

JOHN CRONIN & ASSOCIATES

ARCHAEOLOGY | CONSERVATION | HERITAGE | PLANNING

Archaeological Assessment

Ballybin Road LRD, Ratoath, County Meath



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Dublin 14

June 2024

Document Control Sheet

Client	Marshall Yards Development Company Ltd				
Project	Ballybin Road LRD, Ratoath, County Meath				
Document type	Archaeological Assessment				
Document comprises	<i>DCS</i>	<i>NTS</i>	<i>TOC</i>	<i>Pages</i>	61
	<i>Y</i>	<i>N</i>	<i>Y</i>	<i>Appendices</i>	3

<i>Rev</i>	<i>Status</i>	<i>Author(s)</i>	<i>Reviewed by</i>	<i>Approved by</i>	<i>Office of origin</i>	<i>Issue date</i>
01	Issue	Camilla Brännström & John Cronin	Camilla Brännström	John Cronin	Buncrana	17/06/2024
02	Final	Camilla Brännström & John Cronin	Camilla Brännström	John Cronin	Buncrana	25/06/2024

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1. Introduction

John Cronin and Associates have been commissioned by **Marshall Yards Development Company Ltd** to compile an archaeological assessment of a proposed large-scale residential development (LRD) site at Ballybin Road, Ratoath, County Meath. The subject site comprises c. 5.48 hectares and includes elements of the existing public road network (**Figure 1**).

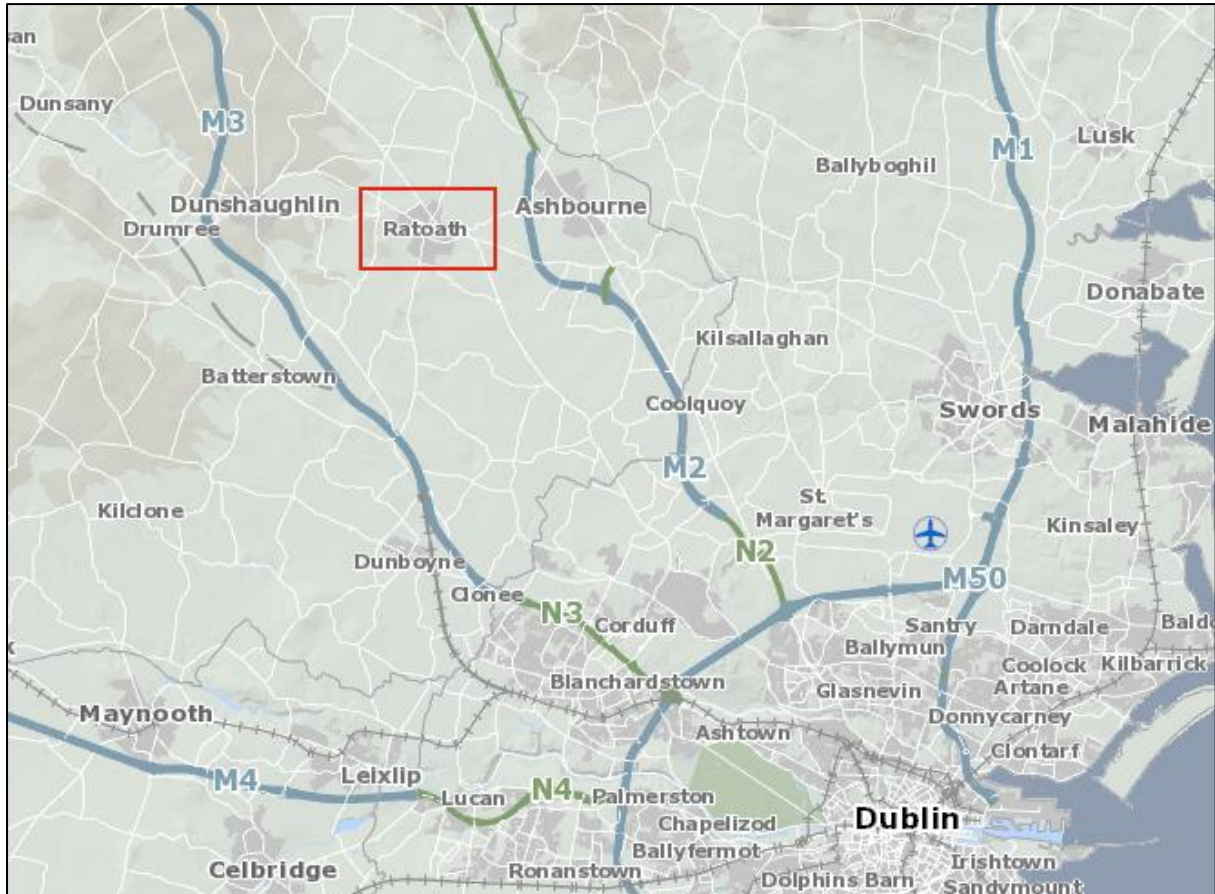


Figure 1: General location of subject site outlined in red (Source: Government of Ireland)

The formal description of the proposed development is as follows:

The proposed development is at a site with a total area of 5.48 hectares principally located at Main Street/R125 and Ballybin Road, Ratoath, Co. Meath. The total site contains a proposed residential development site with an area of 3.66 hectares (bisected by a proposed realigned Ballybin Road) and a proposed infrastructural development site with an area of 1.82 hectares (principally for road and related works, water services and open space amalgamation). The site is generally bound by: Fox Lodge Woods and Fox Lodge Manor to the west and north; existing agricultural lands and residential development to the north and east; existing Ballybin Road and Moulden Bridge to the east; and Main Street/R125 and Jamestown Road/L1016 to the south. The site also incorporates parts of: the existing Ballybin Road (north and west of Moulden Bridge), Main Street/R125, Jamestown Road/L1016 and green open space in Fox Lodge Manor.

The proposed development principally consists of the demolition of 2 No. dwellings (594 square metres gross floor area combined) and 1 No. agricultural shed (988.7 square metres gross floor area) and the construction of 141 No. residential dwellings with a gross floor area of 12,428 square metres in buildings of 2 No. and 3 No. storeys. The dwellings include 117 No. houses (57 No. 2-bed, 52 No. 3-bed, 7 No. 4-bed and 1 No. 5-bed) and 24 No. maisonette/duplex units (18 No. 1-bed and 6 No. 3-bed).

The development also proposes a reconfiguration of the road layout at the south (Main Street/R125 and Jamestown Road/L1016) and east (Ballybin Road) of the site. Specifically, it is proposed to demolish/remove the existing 5-arm roundabout and to replace same with a new 4-arm signalised junction and reconfigured access to the existing Ratoath Childcare site. The new junction arrangement will facilitate a proposed realignment of the southern section of the existing Ballybin Road (approximately 172 metres) as the northern arm of the new signalised junction and a revised entrance for the existing dwelling to the north-east of the site at Ballybin Road (known as 'Fox Lodge Farm', Eircode A84 KF97). The proposed road infrastructure works also include: road markings, traffic signals, traffic signage, footpaths and cycle infrastructure.

The development also proposes:

- 2 No. new multi-modal accesses onto the proposed realigned Ballybin Road to serve the bisected residential site;*
- 2 No. pedestrian accesses onto Main Street/R125 and 1 No. pedestrian access onto the realigned Ballybin Road;*
- Relocation of existing eastbound bus stop at Main Street/R125 approximately 130 metres to the west;*
- Repurposing of the closed section of Ballybin Road as a pedestrian/cycle greenway;*
- Internal roads and footpaths;*
- 228 No. car parking spaces;*
- Cycle parking spaces;*
- Hard and soft landscaping, including public open space, communal amenity space and private amenity space (as rear gardens and terraces/balconies facing multiple directions);*
- Demolition of the wall at the north-west corner of the site interfacing with Fox Lodge Manor and the amalgamation of existing public open in the estate and proposed public open space;*
- Boundary treatments;*
- Public lighting;*
- Rooftop PV panels;*
- 2 No. ESB sub-stations; and*
- All other associated site and development works above and below ground.*

This report presents summary details on the locations of recorded elements of the archaeological resource within the environs of the subject site. The study area for this assessment comprised the internal area of the proposed development site combined with the lands extending for approximately 500m from the outer boundary of the site (study area). There are no recorded archaeological sites within the proposed development boundary and there are two recorded sites located within the wider study area. This assessment was prepared by John Cronin & Associates and is based on a programme of desktop research and a site inspection.

2. Methodology

The Sites and Monuments Record (SMR) and the Record of Monuments and Places (RMP) for County Meath, published by the Archaeological Survey of Ireland (ASI), were the principal sources for identifying known archaeological constraints. The *Meath County Development Plan 2021-2027* was consulted to review the planning authority's policies and objectives designed for the protection of the archaeological resource and historic landscapes.

In addition, the following sources were consulted to assess the potential for the presence of unrecorded archaeological sites within, and in vicinity to, proposed work areas:

- *Archaeological Survey of Ireland*: Since the publication of the original county SMRs and RMPs, the ASI has continued to record and add entries to the Sites and Monuments Record. In addition, the ASI has developed an online database and web viewer known as 'Historic Environment Viewer'. This has been developed to "enhance the user's experience by facilitating access to the database of the National Monuments Service Sites and Monuments Record (SMR) and the National Inventory of Architectural Heritage (NIAH) in a seamless one stop point of access for both data resources" (Source: www.archaeology.ie).
- *Database of Irish excavation reports*: This database contains summary accounts of all licensed archaeological excavations carried out in Ireland (North and South) from 1969 to 2023.
- *Historical publications and cartographic sources*: various published sources and historical maps were consulted as part of the assessment.
- *Aerial imagery*: available online aerial imagery of the study area was consulted to determine if any traces of unrecorded, sub-surface archaeological sites were evident within the proposed development area.
- *Archaeogeophysical survey (Licence No.: 24R0158)*: A survey of greenfield areas of the proposed development was undertaken by Dr Ger Dowling (2024). The investigation, comprising high resolution magnetic gradiometry, was implemented over two adjoining tracts of pasture and covered an area of approximately 3.5 hectares, though only about 2.1 ha was suitable for investigation. The survey report is presented in **Appendix 4** of this document.

3. Context

The subject site is located in the townlands of Ratoath and Jamestown, County Meath, approximately 22km northwest of Dublin (**Figure 2**). The site is bounded by residential areas to the east and west and agricultural lands to the north and south. The subject site principally contains two existing residential properties and a large agricultural shed set within two greenfield parcels used for pasture. The soil profiles of this area consist of fine loamy drift with limestones set on a limestone bedrock (gis.teagasc.ie).

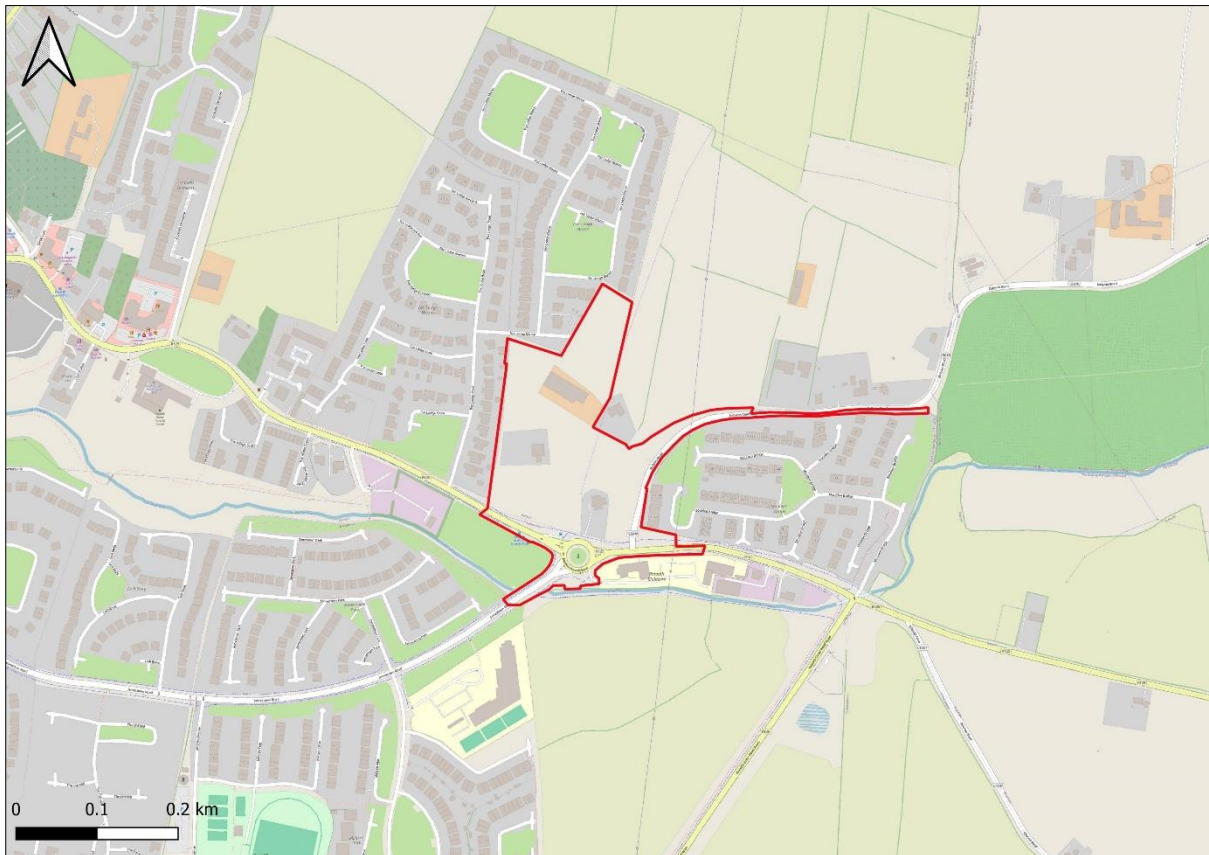


Figure 2: Detailed location of the subject site, outlined in red (Source: OpenStreetMap)

Legal & Policy Framework

On the 13th of October 2023, the Historic and Archaeological Heritage and Miscellaneous Provisions Bill 2023 was signed into law by President Michael D. Higgins. The new Act repeals existing legislation and institutes new provisions equipped to cater for the protection of historic heritage in a modern era.

The Act repeals the National Monuments Acts 1930 to 2014 and replaces those Acts with provisions for the protection of historic heritage, provisions for the protection of archaeological heritage, provisions for the regulation of certain activities in the interests of such protection and provisions enabling the State to ratify or accede to certain international conventions which relate to such protection or regulation; to give effect to the EIA Directive and the Habitats Directive in relation to the carrying out of works at, on, in, under, to, or within the immediate surroundings of monuments; to give further effect to the Valletta Convention; to consequentially repeal or amend

certain other enactments; to make miscellaneous amendments to the Foreshore Act 1933, the Lough Corrib Navigation Act 1945, the Planning and Development Act 2000, the Valuation Act 2001, the Local Government Act 2001, the Local Government Rates and other Matters Act 2019 and the Maritime Area Planning Act 2021; and to provide for related matters

The Act introduces the following innovative measures:

- newly discovered archaeological sites are afforded immediate legal protection, mirroring the existing system for archaeological objects and historic wrecks that are automatically protected without a need for formal designation or registration;
- a statutory reporting scheme for finds of monuments;
- a new ‘Register of Monuments’ will be established, replacing several overlapping designation and registration systems hitherto in operation;
- “World Heritage Property” is defined for the first time in Irish legislation;
- subject to certain exceptions, archaeological objects with no known owner will automatically become the property of the State;
- the Act provides the necessary provisions to allow for the ratification of two important international treaties, the 1970 UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property, and the 1995 UNIDROIT Convention on Stolen or Illegally Exported Cultural Objects;
- the Act enables the State to ratify the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage;
- an integrated licensing system whereby one licence can authorise a range of activities will be introduced and, for the first time, a statutory appeals process will be established to review licensing decisions, and
- a new civil enforcement procedure can be used as an alternative to, or to supplement, criminal proceedings.

The Act defines archaeology as “the study of past human societies of all periods, either as a whole or of various aspects of them, through the material remains of all forms, moveable and immovable, left by those societies and the evidence of their environment, and includes the study of climatological, ecological, geological, geomorphological or pedological factors relevant to understanding the nature or context of those societies or the distribution or nature of their material remains, and “archaeological interest” shall be construed accordingly”.

Section 14 of the Act provides for the establishment of a register to be known as the Register of Monuments. The Act sets out transitional provisions applicable to Register of Historic Monuments, Record of Monuments and Places and National Monuments.

There are **no National Monuments located within the study area**. The nearest National Monument to the subject site is St Seachnall's Church (ME044-033002-; Nat. Mon. 400) which is circa 6km west of the subject site.

The *Meath County Council Development Plan 2021-2027* includes the following relevant policies and objectives in relation to the protection of the archaeological resource:

HERITAGE POLICY 1 *To protect sites, monuments, places, areas or objects of the following categories: Sites and monuments included in the Sites and Monuments Record as maintained by the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht; Monuments and places included in the Record of Monuments and Places as established under the National Monuments Acts;*

Historic monuments and archaeological areas included in the Register of Historic Monuments as established under the National Monuments Acts; National monuments subject to Preservation Orders under the National Monuments Acts and national monuments which are in the ownership or guardianship of the Minister for Culture, Heritage and the Gaeltacht or a local authority;

Archaeological objects within the meaning of the National Monuments Acts; and Wrecks protected under the National Monuments Acts or otherwise included in the Shipwreck Inventory maintained by the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht.

HERITAGE POLICY 2 *To protect all sites and features of archaeological interest discovered subsequent to the publication of the Record of Monument and Places, in situ (or at a minimum preservation by record) having regard to the advice and recommendations of the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht and The Framework and Principles for the Protection of the Archaeological Heritage (1999).*

HERITAGE POLICY 3 *To require, as part of the development management process, archaeological impact assessments, geophysical survey, test excavations or monitoring as appropriate, for development in the vicinity of monuments or in areas of archaeological potential. Where there are upstanding remains, a visual impact assessment may be required.*

HERITAGE POLICY 4 *To require, as part of the development management process, archaeological impact assessments, geophysical survey, test excavations or monitoring as appropriate, where development proposals involve ground clearance of more than half a hectare or for linear developments over one kilometre in length; or developments in proximity to areas with a density of known archaeological monuments and history of discovery as identified by a suitably qualified archaeologist.*

HERITAGE POLICY 5 *To seek guidance from the National Museum of Ireland where an unrecorded archaeological object is discovered, or the National Monuments Service in the case of an unrecorded archaeological site.*

HERITAGE OBJECTIVE 1 *To implement in partnership with the County Meath Heritage Forum, relevant stakeholders, and the community the County Meath Heritage Plan and any revisions thereof.*

HERITAGE OBJECTIVE 2 *To ensure that development in the vicinity of a Recorded Monument or Zone of Archaeological Potential is sited and designed in a sensitive manner with a view to minimal detracting from the monument or its setting.*

HERITAGE OBJECTIVE 3 *To protect important archaeological landscapes from inappropriate development.*

HERITAGE OBJECTIVE 4 *To encourage the management and maintenance of the County's archaeological heritage, including historic burial grounds, in accordance with best conservation practice that considers the impact of climate change.*

Archaeological and historical context

There are **no** recorded archaeological monuments within the subject site. There is one archaeological site recorded by the ASI within the 500m radius study area which surrounds the subject site, field system (ME044-034015-). Also, a portion of the Zone of Archaeological Potential associated with the historic town of Ratoath (ME044-034---) lies within the study area. Details of these archaeological monuments are presented in **Table 1** and **Figure 3**, and their published inventory descriptions are provided in **Appendix 1**.



Figure 3: Recorded archaeological sites within 500m of the subject site (Source: Government of Ireland)

Table 1: List of recorded archaeological sites within the 500m study area

RMP No.	Classification	Townland	ITM (E,N)	Distance from site boundary
ME044-034----	Historic town	Ratoath	701899, 751953	300m west
ME044-034015-	Field system	Ratoath	702400, 751690	280m west

The following section presents summary details of the main periods within the Irish archaeological record. The dating framework used for each period is based on *Guidelines for Authors of Reports on Archaeological Excavations* as published by the National Monuments Service.

Early prehistoric

Traditionally, the earliest recorded evidence for human settlement in Ireland dates to the Mesolithic period (c.7000–4000 BC) when groups of hunter-gatherers arrived on the island, however recent evidence in the form of a butchered bear patella found in Alice and Gwendoline

Cave near Ennis in County Clare now suggests that humans were present in Ireland during the Palaeolithic period between 12,800 to 12,600 cal BC (Dowd and Carden, 2016, 161). However, in 2021, re-examination of a reindeer bone fragment discovered in Castlepook Cave near Doneraile, County Cork in 1905 revealed human butchery marks on the bone which was radiocarbon dated to 31,000 BC, proving human settlement in Ireland at a much earlier stage than previously thought. While the Mesolithic settlers did not construct any settlements or monuments that leave any above ground traces, their presence in an area can often be identified by scatters of worked flints in ploughed fields or shell middens adjacent to the coastline. There are no recorded sites dating to the Mesolithic period within the study area. However, the surrounding landscape is known for its prehistoric occupation and there is substantial evidence for Mesolithic activity less than 10km from Ratoath; archaeological investigations which took place at Clowanstown in advance of the construction of the M3 motorway discovered a Late Mesolithic temporary dwelling. The excavation yielded a variety of exceptional artefacts including a cache of Bann flakes (leaf-shaped stone tools), woven fishing baskets, worked wooden stakes as well as what is believed to be a wooden toy (O'Connor 2008). Three other Late Mesolithic platforms were discovered only 30 km north, at Moynagh Lough, County Meath and are comparable to the site at Clowanstown.

The Neolithic period (*circa* 4000-2400 BC) began with the arrival and establishment of agriculture as the principal form of economic subsistence, which resulted in more permanent settlement patterns. As a consequence of the more settled nature of agrarian life, new site-types, such as more substantial rectangular timber houses and various types of megalithic tombs, begin to appear in the archaeological record during this period. There are no recorded sites dating to the Neolithic period within the study area. Again, however, the surrounding landscape is rich in Neolithic archaeology, which is unsurprising given that the subject area is situated only 21km away from Brú na Bóinne, one of Irelands UNESCO world heritage sites and famous for its evidence of Neolithic occupation. Also, during the excavations which took place prior to the construction of the M3, several mounds of burnt bone were uncovered at Clowanstown, some of which also contained flint and ceramic artefacts (O'Connor 2008). The function of these mounds remains unclear though radiocarbon dating has placed them firmly in the Neolithic, further illustrating the variety of transient neolithic activity throughout the surrounding landscape. **There are no early prehistoric sites recorded within the study area.**

Late prehistoric periods

Metalworking arrived in Ireland with the advent of the Bronze Age period (*circa* 2400–500 BC). This period was also associated with the construction of new monument types such as standing stones, stone rows, stone circles and *fulachta fia*. *Fulachta fia* translates as cooking places of the wild (or of deer), they are often interpreted as the remains of cooking sites and are the most numerous archaeological site type in Ireland, radiocarbon dating of excavated examples has generally produced dates in the Bronze Age (*circa* 2400-500BC). Seven of these sites were excavated at Boyerstown in advance of the M3 construction, with some suggesting that the clusters of these mounds may represent the catchment areas of family groups for domestic and ritual purposes (Grogan, et al. 2007), thus highlighting the potential for large numbers of Bronze age people to be moving through the area. The development of new burial practices saw the construction of funerary monuments such as cairns, barrows, boulder burials and cists. The later first millennium BC and the early centuries AD comprise the Irish Iron Age, which is the most obscure period in the Irish archaeological record. While there is general agreement that the introduction of an iron technology was a significant factor in the eventual demise of bronze working on a large scale, but how, why and when this came about in Ireland is far from clear.

There are no recorded sites dating to the Bronze Age or Iron age within the study area, however there are an abundance of examples of Bronze age activity in the surrounding landscape.

Early medieval

This period began with the introduction of Christianity in Ireland and continued up to the arrival of the Anglo-Normans during the 12th-century (*circa* 400–1169 AD). The establishment of the Irish church was to have profound implications for political, social and economic life and is attested to in the archaeological record by the presence of church sites, associated places for burial and holy wells. The early medieval church sites were morphologically similar to ringforts but are often differentiated by the presence of features such as church buildings, graves, stone crosses and shrines. This period saw the emergence of the first phases of urbanisation around the large monasteries and the Hiberno-Norse ports. However, the dominant settlement pattern of the period continued to be rural based in sites such as ringforts, which comprise roughly circular enclosures delimited by roughly circular earthen banks formed of material thrown up from a concentric external ditch. Ringforts are one of the most numerous monuments in the Irish landscape, with some 45,000 recorded examples (Stout 1997, 53). The early medieval terms for these sites – *ráth/lios/dún* these still form some of the most common place-name elements in the country. Archaeological excavations indicate that many ringforts were early medieval farmsteads with internal timber buildings and were surrounded by associated field systems.

Ratoath is recorded as an Historic Town (ME044-034----) primarily due to its post-medieval status and is largely founded after the Anglo-Norman settlement of Meath in 1171. It is likely, however, that there was an earlier structure or settlement, such as a rath or enclosure at Ratoath prior to the construction of the motte and bailey castle (ME044-034001-). There are several archaeological features within the historic town of Ratoath which may also have pre-Anglo-Norman roots, such as the road/trackway (ME044-034010-) or the linear earthwork (ME044-034012-), both of which are located between the castle and the church.

Later and post-medieval

The arrival and conquest of large parts of Ireland by the Anglo-Normans in the late 12th-century broadly marks the advent of the Irish late medieval period, which continued up until the beginning of the post-medieval period in *circa* 1550. This period saw the continuing expansion of Irish urbanisation as many of the port cities developed into international trading centres and numerous villages and towns developed as local or regional market centres.

Leinster was the first lordship established on the assumption of power by Strongbow following the death of his father-in-law mac Murchada in 1171. During the following centuries, the Anglo-Normans inter-married and formed alliances with the native Irish, and large parts of the Liberty fell back into Irish hands. The most significant sites within the town of Ratoath date to the post-medieval period, including the motte and bailey castle (ME044-034001-), church (ME044-034003-) and both the market cross (ME044-034008-) and churchyard cross (ME044-034006-), all of which lie outside the study area.

The post-medieval period (1550+) saw the development of high and low status stone houses throughout the Irish country. During this period any given settlement cluster is likely to have consisted primarily of single-storey thatched cottages with associated farm buildings while two-storey farmhouses became more common in the 19th-century. In the latter half of the 20th-century, there was a radical change in the nature and character of Irish domestic architecture manifested

by the replacement of older stone-built structures with modern bungalows of concrete blockwork construction.

Samuel Lewis in his *Topographical Dictionary of Ireland* (1837, 261ff.) described Ratoath as follows:

RATOATH, a parish (formerly a parliamentary borough), in the barony of RATOATH, county of MEATH, and province of LEINSTER, 3 miles (N. W.) from Ashbourne, and 11- (N. W.) from Dublin; containing 1779 inhabitants, of which number, 552 are in the village. This place, anciently called Rathtotoath, is supposed to have derived that name from a conspicuous mount near the church, on which Malachy, the first monarch of all Ireland, is said to have held a convention of the states. In the reign of Hen. VI. it was classed among the borough towns of Meath, and had attained such importance as to give its name to the hundred in which it is situated; it had also an abbey, dedicated to St. Mary Magdalene, and sent members to the Irish parliament, which it continued to do till the Union, when the borough was disfranchised. The village contains 96 houses, but retains nothing of its former importance. The manufacture of sacking and the weaving of linen are carried on to a small extent ; and fairs, chiefly for cattle and pigs, are held on April 18th, June 1st, and Nov. 20th, for which, though authorised by patent, no toll has been lately demanded, A constabulary police force is stationed here, and a manorial court was formerly held, but within the last few years has been discontinued.

The parish comprises 8207- statute acres, as apportioned under the tithe act: the land is generally of good quality and in a state of profitable cultivation; rather more than half is under tillage, producing favourable crops; the remainder, with the exception of a moderate portion of bog, is in meadow and pasture. Stone of good quality is quarried for building and for repairing the roads. The principal seats are the Manor House, that of J. I. Corballis, Esq., pleasantly situated in the town; and Lagore, of M. Thunder, Esq., a handsome residence in a richly wooded demesne, abounding with stately timber. The living is a rectory and vicarage, in the diocese of Meath ; the rectory is partly impropriate in T. L. Norman and J. I. Corballis, Esqrs., and the vicar of Athlone ; and partly united to the vicarage, which by act of council in 1682, was united to the rectories and vicarages of Greenogue, Killeglan, Creekstown, and Donaghmore, and to the chapelry of Cookstown, together forming the union of Ratoath, in the alternate patronage of the Crown and the family of Norman, The tithes amount to £515, of which £55 is payable to T. L. Norman, Esq., £62. 10. to J. I. Corballis, Esq., £62. 10. to the vicar of Athlone, and the remainder to the vicar of Ratoath : the glebe-house, situated close to the church, was built in 1813, at an expense of £2200, of which £100 was a gift and £900 a loan from the late Board of First Fruits, and the remainder was defrayed by the then incumbent ; the glebe comprises 6- acres, valued at £19. 10. per ann.: the gross income of the whole benefice amounts to £788. 7. 3. per annum. The church, towards the erection of which the late Board of First Fruits granted a loan of £800, in 1817, is a neat edifice in good repair. In the R. C. divisions this parish is the head of a union, comprising also the parishes of Cookstown, Killeglan, and Rathbeggan; there are chapels at Ratoath and Killeglan. About 240 children are taught in a parochial and a national school, of which the former is aided by a donation of £10 per ann. from the incumbent; there is also a dispensary. The rath from which the parish takes its name has been planted; several old coins have been found near it. There are no remains either of the abbey of St. Mary Magdalene, or of a chantry for three priests, which formerly existed here.

Placenames database

Townlands are the smallest unit of land division in the Irish landscape and many preserve early Gaelic territorial boundaries that pre-date the Anglo-Norman conquest. The layout and nomenclature of Irish townlands was recorded and standardised by the work of the Ordnance Survey in the 19th century. The Irish translations of the townlands names often refer to natural topographical features, but name elements may also give an indication of the presence of past

human activity within the townland, e.g. dun, lios or ráth indicate the presence of a ringfort while temple, saggart, termon or kill record an association with a church site. Most of the proposed development lands are located within the townland of Ratoath but its southern portion is located within Jamestown townland. The boundary between the Ratoath and Jamestown extends east-west across the development area along Main Street (R125) where it is defined by an existing boundary comprising a wall, a row of mature deciduous trees and a hedge.

The Irish origins and translations for the townland of Ratoath and surrounding townlands (**Table 2**) were sourced from www.logainm.ie.

Table 2: Translation of townland name (source www.logainm.ie)

Townland	Irish Root	Translation
Ratoath	<i>Ráth Tó</i>	<i>Ráth</i> ; Ringfort
Jamestown	<i>Baile Shéamuis</i>	–
Tankardstown	<i>Bail' an Tancard</i>	Tankard; family name
Raystown	–	–
Ballybin	<i>Baile bhinn</i>	'Peak or town of the pointed hill'

Excavations Database

The Excavation Database contains summary accounts of all licensed archaeological investigations carried out in Ireland (North and South) from the 1960s to present. The database gives access to over 27,000 reports and can be browsed or searched using multiple fields, including year, county, site type, grid reference, license number, Sites and Monuments Record number and author. A total of 22 licenced investigations have taken place within the landscape surrounding the subject site, mainly within the historic town of Ratoath. Please consult **Appendix 2** for full Excavations Database summaries of the above investigations.

Cartographic review

The detail on historic cartographic sources demonstrates the nature of past settlements and land use patterns in recent centuries and can also highlight the impacts of modern developments and agricultural practices. This information can aid in the identification of the location and extent of unrecorded or partially levelled features of archaeological or architectural heritage interest. The cartographic sources examined for the study area include the first edition 6-inch Ordnance Survey map (1837-42) and the 25-inch Ordnance Survey map (1888-1913). Modern aerial imagery was also consulted.

On the first edition 6-inch Ordnance Survey map, the subject site encompasses portions of three agricultural fields. The present day R125 Main Street and Ballybin Road are both depicted on the map. Two of the fields are located to the north of the R125 and correspond to the northern and southern plot. The southern plot is bordered by lines of trees along its southern and western boundary. A third field, in the townland of Jamestown, south of the R125 has since been developed as a roundabout. The townland boundary of Ratoath is marked in its current location along Main Street (R125) and is lined with trees (**Figure 4**).

The late nineteenth century/early twentieth century 25-inch Ordnance Survey map records only one change to the subject lands. The boundary between the northern and southern plots is now defined by a large ditch (**Figure 5**).

A review of aerial imagery shows that the southern margin of the site has been subject to modern disturbance through the widening of the R125 road and construction of a roundabout (**Figure 6**).

There were no indications of previously unknown archaeological sites from this cartographic review.

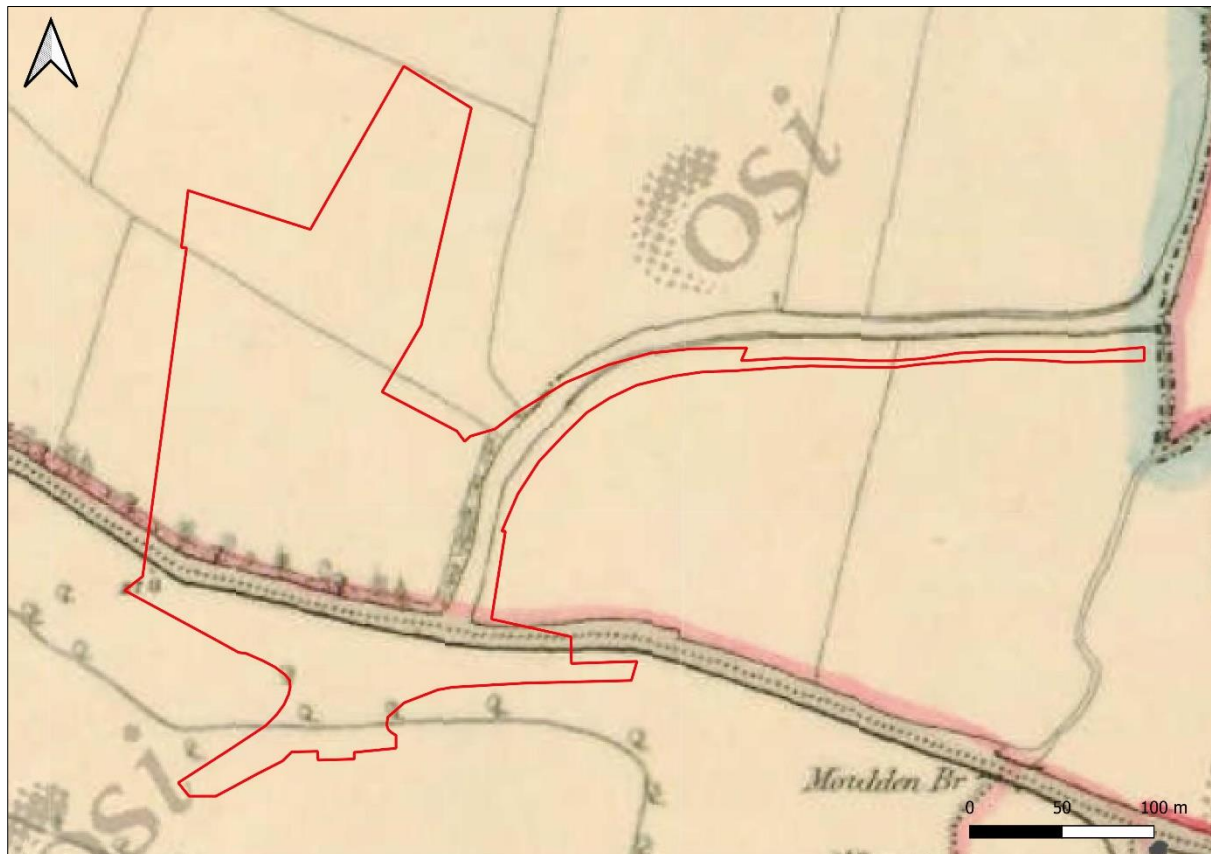


Figure 4: Extract from the first edition 6-inch Ordnance Survey map (1837-42) (Source: Government of Ireland)

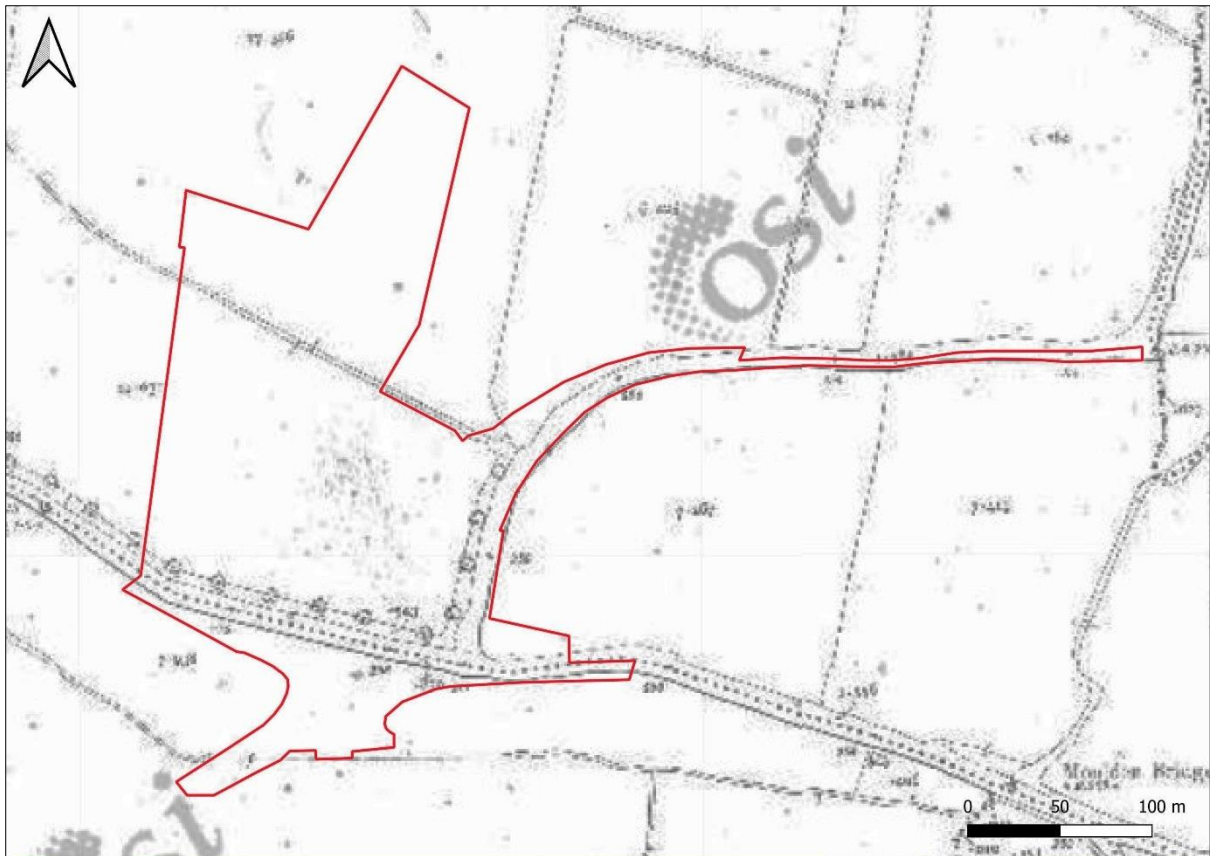


Figure 5: Extract from the 25-inch Ordnance Survey map (1888-1913) (Source: Government of Ireland)



Figure 6: Aerial view showing modern land use within subject site (Source: Google Maps).

4. Description of site

The subject site, approximately 5.48 hectares in size, is located to the northeast of the town of Ratoath. It is principally zoned *Residential* and is currently greenfield and in agricultural use with 2 no. dwellings and a farm outbuilding. The planning boundary also incorporates three existing public roads, Main Street (R125) and Jamestown Road to the south and Ballybin Road to the east (Figure 7).



Figure 7: Site layout plan (Courtesy of John Fleming Architects)

The field survey was undertaken on Friday 23rd February 2024, with good weather conditions and visibility. The main residential portion of the site consists of two adjoining plots separated by an existing farm lane, ditch and tree line (see **Appendix 3: Plate 1 and 2**).

The northern plot is irregular in shape and contains an agricultural shed and a yard. The area adjacent to the farmyard consists of moderately wet and relatively flat pastureland, gently sloping eastwards from its middle portion. The ground surface of this area is soft underfoot suggesting moderate to poor drainage. The plot is bounded to the south by an existing farm lane, to the east by tree-lines/hedgerow and an existing housing estate behind a block wall to its north and west. Minor ground disturbances were observed immediately northwest of the existing farmyard, including a number of overhead line (OHL) pole sets across the field, to the north. No upstanding archaeological features were observed during this field survey (**Plate 3-6**).

The southern plot consists of a large rectangular green field, on a slight east facing slope and contains two dwellings. The ground is moderately drained. The plot is kept as a domestic green area associated with the existing dwelling located within the western half of the plot. Lines of trees along its boundary screens the plot from the main road (R125) to the south, Ballybin Road to the east, and an existing row of dwellings to the west. Occasional minor ground disturbances were observed along the boundaries, close to the tree lines. A modern mound of soil/spoil heap was noted along the western portion of the southern boundary (**Plate 7 and 8**).

5. Summary of geophysical survey

An archaeogeophysical survey (Licence No.: 24R0158) at greenfield areas of the proposed development was undertaken by Dr Ger Dowling (2024). The investigation, comprising high resolution magnetic gradiometry, was implemented over two adjoining tracts of pasture and covered an area of approximately 3.5 hectares, though only about 2.1 ha was suitable for investigation. The survey report is presented in **Appendix 4** of this document.

The geophysical investigation at Ratoath townland did not identify any anomalies of clear archaeological potential. However, evidence for former cultivation of uncertain antiquity was detected.



Figure 8: Greyscale image of gradiometry results (Courtesy of Dr Ger Dowling).

Several 'pit-type anomalies registered by the survey may represent small pits/spreads, though an archaeological origin for these putative features is highly tentative; they may instead reflect natural soil variation and/or disturbance from past cultivation and/or more deeply buried ferrous litter. Traces of former ridge-and-furrow is discernible in the survey results from the southern part of the site. This cultivation pattern, which is visible as a surface feature, may relate to medieval farming – and perhaps be associated with medieval cultivation (ME044-034015) identified in 2001/2002 some 300m to the west. In the absence of supporting information, however, this interpretation is speculative, and the ridge-and-furrow may date from more recent centuries.



Figure 9: Interpretative plan showing principal geophysical anomalies (Courtesy of Dr Ger Dowling).

Other anomalies mapped by the investigation reflect modern activity and include possible drains/buried services, a septic tank [1], an electricity pole [2], iron litter, and disturbed ground associated with modern house construction.

In his report, Dr Dowling notes that the interpretations ‘are invariably provisional and further work (e.g. test trenching) is required to fully assess the nature and archaeological potential of the anomalies identified by the present investigation.’

6. Conclusions and recommendations

This assessment, based on desktop research, field inspection and a review of a recently-completed geophysical survey, has revealed that the lands within the subject site have been subject to a ***moderate degree of modern disturbance and development associated with the construction of two dwellings and a farmyard***. The remainder of the site consists of an agricultural field to the north of the farmyard and an area of maintained grass around the residential property in the south.

There are ***no recorded archaeological sites within the lands comprising the subject site***. The Historic Environment Viewer records ***two archaeological sites within the 500m study area*** surrounding the site boundary. The wider landscape around the proposed scheme contains a large number of archaeological excavations dating from the prehistoric period onwards.

The geophysical investigation at Ratoath townland (under Licence No.: 24R0158) did not identify any anomalies of clear archaeological potential. However, evidence for former cultivation of uncertain antiquity was detected. In his report, Dr Dowling notes that the interpretations 'are invariably provisional and further work (e.g. test trenching) is required to fully assess the nature and archaeological potential of the anomalies identified by the present investigation.' The former cultivation pattern seen in the results (and visible on the ground surface) across the southern part of the site may reflect medieval or early modern cultivation.

In summary, due to their undeveloped nature, the greenfield areas of the subject lands can be considered to possess a ***moderate archaeological potential***. As such, in the absence of any mitigation measures, there is the potential for ***direct and indirect impacts*** to recorded and unrecorded archaeological heritage resources should the proposed development proceed subject to no mitigation measures.

Recommendation

To address the archaeological potential of the proposed development site, ***a programme of licenced archaeological testing*** of greenfield areas is recommended prior to commencement of development. This will allow appropriate archaeological mitigation measures to be incorporated into the design of the scheme prior to commencement of any site development works.

It is noted that Meath County Council, in their formal opinion on the LRD (dated 24/05/2024) agree with this recommendation and have proposed the application of the following wording for a condition of planning permission (if the LRD is approved):

- a) The applicant is required to engage the services of a suitably qualified archaeologist (licensed under the National Monuments Acts 1930-2004) to carry out pre-development testing at the site. No subsurface work shall be undertaken in the absence of the archaeologist without his/her express consent.
- b) The archaeologist is required to notify the Department of Housing, Local Government and Heritage in Writing at least four weeks prior to the commencement of site preparation. This will allow the archaeologist sufficient time to obtain license to carry out the work. The earlier the archaeologist is able to access the site for the survey, the better, since there

may be a further phase of archaeological works if something significant is found (see e) below)

- c) The archaeologist shall carry out any relevant documentary research and may excavate test trenches to a general total of 8%-10% of the greenfield site area, suitably placed to give an overall coverage of the site, at locations chosen by the archaeologist, having consulted the Proposed Development plans and the advance geophysical survey.
- d) Having completed the work, the archaeologist shall submit a written report to the Planning Authority and to the Department of Housing, Local Government and Heritage for consideration.
- e) When archaeological material is shown to be present, avoidance, preservation in situ, preservation by record (rescue excavation) and/or monitoring may be required, and the Department of Housing, Local Government and Heritage will also advise the Applicant/Developer with regards to these matters.
- f) In areas where no archaeological material is present following the testing survey, then no further work would typically be required.
- g) No site preparation or construction works shall be carried out until after the archaeologist's report has been submitted and permission to proceed has been received in writing from the Planning Authority in consultation with the Department of Housing, Local Government and Heritage.

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Appendix 1: Relevant inventory entries

ME044-034015-

Class: Field System

Townland: Ratoath

Scheduled for inclusion in the next revision of the RMP: No

Description: Located on a S-facing slope at the E extremity of what might have been the medieval extent of Ratoath. It might also be on the grounds of the Manor House, an eighteenth century mansion just to the NW. The Manor House is probably on the site of the medieval manor house, which was described in an inquisition of 1333 as half an acre surrounded by a square ditch (Orpen 1921) and was probably a moated site. Archaeological testing (01E0359) by J. Ó Neill in a green area of about 4 acres (c. 1.5 ha) identified cultivation ridges (Wth c. 1m) which produced medieval pottery, while medieval pottery was also recovered from the topsoil (excavations.ie 2001: 1041). The furrows survived best at the bottom of the slope close to W-E Broad Meadow River but not on the flat ground immediately adjacent to it. In the same area there were also deeper ditches (Wth c. 0.6-3m) placed c. 12m apart cut into the subsoil and dividing the area into plots. No house structures or evidence of settlement was recorded in the area. (O'Neill 2001).

Further monitoring (02E1454) by M. Fitzpatrick recovered more medieval and post-medieval pottery from the topsoil and identified further N-S or NW-SE linear cut features (Wth 1.4m ; D 0.5m) (excavations.ie 2002:1515). These were placed c. 10-15m apart with some slighter E-W cuts (Wth 0.5m; D 0.01m) off-set from them. The latter are probably furrows but the former are probably boundaries delineating burgher plots from the medieval settlement. No house sites were identified. The area was subsequently developed for modern housing. (Fitzpatrick 2001).

ME044-034----

Class: Historic town

Townland: Ratoath

Scheduled for inclusion in the next revision of the RMP: Yes

Description: Ratoath is situated on a locally prominent hill with a W-E section of the Broad Meadow River just to the S. The name, signifying the 'fort of Thó' or what is more likely 'O thuaidh (North)', is the only indication of a pre-Anglo-Norman presence and a rath may be incorporated into the base of the motte. This area was retained by Hugh de Lacy in the Anglo-Norman settlement of Meath after 1171. He granted the churches of Dunshaughlin and Ratoath to St Thomas' Augustinian abbey (DU018-020051-) before 1183, and the rectory of Ratoath was still amongst the possessions of St Thomas' at its suppression in 1540 (White 1943, 35). On Hugh's death in 1186 Meath was inherited by his son Walter who granted the baronies of Morgallion and Ratoath to his brother Hugh before 1198. The younger Hugh probably built the motte and bailey, and he may have granted a charter to Ratoath c. 1200. This Hugh became the first Earl of Ulster in 1205 after he had taken over the de Courcy lordship. (Orpen 1921, 69)

The castle (i.e. motte) of Ratour or Ratouth is referred to frequently in the thirteenth century. The manor was forfeited by Hugh in 1210 but it was returned to Walter de Lacy in 1215. The lands and castles in Walter's charge including Ratoath were seized by the King again in 1224 but they were returned to Hugh de Lacy in 1227, when the right to hold a fair lasting thirteen days at Ratoath was also granted. David FitzWilliam, the baron of Naas, had an interest in Ratoath in 1244 through his wife, Matilda, a daughter of Hugh de Lacy. In 1283 Sir Roger de Clifford, a Welsh baron, sold the manor of Raoath to Queen Eleanor, the wife of King Edward I. Ratoath had probably been granted to Roger by King Edward to help Roger raise some ransom money as he was held captive in Wales, and Eleanor almost immediately granted the manor to Richard de

Burgh, Earl of Ulster, known as the Red Earl. The manor had passed to the Duke of York with the liberty of Trim before 1449 when it was granted the right to hold weekly markets on Monday, and two fairs, each of two days duration, during the year. (Bradley and King 1985, 123) An inquisition in 1333 found William de Burgh, a grandson of the Red Earl, possessed of the manor of Ratoath at his death, and he had held it in capite from the King. The manor had no buildings but its site is described as half an acre surrounded by a square ditch, and this suggests that not only the motte and bailey but even this moated site were abandoned as the manorial centre, although two carucates (townlands) and 100 acres were in the demesne. The burghers of Ratoath paid over £6 in yearly rent (Orpen 1921, 76), indicating that the settlement may have had over a hundred heads of households. It also had a Hundred or manorial court and there was a mill. About 160 acres are described as Betaghsland, meaning the native Irish settlement, which could be Baytown in Kilbride parish. About thirty five free tenants are named, amongst whom the names Cruys, Tuyt, Cusack, de Bathe, and FitzLeon recur, but the most common name is Bereford.

Many of the townlands in the barony can be identified by name. (Orpen 1921) According to the Civil Survey (1654) in 1641 Ratoath townland had 21 proprietors, but only four of these lived there. However, 82 lettings described as tenements or messuages are dependent on them, and the town had a portreeve or mayor and a sergeant (Simington 1940, 106-07). There was a corn mill in repair on the river called the Gore Water, according to the terrier or commentary on the Down Survey (1656-8) parish map. This was probably on the S side of the river where a mill is depicted on the 1835 edition of the OS 6-inch map. The terrier says that the market for provisions and linen was on Mondays. It describe the motte as at the S edge of the town, and the map shows the 62 acres of the town on the N side of the river. Ratoath had a population of 166 c. 1659 (Pender 1939, 487). However, it maintained its status as an incorporated town into the eighteenth century as it continued to send two members to the Irish Parliament up to its dissolution in 1800. The electors appear to have been the adult males of the manor or parish. By this time the Corballis family were the largest landowners and lived in the Manor House, a seven bay, two storey house which was built c. 1780 and is now a nursing home. It is located c. 170m ESE of the motte, and is possibly on the site of the old moated site that was the centre of the medieval manor.

Apart from the motte and bailey, the site of the medieval church is known as well as the location of the market where the Market cross once stood. The burgage plots as depicted on the 1835 edition of the OS 6-inch map are on either side of the Dunshaughlin Road. There are also plots extending S from Main Street and the sinuous Fairhouse Road to the W-E Broad Meadow River that is c. 70m S of the motte and bailey.

The town had no defensive wall but this does not preclude an earthwork boundary consisting of an earthen bank and external ditch. Such a ditch (ME044-034012-) was found in archaeological testing of a sewage pipe on the Kentstown road as well as a medieval roadway, a cistern and cut drains that are probably property boundaries. Archaeological monitoring (02E1563) by B. Shanahan of a services trench (D 0.6-0.9m) outside the perimeter of the grounds of the Roman Catholic church NW-NE and west as far as the site of the market cross identified but did not excavate three pits and three ditches of likely medieval date beneath more modern features (excavations.ie 2002: 1516), and other boundaries between plots have been discovered in other excavations within the town.

Appendix 2: Previous archaeological excavations

The following summary accounts of licenced archaeological investigations within the study area have been extracted from *The Excavation Database* (Source: www.excavations.ie).

Licence No.	Summary
01E0721	<p>Testing was carried out at a site on Fairyhouse Road, Ratoath, Co. Meath, in August 2001. Ratoath was the centre of an important manor established by Hugh de Lacy prior to 1183. The street plan largely follows the curve formed by the motte. The name is derived from Rath To, 'the fort of To', which suggests that there was a settlement there before the coming of the Anglo-Normans.</p> <p>Four test-trenches were inserted around the perimeter of the site, positioned both to give a representative cross-section of the stratigraphy on the site and to examine those locations to be most affected by the development. There was no evidence of either archaeological features or artefacts, nor was there any indication that archaeological strata have ever existed on the site. The general impression obtained from the examination of the test-trenches was of ground which had been extensively disturbed by earlier developments and through use as a garden area.</p> <p>It was recommended that all works for road realignment along the northern and eastern boundaries of the site should be subject to monitoring.</p>
93E0055	<p>Monitoring of house foundation trenches was carried out as the development was situated across the road from a motte and the site of a possible medieval church.</p> <p>Nothing of archaeological significance was found.</p>
03E1316 ext	<p>Site 23 was excavated on 19-28 May 2004 under an extension to the testing licence, at the request of Meath County Council as part of a programme of archaeological mitigation in advance of the proposed N2 Finglas-Ashbourne road scheme, Counties Dublin and Meath (Appendix II). Excavation uncovered a single small barrow-type monument comprising a circular ditch feature, measuring 2.9m across, with an internal diameter of 1.7m. This excavation produced no evidence of any internal features and it is likely that any mound or bank that may have originally existed would long since have been destroyed. This feature was cut by a relatively recent field drain. Samples from this site have been selected for dating and post-excavation analysis</p>
99E0581	<p>This work was carried out as part of the ongoing monitoring of pipe-laying for the Ashbourne/ Ratoath/Kilbride Sewerage Scheme. A 2m-wide ditching bucket was used to trench along the verge parallel to the area where the ploughed-out ringfort was sited. Telecom lines and a stone-filled ditch disturbed the area. Modern china and crock were recovered but nothing of archaeological significance. Subsoil was reached at a depth of 0.35m and was a pale beige/yellow clay.</p>
11E062	<p>Testing and monitoring were carried out at the site of a proposed school campus extension at Jamestown, Ratoath. The works were undertaken on behalf of Western Building Systems in response to planning conditions attached to the proposed development. Five trenches were excavated across the area of the proposed development in February 2011. Nothing of archaeological significance was recorded in any of the trenches</p>
04E1231	<p>Monitoring was carried out in advance of a residential development at Ratoath, Co. Meath. The site area was 16.3 acres. It is proposed to construct 124 semi-detached and detached residential units with associated services on a greenfield site situated to the east of the town and outside the zone of archaeological potential.</p> <p>There were no known archaeological remains within the proposed development. Topsoil-stripping was carried out in November 2004. No significant archaeological remains were identified. A single shallow cut feature was identified, which contained occasional charcoal flecking but no other datable material. There were expected finds of ceramic and</p>

Licence No.	Summary
	earthenware fragments from the topsoil, but also recovered were a flint flake, a broken flint blade and a body sherd of local glazed medieval pottery.
98E0360	The site lies close to the northern limit of the area of archaeological potential for Ratoath as defined by the Urban Survey. Four trenches tested the proposed location of a dwelling-house. Trench 1 exposed a layer of yellow clay within natural boulder clay at its west end; there were no inclusions within the yellow clay to suggest that it had been redeposited. The three other trenches exposed evidence of insertion of drainage channels around the development area. They were cut into the natural, dark grey-brown clay with much broken stone. No features of archaeological interest were exposed
97E0365	The development of two houses and garages was proposed for this site, which lies within the area of the medieval borough. The site straddles the line of what may have been a north-south property boundary. Two trenches and two pits were opened. Topsoil lay immediately over a mottled stiff clay with a lot of decayed stone. In Trench 2 there was evidence for a lot of dumping of soil over the sod in modern times. Nothing of archaeological interest was exposed.
14E0204	<p>An assessment including geophysical survey and subsequent test trenching were carried out in response to a further information request from Meath County Council on foot of a planning application for the proposed construction of 66 houses at Corballis Demesne, Ratoath, Co Meath. The site currently comprises of two green fields located in the north-east corner of Ratoath village between the Glebe Park and Corballis Demesne housing estates. The assessment consisted of an initial geophysical survey followed by intensive archaeological testing of the site and was conducted in order to assess the site's archaeological potential in advance of any grant of planning permission. The site is located within the historic town of Ratoath (ME044-034) and is located in close proximity to a number of Recorded Monuments including a motte and bailey (ME044-034001) and church site (ME044-034003).</p> <p>A detailed geophysical survey was conducted in the two fields proposed for development on 6 and 7 June 2014. No clear responses indicative of archaeological activity was apparent although two possible features requiring further investigation were identified in the northern field. The survey in the south of the site identified linear responses indicative of a former track-way and numerous linear trends which are suggestive of ploughing activity. In the east of the data set there are large ferrous responses indicative of a pipe. Broad ferrous responses to the south of this may represent a spread of rubble or the remains of a possible structure, although this is speculative. The magnetic strength of the responses is indicative of more recent activity.</p> <p>Test trenching was carried out on 10 June 2014. A total of 18 test trenches were excavated. No archaeological features or deposits were identified. A network of field drains that were identified by the geophysics were located and recorded within field 1 and the location of the 2 possible archaeological features (also identified by the geophysics) were found not to be of an archaeological nature.</p> <p>During the geophysical survey of field 2 a double linear feature was identified and described as a possible agricultural track-way. The layout of the test trenching was designed to locate and identify this feature; however no visible evidence of the two linear features appeared within any of the test trenches. It is possible that the linear feature may have been formed by compaction within the topsoil and is therefore modern in date.</p> <p>Due to the absence of any archaeological features or deposits on the site, there will therefore be no impact from the proposed development</p>
02E0722	An assessment was carried out at the rear of Ratoath Nursing Home before the construction of an extension to the building. The area lies within the zone of archaeological potential of Ratoath, a seignural manor under Hugh de Lacy in the 1180s but likely to be of greater antiquity. Five test-trenches, 10-21m long, were opened to the rear of the existing buildings. No features of archaeological significance were noted, but some sherds of medieval pottery were recovered from the topsoil during the excavation.

Licence No.	Summary
01E0248	Testing took place in March and April 2001 at Main Street, Ratoath, in advance of construction of a commercial development. Eleven test-trenches were excavated across the development area. These revealed a series of medieval ditches and two 19th-century buildings. The ditches were preserved in situ in all but one area—the foundation trench for the proposed development. Excavation of the ditch showed that it had been severely truncated by the construction of the 19th-century buildings as it only survived to a depth of c. 0.3m.
01E0248 ext	<p>This was an extension of an existing licence taken out by Catherine McLoughlin when testing the adjoining site to the east (see No. 1046 above). Medieval features were exposed in the adjoining site, and the current testing at the back of the Auld Stand pub was carried out to establish whether the features extended this far before the construction of an extension to the pub.</p> <p>Two trenches tested the proposed locations of the eastern and southern walls of this extension. Black silty clay was exposed in both trenches at a depth of 0.6–0.7m. The underlying natural subsoil was soft grey sandy boulder clay. Earlier insertion of services caused disturbance closer to the existing pub building.</p> <p>Nothing of archaeological significance was observed in the trenches.</p>
02E1101 and 02E1101 ext	<p>Testing was carried out on the site in 2002 (Excavations 2002, No. 1520). Following from the discovery of a possible medieval ditch in the northeast corner of the site, the proposed location of one of the apartment blocks was moved westwards in order to avoid disturbance to the ditch. In the grant of planning for two apartment blocks, the developer was required to employ an archaeologist to carry out monitoring during ground disturbance. The licence issued to cover the testing in 2002 was extended to cover the monitoring.</p> <p>A small amount of rubble overburden and sod was removed from the surface of the site. The footings for Block A were excavated first. The depth of topsoil varied between 0.3m and 0.5m. It overlay natural brown boulder clay that contained loose stones.</p> <p>In the area of Block B, the topsoil was dark-grey and silty, 0.6–0.8m deep. The natural subsoil was stiff grey/brown boulder clay with loose stones. Excavation of the footings here produced evidence for poor drainage in this part of the site. Deposits of grey silt were present throughout, but they were amorphous and could not be interpreted as ditches. It is more likely that they were originally dug as soak holes, as similar soak holes were found by the writer on other sites along Main Street in Ratoath.</p>
03E1851	<p>The developer received planning permission to demolish a two-storey house on Main Street, Ratoath, and to build a two-storey development with retail unit at ground-floor level and residential units at first-floor level. Planning permission required an assessment of the site.</p> <p>The inspection of the house revealed that it was built in several stages. The earliest phase was represented by a large room at the east end of the modern house; this was originally two rooms, with the fireplace on the east side of the dividing wall. A doorway originally opened in from the street at the north-west corner of the western room. This was a single-storey structure. A later phase was represented by an extension westwards comprising a lobby with staircase and living room. The second storey may have been added at this time. The third phase was represented by a flat-roof extension. Early architectural material was not observed during the inspection.</p> <p>Two test-trenches and a small pit tested the area of the development outside the area occupied by the standing house. In Trench 1 there was evidence for disturbance caused by drainage trenches and soak holes associated with the house.</p> <p>The test-pit against the back wall showed that the house was built directly on to natural clay, with no evidence for a batter or foundation trench. A third trench was excavated after the demolition of the standing house and this demonstrated that the extensions were constructed immediately on top of natural subsoil.</p>
07E0173	This site was tested in advance of a planning application to construct two blocks of apartments on the north side of the River Broadmeadow, just south of the Moatlands housing estate.

Licence No.	Summary
	When excavation commenced it became clear that a huge quantity of building rubble had been dumped on the site creating a very steep slope, up to 5m deep. The rubble derived from the Moatlands development, built in the mid-1990s. It was not possible to bottom the five test-trenches. No mitigatory measures were suggested as it was likely that the apartments were to be built on raft foundations and that the original ground level would remain disturbed.
97E0293	An archaeological assessment of a proposed commercial development at Ratoath, Co. Meath, was carried out on 18 August 1997. The site of the proposed development lies to the north-west of a motte and bailey (SMR 44:7) and to the south-west of a church site. Two test-trenches were excavated by machine under archaeological supervision. The trenches did not reveal any evidence of archaeological stratigraphy. The boulder clay was visible very close to the surface and rises to the north of the site. No features were evident in either of the trenches and the finds were of modern date.
03E1898	Testing immediately east of the current development site in March 2001 ('Streamstown' development) revealed nothing of archaeological interest (Excavations 2001, No. 1044, 01E0275). The current development will be an extension of the earlier one. The site lies at the north end of a long narrow garden. The houses on either side have similar long narrow gardens. These plots may represent a medieval strip pattern similar to the pattern at Newcastle Lyons, Co. Dublin. A bank and drain forms the boundary along the west side of the plot and there is a deep drain at the north end of the plot. Three trenches tested the locations of the four two-storey semi-detached houses (in two blocks of two). Nothing of archaeological significance was exposed.
05E0460	This is the third site tested by the writer in connection with the phased development known as 'Streamstown'. Four trenches tested this site, located on the north side of the Dunshaughlin road, on the western side of Ratoath village. The site is located in a back garden in an area that Bradley suggested may have retained its medieval strip pattern. Three trenches tested the interior of the site where the proposed houses are to be built. A fourth shorter trench tested the eastern property boundary. Nothing of archaeological significance was exposed in the trenches. One sherd of green-glazed, 13th-century pottery was recovered. Ratoath was an important de Lacy manor site. Stray finds of medieval pottery in fields around the manorial centre are to be expected.
01E0275	Planning permission was granted to construct fourteen two-storey semi-detached houses with associated access road and services. In the original grant of planning permission the developer was required to have all subsurface work monitored. However, he was subsequently requested by Dúchas to carry out pre-development test excavation instead of monitoring. The topography of this development site had been altered and terraced during construction of glasshouses. Three trenches tested the locations of the main elements of the development. Nothing of archaeological significance was exposed and no artefacts were found. It may have been the case that construction of the glasshouses destroyed any existing archaeological material.
01E0174	A pair of stone houses, late 19th-century in date, were demolished at this site, to be replaced by an apartment block. An architectural survey was carried out on the houses before their demolition. Three trenches tested this development site, two of them along the long front and back walls of the development and a perpendicular third trench in the middle of the proposed development. At the front of the site, i.e. the north side, some rubble deriving from the demolition of the 19th-century houses was exposed. This was mixed with the loose black clay topsoil. Drainage features were exposed in the west ends of both long trenches; these were the same features extending from the north to the south of the site. One was a stone-filled drain which yielded a plastic bottle in the fill. The other drain was filled with loose grey

Licence No.	Summary
	<p>silty clay. Both features bottomed at approximately 0.5m below the present ground level. In Trench 3, at the north end, stone blocks mixed with black clay were exposed. These represented demolition rubble from the stone houses. Natural subsoil was a mixed grey and yellow boulder clay, sandy in places and with gravel varying in consistency. Nothing of archaeological significance was exposed in the trenches and no artefacts were found.</p>
02E1563	<p>Monitoring of groundworks was required as the development is within the zone of archaeological potential reflecting medieval occupation within the town of Ratoath. Groundworks consisted of the excavation of trenches for the insertion of services, including telecom ducts, street-lighting ducts and drainage pipes. Trenches were generally excavated to 0.4–1.2m below the modern ground level. Work extended north along Main Street and along the Kentstown Road on either side of the junction. Work also took place along a pathway close to the river and to the rear (east) of the motte. Extensive modern disturbance was evident in most trenches, including earlier services, pits and gullies, and rubble spreads. The construction of the modern road surface on Main Street appeared to have largely removed evidence of earlier activity. Nonetheless, several cut features of medieval date were exposed. A cesspit revealed on Main Street was excavated to a depth of 2m, at which point a sherd of Leinster cooking ware was recovered and the pit became waterlogged. Two further medieval features were exposed beside the northern boundary wall of the Roman Catholic church. A U-shaped gully or shallow pit, 1.15m wide and 0.19m deep, contained a single sherd of green-glazed local ware. A spread of clay or possible ditch fill, 4.4m wide and containing two sherds of Leinster cooking ware, was exposed only in plan, as groundworks did not extend beyond that depth. Groundworks along the Kentstown Road, which exits the town to the north-west, exposed a substantial topsoil horizon beneath the road surface, associated with gardens that were truncated by the insertion of the toll road in the late 18th century. The medieval town boundary ditch was exposed in plan at 1m below the surface of the Kentstown Road. No medieval artefacts were recovered, but the ditch can be dated based on its proximity to the known north-western boundary of the town. It appeared as a 3m-wide band of highly compact, grey clay with a green hue, containing some small pieces of animal bone. The adjacent subsoil was stonier but otherwise quite similar. No ditch cut was visible at a higher level in the section, and no further works were undertaken below this level. Ceramics recovered during the monitoring included medieval and post-medieval wares. Medieval wares consisted of Leinster cooking ware and glazed local wares of 13th–14th-century date, and 17th-century wares were represented by black-/ green-glazed coal-measure clay ware. Manganese mottled ware of 18th-century date was recovered from the fossilised garden-soil layer covered by the late 18th-century toll road. Late 18th- and 19th-century wares included creamwares, pearlwares and blackwares.</p>
06E0915	<p>Monitoring was undertaken of a single test-pit in Ratoath connected with a proposed sewage pipeline. Nothing of archaeological significance was uncovered. The scheme is to recommence in 2008.</p>

Appendix 3: Photographic record



Plate 1: Aerial view of the plots associated with the proposed development, facing south



Plate 2: Aerial view of the plots associated with the proposed development, facing northeast



Plate 3: View of a portion of the northern plot, located to the northwest of the existing farmyard, facing north



Plate 4: View of existing farmyard and lane within the northern plot, facing southeast



***Plate 5:** View of northern plot, facing northeast*



***Plate 6:** View of northern plot, facing southwest towards existing farmyard*



Plate 7: View of the southern plot, from the south-western corner, facing northeast



Plate 8: View of the southern plot, from the south-eastern corner, facing northwest

Appendix 4: Geophysical survey

The following report details the results of an archaeogeophysical survey (undertaken under Licence No.: 24R0158) at the subject site. The report was prepared by Ger Dowling PhD MIAI. The investigation, comprising high resolution magnetic gradiometry, was implemented over two adjoining tracts of pasture and covered an area of approximately 3.5 hectares, though only about 2.1 ha was suitable for investigation. Evidence for former cultivation of uncertain antiquity was detected.

Geophysical Survey Report

Ratoath, Co. meath

License No.: 24R0158

RMP: N/A

ITM: 702750, 751750



Ger Dowling, PhD MIAI
March 2024

Summary

This report details the results of an archaeogeophysical survey (Licence No.: 24R0158) at lands at Ratoath townland, Ratoath, Co. Meath. The investigation was conducted as part of a pre-planning archaeological assessment.

The investigation, comprising high resolution magnetic gradiometry, was implemented over two adjoining tracts of pasture and covered an area of approximately 3.5 hectares, though only about 2.1 ha was suitable for investigation. Evidence for former cultivation of uncertain antiquity was detected.

Survey details

Site Name: Ratoath

Townland: Ratoath

County: Meath

Parish: Ratoath

Barony: Ratoath

RMP/SMR No.: N/A

ITM (centroid): 702750, 751750

Land use: Pasture

Geology: Dark limestone & shale ('calp') (Lucan Formation)

Soils: Fine loamy drift with limestones (Straffan Series)

Detection License No.: 24R0158

Planning Reference No.: N/A

Survey Type & Instrument: Fluxgate Gradiometer – Five-channel magnetometer

Sample/Transverse Interval: 0.05m/0.5m

Area Surveyed: c.2.1 ha.

Survey Date: 06 March 2024

License Holder: Ger Dowling

Report Author: Ger Dowling

Report Date: 09 March 2024

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Abbreviations

GPS	Global Positioning System
ITM	Irish Transverse Mercator
ME	Meath
nT	nanoTesla (unit of magnetic measurement)
OS	Ordnance Survey
QGIS	Quantum Geographical Information Systems
SMR	Sites and Monument Record
RMP	Record of Monument and Places

Coordinate System

All GPS coordinates given in this report are in Irish Transverse Mercator (ITM)

1 Introduction

This report details the results of an archaeogeophysical survey (Licence No.: 24R0158) at lands at Ratoath townland, Ratoath, Co. Meath. The survey, comprising high resolution magnetic gradiometry, was implemented over two adjoining tracts of pasture and covered an area of approximately 3.5 hectares, though only about 2.1 ha was suitable for investigation. The investigation was conducted as part of a pre-planning archaeological assessment.

The site has not previously been subjected to geophysical survey and it was hoped that the investigation would identify and map any subsurface archaeology that may be present.

2 Site Location

The survey is located in the townland of Ratoath, Co. Meath (Figure 1). The site, which lies on the northeastern edge of the town of Ratoath, is in the Civil Parish and Barony of Ratoath.¹

¹<https://www.logainm.ie/en/37997>: accessed on 29 January 2024.

3 Survey Background

The investigation was conducted as part of a pre-planning archaeological assessment.

4 Archaeological Background

4.1 Recorded/Known Archaeology

There are no recorded monuments within the survey area (Figure 2). However, the site lies a short distance east of the Historic Town of Ratoath (SMR ME044-034), the foundation of which dates to the Anglo-Norman conquest of Meath (ancient Brega), though an earlier, yet unidentified, settlement/s at this location is likely. Evidence for of medieval cultivation (SMR ME044-034015) was encountered about 320m west of the target land during archaeological testing and monitoring in 2001 and 2002.²

The survey area is shown as farmland on early historical maps (Figures 3 & 4). Traces of former ridge-and-furrow are discernible across much of the southern part of the site (see Plate 4). While the precise antiquity of this cultivation pattern is unknown, a medieval or later date is probable.

4.2 Previous Investigations

No recorded archaeological investigations have previously been conducted at the survey area.³ Nearby excavations have been described above.

² [Historic Environment Viewer \(arcgis.com\)](https://historicenvironmentviewer.arcgis.com/): accessed on 29 January 2024.

³ <https://excavations.ie/>: accessed on 29 January 2024.

5 Survey Location and Aims

The investigation, comprising high resolution magnetic gradiometry, focused on two adjoining tracts of pasture that encompassed a combined area of approximately 3.5 ha (Figure 5). However, the presence of modern buildings and other structures and features reduced the survey area to approximately 2.1 ha (see Section 8.1 below).

The target land is the location of two modern domestic residences, as well as a large, steel shed that forms the core of a working farm (Plates 1–3) The land is flat, with traces of former ridge -and-furrow visible across much of the southern part of the site (Plate 4). The site is bounded by a combination of hedges, trees and wire fencing on the south and by a modern residential estate and pastureland on the north. An electricity overhead cable traverses the approximate centre of the southern part of the site from roughly north to south. The R125 road runs past the area on the south, while elsewhere the surrounding land is a mixed suburban and agricultural (pasture and tillage) environment.

The underlying bedrock of the locality comprises dark limestone & shale ('calp') (Lucan Formation).⁴ The local soils comprise fine loamy drift with limestones (Straffan Series).⁵

The geophysical investigation aimed to:

- identify any geophysical anomalies of possible archaeological origin within the specified survey area
- accurately locate these anomalies and present the findings in map form
- describe the anomalies and discuss their likely provenance in a written report
- incorporate all of the above in a report to the Client

⁴ Geological Survey of Ireland Spatial Resources, Public Data Viewer Series: <https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228> [accessed on 29 January 2024].

⁵ Irish National Soils Map, 1:250,000k, V1b (2014): <http://gis.teagasc.ie/soils/map.php> [accessed on 29 January 2024].

6 Survey Methodology and Instrumentation

The survey involved high-resolution magnetic gradiometry survey (Table 1). This technique measures changes in the magnetic properties of the soil and is widely used in modern investigations due to its ability to detect a broad range of sub-surface archaeological remains, including ditches and pits, and industrial features associated with metalworking and pottery production.

The magnetic survey was conducted using a five-channel fluxgate magnetometer system, combining two Foerster Ferex 4.034 dataloggers and Foerster MG-10-550 probes, with cm-precision GPS (Trimble R12 antenna and TSC5 controller) georeferenced to Irish Transverse Mercator and Ordnance Datum. Mounted on a cart and hand-pushed, the system records magnetometer and GPS data simultaneously into a single data file. The data capture strategy involved logging readings every 0.05m intervals along transects spaced 0.5m apart, with a maximum traverse width of 2.5m.

The highly accurate positioning of the survey data provides strong confidence when integrating the geophysical results with other datasets such as aerial imagery in GIS, and also ensures repeatability should further investigation of anomalies (e.g., test excavation) be required.

Table 1. Geophysical survey details

Technique	Instrumentation	Sensor spacing	Sample rate	Survey Area	Number of recorded data
Magnetic Gradiometry	Five-channel fluxgate gradiometer array	0.5m	240 Hz	c.2.1 ha	464,360

7 Data Management, Processing and Interpretation

Gradiometry data was logged to a laptop computer and archived daily to an external hard drive. The collated data was processed using the following methodology:

- Real-time positioning of magnetometer data based on GPS measurements;
- Track correction (compensation) of collated magnetometer data; and
- Export of georeferenced greyscale images at optimum visual range

The processed data was imported into QGIS for final image production (Figures 6 & 7). Final geophysical datasets have been formatted as raster data models/GeoTiffs (projected to ITM, EPSG:2157) to enable subsequent geospatial analysis. Fieldwork, data processing and reporting adhered to the most up-to-date guidelines for conducting archaeo-geophysical surveys.⁶ All geophysical raster datasets will be digitally archived to best practice.⁷

⁶ Schmidt A., Linford P., Linford N., David, A., Gaffney C., Sarris A., and Fassbinder J. 2016. *EAC Guidelines for the Use of Geophysics in Archaeology: Questions to Ask and Points to Consider*. EAC Guidelines 2. [Online] Available from:

https://f64366e3-8f7d-4b63-9edf5000e2bef85b.filesusr.com/ugd/881a59_fdb1636e95f64813a65178895aea87cf.pdf

⁷ Niven, K. 2012. *Raster Images: A Guide to Good Practice*. Archaeology Data Service/Digital Antiquity, Guides to Good Practice. [Online] Available from: http://guides.archaeologydataservice.ac.uk/g2gp/RasterImg_Toc; & Schmidt, A. and Ernenwein, E. 2012. *Guide to Good Practice: Geophysical Data in Archaeology*. Oxford: Oxbow.

8 General Considerations and Complicating Factors

8.1 Access and Ground Conditions

The survey area comprises two neighbouring tracts of pasture that are occupied by two modern houses and a large farm shed. These represented an obvious impediment to the investigation. Further constraining the survey was the presence of agricultural machinery (tractor, trailers, etc.) immediately east and west of the shed (Plates 5 & 6) and a modern gravelled path that curves around the southern part of the site, on the north. A small garden area, containing wooden sheds and an orchard, next to one of the houses, on the south, was also avoided by the survey, as was a large earthen mound and adjacent patch of disturbed/rutted terrain located along the southern site boundary.

8.2 Modern Interference

Numerous small-scale ‘ferrous-type’, dipolar (positive–negative) responses are evident in the results from the gradiometry survey. These are a common occurrence in magnetic data and in most cases represent modern metal debris and other magnetised material (e.g., fired brick) contained within the topsoil. A septic tank (labelled ‘1’ on Figure 7) in the southern part of the site produced a strong dipolar response, as did a nearby electricity pole (labelled ‘2’ on Figure 7).

Large areas of ferrous disturbance deriving from survey in proximity to the farm shed, agricultural machinery, gravelled path, and modern houses were recorded in places along the edge of the survey area.

An area of enhanced magnetic response registered by the survey next to one of the houses on the south likely reflects ground disturbance associated with construction works.

8.3 Former Land Use

Ploughing associated with past cultivation is discernible in the survey results from the southern part of survey area as a series of slender, widely-set positive–negative linear anomalies, orientated east–west. A number of possible field drains or buried services were also mapped by the investigation.

9 Survey Results

Table 2. Survey results

Area	Ratoath		
ITM (centroid)	702750, 751750		
Area surveyed	c.2.1 ha		
Figure Numbers	6 & 7		
Anomaly Number	Form/nature of anomaly	Possible sources(s) of anomaly	Interpretative discussion
	Several 'pit-type' responses	Possible archaeology/ agricultural/ natural/modern	Possible pits/deposits. May also reflect localised natural soil variation and/or disturbance from past cultivation and/or more deeply buried ferrous litter.
	Positive trend	Possible agricultural/ modern	Possible ditch/drain.
	Multiple, widely-set, parallel, positive—negative linears	Agricultural	Former cultivation, averaging about 1.9m apart. Oriented E–W. Surface feature. See Plate 4
	Multiple 'ferrous-type' responses	Modern/natural	Ferrous debris and other weakly magnetised material (e.g., fired brick).
1	Mass dipolar response	Modern	Septic tank.
2	Mass dipolar response	Modern	Electricity post.
	Slender positive linears	Possible agricultural/ modern	Possible drains/modern services.
	Area of enhanced magnetic response	Modern	Ground disturbance associated with house construction.
	Areas of magnetic disturbance	Modern	Disturbance from adjacent buildings, farm shed, agricultural machinery and path.

10 Conclusion

The geophysical investigation at Ratoath townland did not identify any anomalies of clear archaeological potential.

Several 'pit-type anomalies registered by the survey may represent small pits/spreads, though an archaeological origin for these putative features is highly tentative; they may instead reflect natural soil variation and/or disturbance from past cultivation and/or more deeply buried ferrous litter. Traces of former ridge-and-furrow is discernible in the survey results from the southern part of the site. This cultivation pattern, which is visible as a surface feature, may relate to medieval farming – and perhaps be associated with medieval cultivation (ME044-034015) identified in 2001/2002 some 300m to the west. In the absence of supporting information, however, this interpretation is speculative, and the ridge-and-furrow may date from more recent centuries.

Other anomalies mapped by the investigation reflect modern activity and include possible drains/buried services, a septic tank [1], an electricity pole [2], iron litter, and disturbed ground associated with modern house construction.

10.1 Statement of Indemnity

The geophysical properties of sub-surface features must contrast sufficiently with the surrounding soils/background variation to enable them to be detected and mapped using geophysical methods. As such, the clarity and definition of buried features can vary considerably, with some having well-defined signatures while others are only barely visible, or not discernible, in geophysical imagery. A lack of geophysical anomalies cannot be taken to imply the absence of archaeological features.

The interpretations presented here are invariably provisional and further work (e.g. test trenching) is required to fully assess the nature and archaeological potential of the anomalies identified by the present investigation.

11 Figures

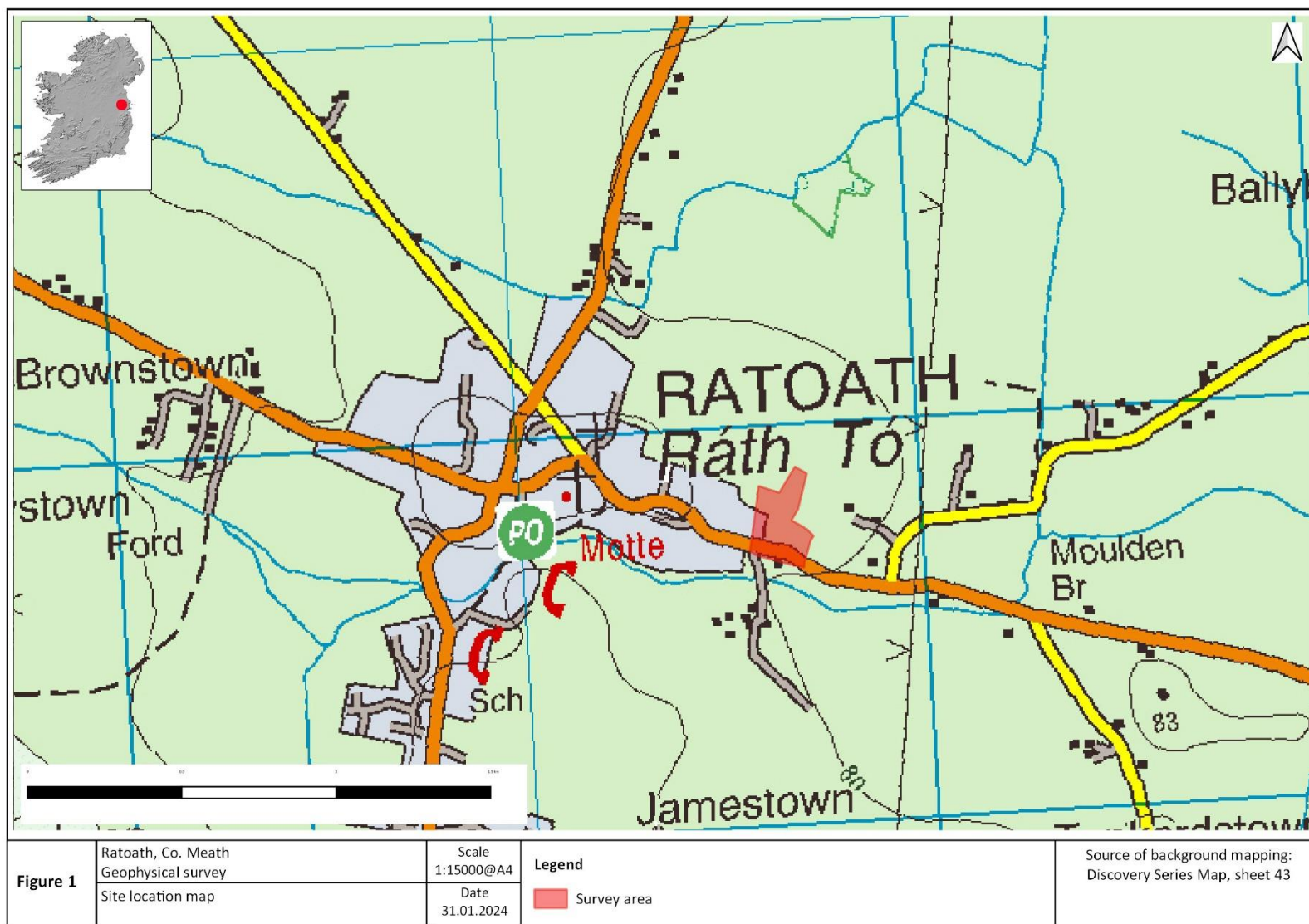


Figure 1. Site location map, showing survey area highlighted in red.



Figure 2. Location of recorded archaeological sites in the vicinity of the survey area.

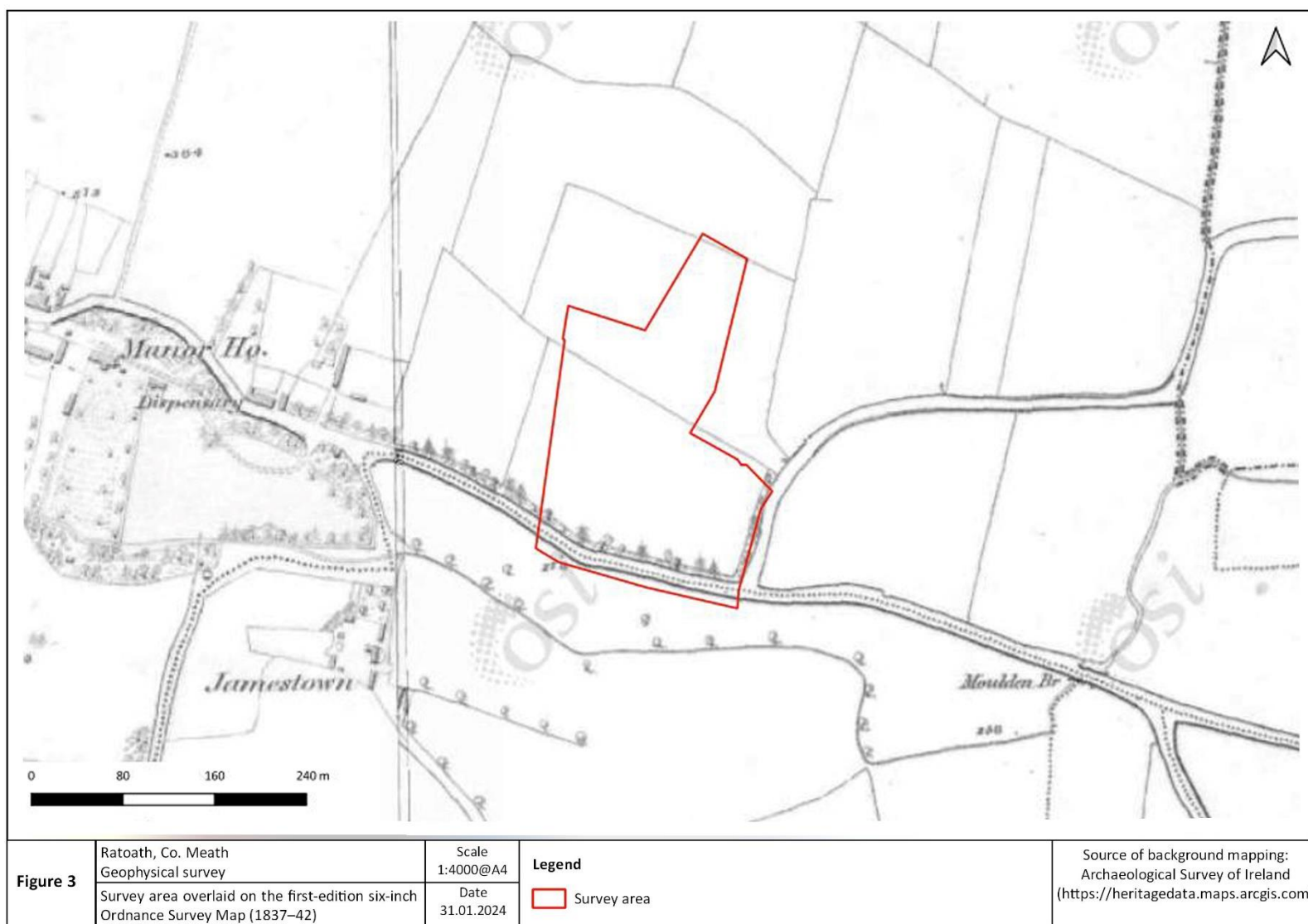


Figure 3. The survey area overlaid on the first-edition six-inch Ordnance Survey Map (1837–1842).

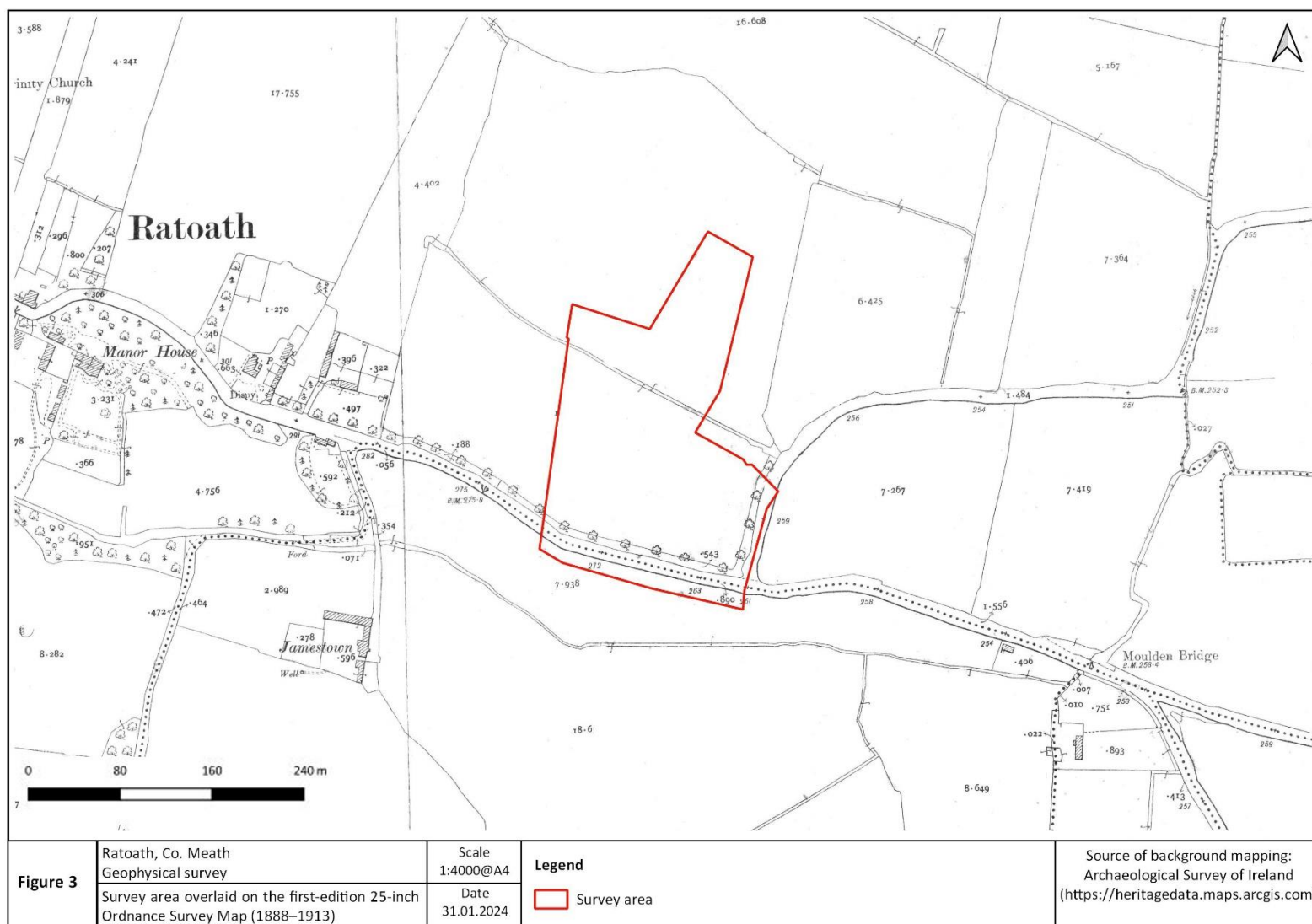


Figure 4. The survey area overlaid on the first-edition 25-inch Ordnance Survey Map (1888–1913).



Figure 5. The survey area.



Figure 6. Greyscale image of gradiometry results.



Figure 7. Interpretative plan showing principal geophysical anomalies.

12 Plates



Plate 1. North field, looking north.



Plate 2. North field, looking south towards large farm shed.



Plate 3. View west across southern fields, showing modern houses.



Plate 4. Former ridge-and-furrow cultivation in the southern field, looking north.



Plate 5. Small eastern fields, showing agricultural machinery, looking southeast.



Plate 6. Small, unsurveyable, area directly west of farm shed, viewed from the north.