CONTAMINATED LAND RISK ASSESSMENT

Phase 1 Desk Study Report

Site Address
Land Adjacent Charnwood,
259 High Road,
Whaplode,
Spalding,
PE12 6TG

Client
La Rose Homes Ltd

Report Reference
PH1-2022-000037

Prepared by
STM Environmental Consultants Ltd

Date
09/05/2022



1 CONTENTS

1 Contents 2
2 Document Control 5
3 Disclaimer 6
4 Executive Summary 7
5 Introduction 9
5.1 Development Proposal 9
6 Context and Objectives for the Risk Assessment 9
6.1 Legislative Context 9
6.1.1 Part IIA 9
6.1.2 National Planning Policy Framework 9
6.1.3 Environmental Damage Regulations 10
6.2 Objectives 10
6.3 Summary of Research Undertaken 10
7 Site Description 11
7.1 Site Location and Size 11
7.2 Current Site Use 11
7.3 Surrounding Land Uses 11
8 Site History 13
8.1 Analysis of Historical Ordnance Survey Mapping 13
9 Environmental Characteristics 15
9.1 Geology 16
9.1.1 Published Geology 16
9.1.2 Unpublished Geology 16
9.2 Hydrogeology 16
9.3 Water Abstractions 16
9.4 Groundwater Level 16
9.5 Hydrology 16
9.6 Flood Risk 16
9.6.1 River and Tidal (Fluvial and Tidal) Flooding 16
9.6.2 Surface Water (Pluvial) Flooding 16
9.6.3 Groundwater Flooding 17
9.7 Environmentally Sensitive Sites and Ecological Protection Zones 17
9.8 Conservation Areas, Designated Protected Buildings and Monuments 17
9.9 Topography 17
9.10 Waste Disposal Activities & Landfill Sites 17
9.11 Petrol and Fuel Sites 17
9.12 Sites Determined as Contaminated Land under Part 2A EPA 1990 17

9.13 Dangerous or Hazardous Sites 18
9.14 Hazardous Substance Storage/Usage 18
9.15 IPC Authorisations 18
9.16 Part A(1) and IPPC Authorised Activities 18
9.17 Part A(2) and Part B Activities and Enforcements 18
9.18 Category 3 or 4 Radioactive Substance Authorisations 18
9.19 Discharge Consents 18
9.20 List 1 and List 2 Dangerous Substance Inventory Sites 20
9.21 Pollution Incidents 20
9.22 Coal Mining 20
9.23 Non-Coal Mining 20
9.24 Radon 20
9.25 Asbestos within Buildings 20
10 Relevant Planning History 20
10.1 Planning Applications for Adjacent Sites 20
11 Review of Previously Submitted Relevant Reports 21
11.1 Land Off Kirkgate/Cross Street, Whaplode, Spalding 21
11.2 The Lamb and Flag, 226 High Road, Whaplode, Spalding 22
11.3 Off High Road, Whaplode, Spalding 23
12 Site Walkover 23
13 Preliminary Conceptual Site Risk Model (CSM) 24
13.1 Potential Sources 24
13.2 Potential Receptors 25
13.2.1 Potential Human Health receptors 25
13.2.2 Potential Groundwater Receptors 25
13.2.3 Potential Surface Water Receptors 25
13.2.4 Potential Ecological Receptors 25
13.2.5 Potential Property Receptors 25
13.3 Potential Pathways 25
13.3.1 Potential Pathways for Human Receptors 25
13.3.2 Potential Pathways for Groundwater Receptors 25
13.3.3 Potential Pathways for Surface Water Receptors 25
13.3.4 Potential Pathways for Ecological Receptors 26
13.3.5 Potential Pathways for Property Receptors 26
13.4 Potential Pollutant Linkages 26
14 Qualitative Risk Assessment 26
14.1 Assessment of Potential Significance of Potential Pollutant Linkages 29
14.1.1 Potential Risks to On-Site Human Health Receptors 29

14.1.2 Potential Risks to Off-Site Human Health Receptors 29
14.1.3 Potential Risks to Groundwater Receptors 29
14.1.4 Potential Risks to Surface Water Receptors 29
14.1.5 Potential Risks to Ecological Receptors 30
14.1.6 Potential Risks to Property Receptors 30
15 Conclusions 30
16 Recommendations 31
16.1 Intrusive Site Investigation 31
16.2 Watching Brief and Discovery Strategy 31
16.3 Health and Safety 31
16.4 Services 32
17 Information Gaps and Uncertainties 32
18 Appendix 1 – Decision Notice 33
19 Appendix 2 – Proposed Development Plans 34
20 Appendix 3 – Historical Maps 35
21 Appendix 4 – Environmental Screening Report 36
22 Appendix 5 – Site Photography 37
23 Appendix 6 - Risk Assessment Methodology 38
24 Abbreviations 40

List of Tables

Table 1: Summary of surrounding land uses 11
Table 2: Summary of historical land use identified from historical maps 13
Table 3: Historical Landfills (EA/NRW records) identified on or within 250m 17
Table 4: Petrol or Fuel Sites recorded within 250m of the site 17
Table 5: Part A(2) and Part B Activities and Enforcements identified within 250m of the site 18
Table 6: Licensed Discharge Consents identified within 50m of the site 19
Table 7: Summary of planning applications for adjacent sites 20
Table 8: Summary of potential contamination sources, period of operation and distance from site. 24
Table 9: Conceptual Site Risk Model - Potential Sources, Pathways and Receptors identified on the site. 28
Table 10: Summary of qualitative risk assessment 30
Table 11: Contamination Risk Matrix 38
Table 12: Assessment description for risk scores 38
Table 13: Risk Classification System 39

2 DOCUMENT CONTROL

CONTAMINATED LAND RISK ASSESSMENT
Phase 1 Desk Study Report

Site Address:	Land Adjacent Charnwood, 259 High Road, Spalding, PE12 6TG
Site Coordinates:	532471, 324298
Prepared for:	La Rose Homes Ltd
Report Reference:	PH1-2022-000037
Version No:	1.0
Date:	09/05/2022
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3 DISCLAIMER

This report and any information or advice which it contains, is provided by STM Environmental Consultants Ltd (STM) and can only be used and relied upon by La Rose Homes Ltd (Client).

STM has exercised such professional skill, care and diligence as may reasonably be expected of a properly qualified and competent consultant when undertaking works of this nature. However, STM gives no warranty, representation or assurance as to the accuracy or completeness of any information, assessments or evaluations presented within this report. Furthermore, STM accepts no liability whatsoever for any loss or damage arising from the interpretation or use of the information contained within this report. Any party other than the Client using or placing reliance upon any information contained in this report, do so at their own risk.

It is noted that some of the findings presented in this report are based on information obtained from third parties (i.e. Environmental Search Report). Whilst we assume that all information is representative of the site and of present conditions, we can offer no guarantee as to its validity regarding the short term or long-term history of the Site.

This report excludes consideration of potential hazards arising from any activities at the Site other than normal use and occupancy for the intended land uses. Hazards associated with any other activities have not been assessed and must be subject to a specific risk assessment by the parties responsible for those activities.

It should be noted that this report has been produced for environmental purposes only. It should not in any way be construed to be or used to replace a geotechnical survey, structural survey, asbestos survey, buried services survey, unexploded ordnance survey or Invasive Plant Survey.

4 EXECUTIVE SUMMARY

SECTION	SUMMARY
Site Location And Size	The site is located at Land Adjacent Charnwood, 259 High Road, Whaplode, Spalding, PE12 6TG and is centred at national grid reference 532471, 324298. The site has an area of approximately 0.03 ha.
Current Site Use	The site is currently used as a residential garden. The main current uses in the immediate surrounding area include residential and commercial properties.
Proposed Development	The development proposal is for the erection of a residential dwelling. It is understood that there are proposals to include soft landscaping in the development.
Site History	Examination of Ordnance Survey historic maps revealed that the centre of the site was developed in c.1887. Minor changes to site layout also occurred in c.1888, c.1904, c.1931, c.1970, and c.1977. The site was cleared and matched the present day layout in c.1981, when the site became land associated with an adjacent residential dwelling. The surrounding area has been residential and Industrial.
Geology	According to BGS, the bedrock geology beneath the site consists of West Walton Formation comprising Mudstone and Siltstone while superficial deposits of Tidal Flat Deposits comprising Clay and Silt were identified.
Topography	The site is at an elevation of approximately 4 mAOD (above Ordnance Datum).
Hydrogeology	The site is underlain by Unproductive Bedrock and Superficial Aquifers.
Hydrology	The nearest surface water body is a tributary of the Whaplode River located 93m NE of the site.
Ecology	There are no ecological receptors located on or within 250m of the site.
Contamination Assessment	Offsite potentially contaminative land uses (PCLUs) have included Orchards (adjacent-50m NE to W), Windmill (Corn)/Corn Mill/Store (20m S), Piggery HistoricLandfill (34m E), Petrol Station (40m E), Infilled Ground (50m SE). Additionally, a potential onsite source of contamination was also identified (i.e. Made Ground). A conceptual site risk model was developed and a qualitative risk assessment carried out. Potentially significant potential pollutant linkages were identified in respect of: • Human Health Receptors (i.e. Future Occupiers/Users, Neighbours and Construction Workers) via ingestion, dermal absorption and inhalation (indoors and outdoors); • Human Health Receptors (i.e. Explosion/ Fire risk due to build-up of Methane/ VOCs in confined spaces); • Property Receptors (– i.e. Buildings & Services); • Property Receptors (i.e. Damage to buildings and services\Explosion\Fire) due to the presence of aggressive chemicals in the soil and/or buildup of ground gases and vapours in confined spaces.

Recommendations	Given that potentially significant potential pollutant linkages were identified, it is recommended that an intrusive site investigation is undertaken with the objective of determining the presence and extent of any soil contamination at the site.
This table is intended as a summary of the desk study findings and should be read in conjunction with the main report.	

5 INTRODUCTION

STM Environmental Consultants Ltd (STM) were commissioned by La Rose Homes Ltd (Client) to undertake a Phase 1 Contaminated Land Risk Assessment (CLRA) at a site located at Land Adjacent Charnwood, 259 High Road, Whaplode, Spalding, PE12 6TG.

The study is required to support the partial discharge of Condition 8 attached to planning permission H23-0485-19 (Refer to Appendix 1 for the Decision Notice).

5.1 Development Proposal

The development proposal is for the erection of a residential dwelling. It is understood that there are proposals to include soft landscaping in the development.

The proposed development plans are contained in Appendix 2.

6 CONTEXT AND OBJECTIVES FOR THE RISK ASSESSMENT

6.1 Legislative Context

6.1.1 Part IIA

Part IIA of the Environmental Protection Act 1990, which came into force in England in April 2000 and in Wales in July 2001, introduced a new statutory regime for the identification and remediation of contaminated land in the United Kingdom.

The legislation considers risks from contaminated land to human beings, controlled waters (surface and ground water), protected ecological systems and property. Under the legislation “contaminated land” is defined as:

"Any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that: -

(a) Significant harm is being caused or there is significant possibility of such harm being caused: or

(b) Pollution of controlled waters is being caused, or is likely to be, caused."

In order for land to be considered contaminated, there must be a contaminant, a receptor and a pathway (via which the contaminant can reach the receptor) present at the site. When these three components are identified at a site, a *pollutant linkage* is said to exist.

Pollutant Linkage = Contaminant –> Pathway –> Receptor

In order for a local authority to determine that a site is contaminated land, it must be satisfied that the pollutant linkage is a *significant pollutant linkage* and that the land in question is causing, or that there is a significant possibility that it will cause significant harm (SPOSH) to humans, habitats, buildings or livestock and crops if remedial work is not carried out.

6.1.2 National Planning Policy Framework

The National Planning Policy Framework (NPPF) sets out the government's policy on dealing with land contamination through the planning process. It states that planning policies and decisions should ensure that:

- a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);
- after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and
- adequate site investigation information, prepared by a competent person, is presented.

6.1.3 Environmental Damage Regulations

The Environmental Damage (Protections and Remediation) Regulations 2015 transpose the provisions of the EU Environmental Liability Directive into law in England and Wales.

The Regulations require action in response to the most significant cases of environmental damage. They cover specific types of:

- damage to species and habitats;
- damage to water; or
- risks to human health from contamination of land.

The Regulations apply to both imminent threats and actual cases of damage. Where these arise, those responsible must take immediate action to prevent damage occurring or remediate damage where it does occur.

The Regulations are based on the polluter pays principle ‘requiring those responsible to meet the cost of preventive and remedial measures.

6.2 Objectives

This Desk Study has been written so as to provide an initial overview of the nature and extent of contamination hazards that may exist at the site. It has been undertaken in accordance with the specifications outlined in the British Standard BS 10175:2011+A2:2017 Code of Practice for the Investigation of potentially contaminated sites and the Environment Agency Document, LCRM: Stage 1 Risk Assessment.

The main objectives of the study were to:

- Enable a conceptual site risk model to be constructed;
- Provide sufficient information for a preliminary qualitative risk assessment to be undertaken;
- Inform the need for and scope of any intrusive investigations that may be required.

6.3 Summary of Research Undertaken

Details of information sources researched in order to compile this desk study are given below.

- Environment Agency Open Data (GIS)
- English Nature Open Data (GIS)
- English Heritage Open Data (GIS)
- British Geological Survey GeoIndex Web Map Service
- Coal Authority Open Data and Web Map Service.
- Historical Ordnance Survey Maps

- Local Authority Planning Application Portal
- Groundsure Enviro Insight Report & Historical Maps
- Bomb Sight Web Map Service for UXO

7 SITE DESCRIPTION

7.1 Site Location and Size

The site is located at Land Adjacent Charnwood, 259 High Road, Whaplode, Spalding, PE12 6TG at grid reference is 532471, 324298. The site has an area of approximately 0.03 ha.

The site lies within the jurisdiction of South Holland District Council in terms of the planning process. See Figure 1 below for the Site Location and Aerial Map.

7.2 Current Site Use

The site is currently used as a residential garden.

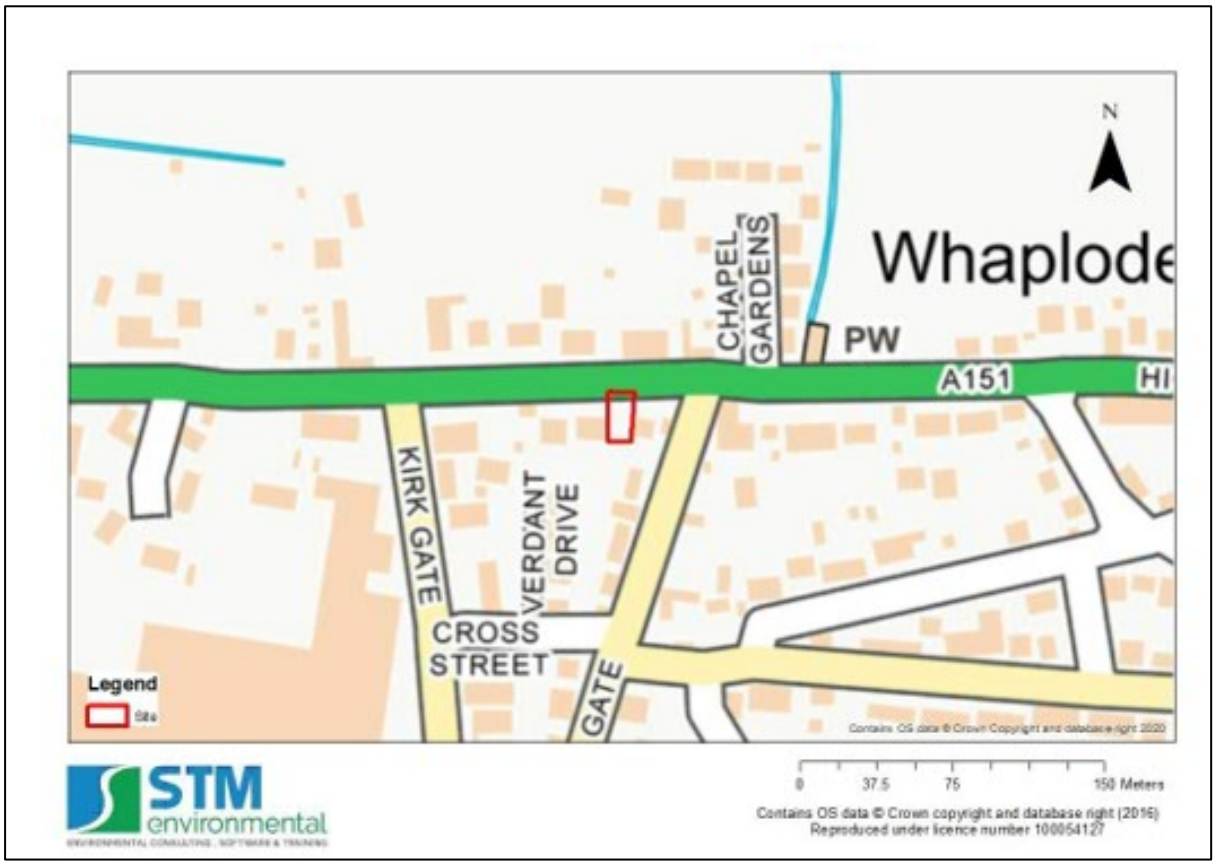
7.3 Surrounding Land Uses

A description of current land uses surrounding the boundaries of the site is given below in Table 1.

Table 1: Summary of surrounding land uses

Boundary	Land Use Description
Northern	Commercial/Adjacent Road (High Road)
Eastern	Residential
Southern	Residential
Western	Residential

Figure 1: Site Location and Aerial Map





8 SITE HISTORY

8.1 Analysis of Historical Ordnance Survey Mapping

Historical maps published by the Ordnance Survey dating back to the late 1800's were reviewed in order to ascertain any previous industrial use at the site. The Groundsure Historical Maps are presented in Appendix 3. A summary of the historic map analysis is provided in Table 2.

Table 2: Summary of historical land use identified from historical maps

Map Year & Scale	POTENTIALLY CONTAMINATIVE LAND USES	
	On Site	Off Site
1887 1:10,560	The centre of the site is developed.	The surrounding area is predominantly developed in all directions, with open undeveloped land to the north west. Multiple Orchards present between adjacent to 250m, NE to W The Broads 50m SE. 6no. Pond 70m W, 150m NW, 170m SE, 180m W, 190m NW, 200m NW.
1888 1:2,500	The site comprises of 1no. unspecified building in the centre of the site, and part of 1no. unspecified building on the western boundary.	Windmill (Corn) 20m S. Smithy 110m W.
1903 1:10,560	No significant changes.	Majority of the Orchards present adjacent to 250m have been cleared, the remaining 5no. Orchards present 85m W, 95m NE, 140m SE, 150m S & 210m NE. Smithy 110m W no longer labelled. Smithy 90m E.
1904 1:2,500	The building in the centre of the site has been demolished. 1no. small unspecified building now present in the west of the site.	Pond 200m SW. Timber Yard 200m E.
1929 1:10,560	No significant changes.	2no. Ponds 150m NW & 200m NW no longer present. 3no. Orchards 145m S, 180m SE & 220m SE.
1931 1:2,500	1no. unspecified building developed on the south eastern boundary.	Windmill (Corn) 20m S relabelled as Corn Mill. Smithy 90m E no longer present. Timber Yard 200m E no longer present.

Table 2: Summary of historical land use identified from historical maps

Map Year & Scale	POTENTIALLY CONTAMINATIVE LAND USES	
	On Site	Off Site
		Orchards 50m W
1938 1:10,560	No significant changes.	No significant changes.
1950 1:10,560	No significant changes.	Orchard 145m S no longer present.
1955-58 1:10,560	No significant changes.	No significant changes.
1970 1:2,500	1no. unspecified building in the south east of the site has been demolished, and 1no. building developed in the north east of the site.	Corn Mill 20m S relabelled as a Store. The Broads 50m SE no longer present, likely infilled. 5no. Ponds 70m W, 170m SE, 180m W, 190m SW & 200m SW no longer present, likely infilled. 7no. Orchards 85m W, 95m NE, 140m SE, 150m S, 180m SE, 210m NE & 220m SE no longer present. Drain adjacent S. Nursery 75m S. Police Station 75m NW. Piggery 80m SE. Store 80m W. Allotment Gardens 70m N. 2no. Works 120m W & 160m SW. Depot 190m S. Garage 230m E. Electricity Substation 250m SE.
1971 1:10,000	No significant changes.	No significant changes.
1977 1:2,500	2no. unspecified buildings in the west of the site have been demolished.	No significant changes.
1981 1:2,500	Residential dwelling has been constructed to the west of the site, matching the present day layout.	Drain adjacent S no longer present adjacent, potentially culverted as sections still present 20m E & W.

Table 2: Summary of historical land use identified from historical maps

Map Year & Scale	POTENTIALLY CONTAMINATIVE LAND USES	
	On Site	Off Site
		Store 20m S no longer labelled. Nursery 75m S no longer present. Police Station 75m NW relabelled as a Police House. Works 120m W no longer labelled. Sewage Works 250m E.
1992 1:10,000	No significant changes.	No significant changes.
1993-95 1:2,500	No significant changes.	Store 80m W no longer labelled. Allotment Gardens 70m N no longer labelled.
2001 1:10,000	No significant changes.	No significant changes.
2003 1:1,250	No significant changes.	No significant changes.
2010 1:10,000	No significant changes.	No significant changes.
2022 1:10,000	No significant changes.	Works 160m SW no longer labelled.
Current Use	The site is currently used as a residential garden.	The main current uses in the immediate surrounding area include residential and commercial properties.

9 ENVIRONMENTAL CHARACTERISTICS

A variety of Environmental datasets provided by the Environment Agency, British Geological Society, English Heritage and English Nature and others were screened in order to assess the environmental sensitivity of the site. The Groundsure Environmental Screen Report is presented in Appendix 4. The results are summarised below.

9.1 Geology

9.1.1 Published Geology

According to the BGS Geoindex, the site is located on bedrock of West Walton Formation comprising Mudstone and Siltstone. The superficial deposits are Tidal Flat Deposits comprising Clay and Silt.

9.1.2 Unpublished Geology

BGS borehole records for the immediate surrounding area were reviewed in order to obtain further information on the ground conditions beneath the site No relevant information was identified.

9.2 Hydrogeology

The Environment Agency classifies the superficial deposits as an Unproductive Aquifer. The bedrock is classified as an Unproductive Aquifer.

There are no groundwater Source Protection Zones on or within 250m of the site.

9.3 Water Abstractions

No Groundwater, Surface Water or Potable Water Abstraction Licenses were identified on or within 2000m of the site.

9.4 Groundwater Level

According to BGS, the groundwater is likely to be less than 3.0 metres below the ground surface throughout the year.

9.5 Hydrology

The nearest surface water body is a tributary of the Whaplode River located 93m NE of the site.

9.6 Flood Risk

9.6.1 River and Tidal (Fluvial and Tidal) Flooding

The risk of fluvial and tidal flooding is therefore considered to be Medium/High. The site is located within Flood Zones 2 and 3 which are defined by the Environment Agency as follows:

- Flood Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea;
- Flood Zones 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year.

9.6.2 Surface Water (Pluvial) Flooding

The Environment Agency (EA) long term flooding maps indicate that the site is at Low risk of surface water flooding. Low risk means that each year this area has a chance of flooding of between 0.1% and 1%.

9.6.3 Groundwater Flooding

The BGS groundwater flood maps indicate that the risk of groundwater flooding at the site is Negligible.

9.7 Environmentally Sensitive Sites and Ecological Protection Zones

No Environmentally Sensitive Sites (e.g. Green Belt Land, Ancient Woodlands) or Ecological Protection Zones (e.g. Special Scientific Interest (SSSI), Ramsar Sites, Special Areas of Conservation (SAC)) were identified on or within 250m of the proposed development.

9.8 Conservation Areas, Designated Protected Buildings and Monuments

No Conservation Areas, Listed Buildings or Scheduled Ancient Monuments were identified on or within 50m of the proposed development.

9.9 Topography

According to Google Earth, the general site level is at 4 mAOD.

9.10 Waste Disposal Activities & Landfill Sites

The following Historical Landfills were identified on or within 250m of the site:

Table 3: Historical Landfills (EA/NRW records) identified on or within 250m

Site Address	Waste Type	License Issue/ Surrender Date	Distance/ Direction
Piggery, Whaplode, Lincolnshire	Household	-	34m E
Foundry House, Whaplode, Lincolnshire	Household	-	157m E

9.11 Petrol and Fuel Sites

The following Petrol or Fuels Sites were recorded within 250m of the site:

Table 4: Petrol or Fuel Sites recorded within 250m of the site

Site Address	Company	Status	Distance/ Direction
Main Road, Whaplode, Spalding, Lincolnshire, PE12 6TA	Co-op Petrol	Open	235m E

Additionally, whilst not identified in the Groundsure report, a visual inspection of the local area indicated that there was likely to have been an obsolete Petrol Station located 40m E. This was determined due to the presence of a canopy at 251 High Rd, Whaplode, Spalding PE12 6TJ.

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

No Sites Determined as Contaminated Land were identified on or within 500m of the site.

9.13 Dangerous or Hazardous Sites

No Control of Major Accident Hazards (COMAH) or Notification of Installations Handling Hazardous Substances (NIHHS) Sites were identified on or within 500m of the site.

9.14 Hazardous Substance Storage/Usage

No 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 were identified on or within 500m of the site.

9.15 IPC Authorisations

No Integrated Pollution Control (IPC) Authorisations were identified on or within 500m of the site.

9.16 Part A(1) and IPPC Authorised Activities

No Part A(1) or Integrated Pollution Prevention Control (IPPC) Authorised Activities were identified on or within 500m of the site.

9.17 Part A(2) and Part B Activities and Enforcements

The following Part A(2) and Part B Activities and Enforcements were identified within 250m of the site:

Table 5: Part A(2) and Part B Activities and Enforcements identified within 250m of the site

Site Address	Process	Permit Type	Status	Distance/ Direction
D A Green & Sons, High Road, Whaplode, Spalding, Lincs, PE12 6TL	Coating Processes	Part B	Historical Permit	133m W
D A Green & Sons, High Road, Whaplode, Spalding, Lincs, PE12 6TL	Coating Processes	Part B	Historical Permit	133m W

9.18 Category 3 or 4 Radioactive Substance Authorisations

No Category 3 or 4 Radioactive Substance Authorisations were identified on or within 500m of the site.

9.19 Discharge Consents

No Red List Discharge Consents were identified on or within 500m of the site.

The following Licensed Discharge Consents were identified within 50m of the site:

Table 6: Licensed Discharge Consents identified within 50m of the site

Site Address	Effluent Type	Receiving Water	Permit Number	Effective Date- Revocation Date	Distance/ Direction
The Bungalow, High Road, Whaplode, Spalding, Lincs, PE12 6TG	Sewage Discharges - Final/Treated Effluent - Not Water Company	Land	PR5LF3467	17/01/1978 – 28/08/1997	26m W
Churchgate Plots, Churchgate, Whaplode, Spalding, Lincs, PE12 6TA	Sewage Discharges - Final/Treated Effluent - Not Water Company	Land	PR5LF5009	18/10/1984 - 01/10/1996	36m S
Churchgate Plots, Churchgate, Whaplode, Spalding, Lincs, PE12 6TA	Unspecified	Land	PR5LF5010	18/10/1984 - 01/10/1996	36m S
Churchgate Plots, Churchgate, Whaplode, Spalding, Lincs, PE12 6TA	Unspecified	Land	PR5LF5011	18/10/1984 - 01/10/1996	36m S
Churchgate Plots, Churchgate, Whaplode, Spalding, Lincs, PE12 6TA	Unspecified	Land	PR5LF5012	18/10/1984 - 01/10/1996	36m S
Churchgate Plots, Churchgate, Whaplode, Spalding, Lincs, PE12 6TA	Unspecified	Land	PR5LF5013	18/10/1984 - 01/10/1996	36m S
Corner House At Whaplode, Spalding.	Unspecified	Land	PR5LF3541	25/10/1978 – 01/10/1996	38m S
Q8 Filling Station Whaplode, Spalding, Lincs	Miscellaneous Discharges - Surface Water	Culverted Drain	PRNNF02341	08/03/1990 – 19/09/1996	49m SE

9.20 List 1 and List 2 Dangerous Substance Inventory Sites

No List 1 and List 2 Dangerous Substances Inventory Sites were identified on or within 500m of the site.

9.21 Pollution Incidents

No Pollution Incidents occurred on or within 50m of the site.

9.22 Coal Mining

The site is not located in an area potentially affected by Coal Mining.

9.23 Non-Coal Mining

No Non-Coal Mining Areas were identified on or within 50m of the site.

9.24 Radon

A search of the BGS Radon dataset indicates that the property lies in an area with less than 1% chance of being affected by naturally occurring Radon gas. Therefore, it is unlikely to be affected by Radon.

9.25 Asbestos within Buildings

An Asbestos survey may be required in line with The Control of Asbestos Regulations 2012. This is outside the scope of this assessment.

10 RELEVANT PLANNING HISTORY

South Holland District Council's online planning portal was searched in an effort to identify any relevant planning applications. No relevant documents were identified for the site.

10.1 Planning Applications for Adjacent Sites

Table 7 below provides a summary of the previously submitted planning applications identified for adjacent sites. Although other planning applications were identified on adjacent sites; they were not deemed relevant to this report.

Table 7: Summary of planning applications for adjacent sites

Application Reference	Date	Description of Proposal	Status
H23-0221-09	2009	Proposed five-bed detached house and detached double garage **(Adjacent: 300 High Road Whaplode PE12 6TG – 214m W)**	Granted (without Contaminated Land Condition)
H23-1182-15	2015	Proposed residential development and associated works **(Land Off Kirkgate / Cross Street (Former Green's Car Park Area) Whaplode Spalding – 15m S)**	Granted (with Contaminated Land Condition)**
H23-0246-17	2017	Residential development - four dwellings **(The Lamb And Flag 226 High Road Whaplode Spalding – 156m E)**	Granted (with Contaminated Land Condition)**

Application Reference	Date	Description of Proposal	Status
H23-1097-18	2018	Conversion of commercial premises to 3 dwellings **(254 High Road Whaplode Spalding Lincs – 15m N)**	Granted (with Ground Gas Condition)*
H23-1234-18	2019	Proposed bungalow **(260 High Road Whaplode Spalding – 18m NW)**	Granted (with Contaminated Land Condition)*
H23-1236-18	2019	Proposed bungalow and garage **(Rear: 254 High Road Whaplode Spalding Lincs – 15m N)**	Granted (with Contaminated Land Condition)*
H23-0697-19	2019	Residential development – proposed chalet bungalow **(Off High Road, Whaplode, Spalding – 95m NW)**	Granted (without Contaminated Land Condition)**
H23-0897-20	2021	Erection of single storey dwelling **(High Road Whaplode Spalding PE12 6TG – 22m NE)**	Granted (with Ground Gas Condition)*

**No relevant reports were identified on the planning portal in the search.*
***Contaminated Land Reports identified in the search are summarised in the sections below.*

11 REVIEW OF PREVIOUSLY SUBMITTED RELEVANT REPORTS

11.1 Land Off Kirkgate/Cross Street, Whaplode, Spalding

A GeoEnvironmental Desk Study (ref.0225/1; June 2014) by Goldfinch Environmental Ltd was identified for the above site, located 15m S of the Site. The report was identified on the online planning portal, and was submitted as a part of planning application ref.H23-1182-15.

A review of the available historical maps shows that the site comprised a series of buildings in the south and west of the site in c.1887. In c.1888 a circular feature in the north east of the site was labelled Windmill. Subsequent minor changes in site layout occurred in c.1904 and c.1929, until c.1968 when the site was redeveloped. There was an increase in the number of buildings in the north west of the site, and a Nursery was developed in the south. The Nursery was no longer present c.1981, and further minor changes in site layout occurred in the north west. In c.1992 the site was cleared of all former structures.

A site walkover was carried out on 25th June 2014, at which point a former motorbike/cycle shelter was present in the northwest corner of the site, with the remaining area capped in concrete, loose soils and gravel with occasional patches of light weed growth. No notable features of contamination were observed during the walkover.

Goldfinch concluded that human health receptors had a Low-Medium risk, due to the site history and the sensitivity of the proposal. Therefore, it was recommended that a Phase 2 Intrusive Investigation should be undertaken within the proposed soft landscaped areas.

Whilst no additional Contaminated Land Reports were identified on the planning portal, subsequent applications do discuss the submission of Contaminated Land Reports. An

Environmental Risk Assessment (ref. 16-04-01; May 2016) was submitted as a part of planning application ref. H23-0479-16. The Risk Assessment was based upon the aforementioned Desk Study, a Geotechnical Report (ref. 28915; February 2016) by Sidebottom, Richardson, Cheng Ltd; a site investigation undertaken on 14th April 2016 to take soil samples; and the analysis of the samples (ref.16-06483; April 2016) by The Environmental Laboratory Ltd. Aside from the Desk Study, none of the other reports were identified on the planning portal. However, summaries of the reports were included within the Risk Assessment.

During the Geotechnical Investigation, an odour of 'slight petrochemical smell' was identified in one of the borehole locations. However, this was dismissed on the grounds that rotting vegetation can produce similar odours, and no samples were taken for analysis.

During the subsequent Site Investigation on 14th April 2016, 6no. trial pits (TP1-TP6) were excavated to a maximum depth of 1.6mbgl. Samples were sent for chemical analysis, including a general suite of metals, TPHs and PAHs.

The concentrations of Lead, Chromium, Nickel and Zinc were slightly elevated above the background values at which they are normally found, and the concentrations of PAHs and TPHs were very low. None of the values exceeded the relevant Soil Guideline Values, therefore the risk to human health receptors was considered to be low. As such, no further site investigations or remediation were deemed to be required. The only recommendation related to the removal of the top layer of stones, bricks and sand from the garden areas. It was stated that the imported soils should be of a suitable quality, and required the approval of the Local Authority Land Contamination Officer.

A Verification Report (ref.16-04-01; August 2017) by Stuart Guy Consulting was submitted as a part of planning application H23-0800-17, and was deemed sufficient to fully discharge the condition. The development has been completed, based on images from Google Maps.

11.2 The Lamb and Flag, 226 High Road, Whaplode, Spalding

A GeoEnvironmental Desk Study (ref.0450/1; July 2017) by Goldfinch Environmental Ltd was identified for the above site located 156m E of the Site. The report was identified on the online planning portal, and was submitted as a part of planning application ref. H23-0870-17.

A review of the available historical maps shows that the site comprised a developed plot of land in a semi-rural setting in c.1887, which was labelled as 'Lamb & Flag (P.H)' in c.1888. Minor changes to the layout occurred in c.1950, and in c.1968 the site layout changed to show 1no. large building in the south of the site and a smaller structure in the north of the site, matching the present day layout.

A site walkover was carried out on 11th July 2017, at which point the site was predominantly capped with concrete/asphalt in the east of the site and loose gravel in the west of the site, and 2no. structures (a former Public House and a Small Domestic Garage). An internal inspection of the Garage showed that it was being used to store textiles, gas cylinders, cardboard packaging, plastics, emulsion paint and plastic bags. General refuse awaiting collection was also present across the site, together with occasional wooden pallets and discarded plastics. In addition, a small open container of an 'oily content' was identified in the north east corner of the site. It appeared to have impacted the underlying concrete hardstanding, and potentially an adjacent concrete post.

Based on the fact that there were no readily identifiable sources of contamination identified during the site walkover or the desk study, the site was assessed as being Low risk, and as such no further work was deemed necessary.

In addition to the aforementioned GeoEnvironmental Desk Study, a letter from Goldfinch Environmental Ltd to the council was submitted as a part of the same planning application (ref. H23-0870-17). The letter is in response to some comments from Environmental Protection regarding further ground gas risk assessment, which were not identified on the online planning portal.

Environmental Protection appeared to believe that the ground gas risk from a landfill site located off site. Goldfinch Environmental Ltd maintained their arguments set out within the Desk Study, which dismissed the risk due to the local geology inhibiting the migration of ground gas. However, they agreed to undertake a more precautionary approach based on the comments made by Environmental Protection, and recommended the installation of a 1200 gauge LDPE membrane.

The planning application was granted by the council on the basis of the aforementioned reports, which meant that the full contaminated land condition was discharged. Based on images from Google Maps, the development appears to have been completed.

11.3 Off High Road, Whaplode, Spalding

A GeoEnvironmental Desk Study (ref.0603/1; March 2019) by Goldfinch Environmental Ltd was identified for the above site located 95m NW of the Site. The report was identified on the online planning portal, and was submitted as a part of planning application ref. H23-0697-19.

A review of the available historical maps shows that the site comprised undeveloped land until c.1968, when buildings in the north of the site were labelled as Offices. In c.1981 changes were made to the layout of the buildings on site but no further changes were listed in the report.

A site walkover was carried out on 21st March 2019, at which point the site was capped with concrete with a small gravelled area in the south of the site. There were no structures present on site at the time of the walkover, and there were no visual or olfactory signs of contamination.

Based on the limited historical developments on site, and the lack of notable features identified during the site walkover, the site was assessed as being Low risk, and as such no further work was deemed necessary.

This report was submitted in support of a planning application, which was granted without a contaminated land condition. Therefore, this indicates that the Council were satisfied with the findings of the report.

12 SITE WALKOVER

A site walkover was not undertaken as part of the initial scope of works. Photographs of the site, which have been taken from Google Maps, are presented in Appendix 5.

13 PRELIMINARY CONCEPTUAL SITE RISK MODEL (CSM)

A conceptual site risk model (CSM) aims to summarise all the potential pollutant linkages or risk that may be associated with a site. It considers the potential pollution sources, receptors and pathways by which receptors can be impacted.

13.1 Potential Sources

Potentially contaminative land uses (PCLUs) of concern were identified based on their proximity to the site and whether they had the potential to generate significant quantities of ground gases, vapours and/or mobile volatile contamination (i.e. high pollution migration potential).

Any PCLUs within a 50m radius of the site as well as any PCLUs with high pollution migration potential within 250m of the site were considered to be of concern and were included within the assessment.

A summary is provided in Table 8 below.

Table 8: Summary of potential contamination sources, period of operation and distance from site.

Site Name	Industrial Profile	Approx. Year Use Established	Approx. Year Use Ended	Direction	Approx. Distance from Site (m)
Potential Made Ground	-	Unknown	Unknown	Onsite	0
Orchards	-	c.1887	c.1903	NE to W	Adjacent – 50
Windmill (Corn)/Corn Mill/Store	-	c.1888	c.1981	S	20
Piggery (Historic Landfill)	Waste: Landfills and Other Waste Treatment & Disposal Sites	Unknown	Unknown	E	34
Petrol Station	Road Vehicles: Garages and Filling Stations	Unknown	Unknown	E	40
The Broads (Infilled Ground)	Unknown Filled Ground	c.1970	Current (2022)	SE	50

Typical contaminants associated with the above PCLUs are:

- Acids & Alkalis
- Asbestos
- Chlorinated & Non-Chlorinated Solvents
- Fuels & Fuel Oils
- Heavy Metals
- Landfill Gases: Methane & Carbon Dioxide
- Organic & Inorganic Compounds
- Pesticides

- Polycyclic Aromatic Hydrocarbons (PAHs)
- Total Petroleum Hydrocarbons (TPHs)
- Volatile Organic Compounds (VOCs)

Please note, this list is not exhaustive of all contaminants that may be present on or off site.

13.2 Potential Receptors

The potential receptors include human, water, ecological and infrastructure receptors.

13.2.1 Potential Human Health receptors

Potential human health receptors include construction workers, future occupants or users of the site and the proposed development and neighbours of the site.

13.2.2 Potential Groundwater Receptors

There are no potential groundwater receptors in the vicinity of the site.

13.2.3 Potential Surface Water Receptors

Potential surface water receptors include the tributary of the Whaplode River located 93m NE.

13.2.4 Potential Ecological Receptors

There are no potential ecological receptors in the vicinity of the site.

13.2.5 Potential Property Receptors

Potential property receptors include the proposed development as well as neighbouring properties and associated services.

13.3 Potential Pathways

13.3.1 Potential Pathways for Human Receptors

The main pathways via which on and off-site human receptors are likely to come into contact with, or be affected by any contamination present on the site can be summarised as follows:

- Dermal contact with contaminated soil (i.e. absorption through the skin) – through garden activities such as children playing, gardening etc.
- Ingestion of contaminated soil (either directly or via soil adhering to vegetables grown on the site)
- Inhalation of contaminated soil, fugitive dust and vapours.
- Explosion of landfill gases leading to death/injury

13.3.2 Potential Pathways for Groundwater Receptors

The principal means by which contaminants can reach the groundwater is by leaching (i.e. downward movement through the soil pores with percolating and infiltrating water).

13.3.3 Potential Pathways for Surface Water Receptors

Routes by which contaminants from the site could reach surface water include via overland run-off, drainage and groundwater entering nearby rivers as base flow.

13.3.4 Potential Pathways for Ecological Receptors

The exposure pathways for terrestrial ecological receptors will be similar to those for humans. Pathways for aquatic receptors are via uptake of contaminated sediments and water.

13.3.5 Potential Pathways for Property Receptors

Pathways by which property receptors are exposed to potential contaminants include ground gas and vapour migration through the unsaturated zone and absorption of water containing dissolved contaminants (i.e. as in the case of sulphate attack).

13.4 Potential Pollutant Linkages

The Potential Pollutant Linkages (PPLs) were identified as part of the CSM. These were concerned with the following:

- Risk of direct contact (ingestion and absorption) with and inhalation of contaminants to on-site human health receptors including future occupiers and site visitors (PPL1a)
- Risk of injury/death to future occupiers and visitors as a result of explosion due to accumulation of ground gas from on and off-site sources in confined spaces within on-site dwellings/buildings. (PPL1b)
- Risk of direct contact (ingestion and absorption) with and inhalation of contaminants to on-site human health receptors such as Construction Workers (PPL1c)
- Risk of injury/death to construction workers as a result of explosion due to accumulation of ground gas from on and off-site sources in confined spaces within on-site dwellings/buildings. (PPL1d)
- Risk of direct contact with (ingestion and absorption) and inhalation of contaminants to off-site human health receptors as a result of on-site contaminants migrating off-site (PPL2a)
- Risk of injury/death to off-site human health receptors as a result of explosion due to migration of on-site ground gas and subsequent accumulation in confined spaces in off-site buildings. (PPL2b)
- Risk of deterioration of groundwater quality resulting from the migration of on-site contaminants into the underlying aquifer (PPL3)
- Risk of deterioration of surface water quality resulting from the migration and entry of on-site contaminants into the surface water receptor (PPL4)
- Risk of deterioration of ecological quality resulting from the migration and entry of on-site contaminants to the ecological receptor during development and after completion (PPL5);
- Risk of damage to buildings and services from on and off-site contaminants (PPL6a)
- Risk of damage to property as a result of explosion due to accumulation of ground gas from on and off-site sources in confined spaces within buildings (PPL6b).

14 QUALITATIVE RISK ASSESSMENT

For land to be considered ‘contaminated land’ under Part IIA, the potential contamination source must be causing or have the significant possibility of causing harm to designated receptors. It is therefore necessary to focus on pollutant linkages that have the potential to be significant (i.e. those that are most likely to lead to a determination).

The identified PPLs were therefore individually qualitatively assessed using a basic risk assessment methodology which considers “Likelihood” and “Severity” to assess the magnitude of the potential risk. The methodology is summarised in Appendix 6.

Table 9 below summarises the conceptual site risk model (CSM) including the identified PPLs and the results of the qualitative risk assessment.

Table 9: Conceptual Site Risk Model - Potential Sources, Pathways and Receptors identified on the site.

Source/ Potential Contaminants	**Potential Contaminants Associated with Site History as Potential Made Ground and Adjacent Uses as Orchards/ Offsite Land Uses as Corn Mill, Landfill, Petrol Station and Infilled Ground:** i.e. Acids & Alkalis, Asbestos, Chlorinated & Non-Chlorinated Solvents, Fuels & Fuel Oils, Heavy Metals, Landfill Gases: Methane & Carbon Dioxide, Organic & Inorganic Compounds, Pesticides, PAHs, TPHs, VOCs										
	On and Off-Site Contaminants				**On Site Contaminants**		**On Site Contaminants**			**On and Off-Site Contaminants**	
Potential Pathways	• Ingestion of soils, garden vegetables and dust • Ingestion of contaminated drinking water • Dermal absorption • Inhalation of dusts and vapours indoors and outdoors • Migration of ground gases and vapours into properties						Leaching in the unsaturated zone & diffusion in the saturated zone	• Overland run-off • Drainage channels • Base flow	• Direct contact via absorption and ingestion; • Inhalation	• Migration of ground gases and vapours through the unsaturated zone • Attack on water supply service pipes	
Potential Receptors	**ON SITE HUMANS (AFTER COMPLETION)** Future Occupiers & Visitors		**ON SITE HUMANS (DURING DEVELOPMENT)** Construction Workers		**OFF SITE HUMANS** Neighbours		**GROUND WATER** None	**SURFACE WATER** Whaplode River 93m NE	**ECOLOGICAL** None	**ON SITE PROPERTY** Buildings and Services	
Potential Hazards	• Adverse health effects • Injury/ • Death	Explosion/ Fire - Build-up of Methane/ VOCs in confined spaces	• Adverse health effects • Injury/ Death	Explosion/ Fire - Build-up of Methane/ VOCs in confined spaces	• Adverse health effects • Injury/ Death	Explosion/ Methane build-up in confined spaces	Deterioration of groundwater quality	• Deterioration of surface water quality • Ecological impacts	Deterioration of ecological receptor quality	Damage to property and services	Explosion/ Fire - Build-up of Methane/ VOCs in confined spaces
Plausible?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**No**	**Yes**	**Yes**
PPL ID	**PPL1a**	**PPL1b**	**PPL1c**	**PPL1d**	**PPL2a**	**PPL2b**	**PPL3**	**PPL4**	**PPL5**	**PPL6a**	**PPL6b**
SEVERITY	Major (4)	Major (4)	Major (4)	Major (4)	Major (4)	Major (4)	Moderate (3)	Moderate (3)	Moderate (3)	Moderate (3)	Moderate (3)
LIKELIHOOD	Possible (3)	Possible (3)	Possible (3)	Possible (3)	Improbable (1)	Improbable (1)	Improbable (1)	Improbable (1)	Improbable (1)	Possible (3)	Possible (3)
UPDATED RISK	Moderate (12)	Moderate (12)	Moderate (12)	Moderate (12)	Low (4)	Low (4)	Very Low (3)	Very Low (3)	Very Low (3)	Low to Moderate (9)	Low to Moderate (9)
POTENTIALLY SIGNIFICANT?	**YES**	**YES**	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**	**NO**	**YES**	**YES**

14.1 Assessment of Potential Significance of Potential Pollutant Linkages

14.1.1 Potential Risks to On-Site Human Health Receptors

PPL1a and PPL1c are concerned with the risk of direct contact (ingestion and dermal absorption) with and inhalation of on and off-site contaminants by on site human health receptors and construction workers. PPL1a and PPL1c are considered to have the potential to be significant as potentially contaminative land uses (i.e. Orchards, Corn Mill, Landfill, Petrol Station, Infilled Ground) and a potential source of onsite contamination (i.e. Made Ground) were identified on and within 50m of the site.

As the proposal is to introduce a residential dwelling with soft landscaping, it is possible that human health receptors (i.e. groundworkers and future occupiers of the dwellings) could be exposed to any potential contamination via direct contact and ground gases and vapours via indoor inhalation during groundworks and after completion. Although potentially contaminative land uses were identified on and within 250m of the site, it is considered that any potential risks can be reduced so long as Construction Workers implement standard health and safety measures as described in Sections 16.2.

PPL1b and PPL1d are concerned with the risk of injury/death of future occupiers, site visitors and construction workers as a result of explosion due to the potential accumulation of ground gases and vapours from on and off-site sources. PPL1b is considered to have the potential to be significant as potential sources of explosive ground gases and/or vapours (i.e. Landfill, Petrol Station, Infilled Ground) were identified within 50m of the site.

14.1.2 Potential Risks to Off-Site Human Health Receptors

PPL2a is concerned with the risk of direct contact and inhalation of contaminants emanating from the site by off-site human health receptors. PPL2a is considered unlikely to have the potential to be significant as it is considered unlikely that any potential contaminants present at the site would be of sufficient magnitude and mobility as to significantly impact off-site human receptors.

PPL2b is concerned with the risk of injury/death of off-site human health receptors as a result of explosion due to accumulation of ground gases from on-site sources. PPL2b is considered unlikely to have the potential to be significant as no potential sources of explosive ground gases (i.e. Landfills, Minable Coal, Petrol Stations etc.) were identified on the site.

14.1.3 Potential Risks to Groundwater Receptors

PPL3 is concerned with the risk of deterioration of groundwater quality resulting from the migration of on-site contaminants into the underlying aquifer. PPL3 is considered unlikely to have the potential to be significant. The site is underlain by an Unproductive Aquifer and no Source Protection Zones were identified in the vicinity of the site.

14.1.4 Potential Risks to Surface Water Receptors

PPL4 is concerned with the risk of deterioration of surface water quality resulting from the migration and entry of on-site contaminants into surface water receptors. PPL4 is considered unlikely to have the potential to be significant. Although the tributary of the Whaplode River is located 93m NE from the site, it is considered unlikely that any potential contaminants present at the site would be of sufficient magnitude and mobility as to significantly impact surface water receptors.

14.1.5 Potential Risks to Ecological Receptors

PPL5 is concerned with the risk of deterioration of ecological receptors resulting from potential on-site contaminants. PPL5 is considered unlikely to have the potential to be significant as no designated ecological receptors were identified on or within 250m of the site.

14.1.6 Potential Risks to Property Receptors

PPL6a is concerned with the risk of damage to on site buildings and services from on and off-site contaminants. If contaminated, the soil may contain aggressive chemicals (i.e. Sulphates, VOCs) that can attack building materials and services. PPL6a is considered to have the potential to be significant for the same reasons as PPL1a and PPL1c.

PPL6b is concerned with the risk of damage to property as a result of explosion due to migration of on and off-site ground gases and vapours and their subsequent accumulation in confined spaces in on-site buildings. PPL6b is considered to have the potential to be significant for the same reasons as PPL1b and PPL1d.

15 CONCLUSIONS

This Phase 1 Desk Study was carried out to support a planning application seeking to erect a residential dwelling.

A review of historical maps and planning records suggests that the site and surrounding land have been subject to previous potentially contaminative land uses (PCLUs). Off site PCLUs have included Orchards (adjacent-50m NE to W), Windmill (Corn)/Corn Mill/Store (20m S), Piggery Historic Landfill (34m E), Petrol Station (40m E), Infilled Ground (50m SE). Additionally, a potential source of onsite contamination was also identified (i.e. Made Ground).

A conceptual site risk model was developed and a qualitative risk assessment undertaken. The conclusions of the risk assessment are presented in Table 10 below.

Table 10: Summary of qualitative risk assessment

Potential Receptor	Potential Pathway	Potential Hazard	PSPPL?	Risk
On-Site Human Health (Future Occupiers)	Ingestion/Absorption Inhalation	Adverse health Injury/Death	**Yes**	**Moderate**
	Buildup of Methane/ VOCs in confined spaces	Explosion/ Fire Injury/Death	**Yes**	**Moderate**
On-Site Human Health (Construction Workers)	Ingestion/Absorption Inhalation	Adverse health Injury/Death	**Yes**	**Moderate**
	Buildup of Methane/ VOCs in confined spaces	Explosion/ Fire Injury/Death	**Yes**	**Moderate**
Off-Site Human Health	Ingestion/Absorption Inhalation	Adverse health Injury/Death	**No**	**Low**
	Buildup of Methane/ VOCs in confined spaces	Explosion/ Fire Injury/Death	**No**	**Low**
Groundwater	Percolation/Leaching	Adverse groundwater quality	**No**	**Very Low**

Potential Receptor	Potential Pathway	Potential Hazard	PSPPL?	Risk
Surface Water	Lateral Migration Groundwater baseflow	Adverse Surface water quality	**No**	**Very Low**
Ecology	Ingestion/Absorption	Adverse health Injury/Death	**No**	**Very Low**
Property	Physical Contact/Absorption	Damage to building and services	**Yes**	**Low to Moderate**
	Buildup of Methane/ VOCs in confined spaces	Explosion/ Fire Damage to building	**Yes**	**Low to Moderate**

16 RECOMMENDATIONS

16.1 Intrusive Site Investigation

Given that potentially significant potential pollutant linkages (PSPPLs) were identified, it is recommended that an intrusive site investigation is undertaken with the objective of determining the presence and extent of any soil contamination at the site.

16.2 Watching Brief and Discovery Strategy

Therefore, it is recommended that a "watching brief" is kept at all times during the development. Should any unexpected contamination be encountered then the discovery strategy outlined below should be followed.

- Works should be halted if any suspicious ground conditions are identified by groundworkers;
- The Contractor should assess the need for any immediate health and safety or environmental management control measures. If control measures are considered to be required, they should be implemented;
- The Contractor should notify the Client's Environmental Consultant and the Local Planning Authority;
- The Environmental Consultant should attend the site to record the extent of 'contamination' and if necessary, to collect samples;
- If remedial action is considered necessary then the proposed works should be agreed with the Local Planning Authority prior to implementation;
- Once remediation is complete, the Environmental Consultant should collate evidence of work carried out for inclusion in a Remediation Verification Report which should be submitted to the Local Planning Authority.

16.3 Health and Safety

All site works should be carried out in accordance with Health and Safety Executive regulations and guidelines, the Contractor's Construction Health and Safety Plan and the Construction (Design and Management) Regulations 2015.

Precautions should be taken to minimise exposure of site workers during ground works through the implementation of site safety. Such precautions should include, but not be limited to:

- Provision of appropriate Personal Protective Equipment (PPE);
- Availability of site welfare;
- Good personal hygiene, washing and changing procedures;

- Daily safety briefings.

16.4 Services

The local Statutory Water Undertaker should be contacted in the event that new services are proposed as part of the redevelopment in order to determine their specification for the type of pipework which should be used on this site.

Further information can be found within the published guidance for the '*Selection of Water Supply Pipes to be used in Brownfield Sites'*, issued in January 2011 by the UK Water Industry Research.

17 INFORMATION GAPS AND UNCERTAINTIES

Assumptions have been made regarding the nature and scale of the activities that took place on the site and the types of potential contaminants that may have resulted. These assumptions will need to be reviewed along with the Conceptual Site Model should further information come to light.

18 APPENDIX 1 – DECISION NOTICE

Council Offices
Priory Road
Spalding
Lincolnshire
PE11 2XE
Admin 01775 764723
DC Officers 01775 764703
facsimile 01775 762937
planningadvice@sholland.gov.uk
www.sholland.gov.uk

Cooper Architectural Design
90 Winsover Road
Spalding
Lincs
PE11 1HA

TOWN AND COUNTRY PLANNING ACT 1990

OUTLINE

Reference: H23-0485-19 **Date of Decision:** 18th July 2019

Applicant: Mr A & Mrs E Welsh
Charnwood
259 High Road
Whaplode
Spalding Lincs
PE12 6TG

Location: Land Adjacent: Charnwood 259 High Road Whaplode Spalding

Description: Residential development - single plot

South Holland District Council hereby give notice that this application has been GRANTED (or equivalent) subject to the following condition(s):

1 Application for approval of reserved matters must be made not later than three years beginning with the date of this permission, and the development must be begun before the expiration of two years from the final approval of reserved matters or in the case of approval on different dates, the final approval of the last such matter to be approved.

Reason: As required by Section 92 of the Town and Country Planning Act 1990 as amended by the Planning and Compulsory Purchase Act 2004.

2 The development hereby permitted shall be carried out in accordance with the following approved plans:
1902-01-C;
Design and Access Statement and Flood Risk Assessment.

Reason: For the avoidance of doubt and in the interests of proper planning.

3 No development shall take place without the prior written approval of the Local Planning

Authority of all details of the following matters:
i) the layout, scale and external appearance of building(s), including a schedule of external materials to be used;
ii) the means of access to the site;
iii) the landscaping of the site;
iv) the means of sewage and surface water disposal;
v) the existing and proposed site levels and floor levels of the buildings and hard surfaced areas.

Reason: The application was submitted in outline only and the above details are required to enable the Local Planning Authority to assess the detailed design, appearance and layout of the development as well as ensure that appropriate access and services are provided to serve the development.
This Condition is imposed in accordance with Policies 2, 3, 4 and 30 of the South East Lincolnshire Local Plan, 2019 and national guidance contained in Section 14 of the National Planning Policy Framework, 2019.

4 When application is made to the Local Planning Authority for approval of reserved matters, that application shall be accompanied by a scheme of landscaping and tree planting indicating, inter alia, the number, species, heights on planting and positions of all trees in respect of the land to which that application relates, together with details of post-planting maintenance and such a scheme shall require the approval of the Local Planning Authority before any development is commenced. Such scheme as is approved by the Local Planning Authority shall be carried out and completed in its entirety during the first planting season following practical completion of the development. All trees, shrubs and bushes shall be maintained by the owner or owners of the land on which they are situated for the period of five years beginning with the date of completion of the scheme and during that period all losses shall be made good as and when necessary.

Reason: To ensure that the development is adequately landscaped, in the interests of its visual amenity and that of the area in which it is set. This issue is integral to the development and therefore full details need to be finalised prior to the commencement of works.
This Condition is imposed in accordance with Policies 2 and 3 of the South East Lincolnshire Local Plan, 2019.

5 When application is made to the Local Planning Authority for approval of reserved matters, that application shall be accompanied by details of the proposed boundary treatment/screening, including a schedule of materials, and details of the size and species of any hedging. The details so approved shall be implemented in full before the development is first brought into use.

Reason: In the interests of the character and appearance of the development and also amenity.
This Condition is imposed in accordance with Policies 2 and 3 of the South East Lincolnshire Local Plan, 2019.

6 When application is made for approval of reserved matters, that application shall show details of arrangements to enable a motor vehicle to turn within the site so that it can enter and leave the highway in a forward gear.

Reason: To allow vehicles to enter and leave the highway in a forward gear in the interests of highway safety.
This condition is imposed in accordance with Policies 2 and 3 of the South East Lincolnshire Local Plan, 2019.

7 The development hereby permitted shall be carried out in accordance with the measures set out in the Flood Risk Assessment forming part of this planning application, unless otherwise agreed in writing by the Local Planning Authority. In particular the following measures shall be fully implemented before the property is first occupied:
- Finished floor levels shall be set 300mm above existing ground level;
- Flood resilient construction shall be incorporated within the development up to 300mm above finished floor level in accordance with DCLG document "Improving Flood Performance of New Buildings - Flood Resilient Construction", 2007.
The mitigation measures shall be fully implemented prior to occupation.

Note: Future occupants are advised to sign up to the Environment Agency's free Floodline Warnings Direct Service.

Reason: To ensure that the development does not increase the risk of flooding or be at risk of flooding.
This Condition is imposed in accordance with Policies 3 and 4 of the South East Lincolnshire Local Plan, 2019 and national guidance contained in Section 14 of the National Planning Policy Framework, 2019.

8 The development hereby permitted shall not be commenced until a scheme to deal with any contamination of land or pollution of controlled waters has been submitted to and approved in writing by the Local Planning Authority (LPA) and until the measures approved in that scheme have been implemented. The scheme shall include all of the following measures:

i) a desk-top study carried out to identify and evaluate all potential sources of contamination and the impacts on land and/or controlled waters, relevant to the site. The desk-top study shall establish a 'conceptual site model' and identify all plausible pollutant linkages. Furthermore, the assessment shall set objectives for intrusive site investigation works/Quantitative Risk Assessment (or state if none required). Two full copies of the desk- top study and a non-technical summary shall be submitted to the LPA without delay upon completion.
ii) if identified as being required following the completion of the desk-top study, a site investigation shall be carried out to fully and effectively characterise the nature and extent of any land contamination and/or pollution of controlled waters. It shall specifically include a risk assessment that adopts the Source-Pathway-Receptor principle, in order that any potential risks are adequately assessed taking into account the sites existing status and proposed new use. Two full copies of the site investigation and findings shall be forwarded to the LPA without delay upon completion.
iii) thereafter, a written method statement detailing the remediation requirements for land contamination and/or pollution of controlled waters affecting the site shall be submitted to and approved in writing by the LPA, and all requirements shall be implemented and completed to the satisfaction of the LPA. No deviation shall be made from this scheme. If during redevelopment contamination not previously considered is identified, then the LPA

shall be notified immediately and no further work shall be carried out until a method statement detailing a scheme for dealing with the suspect contamination has been submitted to and agreed in writing by the LPA.
iv) two full copies of a full closure report shall be submitted to and approved in writing by the LPA. The report shall provide verification that the required works regarding contamination have been carried out in accordance with the approved Method Statement(s). Post-remediation sampling and monitoring results shall be included in the closure report to demonstrate that the required remediation has been fully met.

Note
The applicant is advised that the phased risk assessment required by the Contaminated Land Scheme Condition should be carried out in accordance with the procedural guidance of the Environmental Protection Act 1990 Part 11A.
The applicant's attention is also drawn to the document entitled "Developing Land Within Lincolnshire - A guide to submitting planning applications to develop land that may be contaminated", which can be obtained through the Local Environmental Health Department.

Reason: To assess whether the site is polluted and to address any pollution to ensure a satisfactory development. This issue is integral to the development and therefore full details need to be finalised prior to the commencement of works.
This Condition is imposed in accordance with Policy 30 of the South East Lincolnshire Local Plan, 2019.

Notes:

The Local Planning Authority has acted positively and proactively in determining this application by assessing it against all material considerations, including national guidance, planning policies and representations that have been received during the public consultation exercise, and by identifying matters of concern within the application and negotiating, with the Applicant, acceptable amendments to the proposal to address those concerns. As a result, the Local Planning Authority has been able to grant planning permission for an acceptable proposal.

This decision notice, the relevant accompanying report and the determined plans can be viewed online at http://planning.sholland.gov.uk/OcellaWeb/planningSearch



Phil Norman
Planning and Building Control Manager
South Holland District Council

BUILDING REGULATIONS:
This decision refers only to planning permission as granted under the Town and Country Planning

Act 1990. The works that you are proposing may also require Building Regulations and this planning permission does not give authority under Building Regulations to commence work. Please contact the Building Control section for further information on 01775 764557 or bcadmin@sholland.gov.uk

RIGHTS OF APPEAL

Appeals to the Secretary of State

If you are aggrieved by the decision of your Local Planning Authority to refuse permission for the proposed development or grant consent subject to conditions, then you can appeal to the Secretary of State under Section 78 of the Town and Country Planning Act 1990 or Section 20 of the Planning (Listed Building and Conservation Areas) Act 1990.

Timescales for appealing

The deadlines for appeals are calculated from the **date of decision** and are as follows for the types of applications below:

12 Weeks	6 Months	8 Weeks
Householder Applications	Planning Permission	Consent to Display Adverts
Minor Commercial Development	Listed Building Consent	
Agricultural Determinations	Other Prior Approval Applications	
Householder Prior Approval Applications		

Enforcement Notices

If an enforcement notice was served prior to the planning application being determined then the deadline for appealing is 28 days from the date of the **planning refusal**

If an enforcement notice is served after the planning application is determined then the deadline for appealing is 28 days from the date of the **enforcement notice** OR **the timescales stated above for each application type** from the date of the planning refusal - whichever is sooner.

All appeals must be made using an Appeal Form which you can get from The Planning Inspectorate at Temple Quay House, 2 The Square, Bristol, BS1 6PN (tel: 0303 444 5000) or you can submit your appeal online at:

http://www.planningportal.gov.uk/planning/appeals/online/makeanappeal

The Secretary of State can allow a longer period for giving notice of an appeal but he will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.

The Secretary of State need not consider an appeal if it seems to him that the Local Planning Authority could not have granted planning permission for the proposed development or could not have granted it without the conditions it imposed, having regard to the statutory requirements, to the

provisions of the development order and to any directions given under the order. In practice the Secretary of State does not refuse to consider appeals solely because the Local Planning Authroity based its decision on a direction given by him.

For detailed information on appeals, appeal types and guidance on the appeals process please visit:

http://www.planningportal.gov.uk/planning/appeals/planningappeals

Purchase Notices

If either the Local Planning Authority or the Secretary of State refuses permission to develop land or grant it subject to conditions the owner may claim that he can neither put the land to a reasonably beneficial use in its existing state nor can he render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.

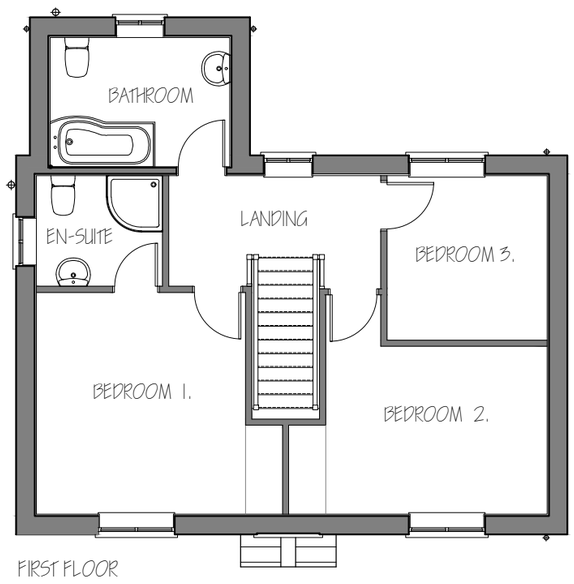
In these circumstances the owner may serve a purchase notice on the Council in whose area the land is situated. This notice will require the Council to purchase his interest in the land in accordance with the provisions of the Part VI of the Town and Country Planning Act 1990 or Section 32 of the Planning (Listed Building and Conservation Areas) Act 1990.

Compensation

In certain circumstances compensation may be claimed from the Local Planning Authority if permission is refused or granted subject to conditions by the Secretary of State on appeal or on reference of the application to him.

These circumstances are set out in Section 114 and related provisions of the Town and Country Planning Act 1990 and Section 27 of the Planning (Listed Building and Conservation Areas) Act 1990.

19 APPENDIX 2 – PROPOSED DEVELOPMENT PLANS



FIRST FLOOR



FRONT ELEVATION

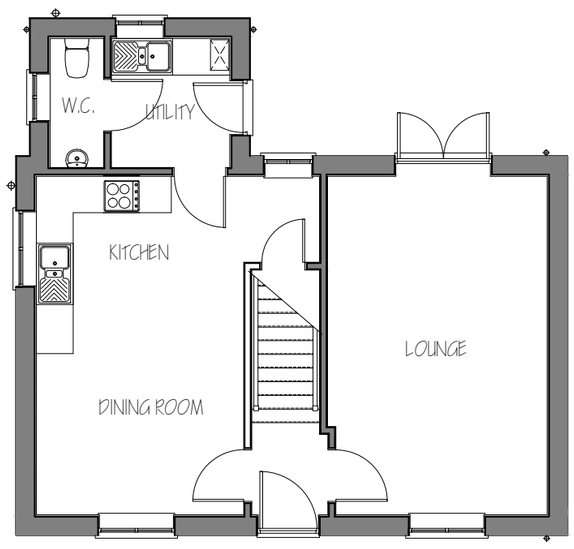
LIMITATIONS.
This drawing is limited in the amount of information contained and does not purport to contain a full specification of the works. It is solely for the purpose of obtaining Planning/Building Regulation approval.
The drawing must not be used for any other purpose than above.
All dimensions shall be taken from site from actual work. Under no circumstances shall measurements be scaled from this drawing for construction or ordering purposes.
All given dimensions shall be checked by the Builder/Contractor and will be his responsibility from commencement of site works.
The works will not be supervised or inspected on site by C.A.D. or any representative thereof. It is the client or their appointed agents responsibility to control workmanship, substitution of materials, adherence to specification, variations to contract etc.

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Copies of this drawing must be made only with the written permission of Cooper Architectural Design.

STANDARDS.
All materials to be new unless otherwise stated and all components and materials etc. to be used fitted and installed etc. in strict accordance with manufacturers instruction and relevant Code of Practice.
Materials shall conform to appropriate British Standard Specification or BBA Certificate or European Code equivalent.

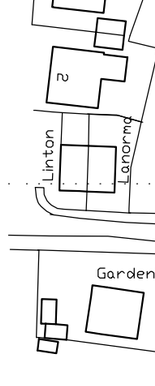
HEALTH & SAFETY.
The Employer/Client shall ensure that the selected contractor is conversant with and adopts all measures necessary to achieve compliance with Health & Safety legislation for Building Sites and Work Places.
The Employer /Client is advised that should the works need to comply with the Construction Design and Management Regulations an independent Planning Supervisor will be required.

SCOPE OF THE WORKS.
The works shall comprise of all that is shown on the drawing and details. Work that may not be specifically shown but may be reasonably inferred as necessary to carry out the works shall be deemed to be included.



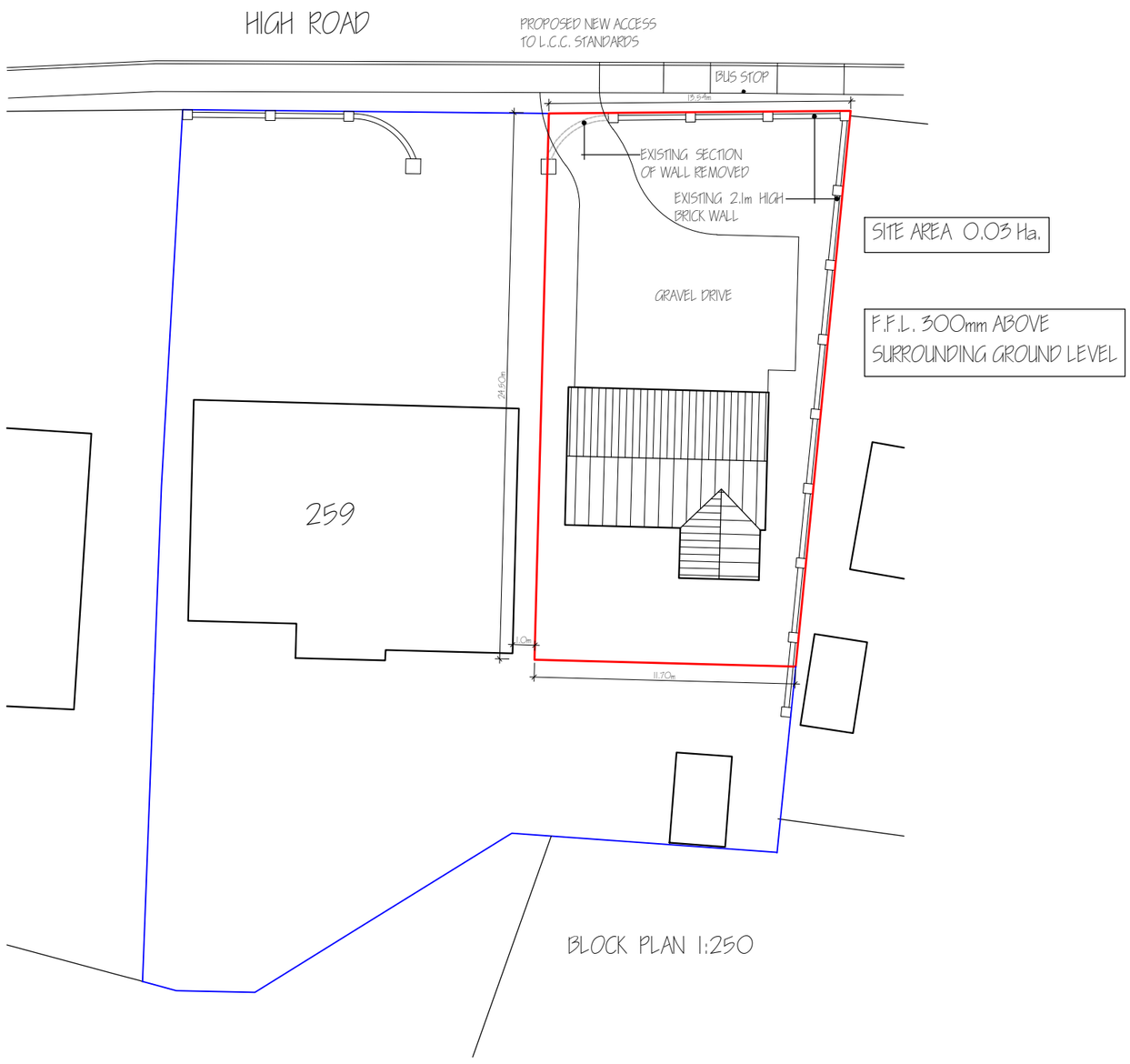
GROUND FLOOR

INDICATIVE LAYOUT 1:100



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LOCATION PLAN 1:1250



SITE AREA 0.03 Ha.

F.F.L. 300mm ABOVE SURROUNDING GROUND LEVEL

BLOCK PLAN 1:250

revision	date	init.	revision details.
A	MAY '19	J.C.	PLOT DEPTH REDUCED

COOPER ARCHITECTURAL DESIGN
90 WINSOVER ROAD
SPALDING, LINC'S PE11 1HA
Tel: 01775 711174
Mobile : 07808 125 778
E-MAIL : c.a.d@btconnect.com

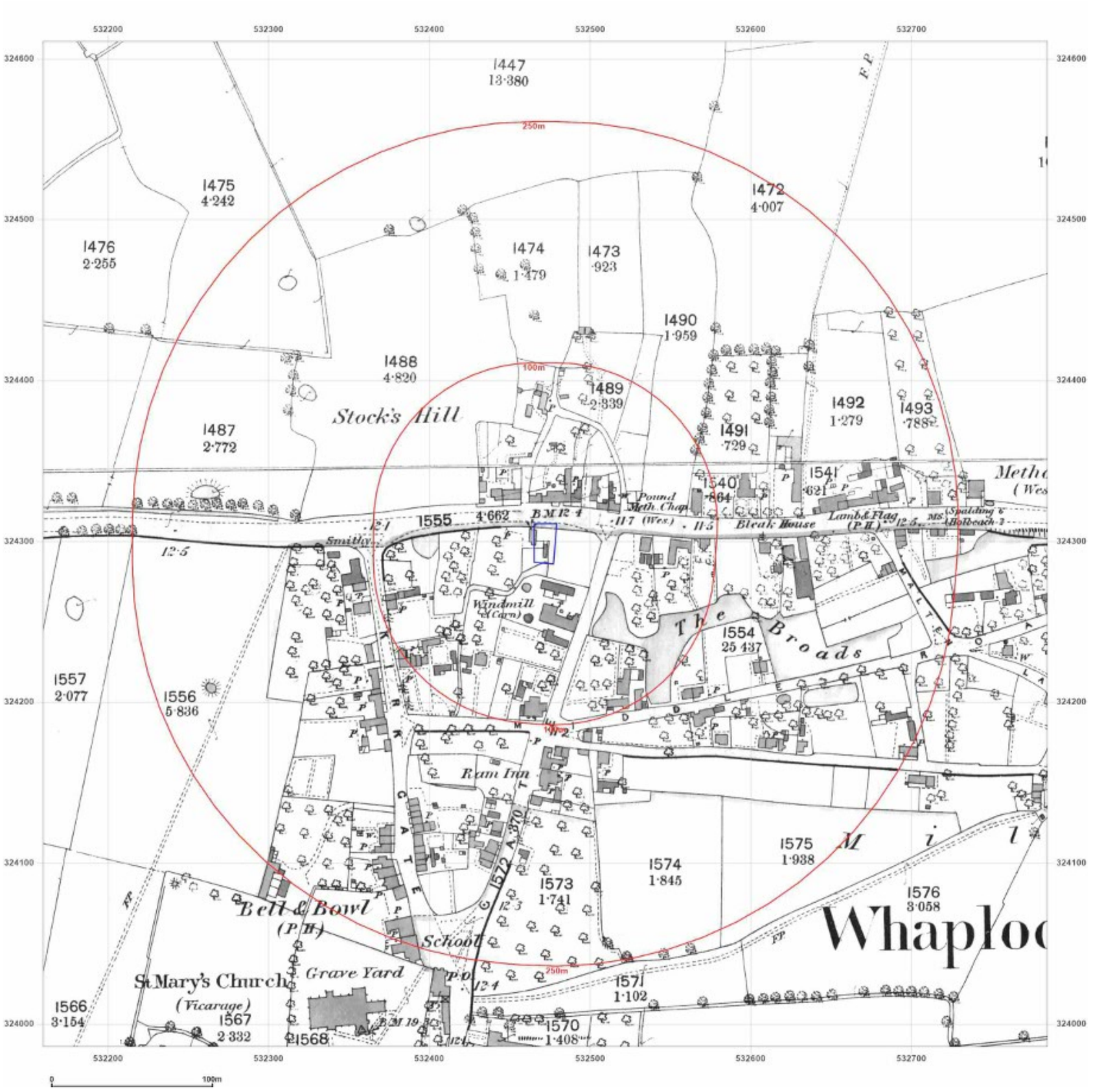
Client.
MR A & MRS E WELSH

Project.
PROPOSED RESIDENTIAL DEVELOPMENT
Adj. 259 HIGH ROAD
WHAPLODE
LINCS
PE12 6TG

Drawing.
BLOCK & LOCATION PLANS
INDICATIVE DWELLING LAYOUT.

Scale	Drawing No.
1:100 1:1250 1:250 @ A2	1902-01-A
Date. MAY '19	Drawn. J.C.

20 APPENDIX 3 – HISTORICAL MAPS



Groundsure INSIGHTS

Site Details:

LA CHARNWOOD, 259 HIGH ROAD, WHAPLODE, SPALDING, PE12 6TG

Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

Map Name: County Series

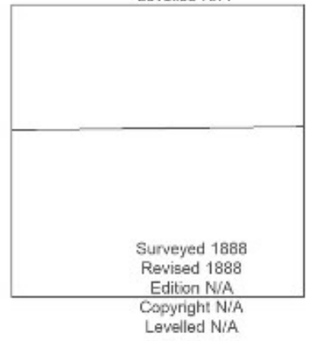
Map date: **1888**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1888
Revised 1888
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1888
Revised 1888
Edition N/A
Copyright N/A
Levelled N/A

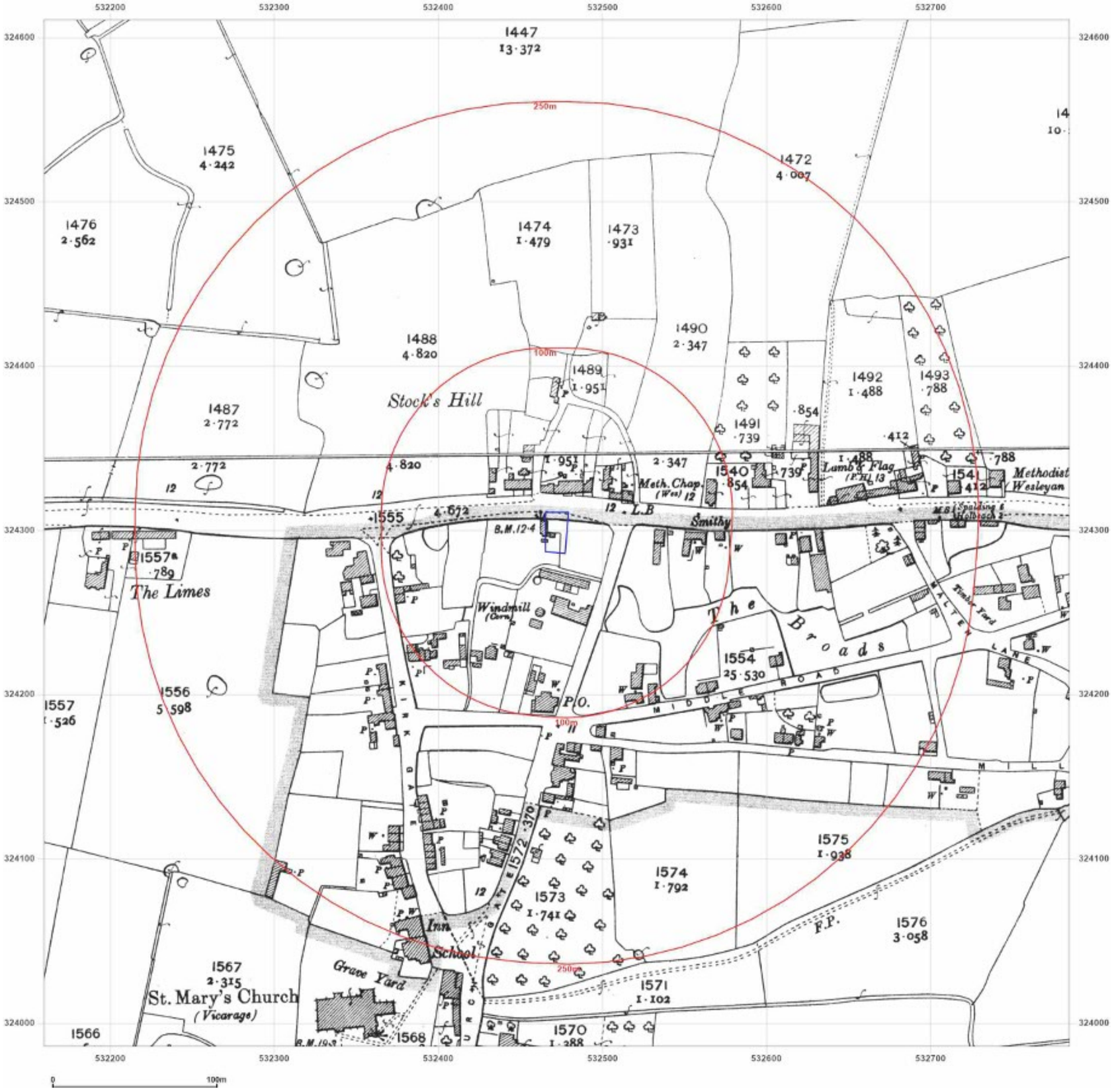
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Site Details:

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Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

Map Name: County Series

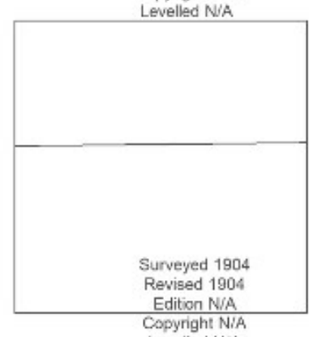
Map date: **1904**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1904
Revised 1904
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1904
Revised 1904
Edition N/A
Copyright N/A
Levelled N/A

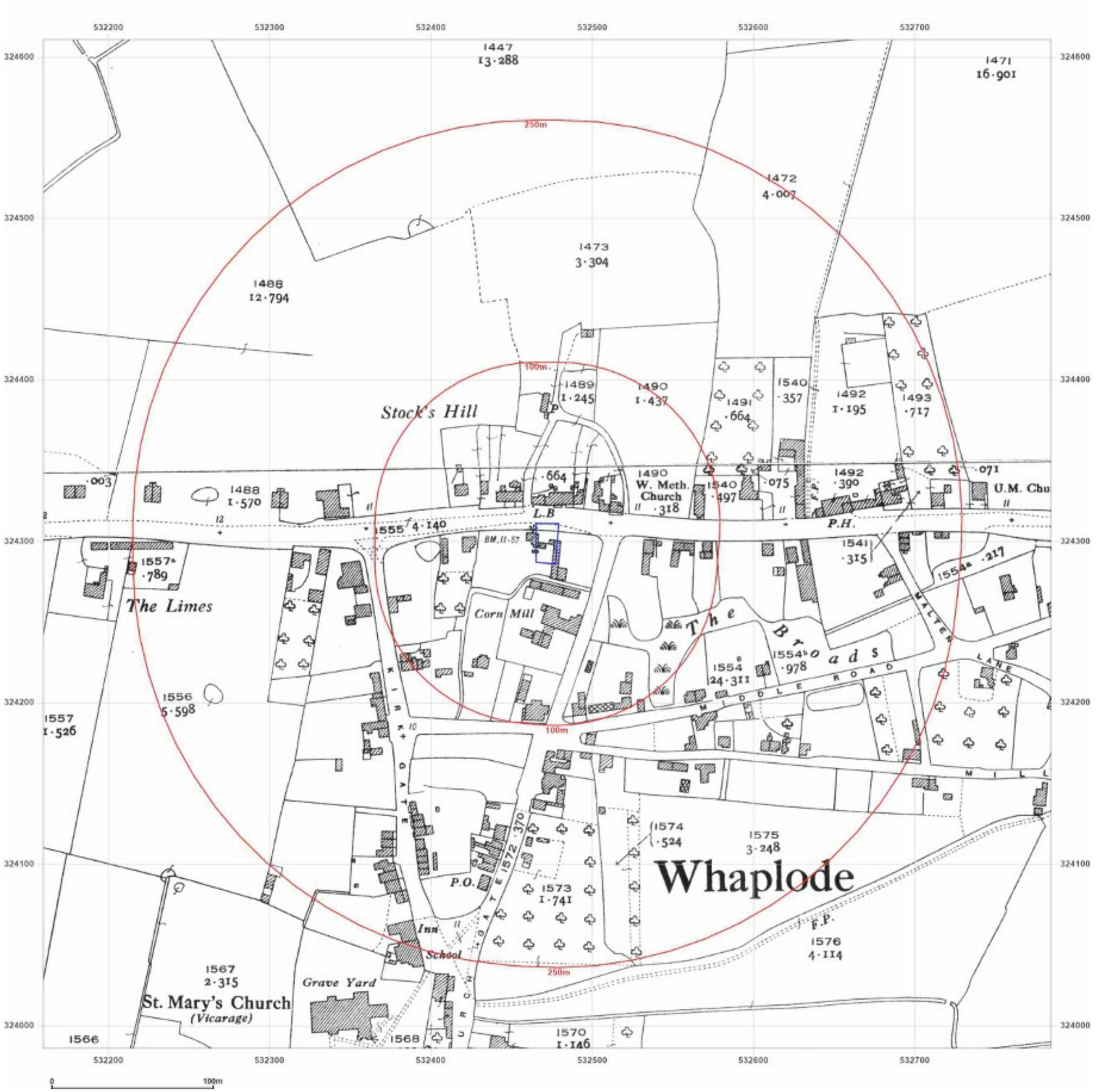
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Report Ref: GS-8700148
Grid Ref: 532472, 324298

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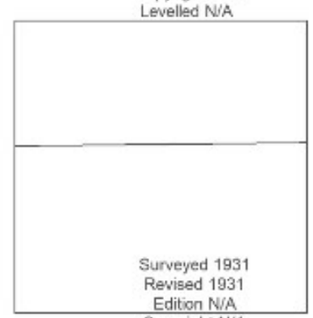
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Surveyed 1931
Revised 1931
Edition N/A
Copyright N/A
Levelled N/A



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Revised 1931
Edition N/A
Copyright N/A
Levelled N/A

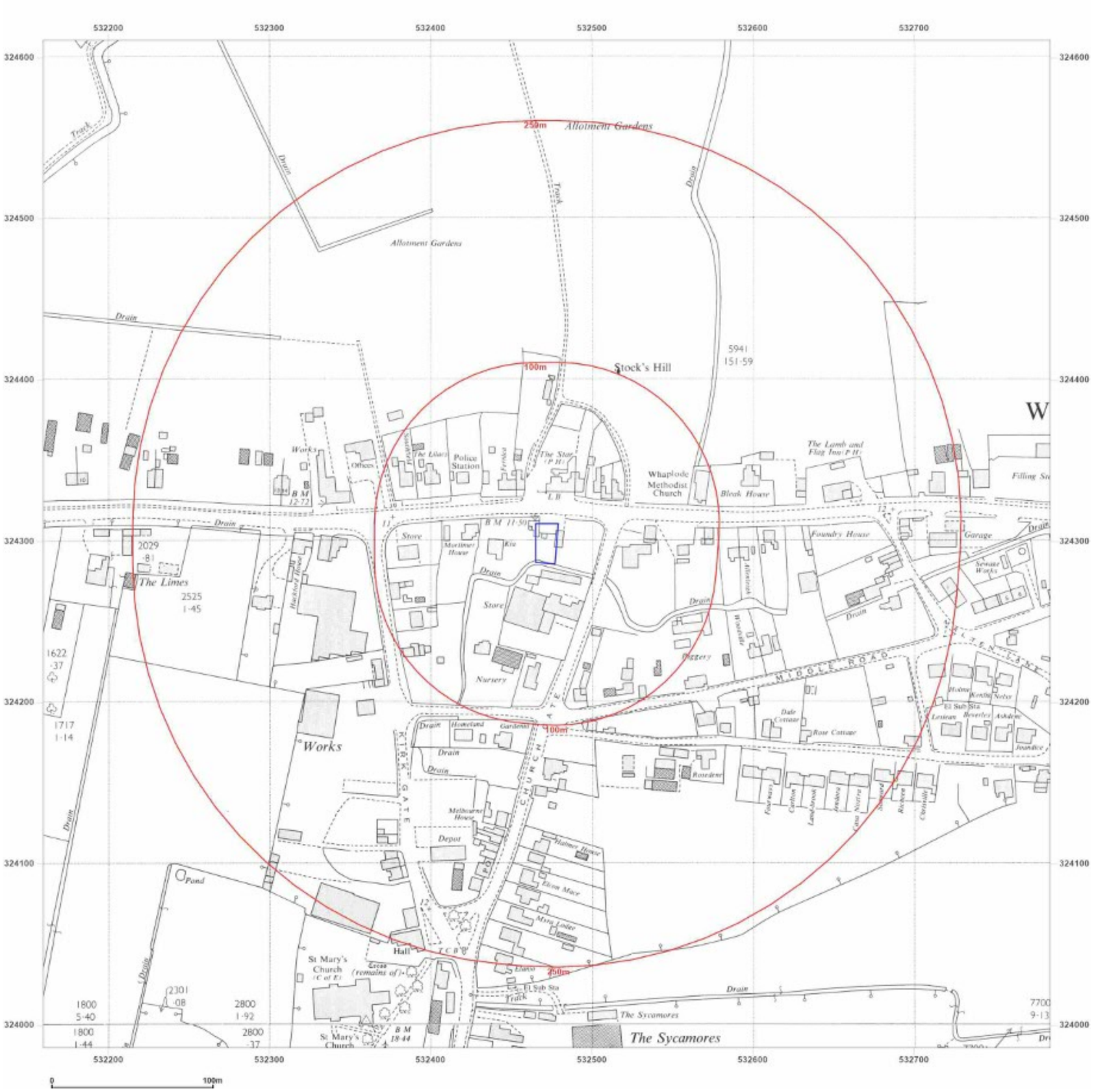
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Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

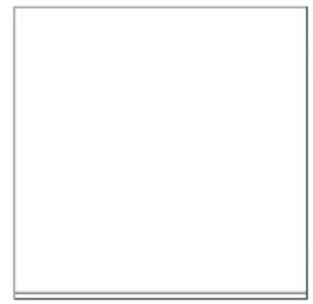
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Surveyed 1968
Revised 1968
Edition N/A
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Revised 1968
Edition N/A
Copyright 1970
Levelled 1965

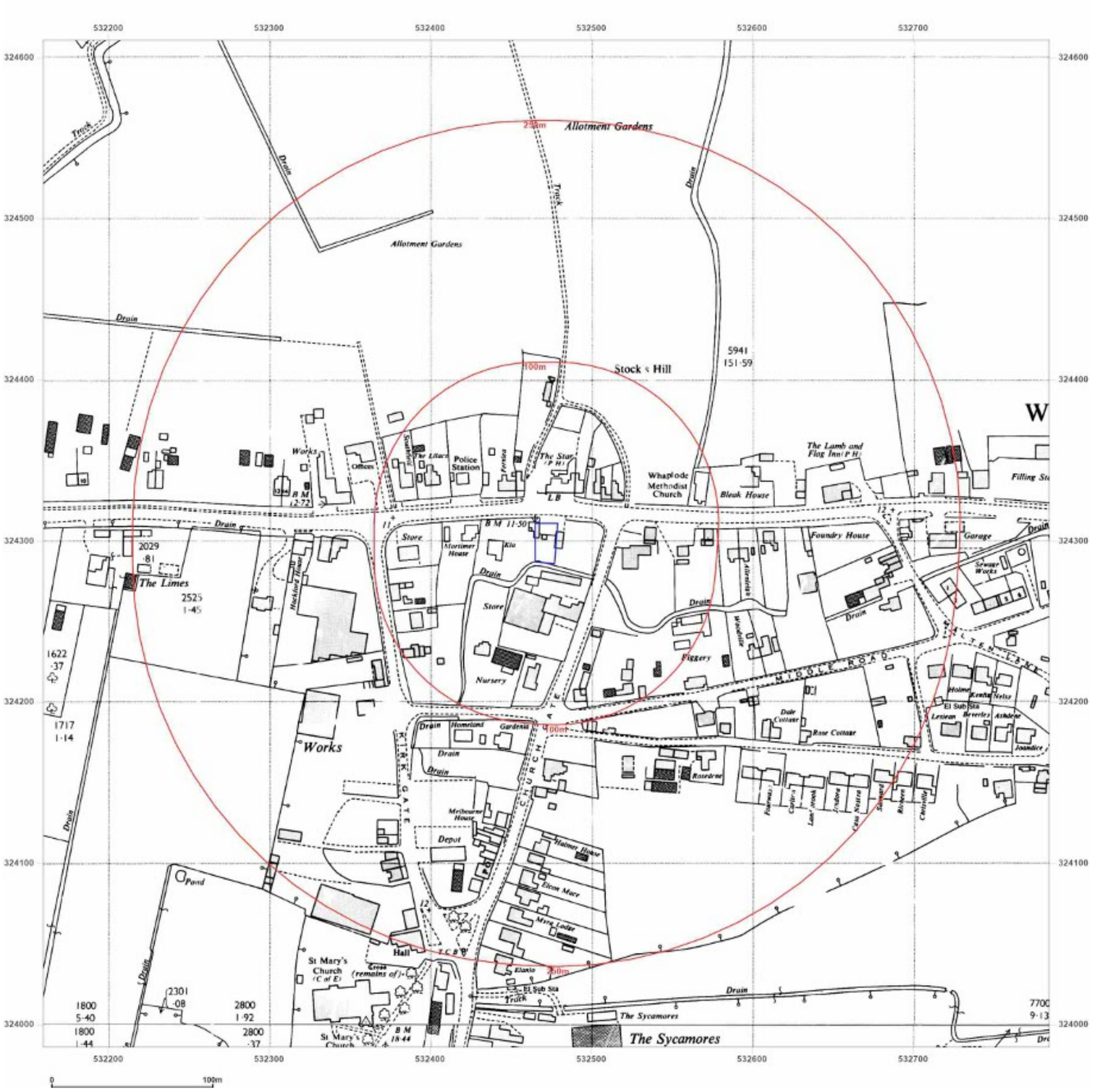
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Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

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Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
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Revised N/A
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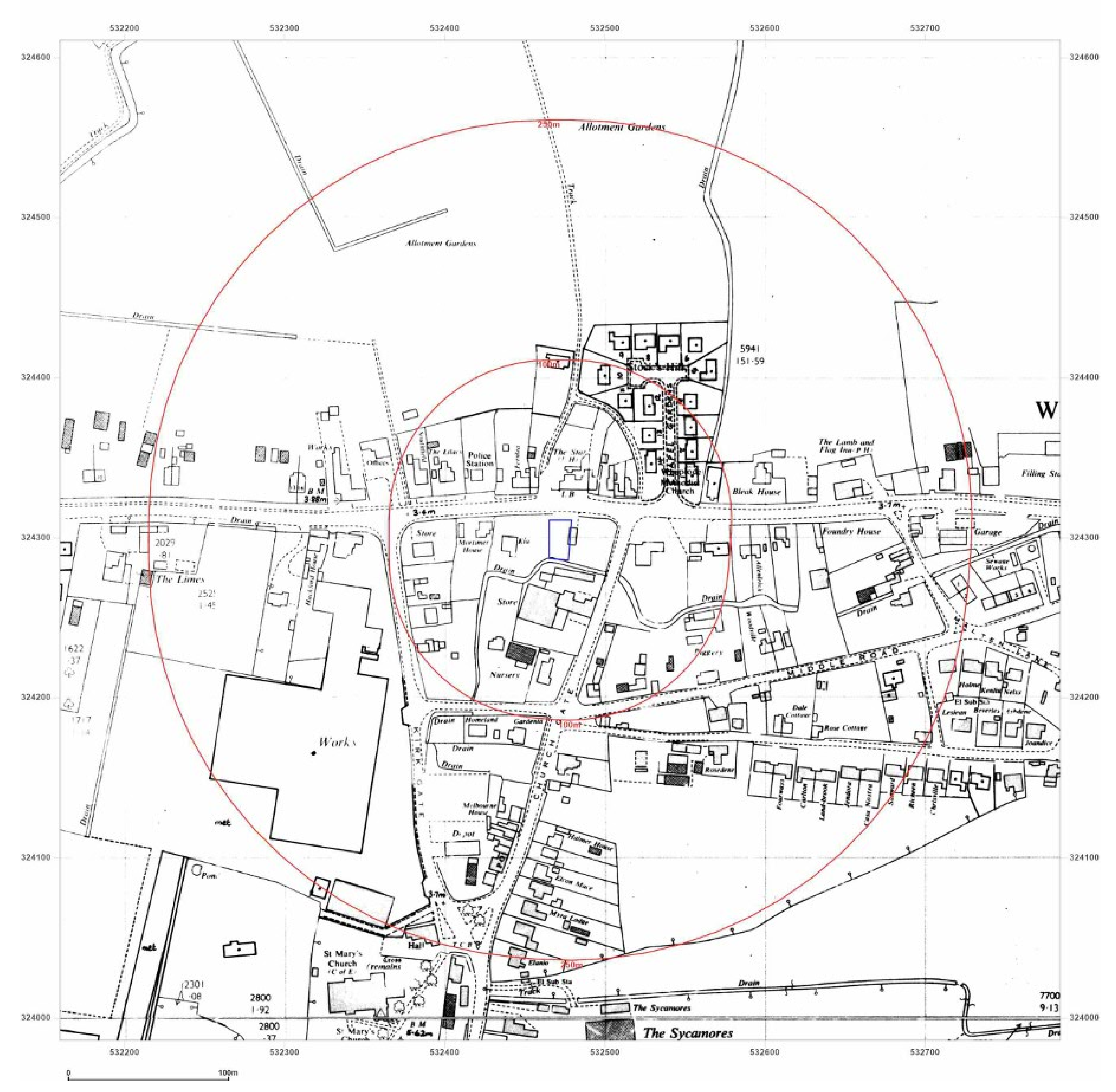
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Report Ref: GS-8700148
Grid Ref: 532472, 324298

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Surveyed N/A
Revised N/A
Edition N/A
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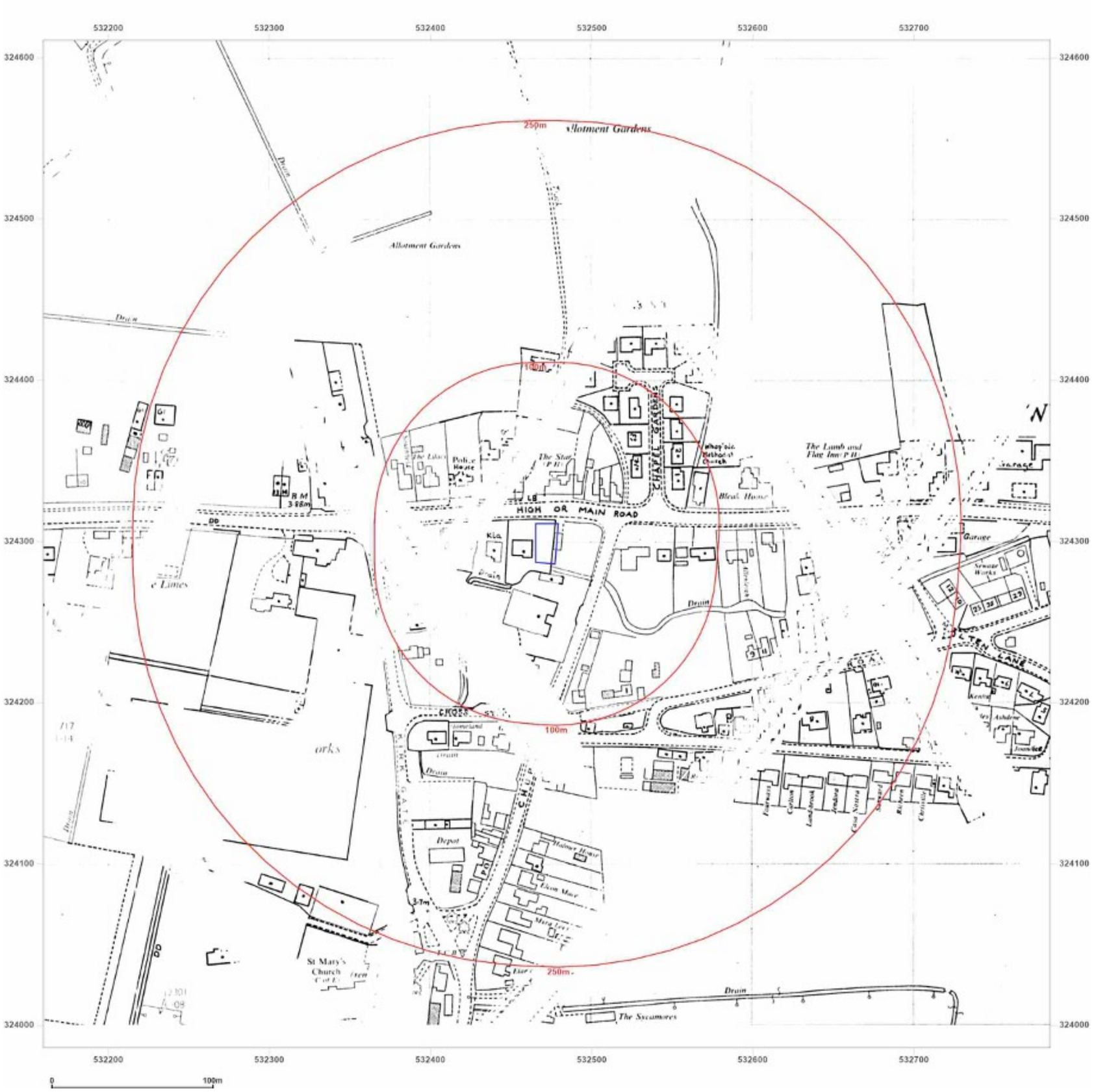
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Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

Map Name: National Grid

Map date: **1981**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1965
Revised 1981
Edition N/A
Copyright 1981
Levelled 1965

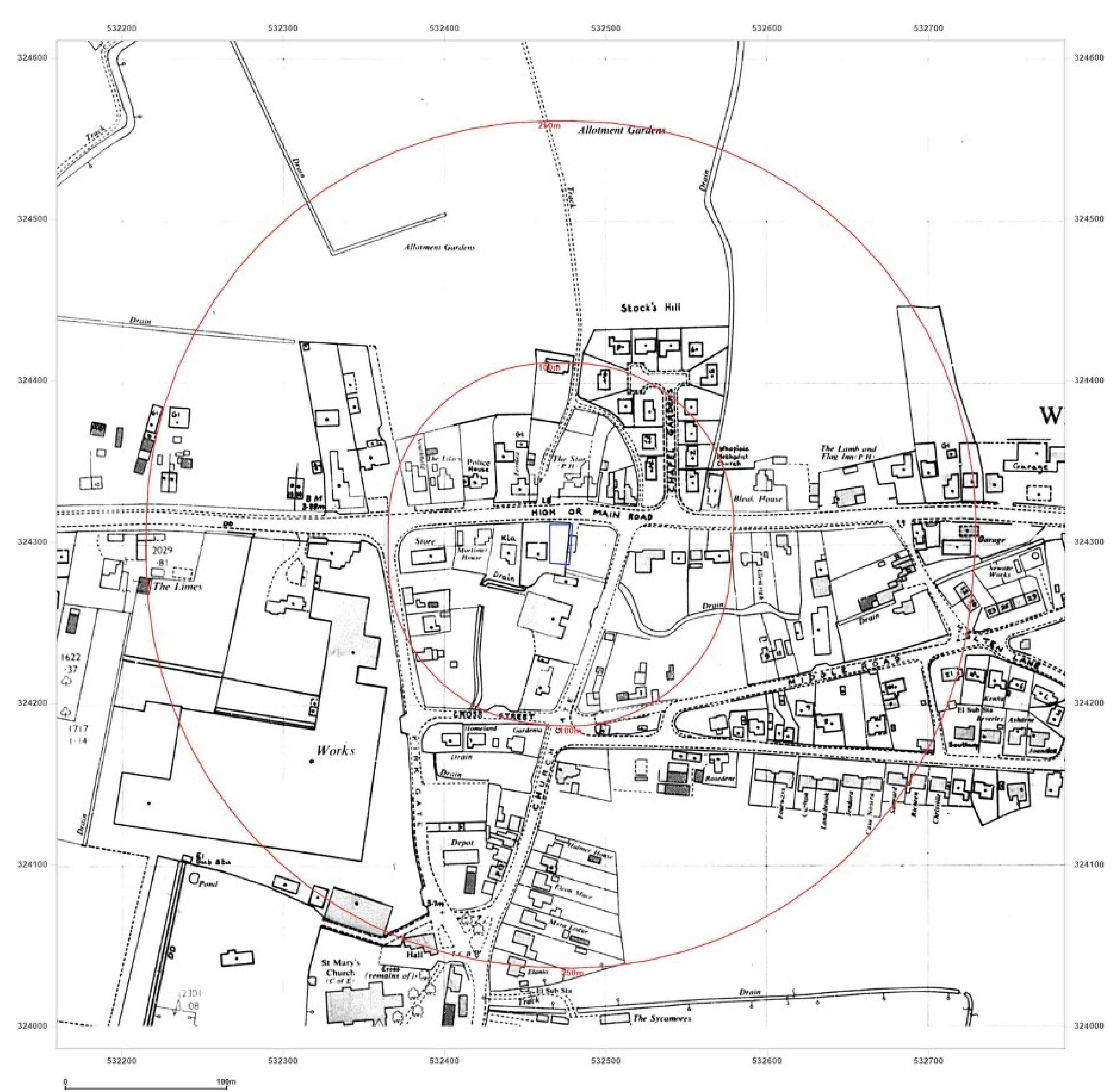
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Report Ref: GS-8700148
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Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

Map Name: National Grid
Map date: **1993**
Scale: 1:2,500
Printed at: 1:2,500

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Revised 1993
Edition N/A
Copyright 1993
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Site Details:

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Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

Map Name: National Grid

Map date: **1995**

Scale: 1:2,500

Printed at: 1:2,500

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

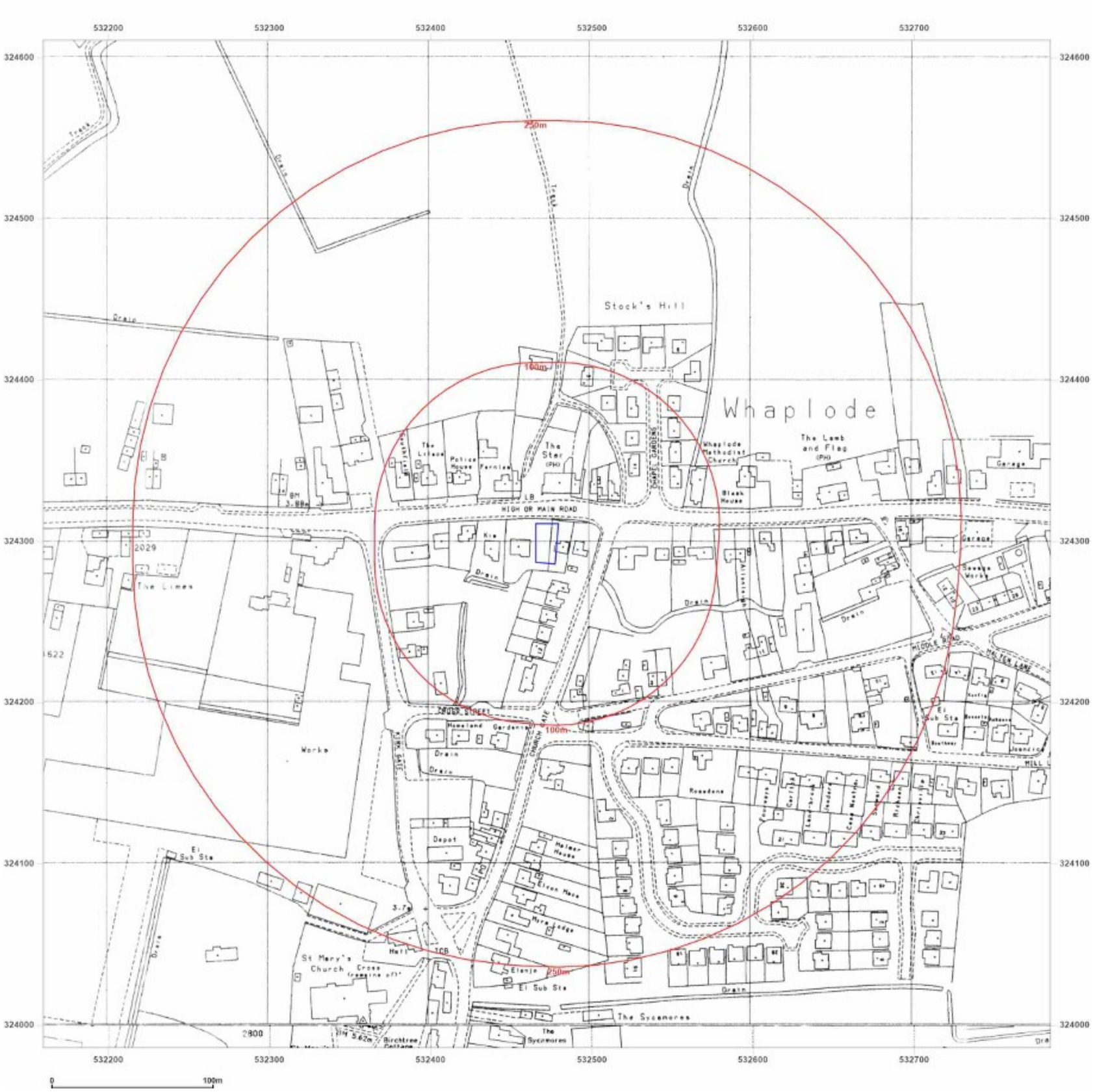
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Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

Map Name: National Grid

Map date: **1993-1995**

Scale: 1:2,500

Printed at: 1:2,500

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

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1995
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Groundsure INSIGHTS

Site Details:

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Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

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Printed at: 1:1,250

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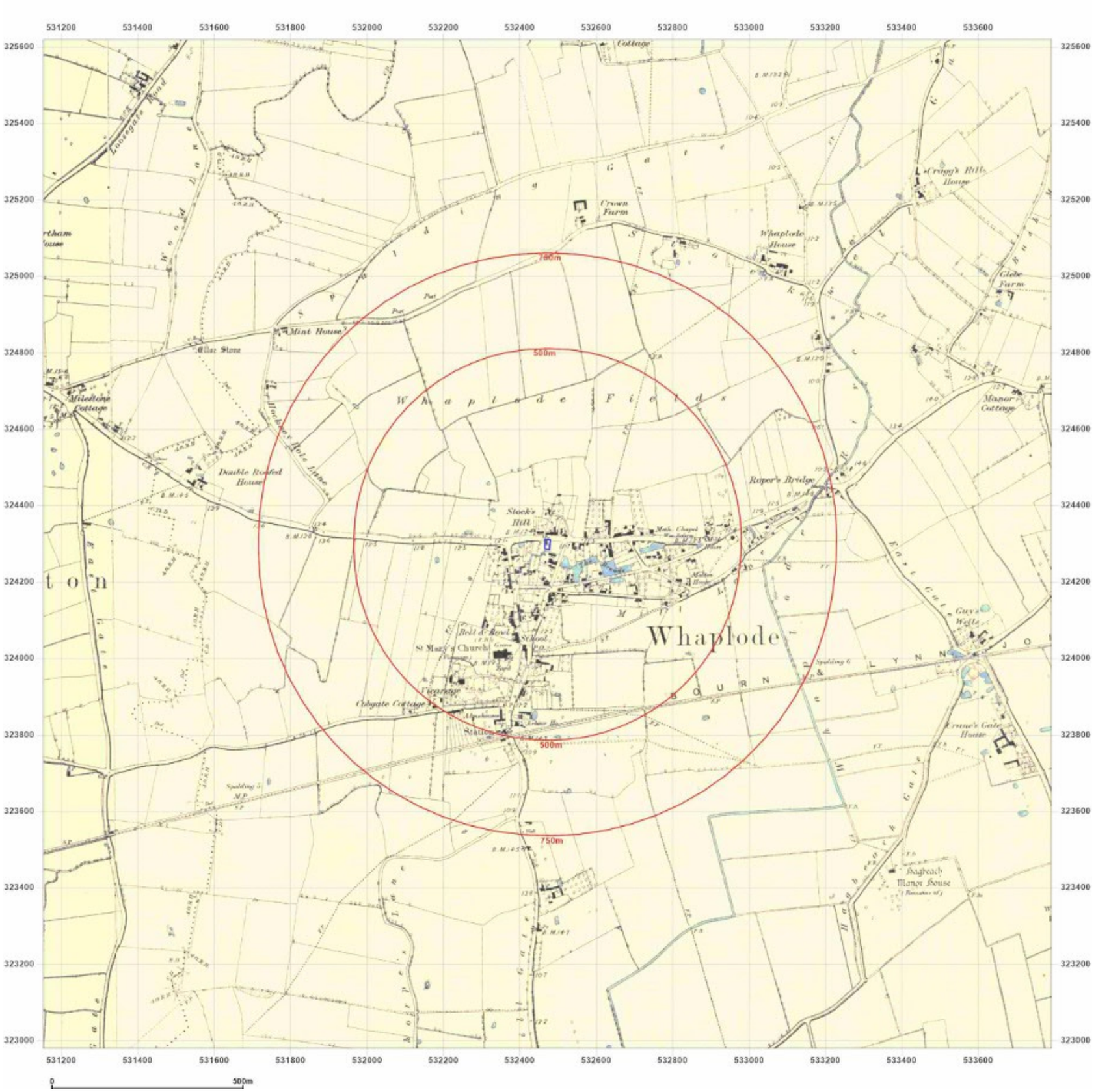
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Groundsure INSIGHTS

Site Details:

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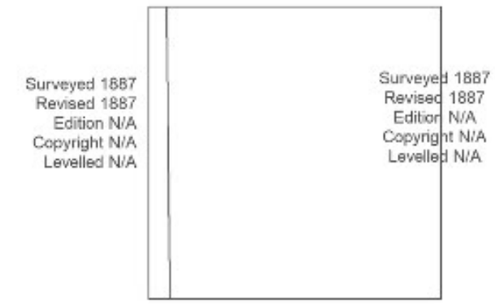
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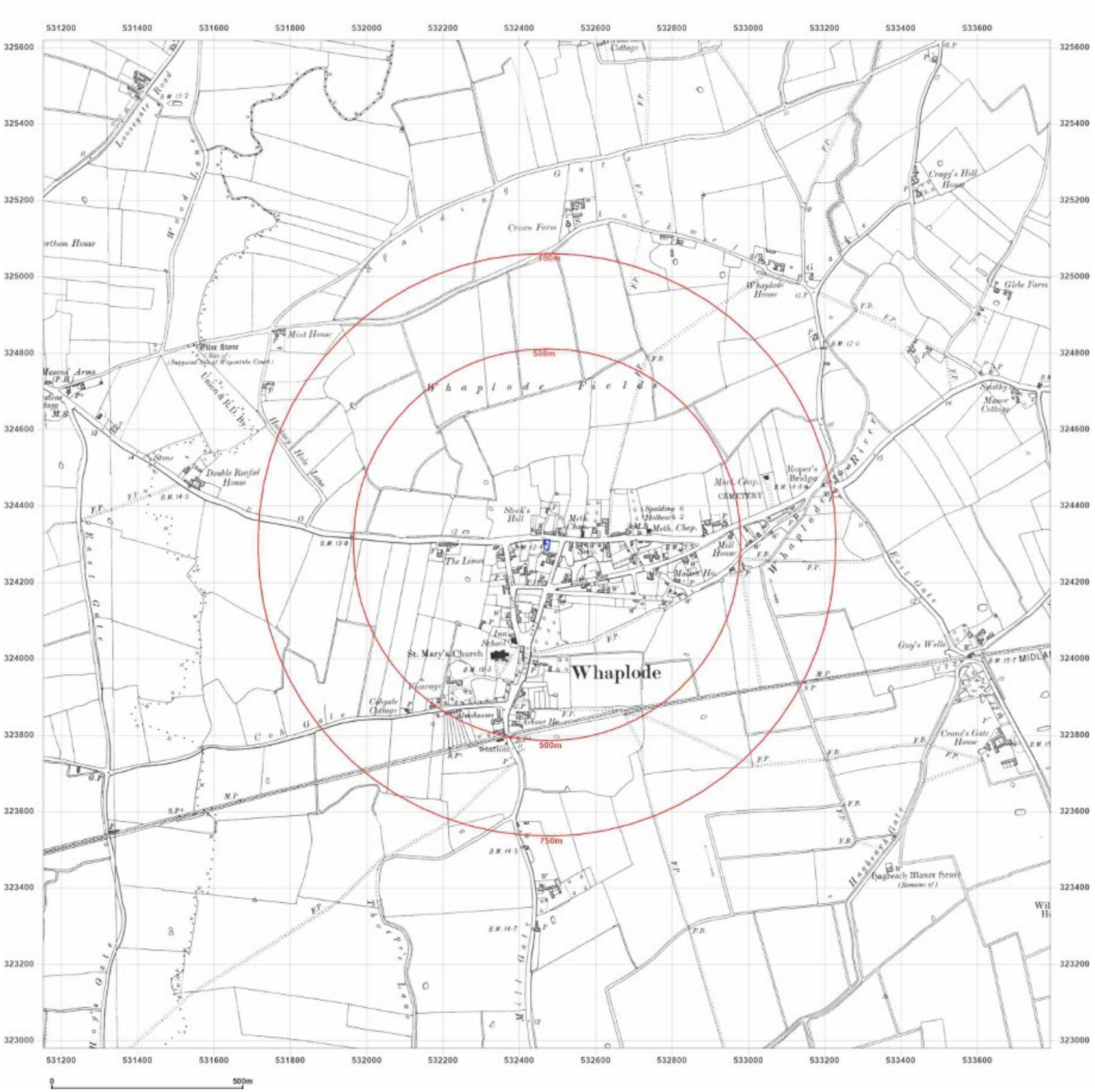
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Site Details:

LA CHARNWOOD, 259 HIGH ROAD, WHAPLODE, SPALDING, PE12 6TG

Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

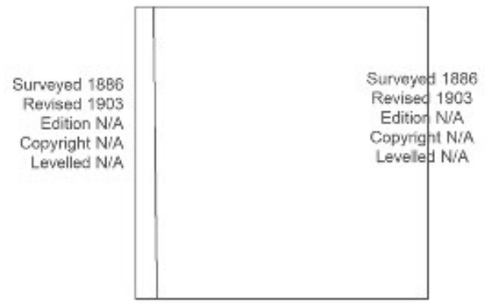
Map Name: County Series

Map date: **1903**

Scale: 1:10,560

Printed at: 1:10,560

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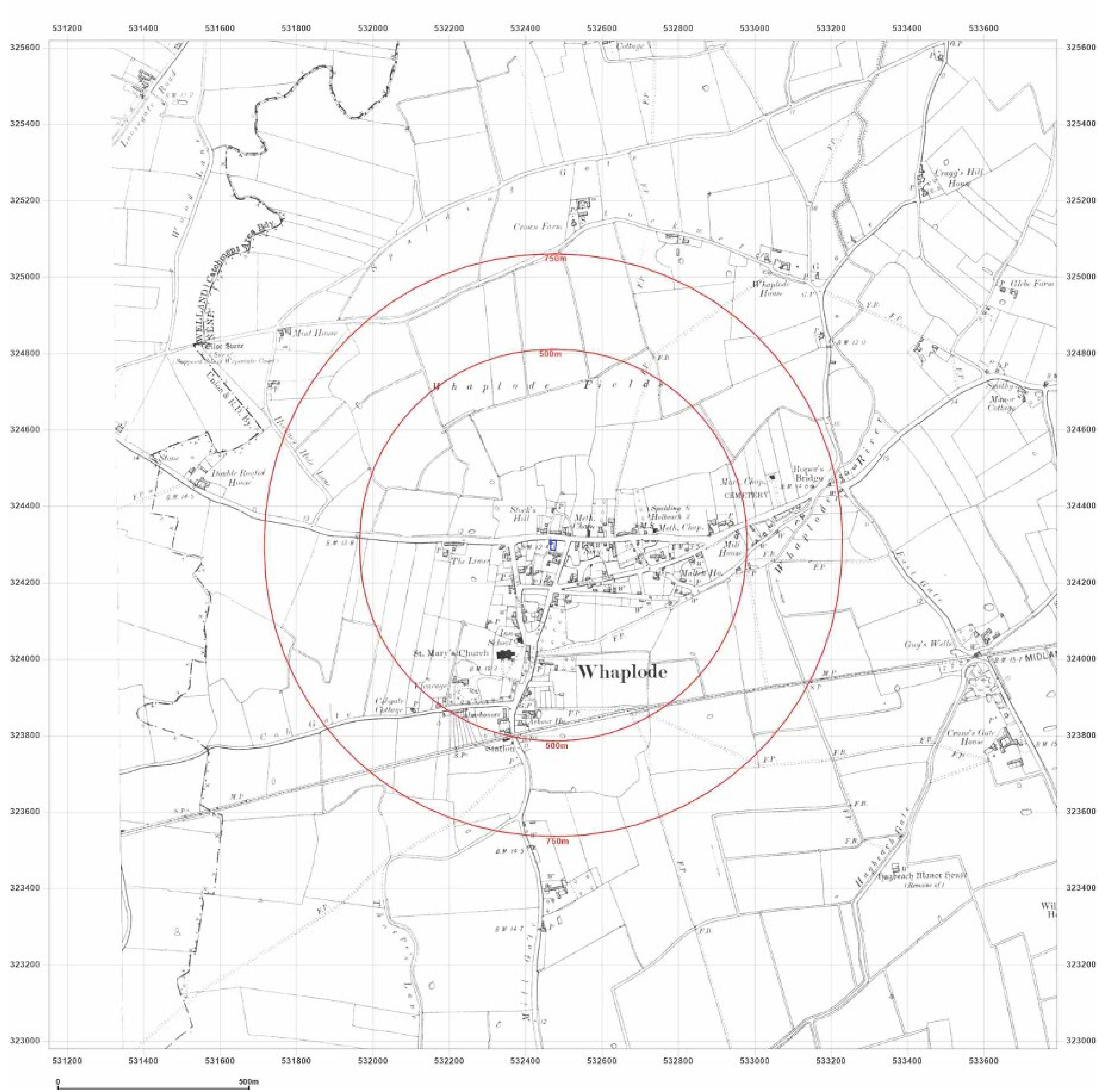
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Site Details:

LA CHARNWOOD, 259 HIGH ROAD, WHAPLODE, SPALDING, PE12 6TG

Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

Map Name: County Series

Map date: **1903**

Scale: 1:10,560

Printed at: 1:10,560

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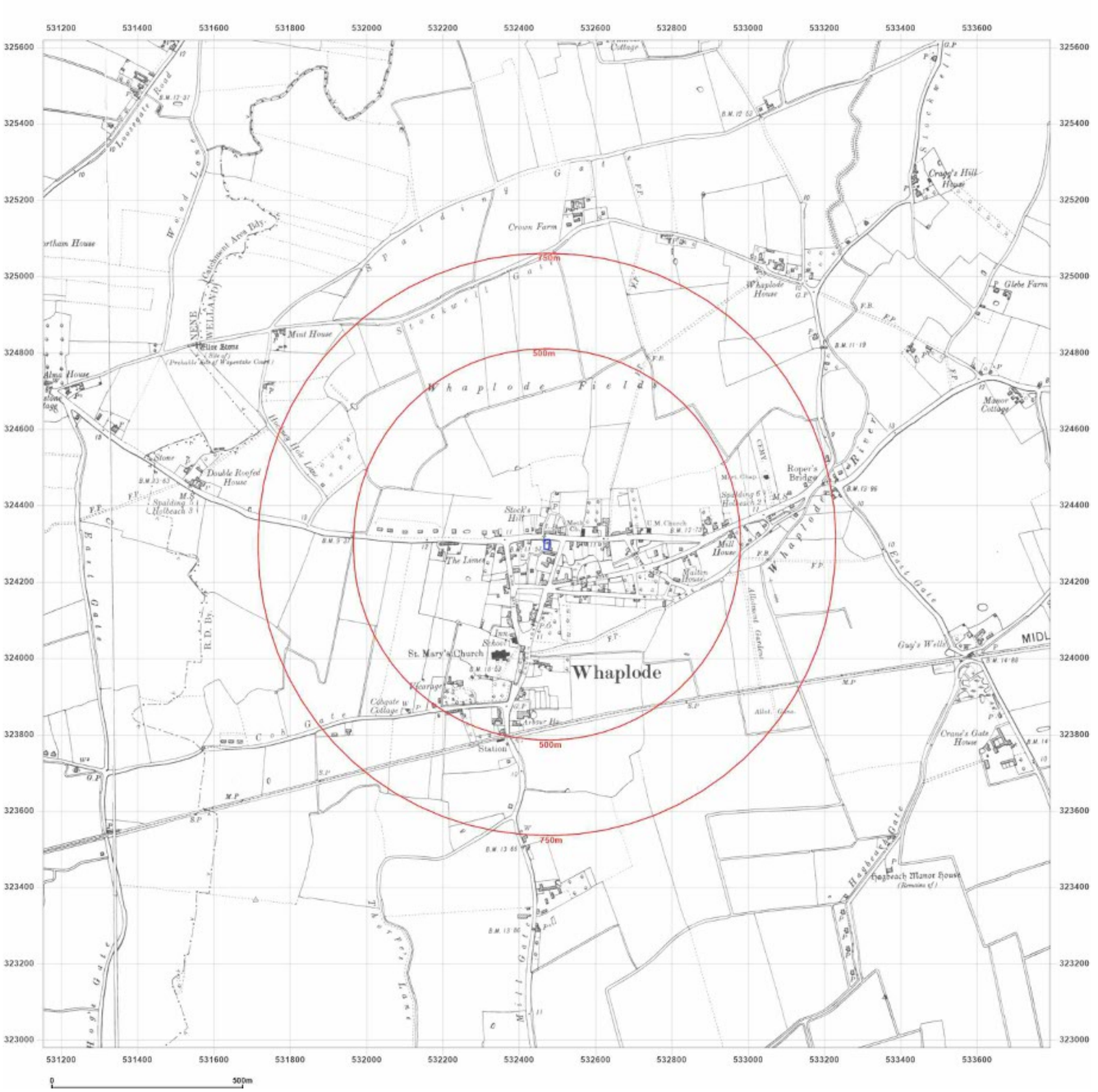
Surveyed 1886
Revised 1903
Edition N/A
Copyright N/A
Levelled N/A

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Site Details:

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Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

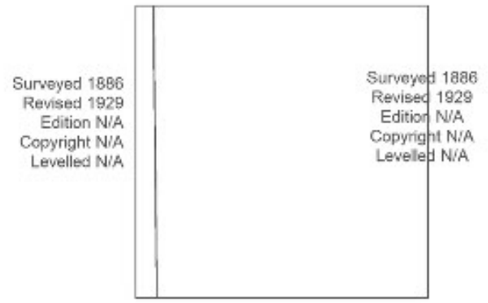
Map Name: County Series

Map date: **1929**

Scale: 1:10,560

Printed at: 1:10,560

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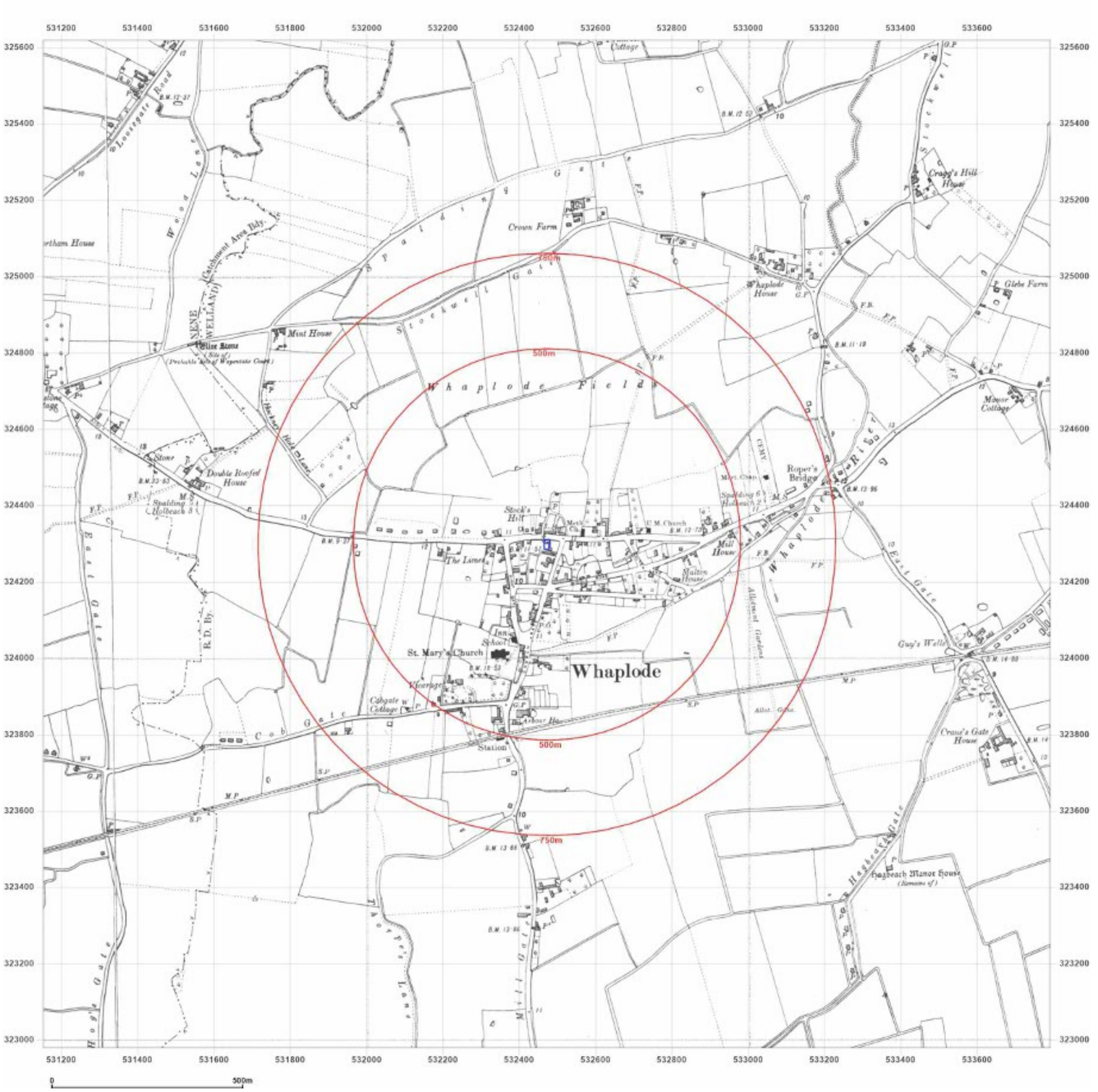
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Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

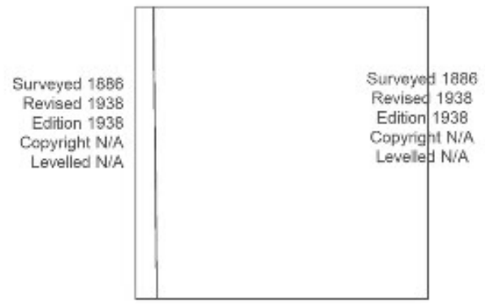
Map Name: County Series

Map date: **1938**

Scale: 1:10,560

Printed at: 1:10,560

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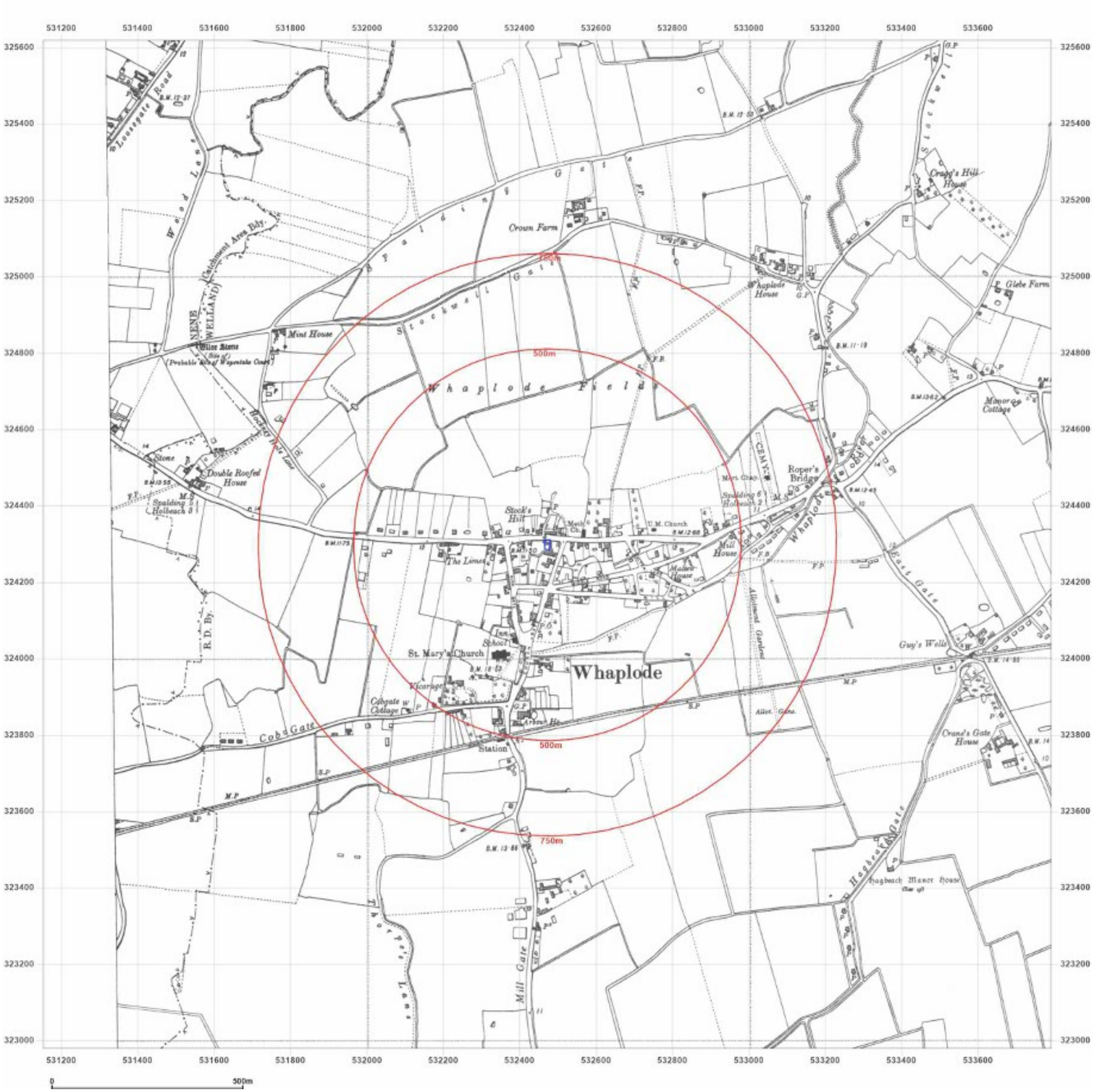
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Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

Map Name: County Series

Map date: **1950**

Scale: 1:10,560

Printed at: 1:10,560

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

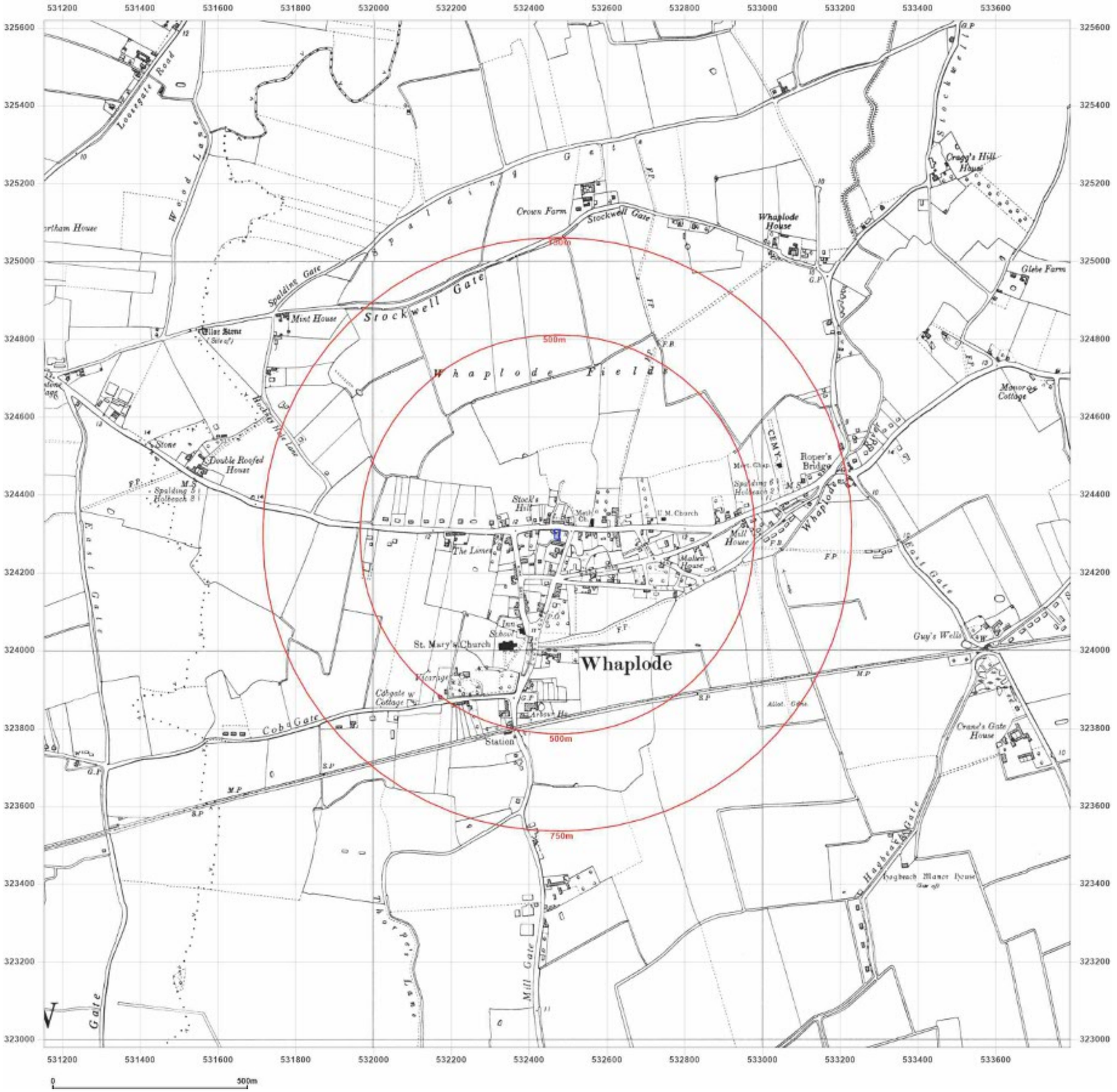
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LA CHARNWOOD, 259 HIGH ROAD, WHAPLODE, SPALDING, PE12 6TG

Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

Map Name: Provisional

Map date: **1955-1958**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed N/A
Revised 1955
Edition N/A
Copyright N/A
Levelled N/A

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

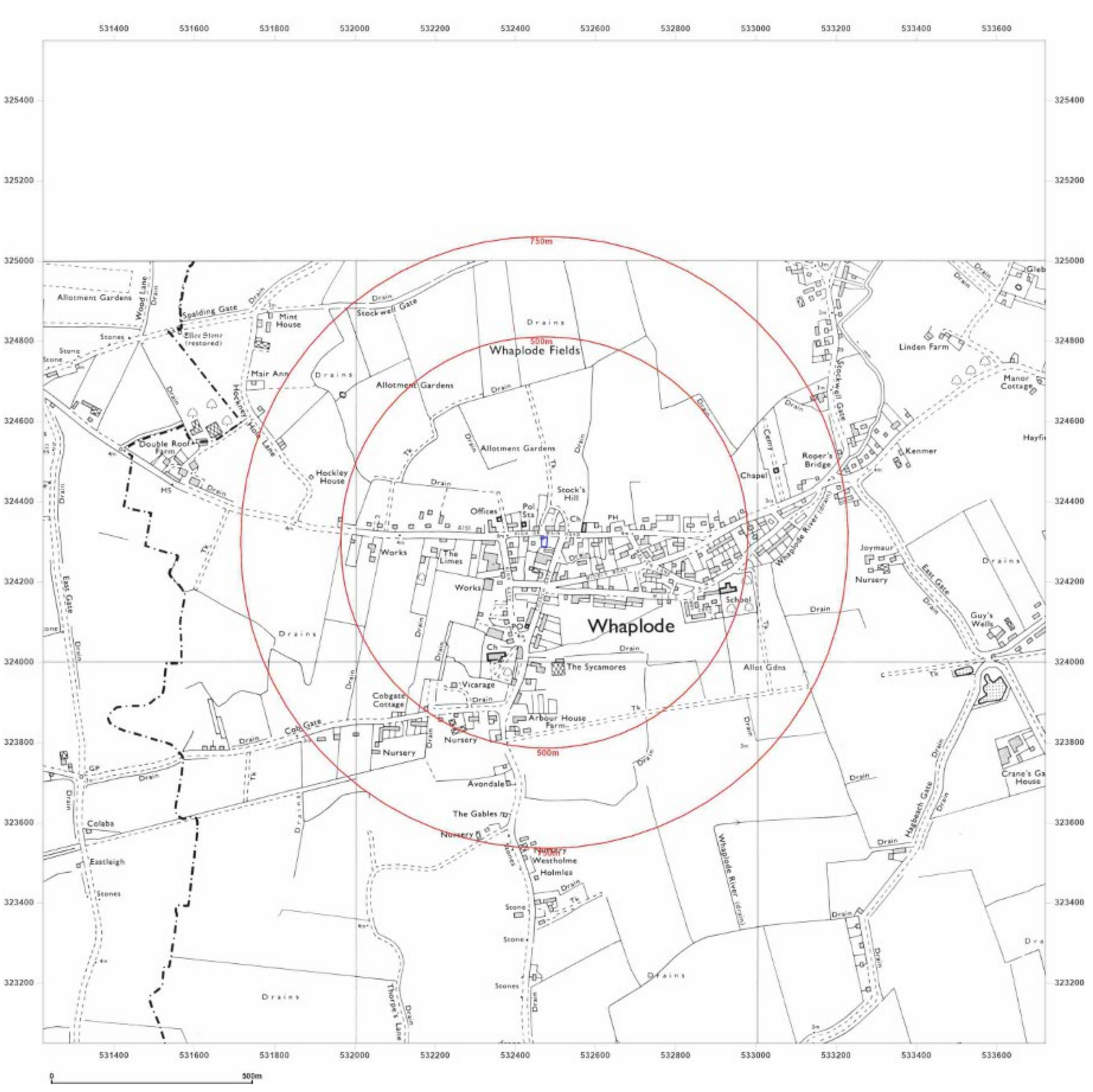
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Site Details:

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Client Ref: PH1-2022-000037
Report Ref: GS-8700148
Grid Ref: 532472, 324298

Map Name: National Grid

Map date: **1971**

Scale: 1:10,000

Printed at: 1:10,000

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Surveyed 1970
Revised 1971
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