 LTRS DIESEL
TANK 6 12920 LTRS DIESEL
TANK 7 12350 LTRS UNLEADED
TANK 8 12350 LTRS SUPER ULG

WORK INSTRUCTION No: 2.7

DRAINING/UPLIFTING AND TRANSFERRING FUEL FROM/TO STORAGE TANK(S)/ROAD VEHICLE(S).

GENERAL.

This Work Instruction is to ensure the safety of the Company's personnel, client's staff and members of the public, when draining/uplifting and transferring fuel from/to storage tank(s) or into an approved road vehicle (not a vacuum tanker) at a filling/service station or commercial site. This instruction should be read in conjunction with the Company's Health & Safety and COSHH Manuals.

PERSONAL PROTECTIVE AND SAFETY EQUIPMENT.

The following equipment is essential always:

a) Overall

b) Safety Footwear

c) Rubber/disposable gloves

d) Hard hat

e) Fire extinguisher(s)

f) Stainless or galvanised steel bucket(s)

The following additional equipment may be required:

a) Hand barrier cream

b) Heavy duty gloves

c) Goggles, if any splashing is likely to occur

d) Reflective Jacket/Belt

If the site is operational then it shall be temporarily closed during the uplifting operation. It will then be necessary to cordon off two distinct areas, unless they are combined, before commencing work:

a) the area around the donor tank(s)

b) the area around the recipient tank(s)/road vehicle

Both areas shall be protected against unauthorised access by using traffic cones, protective barriers or tape positioned at a radii of at least 4.0 metres of the tank openings. "No Smoking" notices shall be prominently displayed and fire extinguishers and a spill kit shall be strategically located so that quick and ready access is possible in the event of an incident. Extreme care shall be exercised when pumping/draining fuel from tank to tank, or to a road vehicle, to avoid spillage. The road tanker driver is responsible for ensuring that there is sufficient ullage in the recipient vehicle's tank compartment(s) and he should stand on top of the vehicle's tank during the discharge to ensure there is no spillage or overfill. The tank(s) ullage shall be visually checked, by him, and confirmed by dipping.

PROCEDURES.

a) The Engineer shall, on arrival at the filling/service station/site, advise the Operator of his/her arrival. Establish the tank(s) from which the fuel is to be drained/uplifted from, the grade of the fuel, the quantity of fuel, the identity of the dispenser(s) that are connected to the donor tank(s) and, where applicable the recipient tank(s), also their number(s). The Engineer together with the site Operator shall check and isolate any potential sources of ignition within the site perimeter before commencing work.

b) Shut down the dispenser(s) and switch off their mains electrical supply or lock all the nozzles in their holsters.

c) Where applicable measure the depth of the tank(s) inspection chamber(s) and apply Work Instruction No: 2.0.

d) Drain back the suction line(s) to the donor tank(s).

e) Check the quantity and quality of fuel in the recipient tank(s) to ensure there is sufficient ullage to accommodate the fuel to be transferred and that it is of similar grade.

f) If the donor tank(s) is fitted with an offset fill line remove the plug from the tee-piece on top of the tank inspection cover, or remove any spare connection, and insert the internal suction pipe from the pumping out unit.

g) If the fuel is to be pumped into a road vehicle consideration shall be given to the prevailing wind direction so that the vehicle is positioned to ensure that any vapour that is displaced from its tank(s) is dispersed safely.

h) Position the single tool air compressor in a safe area, upwind, from the working area(s) at least 4.25 metres from any tank openings. Connect the air hoses to the Atlas Copco diaphragm pump.

NOTE: Only the Company's specially prepared air compressor unit, that is equipped with a Chalwin induction manifold and exhaust spark arrestors shall be used for uplifting fuel.

i) Using only the Company's earthed and bonded hoses connect the pump's fuel suction line to the internally inserted tube in the donor tank(s) and its discharge line to the fill pipe of the recipient tank.

j) If the fuel is to be pumped into a road vehicle it is essential to determine the capacity of receiving tank(s)/compartment(s) and check that it is empty. The discharge hose may be connected to the vehicle's recipient tank(s) bottom API or placed through the manlid. If the latter method is adopted the hose shall be fully inserted to the bottom of the tank/compartment and securely restrained in that position during discharge.

IMPORTANT NOTE: The free fall or splashing of fuel into the recipient tank/compartment is STRICTLY PROHIBITED.

k) Start up the single tool air compressor and commence pumping. Check, immediately, all hose connections for leaks collecting any leaks in the steel bucket. The Atlas Copco pumping unit shall be shut down immediately if any leaks are observed and BEFORE the leak is rectified.

Colour coded laminated "Traffolite" labels shall be fitted to each tank manlid indicating the grade of fuel stored and the safe working capacity, normally 97% of the tank/compartment capacity, or as otherwise specified.

Each suction pipe shall terminate under its associated Dispenser with a 1.5" diameter brass or stainless steel check (NRV) valve (normally supplied with the Dispenser) to restrain the fallback of fuel to the tank. The Dispenser connection shall be made with a flexible connector. The flexible connector, including its joints shall always be above the Dispenser drip tray.
NOTE: Dropped suction lines are not acceptable.

See Work Instruction No: 3.1 for details of installation requirements for vapour balancing and non-balancing vent pipelines and off-set fill pipes.

TESTING.

On completion, and BEFORE the removal of the protective barriers, all new and disturbed pipelines shall be tested in accordance with Work Instruction No. 3.4. During the test period a further inspection of the lines, under test, shall be carried out and any abnormalities recorded.

No observable pressure drop over the test period is acceptable.

Any pipeline failing to maintain the imposed test pressure shall be rejected and shall become the subject of an investigation and the completion of "Non-Conformance and Corrective Action Reports". Any fitting or joint found leaking shall be replaced in its entirety. No further tightening of a compression fitting is permissible.

Notices "WARNING PRESSURE TESTING" shall be conspicuously displayed at strategic positions and all unauthorised personnel kept away from the pipelines during the testing procedure. Installation Engineer(s) may be required, by the Client, to be in attendance when the first deliveries of fuel are made into the installation. They shall be present during the commissioning of any new Dispensers when a final visual inspection shall be made of the tank and Dispenser connections and to undertake a dispenser grade verification check, (Work Ins. 1.5, Page 2).

DOCUMENTATION.

On completion of the work the Engineer shall complete the following:

a) Certificate of Test Underground Tanks/Pipework, Form: QAS014.

b) Installation Completion Check List, Form: QAS015(a).

c) Dispenser Grade Verification - Check List, Form: QAS036.

d) Installation/Service Report, Form: QAS015.

WORK INSTRUCTION No: 3.2

INSTALLATION/ALTERATION OF MILD STEEL PIPEWORK ON AN OPERATIONAL SITE.

GENERAL.

This Work Instruction describes a method for installing/altering screwed galvanised and black mild steel pipework for fuel systems at operational retail and commercial petroleum installations. It is designed to assist in protecting the safety of the Company's personnel, client's staff and members of the public and to achieve a good standard of work on an existing site/service station(s).

The definition of "operational" is any site/station in which petroleum products are, or have been, stored in underground storage tanks and/or pipelines. These working areas present special safety hazards and strict compliance with the following procedures are MANDATORY.

This Work Instruction shall be read in conjunction with the Company's Health & Safety and COSHH Manuals and Work Instruction No: 2.0. It is also supplemental to Work Instruction No: 3.1 and any conflicting instruction(s) shall override those contained in that document.

The Engineer(s) shall, on arrival at the site/service station, advise the Operator of his/her arrival and, in the absence of any specific preparatory instructions, obtain a clear and concise identification of the area in which the specified work is to be carried out.

For polyethylene pipework see Work Instruction No 3.0.

NOTE: Other Work Instructions are applicable when carrying out alterations/modifications to pipework of other materials e.g. G.R.P. etc. and also for pressurised, submerged pump, installations.

PERSONAL PROTECTIVE AND SAFETY EQUIPMENT.

The following equipment is essential always:

a) Overall

b) Safety Footwear

c) Hard hat

d) Hand Barrier cream and heavy duty gloves

e) Traffic cones, protective barriers or tape

f) Fire Extinguisher

The following additional equipment may be required:

a) Goggles

b) Ear defenders

c) Reflective Jacket/Belt

The working areas, particularly around open trenches and Inspection chambers, shall be effectively cordoned off to protect the work and to minimise unauthorised access, by using traffic cones, protective barriers or tape. A fire extinguisher is in the vehicle in such a position that quick and ready access is possible in the event of a fire.

When, for operational reasons, the vehicle is parked, remotely, from the working area the fire extinguisher shall be deployed within a 5 metre radius of the working area.

NOTE: Additional extinguishers are likely to be available either on the Dispenser islands or in front of the Sales building but these shall only be used if the Company's extinguisher proves inadequate for dealing with the fire.

INSTALLATION REQUIREMENTS.

Before commencing work on existing pipelines the Engineer shall ensure that:

a) all associated Dispensers are "locked out"

b) the lines are drained back to their associated tank(s)

c) all filling points are securely locked

Any work taking place in an Inspection Chamber MUST be carried out in strict compliance with Work Instruction No: 2.0.

Care shall be exercised when disconnecting existing pipelines to avoid any spillage and ALL open ends shall immediately be capped/plugged until they are finally re-connected.

Pipework conforming to BS 1387: 1985 (Blue Band) and malleable C.I. pipe fittings to BS 143 & BS 1256:1986 only shall be used. Generally galvanised pipe shall be used for all installations except when otherwise specified when black pipe may be used for diesel pipelines. The number of joints shall be kept to a minimum. Pipe joints will normally be screwed and shall be adequately protected against corrosion.

Specified jointing compound shall be used only in strict accordance with the manufacturers instructions. The joint(s) shall be thoroughly degreased prior to applying the compound only to the 'male' threaded section. The joint(s) shall be adequately supported before and after jointing. Commonly "litharge" is specified by clients and this should be mixed in the proportion of 3.5 litharge : 1 glycerine by volume (or otherwise as specified). Accelerated curing of litharge by any means is strictly prohibited. Sufficient time, depending upon the prevailing ambient temperature, shall be allowed for the natural curing of the compounded joint. Fuel must not be brought into contact with a newly made joint until the compound has fully cured.

Bending of pipes shall be employed whenever possible to minimise on the number of screwed elbow fittings. Bending shall however only be used on pipework up to 50 mm diameter (2"). Bending shall not exceed an angle of 45°. After bending, the pipe shall be inspected to check for cracks, excessive scratching, wrinkling or thinning that, if evident, are grounds for rejection. Localised heating, cooling or flattening of a pipe is not permitted.

New pipelines shall be laid to levels consistent to that of the existing pipelines to provide a continuous fall-back towards its associated tank of 1:120, 25mm per 3 metres of length. There shall be no high or low points which could allow the accumulation of condensation. Each below ground pipe run, including vent pipes, shall be firmly supported to maintain the required levels. Following satisfactory testing and the approval of the local Licensing Authority all below ground pipelines shall be encased in, not less than, 150mm of sulphate resisting concrete. The minimum distance of the finished ground surface above a pipe run shall not be less than 300mm.

Any temporary pipe supports used during the pipe laying must be removed before backfilling the trenches. In areas subject to vehicular traffic the surface of the ground above a pipe run shall be adequately reinforced to protect the pipe from the weight of the vehicles, before the removal of protective barriers.

All pipelines which enter inspection chambers shall be at right angles to the sides of the chamber and have connections within the chamber to allow for future disconnections.

NOTE: PVC (plastic), GRP or other non-conductive buckets or containers should NOT be used.

l) The pumping operation shall be monitored with the quantity of fuel pumped out from the donor tank being continuously reconciled with the contents of the recipient tank ensuring that sufficient ullage always remains.

m) On completion of the fuel uplift/transfer remove the internally inserted suction tube from the donor tank, keeping the Atlas Copco pumping unit running, and lift the hoses to drain any residual fuel back to the pump. When the hoses are drained switch off the compressor.

n) The donor tank(s) shall then be sealed and "made safe" in accordance with Work Instruction No. 2.2, 2.3 or 2.5.

o) All disturbed pipe lines/connections on the recipient tank(s) shall be reinstated and tested in accordance with Work Instruction No. 3.2.

p) If the recipient tank(s) has been regraded, re-signature the fill pipe connections and connected dispenser(s) as necessary in accordance with Work Instruction No. 1.4. Where appropriate, re-programme the console and tank(s) contents gauging equipment accordingly.

q) If the fuel has been transferred to a road vehicle determine and record the actual quantity discharged before securing the tank/compartment cover(s).

Following the transfer of the fuel to the recipient tank(s) check and ensure that all the fill points are securely locked and the key(s) returned to the Site Operator.

The site to be left in a clean, tidy and safe condition.

DOCUMENTATION.

On completion of the work the Engineer(s) shall complete the following:

a) Installation/Service Report, Form: QAS015.

b) Page 3 - Dispenser/Tank Grade Verification Check List, Form: QAS035.

c) Site Register/Visitors book.

The following additional documentation will be required when the fuel has been transferred into a road vehicle for removal from site:

d) The Road Traffic (Carriage of Dangerous Substances in Road Tankers & Tank Containers) Regulations 1992.

(18) Stn O Keith Trotter

Consultants in environmental geotechnology

Facsimile Transmission

DG environmental ltd

Black Lion Court, High Street
Congleton, Cheshire CW12 1WL

Telephone: 01260 - 299495
Telefax: 01260 - 299856

Date:	29 January 1999
Pages:	2 including cover
From:	Chris Buckley
To:	Fire Safety
Attention of:	Ken Pringle
Fax number:	0191 2585089
Subject:	Service Plans
Our reference:	C1433.356
Your reference:	

If any of this transmission is missing or unclear please contact our office on: 01260 - 299495

RE: Shell Whitemare Pool, Gateshead.

Ruth

As requested please find Method Statement for the proposed works on the above site. The works are planned for the week commencing 15/2/99.

If you have any queries please contact me.

Regards

Chris Buckley

Report Sent 5/2/99

T/WH11/2

T. & W. MET F. B
SOUTH DIV. H.Q.
- 2 FEB 1999
FS ✓
OPS
OFFICER
STNO TROTTER

D G Environmental Ltd

FIRE SAFETY METHOD STATEMENT FOR INSTALLATION OF BOREHOLES (INCL SHALLOW SOIL SAMPLING)

1. Introduction

DG Environmental Ltd. are greatly aware of the hazards inherent in many types of work at a filling station. Fire and explosion risks are ever present because of the presence of highly flammable petrol vapours. BS 5345 defines the following hazard zones.

a) *Zone 0:* in which an explosive gas-air mixture is continuously present, or present for long periods.

b) *Zone 1:* in which an explosive gas-air mixture is likely to occur in normal operation.

c) *Zone 2:* in which an explosive gas-air mixture is likely to occur in normal operation and, it occurs, it will exist only for a short time.

Guidelines for the extent of these zones is detailed in HS(G) 41 (petrol filling stations: Construction and Operation).

A method statement for the work on site for the installation of boreholes in order to investigate potential soil and groundwater contamination is detailed below:

2. General Working Practices

a) All operations will conform to the clients Safety Requirements.

b) As a pre-requisite to any site operations, no work is carried out at the site until permission is obtained from the site manager, client representative, Petroleum Officer or other approved person.

c) No smoking will be permitted on site, except for those areas designated for that purpose by the person responsible for the site.

d) All activities will be temporarily ceased during the discharge from a road tanker of motor fuels at the site.

e) The activities will not obstruct fire and emergency equipment at the site, exits, walkways, etc.

f) No fire or naked light, no petrol or other types of lighters, nor any apparatus causing ignition shall be taken into the site by any person.

g) A suitable fire extinguisher will be located ready for use, within one metre of the location being investigated. The fire extinguisher will be of dry powder type and personnel on site will be familiar with the use of this instrument.

h) The working area shall be monitored at a minimum of 30 minute intervals for hydrocarbon vapours using an explosimeter which has a certificate for use in areas such as *Zone 2*. Should the concentrations exceed 0.4 (or 40%) of the Lower Flammable Limit (LFL), drilling will cease. These readings will be taken at 100 mm above the drilling surface.

I) A mobile car phone will be kept on decommissioned sites for use in case of emergency. On open sites car phones will only be used outside *Zone 2*.

j) The minimum clothing issued to DGEL employees and sub contractors will include reflective jacket, safety helmet, protective visor, ear defenders, steel toe capped footwear and gloves. All clothing will conform to the relevant British Standard. Safety helmets are not required to be worn for shallow soil sampling operations using hand held equipment.

k) Appropriate use will be made of road cones, barriers, warning signs, to ensure a safe working environment for both drilling personnel and the public.

3. Location of Sampling Points

a) In order to assess the quality of soil and groundwater at the site it will be necessary to drill boreholes. The position of these sampling points will be determined on the basis of existing information, gained from a Desk-top Study and Soil Gas Survey of the site, which highlights areas of hydrocarbon contamination and location of buried services.

b) No drilling work shall be carried out unless all underground services have been determined and identified. If this is not the case, then a survey to determine the location of all buried services (cables, pipework and UST's) will be undertaken using remote transducer equipment. A separate Method Statement for undertaking this work is provided under the Soil Gas Survey Procedures. The positions of the pipework will then be indelibly marked on the ground.

c) No holes will be drilled where there is any doubt about the exact location of underground services. No holes shall be drilled within one metre of a pipe/cable location.

d) Consideration will also be given to the restrictions imposed by Note HS(G)41 and advice from site management and the Petroleum Officer.

e) No drilling work shall be carried out within a 4.25m radius (*Zone 1*) of any petrol dispensing pump which is in use. Drilling will only be permitted if the pump is switched off.

D G Environmental Ltd

f) No holes shall be drilled within a 2.0m radius of the theoretical length of an underground storage tank (UST). The theoretical boundary distance measured from the tank fill point shall be calculated based upon the known/documented tank volume and an assumed tank diameter of 2.5m using the relationship $l\pi r^2 = V$.

Where, r = tank radius
l = tank length
V = tank volume

4. Drilling Techniques

Two different drilling techniques may be employed during contamination surveys.

Both techniques will utilise water flushing during drilling through concrete and hardcore in order to suppress sparks.

Prior to each boring the area will be rechecked for underground services and tanks using the Radiodetection Locator.

On completion of the sampling, if no well is to be installed, the borehole will be infilled with a cement bentonite mixture. Drill cuttings will be disposed of via an approved route.

The drilling equipment will be cleaned with a high pressure water system between each borehole location.

a) Shallow Soil Sampling

The purpose of this technique is to obtain soil samples for field or laboratory analysis at shallow depth to a maximum of 4.0m bgl from a number of locations.

The sample holes will be drilled using a 35 mm drill powered remotely using either a diesel or petrol driven hydraulic power pack fitted with spark arresters and covers to the exhaust to conform to the requirements of HS(G)41, or an air compressor. This technique is used to drill a pilot hole through the forecourt hardcover before driving a window sampler or flow through sampler to the desired depth by percussive boring using the same power packs. The samplers are retrieved using either a hydraulic or manual jack system.

b) Deep Large Bore Drilling

This involves the use of a 150 - 200 mm diameter cable percussion (shell and auger) drilling rig to drill a limited number of boreholes (rarely exceeding 5 No.) down to a depth just below the water table. The depth of the boreholes will rarely exceed a depth of 10m bgl. Any concrete at the surface will be broken out using a concrete corer on the drilling rig or with the use of a drill powered remotely by a compressor.

The purpose of this technique is to obtain soil samples for field and laboratory analysis and install, where required, groundwater monitoring wells on completion of drilling. The groundwater monitoring wells comprise a screened section of high density polyethylene (HDPE) or PVC piping, designed specifically for groundwater monitoring wells and obtained from a recognised supplier. The screened section of piping has a gravel surround which is sealed out just below the ground level, with an impermeable layer of bentonite, in order to prevent the ingress of any surface water into the well. A suitable cover is placed over the top of the well, flush with the ground level.

On completion of drilling and well emplacement, all waste arisings will be removed from site for disposal. Any contaminated material will be disposed of at a registered landfill site.

5. Groundwater Sampling

a) After allowing a sufficient period of time for the groundwater monitoring wells to re-equilibrate to the local and regional water table, groundwater is undertaken.

b) This is purely a manual procedure which involves no mechanical equipment to obtain the water sample. Tubing is lowered into the well and water is retrieved by means of an inertial lift valve mechanism or liquid layer samplers. The water samples are collected in glass jars, sealed up and dispatched to the laboratory for analysis.

19

DAVID McLEAN

Contractors Limited

PETROLEUM DIVISION

Direct
Tel Line:

Email:

Tel: 01352 793000

Fax: 01352 793001

8 July 1997

Ref: GENRA/JB/tmk.1040/P.5.1.3

Chief Fire Officer
Newcastle Fire Brigade
Pilgrim Street
Newcastle NE99 0HK

T. & W. METS. R.
SOUTH DIV. H.Q.
15 JUL 1997
FS
OPS
OFFICER

For the attention of Station Officer Trotter

Dear Sir

Shell Whitemare Pool
Whitemare Pool, Wardley, Gateshead, Tyne & Wear, NE10 8YB

David McLean Contractors, Petroleum Division, have been appointed the contractor to undertake all the Design and Build Contracts across the UK for Shell UK Limited.

It is intended to carry out a full re-pump of the above site, the works being programmed for week commencing 22 September 1997, but some dates may change depending on Shell's ability to make the site available.

With regards to the above site, our Area Contracts Manager will contact you in advance to ensure that the work is carried out to your requirements and in compliance with relevant legislation.

Please do not hesitate to contact the writer should you require any additional information or wish to discuss these works.

Yours faithfully
for DAVID McLEAN CONTRACTORS LIMITED

John Bruce
Design Manager

cc: Contract Manager

19

DAVID McLEAN

Contractors Limited

PETROLEUM DIVISION

Direct
Tel Line:

Tel: 01352 793000

E-mail:

Fax: 01352 793001

27 August 1997

Our Ref: 600281/BR.sg/001/P5.1.3

Tyne & Wear Fire Brigade
South Division Head Quarters
Railway Row
Sunderland
SK13 HE

T/WH: 1

T. & W.
SOUTH
28 AUG 1997
FS
OPS
OFFICER
Sho Trotter

For the attention of Keith Trotter (Petroleum Division)

Dear Sir

Re: Shell Whitemare Pool, Wardley, South Tyneside

Regarding the above proposed development, we enclose 2 copies of our drawing no. 366342/DMC/001 indicating the proposals for the overall site development.

The development comprises of the following:-

1. Stage 1B and Stage 2 Vapour Recovery to be installed.
2. New 4* and U98 fuel lines to tee off from islands 3/4 and 5/6.
3. New fuel lines to be 63 mm ϕ UPP pipework.

It is our intention to start works on site on 22/9/97, our Contracts Manager will contact yourself with the view to arranging a site meeting to discuss, and agree the full scope of works.

Sorry it is so late but our work load is immense. Trusting that the above is in order, however should you have any additional information, please do not hesitate to contact us.

VISIT ON 22/9/97

Yours faithfully
for **DAVID McLEAN CONTRACTORS (Petroleum Division) LTD**

B Griffiths

11 **BARRY RICHARDS**
CAD Technician

Encl.

UNIT 6, ACORN BUSINESS PARK
ABER PARK, FLINT,
FLINTSHIRE CH6 5YN
TEL: 01352 793000 FAX: 01352 793001
Registered in England and Wales 1076147
VAT Reg. No. 559 8467 74

Construction Certificate No. 927544

Existing Vent pipes manifolded at low level,new Vapour Return Line taken back to new Vapour Recovery hook up point adjacent to above ground fill positions.
Note:Existing Tank fill pipes to be inspected and checked for Overfill Prevention Device valves.(If no valves exist then vent pipes to be manifolded at high level.)

INº PROPOSED 26000 LTR U/G D/C SPIRIT STORAGE TANK.

New Super Unleaded fuel line.

New 4" Fuel line.

All new fuel pipework to be 63mmø UPP suction lines
Tee off from appropriate islands as shown on plan.

1B

EXG OFFICE

EXG DIESEL

EXISTING TANK FROM "PHASE 2" (SEE SCHEDULE FOR CAPACITY)

SEAL OFF EXG LINE

NEW LINE

SEAL OFF EXG LINE

1" EXG FILLS

OUTLINE OF EXISTING CANOPY OVER

EXG MONOLITH SIGN

W.C.

COMPRESSOR

LOBBY

CONSOLE

OFFICE (1ST FL)

NEW OFFICE FWG

EXG FWGS

I.L. 49.647

49.30

49.24

A

B

C

D

(21)

T/WH 1 1/2

Chem Safe

JDB/JMS

SO Trotter
South Division HQ
Railway Road
Sunderland
SR1 3HE

Chem Safe
Tank Testing (U.K.) Ltd
P.O.Box 38, Ossett
West Yorkshire, WF5 9YY

Telephone: 0990 133 111
Facsimile: 0990 133 110

30th July 1997

Reference : Tank Testing - Shell Whitemere Pool

Dear Sirs,

Please find enclosed copy certificates in regards to works carried out at the above by Chem Safe Engineers. All certificates have been duly signed and sealed with the company seal.

Yours sincerely
signed for and on behalf of
Chem Safe Tank Testing

[redacted]

T/WH 1 1/2.
T. & W. METR. B
SOUTH DIV. H.Q.
- 7 AUG 1997
FS
OPR
SHO Trotter

CERTIFICATE

CERTIFICATE NO
175/1811/96

NAME of LICENSEE:
Shell Whitemore Pool

NAME & ADDRESS OF PREMISES:
Shell Whitemore Pool
Whitemore Pool
Wardlex
Gateshead
Tyne & Wear

Precision Leak Detection Test carried out to
Tank 1 4* 34,580 Litres + Associated Pipework & Vent
Tank 2 U/L 12,920 Litres + Associated Pipework & Vent
Tank 3 U/L 10,830 Litres + Assiociated Pipework & Vent
Tank 4 U/L 21,660 Litres + Associated Pipework & Vent

Chem Safe Tank testing (UK) Ltd certify that the equipment detailed below has been subjected to a leak detection test in accordance with the method statement and protocol as directed by the licensor. This test conforms to the standard E.P.A. test procedure for non-volumetric testing.

DATE	*DESCRIPTION*	*NOM-CAPACITY*	*ACT-CAPACITY*	*RESULT*
20.11.96	Tank 1 4* Suction Offset Fill/Fill Vent	34,580 Litres	14,467 Litres	**Pass** **Pass** **Pass** **Pass**
	Tank 2 U/L Suction Offset Fill/Fill Vent	10,330 Litres	9,339 Litres	**Pass** **Pass** **Pass** **Pass**
	Tank 3 U/L Suction Offset Fill/Fill Vent	10,330 Litres	9,174 Litres	**Pass** **Pass** **Pass** **Pass**
	Tank 4 U/L Suction Offset Fill/Fill Vent	21,660 Litres	19,061 Litres	**Pass** **Pass** **Pass** **Pass**

Signed for Chem Safe Tank Testing (UK) Ltd [redacted] 29/11/96
Authentication Stamp (Invalid Without)

CERTIFICATE

CERTIFICATE NO
233/307/97

PREMISES & DATE OF TEST
Shell Whitemere Pool — 23rd July 1997
Whitemere Pool
Wardley
Gateshead
NE10 8YB

Tank No.	*Capacity*	*Tested*	*Result*	*Additional Comments*
1 4*	34,580 Litres	*TANK VENT SUCTION OFFSET*	**Pass**	
		TANK VENT SUCTION OFFSET		
		TANK VENT SUCTION OFFSET		
		TANK VENT SUCTION OFFSET		

Chem Safe Tank testing (UK) Ltd certify that the equipment detailed below has been subjected to a leak detection test in accordance with the method statement and protocol as directed by the licensor. This test conforms to the standard E.P.A. test procedure for non-volumetric testing.

Signed for Chem Safe Tank Testing (UK) Ltd [redacted] **Date.** 31/7/97
Authentication Stamp (Invalid Without)

CERTIFICATE

CERTIFICATE NO
233/307/97

PREMISES & DATE OF TEST	
Shell Whitemere Pool Whitemere Pool Wardley Gateshead NE10 8YB	23rd July 1997

Tank No.	*Capacity*	*Tested*	*Result*	*Additional Comments*
1 4*	34,580 Litres	*TANK* *VENT* *SUCTION* *OFFSET*	**Pass** **Pass** **Pass**	
		TANK *VENT* *SUCTION* *OFFSET*		
		TANK *VENT* *SUCTION* *OFFSET*		
		TANK *VENT* *SUCTION* *OFFSET*		

Chem Safe Tank testing (UK) Ltd certify that the equipment detailed below has been subjected to a leak detection test in accordance with the method statement and protocol as directed by the licensor. This test conforms to the standard E.P.A. test procedure for non-volumetric testing.

Signed for Chem Safe Tank Testing (UK) Ltd [redacted] **.. Date.** 31/7/97
Authentication Stamp (Invalid Without)

22

Chem Safe

Chem Safe
Tank Testing (U.K.) Ltd
P.O.Box 38, Ossett
West Yorkshire, WF5 9YY

Telephone: 0990 133 111
Facsimile: 0990 133 110



MC/JMS

Tyne & Wear Metropolitan Fire Brigade
Rlyrim Street
Newcastle Upon tyne

Dear Sirs,

Re: Tank Testing - Shell Whitemore

Please find enclosed our Certificates in regards to works carried out at the above which are signed & sealed with the company seal.

[redacted]

Managing Director

encl

South Tyneside 45

CERTIFICATE

CERTIFICATE NO 175/1811/96
NAME of LICENSEE: Shell Whitemore Pool
NAME & ADDRESS OF PREMISES: Shell Whitemore Pool Whitemore Pool Wardlex Gateshead Tyne & Wear T/WHI1/2
Precision Leak Detection Test carried out to Tank 5 Derv 12,920 Litres + Associated Pipework & Vent Tank 6 Derv 12,920 Litres + Associated Pipework & Vent Tank 7 4* 12,350 Litres + Associated Pipework & Vent Tank 8 S/U 12,350 Litres + Associated Pipework & Vent

Chem Safe Tank testing (UK) Ltd certify that the equipment detailed below has been subjected to a leak detection test in accordance with the method statement and protocol as directed by the licensor. This test conforms to the standard E.P.A. test procedure for non-volumetric testing.

DATE	DESCRIPTION	NOM-CAPACITY	ACT-CAPACITY	RESULT
18.11.96	Tank 5 Derv Suction Offset Fill/Fill Vent	12,920 Litres	7,675 Litres	**Pass** **Pass** **Pass** **Pass**
	Tank 6 Derv Suction Offset Fill/Fill Vent	12,920 Litres	7,320 Litres	**Pass** **Pass** **Pass** **Pass**
	Tank 7 4* Suction Offset Fill/Fill Vent	12,350 Litres	10,782 Litres	**Pass** **Pass** **Pass** **Pass**
	Tank 8 S/U Suction Offset Fill/Fill Vent	12,350 Litres	6,968 Litres	**Pass** **Pass** **Pass** **Pass**

Signed for Chem Safe Tank Testing (UK) Ltd [redacted] 29/11/96
Authentication Stamp (Invalid Without)

6 Tanks
Pass 96.

23

South Division HQ

Clovemead Limited

BRUNEL HOUSE, VALE OWEN ROAD, ORFORD GREEN, WARRINGTON WA2 8NZ. Tel: (0925) 411221 Fax: (0925) 418496

Our ref: JM/LKL/8988

1 September 1995

T. & W. MET F. B.
NORTH DIV. H.Q.
04SEP1995
SEN. OFF'S.
F.P.
OPS.
STATION
FILE

So Agreement Dating
To file

North Divisional Headquarters
West Denton Way
N.W.T.
NE5 2RD

Dear Sir,

RE: Whitemere Pool T/C

Please find enclosed copy of test certificates with regard to works carried out at the above site.

We trust this meets with your approval, however, should you require any further information, please do not hesitate to contack the undersigned at your earlist convenience.

Yours faithfully

T/WH11/2

A. Dunn

PP John Mitchell

cc Mr M Collins, Shell UK Ltd

T. & W. MET F. B.
SOUTH DIV. H.Q.
06 SEP 1995

[redacted]

STNO & O'DONNELL
the file

Clovemead Limited

Title: CERTIFICATE OF PRESSURE TEST CLPD11

Section Ref: QMWI02 Date: 03/06/91 Revision: 0 Page: 1 of 1

SITE....Whitemere Pool.....CONTRACT NO..8988.....

ADDRESS.....Hardley
.....Gateshead.....

DATE OF TEST(S):.....28/6/95.....

REASON FOR TEST(S): ~~NEW INSTALLATION~~ / SUSPECTED LOSS / ~~STATUTORY AGE TEST~~

WAS THE PETROLEUM OFFICER ADVISED OF THE TESTS? YES ✓ / ~~NO~~
WERE THE TESTS WITNESSED BY THE PETROLEUM OFFICER? ~~YES~~ / NO ✓

IF YES GIVE NAME AND TELEPHONE NUMBER OF THE OFFICER:.....

PRESSURE TEST GAUGES WHICH VARY BY MORE THAN ½lb/in² FROM THE FIRE OFFICER'S GAUGE MUST BE RETURNED TO CLOVEMEAD'S MAIN OFFICE FOR MANUFACTURERS RE-CALIBRATION/ REPLACEMENT.

RECORD OF TANK TEST SERIAL NO. OF GAUGE USED..004.....

Tank Number								
Size (Litres/Gallons)								
Test Pressure lb/in²								
Test Result Pressure ~~lb/in²~~								
~~Test Result~~ - Pass/Fail								

RECORD OF LINE TEST SUCTION ✓ / ~~VENT~~ / ~~OFFSET~~ (delete as applicable)

FROM TANK NO.	TO PUMP NO.	PRESSURE (lb/in²)	DURATION HOURS	RESULT PASS/~~FAIL~~
2 ul.	5/6	7 PSI	½ HR.	PASS
Sul.	5/6 7/8	7 PSI	½ HR	PASS.

SIGNATURE.....(PETROLEUM OFFICER) DATE.....

COMMENTS:

PIPEWORK ENGINEER NAME...A. LUMB.....SIGNATURE. [redacted]

DOES CLIENT REQUIRE WORK TO BE WITNESSED - YES / NO

Clovemead Limited

Title: CERTIFICATE OF PRESSURE TEST CLPD11

Section Ref: QMWI02 Date: 03/06/91 Revision: 0 Page: 1 of 1

SITE....Whitemere Pool.....CONTRACT NO..8988.....

ADDRESS.....Hardley.....

.....Gateshead.....

DATE OF TEST(S):...9/6/95.....

REASON FOR TEST(S): ~~NEW INSTALLATION~~ / SUSPECTED LOSS / ~~STATUTORY AGE TEST~~

WAS THE PETROLEUM OFFICER ADVISED OF THE TESTS? YES / ~~NO~~
WERE THE TESTS WITNESSED BY THE PETROLEUM OFFICER? ~~YES~~ / NO

IF YES GIVE NAME AND TELEPHONE NUMBER OF THE OFFICER:.....

PRESSURE TEST GAUGES WHICH VARY BY MORE THAN ½lb/in² FROM THE FIRE OFFICER'S GAUGE MUST BE RETURNED TO CLOVEMEAD'S MAIN OFFICE FOR MANUFACTURERS RE-CALIBRATION/ REPLACEMENT.

RECORD OF TANK TEST SERIAL NO. OF GAUGE USED..001.....

Tank Number								
Size (Litres/Gallons)								
Test Pressure lb/in²								
Test Result Pressure lb/in²								
Test Result - Pass/Fail								

RECORD OF LINE TEST SUCTION / ~~VENT~~ / ~~OFFSET~~ (delete as applicable)

FROM TANK NO.	TO PUMP NO.	PRESSURE (lb/in²)	DURATION HOURS	RESULT ~~PASS~~/FAIL
2	5/6	7lb	1 hr	FAIL

SIGNATURE.....(PETROLEUM OFFICER) DATE.....

COMMENTS:

PIPEWORK ENGINEER NAME..S. CAUGHEY.....SIGNATURE [redacted]

DOES CLIENT REQUIRE WORK TO BE WITNESSED - YES / NO

Clovemead Limited

Title: CERTIFICATE OF PRESSURE TEST CLPD11

Section Ref: QMWI02 **Date:** 03/06/91 **Revision:** 0 **Page:** 1 of 1

SITE....Whitemere Pool.....CONTRACT NO..8988.....

ADDRESS.....Hardley.....

.....Gateshead.....

DATE OF TEST(S):..31/5/95.....

REASON FOR TEST(S): ~~NEW INSTALLATION~~ / SUSPECTED LOSS / ~~STATUTORY AGE TEST~~

WAS THE PETROLEUM OFFICER ADVISED OF THE TESTS? YES / ~~NO~~
WERE THE TESTS WITNESSED BY THE PETROLEUM OFFICER? YES / NO

IF YES GIVE NAME AND TELEPHONE NUMBER OF THE OFFICER:.....

PRESSURE TEST GAUGES WHICH VARY BY MORE THAN ½lb/in² FROM THE FIRE OFFICER'S GAUGE MUST BE RETURNED TO CLOVEMEAD'S MAIN OFFICE FOR MANUFACTURERS RE-CALIBRATION/ REPLACEMENT.

RECORD OF TANK TEST SERIAL NO. OF GAUGE USED..001.....

Tank Number								
Size (Litres/Gallons)								
Test Pressure lb/in²								
Test Result Pressure lb/in²								
Test Result - Pass/Fail								

RECORD OF LINE TEST SUCTION / ~~VENT~~ / ~~OFFSET~~ (delete as applicable)

FROM TANK NO.	TO PUMP NO.	PRESSURE (lb/in²)	DURATION HOURS	RESULT PASS/FAIL
2	S/6	71b	1hr	FAIL

SIGNATURE.....(PETROLEUM OFFICER) DATE.....

COMMENTS:

PIPEWORK ENGINEER NAME..S. CAUGHEY.....SIGNATURE [redacted]

DOES CLIENT REQUIRE WORK TO BE WITNESSED - YES / NO

SHELL WHITEMARE POOL.								
EXISTING LAYOUT								
TANK NO	CAPACITY	GRADE	P1/2	P3/4	P5/6	P7/8	P9	P10
1	34580	PU50	U	U	U			
2	10830	DSL			D			
3	10830	V POWER	VP					
4	21600	DSL		D		D		
5	12920	DSL					D	D
6	12920	DSL	D					
7	12350	PU50				U		
8	12350	V POWER		VP	VP	VP		
DSL	DIESEL							
V POWER	V POWER							
PU50	UNLEADED							
PROPOSED LAYOUT								
TANK NO	CAPACITY	GRADE	P1/2	P3/4	P5/6	P7/8	P9	P10
1	12920	V POWER	VP	VP	VP	VP		
2	12920	4TH DSL	D	D	D	D		
3	21600	DSL					D	D
4	21660	PU50			U	U		
5	34580	PU50	U	U				
6	24700	DSL	D	D	D	D		

24

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 27.0
Date: 7/5/07 1 of 1

25

Issue No. 3.1.0

RELAYING CONCRETE BLOCKS.

Location	New/Redevelopment/Operational site.
Description of Work	Laying concrete kerbs.
Min. Personal Protection	Overall, gloves, goggles & Safety Footwear.
Additional Protection	Hard Hat, Hand barrier cream, & Reflective jacket.
Hazards	Surrounding work area, manual handling.
Hazard Reductions	Operation of lifting tool for installing kerbs.
Tools/Equipment	Standard toolkit, kerb lifting tool, Barriers/cones, Warning signs & Fire extinguisher.
Disposal of Contaminants	Waste materials disposed of by waste carrier via skip.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet the site Operator and agree extent, duration & plan of work.
2) Cordon off work areas using safety fencing / cones barriers or tape.
3) Lift up & remove existing blocks.
4) Prepare the area for relaying the blocks with sharp sand.
5) Relay the blocks.
6) Using a whaker plate vibrate the blocks back into position, ensuring there are no potential trip hazards.
7) Spread play pit sand over the blocks & sweep into the joints.
8) Sweep up the access sand on completion.
9) Complete Documentation.
10) Leave site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L	L	L	L	L						L			L		L	L	L				L		L	L
Removing existing blocks	L	L	H	L	L						L		L	L	L	L	L	L			L	L		L	L
Relaying block paviours	L	L	L	L	L						L		L	L	L	L	L	L		L		L		L	L

Risk Ratings

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 25
Date: 23/04/07

25

INSTALLATION OF AN TANK INSPECTION CHAMBER/S.

Location	Redevelopment/Operational filling/service station
Description of Work	Installation of a tank manhole chamber.
Min. Personal Protection	Overall, Safety Footwear, goggles & Fire extinguisher.
Additional Protection	Hard Hat, Hand barrier cream, HD gloves & Reflective jacket
Hazards	Manual handling, petroleum products, confined space.
Hazard Reductions	Observe manual handling rules.
Tools/Equipment	Standard toolkit.
Disposal of Contaminants	Contaminated waste materials removed from site in sealed bags for approved disposal.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	W.I uplifting fuel 2.7, water filling tank 2.2, working in tank manholes 2.0, isolating electrical supplies 4.0, COSHH & H&S Manuals available for inspection on request.

Procedures.

1) The definition of 'Operational Site' is any site/station in which petroleum products are, or have been, stored in underground tanks and or pipelines.
2) Isolate electrical supplies & issue isolation certificate. Drain back the suction lines to the respective tank/s.
3) Uplift the fuel onto a tanker& remove from site, fill in fuel transfer sheet & leave a copy on site.
4) Fill the tank with water, to make safe.
5) Disconnect all associated pipework & seal off inside the tank man chamber.
6) Breakdown the existing tank manhole chamber/s down to the tank top/s.
7) Unbolt the existing tank manlid/s & strip off all disused pipework.
8) Install new tank manhole adaptor plate/s / fibreglass tank manhole chamber/s system onto tank/s & reinstall the tank manlid/s.
9) Pressure test the tank manlid/s to ensure the lid gaskets are leak tight.
10) Install all necessary pipe outlet kits for the pipework / cable duct/s by drilling holes through the chamber wall using only approved cutting tools as specified by chamber supplier.
11) Install all necessary pipework / cable ducts.
12) Carry out vacuum test to the tank manhole chamber/s as specified by chamber supplier.
13) Install corbel top section to the tank manhole chamber/s complete with manhole cover & frame to suit forecourt level.
14) Backfill around the tank manhole chamber with required materials as specified by chamber supplier complete with forecourt finish as necessary.
15) Complete Documentation.
16) Leave site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L											L									L
Petroleum products									M	L	L		L	L	L	L	L								L
Excavations	L	L	M		L				L		L		L			L		L						L	L
Installation works	L	L			L																			L	L
Pipeworks	L	L			L													L						L	L
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 23
Date: 12/3/07

25

Issue No. 3.0.0

SITE INSPECTIONS PRIOR TO EXCAVATION WORKS.

Location	New/Redevelopment/Operational filling/service station
Description of Work	Marking forecourt surfaces detailing pipework runs out of tank manhole chambers.
Min. Personal Protection	Overall, Hard hat, Safety Footwear, HD gloves, Hand barrier cream, Reflective jacket & Fire extinguisher.
Additional Protection	Safety fencing.
Hazards	Forecourt traffic.
Hazard Reductions	Observe vapour zone regulations, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs, marker paint, Fire extinguisher.
Disposal of Contaminants	Contaminated waste materials removed from site in skips for approved disposal.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instructions COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet and agree plan of work with site operator.
2) The tank farm area together with the excavation area(s) shall be cordoned off to protect against unauthorised access by using traffic cones, protective barriers or tape.
3) Lift the tank manhole chamber covers & mark the forecourt showing the pipework / duct runs out of the tank manhole chambers. Measure the depth of the pipework runs & assess as accurately as possible if the pipework runs clash with the proposed excavations.
4) Reinstall the tank manhole covers on completion.
5) Determine best practice for excavation method i.e. heavy-duty breaker or machine with breaker.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							M									M
Marking pipework / duct runs	L				L									L	L									L	L
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB

Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 22
Date: 18/12/06

25

INSTALLING UNDERGOUND INTERCEPTOR.

Location	New/Redevelopment/Operational filling/service station
Description of Work	Installing a new U/G interceptor.
Min. Personal Protection	Overall, Hard hat, Safety Footwear, HD gloves, Hand barrier cream, Reflective jacket & Fire extinguisher.
Additional Protection	Safety fencing, harness.
Hazards	Excavations, overhead lifting & forecourt traffic.
Hazard Reductions	Observe vapour zone regulations, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs, Fire extinguisher. Lifting appliance.
Disposal of Contaminants	Contaminated waste materials removed from site in skips for approved disposal.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instructions COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet and agree plan of work with site operator.
2) The work area together with the area(s) around the interceptor shall be cordoned off to protect against unauthorised access by using traffic cones, protective barriers or tape.
3) Excavate hole for interceptor, using approved excavator. Care should be taken during excavation works, a test hole to be excavated first to determine ground conditions.
4) On completion of excavation lay pea gravel base.
5) Extreme care to be exercised in the manoeuvring of the crane/lifting appliance and the interceptor transporting vehicle into and out of the site and assistance shall be given to the driver to ensure that this is safely accomplished.
6) Ensure that the correct lifting eyes/slings are used and check to ensure that the weight of the interceptor is within the lifting and reaching capability of the crane/lifting appliance.
7) Ensure that the standing area to be used by the crane/lifting appliance and the transporting vehicle is stable and adequate for the additional superimposed loading.
8) The tank's transporting vehicle to be securely positioned within the lifting radius of the crane/lifting appliance on a firm and preferably level surface.
9) Attach the lifting chains/slings from the tank to the crane/lifting appliance and ensure that no persons are in, or enter the lifting area before and during the lifting and lowering operation.
10) Lift interceptor into excavated area & fill tank with water.
11) Backfill around interceptor with pea gravel.
12) Construct interceptor manhole chamber.
13) Install drainage & vent connections.
14) Backfill over tank with reinforced concrete slab.
15) Make good disturbed surfaces to match existing.
16) Complete documentation.
17) On completion of the work the site shall be left in a clean, tidy and safe condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							M									M
Excavations	L	L	L	L	L	L	L	L	L	L	L		L	L	L			L						L	L
Mechanical Lifting	L	L		L	L		M	L	M									M							L

Risk Ratings

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 20
Date: 29/9/06

25

TANK FARM EXCAVATIONS.

Location	Petrol filling station, tank farm areas.
Description of Work	Excavating & removing concrete tank farm pads over underground storage tanks.
Min. Personal Protection	Overall, Hard hat, reflective jacket, Safety Footwear.
Additional Protection	Ear defenders & Fire extinguisher.
Hazards	Fire Explosion, Work area, Open trenches, site traffic.
Hazard Reductions	Observe vapour zone regulations, uplift product & water fill tanks, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs & Power cutter/Jack hammer, 5 ton excavator machine.
Disposal of Contaminants	Excavated waste materials removed from site in a skip.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet Operator and agree plan of work.
2) Cordoned off all work areas with safety fencing.
3) Prior to ant commencement of works a PTW must be issued.
4) Uplift product & water fill tanks.
5) Disconnect & cap off all redundant pipework (if necessary) & seal tanks.
6) Measure & record tank manhole depths.
7) Check tank farm areas for tank gauge ducting, Lpg installations & electrical services.
8) The area(s) to be excavated shall be marked out taking into account the possible runs of the existing pipework (If retained).
9) Excavated area to be scanned for electrical cables / services. (IF EXCAVATIONS ARE WITHIN 1M OF ELECTRIC CABLES / SERVICES ONLY HAND EXCAVATIONS WILL BE PERMITTED)
10) Plan of works to be agreed with client & AJB Installation Manager.
11) Tank farm excavation sign off report form to be completed & copy attached to AJB Job Pack.
12) All tank farm excavations to be supervised by non-working site foreman.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							L									L
Excavating	L	L	M		L	L			M	M	L		M	L	M			L			M			L	L
Buried Services											L														
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 19
Date: 20/9/06

25

OPERATING AN EXCAVATOR MACHINE ON SITE ADJACENT UNDERGROUND TANK FARMS.

Location	Petrol Filling Station.
Description of Work	Excavating a trench on an existing site, & removal of concrete rubble into skips.
Min. Personal Protection	Overall, Hard hat, reflective jacket, Safety Footwear.
Additional Protection	Ear defenders & Fire extinguisher.
Hazards	Work area, Open trenches, & low voltage electricity, site traffic.
Hazard Reductions	Observe vapour zone regulations, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs & Power cutter/Jack hammer, 5 ton excavator machine.
Disposal of Contaminants	Excavated waste materials removed from site in a skip.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet Operator and agree plan of work.
2) Cordoned off all work areas.
3) Determine depth of tanks & position of tank/s underground. Machine excavation MUST not to be used within 1m of underground tank/s / services.
4) Plan of works to be agreed with regards to clearing the area of concrete rubble prior to excavating trenches for pipework.
5) The area(s) to be excavated shall be marked out taking into account the possible runs of the existing pipework.
6) Excavated area to be scanned for electrical cables / services. (IF EXCAVATIONS ARE WITHIN 1M OF ELECTRIC CABLES / SERVICES ONLY HAND EXCAVATIONS WILL BE PERMITTED)

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							L									L
Excavating	L	L	M		L	L			M	M	L		M	L	M			L			M				L
Buried Services											L													L	L
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 18
Date: 6/7/06

25

EXCAVATING / WORKING ON SITES WITH LPG PUMPS / TANKS.

Location	Operational filling/service station.
Description of Work	Excavating / breaking out fuel pump islands, excavating trenches for new suction pipework adjacent LPG pumps.
Min. Personal Protection	Overall, Hard hat, Safety Footwear & Goggles.
Additional Protection	Hand barrier cream, HD gloves, Dust mask, Ear defenders, Reflective jacket & Fire extinguisher.
Hazards	Open trenches, Fire & explosion, high & low voltage electricity, forecourt traffic.
Hazard Reductions	Observe vapour zone regulations, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs & Power cutter/Jack hammer.
Disposal of Contaminants	Excavated waste materials removed from site in a skip.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed COSHH, WI & H&S Manuals available for inspection on request.

Procedures.

1) Meet Operator and agree plan of work.
2) Cordoned off all work areas.
3) Carry out visual inspection of the LPG dispenser & storage tank to ascertain that there are no gas leaks. **ALL GAS LEAKS TO BE IMMEDIATELEY REPORTED TO & IN THIS ORDER (1) SHELL GAS ON 0870 7539999 (2) AUTOGAS LTD 0870 8506771 (3) THE STE MANAGER / SUPERVISOR.**
4) In the event of a Gas leak CLOSE THE SITE IMMEDIATELEY & do not carry out any works.
5) Observe position of LPG dispenser & LPG tank to determine if any excavations are within the LPG zones.
6) Prior to starting works the LPG installation must be decommissioned by specialists & made safe.
7) Disconnect & make safe the electrical supplies.
8) The area(s) to be excavated shall be marked out taking into account the runs of the existing LPG pipework.
9) Excavated area to be scanned for electrical cables / services. (IF EXCAVATIONS ARE WITHIN 1M OF ELECTRIC CABLES / SERVICES ONLY HAND EXCAVATIONS WILL BE PERMITTED)
10) Complete Documentation.
11) On completion of the work the site shall be left in a clean, tidy and safe condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LPG visual inspections	L								L		L		L			L									L
Setting out work areas	L				L				L							L									L
Excavating	L	L	M		L	L			M	M	L		M	L	M			L			M			L	L
Buried Services											L														
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 17
Date: 9/1/06

25

Issue No. 3.0.0

OPERATING AN EXCAVATOR MACHINE ON SITE.

Location	Petrol Filling Station.
Description of Work	Excavating a trench on an existing site, & removal of concrete rubble into skips.
Min. Personal Protection	Overall, Hard hat, reflective jacket, Safety Footwear.
Additional Protection	Ear defenders & Fire extinguisher.
Hazards	Work area, Open trenches, & low voltage electricity, site traffic.
Hazard Reductions	Observe vapour zone regulations, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs & Power cutter/Jack hammer, 5 ton excavator machine.
Disposal of Contaminants	Excavated waste materials removed from site in a skip.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet Operator and agree plan of work.
2) Cordoned off all work areas.
3) Plan of works to be agreed with regards to clearing the area of concrete rubble prior to excavating trenches for offset fill pipework.
4) The area(s) to be excavated shall be marked out taking into account the possible runs of the existing pipework.
5) Excavated area to be scanned for electrical cables / services. (IF EXCAVATIONS ARE WITHIN 1M OF ELECTRIC CABLES / SERVICES ONLY HAND EXCAVATIONS WILL BE PERMITTED)

Activity Risk	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
Setting out work areas	L				L				L							L									L
Excavating	L	L	M		L	L			M	M	L		M	L	M			L			M			L	L
Buried Services											L														
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	**H**	**= High**
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	**M**	**= Medium**
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	**L**	**= Low**

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB

Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

WORKING IN CONFINED SPACES.

Location	Redevelopment/Operational filling/service station
Description of Work	Working in a confined space/area other than Tank/Inspection chambers when Work Instructions Nos. 2.0 & 2.8 will apply.
Min. Personal Protection	Overall, Safety Footwear & Fire extinguisher, Breathing Apparatus, Safety Tripod & Resuscitation equipment, 10min escape kit, LEL meter & movement sensors.
Additional Protection	Hard Hat, Hand barrier cream, HD gloves, Reflective jacket.
Hazards	Fire, explosion, exposure to toxic vapours, liquids & forecourt traffic.
Hazard Reductions	Observe vapour zone regulations, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs, Fire extinguisher. When appropriate: Air blower assembly, Explosimeter, Safety harness, Rescue lifting equipment,
Disposal of Contaminants	Job Specific.
Documentation	Job Specific.
Other Applicable Documentation	Detailed Work Instruction Nos. 2.0. and 2.8. HSE Note GS5. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) This Generic Work Instruction applies to work being undertaken in a confined space such as an underground storage tank or Inspection Chamber. Work Instructions 2.0 and 2.8 will also apply.
2) Meet and agree plan of work with site operator and discuss the safe system of working.
3) Identify the likely hazards, ensure that entry/exits are large enough to permit rescue by person wearing rescue equipment.
4) Cordon off working spaces/areas.
5) Determine whether it is absolutely necessary to enter confined space to undertake the work.
6) Ensure space/area has sufficient ventilation, use air blower when necessary. Test atmosphere before entry and during the work.
7) Before entering confined space inform Site Operator and agree measures to be taken in the event of an accident/emergency. Also determine the steps required to extract the person from the confined space in the event of an emergency.
8) A minimum of 2 Company personnel must be present, one to enter the space/area and the other to supervise and act as rescuer in the event of an accident/emergency.
9) If there is a risk of flammable vapours being present follow the instructions in Work Instructions 2.0 and 2.8.
10) The person entering the confined space/area shall wear rescue harness complete with lifeline. In
11) Complete job specific works Documentation.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							M									M
Petroleum products					M					H	H			M											
Lifting covers		M			H						L			L	L	H	M								L
Tank Entry / Confined Space working.	L	M	L	L	L					M/H	L			L		H	H					L		L	L
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 9.1
Date: 20/7/05

25

Issue No. 3.0.0

REMOVING / INSTALLING TANK MANLID.

Location	
Description of Work	Removing tank manlid for repair.
Min. Personal Protection	Overall, Safety Footwear, HD gloves, goggles & Fire extinguisher.
Additional Protection	Hard Hat & Hand barrier cream.
Hazards	Fire, explosion, exposure to toxic vapours & building site.
Hazard Reductions	Observe vapour zone regulations, Gas freeing & deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Solid CO^2-, Hand operated pump.
Disposal of Contaminants	Tank 'bottoms' & contaminated waste materials removed from site for approved disposal.
Documentation	Site Clearance Certificate, QAS010. Work Instruction No. 2.0 – Page 5 checklist. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 2.0, 2.3. COSHH & H&S Manuals available for Inspection on request.

Procedures.

1) Meet and agree plan of work with site operator and complete Checklist (Page 5) before commencing work.
2) The area(s) around the place of work shall be cordoned off to minimise unauthorised access.
3) Check that the tank contents have been reduced to suction break level and that the associated Offset fill has been "locked out".
4) Following the removal of the tank(s) Inspection Chamber cover(s) strict compliance with Work Instruction No: 2.0 shall apply.
5) The associated pipeline(s) shall then be drained of any residual product back to the tank(s).
6) "Bottom-out" the residual tank(s) contents, into approved steel drums if necessary.
7) Disconnect suction line(s) & plug. Plugged off other tank connections except vent pipe.
8) The vent pipe shall remain clear & connected until tank(s) are gas free.
9) Insert the appropriate quantity of 'dry ice' corresponding to the tank(s) capacity.
10) Remove tank(s) flange or lid and replace with new manlid.
11) Replace Inspection chamber cover(s).
12) Complete Documentation.
13) On completion of the work the site shall be left in a clean, tidy and safe condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							M									M
Pipework	L									M	M			M										M	
Removing tank manlid	L	L	L	L	L					L	L		L	L		L	L					L		L	L
Petroleum products					M					H	H			M											
Lifting covers		M			H						L			L	L	H	M								L
Head/body in chamber	L			L										L	L	H									
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 6.8
Date: 7/4/04

25

Issue No. 3.0.0

Disconnecting pipework on above / below storage tanks.

Location	Petrol filling stations
Description of Work	Disconnecting pipework on the tank manlid for maintenance / tank drilling works.
Min. Personal Protection	Overall, safety footwear & goggles
Additional Protection	Hard hat, LW/HD gloves, BA equipment, safety tripod.
Hazards	Fire & Explosion, high & low voltage electricity, forecourt traffic.
Hazard Reductions	Safety barriers.
Tools/Equipment	Standard tool kit, barriers / cones, warning signs, spill kit, fire extinguisher.
Disposal of Contaminants	
Documentation	Installation / service report form QASO15, Site Clearance certificate QASO10, Work instruction
Other Applicable Documentation	Detailed work instruction Nos COSHH & H&S manuals available for inspection on request.

Procedures.

1) Meet & agree plan of work with site operator, & discuss planned fuel deliveries, & possibly cancel fuel deliveries for duration of planned works.
2) Cordon off work areas using cones, barriers or tape.
3) Drain residual fuel from pipelines.
4) Switch off & isolate electrical supply to the fuel dispenser/s.
5) Disconnect pipework at the breaking joints.
6) Remove camlock adaptor from the tank fill point & install blanking cap.
7) Fit tempory sign to fill pipe / offset fill pipe stating no fuel deliveries to be taken into tank due to maintenance works.
8) Carry out maintenance works.
9) Reconnect pipework & test if necessary.
10) Remove blanking cap from fill pipework & re install camlock adaptor.
11) Complete documentation.
12) Leave site in a clean & tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Woking in manhole chambers.		L	L	L	L	L	L	M	M	L	L	M	M	L	L	L	L								
Draining pipework.		L	L	L	L	L	L	L	L	L	L	M	L	L	L	L	L								
Disconnecting pipework.		L	L	L	L	L	L	L	L	L	L	M	L	L	L	L	L								
Testing pipework.		L	L	L	L		L	L	L	L	L	L	L	L	L	L	L								
Removing tank manlids.		L	L	L	L	L	L	M	L	L	L	M	M	L	L	L	L								
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Harmful substances	16	Cuts / lacerations	21		H	= High
2	Trapping	7	U/G services	12	Toxic gas / vapours	17	Third parties	22			
3	Flying particals	8	Fire	13	Oxygen deficiency	18		23		M	= Medium
4	Falling Material	9	Explosion	14	Disease	19		24			
5	Manual Handling	10	Noise	15	Drowning	20		25		L	= Low

A.J.BAYLISS PETROLEUM ENGINEERS LIMITED – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

LAYING CONCRETE PADS ON OPERATIONAL SITES.

Location	New/Redevelopment/Operational filling/service station
Description of Work	Laying concrete pads on operational sites.
Min. Personal Protection	Overall, & Safety Footwear, gloves, goggles.
Additional Protection	Hard Hat, Hand barrier cream & LW/HD gloves.
Hazards	Personal injury(s), particularly to back, hands, fingers and feet.
Hazard Reductions	Wear personal protective clothing. Test weight of object before lifting. Do not lift an object greater than a half of lifter's body weight.
Tools/Equipment	Job Specific.
Disposal of Contaminants	Job Specific.
Documentation	Job Specific.
Other Applicable Documentation	HSE Note HS (G) 115. HSM Section 6.0. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Before starting a job determine what sort of manual handling is going to take place and what protection will be required.
2) Avoid double handling – it increases the risk.
3) Key factors: Balance, Hold/grip, Back position, Arms/body position & shape of weight. Refer to HSM Section No. 6.0.
4) Wear hard hat in hard hat zone and/or working overhead.
5) Excavate area to be concreted, install steel re inforcing & install shuttering.
6) Pour concrete into position direct from the concrete mixer lorry.
7) Wear goggles & gloves whilst working with concrete.
8) Level concrete & tamp & trowel to finish requirements.
9) In poorly lit areas subject to vehicular/pedestrian traffic wear a reflective jacket.
10) Complete job specific Documentation.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L	L	L		L	L	L		L	L	L		L	L	L	L	L							L	L
Handling Concrete	L	L	L	L	L									L						L	L	L	L	L	L
Handling steel reinforcing mesh	L	L			L																			L	
Shuttering	L	L			L																				
Other Materials																								L	
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

WORKING FROM LADDERS AND TRESTLES.

Location	Operational filling/service station.
Description of Work	Working from ladders and trestles.
Min. Personal Protection	Overall, Hard hat, Safety Harness, lanyard, pole strap and Safety Footwear.
Additional Protection	Hand barrier cream, HD gloves, Dust mask, Ear defenders, goggles, Reflective jacket & Fire extinguisher.
Hazards	Uneven or soft ground conditions, high & low voltage overhead electricity cables & forecourt traffic.
Hazard Reductions	Deploy cones/barriers/tape, ensure legs of ladder/trestle are firmly on level ground and top of ladder rests against a solid surface. Ladders over 3.0m shall be secured at top whenever possible otherwise at its base.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs, Job specific tools and materials.
Disposal of Contaminants	Job Specific.
Documentation	Job Specific.
Other Applicable Documentation	Manufacturers or Hirer's Instructions. HSE Note GS31. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet Operator and agree plan of work.
2) Cordoned off all work areas.
3) Inspect ladder/trestle for any damage.
4) Check area surface for irregularities and/or soft patches and the presence and location of any overhead electricity power cables.
5) The use of ladders shall be confined to activities lasting no longer than 30 minutes. Use a trestle/tower scaffold for longer duration's.
6) Ladders shall be pitched ideally at an angle of 4 vertical to 1 horizontal (70º) and both feet have a firm level footing.
7) Ladders shall be of sufficient length to project beyond at least 0.5m the level of the work.
8) Ladders greater than 3.0m in length shall be secured, by a tie, at the top whenever possible. Otherwise use ties at base.
9) Tools/materials shall either be attached to the ladder/trestle or carried in bag/holster enabling both hands to be free for climbing.
10) Use a Sala Savall 400 safety harness and attach a mini-bloc lanyard when on or climbing the ladder and use a pole strap for 'hands free' working.
11) Do not over reach from a ladder or trestle – move it.
12) Ladders/trestles left unattended shall be secured to prevent unauthorised use.
13) The use of any part of a motor vehicle (unless specially adapted) to gain above ground access is not permitted.
14) Complete final job specific work Documentation.
15) On completion of the work the site shall be left in a clean, tidy and safe condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							L									L
Erecting ladder/trestle	L	L		M	M	L	M	L	M															L	L
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB

Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

WORKING FROM MOBILE SCAFFOLD TOWERS.

Location	Operational filling/service station.
Description of Work	Working from mobile scaffold towers.
Min. Personal Protection	Overall, Hard hat and Safety Footwear
Additional Protection	Hand barrier cream, HD gloves, Dust mask, Ear defenders, goggles, Reflective jacket & Fire extinguisher.
Hazards	Uneven or soft ground conditions, high & low voltage overhead electricity cables & forecourt traffic.
Hazard Reductions	Deploy cones/barriers/tape, ensure tower is vertical and the legs firmly on ground, lock any wheels, use outriggers in tower is not to be moved, use internal access ladders, provide guard rails and toe boards, when appropriate tie tower rigidly to structure.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs, Job specific tools and materials.
Disposal of Contaminants	Job Specific.
Documentation	Job Specific.
Other Applicable Documentation	Manufacturers or Hirer's Instructions. HSE Note GS42. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet Operator and agree plan of work.
2) Cordoned off all work areas.
3) Check area surface for irregularities and/or soft patches and the presence and location of any overhead electricity power cables.
4) The tower shall be erected vertically and the legs shall rest properly on firm ground. Lock any wheels and use outriggers if the tower is not to be moved.
5) Provide safe access to the platform, use internal ladders which shall be secured to tower.
6) Provide edge protection, (guardrails and toe boards) when platform is higher than 2 metres above ground level.
7) The tower shall be tied rigidly to the structure when the tower is sheeted, likely to be exposed to high winds, if used for grit blasting or water jetting, when lifting heavy loads outside the tower and when the tower base is small for the height of the platform.
8) If ties are needed ensure that they are put in place as the scaffold is erected.
9) Do not use a ladder on the platform.
10) When moving tower do not allow people or materials to remain on the platform. ALWAYS check for presence of overhead cables.
11) Complete final job specific works Documentation.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							L									L
Erecting tower	L	L		M	M	L	M	L	M															L	L
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – JHA

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 11.0
Date: 01/10/01

25

Issue No. 3.1.0

INSTALLING ACO CHANNELS.

Location	New/Redevelopment/Operational site.
Description of Work	Laying aco channels.
Min. Personal Protection	Overall, gloves, goggles & Safety Footwear.
Additional Protection	Hard Hat, Hand barrier cream, & Reflective jacket.
Hazards	Surrounding work area, manual handling.
Hazard Reductions	Operation of lifting tool for installing kerbs.
Tools/Equipment	Standard toolkit, kerb lifting tool, Barriers/cones, Warning signs & Fire extinguisher.
Disposal of Contaminants	Waste materials disposed of by waste carrier via skip.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 6.2. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet the site Operator and agree extent, duration & plan of work.
2) Cordon off work areas using safety fencing / cones barriers or tape.
3) Disc cut trenches.
4) Break out & excavate trenches for new aco channels.
5) Lay new drainage acos into position.
6) Concrete around the acos, to secure into position.
7) Lat concrete margins & trowel finish.
8) Once the concrete has set, remove all fencing / safety equipment.
9) Complete Documentation.
10) Leave site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L	L	L	L	L						L			L		L	L	L				L		L	L
Breaking out trenches	L	L	H	L	L						L		L	L	L	L	L	L			L	L		L	L
Installing aco channels	L	L	L	L	M						L		L	L	L	L	L	L		L		L		L	L
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 10.0
Date: 01/10/01

25

LAYING CONCRETE KERBS.

Location	New/Redevelopment/Operational site.
Description of Work	Laying concrete kerbs.
Min. Personal Protection	Overall, gloves, goggles & Safety Footwear.
Additional Protection	Hard Hat, Hand barrier cream, & Reflective jacket.
Hazards	Surrounding work area, manual handling.
Hazard Reductions	Operation of lifting tool for installing kerbs.
Tools/Equipment	Standard toolkit, kerb lifting tool, Barriers/cones, Warning signs & Fire extinguisher.
Disposal of Contaminants	Waste materials disposed of by waste carrier via skip.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 6.2. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet the site Operator and agree extent, duration & plan of work.
2) Cordon off work areas using safety fencing / cones barriers or tape.
3) Break out & remove the existing pump island surround.
4) Prepare the area for the new island pre cast concrete kerbs 1m long weighing 30kg.
5) Lift the kerbs from the delivery pallet using a forklift truck, & position adjacent the work area.
6) Using the specialist kerb lifting tool, two persons to then manually lift the kerbs into position.
7) Concrete around the kerbs, to secure into position.
8) Infill the pump island with concrete & trowel finish.
9) Once the concrete has set, remove all fencing / safety equipment.
10) Complete Documentation.
11) Leave site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L	L	L	L	L						L			L		L	L	L				L		L	L
Breaking out existing island	L	L	H	L	L						L		L	L	L	L	L	L			L	L		L	L
Positioning kerb stones	L	L	L	L	M						L		L	L	L	L	L	L		L		L		L	L

Risk Ratings

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB

Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 6.1
Date: 01/10/01

25

PROCEDURES IN THE EVENT OF A FUEL SPILLAGE/LEAKAGE ON SITE.

Location	Redevelopment/Operational filling/service station.
Description of Work	Procedures following a fuel spillage on site.
Min. Personal Protection	Overall, Safety Footwear & Fire extinguisher.
Additional Protection	Hard Hat, Hand barrier cream, HD gloves, Goggles (if splashing is likely) & Reflective jacket.
Hazards	Fire & explosion, high & low voltage electricity, Contamination of drains/ducts/ground & forecourt traffic.
Hazard Reductions	Observe vapour zone regulations, isolate electrical supply, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs, Spill kit, Fire extinguisher.
Disposal of Contaminants	Contaminated waste materials removed from site.
Documentation	Site Clearance Certificate, QAS010. Health & Safety Site Incident Report, Form: QAS100. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 6.1. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) In the event of a significant, >40 litres, spillage/leakage of fuel at a site any work that is being undertaken shall cease immediately.
2) The source of the spillage/leakage shall be identified and where possible isolated.
3) The site's manager, or deputy, informed and the main electrical supply to the forecourt area shall be immediately isolated.
4) Measures shall then be taken to close the site, including the cordoning off of the entrances and exits with tape and/or bollards.
5) The appropriate local authority Emergency Services informed.
6) Any members of the public that may be on the forecourt shall leave their vehicles and be safely evacuated off the site.
7) The engine of any vehicle that is located on the forecourt or in the area of the spillage/leakage shall not be started.
8) The source should be isolated and the spillage/leakage shall be contained.
9) Attempt to avoid any fuel from entering electrical chambers, sewer drains, any buildings, neighbouring properties or the public footpaths and roadways.
10) Use water jets to divert the spilled/leaked fuel into the site's nearest surface water drain.
11) Once contained and the source isolated wash down the contaminated areas into the site's surface water drainage system.
12) Pump out the site's drainage interceptor, using the company's approved contractor.
13) In the event that the spilled/leaked fuel ignites additional procedures shall be actioned as detailed in Work Instruction No. 6.1. When it is suspected that the spilled/leaked fuel has escaped beyond the site's boundaries arrangements shall be made, in conjunction with the fire authorities, to check for the presence of liquid fuel and/or fuel vapour in neighbouring premises and highways.
14) Complete Documentation.
15) Clean site in a safe, clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Isolating source	L								L	M	M			M	M	H									M
Washing down	M								M	M	M			M	M	M									L

Risk Ratings

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 7.2
Date: 01/03/01

25

Issue No. 3.0.0

INSTALLATION OF OPW OVERFILL PREVENTION VALVES.

Location	New/Redevelopment/Operational filling/service station
Description of Work	Installation of OPW overfill prevention system in a tank/s.
Min. Personal Protection	Overall, Safety Footwear, & Fire extinguisher.
Additional Protection	Hard Hat, Hand barrier cream, LW gloves, goggles & Reflective jacket
Hazards	Confined space & forecourt traffic.
Hazard Reductions	Deploy cones/barriers/tape, BA equipment & tripod.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs & Fire extinguisher.
Disposal of Contaminants	Contaminated waste materials removed from site in sealed bags for approved disposal.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Where applicable meet and agree plan of work with site operator.
2) Check the tank manholes for water & remove if necessary.
3) Check the depth of the tank manhole chambers. (See W.I No. 2.0 for working in tank manhole chambers.)
4) Remove the plug from the tank offset fill pipework & remove the aluminium internal fill, by un screwing the fixing cage & pulling out the internal.
5) Measure the tank diameter & pipework riser height.
6) Construct the overfill valve to suit the tank measurements.
7) Insert the overfill valve into the offset fill pipework & secure into position with the holding down cage.
8) Reinstall the 4" plug into the offset pipework & tighten into position.
9) Complete Documentation.
10) Leave site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L																L
Installing OFPV	L	L			L					L	L			L		M	L							L	L

Risk Ratings

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB

Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 6.0
Date: 01/03/01

25

HOT WORK ON A FORECOURT CANOPY AT AN OPERATIONAL SITE.

Location	Redevelopment/Operational filling/service station.
Description of Work	Hot Work on a forecourt canopy at an operational site.
Min. Personal Protection	Overall, Safety Footwear & Fire extinguisher.
Additional Protection	Hard Hat, Hand barrier cream, HD gloves & Reflective jacket.
Hazards	Fire, explosion, vapours & forecourt traffic.
Hazard Reductions	Observe vapour zone regulations, use of fire blankets, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Welding equipment, Barriers/cones, Warning signs, Fire blankets &Fire extinguisher.
Disposal of Contaminants	Contaminated waste materials removed from site in sealed bags for approved disposal.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 6.0. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet and agree plan of work with site operator.
2) Cordon off areas around all dispensers.
3) Switch off and isolate the electrical supply to the dispensers, canopy and to any to any other forecourt electrical circuits ensuring that they cannot be inadvertedly reconnected.
4) Drain product from the Dispenser(s) and its associated pipeline(s) back to the tank(s). If access to tank chamber is necessary then Work Instruction No. 2.0 applies.
5) Each dispenser including hose arms, hoses and nozzles shall be securely covered with approved fire/spark resistant fire blankets.
6) All tank-filling points shall be locked.
7) The site operator shall not permit any fuel deliveries until the scheduled work is completed.
8) On completion of the hot works and when it is safe to reopen the forecourt remove all the fire blankets from the dispenser and reconnect the electrical supplies to the dispensers.
9) The electrical supply to the canopy and to any other forecourt electrical circuit shall only be reconnected following confirmation, from the canopy contractor, that it is safe to do so.
10) Switch on and commission each dispenser in accordance with Work Instruction No. 1.0.
11) Remove all safety barriers, traffic cones, etc.
12) Notify the site operator that the site may reopen.
13) Complete Documentation.
14) Leave site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							M									M
Dispensers	M	M			M		M			M	M			M		M								L	M
Petroleum products					M					H	H			M											
Electrical works										M															
Pipework	L								L	M	M			M										M	
Commissioning	L									M	M			M		M									
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 4.1
Date: 01/03/01

25

Issue No. 3.0.0

SITE ELECTRICAL INSTALLATION & GENERAL ELECTRICAL WORKS

Location	New/Redevelopment/Operational filling/service station.
Description of Work	General Electrical Works.
Min. Personal Protection	Overall & Safety Footwear.
Additional Protection	Hard hat & Reflective jacket..
Hazards	Fire & explosion, high & low voltage electricity & forecourt traffic.
Hazard Reductions	Observe vapour zone regulations & deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs Test equipment.
Disposal of Contaminants	
Documentation	Site Clearance Certificate, QAS010. Applicable Electrical Equipment Inspection Certificate & Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos.4 .0. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet the site Operator and agree plan of work.
2) Cordon off work areas using cones, barriers or tape.
3) A qualified electrician only carries out the work.
4) The work is in accordance with the Institution of Electrical Engineers (I.E.E.) wiring regulations and the Health & Safety 'G' Series HS (G) 41 Code of Practice.
5) Results of the inspection and testing are recorded on the local Licensing Authority's Electrical Equipment Inspection Certificate form.
6) The items scheduled on individual local Licensing Authority's Electrical Equipment Inspection Certificates varies according to the Authority but minimum standards are detailed in Work Instruction No. 4.0.
7) Testing of insulation, continuity, earthing and residual circuit breakers to be carried out from non-hazardous areas using instruments of a similar type to those used for previous tests so as to provide comparative results.
8) Complete Documentation.
9) Leave site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L		L		L							M									M
Testing electrical system	L				L		H		L	M						L									L
General Electrical Work							M																		
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Electric Shock	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 4.0
Date: 01/03/01

25

Issue No. 3.0.0

SITE ELECTRICAL INSTALLATION - PERIODIC INSPECTION & TESTING.

Location	New/Redevelopment/Operational filling/service station.
Description of Work	Periodic Inspection & Testing of a Site's Electrical Installation.
Min. Personal Protection	Overall & Safety Footwear
Additional Protection	Hard hat & Reflective jacket.
Hazards	Fire & explosion, high & low voltage electricity & forecourt traffic.
Hazard Reductions	Observe vapour zone regulations & deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs Test equipment.
Disposal of Contaminants	
Documentation	Site Clearance Certificate, QAS010. Applicable Electrical Equipment Inspection Certificate & Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos.4 .0. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet the site Operator and agree plan of work.
2) Cordon off work areas using cones, barriers or tape.
3) A qualified electrician only carries out the inspection and testing.
4) The inspection and testing is in accordance with the Institution of Electrical Engineers (I.E.E.) wiring regulations and the Health & Safety 'G' Series HS (G) 41 Code of Practice.
5) Results of the inspection and testing are recorded on the local Licensing Authority's Electrical Equipment Inspection Certificate form.
6) The items scheduled on individual local Licensing Authority's Electrical Equipment Inspection Certificates varies according to the Authority but minimum standards are detailed in Work Instruction No. 4.0.
7) Testing of insulation, continuity, earthing and residual circuit breakers to be carried out from non-hazardous areas using instruments of a similar type to those used for previous tests so as to provide comparative results.
8) Any significant increases in earth loop impedance readings, to those previously recorded, will be referred for investigation.
9) Complete Documentation.
10) Leave site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							M									M
Testing electrical system	L				L				L	M						L									L

Risk Ratings

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 3.9
Date: 01/03/01

25

EXCAVATING PUMP ISLANDS.

Location	Operational filling/service station.
Description of Work	Excavating / breaking out fuel pump islands on an existing site.
Min. Personal Protection	Overall, Hard hat, Safety Footwear & Goggles.
Additional Protection	Hand barrier cream, HD gloves, Dust mask, Ear defenders, Reflective jacket & Fire extinguisher.
Hazards	Open trenches, Fire & explosion, high & low voltage electricity, forecourt traffic.
Hazard Reductions	Observe vapour zone regulations, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs & Power cutter/Jack hammer.
Disposal of Contaminants	Excavated waste materials removed from site in a skip.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 3.3. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet Operator and agree plan of work.
2) Cordoned off all work areas.
3) A PTW must be issued prior to any commencement of works.
4) Drain the suction lines from the fuel dispenser/s back to the respective tank/s.
5) Disconnect & make safe the electrical supplies & disconnect & remove the fuel dispenser/s from the pump island.
6) Cap off all suction line/s.
7) The area(s) to be excavated shall be marked out taking into account the possible runs of the existing pipework.
8) Excavated area to be scanned for electrical cables / services. (IF EXCAVATIONS ARE WITHIN 1M OF ELECTRIC CABLES / SERVICES ONLY HAND EXCAVATIONS WILL BE PERMITTED)
9) The surface area of the paving shall be sufficiently wetted down, with water, to extinguish any sparks that may occur from the rotating disk.
10) The paving shall be cut, using an approved power cutter fitted with an appropriate disk.
11) When the cutting is in progress the paved surface shall be continuously monitored and additional water applied to the cutting area, as necessary, to prevent sparks.
12) If and when the cutting comes within a 4 metre radius of a petrol dispenser(s) the dispenser(s) shall be switched off and taken out of commission until the cutting is completed.
13) On completion of the cutting the area shall be safely fenced off to allow the trench to be excavated and to restore, if possible, access to the petrol forecourt area.
14) The trench shall be excavated using an approved Jackhammer operated by a single tool compressor.
15) The spoil arising from the excavation shall be removed and placed in a skip that will be specially provided. The skip will be placed in a area that is safe and likely to minimise disruption.
16) On completion the trench shall be backfilled with appropriate material, consolidated, and the surface reinstated in type and levels to match the adjoining areas.
17) In areas subject to vehicular traffic the backfill above a pipe run shall be adequately reinforced to protect the pipe from the weight of the vehicles.
18) Complete Documentation.
19) On completion of the work the site shall be left in a clean, tidy and safe condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							L									L
Excavating	L	L	M		L	L			M	M	L		M	L	M			L			M			L	L
Buried Services											L														
Removing fuel dispenser	L	L	L	L	L																			L	L
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

PURGING OF MILD STEEL, POLYETHYLENE & DURA PIPEWORK ON AN OPERATIONAL SITE.

Location	Operational filling/service station.
Description of Work	Purging mild steel, polyethylene & Dura pipework.
Min. Personal Protection	Overall, Safety Footwear, goggles & Reflective jacket.
Additional Protection	Hard hat, BA Equipment, Hand barrier cream & HD gloves.
Hazards	Fire & explosion, forecourt traffic.
Hazard Reductions	Observe vapour zone regulations, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs, Company's purging rig. Fire extinguisher & Nitrogen.
Disposal of Contaminants	Contaminated waste materials removed from site in sealed bags for approved disposal.
Documentation	Site Clearance Certificate, pressure test certificate QAS014 & Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 2.0, 3.4. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet the site Operator and agree plan of work.
2) Cordoned off all work areas.
3) The purging medium is to be nitrogen.
4) Establish the pipeline(s) to be purged.
5) Before commencing work on existing pipelines ensure that all associated Dispensers are "locked out" and all filling points are locked.
6) Drain the suction lines, by opening the under pump check valve, & allowing the fuel to drain back to the respective tank/s.
7) Disconnect the suction risers & remove the fuel dispenser/s from the pump island/s.
8) Purge the suction line/s with nitrogen, from the pump island, by inserting nitrogen from a pressurised bottle, with the snap over valve on the angle check valve in the open position. After a period determined by the length of suction line/s the snap over valve to be closed, whilst purging still in progress. Continue purging for a short period. Close off the purging valve, leaving a small amount of nitrogen pressure within the suction line.
9) Lines to be altered, care should be taken whilst the pressure is released to enable alterations to be carried out.
10) On completion of the line/s alteration, the line/s are to be pressurised with a small amount of nitrogen & left sealed or pressurised for testing as per work instruction 3.4.
11) On completion of satisfactory tests the pressure is released, pipework & dispensers reconnected.
12) Complete Documentation.
13) Clean site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							M									M
Petroleum products					M					H	H			M											
Handling Dispensers	M	M			M		M			M	M			M		M								L	M
Pipework	L								L	M	M			M										M	
Commissioning	L									M	M			M		M									
Handling nitrogen bottle.	L	L			M		M																		

Risk Ratings																
1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 3.7
Date: 01/03/01

25

Issue No. 3.0.0

DISC CUTTING A TRENCH ON AN OPERATIONAL SITE

Location	Operational filling/service station.
Description of Work	Disc cutting a trench on an existing site
Min. Personal Protection	Overall, Hard hat, Safety footwear & Goggles.
Additional Protection	Hand barrier cream, HD Gloves, Dust mask, Ear defenders, Reflective jacket & Fire extinguisher.
Hazards	Open trenches, Fire & explosion, high & low voltage electricity, forecourt traffic.
Hazard Reductions	Observe vapour zone regulations, deploy cones/barriers/tape/fencing or close site.
Tools/Equipment	Standard tool kit, Barriers/cones, Warning signs & power floor saw.
Disposal of Contaminants	Excavated waste materials removed from site in a skip.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos.3.3. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet operator and agree plan of work.
2) Cordoned off all work areas.
3) Disc cut area to be scanned for buried electrical cables/services.
4) If disc cutting to be carried out with in a 10m radius of operational fuel dispensers, above ground offset fills the site must be closed until either the disc cutting works have been completed or when the works extend outside the 10m zone.
5) The area(s) to be disc cut shall be marked out taking into account the possible runs of the existing pipework & buried services.
6) The surface area of the paving shall be sufficiently wetted down, with water, to extinguish any sparks that may occur from the rotating disk
7) The area to be cut may have to be cordoned off in stages to allow public access and to protect traffic
8) The paving shall be cut, using an approved power cutter fitted with an appropriate disk.
9) When the cutting is in progress the paved surface shall be continuously monitored and additional water applied to the cutting area, as necessary, to prevent sparks.
10) Complete documentation.
11) On completion of the work the site shall be left in a clean, tidy and safe condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							L									L
Disc Cutting	L	L	M		L	L			M	M	L		M	L	M			L			M			L	L
Buried Services											L														
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB

Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 3.4
Date: 01/03/01

25

Issue No. 3.0.0

PRESSURE TESTING OF MILD STEEL, POLYETHYLENE & DURA PIPEWORK ON AN OPERATIONAL SITE.

Location	Operational filling/service station.
Description of Work	Pressure testing mild steel, polyethylene & Dura pipework.
Min. Personal Protection	Overall, Safety Footwear & Reflective jacket.
Additional Protection	Hard hat, Hand barrier cream & HD gloves.
Hazards	Open trenches, Fire & explosion, forecourt traffic.
Hazard Reductions	Observe vapour zone regulations, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs, Company's test rig, pressure gauges & relief valves. Fire extinguisher & Nitrogen.
Disposal of Contaminants	Contaminated waste materials removed from site in sealed bags for approved disposal.
Documentation	Site Clearance Certificate, QAS010. Certificate of Test Form: QAS014 & Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 2.0, 3.4. COSHH & H&S Manuals available for Inspection on request.

Procedures.

1) Meet the site Operator and agree plan of work.
2) Cordoned off all work areas.
3) The test medium is nitrogen.
4) Establish the pipeline(s) to be tested and if any terminate within an Inspection Chamber then that work shall be carried out in strict compliance with Work Instruction No: 2.0.
5) Before commencing work on existing pipelines ensure that all associated Dispensers are "locked out" and all filling points are locked.
1) Only the Company's test rig & approved pressure gauges with current calibration status shall be used for testing.
6) Suction line(s) shall be disconnected and capped off before priming and pressurising.
7) Care to be exercised when disconnecting existing pipelines to avoid any spillage and ALL open ends shall immediately be capped or plugged until they are finally re-connected.
8) Vent line(s) shall be disconnected in the Inspection Chamber(s) and the Company's pressure test rig shall be fitted to the open end in the tank chamber. On non-Stage 1B vapour recovery systems the vent termination cap(s) shall be removed and the end(s) blanked off.
9) On Stage 1B vapour recovery systems the vapour recovery manifold shall be disconnected and removed from the vent stack. The vent line(s) that is to be tested shall then be capped off and tested.
10) Vapour recovery pipework to be tested separately as detailed in Work Instruction No. 3.4.
11) On completion of satisfactory tests the pressure is released, pipework & dispensers reconnected.
12) Complete Documentation.
13) Clean site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							M									M
Petroleum products					M					H	H			M											
Handling Dispensers	M	M			M		M			M	M			M		M								L	M
Pipework	L								L	M	M			M										M	
Commissioning	L									M	M			M		M									
Handling nitrogen bottle.	L	L			M		M																		
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB

Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 3.3
Date: 01/03/01

25

EXCAVATING A TRENCH ON AN OPERATIONAL SITE.

Location	Operational filling/service station.
Description of Work	Excavating a trench on an existing site.
Min. Personal Protection	Overall, Hard hat, Safety Footwear & Goggles.
Additional Protection	Hand barrier cream, HD gloves, Dust mask, Ear defenders, Reflective jacket & Fire extinguisher.
Hazards	Open trenches, Fire & explosion, high & low voltage electricity, forecourt traffic.
Hazard Reductions	Observe vapour zone regulations, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs & Power cutter/Jack hammer.
Disposal of Contaminants	Excavated waste materials removed from site in a skip.
Documentation	Site Clearance Certificate, QAS010. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 3.3. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet Operator and agree plan of work.
2) Cordoned off all work areas.
3) The area(s) to be excavated shall be marked out taking into account the possible runs of the existing pipework.
4) The surface area of the paving shall be sufficiently wetted down, with water, to extinguish any sparks that may occur from the rotating disk.
5) The area to be cut may have to be cordoned off in stages to allow public access and to protect traffic.
6) The paving shall be cut, using an approved power cutter fitted with an appropriate disk.
7) When the cutting is in progress the paved surface shall be continuously monitored and additional water applied to the cutting area, as necessary, to prevent sparks.
8) If and when the cutting comes within a 4 metre radius of a petrol dispenser(s) the dispenser(s) shall be switched off and taken out of commission until the cutting is completed.
9) On completion of the cutting the area shall be safely fenced off to allow the trench to be excavated and to restore, if possible, access to the petrol forecourt area.
10) The trench shall be excavated using an approved Jackhammer operated by a single tool compressor.
11) The spoil arising from the excavation shall be removed and placed in a skip that will be specially provided. The skip will be placed in a area that is safe and likely to minimise disruption.
12) On completion the trench shall be backfilled with appropriate material, consolidated, and the surface reinstated in type and levels to match the adjoining areas.
13) In areas subject to vehicular traffic the backfill above a pipe run shall be adequately reinforced to protect the pipe from the weight of the vehicles.
14) Complete Documentation.
15) On completion of the work the site shall be left in a clean, tidy and safe condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							L									L
Excavating	L	L	M		L	L			M	M	L		M	L	M			L			M			L	L
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB

Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

INSTALLATION/ALTERATION OF MILD STEEL PIPEWORK ON AN OPERATIONAL SITE.

Location	Operational filling/service station.
Description of Work	Installing/altering mild steel pipework.
Min. Personal Protection	Overall, Hard hat, Safety Footwear & Goggles.
Additional Protection	Hand barrier cream, HD gloves, Ear defenders, Reflective jacket & Fire extinguisher.
Hazards	Open trenches, Fire & explosion, high & low voltage electricity, forecourt traffic.
Hazard Reductions	Observe vapour zone regulations, deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs & pipe cutting/screwing equipment.
Disposal of Contaminants	Contaminated waste materials removed from site in sealed bags for approved disposal.
Documentation	Site Clearance Certificate, QAS010. Certificate of Test Form: QAS014. Completion Checklist Form: QAS015a. Grade Verification Checklist Form: QAS036 & Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 2.0, 3.1, 3.2. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet and establish, from Operator, the dispenser/tank/product grade configurations agree plan of work.
2) Cordoned off all work areas.
3) Installations within tank chambers shall be carried out in accordance with Work Instruction No. 2.0.
4) Pipework conforming to BS 1387: 1985 (Blue Band) and malleable C.I. pipe fittings to BS 143 & BS 1256:1986 only shall be used.
5) Generally galvanised pipe shall be used for all installations except when otherwise specified when black pipe may be used for diesel pipelines.
6) Pipe joints will normally be screwed and shall be adequately protected against corrosion.
7) Specified jointing compound shall only be used.
8) Before commencing work on existing pipelines all associated Dispensers shall be "locked out", the lines are drained back to their associated tank & all filling points are securely locked.
9) Pipelines shall be laid with a continuous fallback towards the associated tank.
10) There shall be no high or low points, which could allow the accumulation of condensation.
11) The open ends of pipework shall be protected to prevent ingress of water, debris, etc. Care shall be exercised when disconnecting pipelines to avoid any spillage.
12) Each below ground pipe run, including vent pipes, shall be firmly supported to maintain the designed levels.
13) Following satisfactory testing and the approval of the local Licensing Authority all below ground pipelines shall be encased in sulphate resisting concrete.
14) On completion of the pipework, and BEFORE the removal of any protective barriers, all pipelines shall be pressure tested, independently of their tank(s), using nitrogen, or as otherwise specified by the local Authority.
15) Complete Documentation.
16) Clean site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							M									M
Petroleum products					M					H	H			M											
Handling Dispensers	M	M			M		M			M	M			M		M								L	M
Electrical works										M															
Pipework	L								L	M	M			M										M	
Commissioning	L									M	M			M		M									
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 3.0
Date: 01/03/01

25

Issue No. 3.0.0

INSTALLATION OF POLYETHYLENE PIPEWORK.

Location	New/Redevelopment/Operational filling/service station
Description of Work	Installing polyethylene pipework.
Min. Personal Protection	Overall, Hard hat, Safety Footwear & Goggles.
Additional Protection	Hand barrier cream, HD gloves, Reflective jacket & Fire extinguisher.
Hazards	Open trenches, Fire & explosion (existing sites), high & low voltage electricity, forecourt traffic.
Hazard Reductions	Observe vapour zone regulations (existing sites), deploy cones/barriers/tape.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs & pipe cutting/welding equipment.
Disposal of Contaminants	Contaminated waste materials removed from site in sealed bags for approved disposal.
Documentation	Site Clearance Certificate, QAS010. Certificate of Test Form: QAS014. Completion Checklist Form: QAS015a. Grade Verification Checklist Form: QAS036 & Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 3.0. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) For existing sites meet and establish, from Operator, the dispenser/tank/product grade configurations agree plan of work.
2) Cordoned off all work areas.
3) Polyethylene pipe is used ONLY for the underground pipework of a composite installation and it shall terminate and change to galvanised mild steel, with a transition coupling at, or near, finished ground level.
4) Polyethylene pipe may be handled by hand, fork-lift truck or crane and shall be protected from damage. Steel cables, sharp impact or friction rubbing must be avoided.
5) Any pipework that is inadvertently damaged, particularly by a sharp object, resulting in partial wall penetration of greater than 1 mm. shall not be used.
6) Pipe joints will normally be cut using an approved pipe cutter or guillotine. The cut shall be square leaving a cross section at 90º, clear of any burrs, and finally wiped with acetone.
7) To minimise the effect of oxidisation, by UV radiation, all moulded fittings and couplings shall be kept in their respective packing boxes until they are required for use.
8) Pipes shall be laid on a bed of pea gravel, which must have been firmly compacted and resistant to any subsidence, with an even and continuous fall back towards the associated tank.
9) It may be necessary to use a geotextile filter fabric beneath and to the sides of pipe trenches to prevent the migration of the back fill material.
10) The open ends of pipework shall be protected to prevent ingress of water, debris, etc.
11) Only polyethylene pipe with a 'yellow' liner shall be used for the suction and tank fill lines.
12) On completion of a pre-test Inspection, and before the removal of any protective barriers, all pipelines shall be tested, as specified by the client or the local Licensing Authority, independently of their respective tank(s).
13) All below ground pipelines to be covered with pea gravel followed by concrete.
14) Complete Documentation.
15) Clean site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							M									M
Handling Dispensers	M	M			M		M			L	L			M		M									M
Installing Pipework	M	L	L	L	M	L			L	L	L			M										L	M
Petroleum products					M					H	H			M											L
Commissioning	L									M	M			M		M									

Risk Ratings

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

Work Instruction No. 1.5
Date: 01/03/01

25

Issue No. 3.0.0

INSTALLING A REPLACEMENT DISPENSER ON AN OPERATIONAL SITE.

Location	Redevelopment/Operational filling/service station
Description of Work	Installing a replacement dispenser at an Operational Site.
Min. Personal Protection	Overall, Safety Footwear & Fire extinguisher.
Additional Protection	Hard Hat, Hand barrier cream, Goggles, HD gloves, & Reflective jacket
Hazards	Fire & explosion, high & low voltage electricity, forecourt traffic, conveying fuel to return point & harmful substances.
Hazard Reductions	Observe vapour zone regulations, isolate electrical supply, deploy cones/barriers/tape, careful handling of product to avoid spillage's.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs, Steel drum, Spill kit, Fire extinguisher, grade labels & signallsation materials. Forklift truck.
Disposal of Contaminants	Product drawn for testing returned to site tanks. Contaminated waste materials removed from site in sealed bags for approved disposal.
Documentation	Site Clearance Certificate, QAS010. Work Instruction No. 1.5, Page 3, Form: QAS 036. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 1.3, 3.4. Certificate of Test Form: QAS014. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet and establish, from Operator, the dispenser/tank/product grade configuration agree plan of work.
2) Ensure affected dispenser(s) are not 'authorised for use'.
3) Isolate electrical supply to dispenser.
4) Cordon off work areas (at dispenser(s) and at area around the fuel return point to tank(s)) using cones, barriers or tape.
5) Drain back fuel from dispenser and pipeline to tank.
6) Using the forklift truck remove 'old' dispenser and lift into place the replacement.
7) Reconnect pipework, supply and data cables. Make good island surfaces.
8) Fit all signalisation & grade materials.
9) Re-energise and prime the dispenser.
10) Undertake a grade verification check and record results.
11) Dispense 50 litres of fuel into a steel drum visually check for clarity and brightness quality.
12) Check tank contents with site's gauging equipment before & after returning the 50 litres to ensure correct grade has been dispensed.
13) Following return of fuel to tank(s) ensure that all fill points are securely locked.
14) Complete Documentation.
15) Leave site in a clean and tidy condition

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							M									M
Petroleum products					M					H	H			M											
Handling Dispensers	M	M			M		M			M	M			M		M								L	M
Electrical works										M															
Pipework	L								L	M	M			M										M	
Commissioning	L									M	M			M		M									
Risk Ratings																									

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB
Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

CHANGING DISPENSER AND/OR TANK PRODUCT GRADES(S).

Location:	Redevelopment/Operational filling/service station
Description of Work	Changing the Product Grade of a dispenser or tank.
Min. Personal Protection	Overall, Safety Footwear & Fire extinguisher.
Additional Protection	Hard Hat, Hand barrier cream, Goggles, HD gloves, & Reflective jacket
Hazards	Fire & explosion, high & low voltage electricity, forecourt traffic, conveying fuel to return point & harmful substances.
Hazard Reductions	Observe vapour zone regulations, isolate electrical supply, deploy cones/barriers/tape, careful handling of product to avoid spillage's.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs, Spill kit, Steel drums, Fire extinguisher, Explosimeter, grade labels & signalisation materials.
Disposal of Contaminants	Product drawn for testing returned to site tanks. Contaminated waste materials removed from site in sealed bags for approved disposal.
Documentation	Site Clearance Certificate, QAS010. Work Instruction No. 1.4 – Page 4, Form: QAS035. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 1.4, 2.0, 2.7 & 2.8. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet and establish, from Operator, the dispenser/tank/product grade configuration agree plan of work.
2) Ensure affected dispenser(s) are not 'authorised for use'.
3) Cordon off work areas (at dispenser(s) and at area around the fuel return point to tank(s)) using cones, barriers or tape.
4) Close off nozzles & drain residual fuel from dispenser(s) and pipeline back to tank.
5) For Petrol to Petrol re-grading, transfer fuel to tank of similar grade or uplift to tanker.
6) Bottom tank(s) into steel drums & resignalise tank and dispenser.
7) Arrange for tank(s) to be filled to capacity with new grade then flush tank(s) & dispenser(s) back to tank. Re-Commission.
8) For Diesel to Petrol as 5) – 7) plus modify Stage 1 vapour recovery system and take fuel samples for analysis, when requested.
9) For Petrol to Diesel as 4) & 5). Additionally for tanks < 26k litres capacity the tank & dispenser to be flushed out with 1.6k litres of diesel that is then barrelled for disposal. Tank then restocked to capacity and dispenser(s) & recommissioned. For tank(s) > 26k litre capacity the tank and dispenser(s) shall be flushed out with 2k litres of diesel that is then returned to the tank. Modify Stage 1 vapour recovery system, recommission tank(s) & dispenser(s) and take fuel samples when requested.
10) Following return of fuel to tank(s) ensure all fill points are securely locked.
11) Complete Documentation.
12) Provide Operator with revised Pump/Tank/Product grade diagram.
13) Leave site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							M									M
Petroleum products					M					H	H			M											
Electrical works										M															
Pipework	L								L	M	M			M										M	
Commissioning	L									M	M			M		M									

Risk Ratings

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

A.J. Bayliss Petroleum Engineers Ltd – Generic Work Statement

Unit 1, Hodfar House. Sandy Lane Industrial Estate, Stourport-on-Severn, Worcestershire. DY13 9QB

Telephone 01299 824541-2-3. Facsimile 01299 827638. E-mail: Simon@ajbayliss.demon.co.uk

DE-COMMISSIONING & REMOVING DISPENSER(S) FROM SITE.

Location	Redevelopment/Operational filling/service station
Description of Work	De-Commissioning a Dispenser(s) on site.
Min. Personal Protection	Overall, Safety Footwear & Fire extinguisher.
Additional Protection	Hard Hat, Hand barrier cream, HD gloves, & Reflective jacket
Hazards	Fire & explosion, high & low voltage electricity, forecourt traffic, conveying fuel to return point & harmful substances.
Hazard Reductions	Observe vapour zone regulations, isolate electrical supply, deploy cones/barriers/tape, careful handling of product to avoid spillage's.
Tools/Equipment	Standard toolkit, Barriers/cones, Warning signs, Spill kit, Fire extinguisher, Gas oil (Red diesel) in steel drum & approved drip tray with drain hose. Forklift truck.
Disposal of Contaminants	Product drawn for testing/measure checks returned to site tanks. Gas oil returned to steel drum and removed from site. Contaminated waste materials removed from site in sealed bags for approved disposal.
Documentation	Site Clearance Certificate, QAS010. Work Instruction No. 2.0 – Check List. Installation/Service Report Form QAS015.
Other Applicable Documentation	Detailed Work Instruction Nos. 1.3 & 2.0. COSHH & H&S Manuals available for inspection on request.

Procedures.

1) Meet and agree plan of work with site operator.
2) Cordon off work areas (at dispenser(s) and at area around the fuel return point to tank(s)) using cones, barriers or tape.
3) Drain residual fuel from dispenser(s) and pipeline.
4) Where necessary disconnect and temporarily remove Spreader Boxes over dispenser(s). Do not disturb electrical connections unless supply has been isolated.
5) Using the drain hose & flexible connector flush out dispenser with gas oil into a measure can.
6) Switch off and isolate electrical supply to the dispenser(s).
7) Disconnect supply and data cables and make safe.
8) Fully remove the dispenser(s) HD bolts and lift dispenser's from island with forklift truck.
9) Secure nozzles and hoses before loading onto removal vehicle.
10) When loaded the dispenser(s) shall be fully secured for transporting.
11) Excavate around island base, disconnect & remove suction riser(s) and plug exposed suction lines.
12) Cement over flush with top of island.
13) Where the dispenser(s) is only removed temporarily the risers shall be plugged and the base left open and protected with tape/cones.
14) Following return of fuel to tank(s) check to ensure all fill points are securely locked.
15) Complete Documentation.
16) Leave site in a clean and tidy condition.

Activity Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Setting out work areas	L				L				L							M									M
Handling Dispensers	M	M			M		M			M	M			M		M								L	M
Petroleum products					M					H	H			M											
Electrical works										M															
Pipework	L								L	M	M			M										M	
Lifting/Transporting	M	M			H		M							L											M

Risk Ratings

1	Slips/Trips/Falls	6	Collapse	11	Explosion	16	Toxic Gas/vapours	21	Vibration	H	= High
2	Trapping	7	Overturning	12	Arc Eye	17	Oxygen Deficiency	22	Disease		
3	Flying Particles	8	Overloading	13	Noise	18	Moving Machinery	23	Drowning	M	= Medium
4	Falling Material	9	UG/AG Services	14	Harmful Substances	19	Radiation	24	Cuts/Lacerations		
5	Manual Handling	10	Fire	15	Contaminated Ground	20	Burns	25	Third Parties	L	= Low

APPENDIX D GEODELFT / BGS LOGS

PROBEHOLE RECORD

GeoDelft Environmental

SITE: Shell, Whitemare Pool, Gateshead

PROJECT No: C1433.SG356 | PROBEHOLE No: SS01

Start Date: 11/2/99 | Completion Date: 11/2/99 | Co-ordinates :

Drilling Method: Percussive Window Sampling | Relative ground level (m):

Sampling Details Depth (m)	Sampling Details Type/No.	Water depth (m)	Field tests	Description of Strata	Depth (m)	Legend
				BRIQUETTE	0.10	
				SAND	0.20	
				CONCRETE		
0.5	VJ CL		1 0	Brown sandy silt with much fine to coarse angular gravel and slag (MADE GROUND)	0.45	
				Light brown clayey SAND varying to grey brown sandy CLAY with pockets of fine to course angular gravel	0.90	
1.0	VJ CL		2.0 389	Black peaty CLAY with some fine to coarse angular gravel	1.10	
				Red brown and grey CLAY with some fine to coarse angular to subangular gravel		
				@ 1.70m becoming slightly sandy with some to much fine to coarse angular to subangular gravel		
2.0	VJ CL	▽	6 335			
3.0	VJ CL		7 266	Borehole completed at 3.0m bgl	3.0	

REMARKS: Any calibration details?

On completion backfilled with bentonite
Water strike at 2.0mbgl which rose to 0.8mbgl in 20min??, standing water level 2.3m.
Equipment decontaminated after drilling

SCALE:

Logged by: CJB

Subcontractor:

Page: 1 of 1

PROBEHOLE RECORD

GeoDelft Environmental

SITE: Whitemare Pool, Gateshead

PROJECT No:C1433.SG356 | PROBEHOLE No: SS02

Start Date: 11/2/99 | Completion Date: 11/2/99 | Co-ordinates :

Drilling Method: Percussive Window Sampling | Relative ground level (m):

Sampling Details Depth (m)	Sampling Details Type/No.	Water depth (m)	Field tests	Description of Strata	Depth (m)	Legend
				BRIQUETTE	0.10	
				SAND	0.20	
				CONCRETE	0.30	
0.5	VJ		61	Light brown sandy silt with much fine to coarse angular gravel (MADE GROUND)	0.40	
		▽		Light brown clayey SAND varying to grey brown sandy CLAY with much fine to coarse angular gravel	0.90	
1.0	VJ		123	Dark brown and grey slightly sandy CLAY with some fine to coarse angular to subangular gravel		
2.0	VJ		134	@ 1.6m Red brown and grey clay with some to much fine to coarse angular to subangular gravel		
				Red brown weathered micaceous SILTSTONE (COAL MEASURES)		xxxxxxx xxxxxxx xxxxxxx xxxxxxx
3.0	VJ		148	Borehole completed at 3.0mbgl	3.0	

REMARKS: Any calibration details?

Groundwater encountered at 1.65m bgl, rising to 0.88m bgl after 20 mins
Water stood @ 0.75m after drilling was complete
On completion backfilled with bentonite.

SCALE:

Logged by: CJB

Subcontractor:

Page: 1 of 1

PROBEHOLE RECORD

GeoDelft Environmental

SITE: Whitemare Pool, Gateshead

PROJECT No:C1433.SG356 | PROBEHOLE No: SS03

Start Date: 11/2/99 | Completion Date: 11/2/99 | Co-ordinates :

Drilling Method: Percussive Window Sampler | Relative ground level (m):

Sampling Details Depth (m)	Sampling Details Type/No.	Water depth (m)	Field tests	Description of Strata	Depth (m)	Legend
				BRIQUETTE	0.10	
				SAND	0.20	
				CONCRETE	0.25	
0.5	VJ		68	Grey silt with much angular fine to coarse gravel (MADE GROUND)	0.50	
				Light brown slightly sandy silt with much angular fine to coarse gravel (MADE GROUND)	1.00	
1.0	VJ		23	Dark brown black peaty CLAY with some angular to subangular fine to coarse gravel		
				@ 1.60m becoming red brown/grey with much angular to subangular fine to coarse gravel		
2.0	VJ		12		2.70	
				Green grey weathered micaceous SILTSTONE (COAL MEASURES)	3.00	
3.0	VJ		6	Borehole complete @ 3.00m bgl		

REMARKS: Any calibration details?

No groundwater encountered.
Backfilled with bentonite.
Equipment decontaminated after drilling

SCALE:

Logged by: CJB

Subcontractor:

Page: 1 of 1

PROBEHOLE RECORD

GeoDelft Environmental

SITE: Whitemare Pool, Gateshead

PROJECT No:C1433.SG356 | PROBEHOLE No: SS04

Start Date: 11/2/99 | Completion Date: 11/2/99 | Co-ordinates :

Drilling Method: Percussive Window Sampler | Relative ground level (m):

Sampling Details		Water depth (m)	Field tests	Description of Strata	Depth (m)	Legend
Depth (m)	Type/No.					
				TARMAC		
				Grey SILT with much angular fine to coarse gravel	0.15	
0.50	JV		3	Light brown slightly clayey SILT with much fine to coarse angular gravel	0.50	
1.0	JV		2	Dark brown peaty CLAY	0.95	
2.0	JV		1	Red brown slightly sandy CLAY with much angular fine to coarse gravel	1.40	
3.00	JV		1	Green grey weathered micaceous SILTSTONE @ 2.75m becoming red brown @ 2.90m becoming green grey (COAL MEASURES)	2.50	
				Borehole complete @ 3.0m bgl	3.00	

REMARKS: Any calibration details?

No groundwater encountered.
Backfilled with bentonite.
Equipment decontaminated after drilling.

SCALE:

Logged by: CJB

Subcontractor:

Page: 1 of 1

PROBEHOLE RECORD

GeoDelft Environmental

SITE: Whitemare Pool, Gateshead

PROJECT No:C1433.SG356 | PROBEHOLE No: SS05

Start Date: 11/2/99 | Completion Date: 11/2/99 | Co-ordinates :

Drilling Method: Percussive Window Sampler | Relative ground level (m):

Sampling Details		Water depth (m)	Field tests	Description of Strata	Depth (m)	Legend
Depth (m)	Type/No.					
				Tarmac	0.15	
0.50	JV		28	Light brown sandy SILT with much angular fine to coarse gravel and occasional clay		
1.0	JV		8	Grey to black peaty CLAY with some fine to coarse angular gravel	0.85	
				Red brown slightly sandy silty CLAY with some to much angular fine to coarse gravel	1.20	
2.0	JV		3			
				Borehole abandoned @ 2.0m bgl, obstruction		

REMARKS: Any calibration details?

No groundwater encountered.
Backfilled with bentonite.
Equipment decontaminated after drilling.

SCALE:

Logged by: CJB

Subcontractor:

Page: 1 of 1

NZ 36SW/136

GIBBONS NORTHERN BRICK COMPANY LTD

Description of strata drilled by B.B. Drilling, 24th-25th March, 1980 at Wardley, Tyne & War. 3" core, air flush.

B.H. 80/4

BGS REGISTRATION NO
NZ 36 SW / 136
PAGE NO. /

Description of Strata	Thickness Ft	Thickness Ins	Depth Ft	Depth Ins
Boulder clay	8	2	8	2
Sandstone, soft (Drillers log - open hole to 9'10")	1	8	8	10
Sandstone, silty, thin bedded, micaceous, rich in plant debris	3	2	13	0
Mudstone, blocky, mid. grey, clean	3	2	16	2
Sandstone, fine, micaceous, with carbonaceous partings	1	8	17	10
Clay, soft rooty with COAL traces	0	6	18	4
Sandstone, hard, massive, fine grained, light grey	2	8	21	0
Siltstone, sandy, dark grey, micaceous, carbonaceous	2	10	23	10
Siltstone, mid. grey	0	10	24	8
Shale, mid. grey, silty to base	3	8	28	4
Siltstone with occasional sandy wisps	2	2	30	6
Shale, mid. grey, siderite bands, occasional plant fragments	2	10	33	4
COAL	0	3	33	7
Seatearth mudstone, dar, carbonaceous, rooty. Silty to base	1	11	35	6
Mudstone, mid. grey. Roots and plant fragments, becoming cleaner and more silty to base	7	2	42	8
Mudstone, light grey. Rooty at top and very poorly bedded becoming harder to base but still light coloured and poorly bedded	10	0	52	8

NZ 36 SW/136

BGS REGISTRATION NO
NZ 36 SW / 136

B.H. 80/4 continued

Description of Strata	Thickness Ft	Ins	Depth Ft	Ins
Siltstone, clean, light grey, hard	3	7	56	3
Sandstone, silty, light grey, wispy bedded	2	9	59	0
Sandstone, light grey, micaceous, fine grained, wispy bedded	3	6	62	6
Shale and ironstone nodules	0	6	63	0
COAL	0	8	63	8
Seatearth mudstone, rooty	1	6	65	2
Mudstone, mid. grey, rooty, carbonaceous at top	1	11	67	1
Sandstone, silty, mid. grey, fine grained	1	6	68	7
Siltstone, well bedded with sandstone wisps	1	1	69	8
Sandstone, light grey, fine grained	1	8	71	4
Siltstone with sandy wisps	2	0	73	4
Sandstone, fine-medium grained, wispy bedded with occasional silty partings	8	6	81	10
Siltstone with sandy wisps, penecontemporaneous slump structures	5	6	87	4
Siltstone, mid. grey	1	0	88	4
Shale, mid. grey, well bedded, clean. A few plant fragments to base	10	8	99	0
COAL	1	6	100	6
Seatearth mudstone, rooty	2	10	103	4
Mudstone, rooty, mid. grey	2	9	106	1
Mudstone, rubbley, poorly bedded, rather hard, light grey	2	10	108	11

Borehole completed at 108'11"

British Geological Survey

BOREHOLE LOG

GROUNDSHIRE
GROUNDSHIRE
GROUNDSHIRE
GROUNDSHIRE

LOCATION WHITEMARE POOL
CLIENT TRUSTHOUSE FORTE.
BOREHOLE No. 5 DIAMETER 150 mm
GROUND LEVEL: DATE: APRIL 1988

Telephone:
(091) 4161108/4179794

Depth	Thickness	Legend	Description of Strata	Type of Sample	C kN/m²	M %	Ø	Density Kg/m³	N
0.30	0.30		CLAYEY SOIL						
0.60	0.30		BRICK RUBBLE & SHALE FILL						
	1.50		FAIRLY FIRM BROWN & GREY MOTTLED STONY CLAY	U 1.00	90.8	17.0	—	2100	
2.10									
	0.90		FAIRLY HARD DRY SANDY SHALE	P 2.50					62
3.00									

Water Struck at NIL Standing Water Level

British Geological Survey

BOREHOLE LOG

GROUNDSHIRE
GROUNDSHIRE
GROUNDSHIRE
GROUNDSHIRE

Telephone:
(091) 4161108/4179794

LOCATION WHITEMARE POOL
CLIENT TRUSTHOUSE FORTE.
BOREHOLE No. 6 **DIAMETER** 150 MM
GROUND LEVEL: **DATE:** APRIL 1988

Depth	Thickness	Legend	Description of Strata	Type of Sample	C kN/m²	M %	Ø	Density Kg/m³	N
0.30	0.30		CLAYEY SOIL						
0.70	0.40		BRICK RUBBLE FILL						
	1.60		FAIRLY FIRM BROWN/GREY MOTTLED STONY CLAY	U 1.00	112.7	17.0	-	2100	
2.30				U 2.50	133.0	16.0	-	2120	
3.00	0.70		FIRM DK BROWN STONY CLAY						
4.00	1.00		FAIRLY HARD SAND SHALE	P 3.50					77

Water Struck at 3.00M Standing Water Level 1.40M

NZ 36 SW/133

GIBBONS NORTHERN BRICK COMPANY LTD

Description of strata drilled by B.B. Drilling, 13th-18th March, 1980 at Wardley, Tyne & Wear. 3" core, air flush.

B.H. 80/1

BGS REGISTRATION NO
NZ 36 SW / 133
PAGE NO. 1

Description of Strata	Thickness Ft	Thickness Ins	Depth Ft	Depth Ins
Boulder Clay	14	9	14	9
Shale, soft (Drillers log - open hole to 16'5")	1	8	16	5
Shale, silty with plant debris	0	7	17	0
Sandstone, silty wisps, hard with plant fragments, plentiful in parts	5	0	22	0
Siltstone with Coaly wisps	1	5	23	5
Sandstone rib, hard	0	8	24	1
Siltstone, carbonaceous and micaceous	2	1	26	2
Sandstone - hard rib	0	9	26	11
Mudstone, with plant debris	1	1	28	0
COAL	0	2	28	2
Seatearth mudstone, rooty	2	10	31	0
Mudstone, light grey, occasional silty bands - firmer but not more than 3 inches thick	14	5	45	5
Mudstone, rooty, carbonaceous in parts, dark grey	6	5	51	10
Siltstone, dark, carbonaceous, rooty	1	5	53	3
Sandstone, massive, wispy bedded	17	3	70	6
Shale, black, canneloid, fish and shell debris	0	2	70	8
COAL	1	2	71	10
Shale, Coaly, plant debris, slickensided	1	2	73	0
Mudstone, light grey, rooty	0	7	73	7

British Geological Survey

BOREHOLE LOG

GROUNDSHIRE
GROUNDSHIRE
GROUNDSHIRE
GROUNDSHIRE

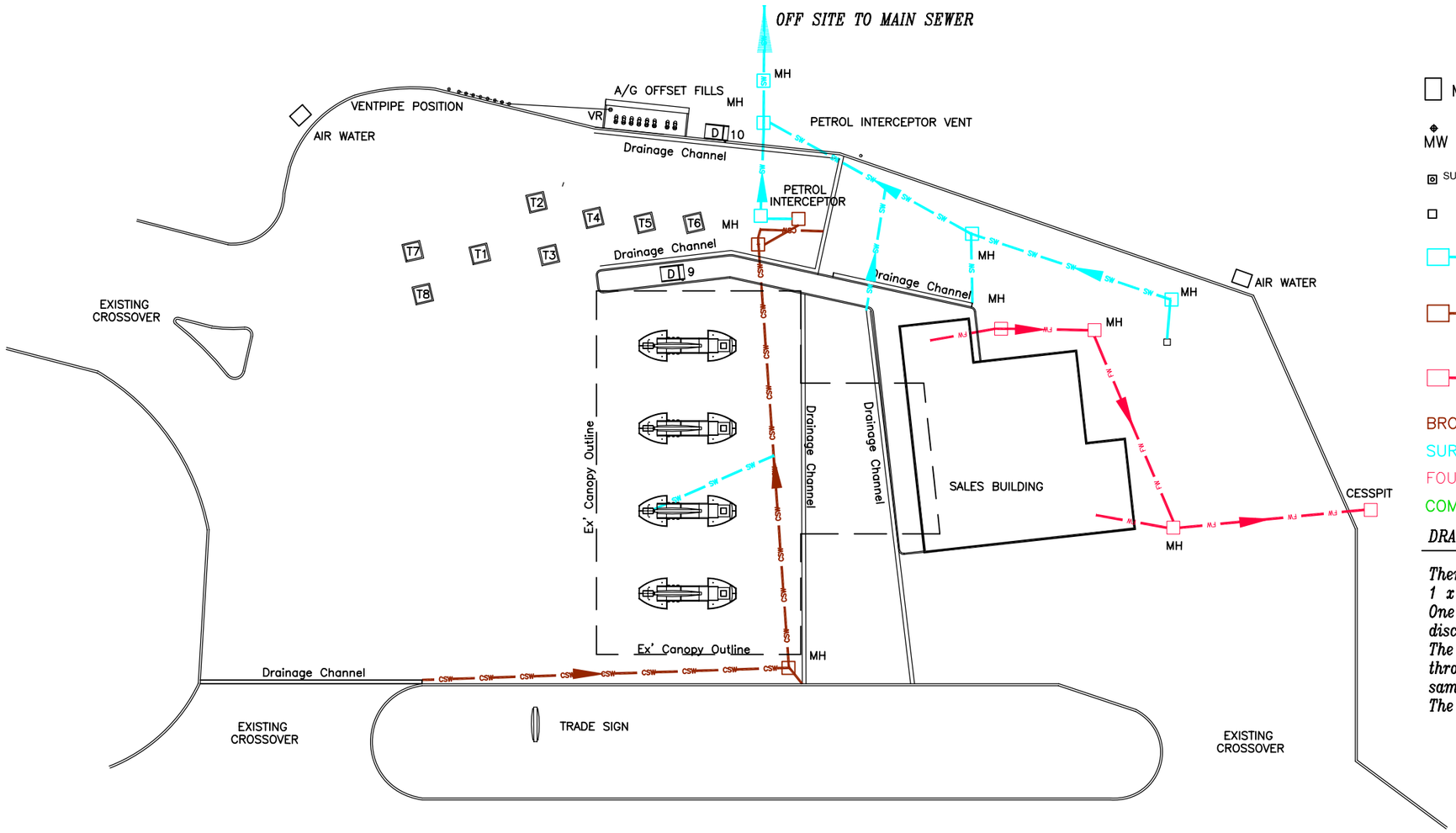
LOCATION WHITEMARE POOL
CLIENT TRUSTHOUSE FORTE
BOREHOLE No. 4 DIAMETER 150 mm
GROUND LEVEL: DATE: APRIL 1988 Telephone: (091) 4161108/4179794

Depth	Thick-ness	Legend	Description of Strata	Type of Sample	C kN/m²	M %	Ø	Density Kg/m³	N
0.60	0.60		DARK CLAYEY SOIL						
				U 1.00	126.7	16.0	-	2140	
			FIRM BROWN & GREY MOTTLED STONY CLAY WITH S/STONE FRAGMENTS						
	2.40			U 2.50	119.8	15.0	-	2120	
3.00									
				U 3.70	48.5	27.0	4°	1900	
	1.80		FIRM BROWN SILTY CLAY						
4.80									
	0.50		LOOSE FRIABLE BROWN GRAVELLY CLAY	P 5.00					11
5.30									
	0.70		FAIRLY HARD FRIABLE SANDY SHALE	P 6.00	Foil	0.10"	PENETRATION		44
6.00									

Water Struck at 4.80m Standing Water Level 1.45

APPENDIX E PPG21 DRAINAGE DRAWING

DRAINAGE DRAWING DETAILS SHOWN
TO COMPLY WITH PPG21 REGULATIONS



MH	Manhole
MW	Monitoring Well
SU	Drainage Channel Sump Unit
	Gulley
SW	Storm Water Sewer (Blue)
CSW	Storm Water Sewer(Brown)
FW	Foul Water Sewer (Red))

BROWN SW DRAIN
SURFACE WATER DRAIN
FOUL WATER DRAIN
COMBINED WATER DRAIN

DRAINAGE DESCRIPTION

There are three seperate drainage systems on this site.
1 x Foul,2 x Surface water.
One surface system takes all non petrol drainage and discharges into a main sewer
The second surface system takes all forecourt drainage through a interceptor and discharges into same main sewer
The foul system takes all toilet waste to a ceespit

SCALE (METRES)
0 5 10 15 20 25 30

THIS DRAWING IS BASED ON INFORMATION SUPPLIED

REV		DATE
PROJECT :	WHITEMARE POOL SERVICE STATION, WARDLEY, GATESHEAD, TYNE & WEAR. NE10 8YB.	
TITLE :	SITE DRAINAGE PLAN	

SHELL UK RETAIL
PO BOX 430
STAINES
TW18 3ZB
UNITED KINGDOM

DRAWN BY :	GKY-PREMIER-GROUP	SCALE :	1:200
DATE :	FEB2011	PLOT DATE :	.
CAD FILE : E:\ARCHIVE\WHITEMARE-POOL\DRAWINGS\WHITEMARE-POOL10019383-PPG21-09			
DWG No :	10019383	PPG21	001