Structural Civil Geo-Environmental



consulting engineers

Proposed Aldi Store Extensions at Whins Road, Alloa, Clackmannanshire

Phase I Geo-environmental Assessment

for

Aldi Stores Limited







Report Ref	Issue	Prepared by	Reviewed by	Date
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EXECUTIVE SUMMARY

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Land Use	The site is irregular in shape and is located south east of Whins Road, which runs parallel to the northern western boundary of the site. The site appears to be generally flat with the exception of the dock leveller ramp and adjacent soft landscaping embankment formed due to the creation of the dock leveller.
	The site is bound by Whins Road to the north west with a soft landscaping encapsulated with a wooden knee rail along most of the boundary, with the exception of vehicular and pedestrian access points. The south west boundary is formed by a timber fence with open scrub beyond. The eastern boundary is also formed by a timber fence with woodland and the northern boundary is formed by railway arches.
Site History	From the earliest plans the site was occupied by Springfield Mills (Woollen) with associated water course (Brothie Burn) running roughly north east to south west through the site. There was also an associated 'drying green' in the south east of the site. By 1900 buildings covered two thirds of the site with only the eastern boundary and southern extent, which was identified as a 'nursery' between 1900 and the early 1970s, were left open. By the early 1950s a large proportion of the buildings on site had been cleared and only a few small buildings were present around the site. These were cleared by the late 1970s with the only discernible features on site being the exposed 'Brothie Burn' passing through the site within a culvert. The site remained open until 2006 when the existing store was constructed.
	From the earliest plans, the land surrounding the site has supported numerous industrial activities, which themselves have been surrounded by residential dwellings and local amenities. The area supported a brewery, corn and flour mill, a foundry, slaughterhouse, laundry and a public railway. Most of these potentially contaminative off site activities have been redeveloped with light commercial, retail and residential dwellings up to the early 2000s.
Environmental Setting	 BGS data records the site to primarily be underlain by Alluvium, which in turn is underlain by Raised Terrace Deposits, which both comprise of clay, silt, sand and gravel. BGS data records the site as being underlain by the Scottish Lower Coal Measures comprising of sedimentary rock cycles (sandstone, mudstone and siltstone). There is a geological fault located in the north of the site trending west to east, and intercepts the northern portion of the existing store. The Brothie Burn is identified to culverted beneath the centre of the site from north east to south west beneath the existing store. The entire site is identified to be in an area of low risk from flooding from river waters, with a 0.1% chance of flooding each year. The site is recorded as being located within an area designated by the BGS as having the potential for groundwater flooding at the surface with the eastern boundary of the site being at risk of property situated below ground level flooding. The bedrock strata are classed as a moderately permeable aquifer. There are no landfill sites recorded within 250m of the site. There is a single waste transfer sites recorded within 250m of the site.

There are 2no. discharge consents within 250m.

ordnance (UXO).

The site is located within a Low Risk area from possible unexploded



Contamination	Any on site contamination is most likely to be associated with the former woollen mill activities and any imported made ground present, however, as the site was redeveloped in the early 2000s, it is considered that any significant historic contamination would have been appropriately dealt with during the redevelopment to a satisfactory standard at the time. Based on the site history and surrounding land uses there is not considered to be a risk to human health or the water environment.
Mining Risk Assessment	The Coal Authority indicates that the site is not in an area at risk from past coal mining activities and no further assessment is required.
Ground Gas	No Radon protection measures are required for this site.
	In view of the preliminary assessment and existing data, there is considered to be a potential risk from ground gas to the development, therefore, it would be prudent to allow for CIRIA CS2 ground gas protection measures as a minimum until a ground investigation and ground gas monitoring has confirmed the existing regime.
Foundations and Floor Slabs	Based on the publicly available information and review of the foundation details for the existing store, which identified that the store has been constructed on a combination of vibro stone columns and deep mass fill foundation adjacent to the culverted watercourse, which passes under the store it is anticipated at this stage, that a piled foundation solution will be required for the proposed store extensions.
	At this stage, it is considered that suspended floor slabs will be required for the proposed extensions based on the likely requirement for a piled foundation solution, subject to a site investigation.
Intrusive	An intrusive investigation will be required comprising:
Investigations Rational	 Assessment of the type, nature and thicknesses of shallow soils by mini percussion drilling to allow in situ testing, the recovery of samples for logging and laboratory testing and installation of combined ground gas/groundwater monitoring wells. If the mini percussion drilling confirms unsuitable founding strata at a shallow depth, cable percussion boreholes may be required for a piled foundation design. Investigation of the proposed retaining structure formation and embankment to inform slope stability analysis, if necessary, by mini percussion boreholes in accessible areas. Contamination testing of soils and groundwater with allowance for screening for metals and hydrocarbons (PAH's), speciated TPH and asbestos screening. PID screening of samples during sampling for potential hydrocarbon soil vapours. Geotechnical testing to inform foundation design. Ground gas monitoring on 6 occasions over a minimum period of 2 months in accordance with CIRIA C665.
Further Works	If cohesive soils are recorded in the ground investigation a tree survey will be required to be undertaken on and within the vicinity of the site (approximately 30m) to enable a comprehensive assessment of the required foundation design to be determined.



1 INTRODUCTION

- 1.1 3e Consulting Engineers Ltd (3e) were commissioned by Aldi Stores Limited to carry out a Phase I Geo-Environmental Assessment for proposed store extensions at the existing Aldi store on Whins Road, Alloa, Clackmannanshire.
- 1.2 This report highlights ground related environmental and geotechnical considerations in relation to the proposed development, which includes the construction of extensions to the existing store, together with changes to the existing car park and soft landscaping, details of which are provided on the proposed site plan included in **Appendix A**.
- 1.3 The objectives of this assessment were:
 - To establish the historical development of the site and surrounding area.
 - To establish the environmental setting of the site.
 - To assess the potential impact of subsurface mining on the development.
 - To determine if historical or current activities could give rise to significant ground or groundwater contamination.
 - To assess the potential for hazardous ground gas.
 - To determine the potential risks posed by contamination arising from historical or current activities on or in the vicinity of the site.
- 1.4 To this end the study has included an inspection of historical maps, a review of environmental data held on publicly available registers and other sources as indicated within the report.
- 1.5 This report presents the factual information available during this appraisal, interpretation of the data obtained and recommendations relevant to the scope of works outlined above. It has been assumed in the production of this report that the site is to have a continued commercial end use.
- 1.6 The comments and opinions presented in this report are based on the findings of the available desk study investigation carried out by 3e. Responsibility cannot be accepted for any conditions not revealed by this desk study and which have not been taken into account by this report.



1.7 This report has been prepared for the sole use of Aldi Stores Limited. No other third party may rely upon or reproduce the contents of this report without the written approval of 3e. If any unauthorised third party comes into possession of this report, they rely on it entirely at their own risk and 3e do not owe them any Duty of Care or Skill.



2 THE SITE

Location and Description

- 2.1 The site, centred on National Grid Reference 289100, 693070, approximately 0.5km north east of Alloa town centre. A site location plan is included as **Drawing G0001**.
- 2.2 The site is irregular in shape and is located south east of Whins Road, which runs parallel to the northern western boundary of the site. The site appears to be generally flat with the exception of the dock leveller ramp and adjacent soft landscaping embankment formed due to the creation of the dock leveller. The site is bound by Whins Road to the north west with a soft landscaping encapsulated with a wooden knee rail along most of the boundary with the exception of vehicular and pedestrian access points. The south west boundary is formed by a timber fence with open scrub beyond. The eastern boundary is also formed by a timber fence with woods and the northern boundary is formed by railway arches.
- 2.3 The adjacent land use is as follows:
 - North: Public railway line with an army cadet centre and residential housing beyond.
 - South: Woodland with residential dwellings and open land beyond.
 - East: Woodland with residential dwellings beyond.
 - West: Whins Road with a supermarket and train station beyond.



3 SITE HISTORY

- 3.1 In order to establish the site history, an inspection was made of historical maps, dating between 1865 and 2021. A summary of the information is provided below and copies of the maps are included as **Appendix B**. It is not the intention of this report to describe in detail all of the changes that have occurred on or adjacent to the site, only those pertinent to the proposed development.
- 3.2 From the earliest plans the site was occupied by Springfield Mills (Woollen) with associated water course (Brothie Burn) running roughly north east to south west through the site. There was also an associated 'drying green' in the south east of the site. By 1900 buildings covered two thirds of the site with only the eastern boundary and southern extent, which was identified as a 'nursery' between 1900 and the early 1970s, were left open. By the early 1950s a large proportion of the buildings on site had been cleared and only a few small buildings were present around the site. These were cleared by the late 1970s with the only discernible features on site being the exposed 'Brothie Burn' passing through the site within a culvert. The site remained open until 2006 when the existing store was constructed.
- 3.3 From the earliest plans, the land surrounding the site has supported numerous industrial activities which themselves have been surrounded by residential dwellings and local amenities. The area supported a brewery, corn and flour mill, a foundry, slaughterhouse, laundry and a public railway. Most of these potentially contaminative off site activities have been redeveloped with light commercial, retail and residential dwellings up to the early 2000s.



4 ENVIRONMENTAL SETTING

4.1 This section summarises the publicly available information collated within an Envirocheck search, included as **Appendix C**, together with other sources where indicated.

Geology and Mining

4.2 A summary of the site geology, based on available published information, is provided below.

Sources of Information	British Geological Survey (BGS) Alloa, Sheet 39E (Scotland), 1:50,000 scale, Bedrock and Drift Deposits. BGS Online Map Based Index (GeoIndex & Geology of Britain). Coal Authority (CA) Consultants Coal Mining Report Ref: 51002680588001, included as Appendix D . CA Interactive Map Viewer.
Made Ground	Geological plans do not record made ground on the site, however, given the site history, made ground is very likely to be present on the site.
Superficial Deposits (Drift)	BGS data records the site to primarily be underlain by Alluvium, which comprises of clay, silt, sand and gravel. This is likely to be underlain by the Raised Terrace Deposits also comprising of clay, silt, sand and gravel.
Bedrock Geology (Solid)	BGS data records the site as being underlain by the Scottish Lower Coal Measures comprising of sedimentary rock cycles (sandstone, mudstone and siltstone). There is a geological fault is located in the north of the site trending west to east, and intercepts the northern portion of the existing store.
Coal Mining	The CA Consultants Coal Mining Report indicates the site to not be at risk from recorded past mining, unrecorded shallow workings and there are no spine roadways, mine entries, nor opencast sites within 500m of the boundary. The CA Interactive Map Viewer indicates that the site is not in a 'High Risk Development Area' for coal mining activities.
Quarrying	NR within 250m.

Hydrology and Hydrogeology

4.3 A summary of available information pertaining to hydrology, hydrogeology, flood risk potential, water abstractions, discharge consents and pollution incidents to the water environment is provided as follows.



Watercourses	The Brothie Burn is identified to culverted beneath the centre of the site from north east to south west.		
Flood Risk	The entire site is identified to be in an area of low risk from flooding from river waters, with a 0.1% chance of flooding each year. A separate Flood Risk Assessment will be required for the proposed development.		
BGS Groundwater Flooding Susceptibility	The site is recorded as being located within an area designated by the BGS as having the potential for groundwater flooding at the surface with the eastern boundary of the site being at risk of property situated below ground level flooding. The site is also identified to have high, medium and low likelihoods of surface water flooding by SEPA.		
Groundwater Classification	Bedrock Geology: The site is recorded to be underlain by a Moderately Permeable Aquifer – Fractured and potentially fractured rocks, which do not have a high primary permeability.		
Source Protection Zones	NR within 1km.		
Licensed Water Abstractions	NR within 1km.		
Wells	NR within 250m, however, the adjacent brewery is likely to have abstractions from groundwater via a series of wells.		
Discharge Consents	There are 2no. discharge consents for storm water overflow and surface water (Water Authority) discharges between 210 and 243m south west of the site.		
Pollution Incidents	NR within 1km.		

NR – None Recorded

Landfill Sites and Waste Management

4.4 A summary of information regarding landfill sites (historical or current) and waste management facilities is provided as follows.

Local Authority Recorded Landfills	NR within 250m.
BGS / SEPA Recorded Landfills	NR within 250m.
Other Waste Management Facilities	There is a single registered waste transfer site within 250m of the site. This site was located some 234m east of the site and accepted hydrocarbons, cleaning compounds, solvents, kerosene and mixed organic compounds.



Pollution Controls and Industrial Land Use

4.5 A summary of pollution control records and potentially polluting activities (fuel stations) is provided as follows.

Integrated Pollution Controls (IPC)	NR within 250m.
Integrated Pollution Prevention and Control (IPPC)	NR within 250m.
Local Authority Pollution Prevention and Controls (LAPPC)	NR within 250m.
Petrol Filling Stations	There are 2no. petrol filling stations located 190m west and 250m south west of the site.

Unexploded Ordnance (UXO)

- 4.6 As part of this report a UXO bomb risk map has been obtained from Zetica UXO, a copy of which is included in **Appendix E**. This map indicates the potential for unexploded bombs (UXB) to be present as a result of World War Two (WWII) bombing.
- 4.7 In summary, the regional unexploded bomb risk map obtained from Zetica records the site as being located within a **Low Risk** area from possible unexploded ordnance (UXO) resulting from WWII bombing (i.e. areas as indicated as having 15 bombs per 1000acre or less), indicating that works can progress without the requirement for special precautions in this regard.

Radon

- 4.8 Inspection of the HPA publication CRCE-023 (July 2011), "Indicative Atlas of Radon in Scotland" indicates that the site lies in a lower probability radon area with a risk of <1%. In addition, Public Health England (PHE) online interactive radon map also indicates the site to have <1% risk from Radon.
- 4.9 The site is not considered to be at risk from Radon gas, and therefore, no Radon protection measures are required.



Other

4.10 There are 6no. active Contemporary Trade Directory Entries recorded within 250m. These include petrol filling stations, tyre dealers, home furnishing manufacturers, a blacksmiths, pet and animal feed retailer and hardware store.



5 CONCEPTUAL SITE MODEL

- Based on the available desk study information, a conceptual site model (CSM) has been developed for the proposed future land use (commercial). This summarises the understanding of the existing site and its historical development, the site geology, the potential contaminant sources, transport pathways and receptors in order to assess potential pollutant linkages. In assessing the potential contaminants present at the site, reference has also been made to the relevant sections of Environment Agency (EA) Land Contamination Risk Management (LCRM) guidance and any other relevant supporting documentation.
- 5.2 The proposed new extensions to the existing Aldi store situated at Whins Road, Alloa, as shown on the proposed site plan included in **Appendix A**. Based on the available information, a summary of the potential contamination sources, pathways and receptors is provided below.

Sources of Contamination

- Contamination associated with any imported made ground/fill below the site.
- Potential for residual contamination associated with on woollen mill activities.
- Potential for hazardous ground gases from on and off-site sources; with potential sources identified for this site including made ground on site and off site.

Potential Pollution Pathways

- Humans direct contact, soil ingestion and dust inhalation.
- Moderately Permeable Aquifer leaching and vertical migration of contamination.
- Lateral migration into the on site culverted watercourse (Brothie Burn) Low risk
 considered due to existing redevelopment being relatively recent and any
 significant contamination should have been addressed as part of the
 redevelopment.
- Vertical and lateral migration, ingress and accumulation of ground gases into buildings and service entries (manholes).
- Direct contact of aggressive soils with foundations, floor slabs and water pipes.



Receptors

- Human Health (site end users).
- Human Health (construction workers).
- The Water Environment (Moderately Permeable Aquifer).
- On site culverted watercourse.
- Buildings, foundations and floor slabs.

Pollutant Linkage Assessment

5.3 A qualitative risk assessment has been made of the likelihood of any pollutant linkage operating and its potential significance, as summarised in the table below:

Contamination Source	Pathway	Hazard	Potential Receptors	Linkage Complete
Contaminants associated with potential imported made ground and residual contamination associated with the former woollen mill activities.	Direct contact, ingestion, dust inhalation	Human health risk	Site construction workers	Unlikely, given the site was redevelopment in the late 2000s, however, any risk can be mitigated by the use of appropriate PPE and limited exposure.
	Direct contact, ingestion, dust inhalation	Human health risk	Site end users	Unlikely, given the site was redevelopment in the late 2000s and any exposure pathways will not be available in areas of proposed hard cover or capping of soft landscaping.
	Lateral and vertical migration	Pollution of the water environment	Moderately permeable aquifer	Unlikely, although any exposure pathways will be reduced in areas of existing and proposed hard cover and positive site drainage.
	Lateral and vertical migration	Pollution of the water environment	On site culverted watercourse	Unlikely, given the site was redevelopment in the late 2000s and contamination sources will have been removed. Exposure pathways will also be reduced in areas of existing and proposed hard cover.



Contamination Source	Pathway	Hazard	Potential Receptors	Linkage Complete
	Direct contact	Presence of aggressive soils	Foundations, floor slabs and water pipes	Unlikely, although any latent risk can be negated by the adoption of appropriate mitigation measures (i.e. barrier pipe) if a new supply is proposed.
Contaminants associated with off-site sources	Lateral migration	Human health risk	Site end users	Limited risk associated with the potential for contamination migration from historical and adjacent site usages given the redevelopment of historical contaminative sources.
Ground Gas	Vertical migration into buildings or confined spaces	Human health risk Fire risk	Site end users, construction workers and property	Potentially the primary potential sources identified for this site are alluvium and imported made ground.



6 ENVIRONMENTAL RISK ASSESSMENT

- 6.1 The potential environmental risk has been assessed based on the 'source-pathway-receptor' pollutant linkages identified in the Conceptual Site Model, which requires that for a liability to arise each stage of the pollutant linkage must be present. References to risk classifications are made according to the following definitions:
 - **Low risk** it is unlikely that an issue will arise with respect to causing significant harm to human health or the water environment.
 - **Moderate risk** it is possible that an issue could arise with respect to causing significant harm to human health or the water environment.
 - **High risk** it is likely that an issue will arise with respect to causing significant harm to human health or the water environment.
- 6.2 Having evaluated the information gathered during this study and described in the previous sections the following risk assessment has been produced.

ENVIRONMENTAL RISK ASSESSMENT		
	Risk rating	Reason
Contamination pote	ential for:	
On-site contamination	Low	Any on site contamination is most likely to be associated with the former woollen mill activities and any imported made ground present. However, as the site was redeveloped in the early 2000s, it is considered likely that any significant historic contamination would have been appropriately dealt with during the redevelopment to a satisfactory standard at the time.
Contaminants migrating off site	Low	It is considered that any significant historic contamination would have been appropriately dealt with during the redevelopment to a satisfactory standard at the time and therefore the site is no longer likely to pose a risk to off site sources.
Contaminants migrating onto site	Low	Low risk considered at this stage due to lack of significant contaminative site uses off site which have not been redeveloped in recent years.
Other environmental issues giving rise to concern	Low	None identified.
OVERALL RISK	Low	



Ground Gas Risk Assessment

6.3 Based on the above information gained through the Envirocheck Report and other sources referenced in the previous sections, the following summarises the gas risk for the site. In accordance with current guidance (CIRIA C665), the gas generation potential for each source has been individually assessed, with references to potential gassing risk made according to the following definitions: Negligible, Very Low, Low, Moderate, High and Very High.

Potential Gas Source	Hazard	Generation Potential	Justification
Made ground (CH ₄ , CO ₂)	Humans: health risk Buildings: explosion	Low	Primarily associated with potential for imported made ground / fill on the site and likely off site made ground.
Alluvium drift deposits (CH ₄ , CO ₂)	Humans: health risk Buildings: explosion	Moderate	The site is underlain by Alluvium and Raised Terrace Deposits, which are considered to have the potential for organic matter, which may pose a risk.
Off-Site Sources (CH ₄ , CO ₂)	Humans: health risk Buildings: explosion	N/A	There are no recorded landfill sites within 250m of the site.
Coal and historical mining	Humans: health risk Buildings: explosion	N/A	Although the site is within an area requiring a coal mining report there is not considered to be any shallow or deep recorded or unrecorded mining beneath or within the immediate proximity of the site.
Radon	Humans: health risk	N/A	The property is in an area where no radon protection measures are required (<1 of buildings are estimated to be at or above the Action Level).
Overall Risk		Lo	w to Moderate

6.4 The site is within an area not requiring Radon protection measures. The site is underlain by Alluvium and Raised Terrace Deposits, which may contain organic soils, which could be a source of ground gas together with made ground soils of unknown composition on and off site, there confirmatory ground gas monitoring will be required.



7 GEOTECHNICAL CONSIDERATIONS

7.1 The following geotechnical considerations are given as preliminary guidelines only based on the available data on the ground conditions. Consequently, the following should not be taken as design criteria without further geotechnical data obtained from a suitably designed ground investigation.

Mining

7.2 The CA indicates that the site is not in an area at risk from coal mining activities and no further assessment is required.

Foundations

- 7.3 The site is indicated to be underlain by Alluvium, which in turn are underlain by Raised Terrace Deposits, which are both of an unknown strength and thickness. Underlying these soils are likely to be residual clay or sand overlying competent bedrock strata.
- 7.4 Based on the publicly available information and review of the foundation details for the existing store, which identified that the store has been constructed on a combination of vibro stone columns and deep mass fill foundation adjacent to the culverted watercourse, which passes under the store it is anticipated that a piled foundation solution will be required for the proposed store extensions.

Floor Slabs

7.5 At this stage, it is considered that suspended floor slabs will be required for the proposed extensions based on the likely requirement, at this stage, for a piled foundation solution, subject to a site investigation.

Gas Protection Measures

- 7.6 No Radon protection measures are required for this site.
- 7.7 In view of the preliminary assessment and existing data, there is considered to be a potential risk from ground gas to the development, therefore, it would be prudent to allow for



CIRIA CS2 ground gas protection measures as a minimum, until a ground investigation and ground gas monitoring has confirmed the existing regime.



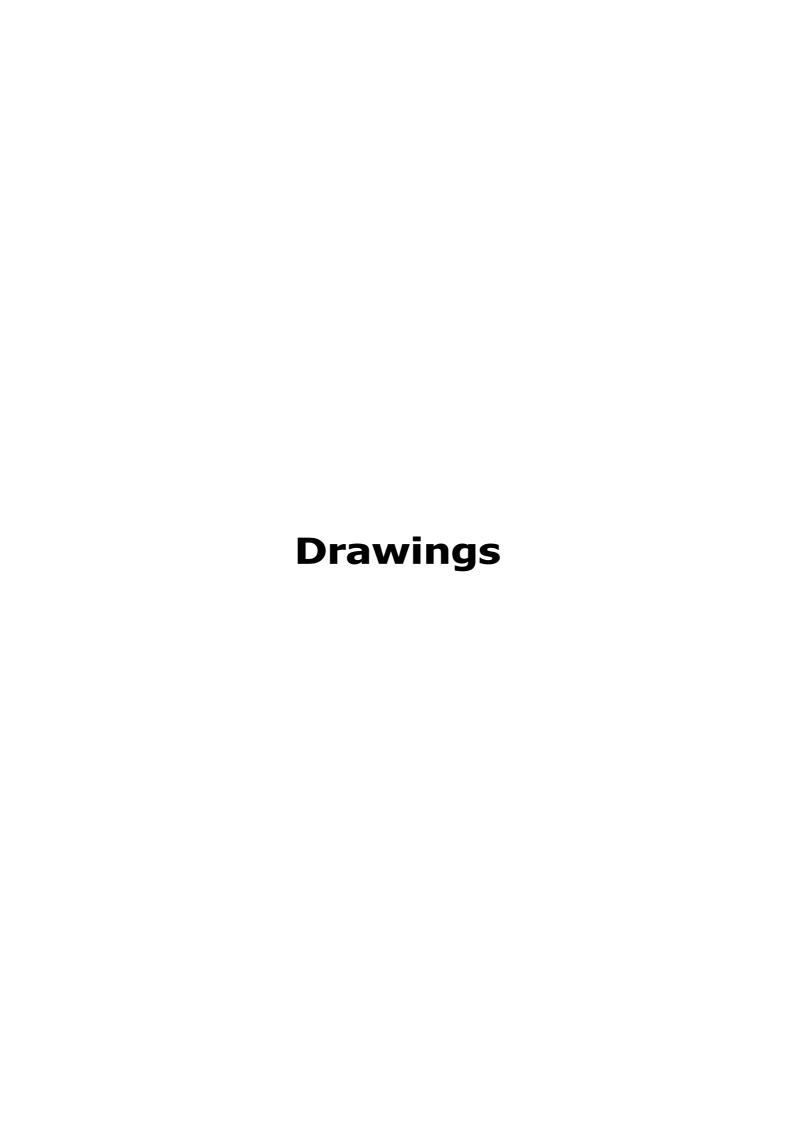
8 RATIONALE AND METHOD FOR INTRUSIVE INVESTIGATION

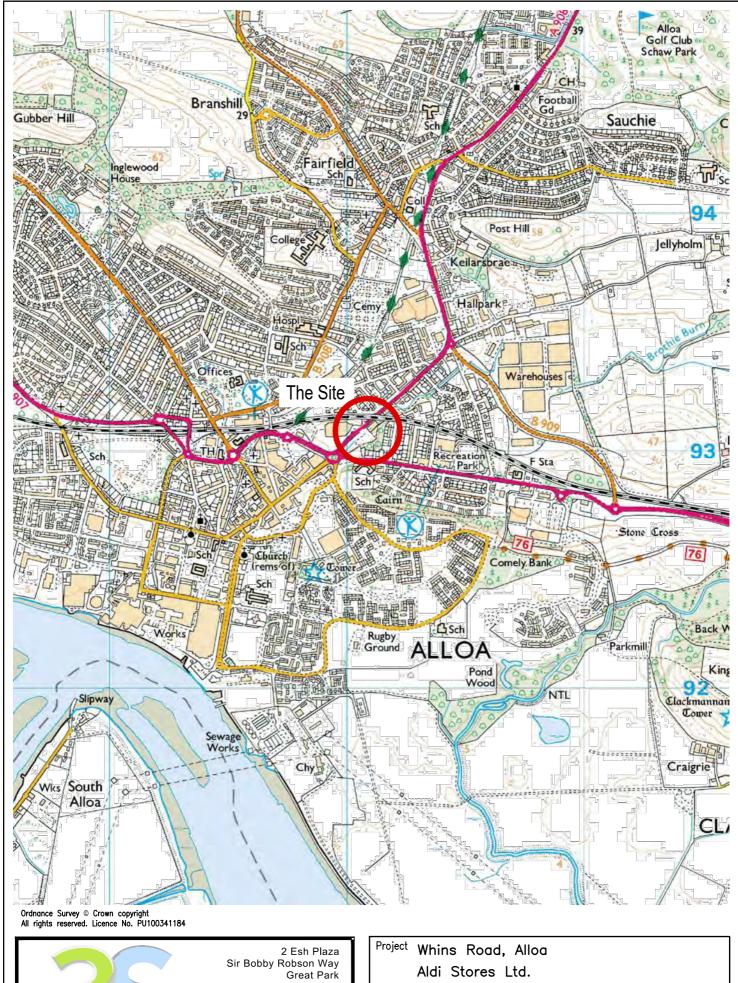
- 8.1 Following a review of the existing ground investigation information, geo-environmental investigation for a proposed Aldi store extensions has been designed by 3e and the methods employed together with the principal concerns regarding the development of the site are summarised as follows. The investigation strategy is in accordance with the current guidance (BS10175:2011+A2:2017) in view to the site history and past investigation results on the site.
 - Assessment of the type, nature and thicknesses of shallow soils by mini percussion
 drilling to allow in situ testing, the recovery of samples for logging and laboratory
 testing and installation of combined ground gas/groundwater monitoring wells (if
 putrescible made ground is identified in the ground investigation).
 - If the mini percussion drilling confirms unsuitable founding strata at a shallow depth, cable percussion boreholes may be required for a piled foundation design.
 - Investigation of the proposed retaining structure formation and embankment to inform slope stability analysis, if necessary, by mini percussion boreholes in accessible areas.
 - Chemical laboratory testing of soil with allowance for screening for metals, hydrocarbons (PAH's), speciated TPH and asbestos screening. PID screening of samples during sampling for potential hydrocarbon soil vapours.
 - Geotechnical testing to inform foundation design.
 - Ground gas monitoring on 6 occasions in 2 months in accordance with CIRIA C665.



9 FURTHER INVESTIGATIONS

- 9.1 An intrusive investigation will be required in accordance with the rationale outlined in Section 8.
- 9.2 If cohesive soils are recorded in the ground investigation a tree survey will be required to be undertaken on and within the vicinity of the site (approximately 30m) to enable a comprehensive assessment of the required foundation design to be determined.





Sir Bobby Robson Way
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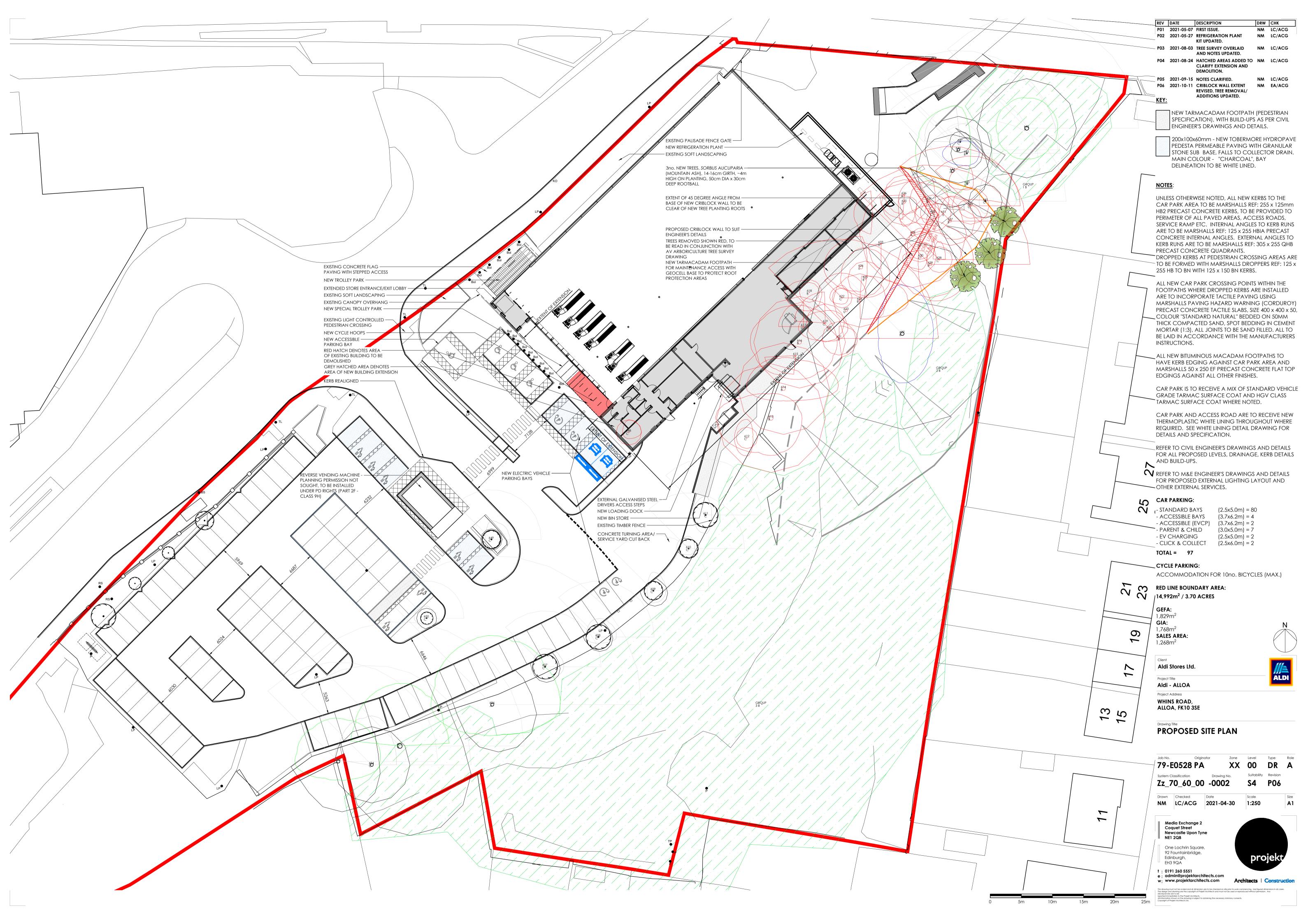
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1:25,000 Job No. P17–107	AC Drawing No.	G0001	Nov '21 Rev O	
Scale	Drawn	Checked	Date '01	
Title Site Location Plan				
Aldi Stores Ltd.				
Project Whins Road, Alloa				

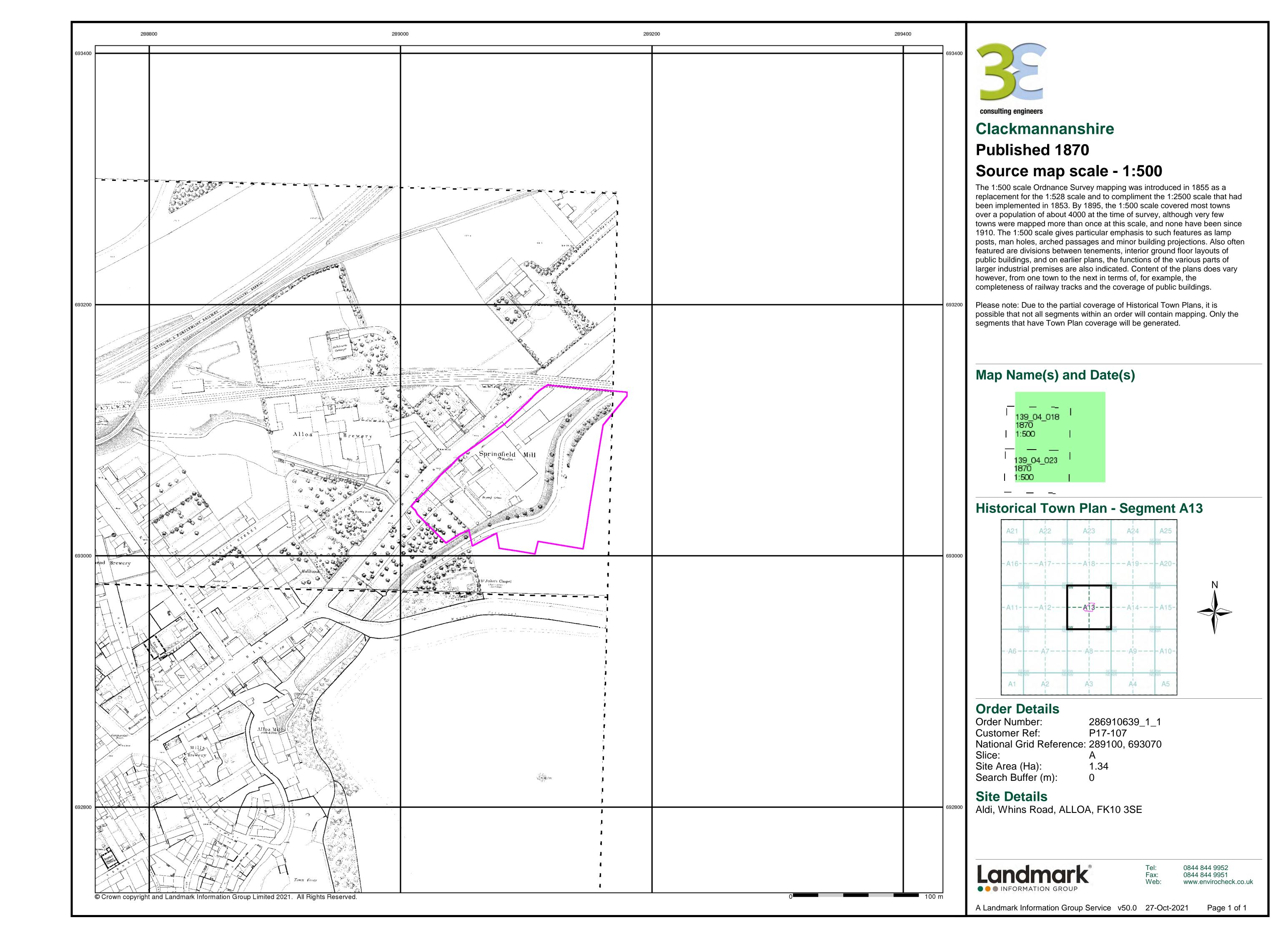
Appendix A

Proposed Site Layout



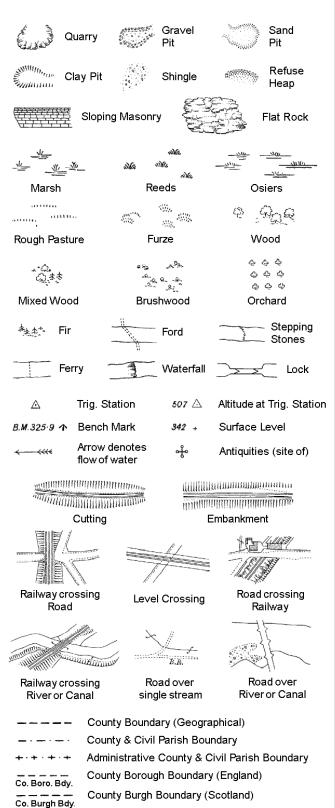
Appendix B

Historical Maps



Historical Mapping Legends

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



B.R.

EP

F.B.

Bridle Road

Foot Bridge

Mile Stone

M.P.M.R. Mooring Post or Ring

Electricity Pylor

Police Call Box

Telephone Call Box

Signal Post

Pump

Sluice

Spring

Trough

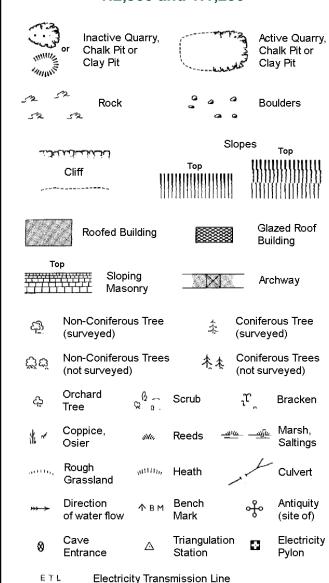
Well

S.P

Sl.

Tr:

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



Electricity Transmission Line

	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

,			
вн	Beer House	Р	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
EIP	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
Н	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	WrPt,WrT	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

1:1,250

			Sle	opes	
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* ~	Coppice, Osier	siHe,	Reeds -=	<u> — ചുല</u>	Marsh, Saltings
,,	Rough Grassland	111111 ₁₁ ,	Heath	1	Culvert
*** >	Direction of water flow	w \triangle	Triangulation Station	ું નું	Antiquity (site of)
E_TL	Electricit	y Transmis	ssion Line	\boxtimes	Electricity Pylon
/ / / вм	1 231.6úm - Be	ench Mark	7	Building Building	
	Roofee	d Building		881	azed Roof iilding
	,		(it .)		
• •			/community b	oundary	
		District bou	-		
_ •	· (County boo	ındary		
9	Þ	Boundary p	ost/stone		
×	9		mereing symb ear in oppose		
Bks	Barracks		Р	Pillar, Pol	e or Post
Bty	Battery		PO	Post Offi	
Cemy	Cemetery		PC	Public Co	onvenience
Chy	Chimney		Pp	Pump	
Cis	Cistern		Ppg Sta	Pumping	
Dismtd F El Gen S	-	ed Railway y Generating	PW Sewage P	Place of\ Pog Sta Se	Worship wage
	Station	_			imping Station
EIP	Electricity P		SB, S Br	Signal B	ox or Bridge
El Sub S	ta Electricity S	ub Station	SP, SL	Signal Po	ost or Light
FB	Filter Bed		Spr	Spring	
Fn / D Fr	n Fountain / D	rinking Ftn.	Tk	Tank or T	rack
Gas Gov	Gas Valve C	ompound	Tr	Trough	
GVC	Gas Govern	er	Wd Pp	Wind Pu	тр
GP	Guide Post		\M/r Pt \M/r'	T Water Po	int WaterTan

Guide Post

Mile Post or Mile Stone

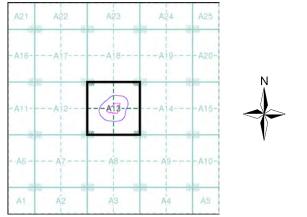
Manhole



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Perthshire	1:2,500	1865	2
	· · ·	1	_
Perthshire	1:2,500	1900	3
Perthshire	1:2,500	1922	4
Ordnance Survey Plan	1:1,250	1952	5
Ordnance Survey Plan	1:2,500	1953 - 1961	6
Ordnance Survey Plan	1:1,250	1954 - 1963	7
Ordnance Survey Plan	1:2,500	1959 - 1974	8
Additional SIMs	1:1,250	1959 - 1989	9
Ordnance Survey Plan	1:1,250	1968 - 1972	10
Ordnance Survey Plan	1:1,250	1968 - 1971	11
Additional SIMs	1:1,250	1986 - 1990	12
Additional SIMs	1:1,250	1989	13
Additional SIMs	1:1,250	1990	14
Large-Scale National Grid Data	1:1,250	1992	15
Large-Scale National Grid Data	1:1,250	1992 - 1993	16
Large-Scale National Grid Data	1:1,250	1994	17
Large-Scale National Grid Data	1:1,250	1995	18
Large-Scale National Grid Data	1:1,250	1996	19
Large-Scale National Grid Data	1:1,250	1996	20

Historical Map - Segment A13



Order Details

Order Number: 286910639_1_1 **Customer Ref:** P17-107 National Grid Reference: 289100, 693070 Slice:

Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

Site Area (Ha): 1.34 Search Buffer (m): 100

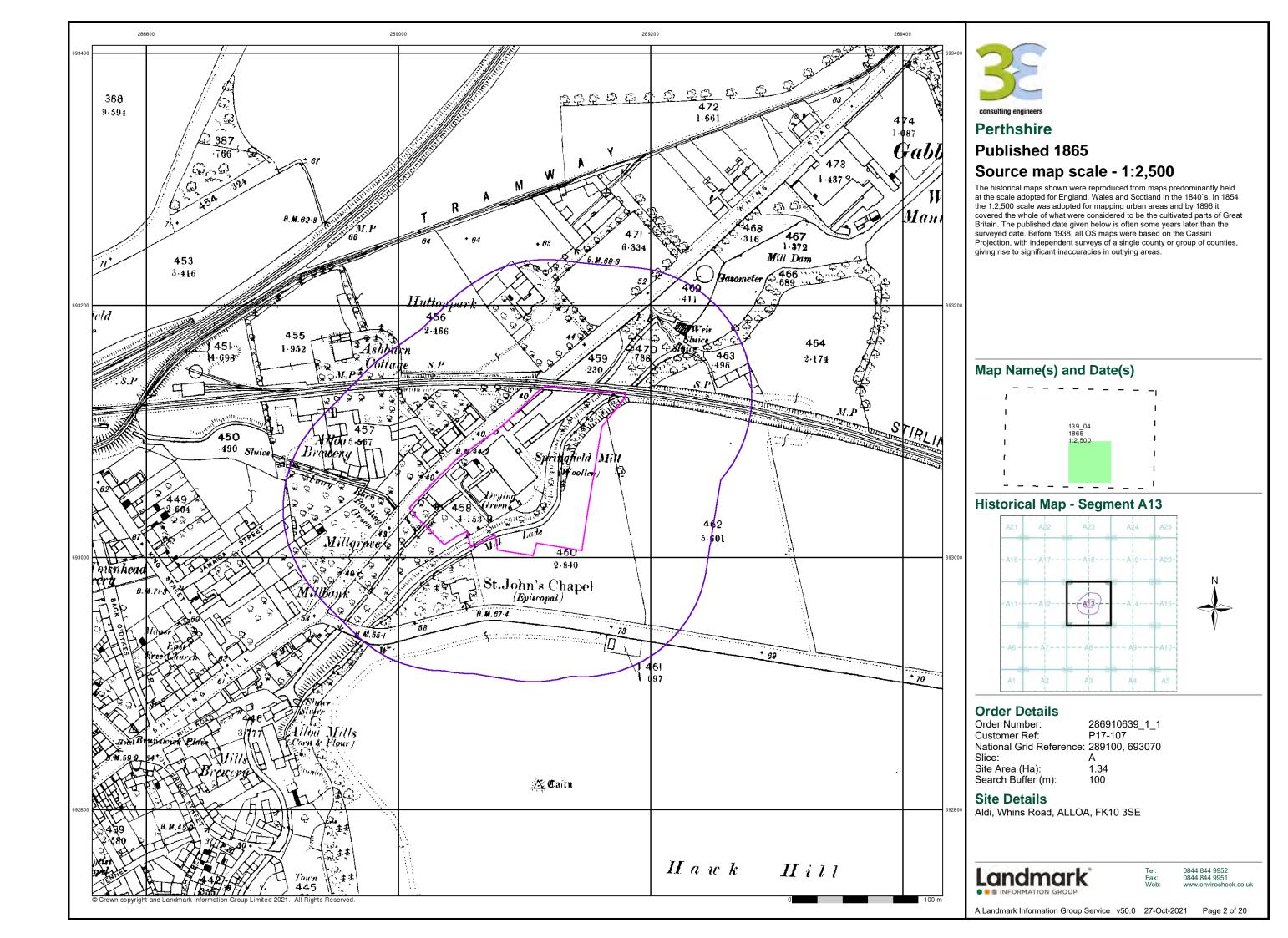
Site Details

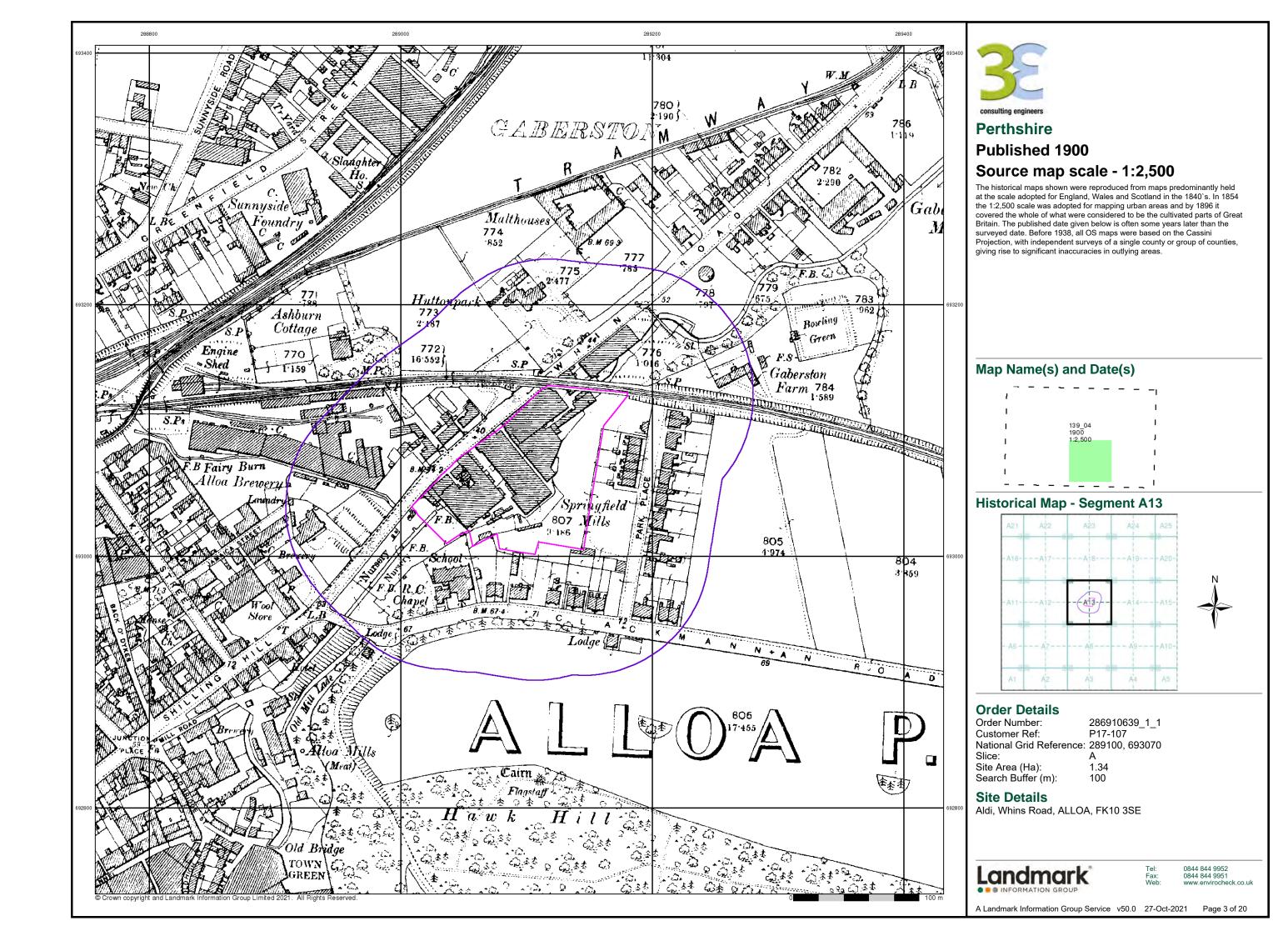
Aldi, Whins Road, ALLOA, FK10 3SE

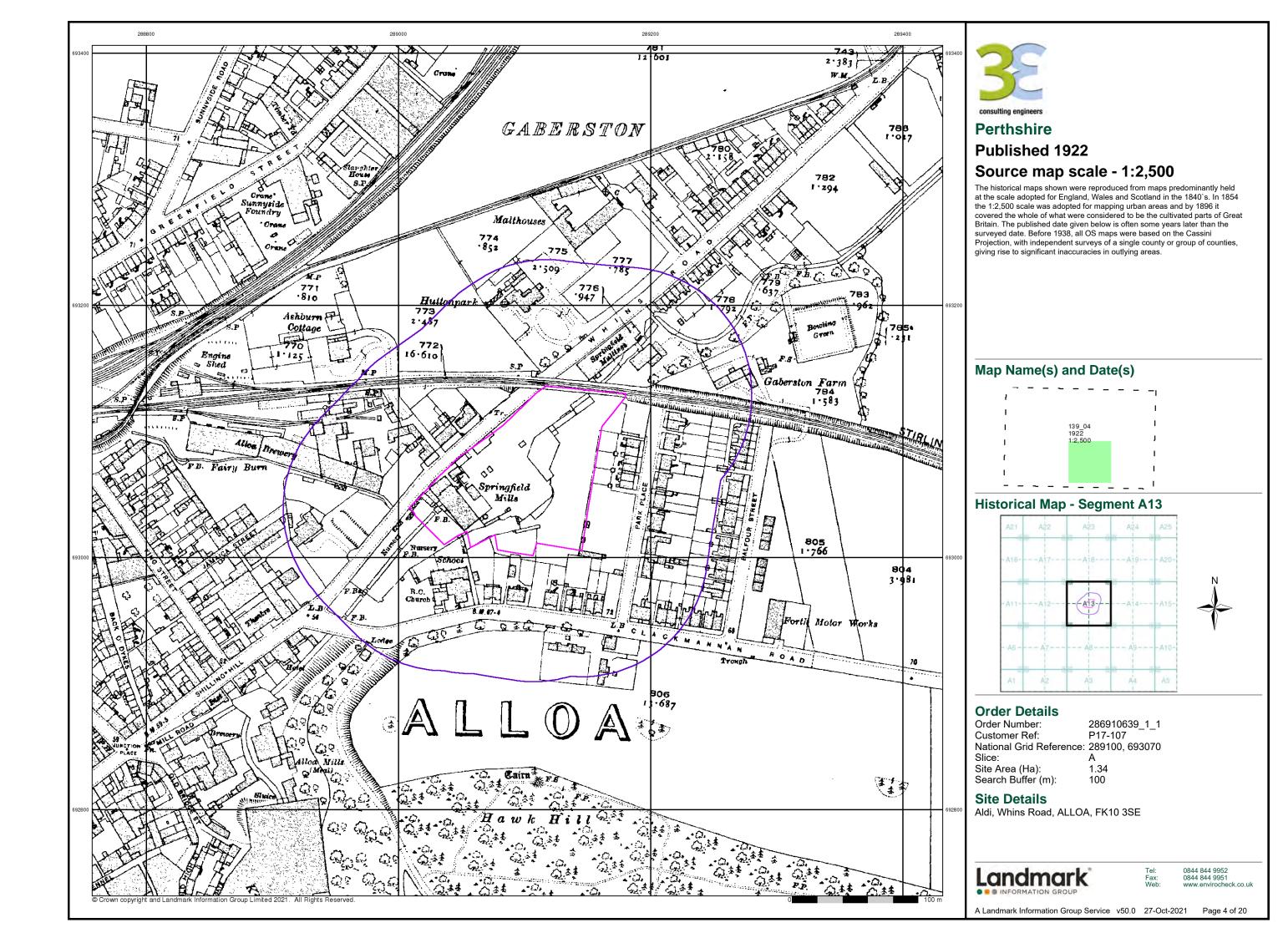


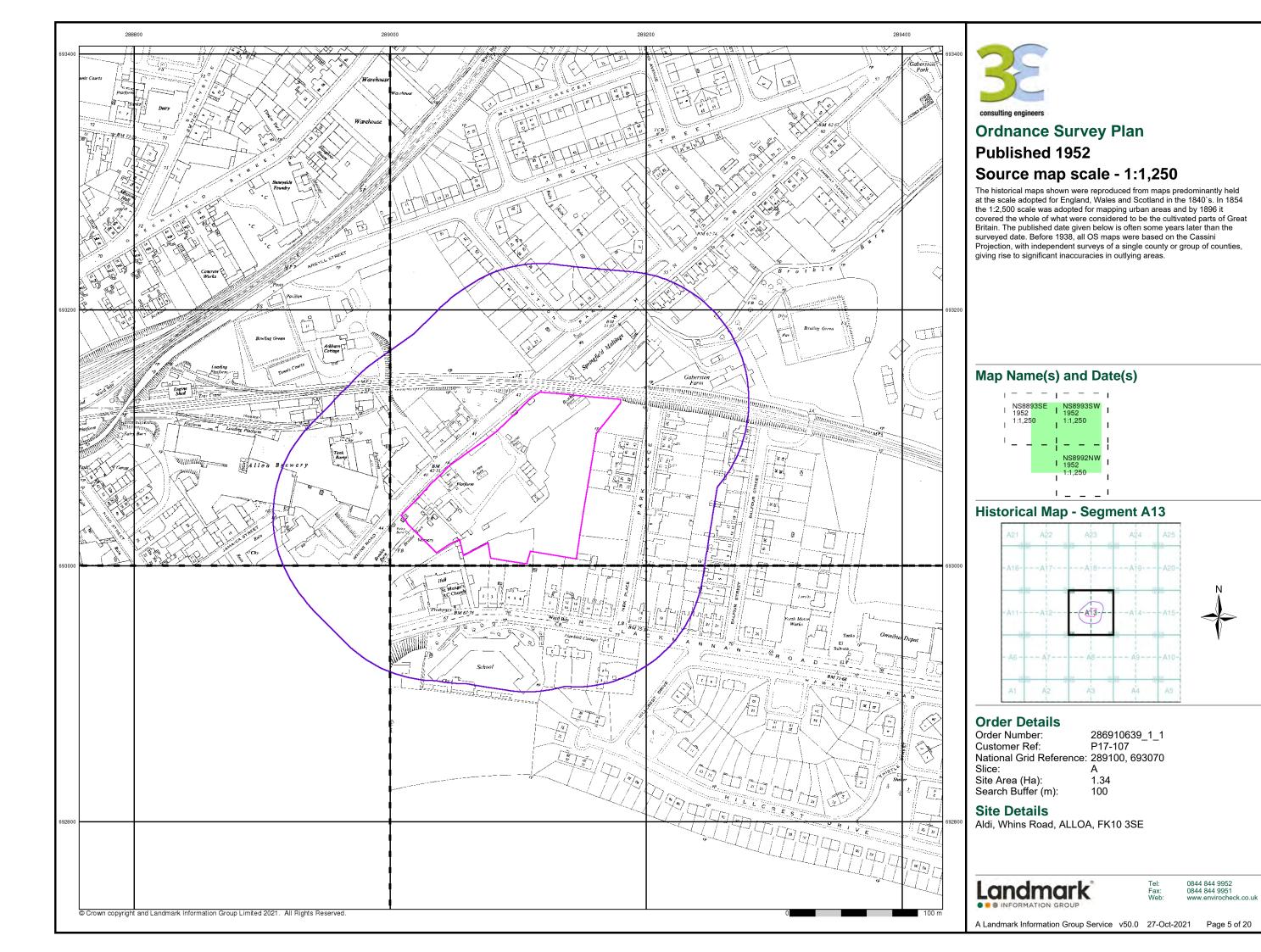
0844 844 9952 0844 844 9951

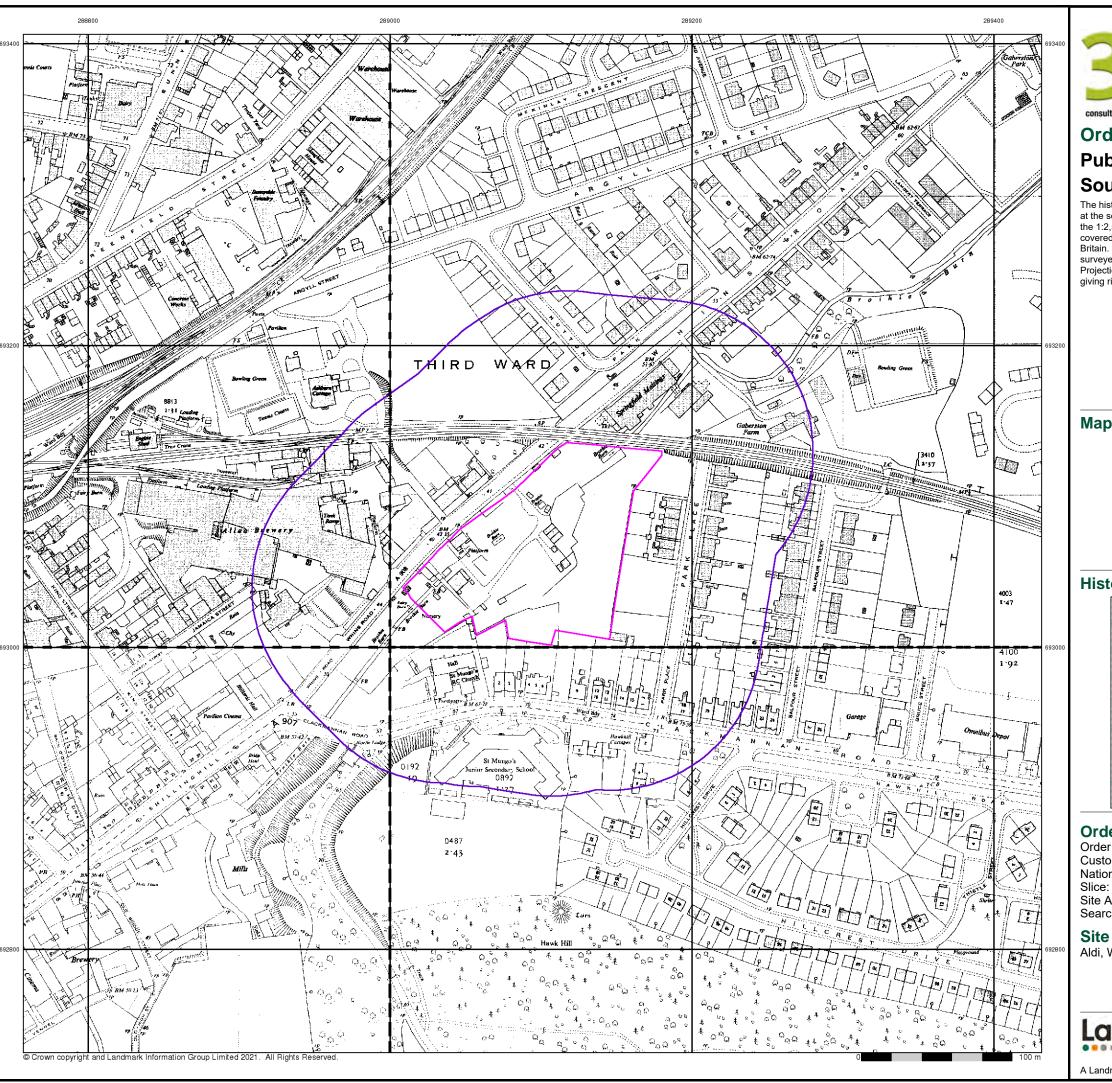
A Landmark Information Group Service v50.0 27-Oct-2021 Page 1 of 20











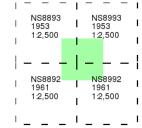


Ordnance Survey Plan

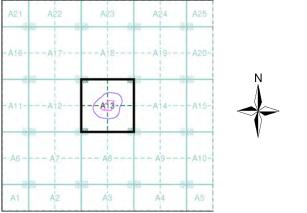
Published 1953 - 1961 Source map scale - 1:2,500

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: 286910639_1_1 Customer Ref: P17-107 National Grid Reference: 289100, 693070

Site Area (Ha): Search Buffer (m): 1.34 100

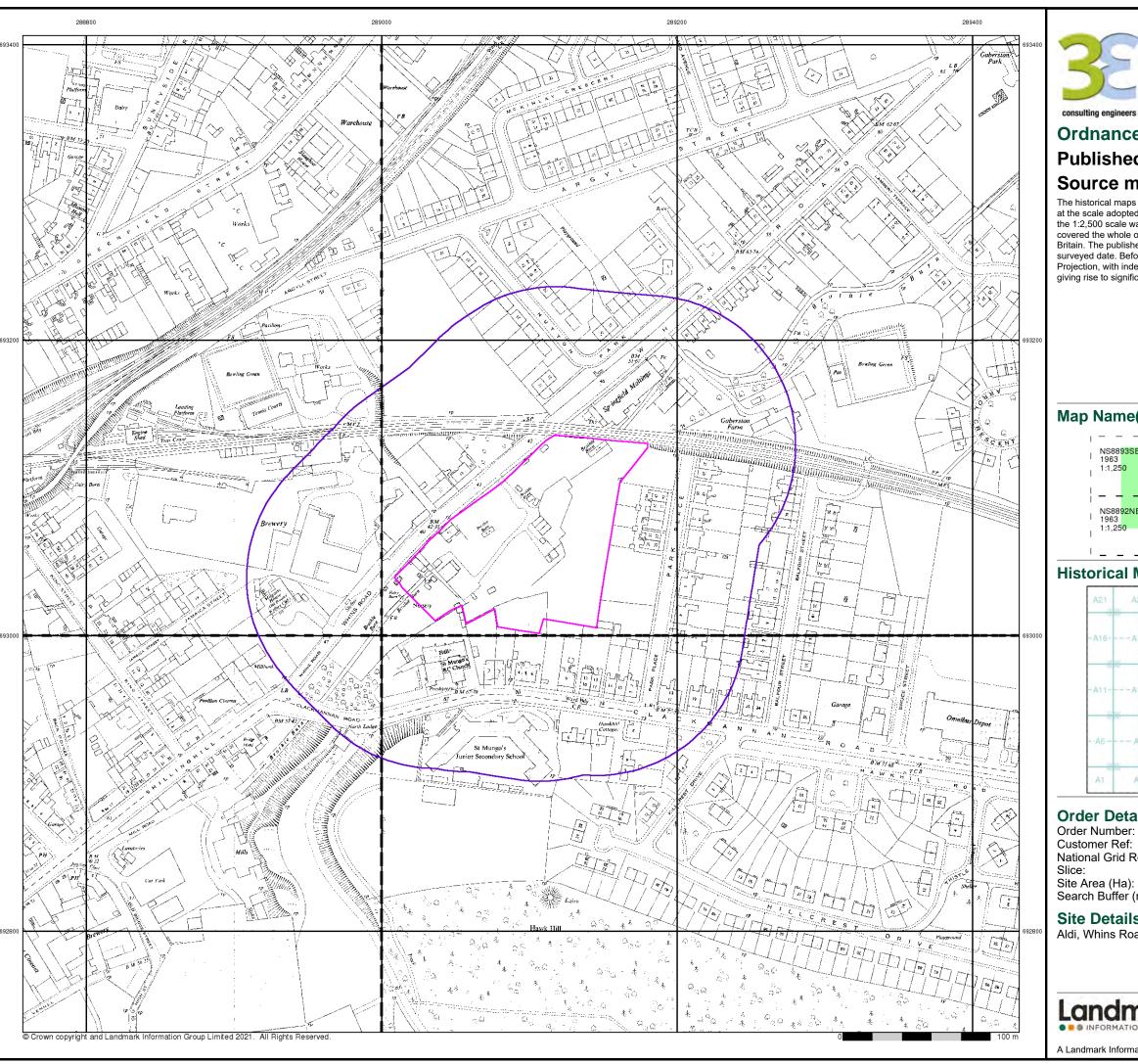
Site Details

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Landmark

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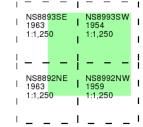




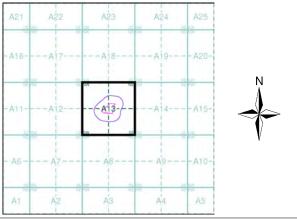
Ordnance Survey Plan Published 1954 - 1963 Source map scale - 1:1,250

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

286910639_1_1 Customer Ref: P17-107 National Grid Reference: 289100, 693070

Site Area (Ha): Search Buffer (m): 1.34 100

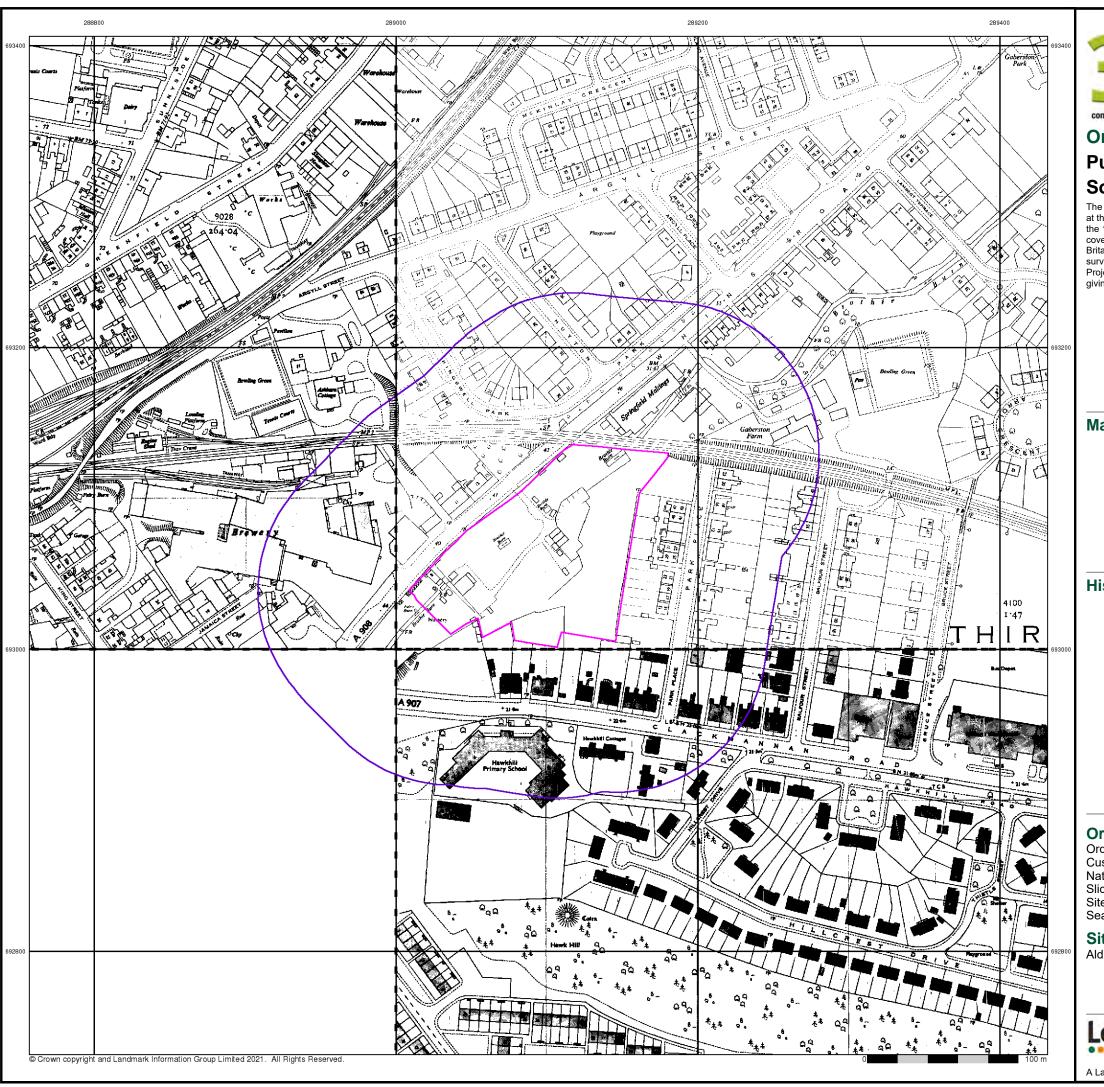
Site Details

Aldi, Whins Road, ALLOA, FK10 3SE

Landmark

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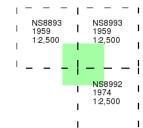


Ordnance Survey Plan

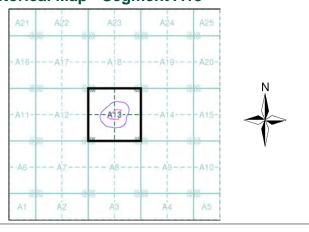
Published 1959 - 1974 Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

286910639_1_1 P17-107 Order Number: Customer Ref: National Grid Reference: 289100, 693070

Slice:

Site Area (Ha): Search Buffer (m): 1.34 100

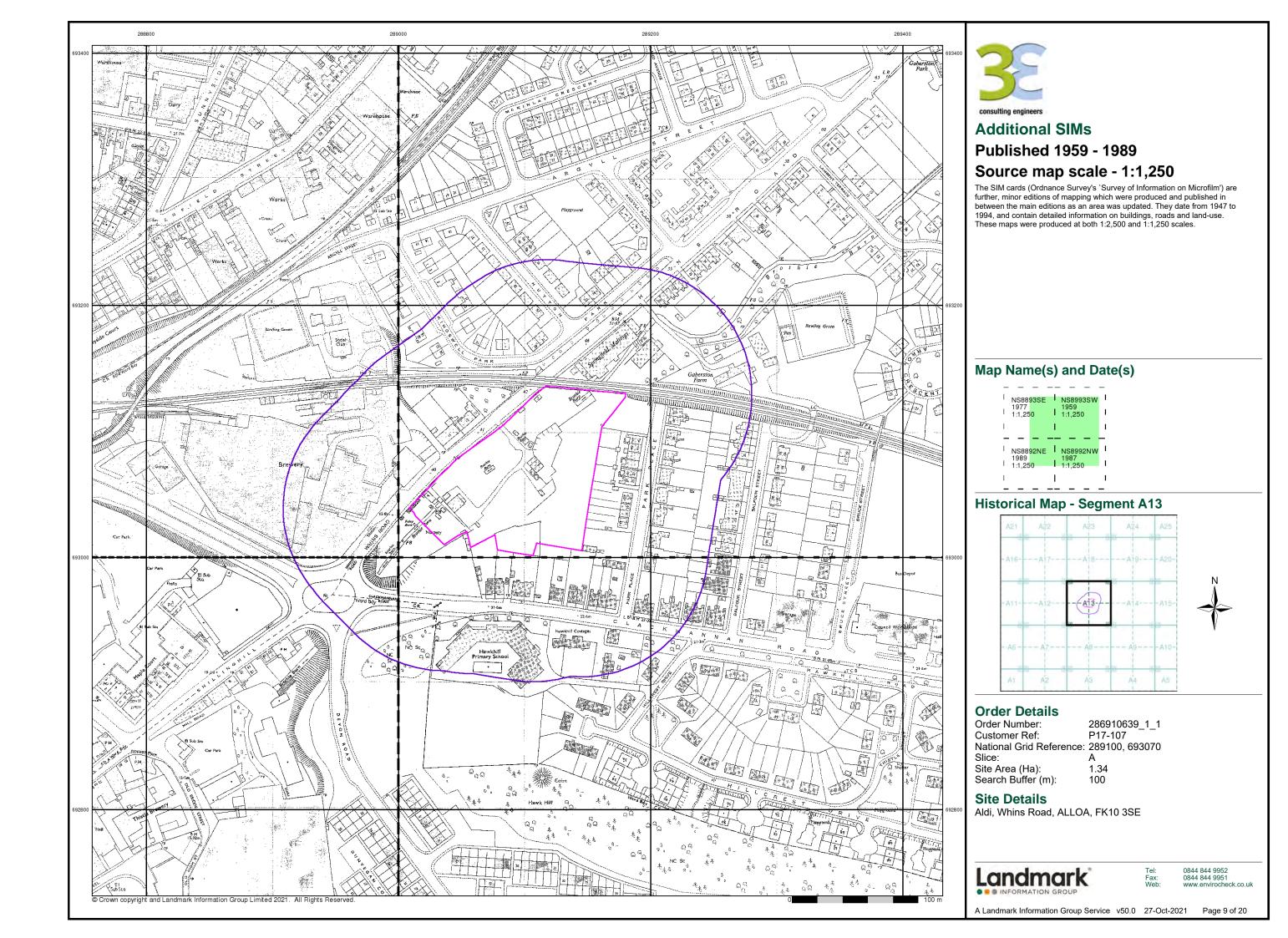
Site Details

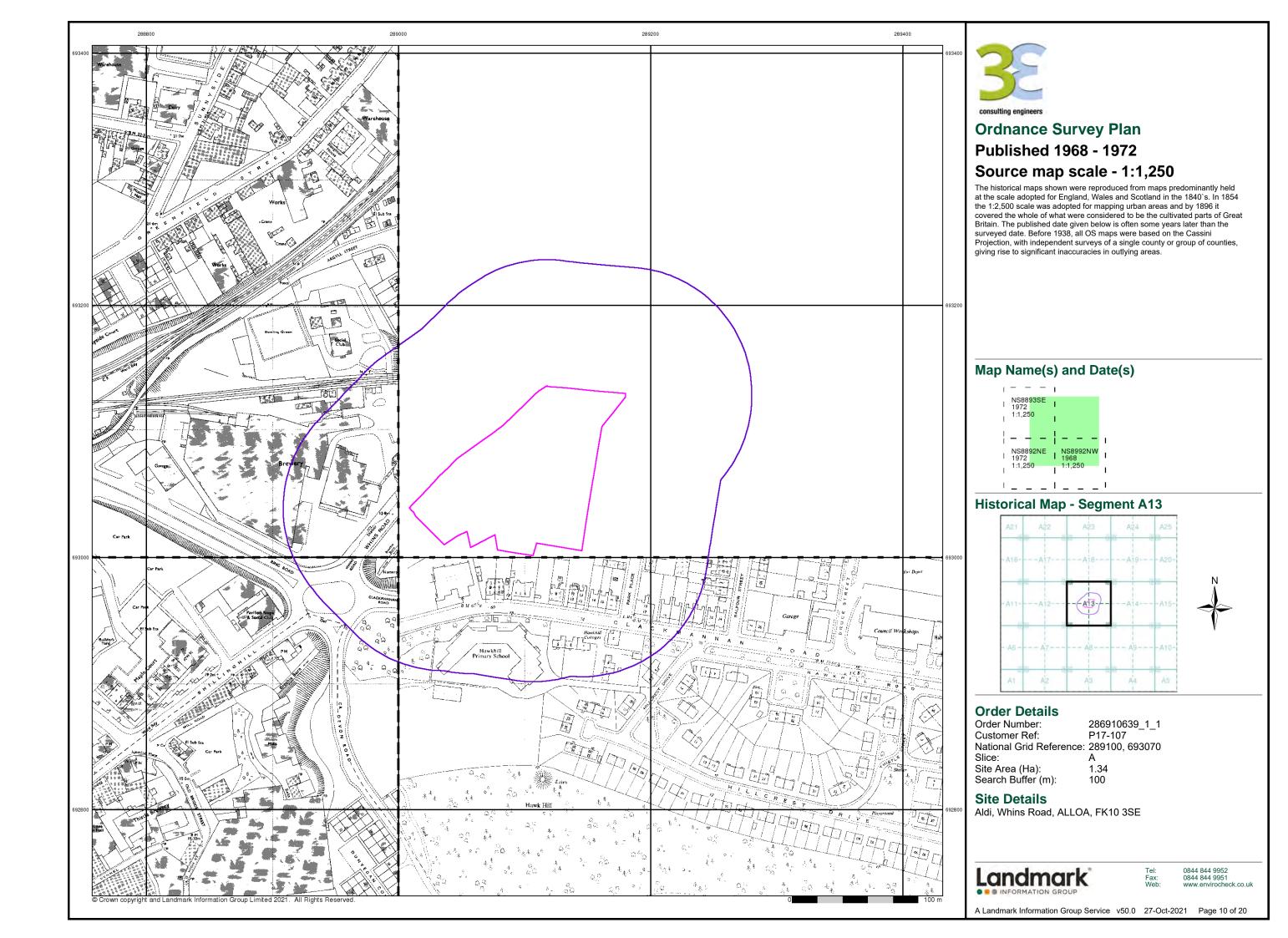
Aldi, Whins Road, ALLOA, FK10 3SE

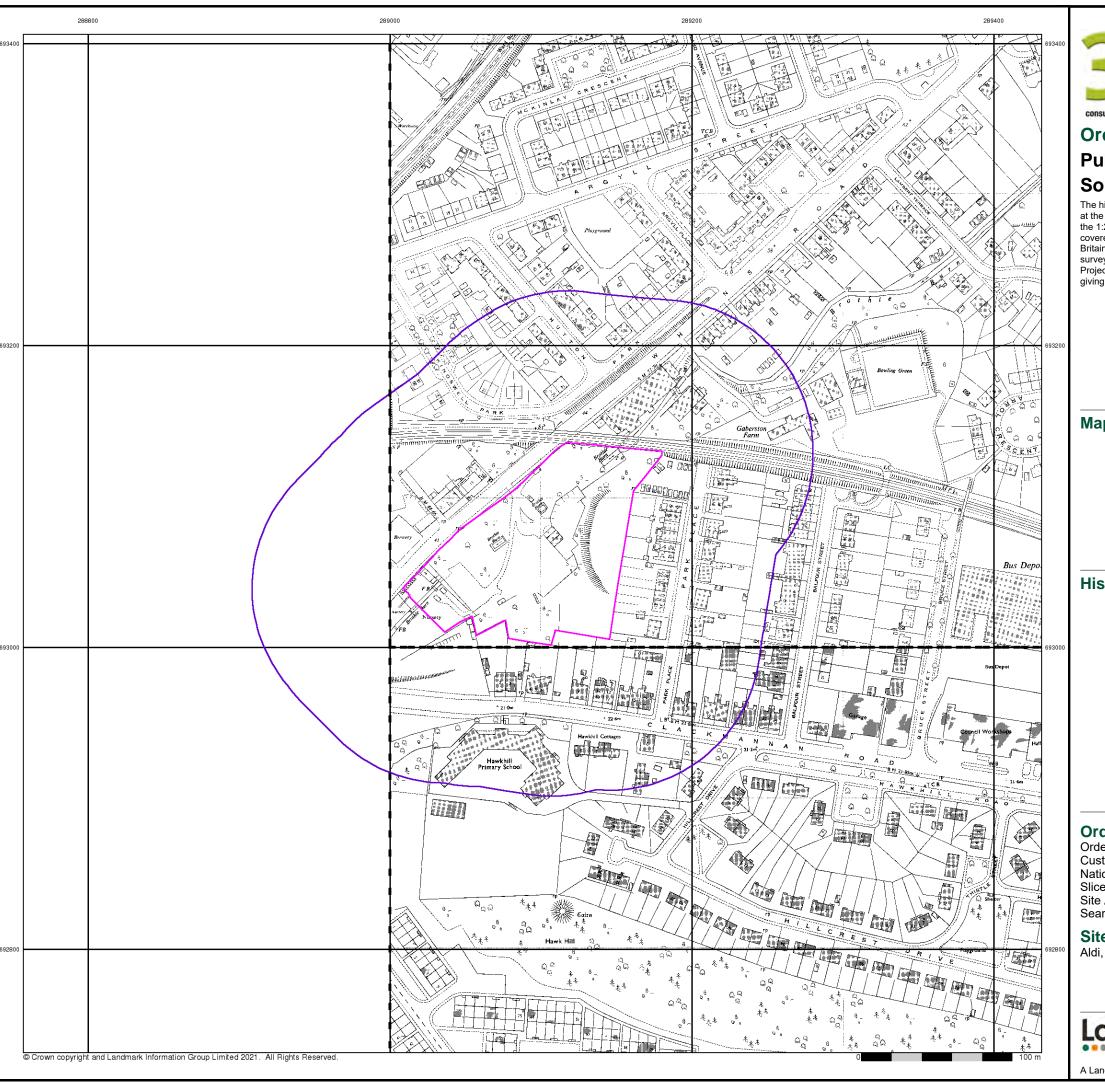


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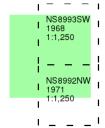


Ordnance Survey Plan

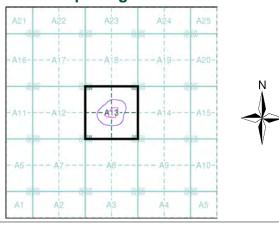
Published 1968 - 1971 Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 286910639_1_1 Customer Ref: P17-107 National Grid Reference: 289100, 693070

Slice:

Site Area (Ha): Search Buffer (m): 1.34 100

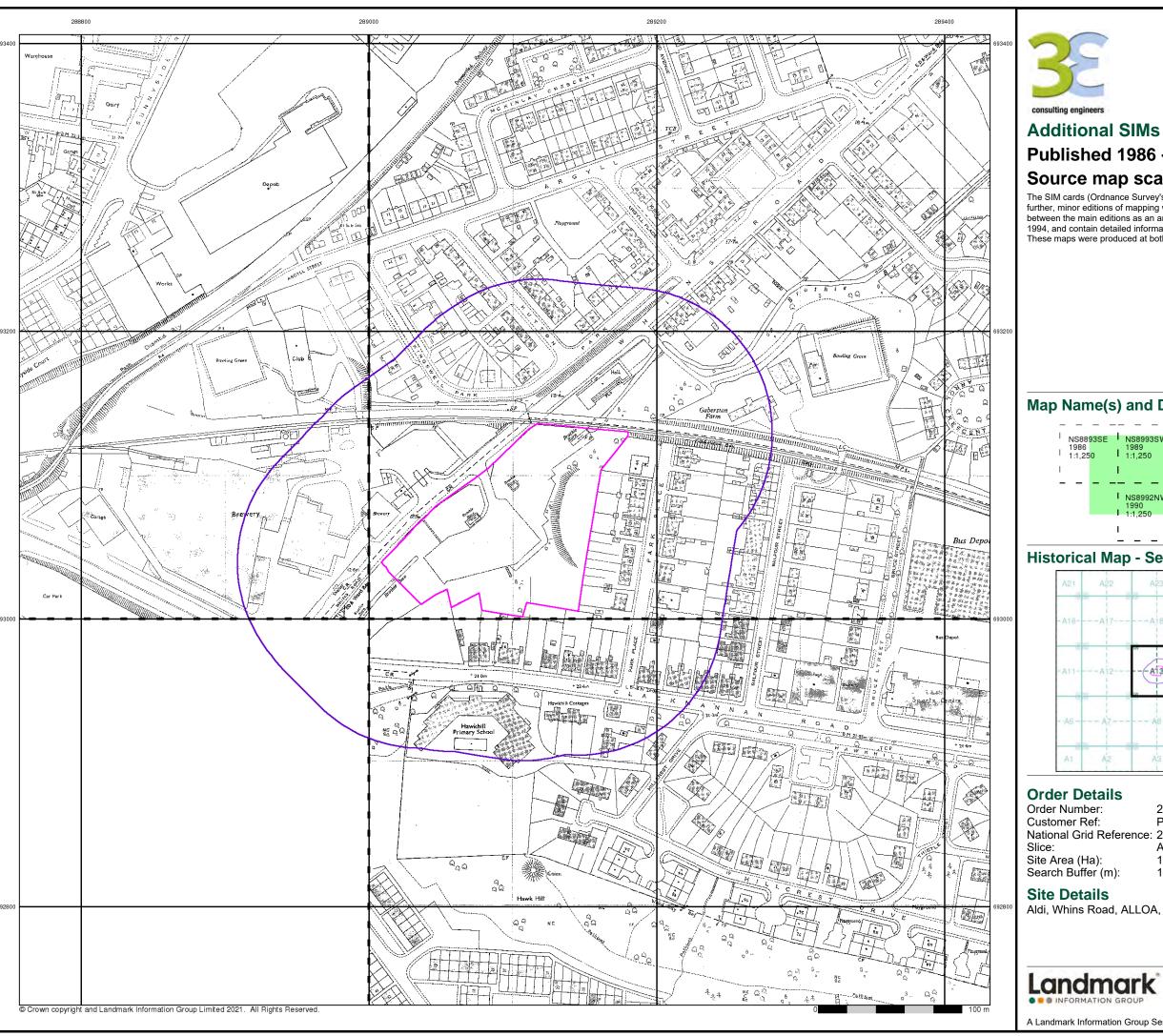
Site Details

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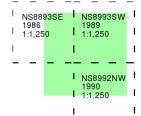
A Landmark Information Group Service v50.0 27-Oct-2021 Page 11 of 20



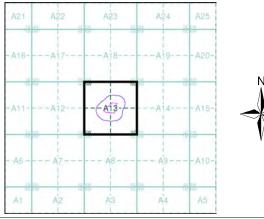
Published 1986 - 1990 Source map scale - 1:1,250

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



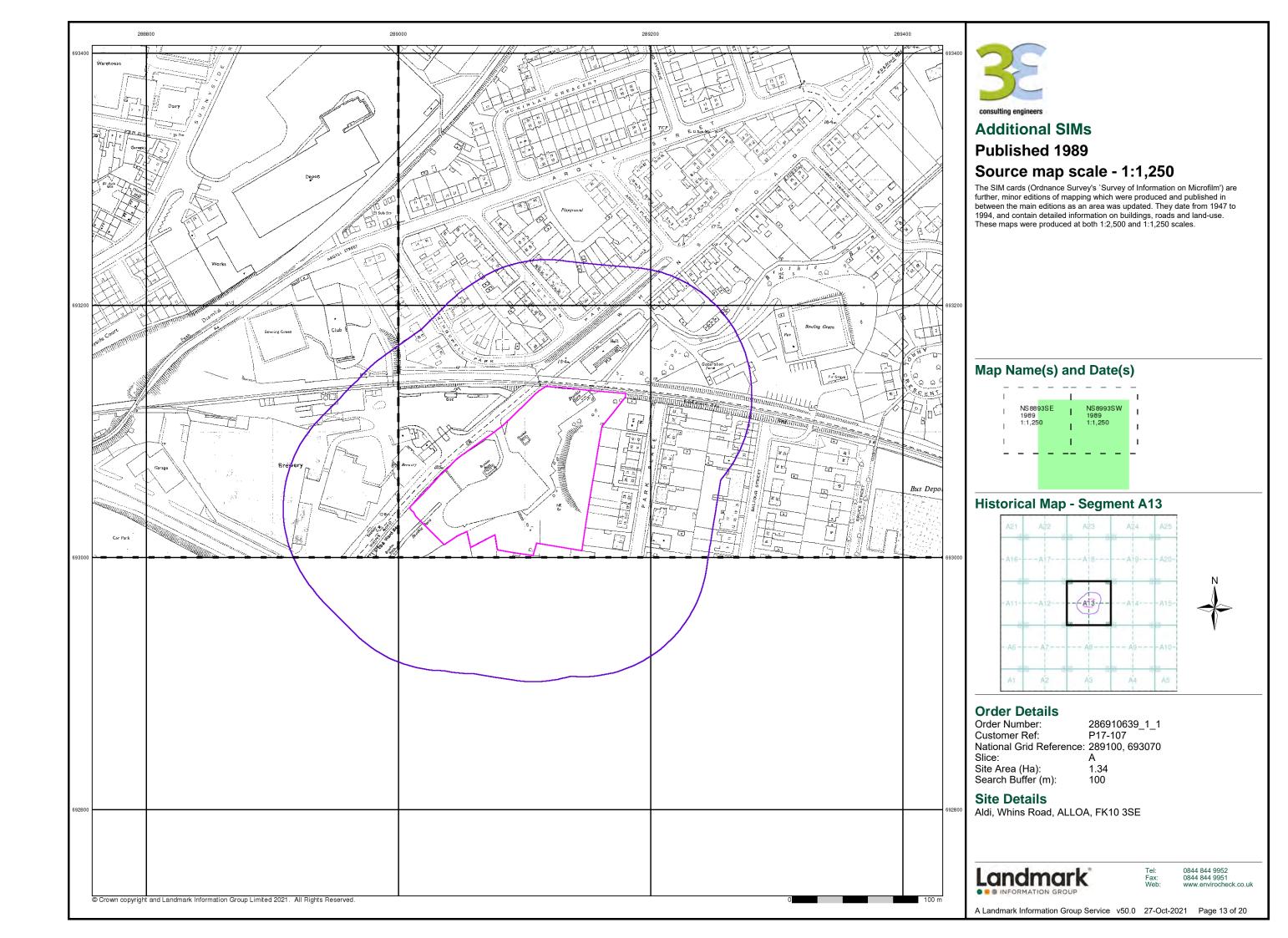
286910639_1_1 P17-107 National Grid Reference: 289100, 693070

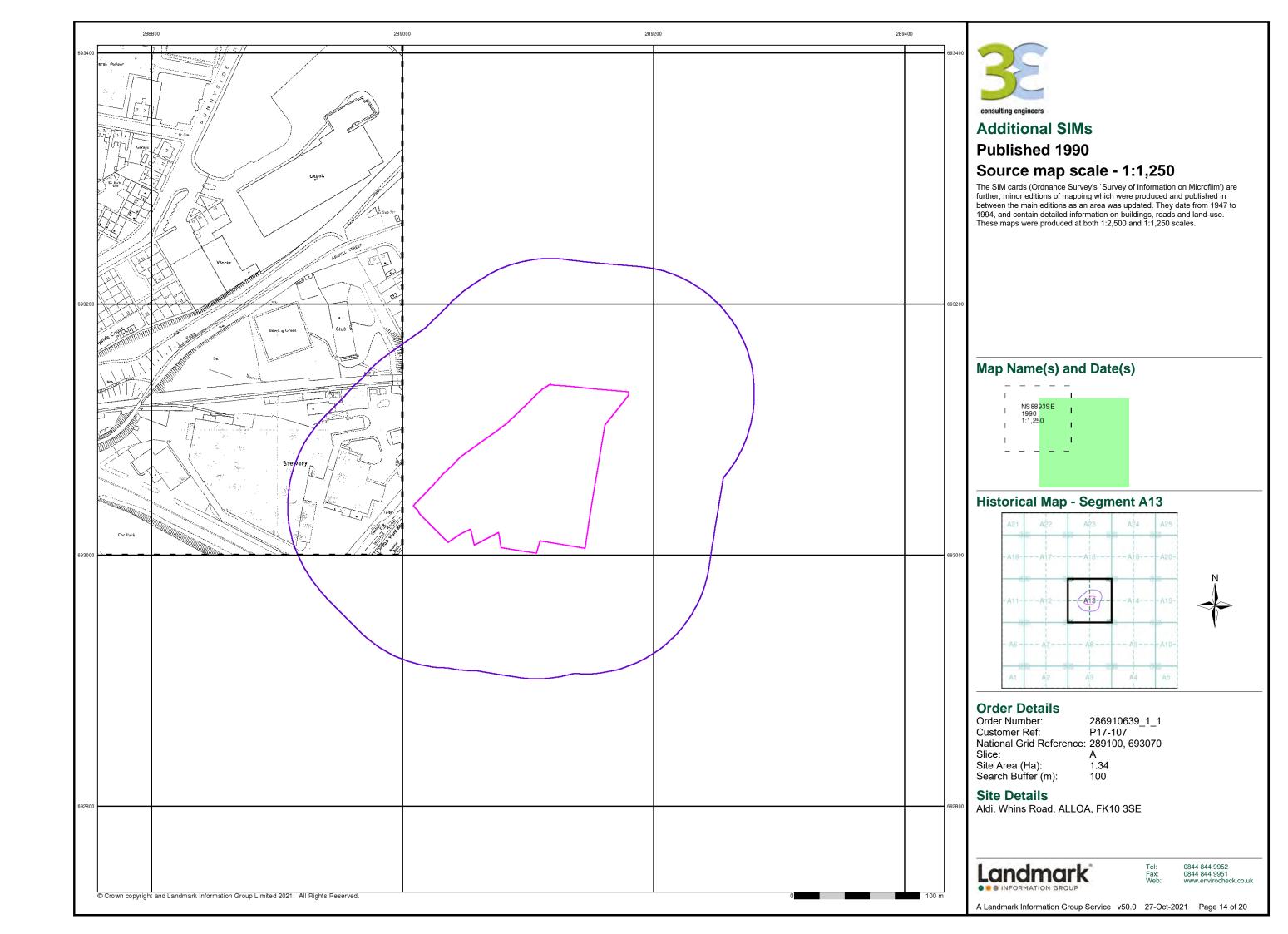
1.34 100

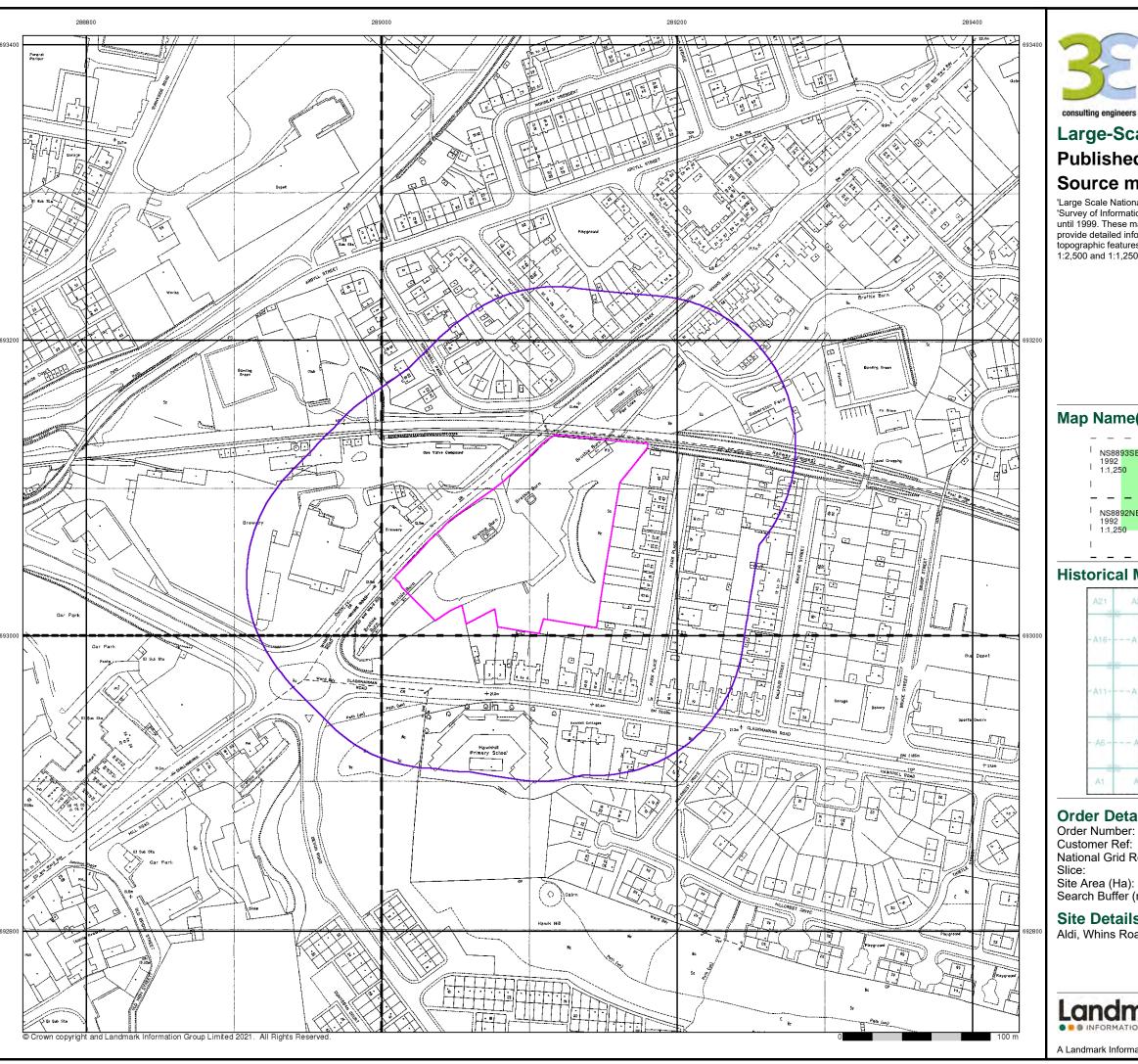
Aldi, Whins Road, ALLOA, FK10 3SE

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Large-Scale National Grid Data

Published 1992

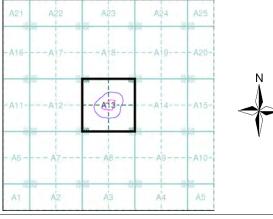
Source map scale - 1:1,250

'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)

	_	_		_	_	_
- 1	NS88	93SE		NS899	3SW	ı
1	1992 1:1,25	0	-1^{-1}_{-1}	992 :1,250)	ı
1			1			ı
_	-	_		_	_	_
Ī	NS88	– . 92NE		— 15899	— 2NW	,
1	NS88: 1992 1:1,25		. 1	 NS899 992 :1,250		-
 	1992		. 1	992		- - - -

Historical Map - Segment A13



Order Details

286910639_1_1 P17-107 Customer Ref: National Grid Reference: 289100, 693070

Site Area (Ha): Search Buffer (m): 100

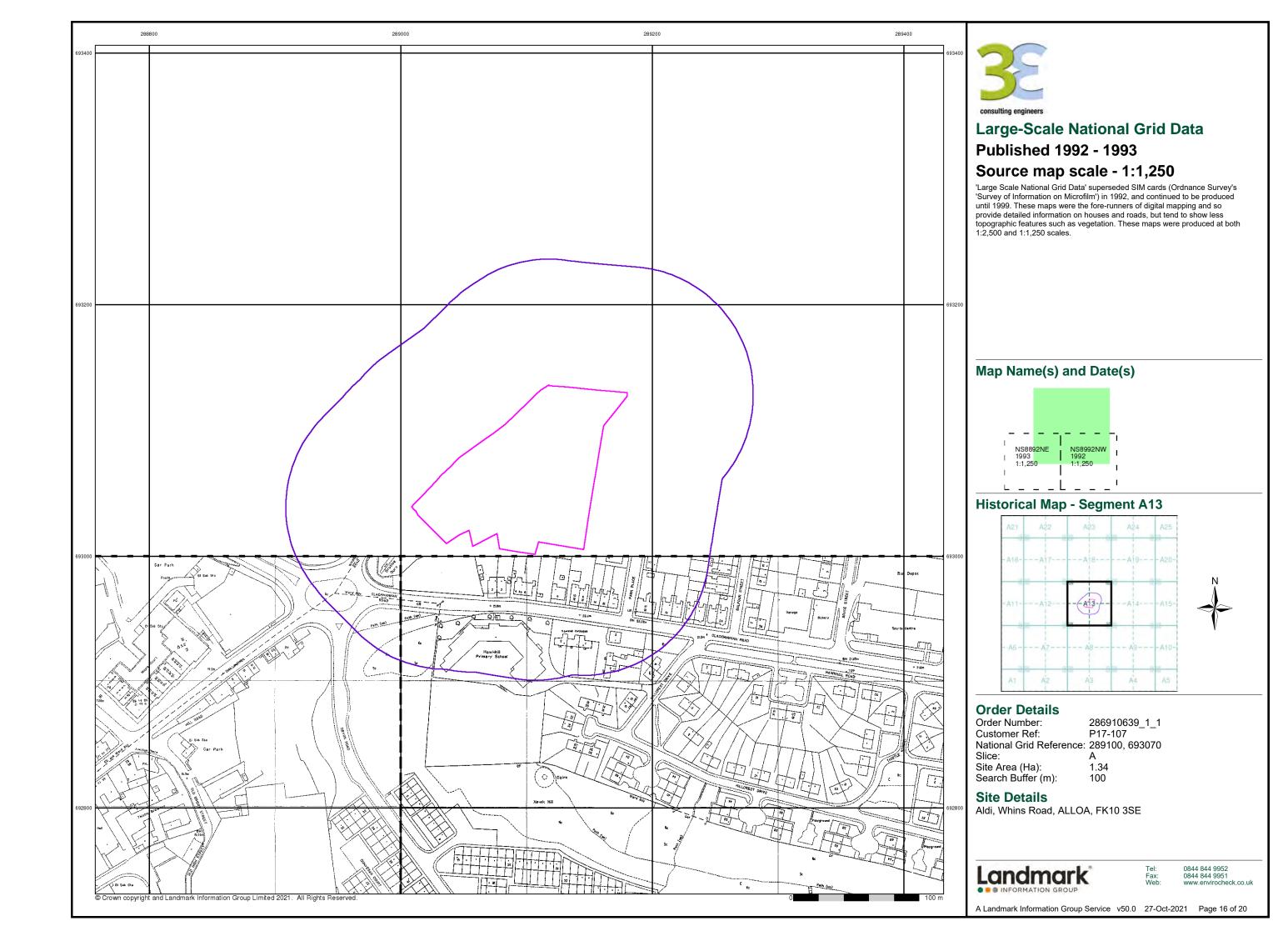
Site Details

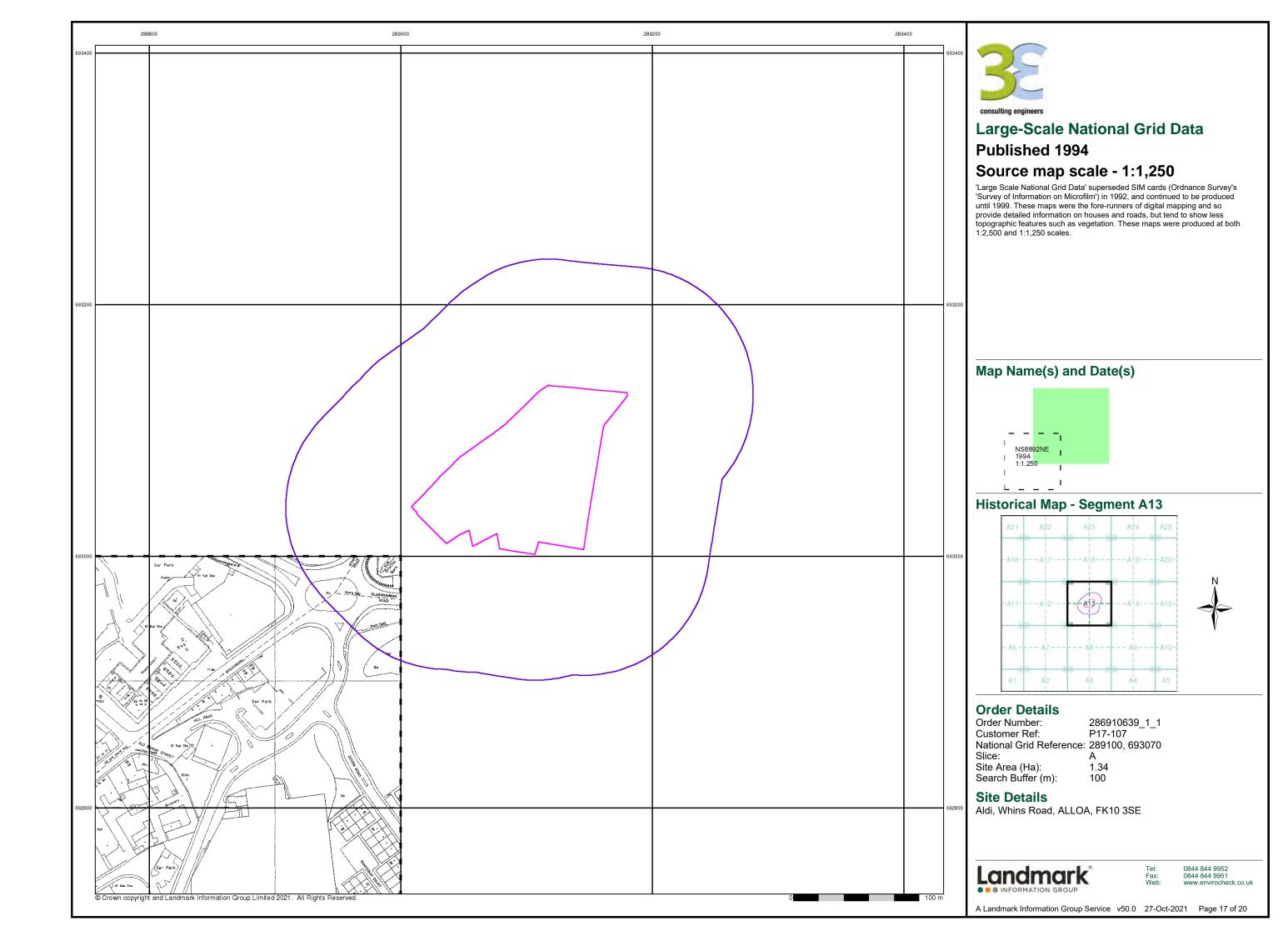
Aldi, Whins Road, ALLOA, FK10 3SE

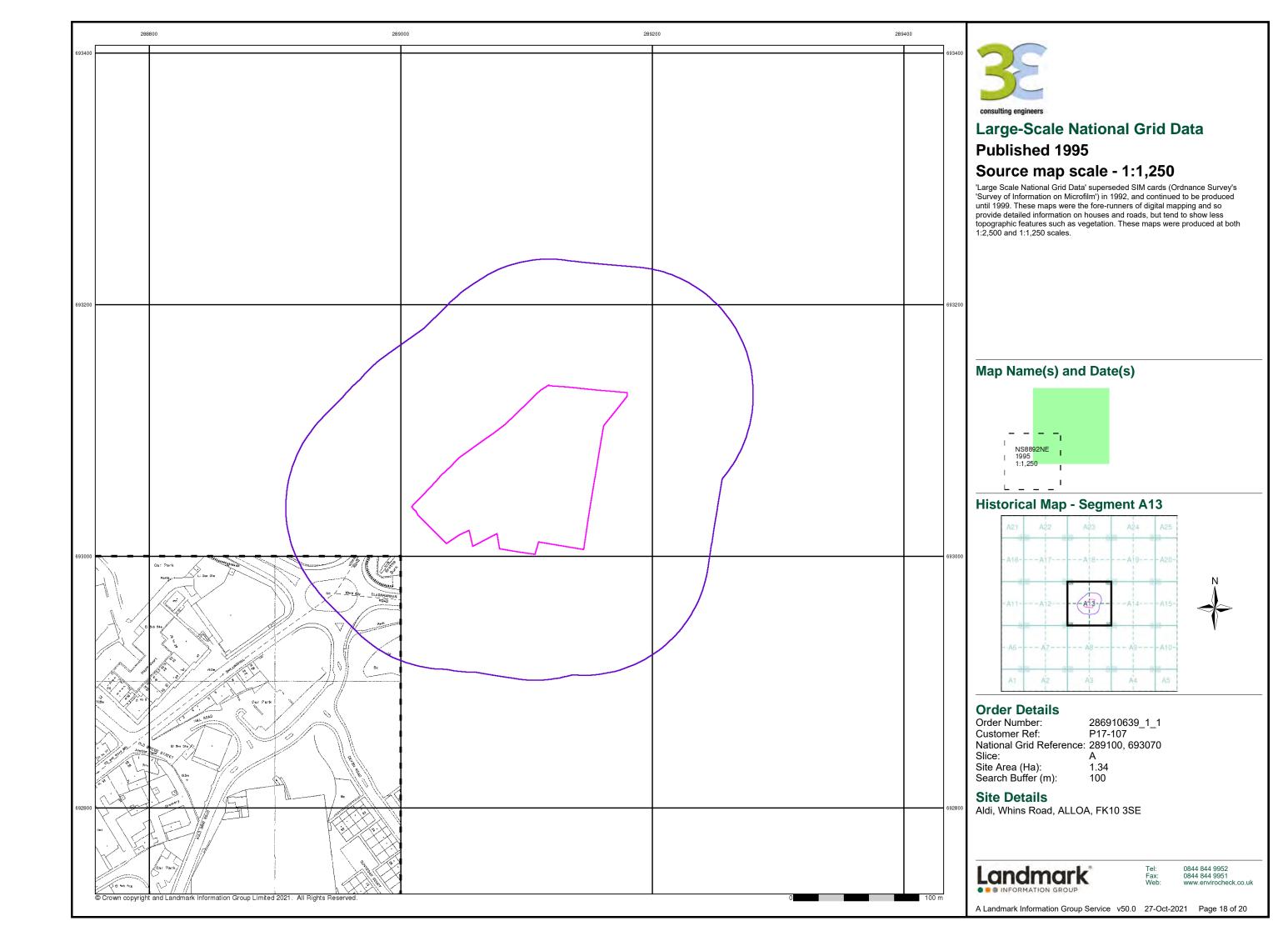
Landmark

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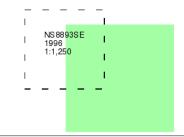
Large-Scale National Grid Data

Published 1996

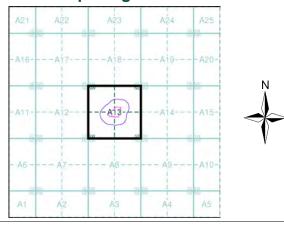
Source map scale - 1:1,250

'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

286910639_1_1 P17-107 Order Number: Customer Ref: National Grid Reference: 289100, 693070

Slice:

Α Site Area (Ha): Search Buffer (m): 1.34 100

Site Details

Aldi, Whins Road, ALLOA, FK10 3SE



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consulting engineer

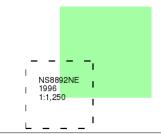
Large-Scale National Grid Data

Published 1996

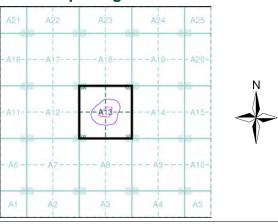
Source map scale - 1:1,250

'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: 286910639_1_1 Customer Ref: P17-107 National Grid Reference: 289100, 693070

Α

Slice:

Site Area (Ha): 1.34 Search Buffer (m): 100

Site Details

Aldi, Whins Road, ALLOA, FK10 3SE

Landmark*

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Historical Mapping Legends

Ordnance Survey County Series 1:10,560 Gravel Pit Other Orchard Mixed Wood Deciduous Brushwood Furze Rough Pasture Arrow denotes Trigonometrical flow of water Station Site of Antiquities Bench Mark Pump, Guide Post, Well, Spring, Signal Post **Boundary Post** · 285 Surface Level Sketched Instrumental Contour Contour Fenced Main Roads Minor Roads Un-Fenced Raised Road Sunken Road Railway over Road over Railway Ri∨er Railway over Level Crossing Road over Road over Road over County Boundary (Geographical) County & Civil Parish Boundary Administrative County & Civil Parish Boundary County Borough Boundary (England) Co. Boro. Bdy. County Burgh Boundary (Scotland) Rural District Boundary R.D. Bdy.

····· Civil Parish Boundary

Ordnance Survey Plan 1:10,000

E CHANGE CONTRACTOR	Chalk Pit, Clay Pit or Quarry	0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Gravel Pit
	Sand Pit	(Disused Pit ✓ or Quarry
1:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0	Refuse or Slag Heap		Lake, Loch or Pond
	. Dunes	000	Boulders
* * *	Coniferous Trees	$\triangle \Diamond \Diamond$	Non-Coniferous Trees
ф	Orchard no_	Scrub	∖Yn/ Coppice
ជ ជ	Bracken	Heath '	、 , , , , Rough Grassland
<u> عا، د</u>	MarshV///	Reeds	그 <u>-</u> Saltings
		tion of Flow of \	Water
	Building		Shingle
	>_	*/	Sand Sand
	Glasshouse		
********	Sloping Masonry	Pylon Pole Output	Electricity Transmission Line
Cutting	Embankme	ent	
		***************************************	_ Standard Gauge Multiple Track
Road''' Under	∐ ☐''' Road Leve Over Crossi		⊨ Standard Gauge Single Track
			_ Siding, Tramway or Mineral Line
			+ Narrow Gauge
	— Geographical Cou	unty	
	Administrative Co or County of City		Borough
	Municipal Boroug	jh, Urban or Ru	ral District,
	Borough, Burgh of Shown only when no		
	Civil Parish Shown alternately w	hen coincidence o	of boundaries occurs
BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church		Post Office
CH F E Sta	Club House Fire Engine Station		Public Convenience Public House
FB FB	Foot Bridge		Signal Box
Fn	Fountain		Spring
GP MB	Guide Post	TCB TCB	Telephone Call Box

Mile Post

Telephone Call Post

1:10,000 Raster Mapping

	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle	Mud	Mud
Sand	Sand		Sand Pit
*******	Slopes		Top of cliff
	General detail		Underground detail
	- Overhead detail		Narrow gauge
	Multi-track railway		railway Single track railway
	County boundary (England only)	• • • • • •	Ci∨il, parish or community boundary
	District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
۵ ^۵	Area of wooded vegetation	۵ ^۵	Non-coniferous trees
۵ ۵	Non-coniferous trees (scattered)	**	Coniferous trees
* *	Coniferous trees (scattered)	Ö	Positioned tree
4 4 4 4	Orchard	* *	Coppice or Osiers
alli,	Rough Grassland	willin	Heath
On_	Scrub	7 <u>√</u> /۲	Marsh, Salt Marsh or Reeds
6	Water feature	← ←	Flow arrows
MHW(S)	Mean high water (springs)	MLW(S)	Mean low water (springs)
	Telephone line (where shown)		Electricity transmission line (with poles)
← BM 123.45 m	Bench mark (where shown)	Δ	Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)	\boxtimes	Pylon, flare stack or lighting tower
+	Site of (antiquity)		Glasshouse

General Building

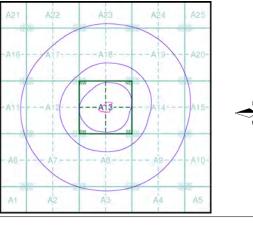


consulting engineers

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Stirlingshire	1:10,560	1865	2
Perthshire	1:10,560	1866	3
Fifeshire	1:10,560	1897	4
Stirlingshire	1:10,560	1899	5
Perthshire	1:10,560	1901	6
Fifeshire	1:10,560	1921	7
Perthshire	1:10,560	1924	8
Stirlingshire	1:10,560	1924 - 1925	9
Perthshire	1:10,560	1950 - 1951	10
Stirlingshire	1:10,560	1951 - 1952	11
Fifeshire	1:10,560	1951	12
Ordnance Survey Plan	1:10,000	1958	13
Ordnance Survey Plan	1:10,000	1967	14
Ordnance Survey Plan	1:10,000	1978	15
Ordnance Survey Plan	1:10,000	1983 - 1987	16
Ordnance Survey Plan	1:10,000	1990 - 1991	17
10K Raster Mapping	1:10,000	1999	18
Street View	Variable		19

Historical Map - Slice A



Order Details

Order Number: 286910639_1_1
Customer Ref: P17-107
National Grid Reference: 289100, 693070

Slice:

Important

Building

Site Area (Ha): 1.34 Search Buffer (m): 1000

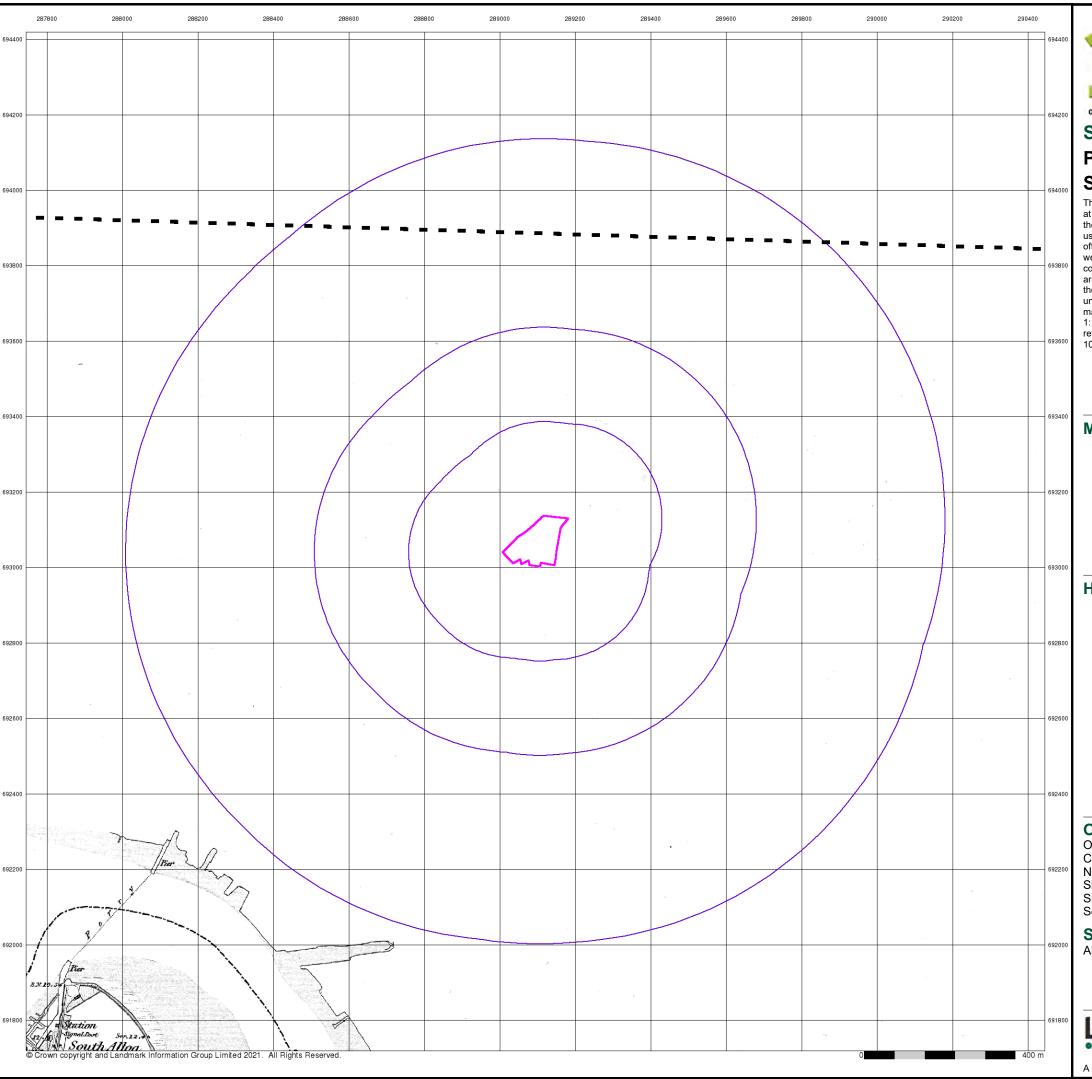
Site Details

Aldi, Whins Road, ALLOA, FK10 3SE



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

A Landmark Information Group Service v50.0 27-Oct-2021 Page 1 of 19



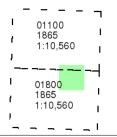


Stirlingshire

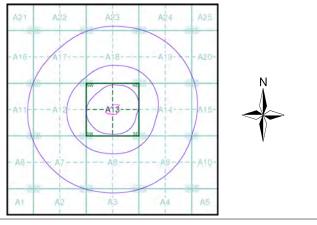
Published 1865 Source map scale - 1:10,560

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: 286910639_1_1 Customer Ref: P17-107 National Grid Reference: 289100, 693070 Α

Slice:

Site Area (Ha): Search Buffer (m): 1.34 1000

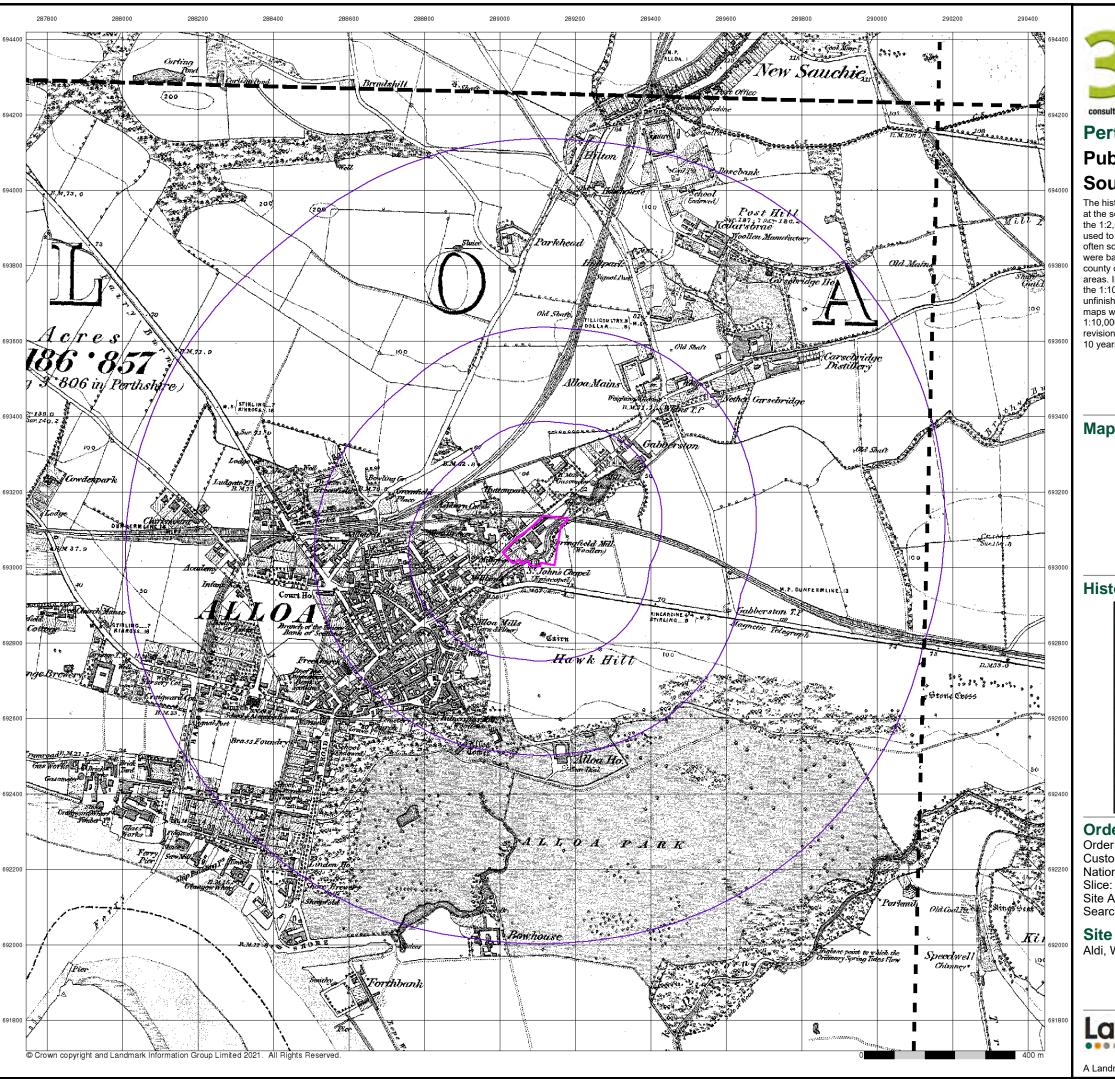
Site Details

Aldi, Whins Road, ALLOA, FK10 3SE



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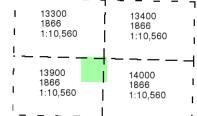


Perthshire

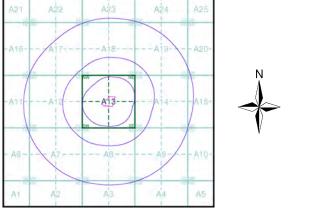
Published 1866 Source map scale - 1:10,560

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: 286910639_1_1 P17-107 **Customer Ref:** National Grid Reference: 289100, 693070

Site Area (Ha): Search Buffer (m): 1.34 1000

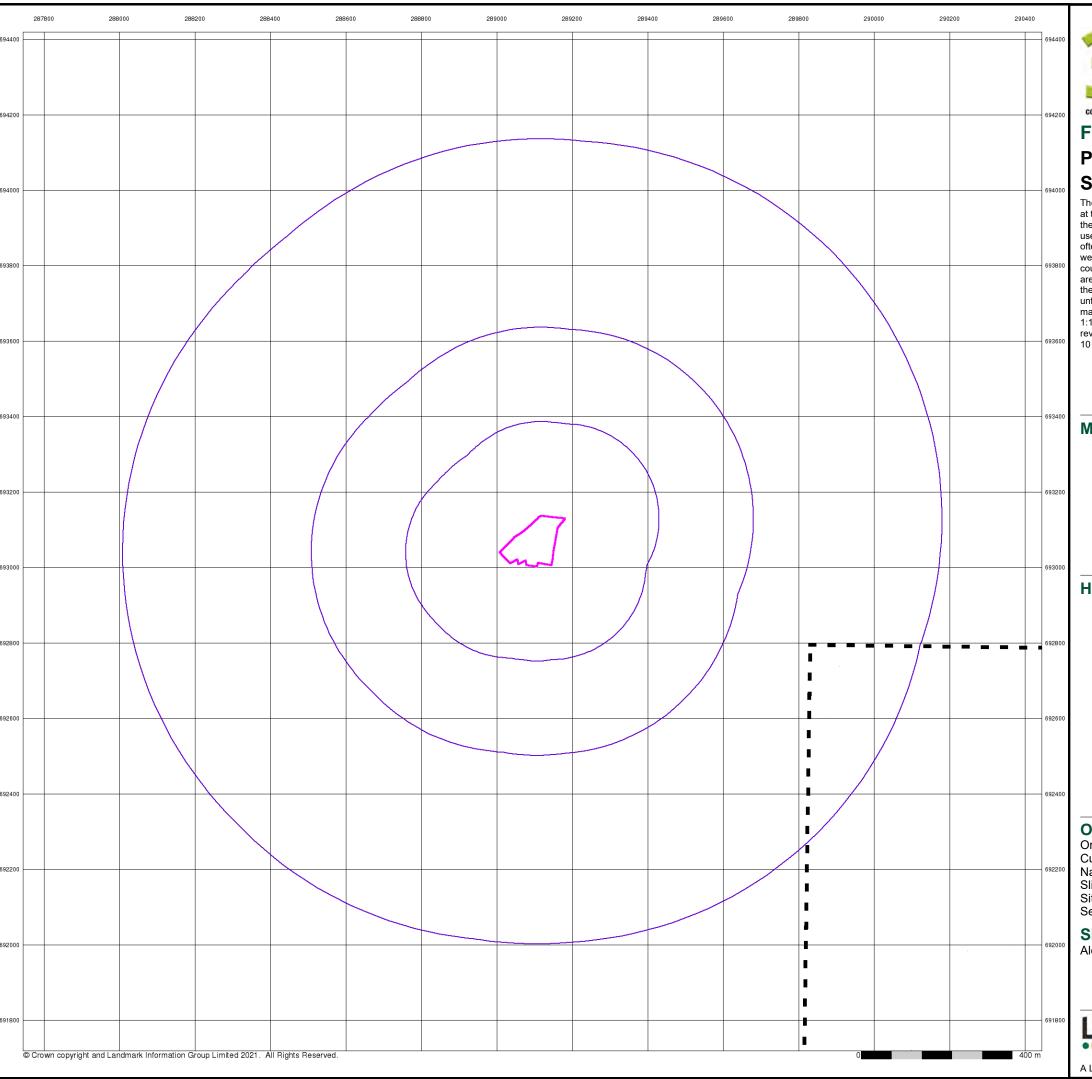
Site Details

Aldi, Whins Road, ALLOA, FK10 3SE

Landmark

0844 844 9952 0844 844 9951

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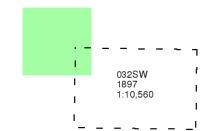


Fifeshire

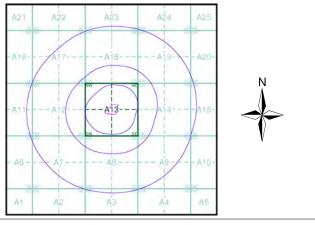
Published 1897 Source map scale - 1:10,560

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: 286910639_1_1 Customer Ref: P17-107 National Grid Reference: 289100, 693070 Α

Slice:

Site Area (Ha): Search Buffer (m): 1.34 1000

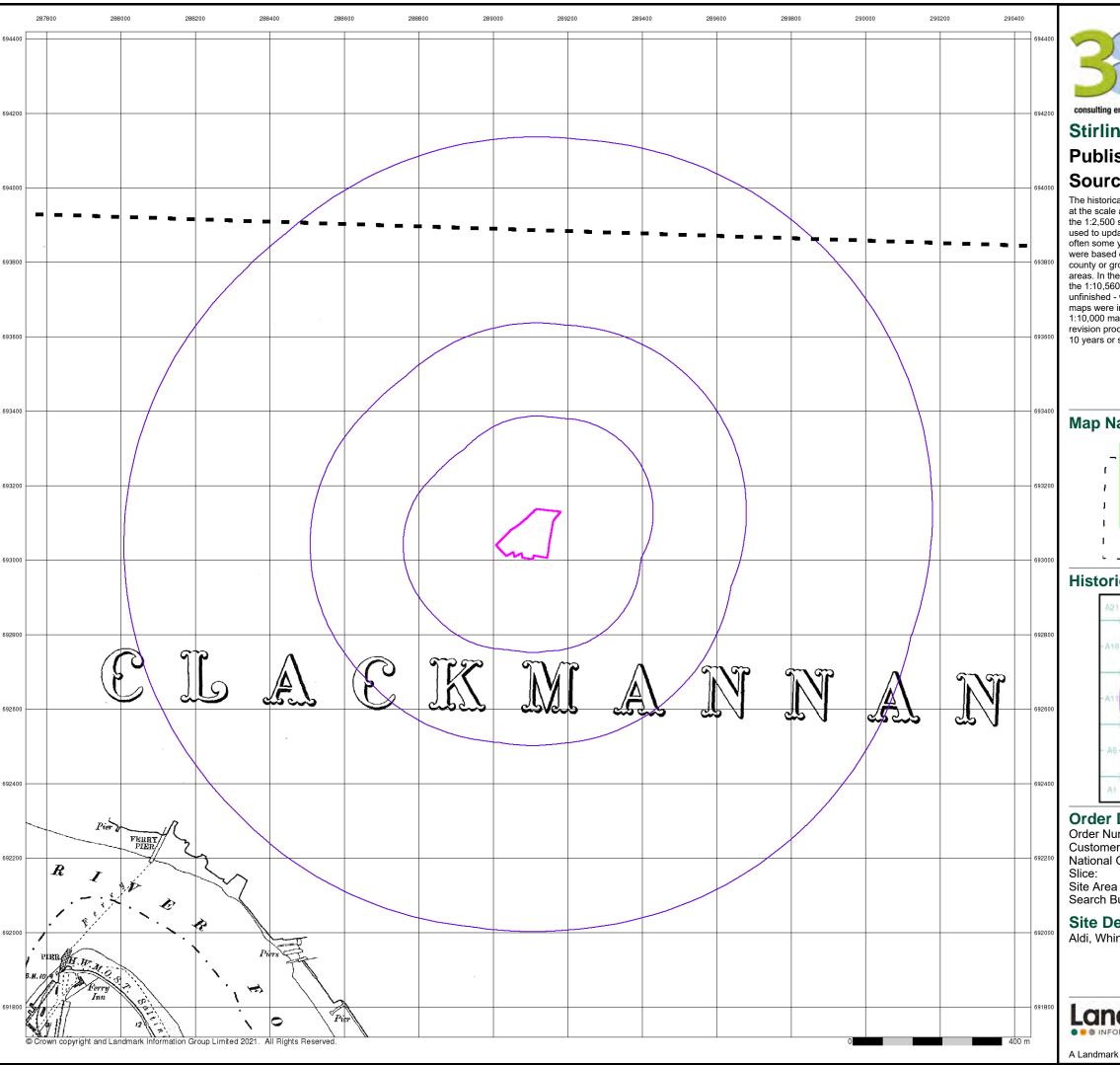
Site Details

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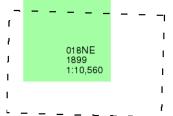


Stirlingshire

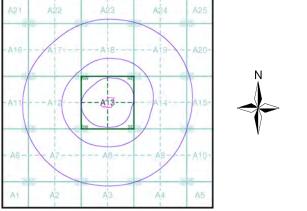
Published 1899 Source map scale - 1:10,560

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: 286910639_1_1 P17-107 Customer Ref: National Grid Reference: 289100, 693070 Α

Site Area (Ha): Search Buffer (m): 1.34 1000

Site Details

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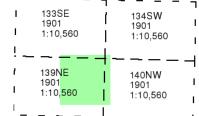


Perthshire

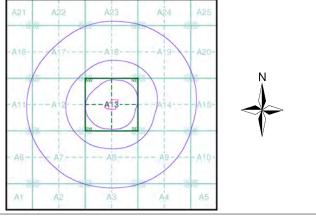
Published 1901 Source map scale - 1:10,560

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: 286910639_1_1 **Customer Ref:** P17-107 National Grid Reference: 289100, 693070

Site Area (Ha): Search Buffer (m): 1.34 1000

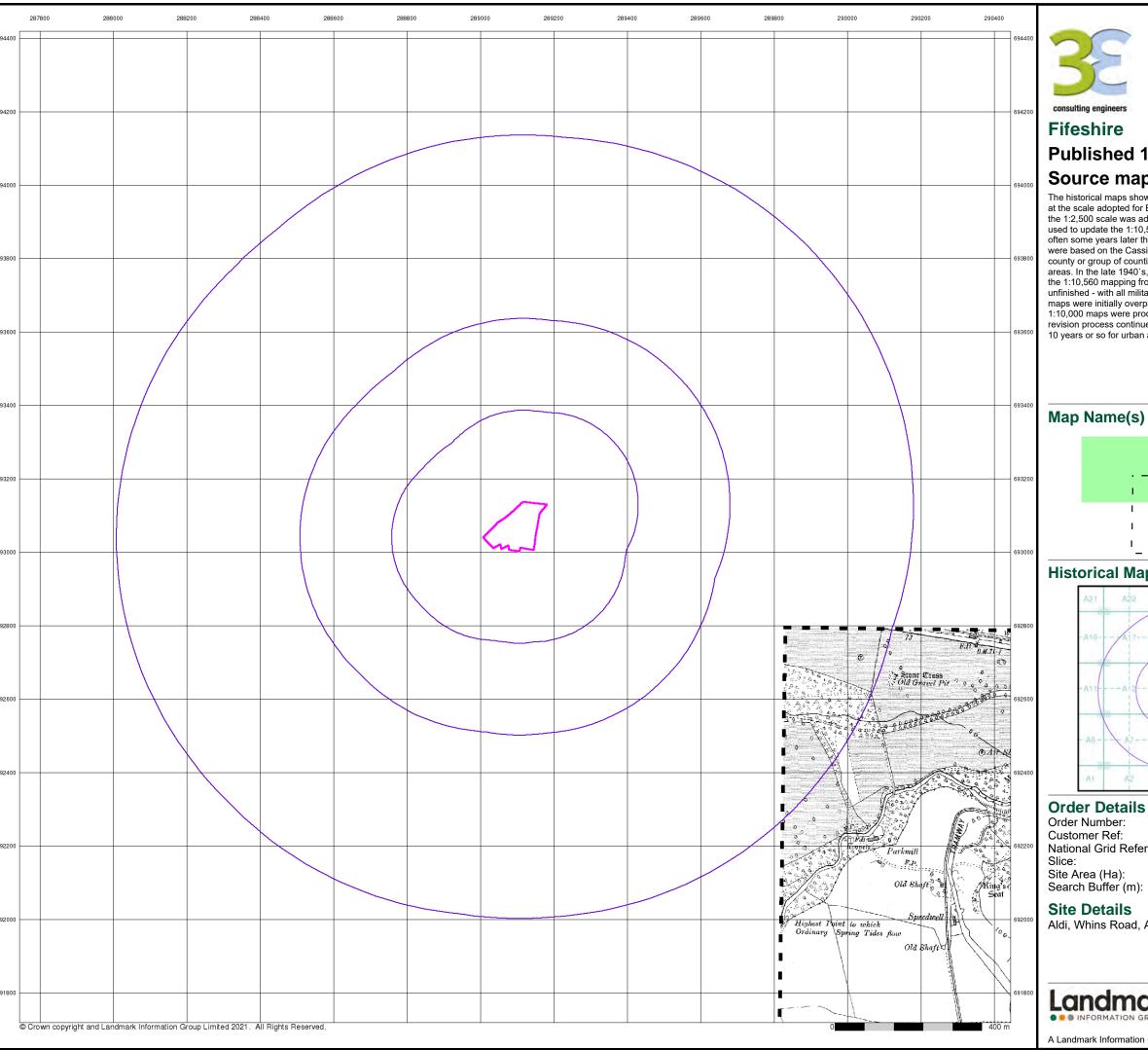
Site Details

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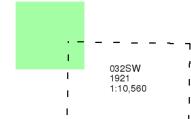
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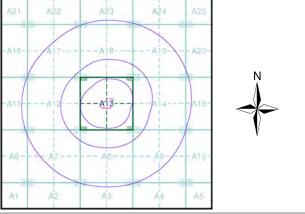
Published 1921 Source map scale - 1:10,560

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)



Historical Map - Slice A



286910639_1_1 P17-107 National Grid Reference: 289100, 693070 Α

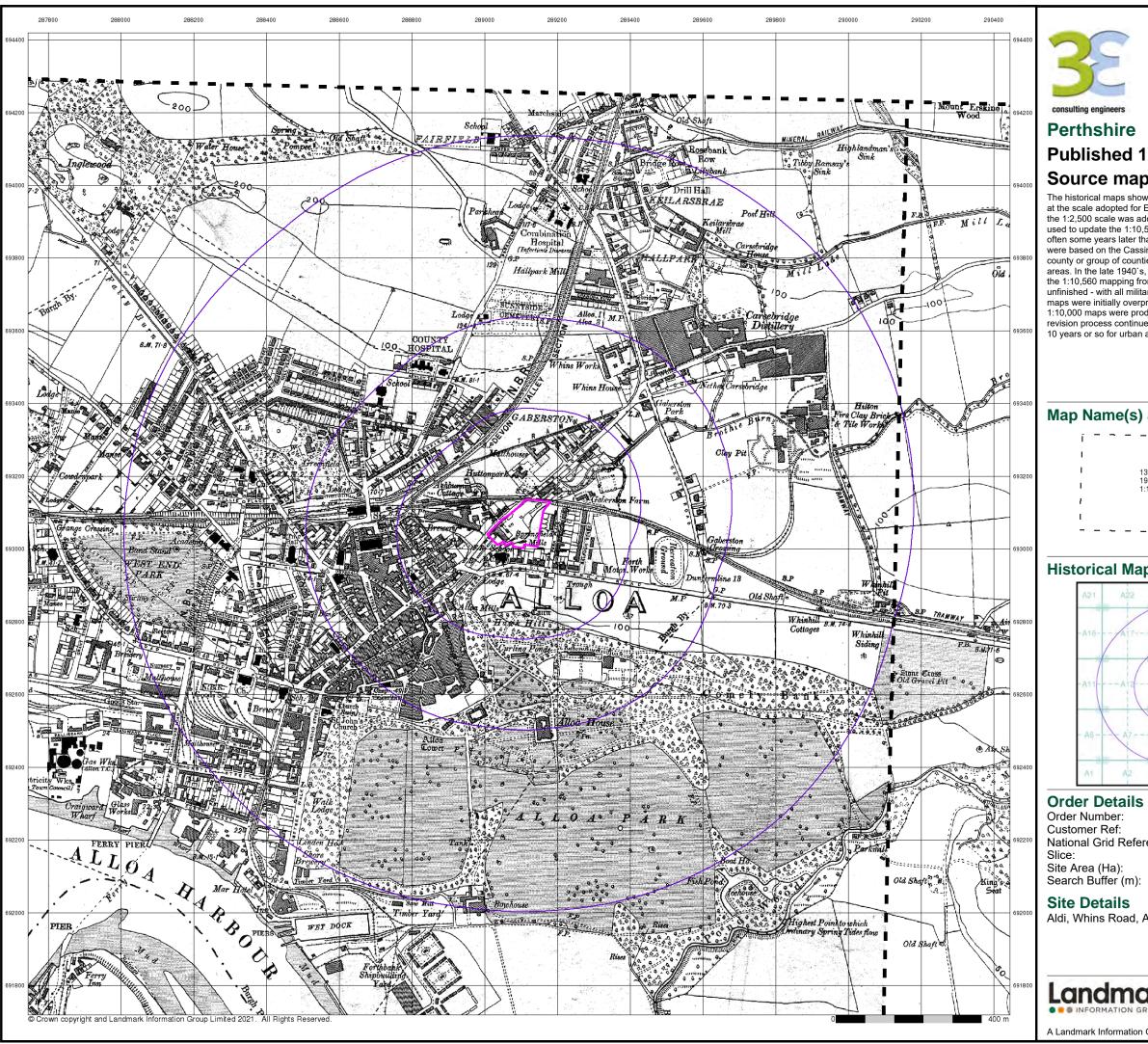
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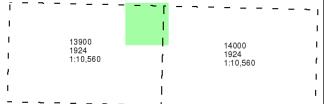
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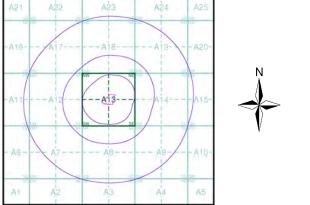
Published 1924 Source map scale - 1:10,560

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



286910639_1_1 P17-107 National Grid Reference: 289100, 693070

1.34 1000

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