



EARTH ENVIRONMENTAL
& GEOTECHNICAL

Phase 1

GeoEnvironmental Desk Study

East Road

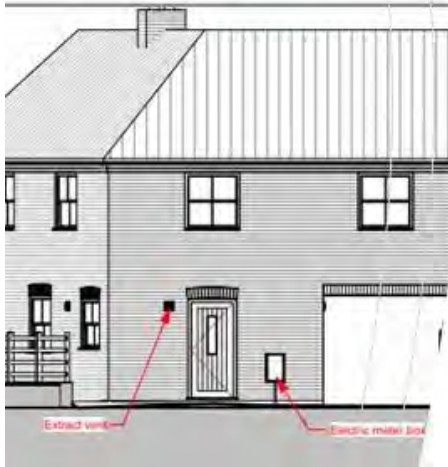
Tydd St Giles

Wisbech

September 2023

On behalf of

Mr. Kevin Vaughn



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PHASE I GEOENVIRONMENTAL DESK STUDY

EAST ROAD

TYDD ST GILES

WISBECH

FOR

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Client:	Mr. Kevin Vaughn
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1. INTRODUCTION

Appointment

- 1.1 Earth Environmental & Geotechnical Ltd has been commissioned by Mr. Kevin Vaughn (the Client) to undertake a Phase I GeoEnvironmental Desk Study for a proposed development at Land off East Road, Tydd St Giles, Wisbech, Lincolnshire,
- 1.2 It is understood that the client wishes to construct a new residential property on the site with changes to the existing parking area.
- 1.3 The site is accessed via East Road to the south of the site.
- 1.4 A proposed development plan for the site is shown in Figure 1 below.

Figure 1 Proposed Development Plan



Objective

- 1.5 The purpose of the Desk Study is to collate available geological and environmental data for the site (and its environment) and provide a preliminary geotechnical and geo-environmental appraisal, with a site-specific conceptual model. This enables a preliminary assessment of geo-environmental risks to be undertaken and, if necessary, provides information for the design of a Phase 2 Ground Investigation.

Scope

- 1.6 The Phase I Environmental Desk Study comprises of a review of the following information sources:
- British Geological Survey online maps.
 - Google Earth imagery.
 - Environment Agency online mapping data.
 - Historical Ordnance Survey maps.
 - The site and surrounding areas environmental, geological, and mining data presented in the site specific GroundSure Reports (Appendix 1).
 - Coal Authority Interactive Viewer.
 - South Holland District Council planning portal.

2. SITE LOCATION AND DESCRIPTION

- 2.1 The site is located at off East Road, Tydd St Giles, Wisbech, Lincolnshire, PE13 5QD, approximately 8km north of Wisbech town centre.
- 2.2 The approximate National Grid Reference for the centre of the site is TF 45091 17933 (X: 545091, Y: 317933).
- 2.3 The site is a triangle shaped parcel of land with maximum dimensions of 40m north to south and 19m west to east. The site occupies an area of approximately 0.04 hectares.
- 2.4 The access to the site is via East Road to the south.
- 2.5 The surrounding land usage is residential with properties to the north and east of the site. There is a road to the west and south of the site.
- 2.6 A location plan is shown below as Figure 2.

Figure 2: Site Location Plan



Site Utility Services

- 2.7 Site service plans have not been obtained for the site by the client. The status of all services should be checked prior to any development (including site investigation) commencing.

3. ENVIRONMENTAL SETTING

3.1 The geology of the site is covered by British Geological Survey (BGS) online data and the site specific GroundSure Geo Insight report (Appendix 1).

3.2 Environmental conditions are covered by Environment Agency (EA) and British Geological Survey (BGS) online data, and the site specific GroundSure Enviro Insight report (Appendix 1).

Geology

3.3 The BGS states that the site is not underlain by artificial deposits.

3.4 The site is recorded to be underlain by superficial deposits of Tidal Flat Deposits comprising of clay and silt.

3.5 The solid geology underlying the site is recorded to be Ampthill Clay Formation comprising of Oxfordian age mudstone.

3.6 There are no records of bedrock faults and linear features within 500m of the site boundary.

3.7 There are no records of landslips within 500m of the site boundary.

3.8 There are 2no. borehole records identified within 250m of the site. The closest borehole record is located 156m south of the site dated February 1962, and is as follows:

- 0.0m – 3.05m: Made Ground/Topsoil.
- 3.05m – 5.50m: Grey sandy clayey silt.
- 5.50m – 17.00m: Grey sand, silty at upper levels, and containing shell fragments.
- 17.00m – 18.00m: Clay.
- 18.00m – 22.50m: Sand and gravel containing shell fragments.
- 22.50m – 26.00m: Very stiff grey chalky boulder clay.

3.9 The site is in an area where the hazard rating is moderate with regards to running sands and compressible deposits, low with regards to shrink swell clays, very low with regards to landslides and negligible with regards to collapsible deposits and soluble rocks

Ground Workings

3.10 There are 5no. records of historical surface ground working features identified within 250m of the site boundary. The closest record refers to an unspecified heap located 83m northwest dated 1900 to 1950. The other records refer to unspecified heaps.

3.11 According to the BGS there are no records of BritPits within 500m of the site.

Mining and Other Underground Workings

- 3.12 Reference to the Coal Authority Interactive viewer shows the site is located outside an identified coal mining area and is located outside a Development High Risk Area.
- 3.13 There are no records for non-coal mining areas located within 1km of the site.
- 3.14 There are no areas of brine extraction, gypsum extraction, tin mining, or clay mining on the site.
- 3.15 There are no records for natural cavities identified within 500m of the site.
- 3.16 There are no records for mining cavities identified within 1km of the site.
- 3.17 There is 1no. record for historical underground working features identified within 1km of the site. Closest located 848m northwest of the site, refers to a tunnel dated 1900.

Radon Potential

- 3.18 The property is not located in a Radon Affected Area, as less than 1% of the properties are above the Action Level. Therefore, radon protection measures are not required.

UXO Risk

- 3.19 According to an initial search of Zetica Online Risk Maps the assessment site falls in an area of Low Risk for unexploded ordnance and therefore further UXO risk assessment is unlikely to be required.

Hydrogeology and Hydrology

- 3.20 Tidal Flat Deposits superficial deposits underlying the site are classified by the Environment Agency (EA) as a Unproductive Strata with a low flow type and low permeability. The BGS states the following:

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

- 3.21 The Ampthill Clay Formation is classified by the Environment Agency (EA) as a Unproductive Strata with a low flow type and low permeability. The BGS states the following:

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

- 3.22 There is 1no. groundwater abstraction licence record within 2km of the site, refers to active abstraction used to trickle irrigation, located 1.6km south of the site.
- 3.23 There is 1no. surface water abstraction licence record within 2km of the site, refers to historical abstraction used to make-up or top up water, located 1.9km southwest of the site.
- 3.24 There are no potable abstraction licence records within 2km of the site.

- 3.25 The site is not located within 500m of a Source Protection Zone or a Source Protection Zone within a confined aquifer.
- 3.26 There are 7no. water network entries within 250m of the site. The closest record refers to an inland river not influenced by normal tidal action 1m northwest of the site.
- 3.27 There are 4no. surface water features identified within 250m of the site.
- 3.28 There is 1no. Water Framework Directive (WFD) surface water body catchment located on site. The record refers to the North Level Main Drain catchment as part of the Nene management catchment.
- 3.29 There is 1no. record of a Water Framework Directive (WDF) surface water body located within 250m of the site. The record refers to the North Level Main Drain catchment as part of the Nene management catchment located 191m south of the site. The water had a fail chemical rating and moderate ecological rating in 2019.
- 3.30 There are no records of a Water Framework Directive (WDF) groundwater body located on-site.

Landfill & Waste Management Activity

- 3.31 There are no records for current Environment Agency/Natural Resource Wales landfill records within 500m of the site.
- 3.32 There are no records of a historic Environment Agency/Natural Resource Wales landfill site within 500m of the site.
- 3.33 There are no records of BGS/DoE non-operational landfill sites within 500m of the site.
- 3.34 There are no records of a historical landfill site from the Local Authority and Historical Mapping Records within 500m of the site.
- 3.35 There are no records of a historical waste site from the Local Authority and Historical Mapping Records within 500m of the site.
- 3.36 There are 2no. records of a waste treatment, transfer, or disposal site within 500m of the site. Closest located 338m southwest of the site, and refers to disposing of waste exemption, burning waste in the open.
- 3.37 There are no records of current Environment Agency/Natural Resources Wales licensed waste sites within 500m of the site.

Industrial Land Use Information

- 3.38 There are 9no. records of potentially contaminative historical industrial land uses identified within 500m of the site. The closest record refers to unspecified heap located 83m northwest of the site, dated 1950. Other records in the vicinity refer to other unspecified heaps, telephone exchange, unspecified tank and unspecified pit.

- 3.39 There are 4no. records of current potentially contaminative land uses identified within 250m of the site. The closest record refers to R J Flack & Sons for vehicle repair, testing and servicing located 96m north of the site.
- 3.40 There are no records of historical tanks identified within 500m of the site.
- 3.41 There are no records of historical energy features identified within 500m of the site.
- 3.42 There are no records of a current petrol or fuel sites within 500m of the site.
- 3.43 There are no records of historical petrol or fuel sites within 500m of the site.
- 3.44 There are 2no. historical garage and motor vehicle repair site records identified within 500m of the site. The closest record refers to a garage located 21m northwest of the site, dated 1985.
- 3.45 There are no National Grid high voltage underground electricity transmission cables within 500m of the site.
- 3.46 There are no National Grid high-pressure gas transmission pipelines within 500m of the site.
- 3.47 There are no historical railway and tunnel features identified within 250m of the site.
- 3.48 There are no historical railway lines identified within 250m of the site.
- 3.49 There are no current active railway line records identified within 250m of the site.
- 3.50 There are no underground railway lines or tunnels identified within 250m of the site.
- 3.51 The site is not within 5km of the route of the High Speed 2 rail project.
- 3.52 The site is not within 500m of the route of the Crossrail 1 rail project.

Environmental Permits, Incidents and Registers

- 3.53 The Groundsure Report includes records of environmental permits, incidents, and registers within 500m of the site, which are summarised in Table 1 overleaf.

Table 1: Environmental Permits, Incidents and Registers within 500m of the Site

Permit/Incident/Register	Number
Historical Licensed Industrial Activities (IPC)	0
Part A (1) and IPPC Authorised Activities	0
Pollutant Release to Surface Waters (Red List)	0
List 1 Dangerous Substances Inventory Sites	0
List 2 Dangerous Substances Inventory Sites	0
Part A (2) and Part B Activities and Enforcements	1
Category 3 or 4 Radioactive Substance Authorisations	0
Licensed Discharge Consents	7

Permit/Incident/Register	Number
Planning Hazardous Substance Consents and Enforcements	0
Dangerous or Hazardous (COMAH and NIHHS) Sites	0
Sites Determined as Contaminated Land under Part 2A EPA 1990	0
Regulated Explosive Sites	0
Pollutant Release to Public Sewer	0
Substantiated Pollution Incidents (Category 1 and 2)	1
Pollution Inventory Substances, Wastes and Radioactive Wastes	0

3.54 There is 1no. record of Part A (2) and Part B Activities and Enforcements recorded within 500m of the site. The record refers to a permit for waste oil burner 0.4MW located 46m west of the site.

3.55 There are 7no. records of licensed discharge consents to controlled waters within 500m of the site. The closest record refers to unspecified discharges, located 54m north of the site.

3.56 There is 1no. record of pollution incidents (category 1 and 2) within 500m of the site. The closest record refers to a specific water material, located 168m east of the site. The incident resulted in no impact on land, water or air.

3.57 There are no other records of Environmental Permits, Incidents and Registers within 500m of the site.

Environmentally Sensitive Sites

3.58 There are no records of Sites of Special Scientific Interest (SSSI) within 2km of the site.

3.59 There are no records of Designated Ancient Woodland within 2km of the site.

3.60 There are no records of Nitrate Vulnerable Zones (NVZ) within 2km of the site.

3.61 There are no records of Local Nature Reserves (LNR) within 2km of the site.

3.62 There are no records of a green belt within 2km of the site.

Ecology

3.63 An ecological assessment of the site falls outside the brief of this report. Where considered necessary, advice should be sought from an ecological specialist in this respect.

Archaeology

3.64 An archaeological assessment falls outside the brief of this report. Where considered necessary, advice should be sought from an archaeological specialist in this respect.

3.65 There are no records of World Heritage Sites or Scheduled Ancient Monuments within 250m of the site.

- 3.66 There is 1no. record of a listed building within 250m of the site. The record refers to Greyfriars located 138m west of the site.

Potential Flood Risks

- 3.67 Detailed assessment of flood risks is outside the scope of this report. However, an Environment Agency Flood Zone 2 and 3 are not located on site.
- 3.68 There is a negligible risk of flooding from rivers and sea (RoFRaS) on site.
- 3.69 There are no records of historical flood events within 250m of the site.
- 3.70 There are no records of flood defences within 250m of the site.
- 3.71 There are no records of areas benefitting from flood defences within 250m of the site.
- 3.72 There are no records of areas used for flood storage within 250m of the site.
- 3.73 The highest risk of surface water flooding occurring on-site for a 1 in 1000-year event is 0.3m to 1.0m.
- 3.74 The highest risk of groundwater flooding occurring on-site is negligible.

Previous Site Investigations

- 3.75 Earth Environmental & Geotechnical Ltd are not aware of any previous site investigations carried out for the site.

4. SITE HISTORY

- 4.1 The historical development of the site has been determined by reference historical plans and Google Earth imagery. The reviewed historical plans comprise only readily available records and are limited; however, the information available to date indicates that additional searches are unlikely to add to our understanding of the site.
- 4.2 The site history is summarised in Table 2, below, followed by selected extracts from maps and aerial photographs.

Table 2: Summary of Site History

Date	On-Site History	Surrounding Land Use History
1886 (partial) 1:10,560	The site is an open field.	Open area to the north and east. No data to the south and west.
1887 (partial) 1:10,560	Brook or channel recorded in the northern part of the site.	Site become a residential area to the north and east. No data to the south and west.
1889, 1902, 1904 1:2,500	Small building in central part of the site.	Smithy recorded 100m to the south. North Level Main Drain recorded 200m to the south.
1931, 1932 10,560	No significant changes.	No significant changes.
1950, 1958 (partial) 10,560	No significant change.	No significant changes.
1965 (partial), 1968 (partial), 1:2,500 and 10,560	No significant change.	No significant changes.
1974-76, 1975 (partial), 1980 1:2,500 and 10,560	Small building recorded in southern part of the site. Later named brick office.	No significant changes.
1985 (partial), 1991-95, 1992, 2001, 2003, 2010, 2023	No significant change.	No significant changes.

Date	On-Site History	Surrounding Land Use History
1:2,500 and 10,560		
1999, 2003, 2005, 2007, 2016, 2018, 2019 Google Earth Imagery	No significant change.	No significant changes.
2021, 2023 Google Earth Imagery	Building on the southern part of the site longer recorded.	No significant change.

Figure 3 OS Map Extract 1889

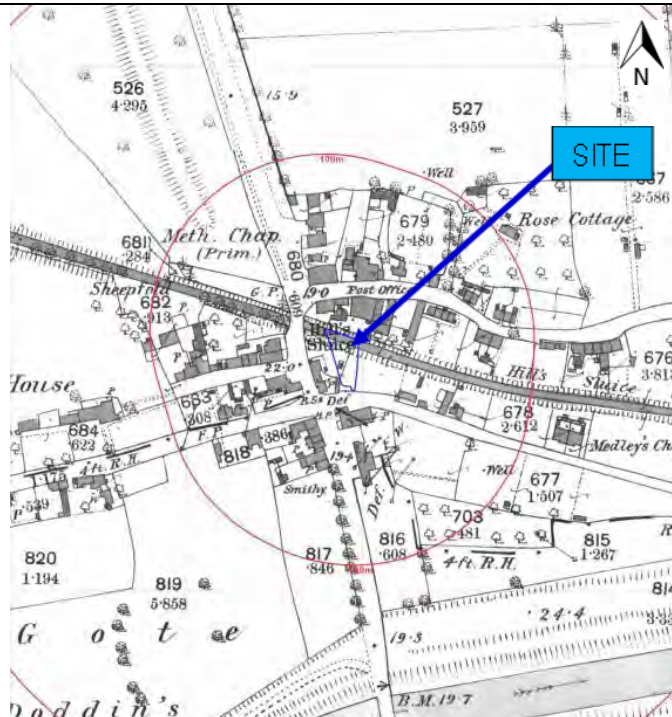


Figure 4 OS Map Extract 1931

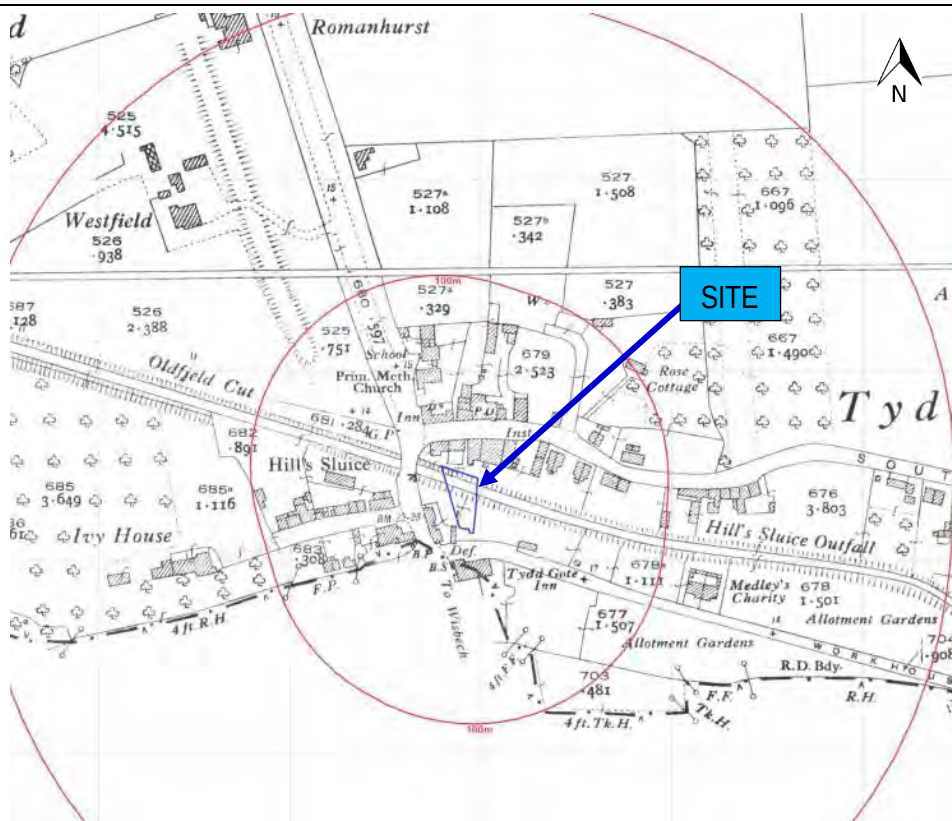


Figure 5 OS Map Extract 1974-1976

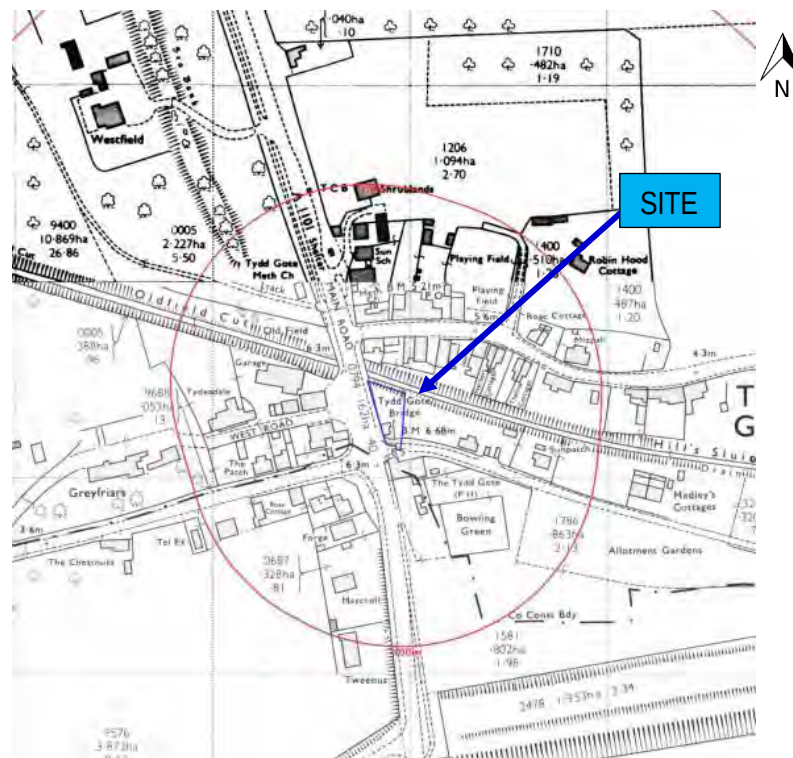


Figure 6 OS Map Extract 2003

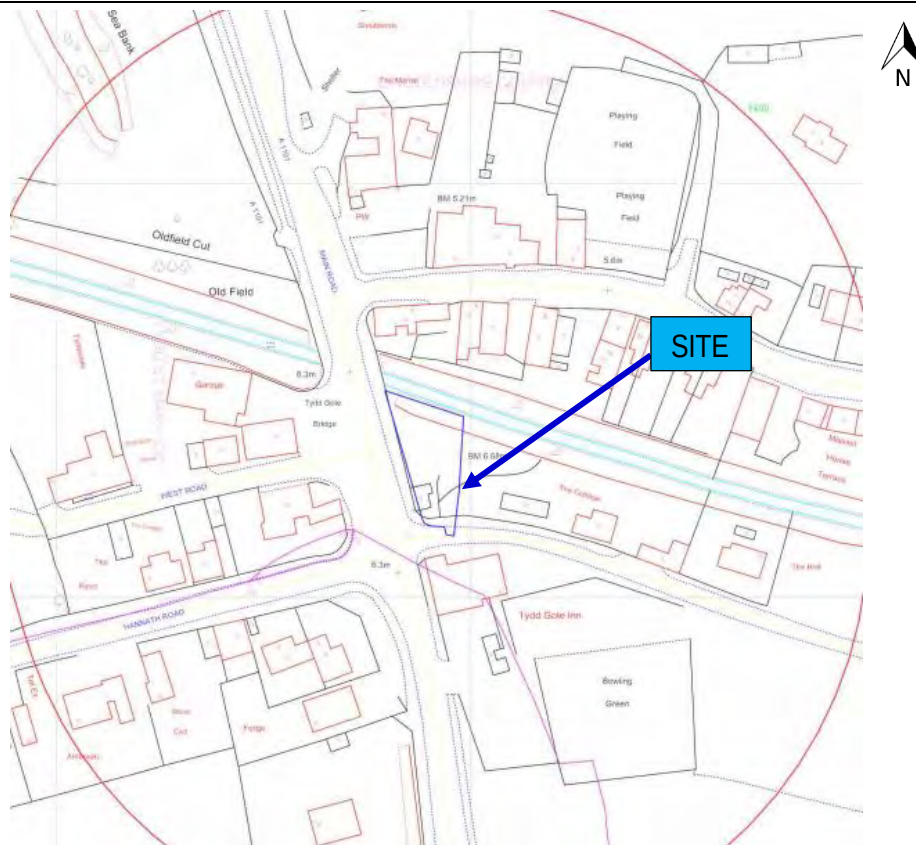
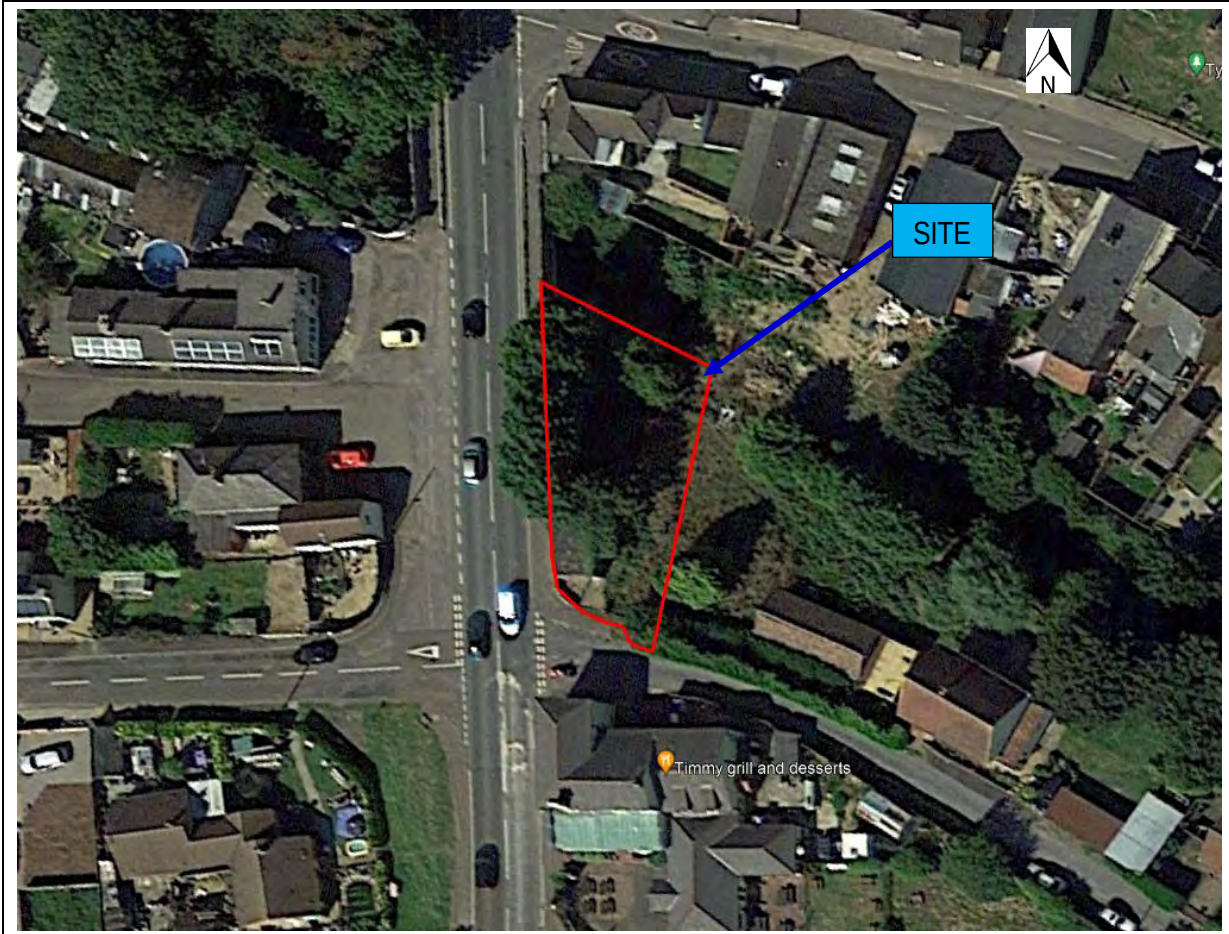


Figure 7 OS Map Extract 2016



5. PRELIMINARY CONTAMINATION RISK ASSESSMENT

Introduction

- 5.1 The following paragraphs outline a Preliminary Risk Assessment (PRA) for the site based on the above desk study information as defined by DEFRA and the EA Land contamination risk management, LCRA (2020) guidance.
- 5.2 Table 5 provides a Preliminary Conceptual Model (PCM) which considers the source-pathway-receptor linkages present alongside the likelihood, severity and risk level as defined within Table 3 and Table 4 below. The assessment of probability, a modified risk table, and certain consequence definitions are based on CIRIA C552 and the former Environment Agency CLR11.
- 5.3 Table 5 considers whether a pollution linkage is potentially present and provides a preliminary qualitative assessment of risk based on the information currently available. Where a possible linkage is identified, it does not necessarily mean that a significant risk exists but indicates that further information is required through appropriate site investigation to substantiate the conceptual model.
- 5.4 The PCM/PRA is based on a proposed residential end use.

Table 3: Consequence, Probability and Risk

Probability	Consequence,	Risk
High Likelihood- There is a pollution linkage and an event either appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution	Very High – acute risk to the human health likely to result in significant harm. Risk of severe or irreversible effect on ground/surface water quality. Catastrophic damage to buildings / property.	Very High – there is a high potential that the source-pathway-receptor scenarios may give rise to harm to human health, or the environment and remedial action is likely to be required.
Likely – there is a pollution linkage, and all the elements are present, which means that it is probable an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.	High – Severe or irreversible effect on human health. Temporary severe or irreversible effect on ground/surface water quality. Reduction of water quality rendering groundwater or surface water unfit to drink and/or substantial adverse impact on groundwater dependant environmental receptors.	High – it is likely that the source-pathway-receptor scenarios may give rise to an impact on human health or the environment, which may require remediation and/or control measures to mitigate risks
Low likelihood– there is a pollutant linkage and circumstances are possible for an event could occur. However, it is by no means certain that even over a longer period such event would take place, and is less likely in the shorter term	Moderate – Long term or short-term moderate effect on human health. Moderate effect on ground/surface water quality, reversible with time. Reduced reliability of a supply at a groundwater or surface water abstraction source	Moderate – it is possible that the source-pathway-receptor scenarios may give rise to an impact on human health or the environment, however it is either relatively unlikely that such would be severe, or if any harm were to occur it is more likely that harm would be mild.
Unlikely – there is a pollution linkage, but circumstances are such that it is doubtful that an event would occur even in the very long term.	Low – Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc.) Slight effect on ground/surface water quality, reversible with time. Marginal reduced reliability of a supply at a groundwater or surface water abstraction source.	Low – it is possible that harm could arise at the source, however it is likely that this would at worst be mild.
		Very Low – it is unlikely that the source-pathway-receptor scenarios will give rise to an impact on human health or the environment.

Table 4: Estimation of Level of Risk by Comparison of Consequence and Probability

		Consequence			
		High	Moderate	Low	Very low
Probability	High Likelihood	Very High	High risk	Moderate risk	Moderate to low risk
	Likely	High risk	Moderate risk	Moderate to low risk	Low risk
	Low Likelihood	Moderate risk	Moderate to low risk	Low risk	Very low risk
	Unlikely	Moderate to low risk	Low risk	Very low risk	Very low risk

Potential Sources

- 5.5 Since the start of recorded mapping until 1886 the site was part of open land with a brook in its most northern part. Throughout history, two buildings were erected and later demolished.
- 5.6 Historically, the surrounding land usage has been residential since the start of recorded mapping.
- 5.7 Given the above, there is limited potential for the presence of contamination to be present on site.

Potential Receptors

- 5.8 The following receptors have been considered for the construction and operational stages of the proposed redevelopment.
- Current site users;
 - Adjacent land users;
 - Future land users;
 - Construction workers during site development works;
 - Groundwater within the underlying aquifer

Potential Pathways

- 5.9 The following pathways have been considered for the construction and operational stages of the proposed redevelopment.
- Dermal contact, ingestion, inhalation pathways of potentially contaminated soils;
 - Downward vertical migration of leachate to shallow groundwater;
 - Vertical or lateral migration of ground gas.

Table 5: Preliminary Conceptual Model

Source	Pathway	Receptor	Probability	Consequence	Risk	Comment
Potential soil contamination E.g., Heavy Metals, PAH, TPH, BTEX, Asbestos and Ground Gases.	Dermal contact, ingestion, and inhalation of soils dust	Current Site Users	Unlikely	Moderate	Low	Site currently undeveloped. The risk is considered LOW.
		Adjacent land users	Unlikely	Moderate	Low	Residential properties are located to the immediate north and east of the site. Usual dust control measures should be implemented as part of good site working practices during construction to reduce dust generation. The risk is considered LOW.
		Future land users	Unlikely	Moderate	Low	The proposed development consists of a new residential property with associated car parking. Due to the low potential for contamination to be present at the site, the risk to future site users via direct exposure is considered to be LOW.
		Construction Workers	Unlikely	Moderate	Low	Construction workers may be exposed to potentially contaminated soils during construction works, however, exposure duration will be short-term only. Appropriate health and safety measures (in line with CDM and other relevant health and safety guidance) will reduce any risk to LOW.
	Downward vertical migration of leachate to shallow groundwater	Groundwater within the Underlying Aquifer	Unlikely	Moderate	Low	The underlying superficial soils are Tidal Flat Deposits comprising of clays and silts. The solid geology beneath the site is shown to be Amphill Clay Formation comprising of mudstone. There is one abstraction licences or potable abstraction licence record within 2km of the site. The groundwater vulnerability is considered to be low. Due to low potential for contamination on the site, the risk to groundwater is also considered LOW.
	Lateral migration in surface waters	Surface water	Unlikely	Moderate	Low	Given the lack of contamination sources, the perceived risk to surface waters is considered to be LOW.
	Vertical or lateral migration of ground gas	Current Site Users	Unlikely	Moderate	Low	Site currently undeveloped. The site is not located in a radon affected area. The risk to current site users from ground gas is therefore considered LOW.
		Adjacent land users	Unlikely	Moderate	Low	Residential properties are located to the immediate north and east of the site. The site is not located in a Radon Affected Area. Therefore, no radon protection measures will be required. The risk to adjacent site users from ground gas is considered LOW.
		Future land users	Low Likelihood	Moderate	Low	The proposed development consists of constructing a new residential property on the site with associated car parking to the rear of the property. There is no potential for radon gas. The risk is considered LOW.

Source	Pathway	Receptor	Probability	Consequence	Risk	Comment
		Construction Workers	Low Likelihood	Moderate	Low	Given the lack of ground gas generation sources, the risk to construction workers from ground gas is considered LOW.

6. GEOTECHNICAL HAZARDS ASSOCIATED WITH THE DEVELOPMENT

6.1 In addition to the environmental hazards there are also geotechnical hazards associated with the stability of the ground including load bearing capacity, slope stability and effects of ground mining activities. Local Authorities follow NPPF (2023) which requires that a site be suitable for its new use considering of ground conditions and land instability, including from natural hazards to former activities such as mining.

6.2 A summary of the geotechnical considerations is provided below in Table 6.

Table 6: Summary of Geotechnical Hazards

Geohazards:	
Highly Compressible Ground	Moderate risk
Collapsible Soils	Negligible risk
Swelling Clay	Low risk
Running Sand	Moderate risk
Ground Dissolution	Negligible risk
Landslip	Very low risk
Mining & Quarrying	The site is located outside a coal mining area and according to the coal authority interactive viewer is not located within a Development High Risk Area.
Geotechnical Design Considerations	
Site Clearance	N/A
Trees	Aerial photography show trees in northern part of the site.
Existing Buildings/Obstructions	N/A
Foundations	The depth and type of proposed foundations would depend on the ground conditions present on site. An intrusive ground investigation may be required prior to any construction works taking place to discover the most suitable foundation options.

Geotechnical Design Considerations	
Floor Slabs	Intrusive geotechnical investigation may be required prior to construction works to determine the most suitable floor slab design for the on-site ground conditions.
Groundwater	Exact groundwater conditions are not known at this stage. For more detailed knowledge of the groundwater regime, an intrusive investigation would be needed. However, it is recorded that the site is underlain by a Unproductive Strata. The highest risk of groundwater flooding occurring on-site is negligible. A shallow groundwater table is anticipated.
Earthworks	Extensive earthworks are unlikely to be required for the proposed development.
Slopes	The site is generally flat and level.
Retaining Walls	There are no retaining walls present on site.
Chemically aggressive ground conditions	Chemically aggressive ground conditions are not expected at this site. An intrusive geotechnical investigation would be necessary to confirm chemically aggressive ground.

7. CONCLUSIONS & RECOMMENDATIONS

Conclusions

- 7.1 The site is located at off East Road, Tydd St Giles, Wisbech, Lincolnshire, PE13 5QD, approximately 8km north of Wisbech town centre.
- 7.2 The approximate National Grid Reference for the centre of the site is TF 45091 17933 (X: 545091, Y: 317933).
- 7.3 It is understood that the client intends to construct a new residential property with associated parking to the rear of the site.
- 7.4 Historically, the surrounding area land usage has been residential since the start of recorded mapping.
- 7.5 The site is underlain by superficial deposits of Tidal Flat Deposits comprising of clays and silts (Unproductive Strata), with the solid geology recorded to be Ampthill Clay Formation comprising of Oxfordian age Mudstone (Unproductive Strata).
- 7.6 Potential on-site sources of contamination are very limited.
- 7.7 The overall risk from soil contamination to end users is LOW.
- 7.8 The overall risk to controlled waters is concluded to be LOW.
- 7.9 The risk from ground gas to end users and construction workers is LOW.
- 7.10 The site is not located in an Environment Agency Flood Zone 2 or 3 and the highest risk of groundwater flooding is LOW.

Recommendations

- 7.11 No further investigation with regards to contamination is deemed necessary.
- 7.12 The client may wish to undertake an intrusive instigation to determine geotechnical parameters for the design of foundations, floor slabs and pavement construction.

APPENDIX 1

GROUNDSURE REPORTS

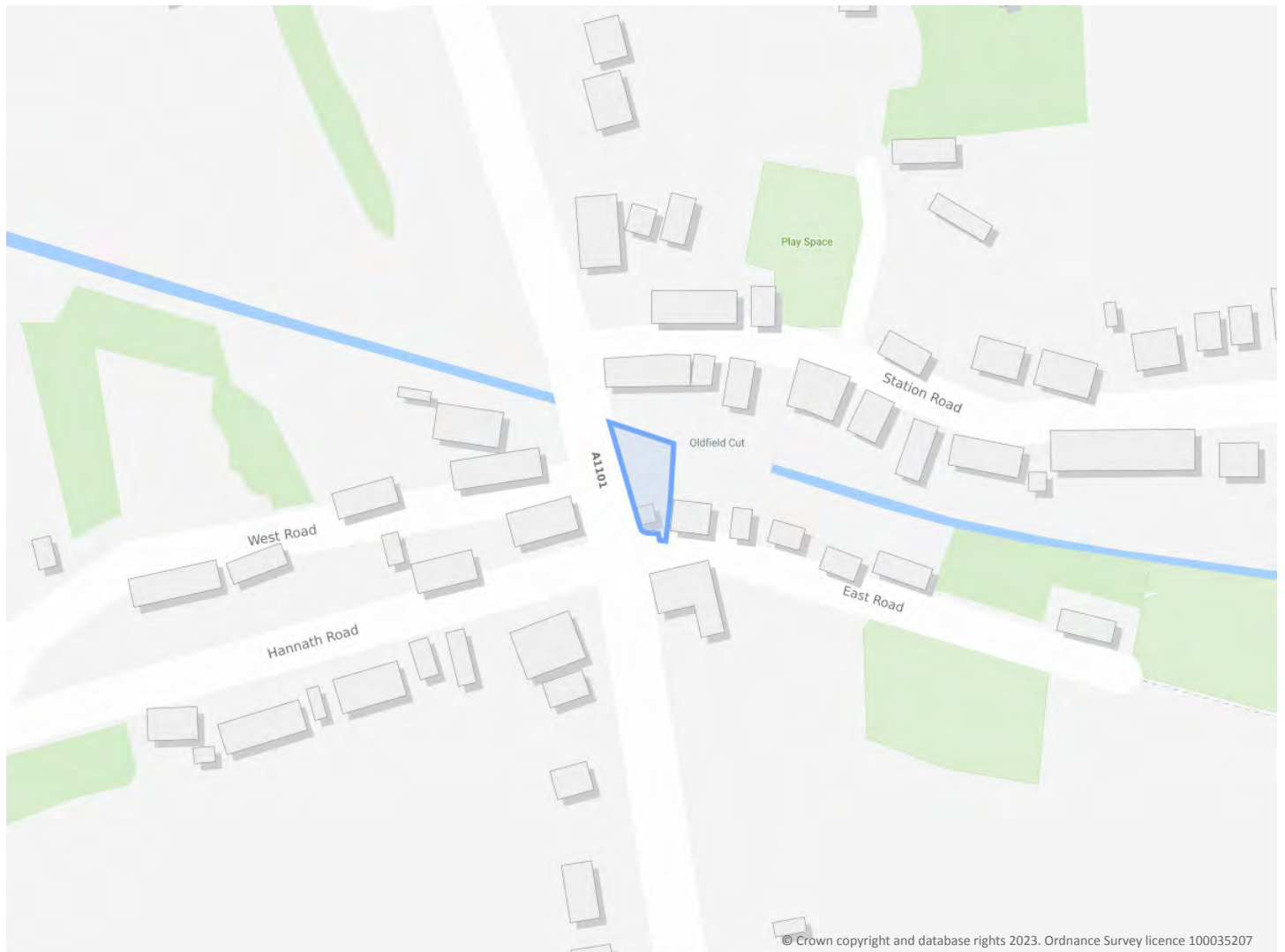
Land West Of 1 East Road Tydd Gote Wisbech,

Order Details

Date: 14/09/2023
Your ref: R3229
Our Ref: GS-D7F-KMR-XAO-5HP

Site Details

Location: 545091 317933
Area: 0.04 ha
Authority: [South Holland District Council](#) ↗



[Summary of findings](#)

[p. 2 >](#) [Aerial image](#)

[p. 9 >](#)

[OS MasterMap site plan](#)

[p.14 >](#) groundsure.com/insightuserguide ↗

Contact us with any questions at:

info@groundsure.com ↗

01273 257 755

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	0	0	5	3	-
16	1.2	Historical tanks	0	0	0	0	-
16	1.3	Historical energy features	0	0	0	0	-
16	1.4	Historical petrol stations	0	0	0	0	-
17 >	1.5 >	Historical garages >	0	1	0	0	-
17	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
18 >	2.1 >	Historical industrial land uses >	0	0	6	3	-
19	2.2	Historical tanks	0	0	0	0	-
19	2.3	Historical energy features	0	0	0	0	-
19	2.4	Historical petrol stations	0	0	0	0	-
20 >	2.5 >	Historical garages >	0	2	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
21	3.1	Active or recent landfill	0	0	0	0	-
21	3.2	Historical landfill (BGS records)	0	0	0	0	-
22	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
22	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
22	3.5	Historical waste sites	0	0	0	0	-
22	3.6	Licensed waste sites	0	0	0	0	-
22 >	3.7 >	Waste exemptions >	0	0	0	2	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
24 >	4.1 >	Recent industrial land uses >	0	0	4	-	-
25	4.2	Current or recent petrol stations	0	0	0	0	-
25	4.3	Electricity cables	0	0	0	0	-
25	4.4	Gas pipelines	0	0	0	0	-
25	4.5	Sites determined as Contaminated Land	0	0	0	0	-



25	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
26	4.7	Regulated explosive sites	0	0	0	0	-
26	4.8	Hazardous substance storage/usage	0	0	0	0	-
26	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
26	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
26 >	4.11 >	<u>Licensed pollutant release (Part A(2)/B) ></u>	0	1	0	0	-
27	4.12	Radioactive Substance Authorisations	0	0	0	0	-
27 >	4.13 >	<u>Licensed Discharges to controlled waters ></u>	0	0	3	4	-
28	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
28	4.15	Pollutant release to public sewer	0	0	0	0	-
28	4.16	List 1 Dangerous Substances	0	0	0	0	-
29	4.17	List 2 Dangerous Substances	0	0	0	0	-
29 >	4.18 >	<u>Pollution Incidents (EA/NRW) ></u>	0	0	1	0	-
29	4.19	Pollution inventory substances	0	0	0	0	-
29	4.20	Pollution inventory waste transfers	0	0	0	0	-
30	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<u>Hydrogeology ></u>	On site	0-50m	50-250m	250-500m	500-2000m
31 >	5.1 >	<u>Superficial aquifer ></u>	Identified (within 500m)				
32 >	5.2 >	<u>Bedrock aquifer ></u>	Identified (within 500m)				
33 >	5.3 >	<u>Groundwater vulnerability ></u>	Identified (within 50m)				
34	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
34	5.5	Groundwater vulnerability- local information	None (within 0m)				
35 >	5.6 >	<u>Groundwater abstractions ></u>	0	0	0	0	1
36 >	5.7 >	<u>Surface water abstractions ></u>	0	0	0	0	1
36	5.8	Potable abstractions	0	0	0	0	0
37	5.9	Source Protection Zones	0	0	0	0	-
37	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<u>Hydrology ></u>	On site	0-50m	50-250m	250-500m	500-2000m
38 >	6.1 >	<u>Water Network (OS MasterMap) ></u>	0	4	3	-	-



39 >	6.2 >	Surface water features >	0	2	2	-	-
39 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
40 >	6.4 >	WFD Surface water bodies >	0	0	1	-	-
40	6.5	WFD Groundwater bodies	0	-	-	-	-

Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
41	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
41	7.2	Historical Flood Events	0	0	0	-	-
41	7.3	Flood Defences	0	0	0	-	-
42	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
42	7.5	Flood Storage Areas	0	0	0	-	-
43	7.6	Flood Zone 2	None (within 50m)				
43	7.7	Flood Zone 3	None (within 50m)				

Page	Section	Surface water flooding >					
44 >	8.1 >	Surface water flooding >	1 in 250 year, Greater than 1.0m (within 50m)				

Page	Section	Groundwater flooding >					
46 >	9.1 >	Groundwater flooding >	Negligible (within 50m)				

Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
47	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
47	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
47	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
47	10.4	Special Protection Areas (SPA)	0	0	0	0	0
48	10.5	National Nature Reserves (NNR)	0	0	0	0	0
48	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
48	10.7	Designated Ancient Woodland	0	0	0	0	0
48	10.8	Biosphere Reserves	0	0	0	0	0
49	10.9	Forest Parks	0	0	0	0	0
49	10.10	Marine Conservation Zones	0	0	0	0	0
49	10.11	Green Belt	0	0	0	0	0
49	10.12	Proposed Ramsar sites	0	0	0	0	0

49	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
50	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
50	10.15	Nitrate Sensitive Areas	0	0	0	0	0
50	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
51 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
52	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
53	11.1	World Heritage Sites	0	0	0	-	-
54	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
54	11.3	National Parks	0	0	0	-	-
54 >	11.4 >	Listed Buildings >	0	0	1	-	-
55 >	11.5 >	Conservation Areas >	1	0	0	-	-
55	11.6	Scheduled Ancient Monuments	0	0	0	-	-
55	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
56 >	12.1 >	Agricultural Land Classification >	Grade 1 (within 250m)				
57 >	12.2 >	Open Access Land >	0	0	1	-	-
57 >	12.3 >	Tree Felling Licences >	0	0	1	-	-
58	12.4	Environmental Stewardship Schemes	0	0	0	-	-
58	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
59 >	13.1 >	Priority Habitat Inventory >	0	1	12	-	-
60 >	13.2 >	Habitat Networks >	1	0	7	-	-
61	13.3	Open Mosaic Habitat	0	0	0	-	-
61	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
62 >	14.1 >	10k Availability >	Identified (within 500m)				
63	14.2	Artificial and made ground (10k)	0	0	0	0	-
64	14.3	Superficial geology (10k)	0	0	0	0	-

64	14.4	Landslip (10k)	0	0	0	0	-
65	14.5	Bedrock geology (10k)	0	0	0	0	-
65	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
66 >	15.1 >	50k Availability >	Identified (within 500m)				
67	15.2	Artificial and made ground (50k)	0	0	0	0	-
67	15.3	Artificial ground permeability (50k)	0	0	-	-	-
68 >	15.4 >	Superficial geology (50k) >	1	0	0	0	-
69 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
69	15.6	Landslip (50k)	0	0	0	0	-
69	15.7	Landslip permeability (50k)	None (within 50m)				
70 >	15.8 >	Bedrock geology (50k) >	1	0	0	0	-
71 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
71	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
72 >	16.1 >	BGS Boreholes >	0	0	2	-	-
Page	Section	Natural ground subsidence >					
73 >	17.1 >	Shrink swell clays >	Low (within 50m)				
74 >	17.2 >	Running sands >	Moderate (within 50m)				
75 >	17.3 >	Compressible deposits >	Moderate (within 50m)				
76 >	17.4 >	Collapsible deposits >	Negligible (within 50m)				
77 >	17.5 >	Landslides >	Very low (within 50m)				
78 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
80	18.1	BritPits	0	0	0	0	-
81 >	18.2 >	Surface ground workings >	0	0	5	-	-
81 >	18.3 >	Underground workings >	0	0	0	0	2
81	18.4	Underground mining extents	0	0	0	0	-
82	18.5	Historical Mineral Planning Areas	0	0	0	0	-



82	18.6	Non-coal mining	0	0	0	0	0
82	18.7	JPB mining areas	None (within 0m)				
82	18.8	The Coal Authority non-coal mining	0	0	0	0	-
83	18.9	Researched mining	0	0	0	0	-
83	18.10	Mining record office plans	0	0	0	0	-
83	18.11	BGS mine plans	0	0	0	0	-
83	18.12	Coal mining	None (within 0m)				
83	18.13	Brine areas	None (within 0m)				
84	18.14	Gypsum areas	None (within 0m)				
84	18.15	Tin mining	None (within 0m)				
84	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
85	19.1	Natural cavities	0	0	0	0	-
85	19.2	Mining cavities	0	0	0	0	0
85	19.3	Reported recent incidents	0	0	0	0	-
85	19.4	Historical incidents	0	0	0	0	-
86	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
87 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
89 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	0	-	-	-
89	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
89	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
90	22.1	Underground railways (London)	0	0	0	-	-
90	22.2	Underground railways (Non-London)	0	0	0	-	-
90	22.3	Railway tunnels	0	0	0	-	-
90	22.4	Historical railway and tunnel features	0	0	0	-	-
90	22.5	Royal Mail tunnels	0	0	0	-	-



91	22.6	Historical railways	0	0	0	-	-
91	22.7	Railways	0	0	0	-	-
91	22.8	Crossrail 1	0	0	0	0	-
91	22.9	Crossrail 2	0	0	0	0	-
91	22.10	HS2	0	0	0	0	-



Recent aerial photograph



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Capture Date: 02/05/2021

Site Area: 0.04ha



Recent site history - 2019 aerial photograph



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Capture Date: 24/05/2019

Site Area: 0.04ha



Recent site history - 2013 aerial photograph



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Capture Date: 19/07/2013

Site Area: 0.04ha



Recent site history - 2007 aerial photograph



Capture Date: 19/04/2007

Site Area: 0.04ha



Recent site history - 1999 aerial photograph



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Capture Date: 25/06/1999

Site Area: 0.04ha



[illegible]

1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical garages

1.1 Historical industrial land uses

Records within 500m

8

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
A	83m NW	Unspecified Heap	1950	2017684



ID	Location	Land use	Dates present	Group ID
A	83m NW	Unspecified Heap	1900	2036944
A	86m NW	Unspecified Heap	1887 - 1900	2013283
2	109m SW	Telephone Exchange	1992	2009008
A	113m NW	Unspecified Heap	1950	2032779
B	266m SW	Unspecified Tank	1900	2030474
B	266m SW	Unspecified Tank	1950	2038200
3	374m S	Unspecified Pit	1887	2002438

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

0

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or



succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m

1

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
1	21m NW	Garage	1974 - 1985	69007

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

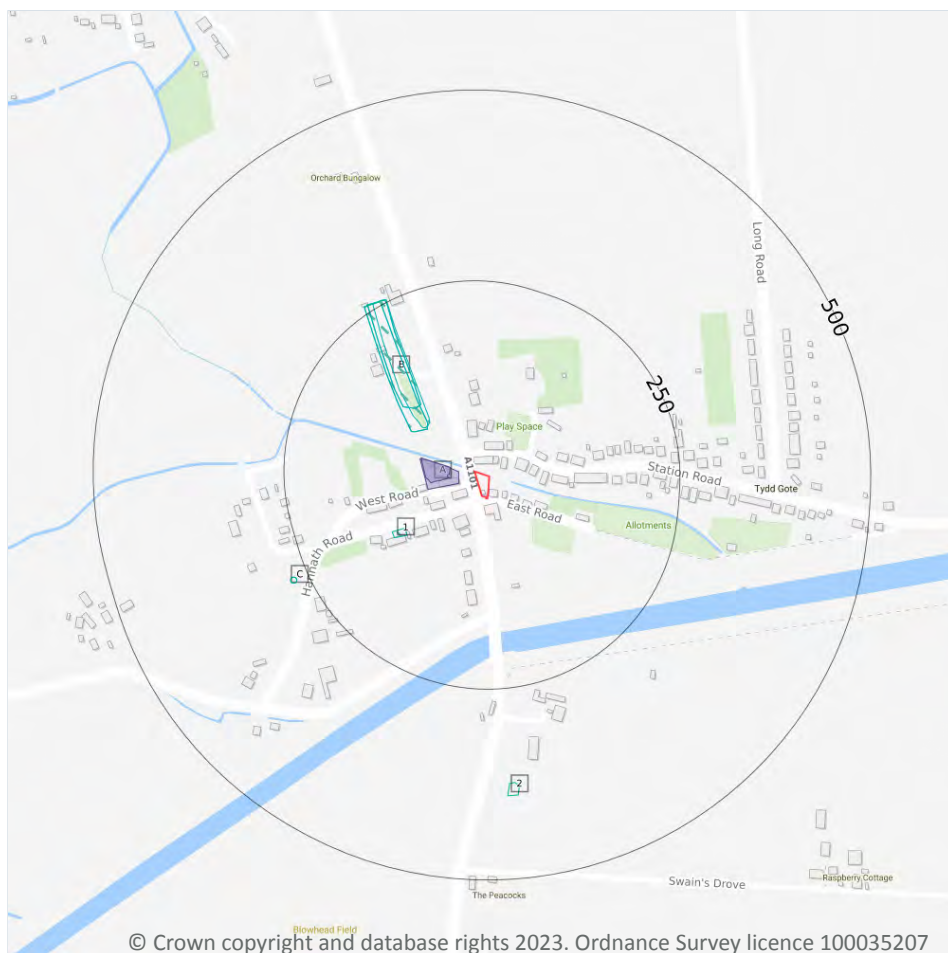
0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.



2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical garages

2.1 Historical industrial land uses

Records within 500m

9

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 18](#) >

ID	Location	Land Use	Date	Group ID
B	83m NW	Unspecified Heap	1950	2017684
B	83m NW	Unspecified Heap	1900	2036944
B	86m NW	Unspecified Heap	1887	2013283



ID	Location	Land Use	Date	Group ID
1	109m SW	Telephone Exchange	1992	2009008
B	113m NW	Unspecified Heap	1950	2032779
B	113m NW	Unspecified Heap	1900	2013283
C	266m SW	Unspecified Tank	1950	2038200
C	266m SW	Unspecified Tank	1900	2030474
2	374m S	Unspecified Pit	1887	2002438

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	0
----------------------------	----------

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	0
----------------------------	----------

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0
----------------------------	----------

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.



2.5 Historical garages

Records within 500m

2

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

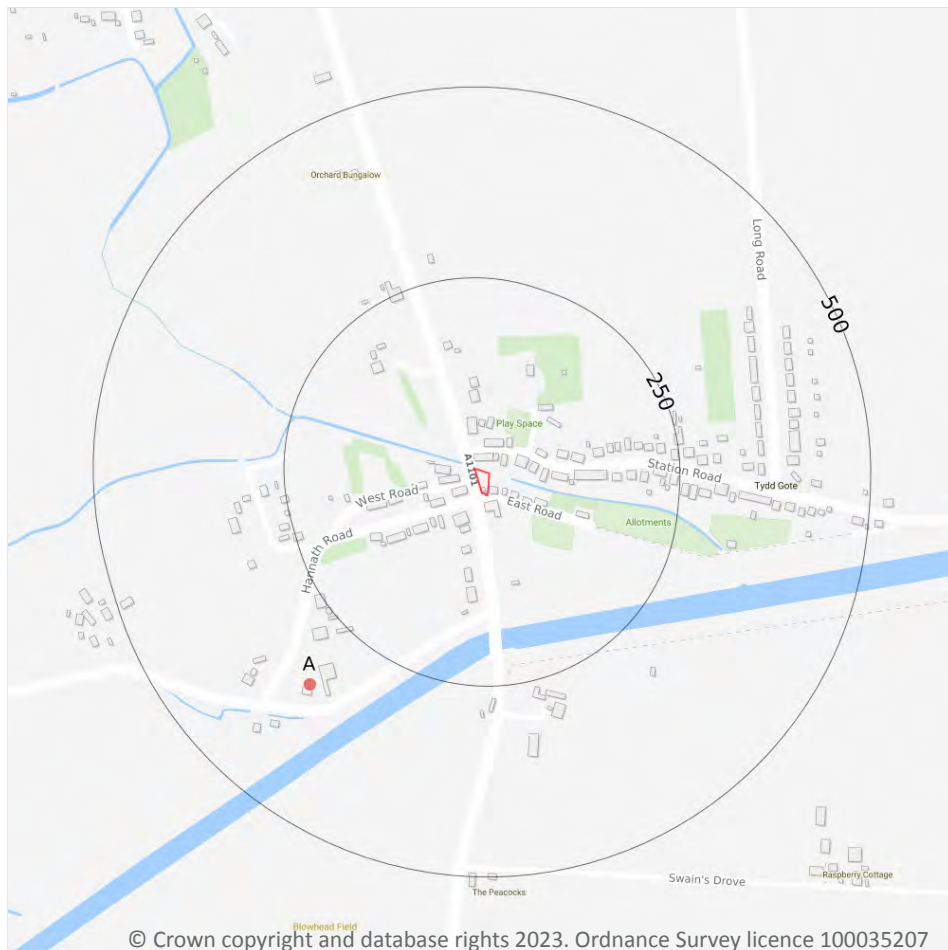
Features are displayed on the Past land use - un-grouped map on [page 18](#) >

ID	Location	Land Use	Date	Group ID
A	21m NW	Garage	1985	69007
A	33m NW	Garage	1974	69007

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Waste exemptions

3.1 Active or recent landfill

Records within 500m

0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m

0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

Records within 500m

0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m

0

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m

0

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m

0

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m

2

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on [page 21](#) >

ID	Location	Site	Reference	Category	Sub-Category	Description
A	338m SW	BRAMLEY LODGE, HANNATH ROAD, TYDD GOTE, WISBECH, PE13 5NB	WEX141354	Disposing of waste exemption	Not on a farm	Burning waste in the open



ID	Location	Site	Reference	Category	Sub-Category	Description
A	338m SW	BRAMLEY LODGE, HANNATH ROAD, TYDD GOTE, WISBECH, PE13 5NB	WEX280107	Disposing of waste exemption	Not on a farm	Burning waste in the open

This data is sourced from the Environment Agency and Natural Resources Wales.



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

4

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 24](#) >

ID	Location	Company	Address	Activity	Category
3	96m N	R J Flack & Son	Shrublands, Main Road, Tydd Gote, Spalding, Lincolnshire, PE13 5QG	Vehicle Repair, Testing and Servicing	Repair and Servicing
4	107m S	Telephone Exchange	Cambridgeshire, PE13	Telecommunications Features	Infrastructure and Facilities
5	108m SW	Telephone Exchange	Cambridgeshire, PE13	Telecommunications Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
6	135m E	Hill's Sluice Outfall	Lincolnshire, PE13	Waste Storage, Processing and Disposal	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0
----------------------------	----------

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0
----------------------------	----------

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0
----------------------------	----------

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0
----------------------------	----------

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0
----------------------------	----------

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.



4.7 Regulated explosive sites

Records within 500m

0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m

0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m

0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m

1

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on [page 24 >](#)

ID	Location	Address	Details	
1	46m W	Cars, Coaches And Commercial, Tydd Garage, Main Road, Tydd Gote, PE13 5QB	Process: Waste Oil Burner 0.4 MW Status: New Legislation Applies Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0
----------------------------	----------

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m	7
----------------------------	----------

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on [page 24 >](#)

ID	Location	Address	Details	
2	54m N	HOUSE AT TYDD GOTE, WISBECH, CAMBS	Effluent Type: UNSPECIFIED Permit Number: PR5LF3837 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 07/06/1982 Effective Date: 07/06/1982 Revocation Date: 01/10/1996
A	82m E	PLOT 1, STATION ROAD, TYDD GOTE, WISBECH, PE13 5QA	Effluent Type: UNSPECIFIED Permit Number: PR5LF5543 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 03/11/1988 Effective Date: 03/11/1988 Revocation Date: 01/10/1996
A	113m E	PLOT 2, STATION ROAD, TYDD GATE, SPALDING	Effluent Type: UNSPECIFIED Permit Number: PR5LF5429 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 16/10/1987 Effective Date: 16/10/1987 Revocation Date: 01/10/1996
8	250m SW	GREENACRES, HANNARTH ROAD, TYDD GOTE, WISBECH, CAMBS, PE13 5NA	Effluent Type: UNSPECIFIED Permit Number: PR5LF5523 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 26/04/1988 Effective Date: 26/04/1988 Revocation Date: 22/09/1997



ID	Location	Address	Details	
9	339m NE	LONG ROAD BUNGALOWS, TYDD GOTE, WISBECH, CAMBS, PE13 5RB	Effluent Type: UNSPECIFIED Permit Number: PR5LF3001 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 10/12/1965 Effective Date: 10/12/1965 Revocation Date: 31/07/1998
B	403m E	94 STATION ROAD, TYDD COTE, WISBECH, PE13 5RD	Effluent Type: UNSPECIFIED Permit Number: PR5LF5384 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 07/08/1987 Effective Date: 07/08/1987 Revocation Date: 01/10/1996
B	403m E	94 STATION ROAD, TYDD COTE, WISBECH, PE13 5RD	Effluent Type: UNSPECIFIED Permit Number: PR5LF3803 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 14/10/1981 Effective Date: 14/10/1981 Revocation Date: 01/10/1996

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0
----------------------------	----------

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m	0
----------------------------	----------

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m	0
----------------------------	----------

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.



4.17 List 2 Dangerous Substances

Records within 500m

0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m

1

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on [page 24 >](#)

ID	Location	Details	
7	168m E	Incident Date: 01/11/2003 Incident Identification: 199371 Pollutant: Specific Waste Materials Pollutant Description: Other Specific Waste Material	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m

0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m

0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.



4.21 Pollution inventory radioactive waste

Records within 500m

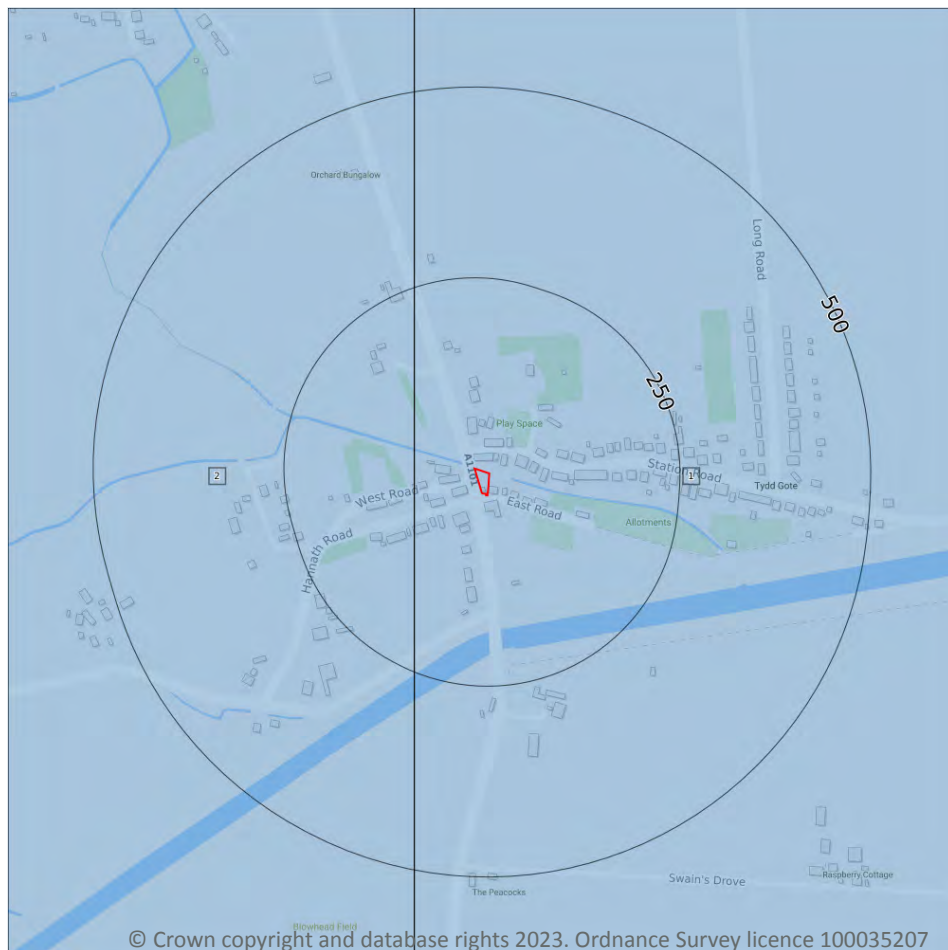
0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.



5 Hydrogeology - Superficial aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive
 - Unknown

5.1 Superficial aquifer

Records within 500m

2

Aquifer status of groundwater held within superficial geology.

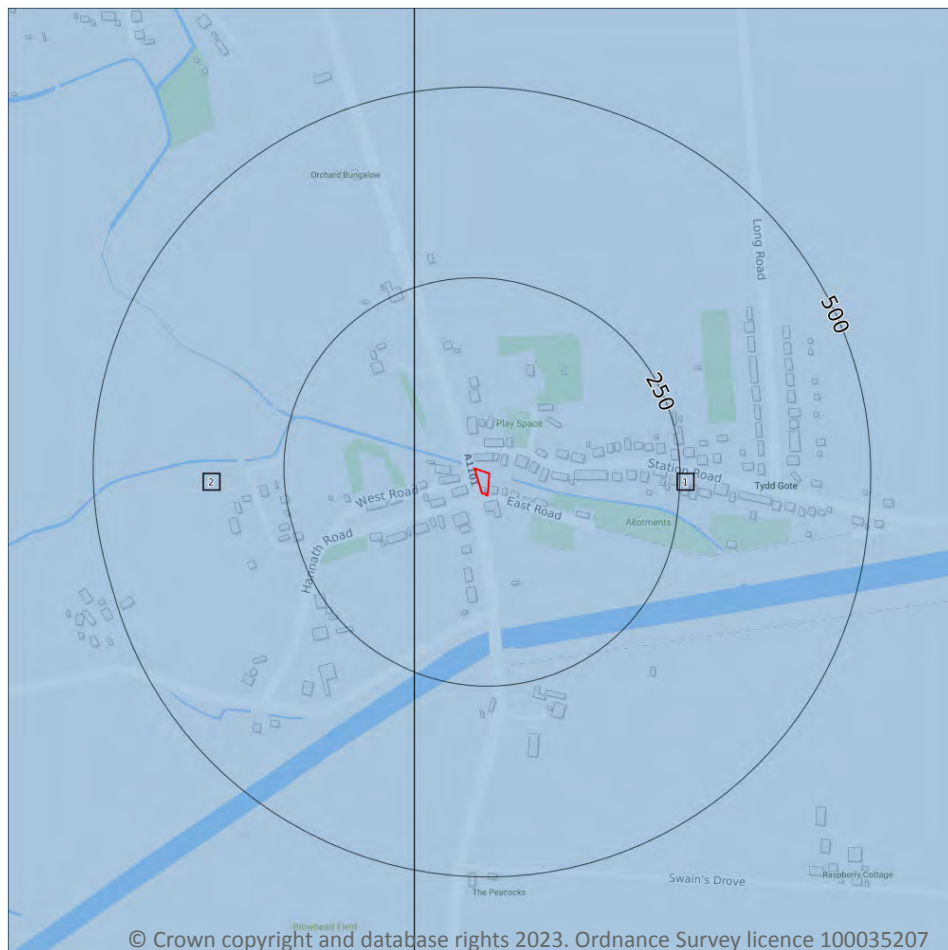
Features are displayed on the Hydrogeology map on [page 31](#) >

ID	Location	Designation	Description
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
2	79m W	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive

5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

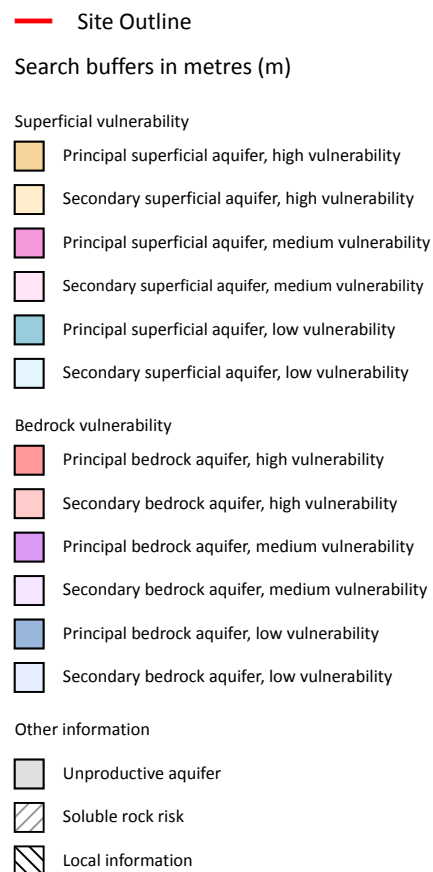
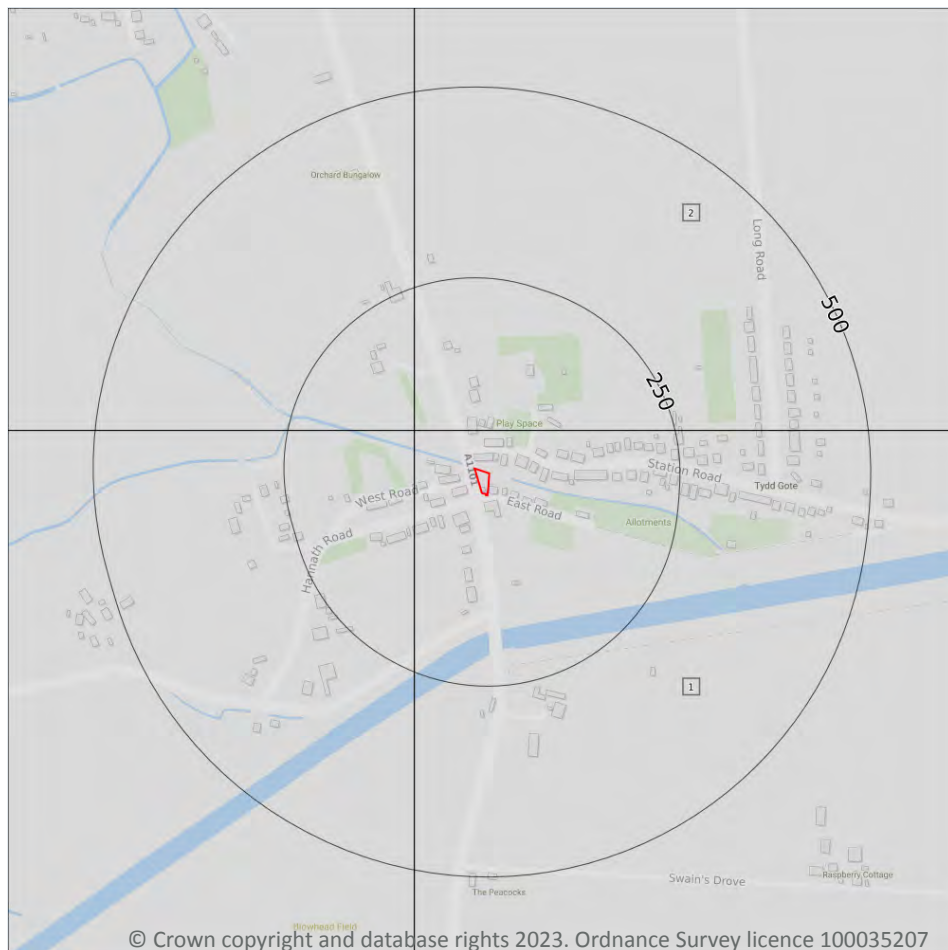
Features are displayed on the Bedrock aquifer map on [page 32 >](#)

ID	Location	Designation	Description
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
2	79m W	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

2

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on [page 33](#) >

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, Unproductive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: Unproductive Aquifer type: Unproductive Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
2	50m N	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, Unproductive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: Unproductive Aquifer type: Unproductive Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site

0

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

5.5 Groundwater vulnerability- local information

Records on site

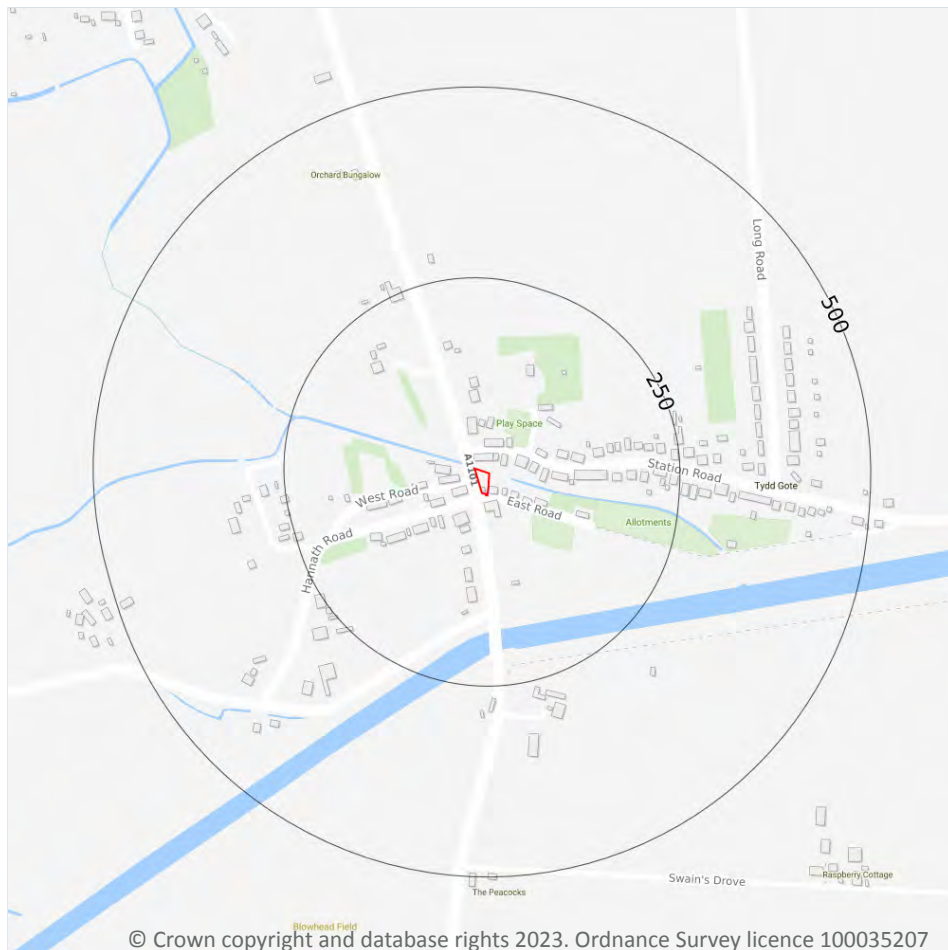
0

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk ↗.

This data is sourced from the British Geological Survey and the Environment Agency.



Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)
- Source Protection Zone 1
Inner catchment
- Source Protection Zone 2
Outer catchment
- Source Protection Zone 3
Total catchment
- Source Protection Zone 4
Zone of Special Interest
- Source Protection Zone 1c
Inner catchment - confined aquifer
- Source Protection Zone 2c
Outer catchment - confined aquifer
- Source Protection Zone 3c
Total catchment - confined aquifer
- Drinking water abstraction licences
Polygon features
- Drinking water abstraction licences
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m

1

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 35 >](#)

ID	Location	Details	
-	1621m S	Status: Active Licence No: AN/032/0011/040 Details: Trickle Irrigation - Storage Direct Source: GROUND WATER SOURCE OF SUPPLY Point: 40 WELLPOINTS AT SILVERWOOD FARM Data Type: Point Name: J. M. Newling & Son Limited Easting: 545713 Northing: 316415	Annual Volume (m ³): 31536 Max Daily Volume (m ³): 86 Original Application No: NPS/NA/000231 Original Start Date: 30/09/2022 Expiry Date: 31/03/2029 Issue No: 1 Version Start Date: 30/09/2022 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m

1

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 35 >](#)

ID	Location	Details	
-	1951m SW	Status: Historical Licence No: 5/32/11/*S/0151 Details: Make-Up Or Top Up Water Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: NORTH LEVEL MAIN DRAIN AT TYDD ST GILES Data Type: Point Name: TYDD ST GILES GOLF & LEISURE COMPLEX LTD Easting: 543649 Northing: 316600	Annual Volume (m ³): 30000 Max Daily Volume (m ³): 2000 Original Application No: - Original Start Date: 20/09/2001 Expiry Date: 14/09/2021 Issue No: 2 Version Start Date: 01/04/2016 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m

0

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.



5.9 Source Protection Zones

Records within 500m

0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.10 Source Protection Zones (confined aquifer)

Records within 500m

0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ... WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m

7

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on [page 38 >](#)

ID	Location	Type of water feature	Ground level	Permanence	Name
A	1m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Oldfield Cut



ID	Location	Type of water feature	Ground level	Permanence	Name
A	2m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Oldfield Cut
B	2m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Oldfield Cut
C	29m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Oldfield Cut
5	189m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	North Level Main Drain
D	246m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Angle Cut
D	246m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Oldfield Cut

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

4

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on [page 38](#) >

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on [page 38](#) >



ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	North Level Main Drain	GB205032050395	Nene Lower	Nene

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	1
---------------------------	----------

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on [page 38 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
6	191m S	River	North Level Main Drain	GB205032050395 ↗	Moderate	Fail	Moderate	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site	0
------------------------	----------

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

This data is sourced from the Environment Agency and Natural Resources Wales.

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m**0**

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m**0**

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m**0**

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.



7.4 Areas Benefiting from Flood Defences

Records within 250m

0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.5 Flood Storage Areas

Records within 250m

0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

Records within 50m

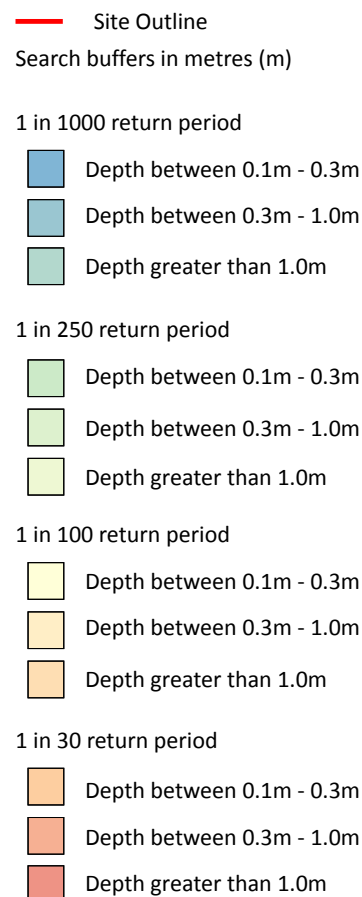
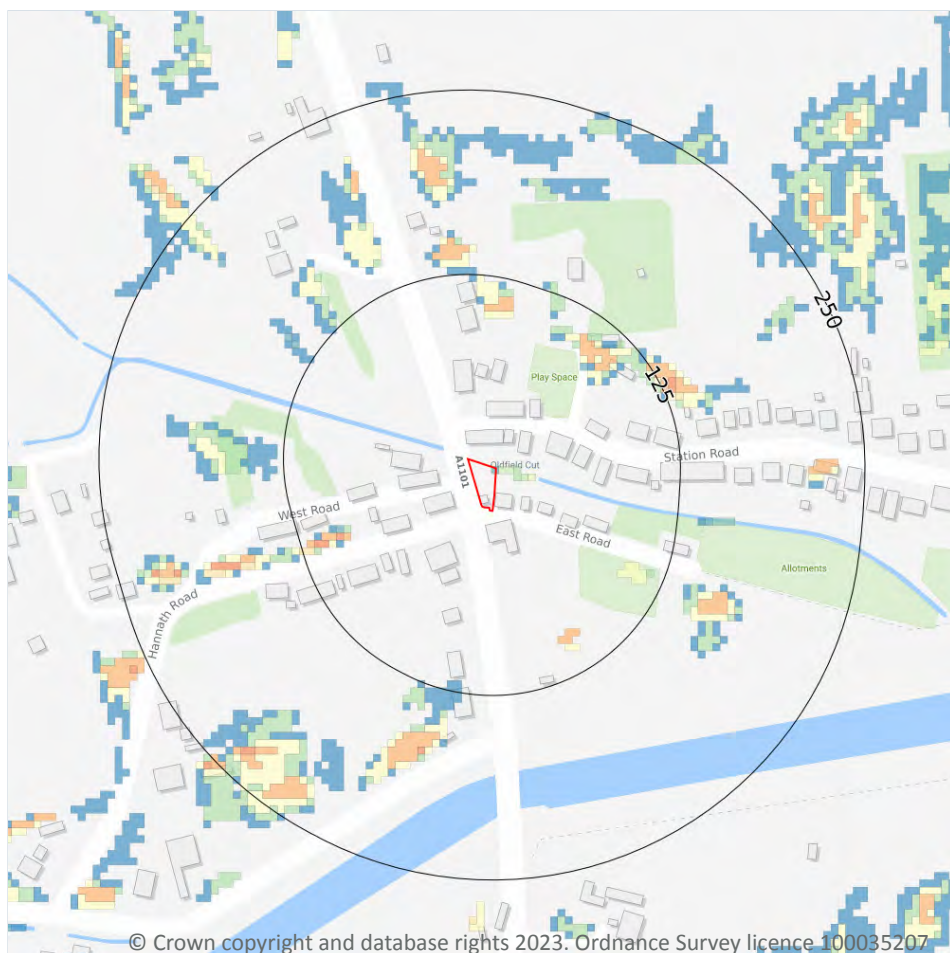
0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.



8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

1 in 1000 year, 0.3m - 1.0m

Highest risk within 50m

1 in 250 year, Greater than 1.0m

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on [page 44 >](#)

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

Highest risk on site

Negligible

Highest risk within 50m

Negligible

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on [page 46 >](#)

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m**0**

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m**0**

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m**0**

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m**0**

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.



10.5 National Nature Reserves (NNR)

Records within 2000m

0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m

0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m

0

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m

0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.



10.9 Forest Parks

Records within 2000m

0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m

0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m

0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m

0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.



10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

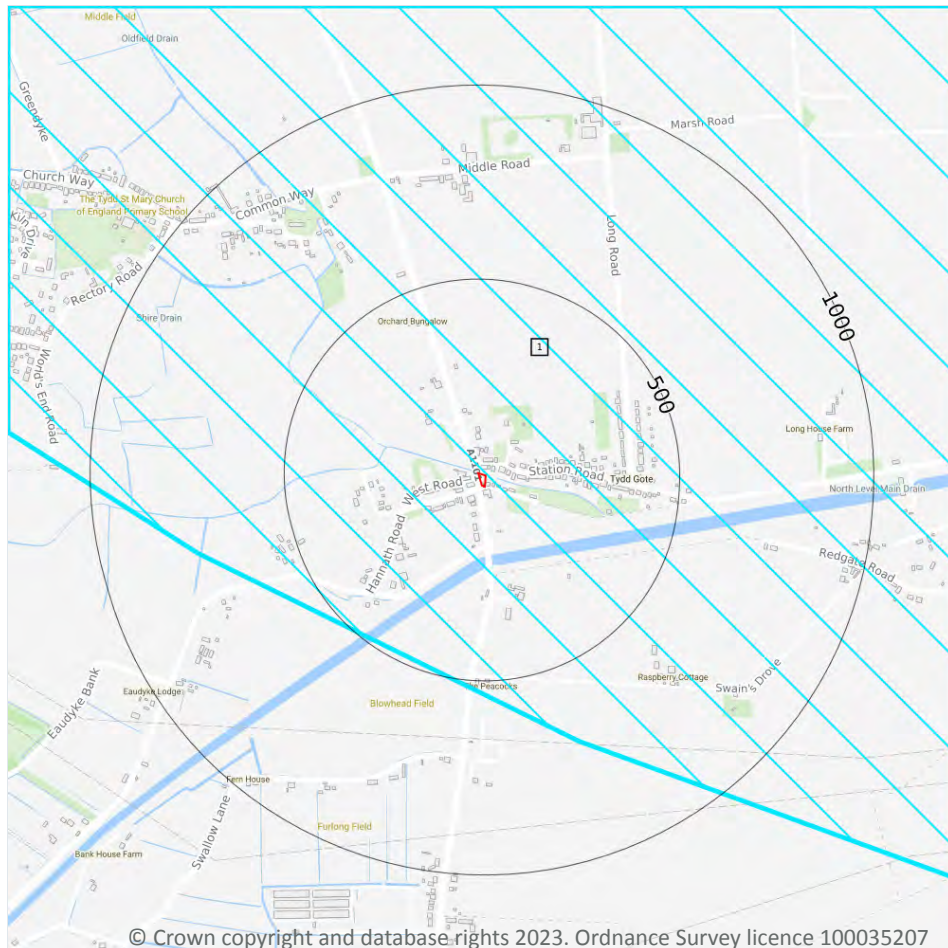
Records within 2000m

0

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

This data is sourced from Natural England and Natural Resources Wales.

SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site

1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on [page 51](#) >

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals. Discharges - Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream

This data is sourced from Natural England.



10.18 SSSI Units

Records within 2000m

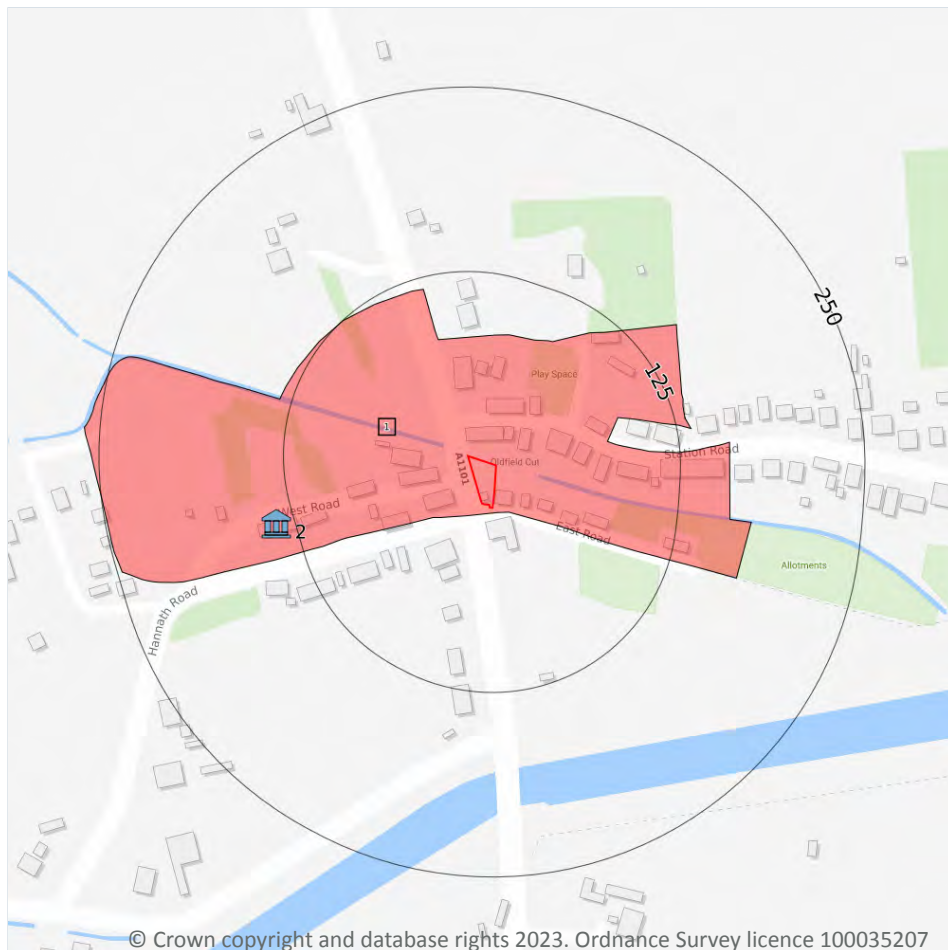
0

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

This data is sourced from Natural England and Natural Resources Wales.



11 Visual and cultural designations



- Site Outline
- Search buffers in metres (m)
- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m**0**

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m**0**

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m**1**

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

Features are displayed on the Visual and cultural designations map on [page 53 >](#)

ID	Location	Name	Grade	Reference Number	Listed date
2	138m W	Greyfriars	II	1359250	30/06/1966

This data is sourced from Historic England, Cadw and Historic Environment Scotland.



11.5 Conservation Areas

Records within 250m

1

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

Features are displayed on the Visual and cultural designations map on [page 53](#) >

ID	Location	Name	District	Date of designation
1	On site	Tydd Gote	South Holland	12/08/1975

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m

0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m

0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m

2

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on [page 56](#) >

ID	Location	Classification	Description
1	On site	Grade 1	Excellent quality agricultural land. Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.



ID	Location	Classification	Description
2	3m S	Grade 1	Excellent quality agricultural land. Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m

1

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

Features are displayed on the Agricultural designations map on [page 56 >](#)

ID	Location	Name	Classification	Other relevant legislation
3	58m NE	Green Lane (Holland)	Section 4 Conclusive Registered Common Land	-

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m

1

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

Features are displayed on the Agricultural designations map on [page 56 >](#)

ID	Location	Description	Reference	Application date
4	239m W	Clear Fell (Unconditional)	014/96/04-05	21/01/2005

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

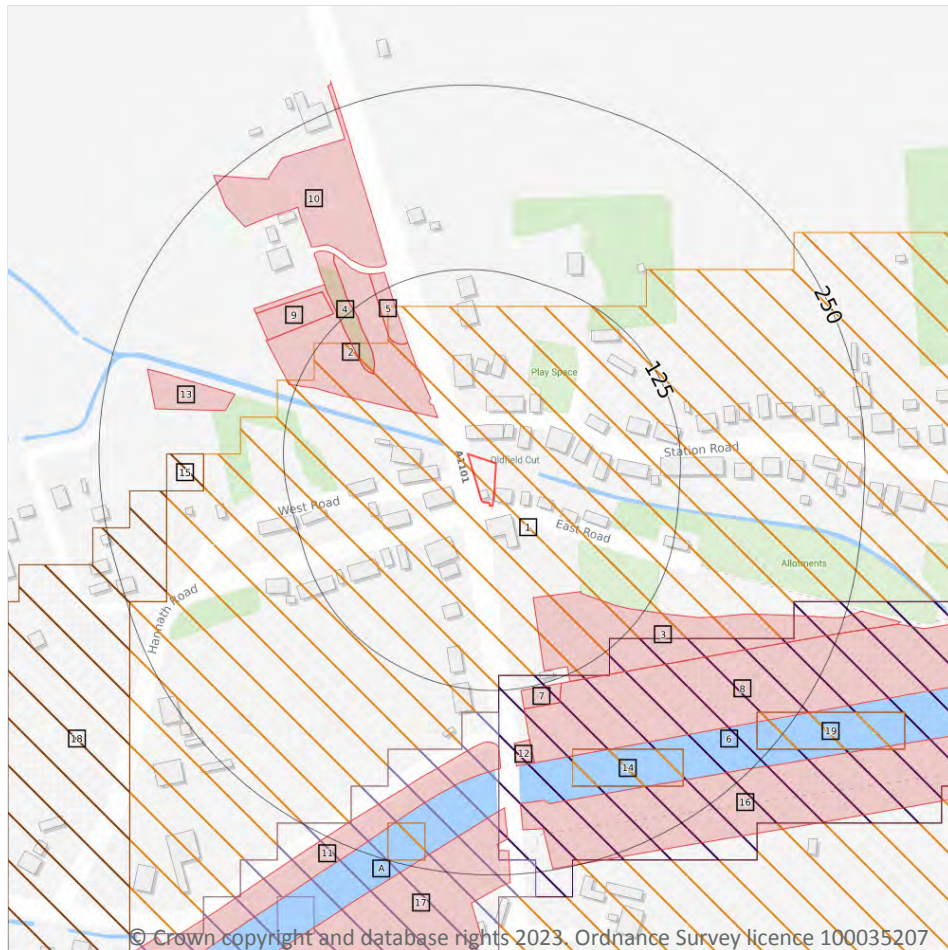
0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.



13 Habitat designations



- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m

13

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on [page 59 >](#)

ID	Location	Main Habitat	Other habitats
2	32m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	68m S	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
4	84m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
5	86m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
7	126m S	Lowland meadows	Main habitat: CFPGM (INV > 50%); LMEAD (INV > 50%)
8	129m S	Lowland meadows	Main habitat: CFPGM (INV > 50%); LMEAD (INV > 50%)
9	132m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
10	140m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
11	160m S	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
12	161m S	Lowland meadows	Main habitat: CFPGM (INV > 50%); LMEAD (INV > 50%)
13	163m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
16	202m S	Lowland meadows	Main habitat: CFPGM (INV > 50%); LMEAD (INV > 50%)
17	205m S	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

8

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

Features are displayed on the Habitat designations map on [page 59 >](#)

ID	Location	Type	Habitat
1	On site	Network Enhancement Zone 1	Not specified
6	115m S	Primary Habitat	Lowland meadows
A	140m S	Restorable Habitat	Not specified
14	174m S	Network Enhancement Zone 1	Not specified
15	179m W	Network Enhancement Zone 2	Not specified
18	206m W	Network Enhancement Zone 2	Not specified
A	220m S	Network Enhancement Zone 1	Not specified
19	227m SE	Network Enhancement Zone 1	Not specified

This data is sourced from Natural England.



13.3 Open Mosaic Habitat

Records within 250m**0**

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

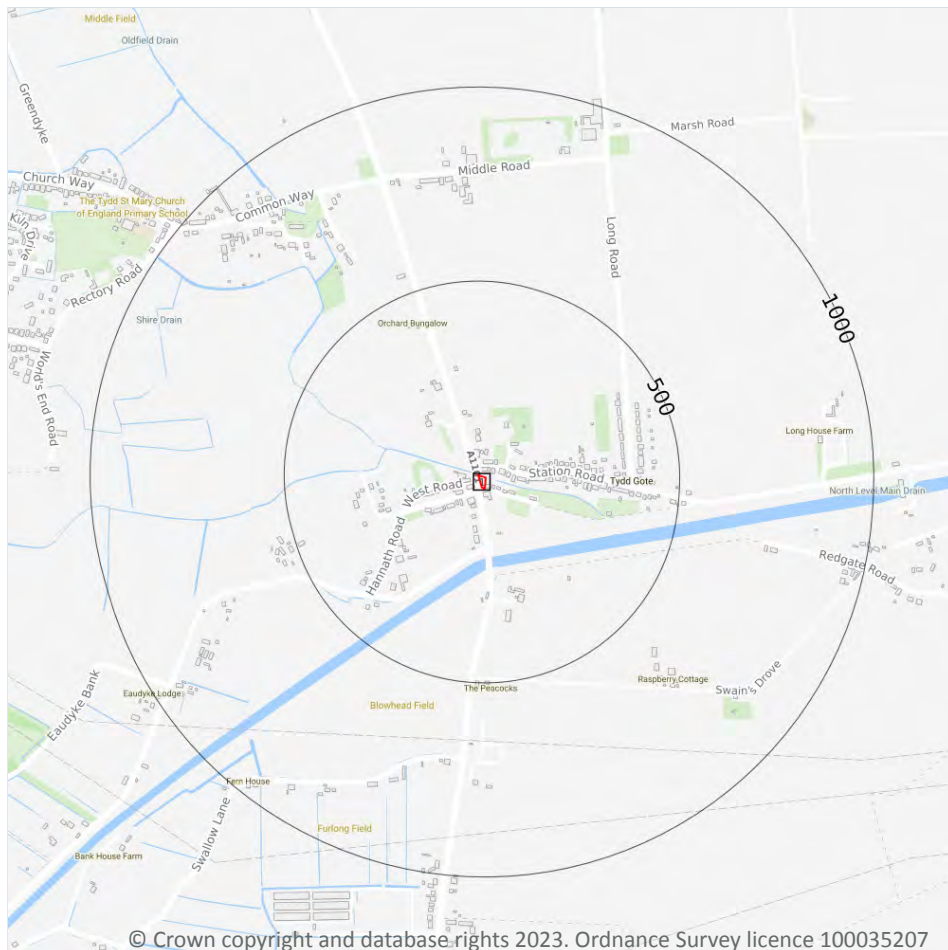
Records within 250m**0**

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



- Site Outline**
- Search buffers in metres (m)
- Full coverage
 - Partial coverage
 - No coverage

14.1 10k Availability

Records within 500m

1

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on [page 62](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	No coverage	No coverage	No coverage	NoCov

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Artificial and made ground

14.2 Artificial and made ground (10k)

Records within 500m

0

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m

0

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m

0

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

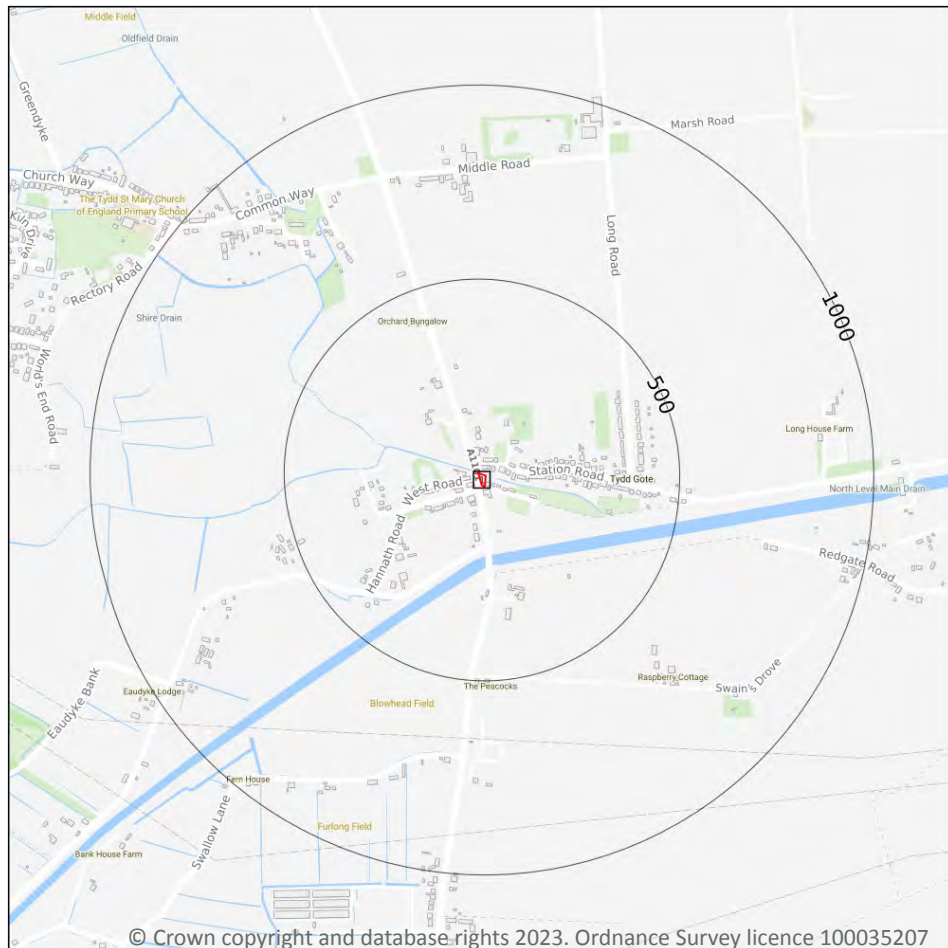
0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m

1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on [page 66](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW145_kings_lynn_v4

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Artificial and made ground

15.2 Artificial and made ground (50k)

Records within 500m

0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m

1

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on [page 68](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT

This data is sourced from the British Geological Survey.



15.5 Superficial permeability (50k)

Records within 50m**1**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Intergranular	Low	Very Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m**0**

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

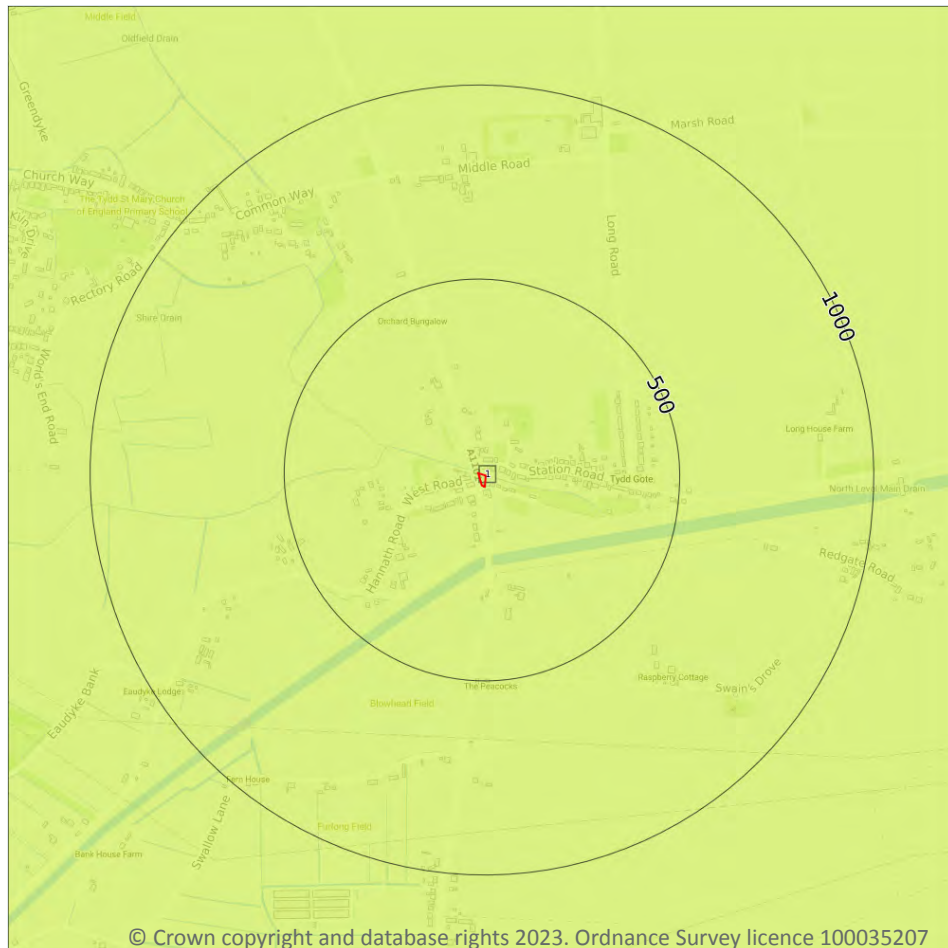
Records within 50m**0**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

1

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 70 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	AMC-MDST	AMPTHILL CLAY FORMATION - MUDSTONE	OXFORDIAN

This data is sourced from the British Geological Survey.



15.9 Bedrock permeability (50k)

Records within 50m

1

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Low	Very Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

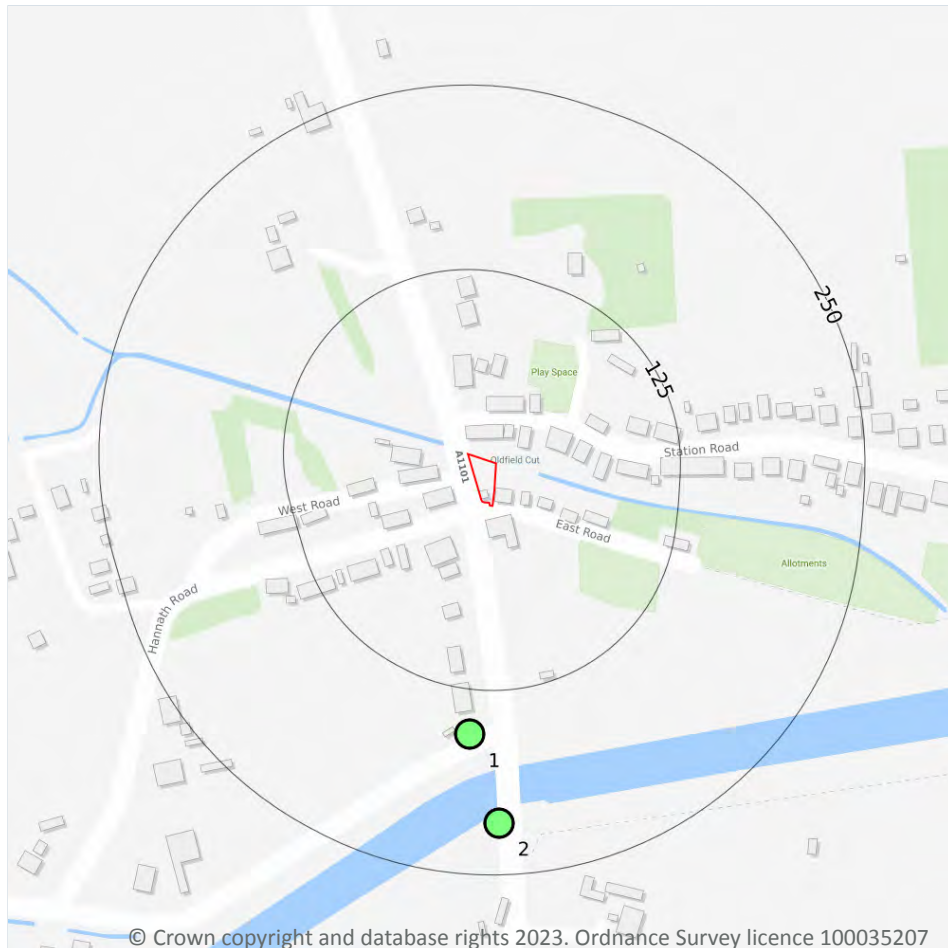
0

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.



16 Boreholes



Site Outline
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m

2

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

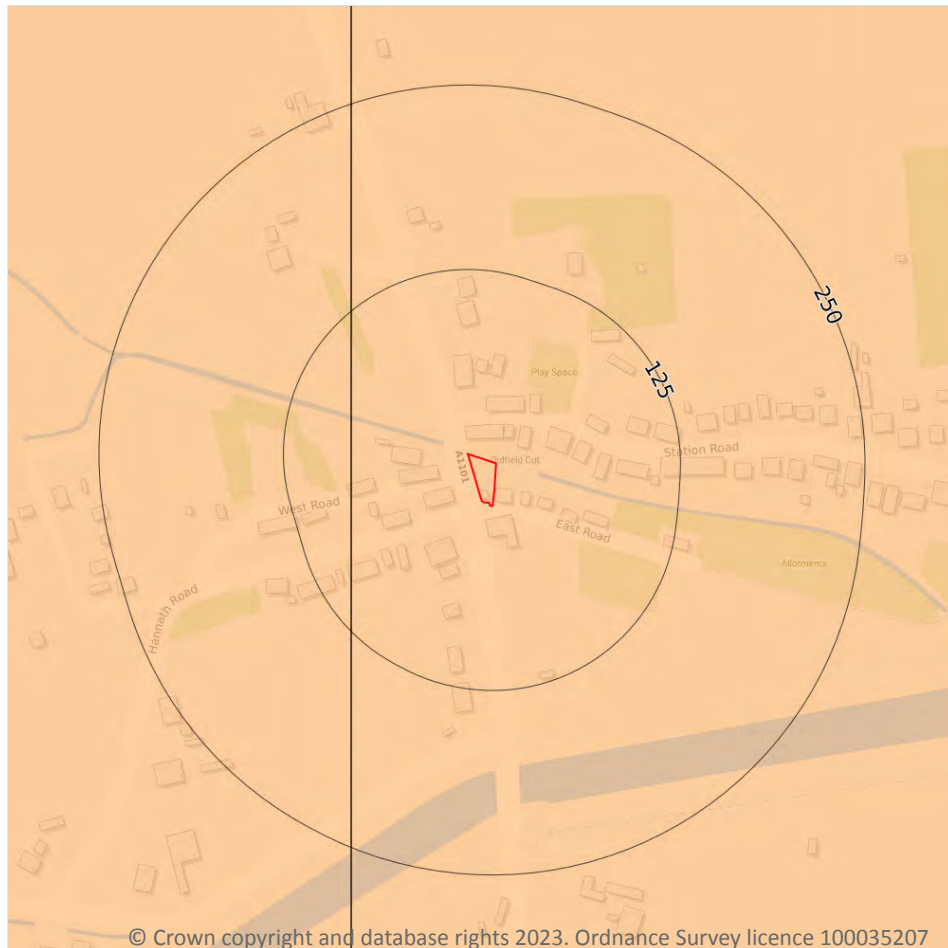
Features are displayed on the Boreholes map on [page 72 >](#)

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	156m S	545080 317760	TYDD GATE BRIDGE 2	25.91	N	505739 ↗
2	215m S	545100 317700	TYDD GATE BRIDGE 1	21.34	N	505738 ↗

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.1 Shrink swell clays

Records within 50m

1

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

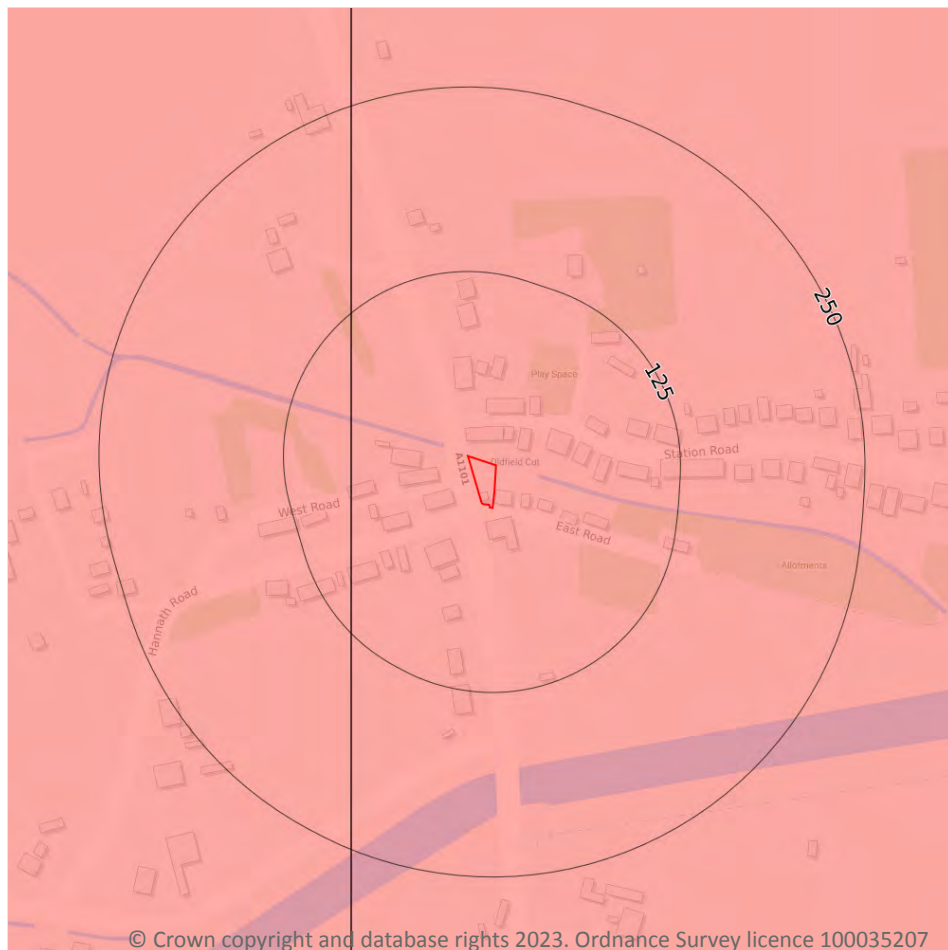
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 73 >](#)

Location	Hazard rating	Details
On site	Low	Ground conditions predominantly medium plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.2 Running sands

Records within 50m

1

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

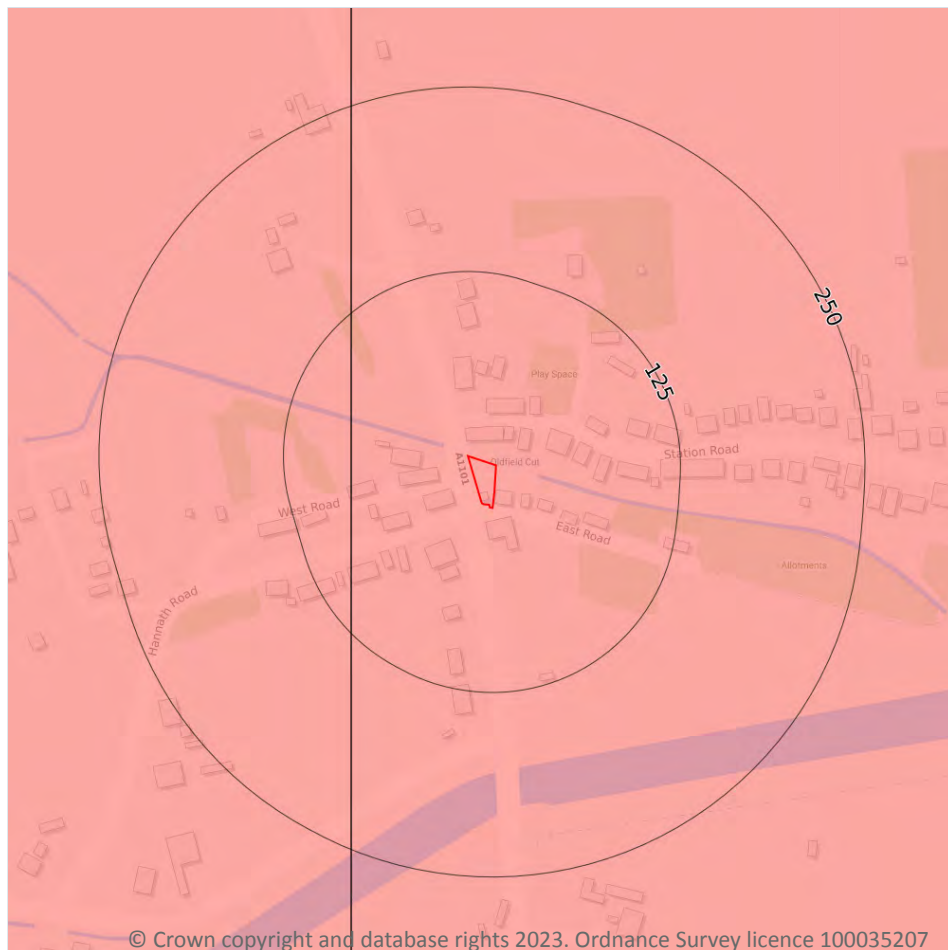
Features are displayed on the Natural ground subsidence - Running sands map on [page 74 >](#)

Location	Hazard rating	Details
On site	Moderate	Running sand conditions are probably present. Constraints may apply to land uses involving excavation or the addition or removal of water.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.3 Compressible deposits

Records within 50m

1

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 75 >](#)

Location	Hazard rating	Details
On site	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



— Site Outline
Search buffers in metres (m)

- ☐ No data
- ☐ Negligible
- ☐ Very low
- ☐ Low
- ☐ Moderate
- ☐ High

17.4 Collapsible deposits

Records within 50m

1

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

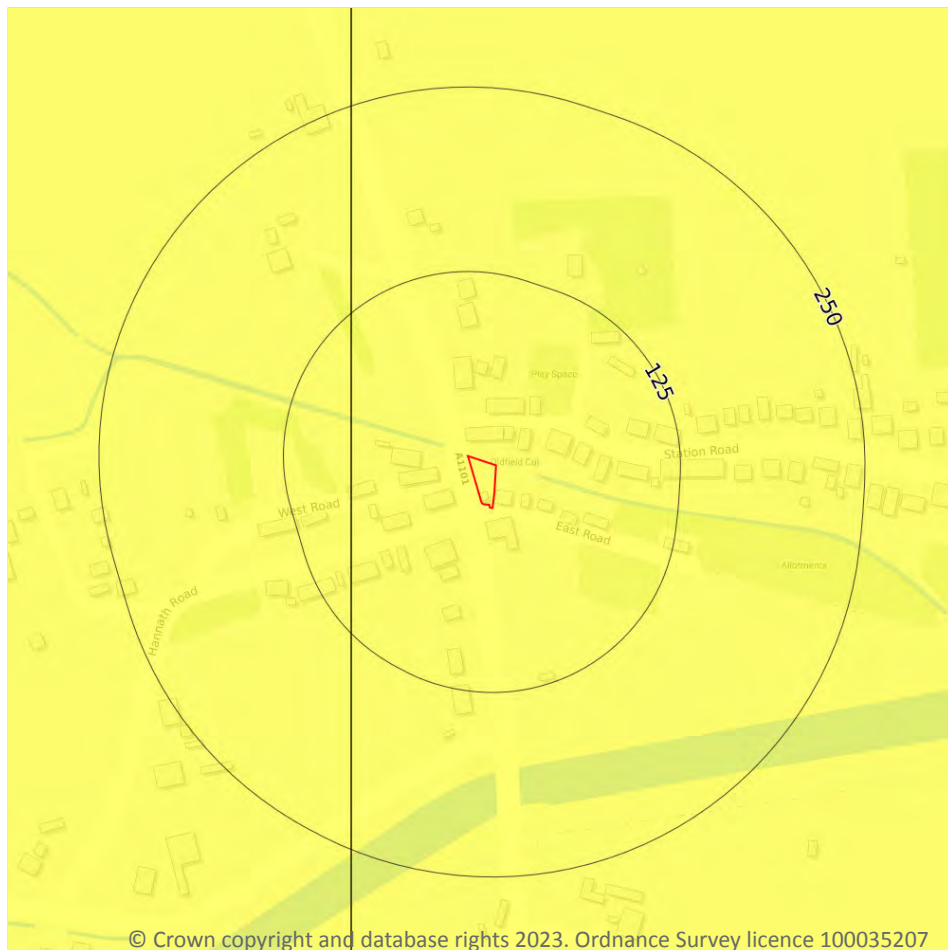
Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 76 >](#)

Location	Hazard rating	Details
On site	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.5 Landslides

Records within 50m

1

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on [page 77](#) >

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



- Site Outline**
- Search buffers in metres (m)**
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.6 Ground dissolution of soluble rocks

Records within 50m

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on [page 78](#)

Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



This data is sourced from the British Geological Survey.



18 Mining and ground workings



- Site Outline
- Search buffers in metres (m)
- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining
- Non Coal Mining
 - Sporadic underground mining of restricted extent possible
 - Localised small scale underground mining possible
 - Small scale mining possible
 - Underground mining known or likely within or in close proximity
 - Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m

0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m

5

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining and ground workings map on [page 80 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
A	83m NW	Unspecified Heap	1950	1:10560
A	83m NW	Unspecified Heap	1900	1:10560
A	86m NW	Unspecified Heap	1887	1:10560
A	113m NW	Unspecified Heap	1950	1:10560
A	113m NW	Unspecified Heap	1900	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m

2

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

Features are displayed on the Mining and ground workings map on [page 80 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
-	848m NW	Tunnel	1900	1:10560
-	865m NW	Tunnel	1887	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m

0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.



18.5 Historical Mineral Planning Areas

Records within 500m

0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m

0

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site

0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m

0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.



18.9 Researched mining

Records within 500m**0**

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m**0**

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m**0**

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site**0**

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site**0**

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.



18.14 Gypsum areas

Records on site	0
-----------------	---

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0
-----------------	---

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m

0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m

0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m

0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.



This data is sourced from Groundsure.

19.5 National karst database

Records within 500m

0

This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

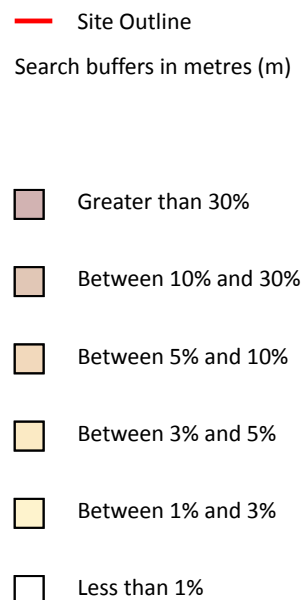
Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.



20 Radon



20.1 Radon

Records on site

1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on [page 87](#) >

Location	Estimated properties affected	Radon Protection Measures required
On site	Less than 1%	None



This data is sourced from the British Geological Survey and UK Health Security Agency.



21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

1

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m**0**

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m**0**

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m**0**

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m**0**

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m**0**

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.



This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m

0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m

0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m

0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m

0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m

0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 Ltd.



Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference> ↗.

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Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: County Series

Map date: 1889

Scale: 1:2,500

Printed at: 1:2,500



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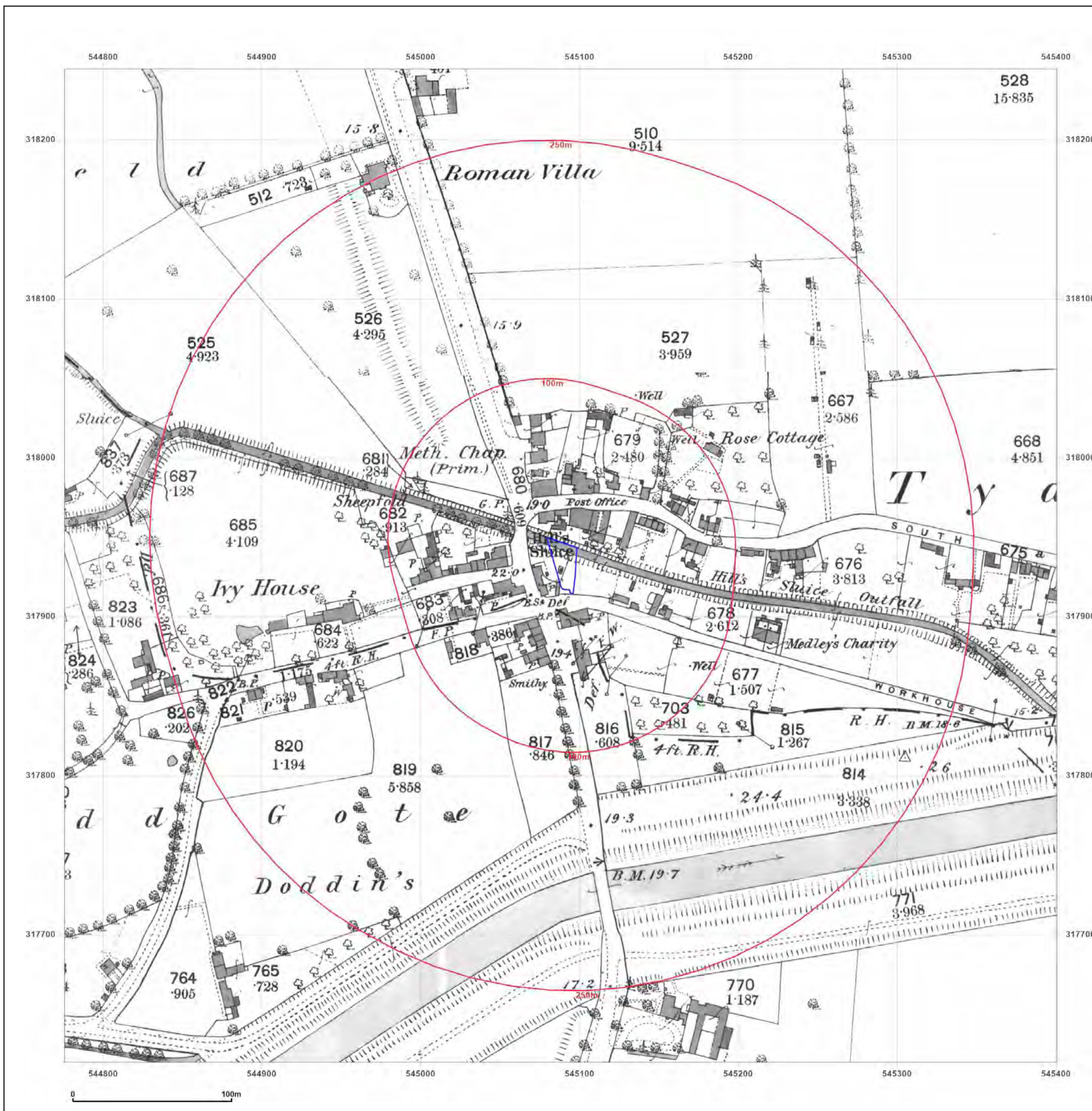


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Map Name: County Series

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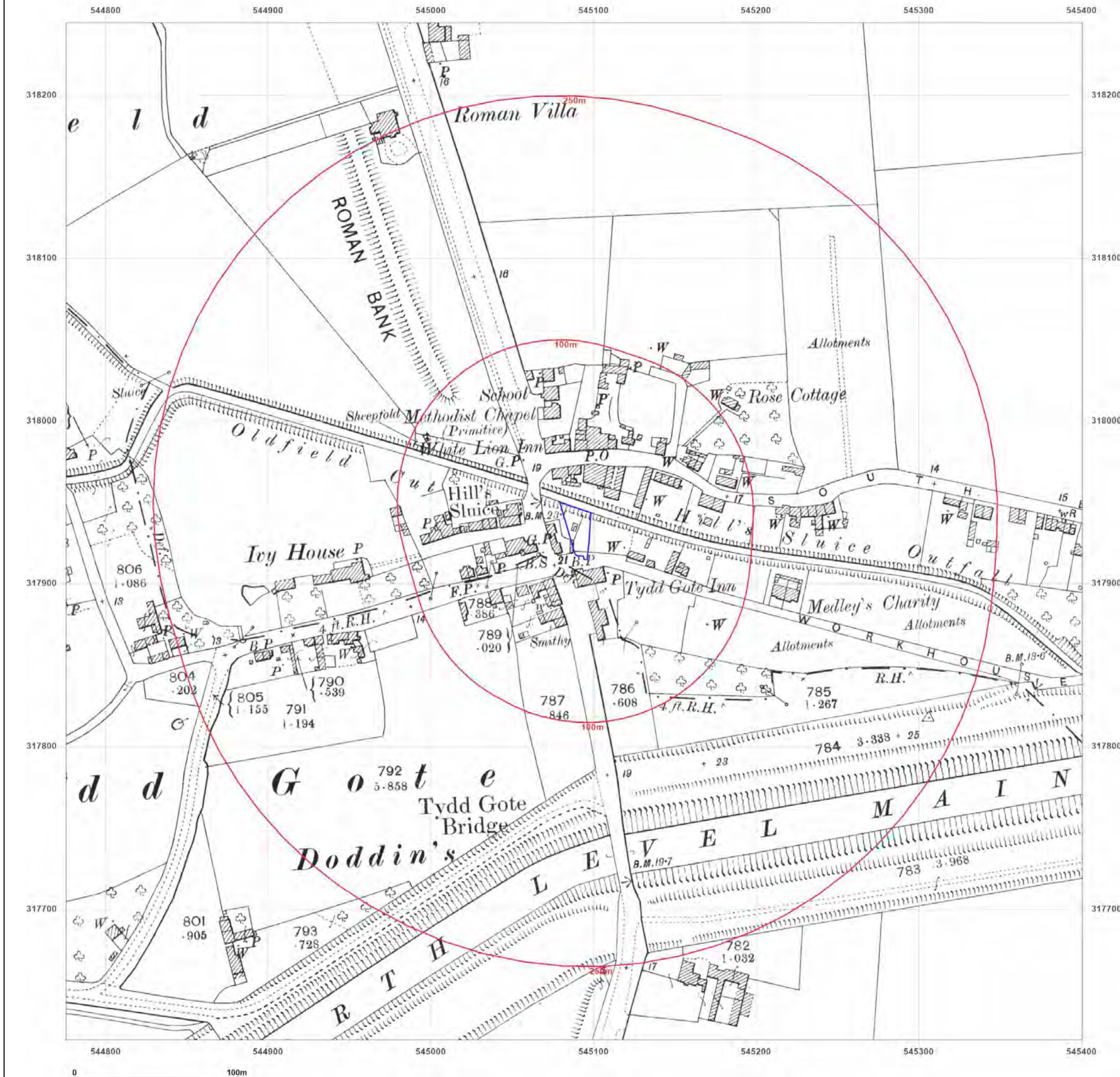


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Map Name: County Series

Map date: 1904

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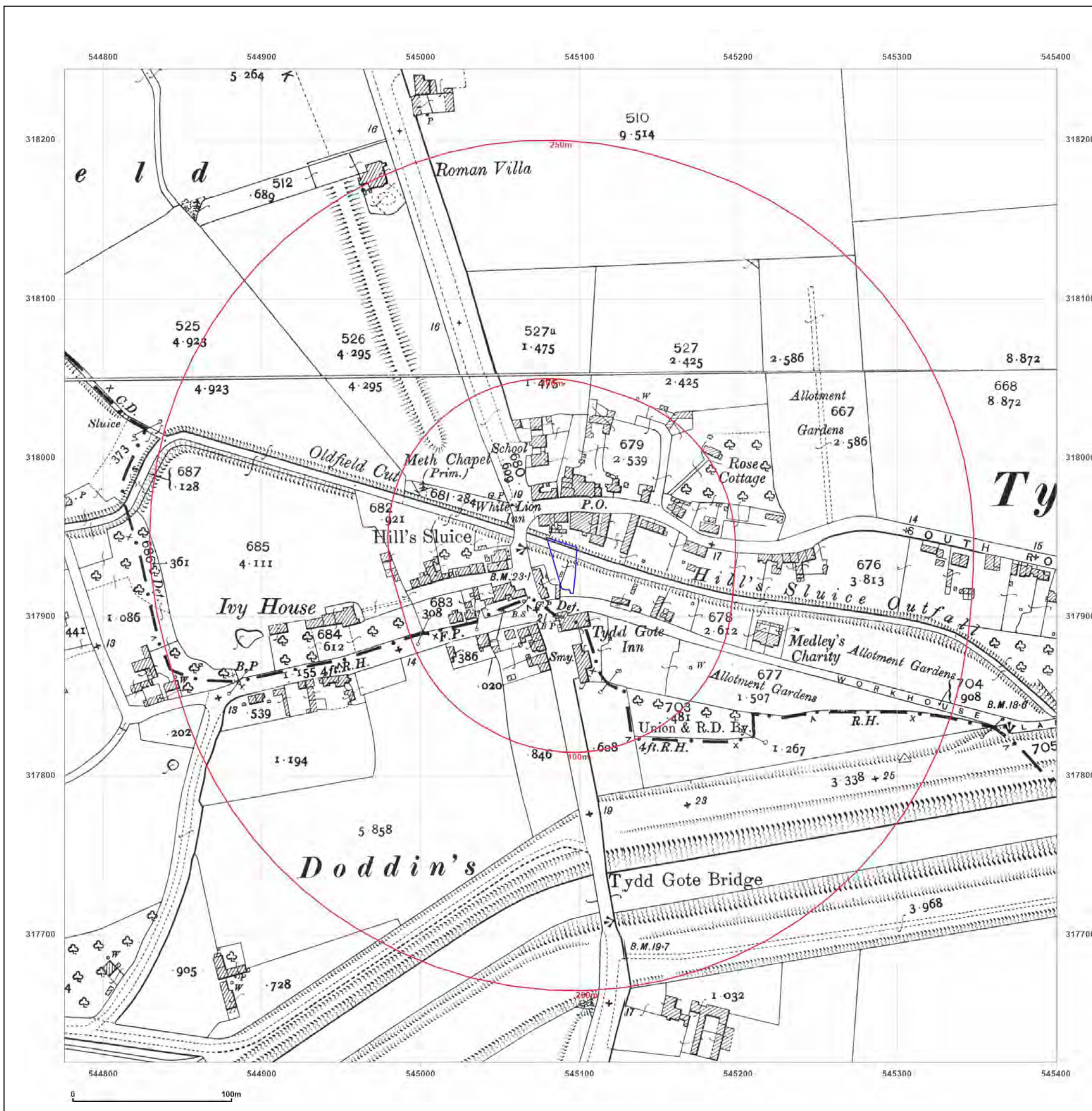


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Report Ref: GS-NID-071-WRE-013
Grid Ref: 545088, 317932

Map Name: County Series

Map date: 1931

Scale: 1:2,500

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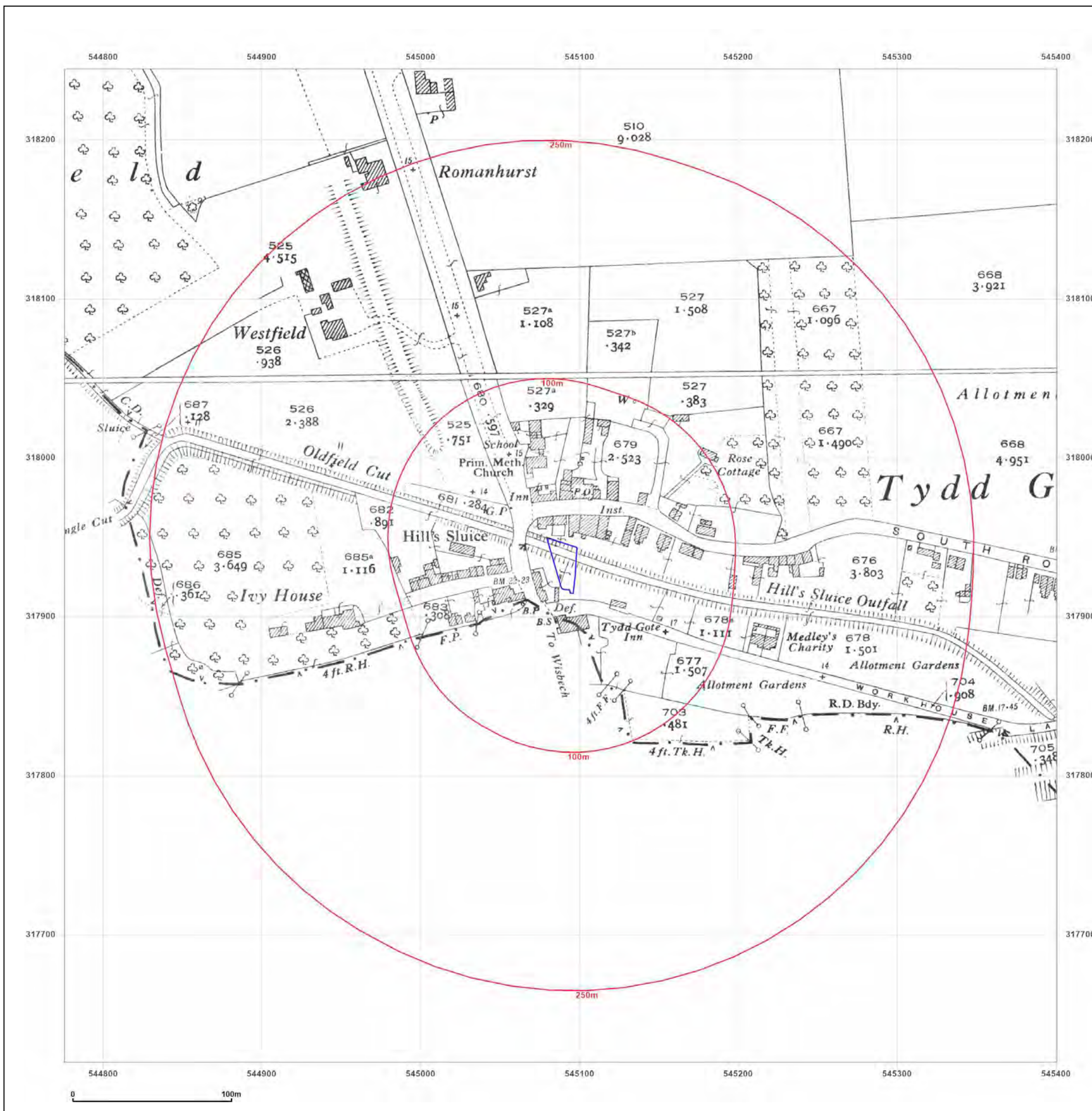


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Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

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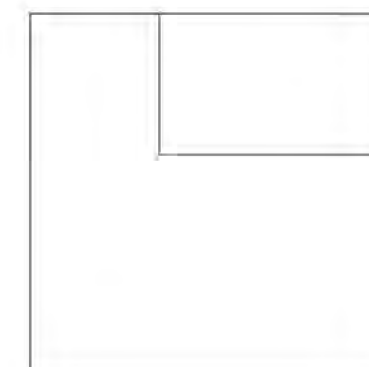
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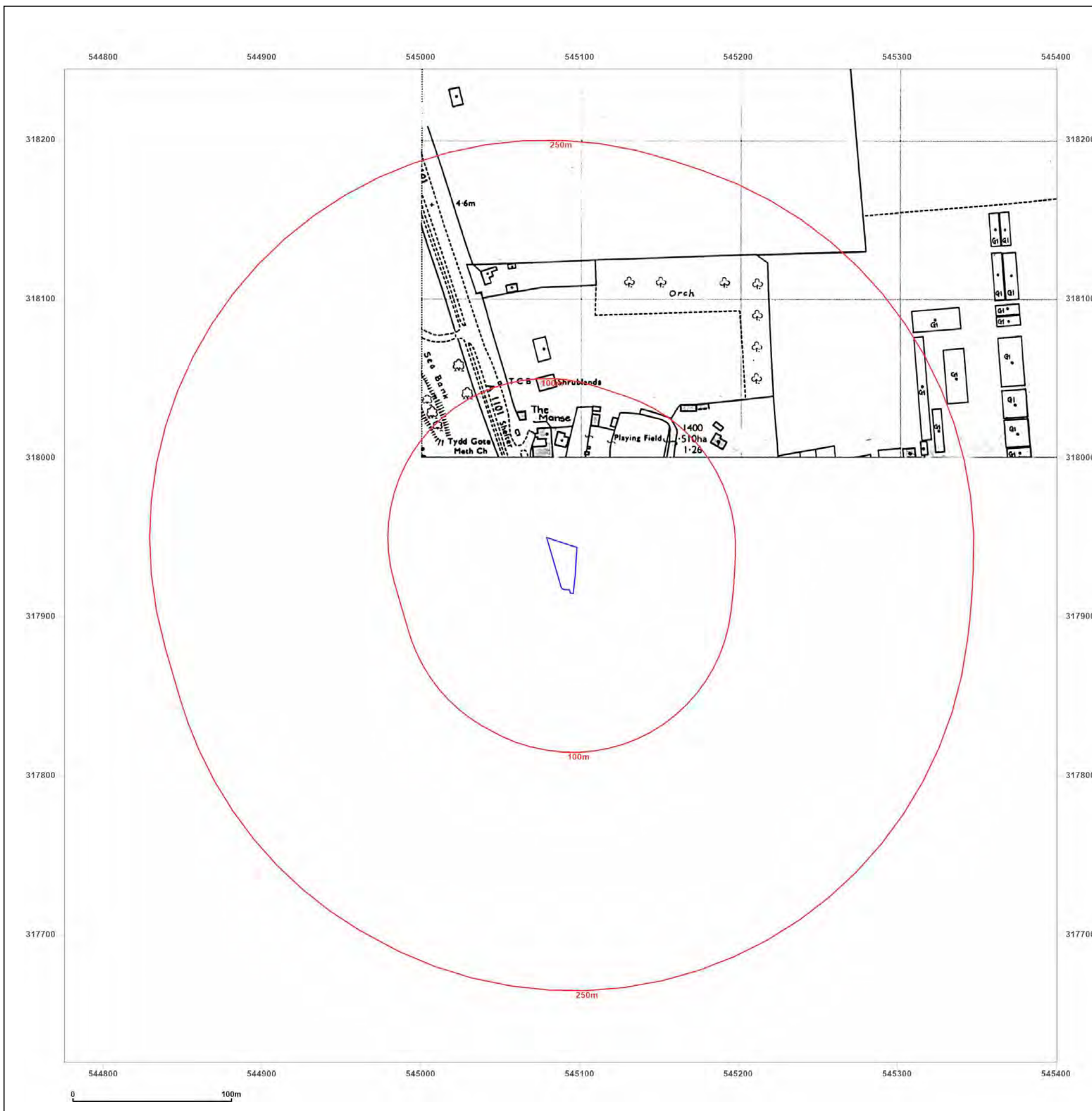


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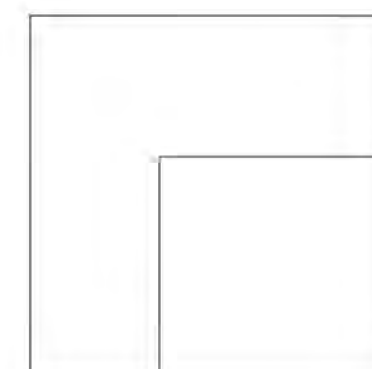
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Map Name: National Grid

Map date: 1975

Scale: 1:2,500

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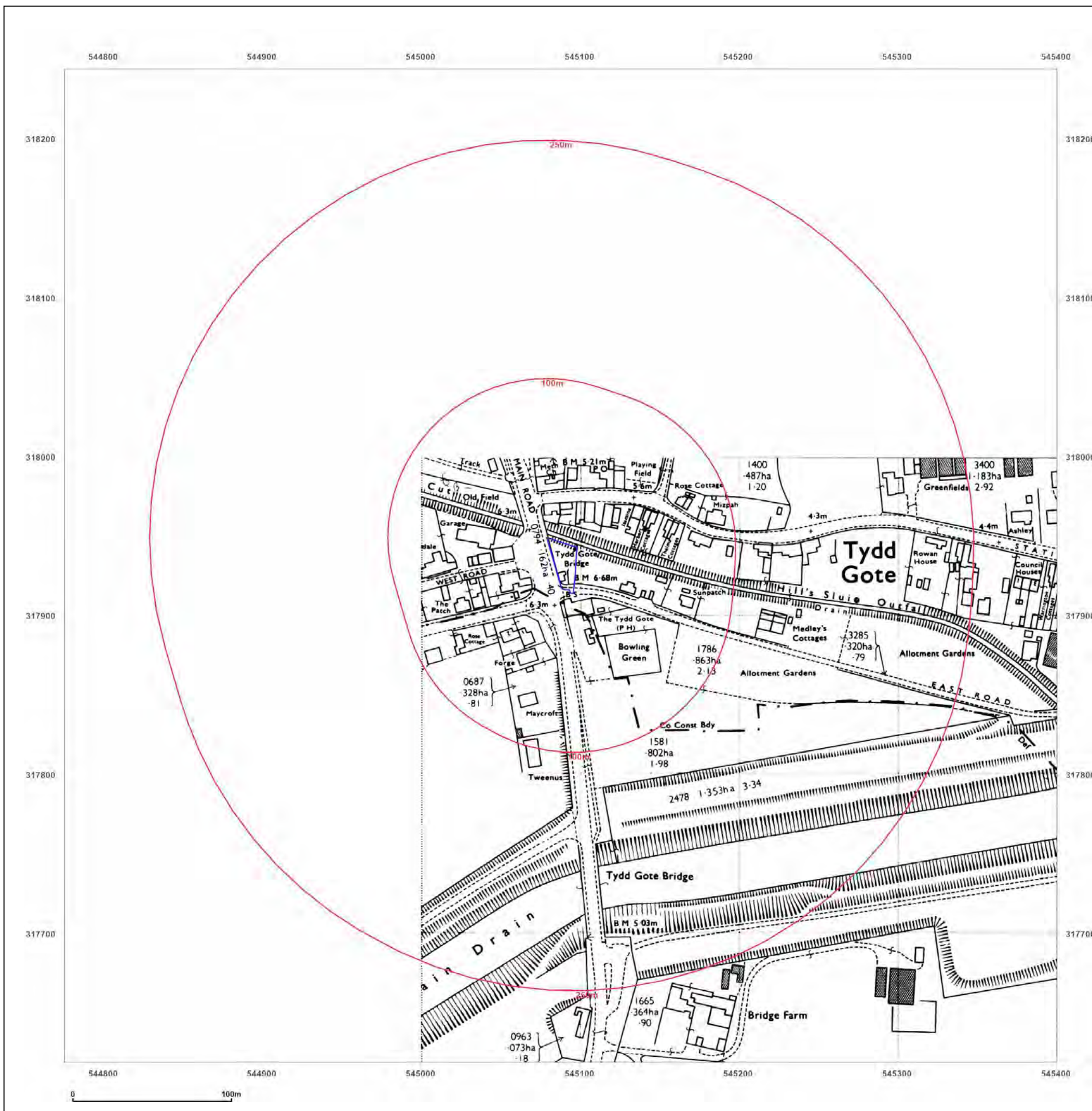


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Grid Ref: 545088, 317932

Map Name: National Grid

Map date: 1974-1976

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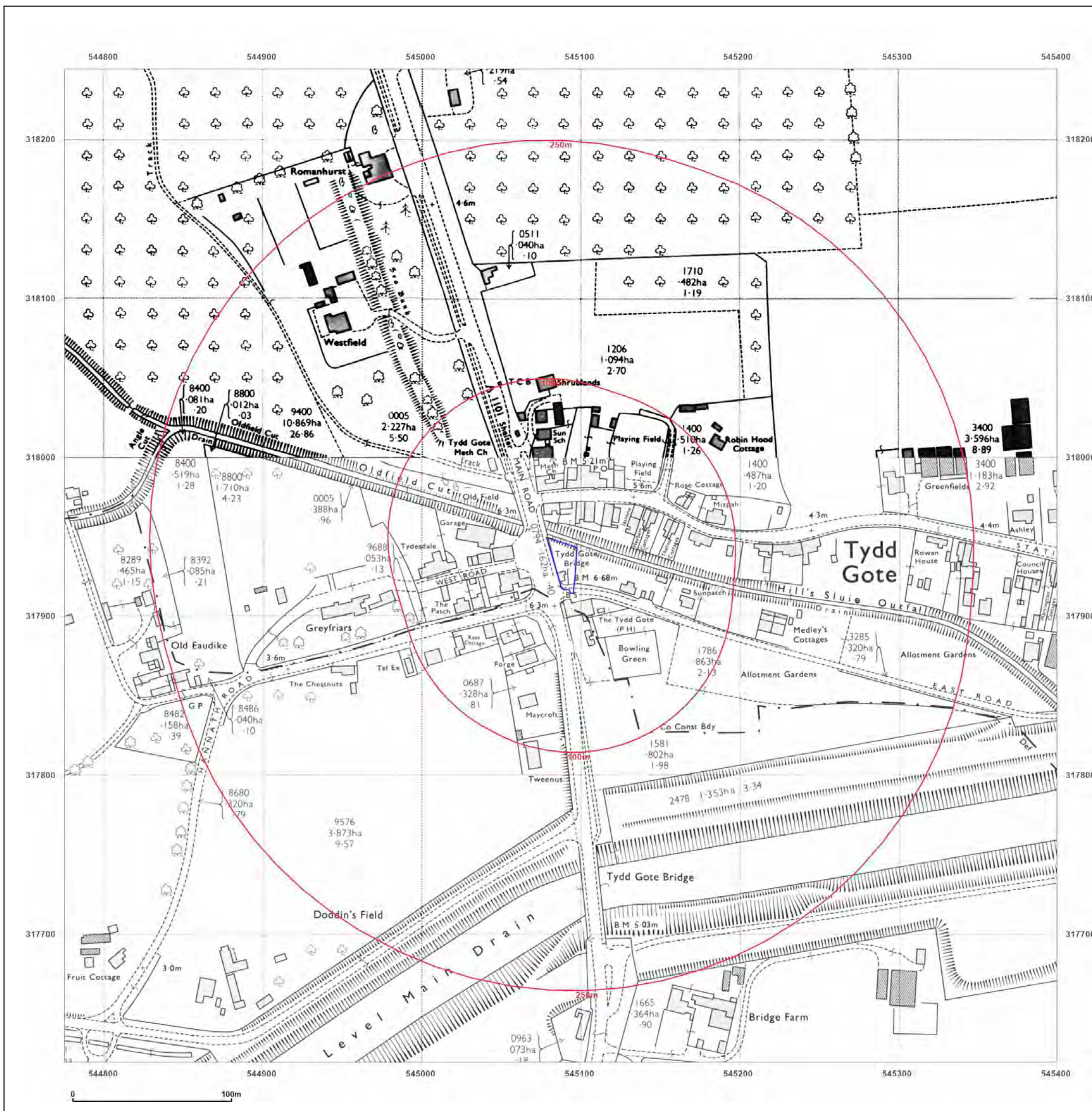


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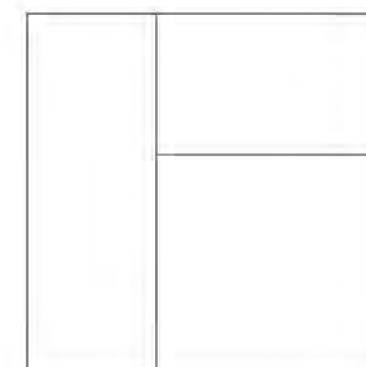
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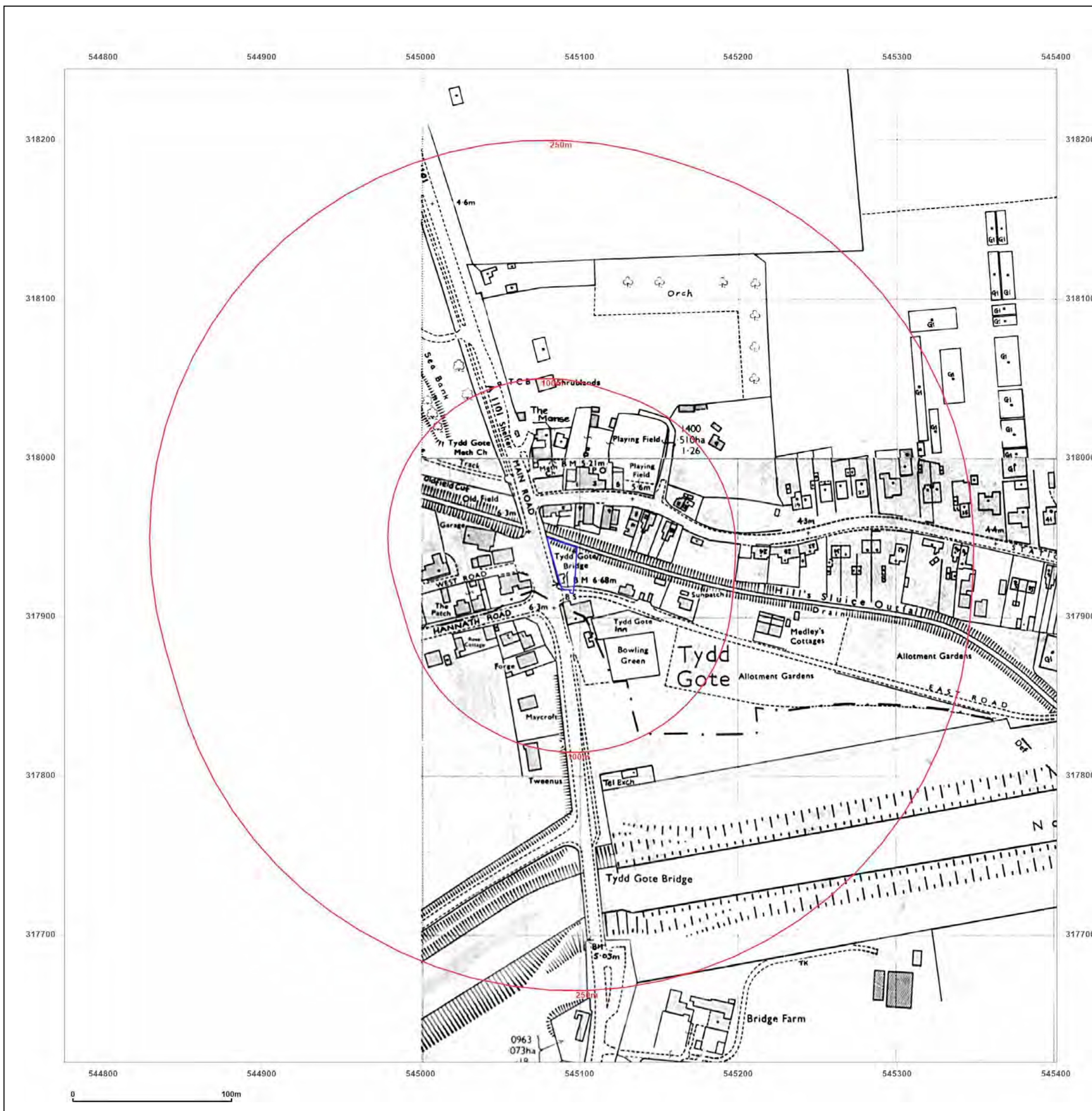


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Map Name: National Grid

Map date: 1991-1995

Scale: 1:2,500

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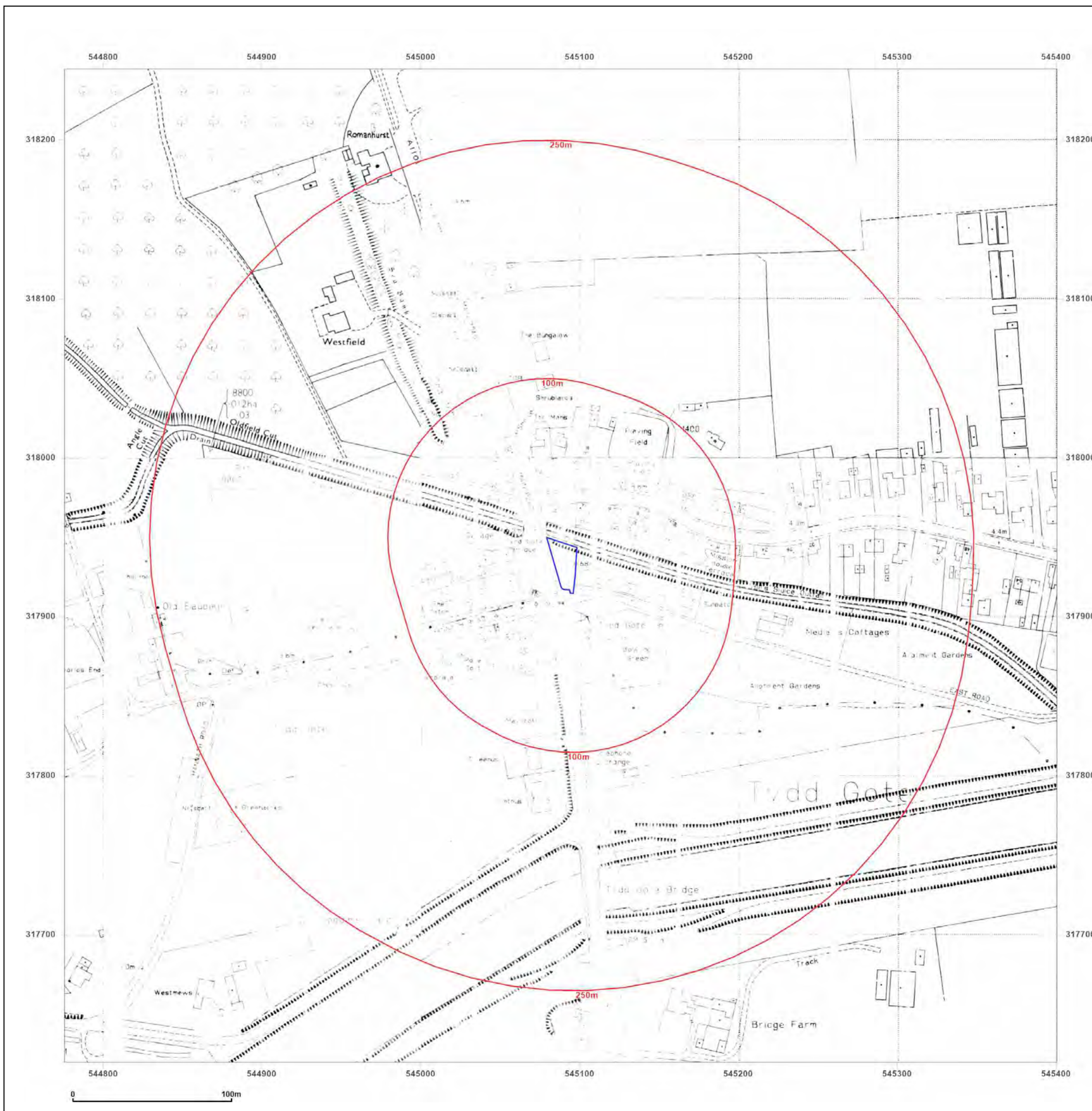


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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: National Grid

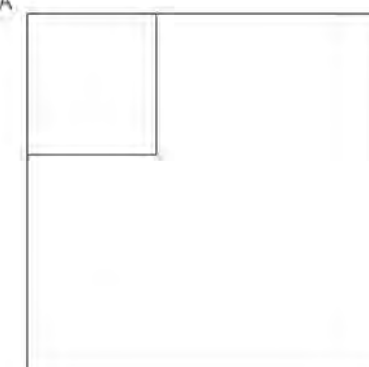
Map date: 1995

Scale: 1:2,500

Printed at: 1:2,500



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

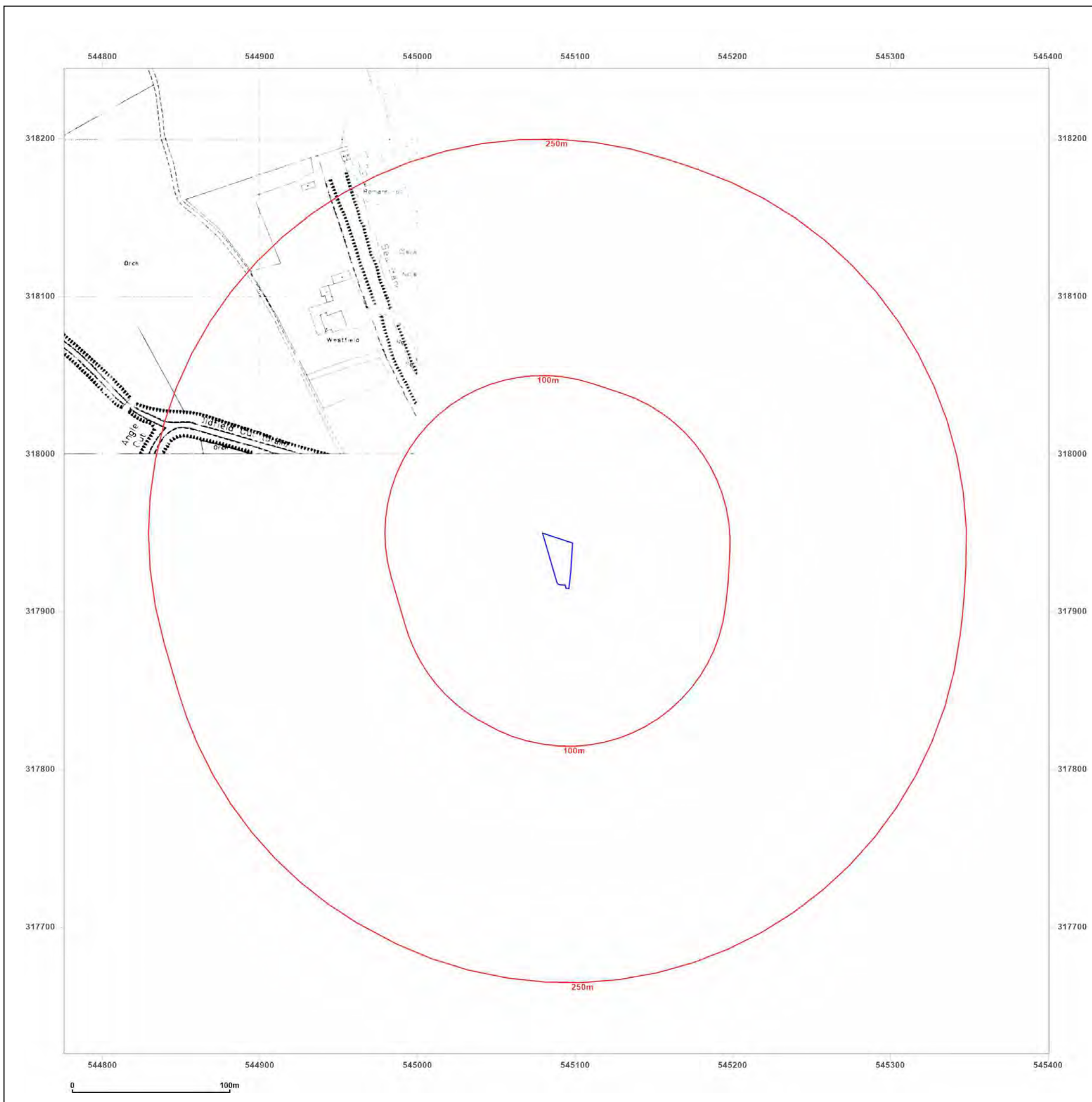


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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: County Series

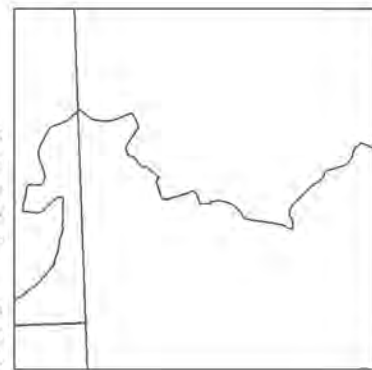
Map date: 1886

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1886
Revised 1886
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1886
Revised 1886
Edition N/A
Copyright N/A
Levelled N/A

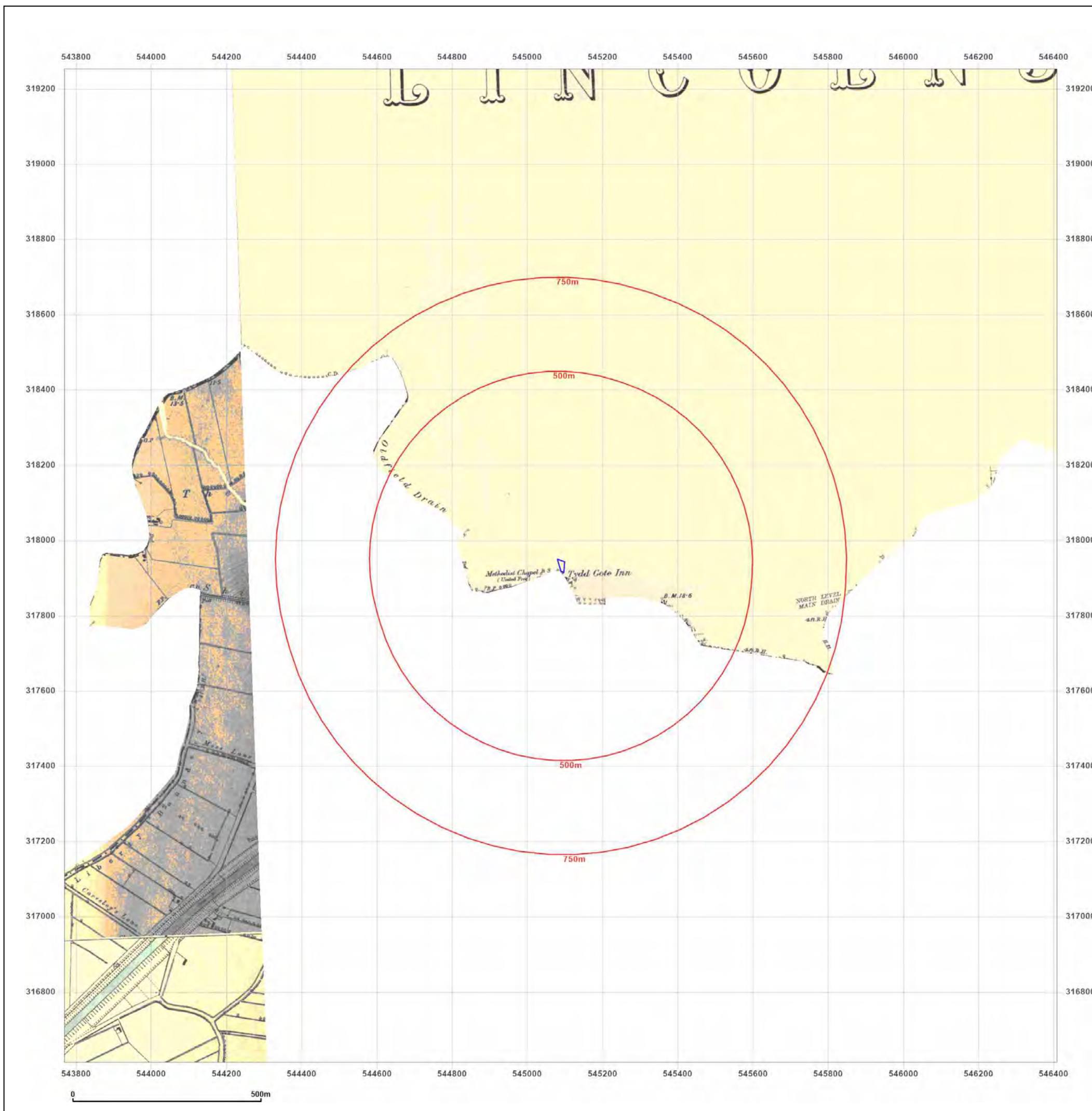


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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: County Series

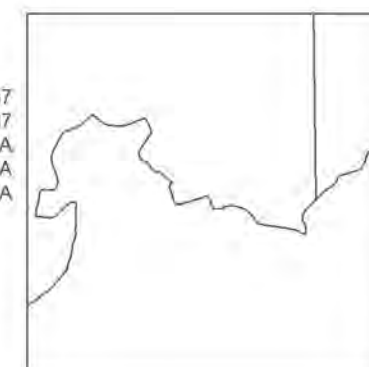
Map date: 1887

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1887
Revised 1887
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1887
Revised 1887
Edition N/A
Copyright N/A
Levelled N/A

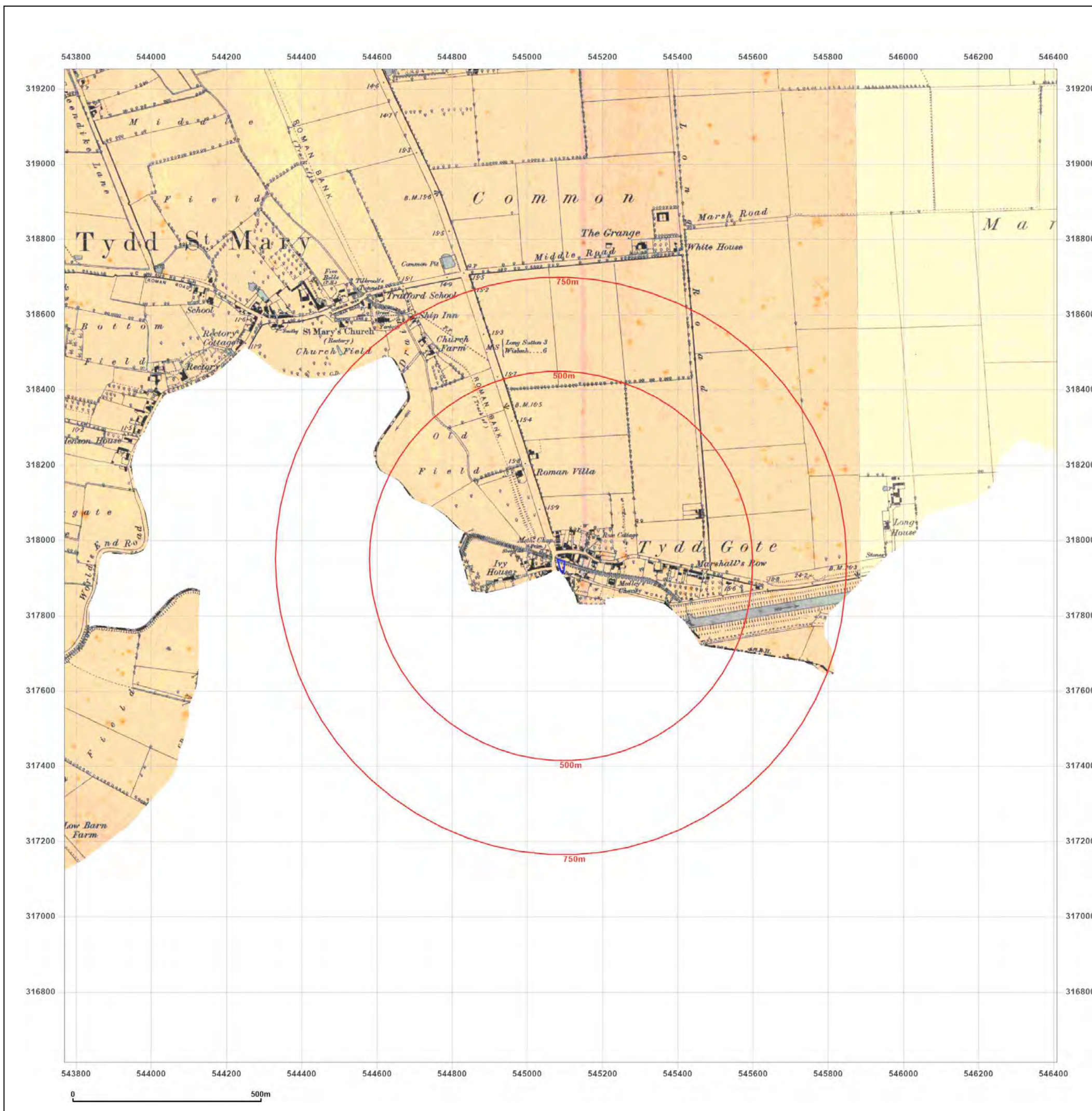


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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: County Series

Map date: 1900

Scale: 1:10,560

Printed at: 1:10,560



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

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

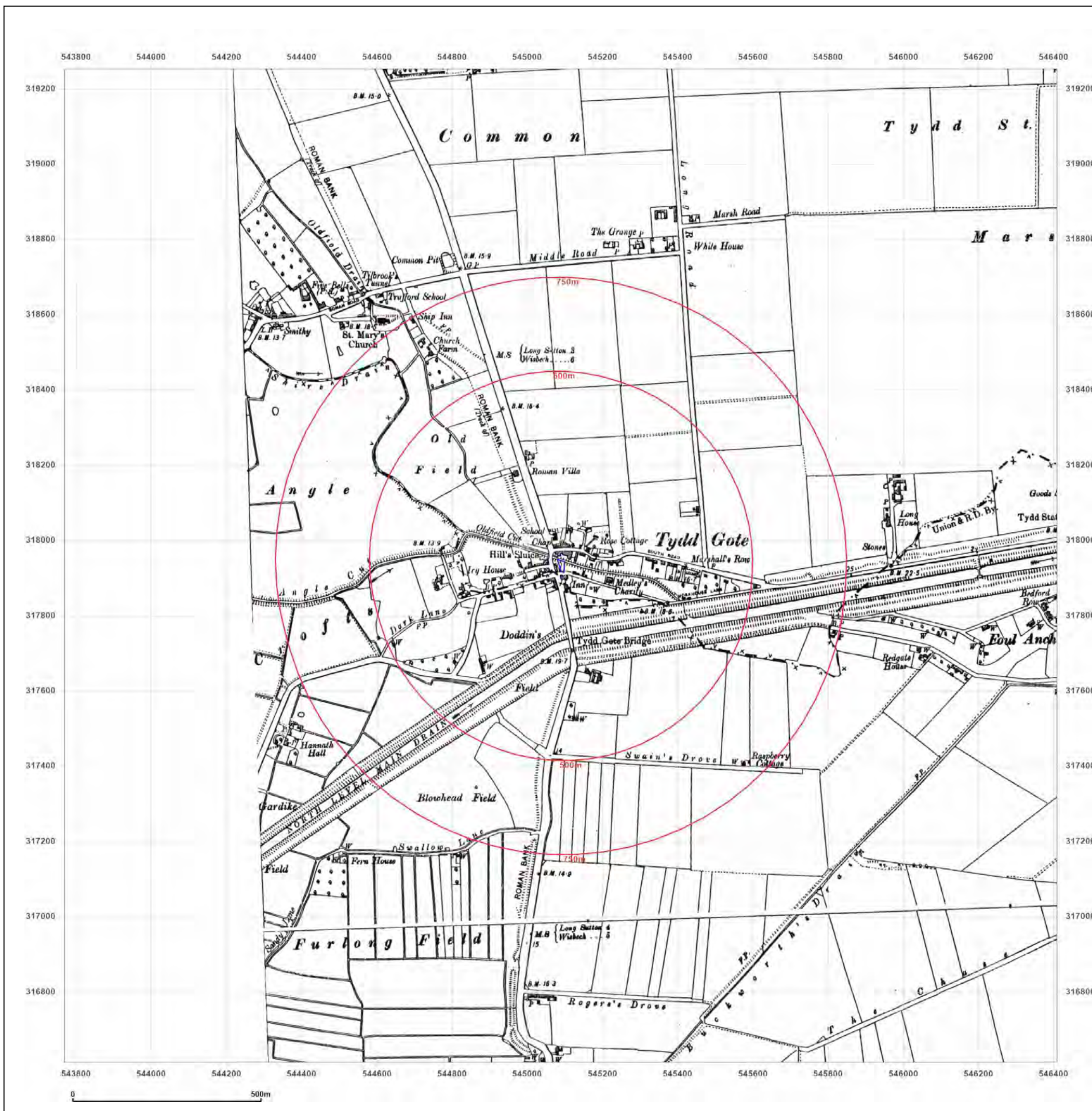


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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: County Series

Map date: 1932

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1886
Revised 1932
Edition 1932
Copyright N/A
Levelled N/A

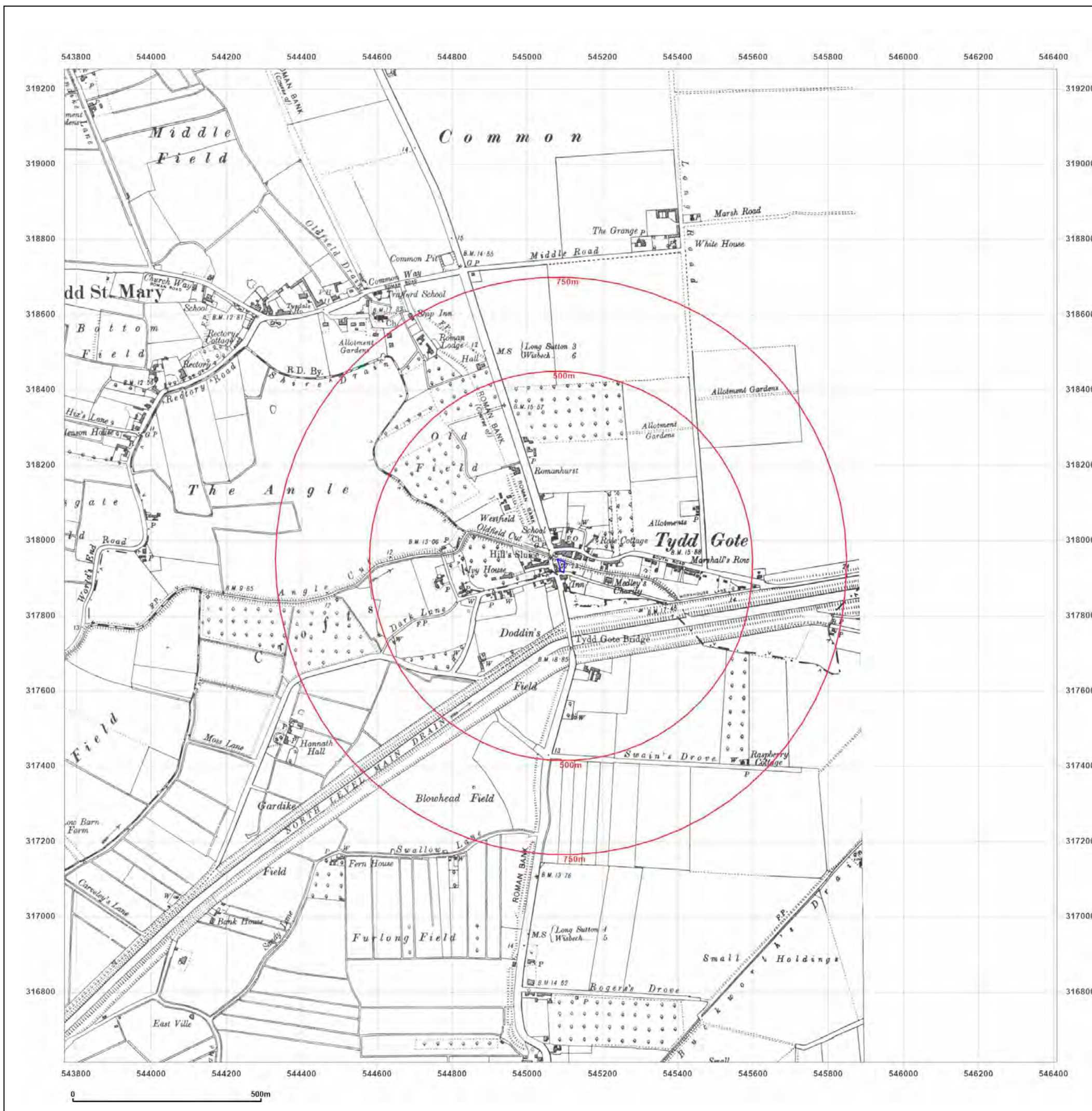


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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: County Series

Map date: 1950

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1886
Revised 1950
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1886
Revised 1950
Edition N/A
Copyright N/A
Levelled N/A

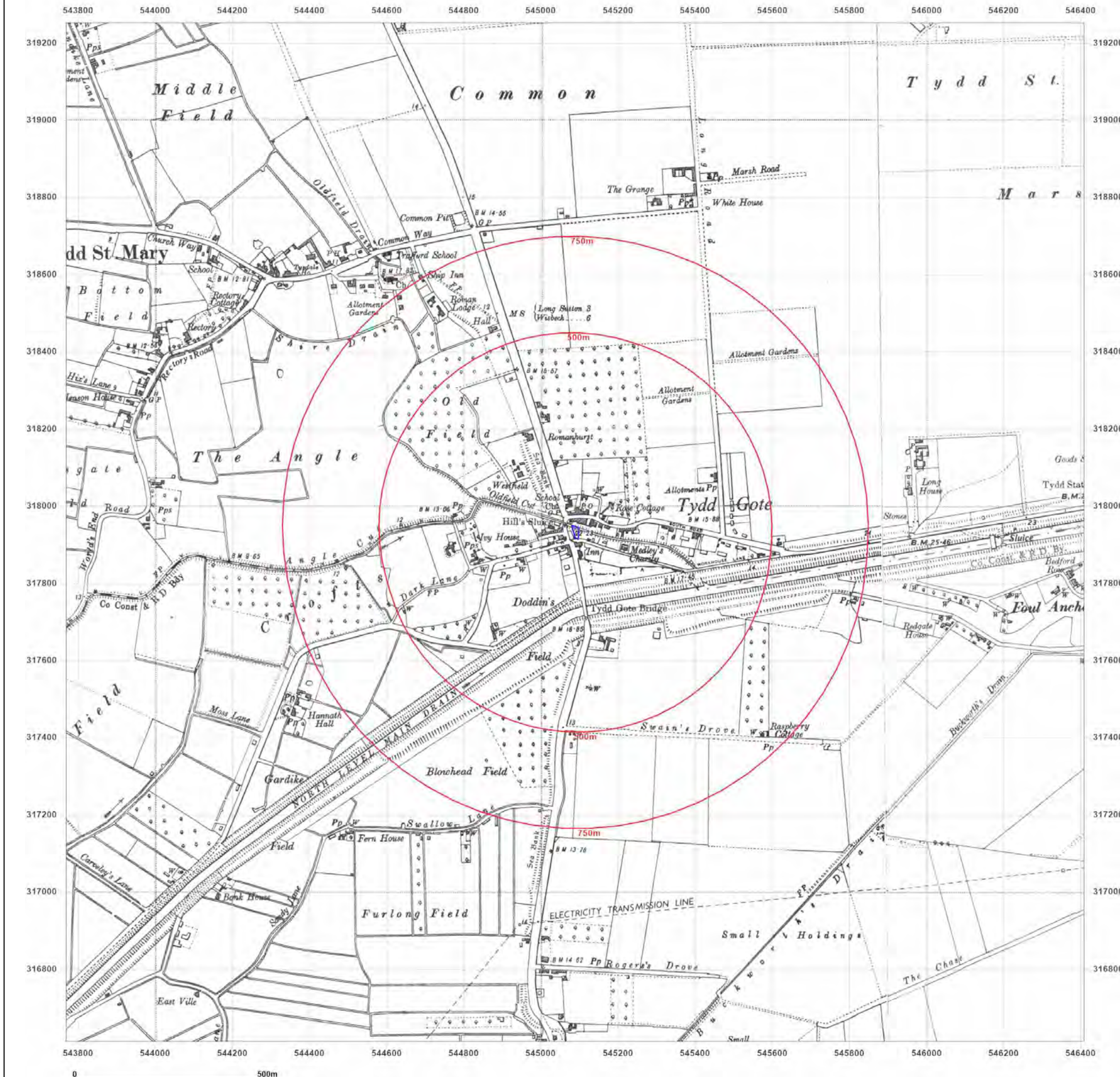


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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: County Series

Map date: 1950

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1886 Revised 1950 Edition N/A Copyright N/A Levelled N/A	Surveyed 1886 Revised 1950 Edition N/A Copyright N/A Levelled N/A
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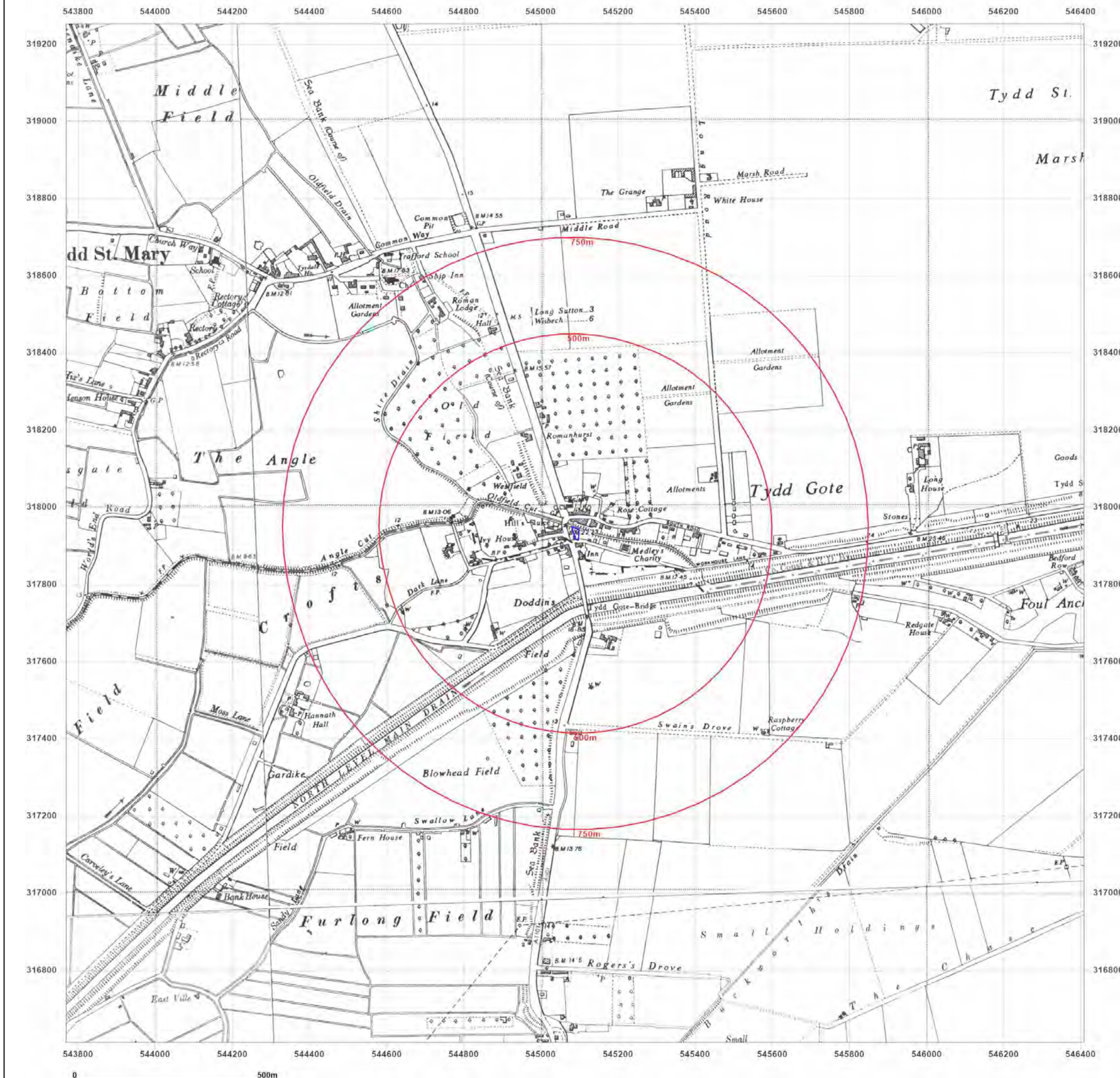


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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: Provisional

Map date: 1950

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1950
Revised 1950
Edition N/A
Copyright N/A
Levelled N/A

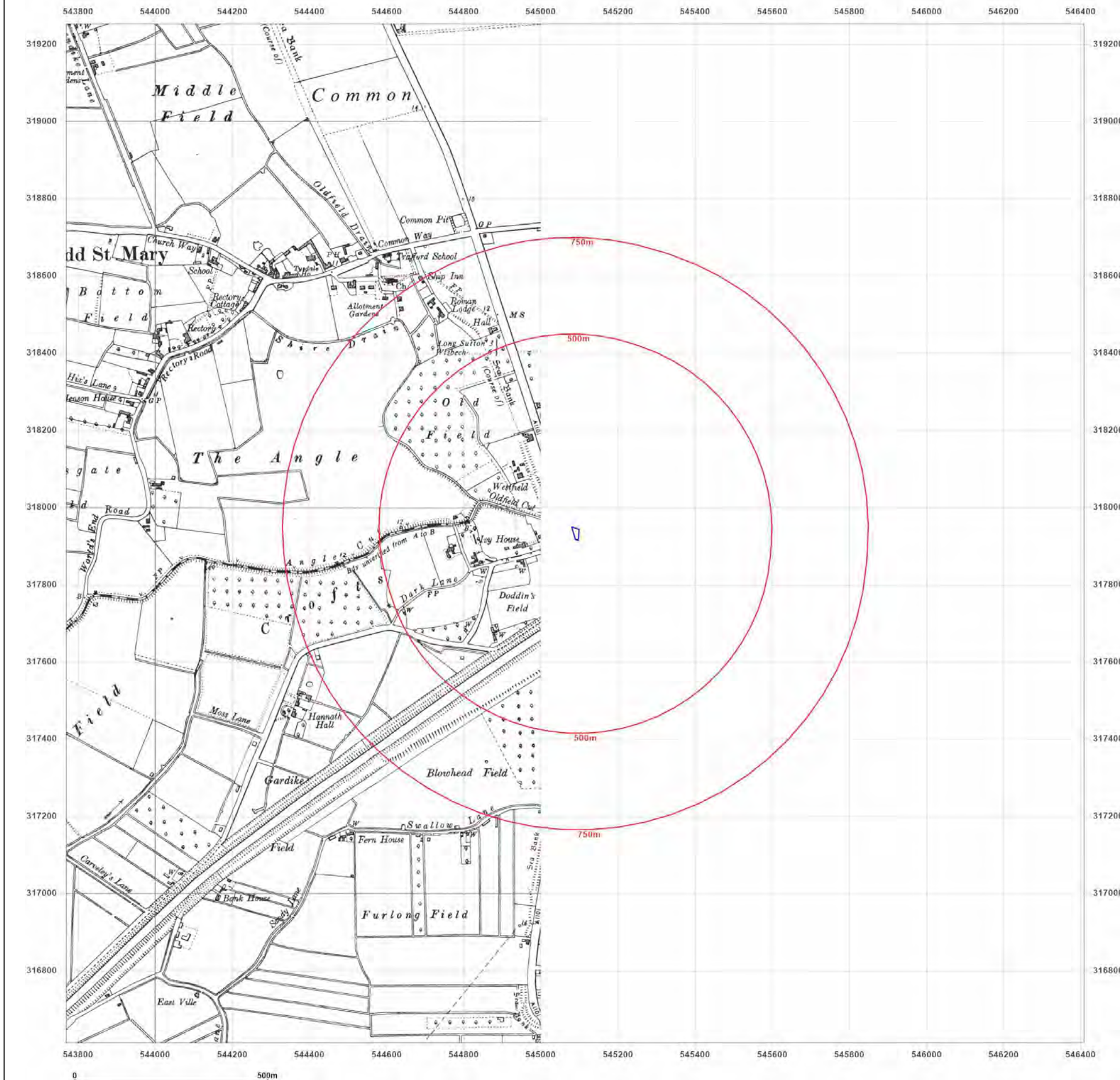


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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

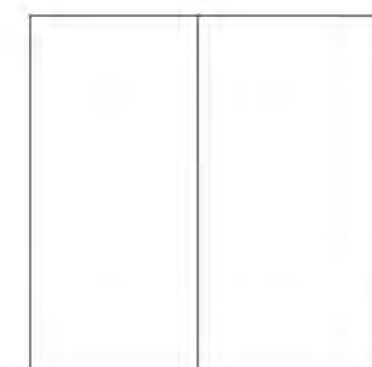
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Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: Provisional

Map date: 1958

Scale: 1:10,560

Printed at: 1:10,560



Surveyed N/A
Revised 1958
Edition 1958
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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

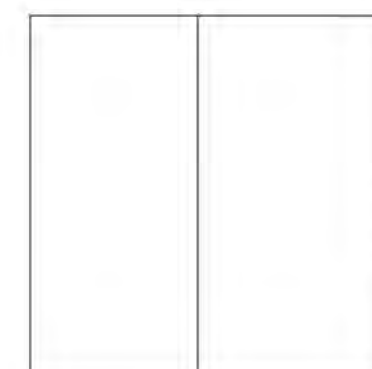
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Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: Provisional

Map date: 1968

Scale: 1:10,560

Printed at: 1:10,560



Surveyed N/A
Revised 1988
Edition 1958
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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: National Grid

Map date: 1980

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1974
Revised 1980
Edition N/A
Copyright 1980
Levelled 1975

Surveyed 1974
Revised 1979
Edition N/A
Copyright 1980
Levelled 1975

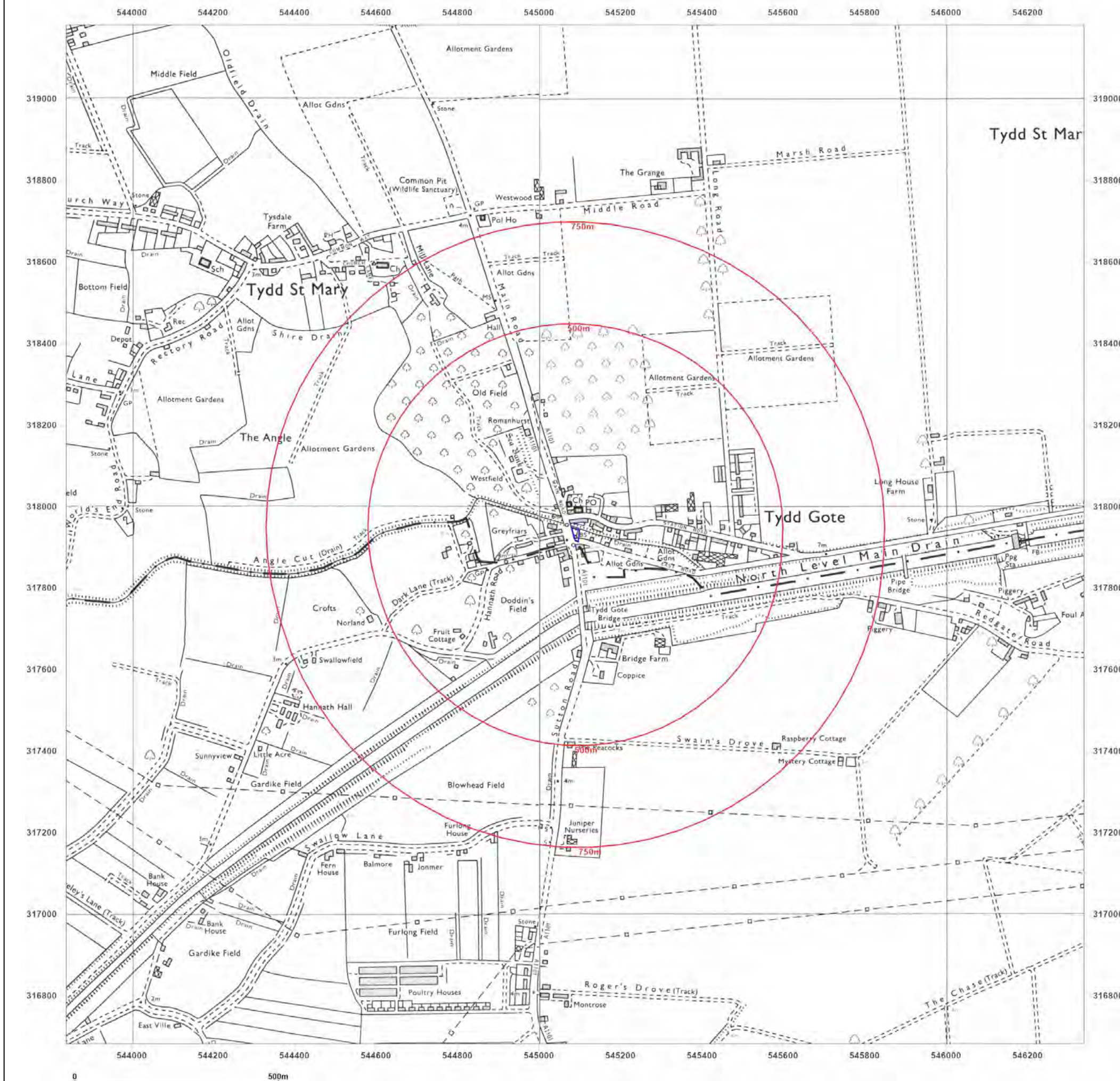


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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: National Grid

Map date: 1992

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1974
Revised 1992
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1974
Revised 1992
Edition N/A
Copyright N/A
Levelled N/A

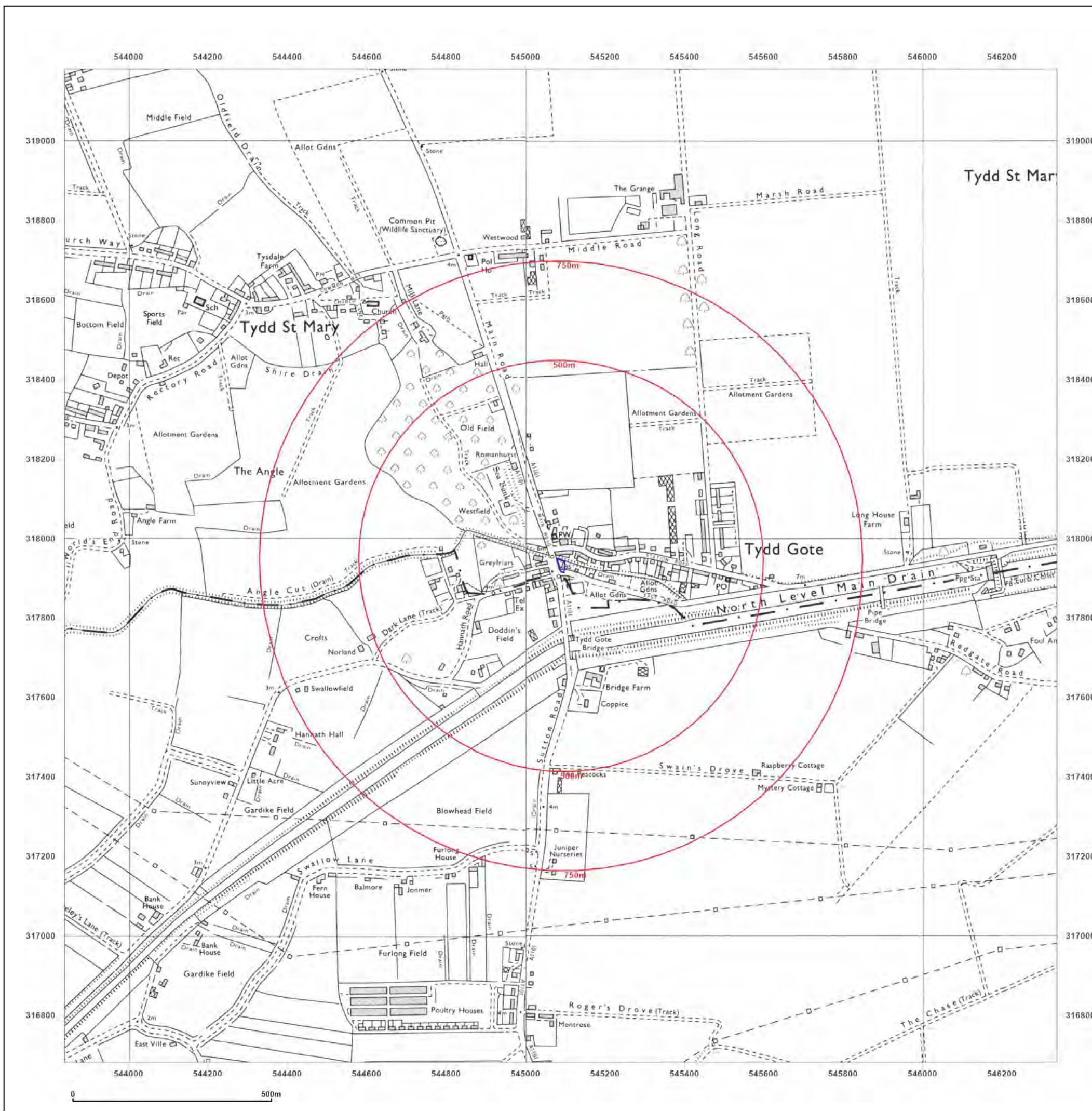


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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000

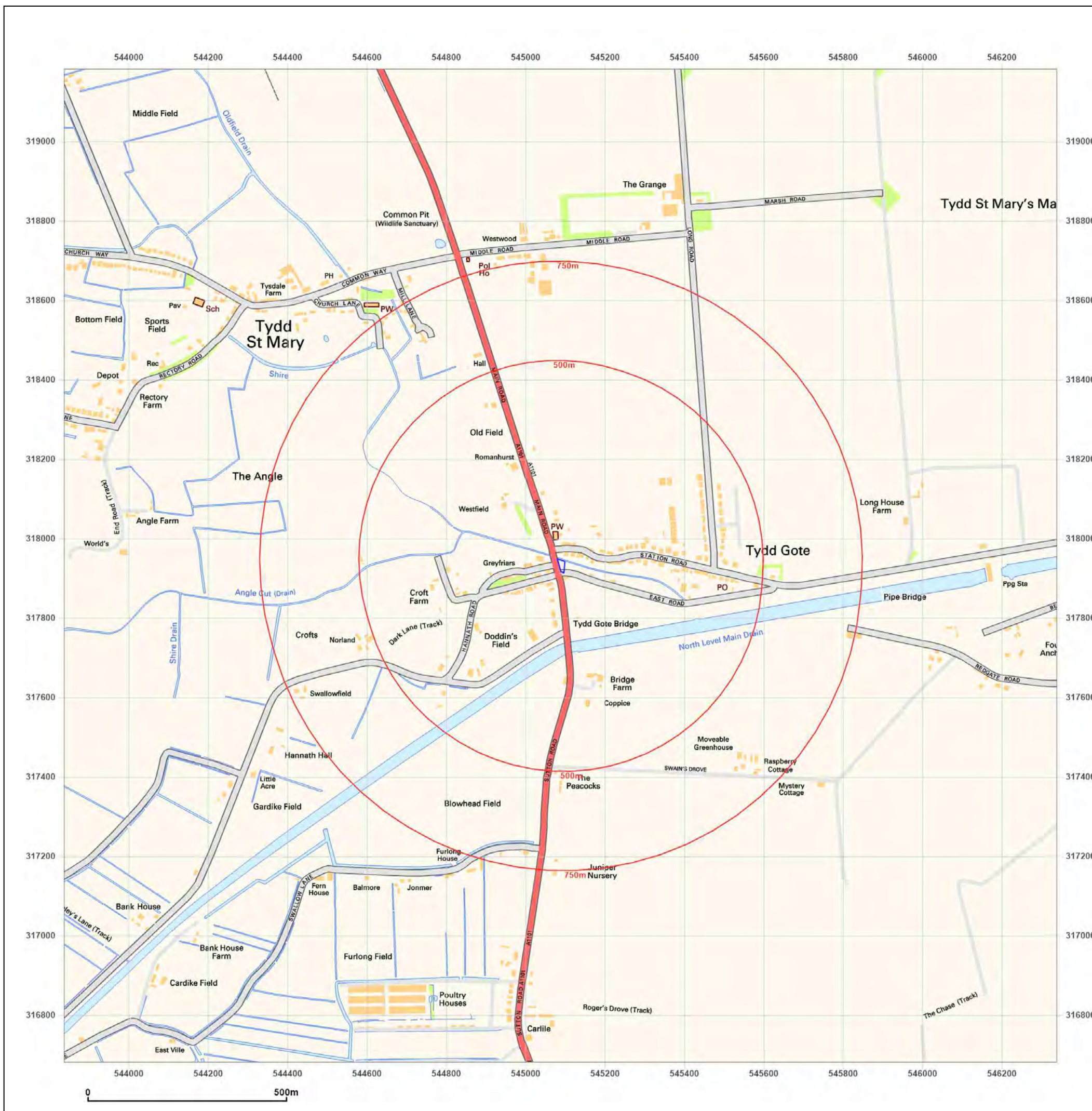


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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000

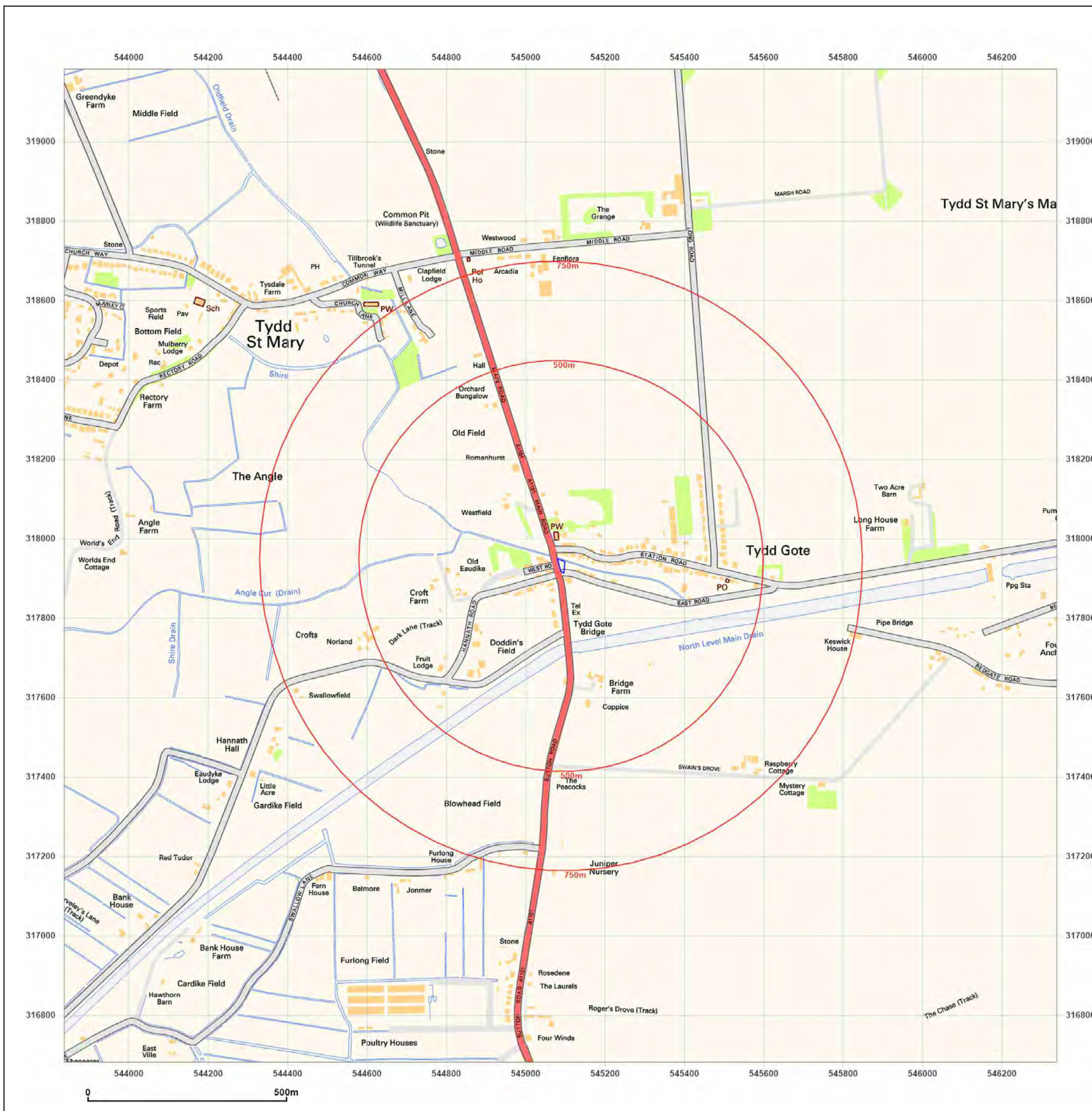


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Site Details:

Land West Of 1 East Road Tydd
Gote Wisbech

Client Ref: R3229
Report Ref: GS-NID-O71-WRE-O13
Grid Ref: 545088, 317932

Map Name: National Grid

Map date: 2023

Scale: 1:10,000

Printed at: 1:10,000

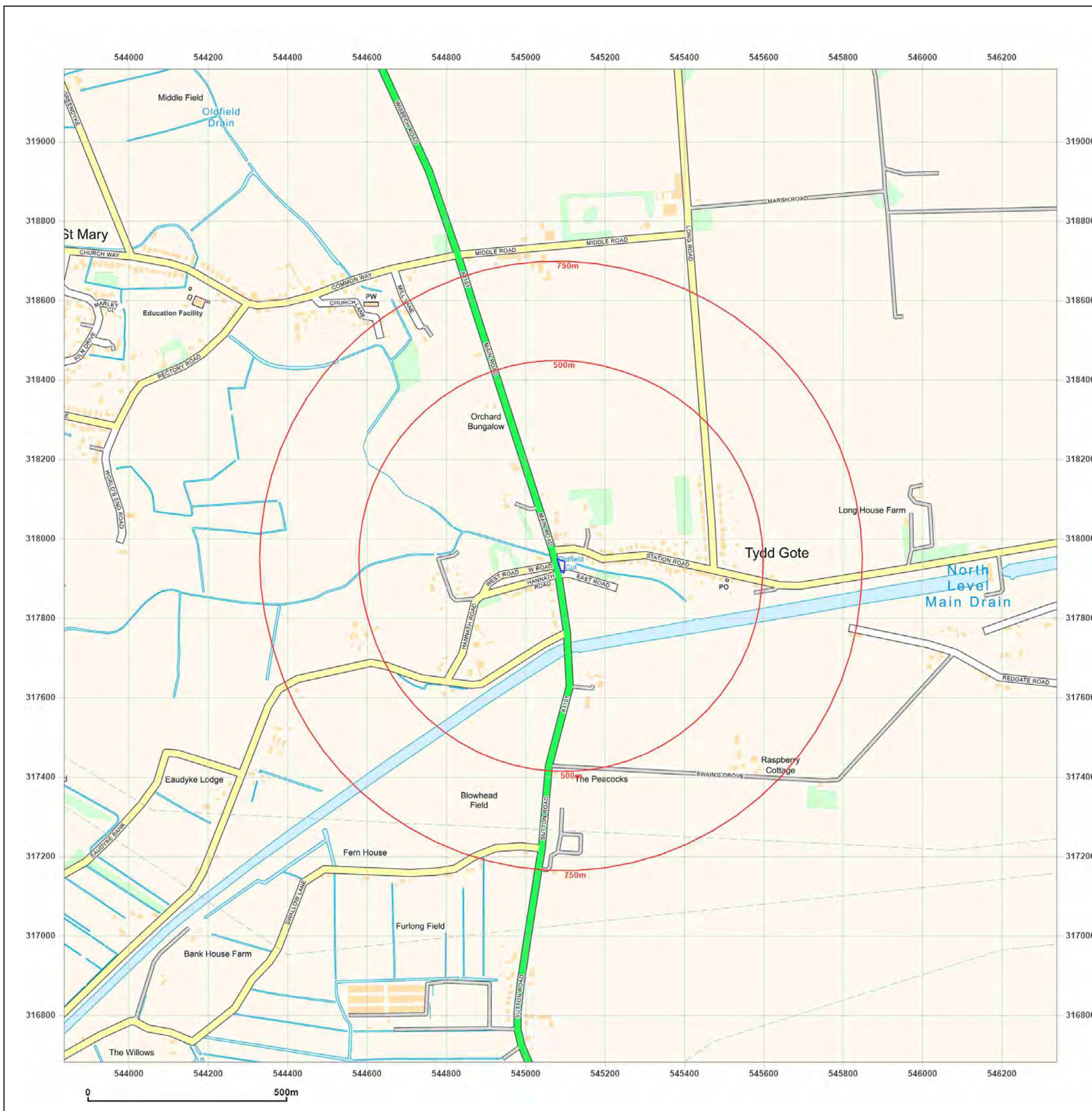


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APPENDIX 2

REPORT LIMITATIONS

LIMITATIONS

This contract was completed by Earth Environmental & Geotechnical Ltd based on a defined programme and scope of works and terms and conditions agreed with the client. This report was compiled with all reasonable skill, and care, bearing in mind the project objectives, the agreed scope of works, the prevailing site conditions, the budget, and staff resources allocated to the project.

Other than that, expressly contained in the above paragraph, Earth Environmental & Geotechnical Ltd provides no other representation or warranty whether express or implied, is made in relation to the services. Unless otherwise agreed this report has been prepared exclusively for the use and reliance of the client in accordance with generally accepted consulting practices and for the intended purposes as stated in the agreement under which this work was completed. This report may not be relied upon, or transferred to, by any other party without the written agreement of a Director of Earth Environmental & Geotechnical Ltd.

If a third party relies on this report, it does so wholly at its own and sole risk and Earth Environmental & Geotechnical Ltd disclaims any liability to such parties.

It is Earth Environmental & Geotechnical Ltd understanding that this report is to be used for the purpose described in the introduction to the report. That purpose was an important factor in determining the scope and level of the services. Should the purpose for which the report is used, or the proposed use of the site change, this report will no longer be valid and any further use of, or reliance upon the report in those circumstances by the client without Earth Environmental & Geotechnical Ltd review and advice shall be at the client's sole and own risk.

The report was written in 2023 and should be read considering any subsequent changes in legislation, statutory requirements, and industry best practices. Ground conditions can also change over time and further investigations, or assessment should be made if there is any significant delay in acting on the findings of this report. The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the report inaccurate or unreliable. The information and conclusions contained in this report should not be relied upon in the future without the written advice of Earth Environmental & Geotechnical Ltd. In the absence of such written advice of Earth Environmental & Geotechnical Ltd, reliance on the report in the future shall be at the client's own and sole risk. Should Earth Environmental & Geotechnical Ltd be requested to review the report in the future, Earth Environmental & Geotechnical Ltd shall be entitled to additional payment at the then existing rate or such other terms as may be agreed between Earth Environmental & Geotechnical Ltd and the client.

The observations and conclusions described in this report are based solely upon the services that were provided pursuant to the agreement between the client and Earth Environmental & Geotechnical Ltd. Earth Environmental & Geotechnical Ltd has not performed any observations, investigations, studies or testing not specifically set out or mentioned within this report.

Earth Environmental & Geotechnical Ltd is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this report, Earth Environmental & Geotechnical Ltd did not seek to evaluate the presence on or off the site of electromagnetic fields, lead paint, radon gas or other radioactive materials.

The services are based upon Earth Environmental & Geotechnical Ltd observations of existing physical conditions at the site gained from a walkover survey of the site together with Earth Environmental & Geotechnical Ltd interpretation of information including documentation, obtained from third parties and from the client on the history and usage of the site. The findings and recommendations contained in this report are based in part upon information provided by third parties, and whilst Earth Environmental & Geotechnical Ltd have no reason to doubt the accuracy and that it has been provided in full of those it was requested from, the items relied on have not been verified.

No responsibility can be accepted for errors within third party items presented in this report. Further Earth Environmental & Geotechnical Ltd was not authorised and did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the client or third parties, including laboratories and information services, during the performance of the services. Earth Environmental & Geotechnical Ltd is not liable for any inaccurate information, misrepresentation of data or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to Earth Environmental & Geotechnical Ltd and including the doing of any independent investigation of the information provided to Earth Environmental & Geotechnical Ltd save as otherwise provided in the terms of the contract between the client and Earth Environmental & Geotechnical Ltd.

Where field investigations have been carried out these have been restricted to a level of detail required to achieve the stated objectives of the work. Ground conditions can also be variable and as investigation excavations only allow examination of the ground at discrete locations. The potential exists for ground conditions to be encountered which are different to those considered in this report. The extent of the limited area depends on the soil and groundwater conditions, together with the position of any current structures and underground facilities and natural and other activities on site. In addition, chemical analysis was carried out for a limited number of parameters [as stipulated in the contract between the client and Earth Environmental & Geotechnical Ltd] based on an understanding of the available operational and historical information, and it should not be inferred that other chemical species are not present.

The groundwater conditions entered on the exploratory hole records are those observed at the time of investigation. The normal speed of investigation usually does not permit the recording of an equilibrium water level for any one water strike. Moreover, groundwater levels are subject to seasonal variation or changes in local drainage conditions and higher groundwater levels may occur at other times of the year than were recorded during this investigation.

Any site drawing(s) provided in this report is (are) not meant to be an accurate base plan but is (are) used to present the general relative locations of features on, and surrounding, the site.