

# Site of former Ramsgate Social Club, Elms Avenue, Ramsgate, Kent

Ground Penetrating Radar Survey Report

Planning Ref.: F/TH/22/1550 Document Ref.: 279200.03 May 2023

wessexarchaeology



© Wessex Archaeology Ltd 2023, all rights reserved

Unit R6 Sheaf Bank Business Park Prospect Road Sheffield S2 3EN

#### www.wessexarch.co.uk

Wessex Archaeology Ltd is a company limited by guarantee registered in England, company number 1712772. It is also a Charity registered in England and Wales number 287786, and in Scotland, Scottish Charity number SC042630. Our registered office is at Portway House, Old Sarum Park, Salisbury, Wiltshire, SP4 6EB

#### Disclaimer

The material contained in this report was designed as an integral part of a report to an individual client and was prepared solely for the benefit of that client. The material contained in this report does not necessarily stand on its own and is not intended to nor should it be relied upon by any third party. To the fullest extent permitted by law Wessex Archaeology will not be liable by reason of breach of contract negligence or otherwise for any loss or damage (whether direct indirect or consequential) occasioned to any person acting or omitting to act or refraining from acting in reliance upon the material contained in this report arising from or connected with any error or omission in the material contained in the report. Loss or damage as referred to above shall be deemed to include, but is not limited to, any loss of profits or anticipated profits damage to reputation or goodwill loss of business or anticipated business damages costs expenses incurred or payable to any third party (in all cases whether direct indirect or consequential) or any other direct indirect or consequential loss or damage

## **Document Information**

Document title Document subtitle Document reference	Site of former Ramsgate Social Club, Elms Avenue, Ramsgate, Kent Ground Penetrating Radar Survey Report 279200.03
Client name Address	Bob Britnell – Planning Consultancy (Canterbury) 28 Orchard Close Canterbury CT2 7AL
Site location	Elms Avenue Ramsgate Kent CT11 9BD
County	Kent
National grid reference	637968 164816 (TR 37968 64816)
Statutory designations	None
Planning authority	Thanet District Council
Planning reference	F/TH/22/1550
WA project name WA project code(s) Date of fieldwork Fieldwork directed by Project management by Document compiled by Contributions from	Site of former Ramsgate Social Club, Elms Avenue, Ramsgate, Kent 279200 18/04/2023 Jake Bishop Tom Richardson Brett Howard Manasi Patil and Phoebe Baker
Graphics by	Brett Howard

## **Quality Assurance**

Issue	Date	Author	Approved by
1	31/05/2023	BH	TR TR



### Contents

Sumi Ackn	ary vledgements	. 11 . 11
1	NTRODUCTION   .1 Project background   .2 Scope of document   .3 The site	<b>1</b> 1 1
2	RCHAEOLOGICAL BACKGROUND	<b>1</b> 1 3
3	IETHODOLOGY   .1 Introduction   .2 Aims and objectives   .1 Fieldwork methodology	<b>3</b> 3 4
4	EOPHYSICAL SURVEY RESULTS AND INTERPRETATION	<b>5</b> 5 5
5	ISCUSSION	6
REFE	ENCES	7
APPI	IDICES ppendix 1: Ground Penetrating Radar Survey Equipment and Data Processing	<b>8</b> 8 0 1

#### **List of Figures**

Figure 1 Site location and survey extent

Figure 2 Ground penetrating radar survey results: Timeslice greyscales

**Figure 3** Ground penetrating radar survey results: Timeslice interpretation

#### List of Tables

Table 1Relative velocity to depth conversion based on a dielectric constant of 13.35 for the 400<br/>MHz antenna



#### Summary

A ground penetrating radar survey was conducted over land at the Site of former Ramsgate Social Club, Elms Avenue, Ramsgate, Kent (centred on NGR 637968 164816). The project was commissioned by Bob Britnell – Planning Consultancy, on behalf of Phil Bowler, with the aim of establishing the presence, or otherwise, and nature of detectable archaeological features in support of a planning application for the development of the site as a commercial and industrial development.

The site comprises the site of a demolished social club site and covers an area of 0.2 ha. The geophysical survey was undertaken on 18 April 2023. The survey has produced evidence for an area of basements related to the former malthouse demolished in the 1970s, and remnants of construction methods from the recently demolished social club.

A broadly square area represents the position of a former basement related to the malthouse. The feature suggests at least one interior compartment is present in the eastern portion of the site. The top of the basement walls corresponds with a former ground surface, likely the malthouse floor level.

Amorphous high amplitude responses within the former basement area suggests backfilling comprised of larger fill material covered with finer material. The responses indicate that there is material piled up against the eastern and western extents of the basement. There is no evidence of voids.

The remaining anomalies relate to a service and the footprint of the former social club.

#### Acknowledgements

Wessex Archaeology would like to thank Bob Britnell – Planning Consultancy for commissioning the geophysical survey. The assistance of Bob Britnell and Phil Bowler is gratefully acknowledged in this regard.

The fieldwork was undertaken by Jake Bishop and Ffion Lister. Brett Howard processed and interpreted the geophysical data, wrote the report, and produced the illustrations. The geophysical work was quality controlled by Rok Plesnicar and the project was managed on behalf of Wessex Archaeology by Tom Richardson.

## Site of former Ramsgate Social Club, Elms Avenue, Ramsgate, Kent

## **Ground Penetrating Radar Survey Report**

#### 1 INTRODUCTION

#### 1.1 **Project background**

1.1.1 Wessex Archaeology was commissioned by Bob Britnell – Planning Consultancy, on behalf of Phil Bowler, to carry out a geophysical survey at the site of former Ramsgate Social Club, Elms Avenue, Ramsgate, Kent (centred on NGR 637968 164816) (Figure 1). The survey forms part of an ongoing programme of archaeological works being undertaken ahead of development of the site as a mixed-use residential and commercial development.

#### 1.2 Scope of document

1.2.1 This report presents a brief description of the methodology followed by the detailed survey results and archaeological interpretation of the geophysical data.

#### 1.3 The site

- 1.3.1 The site is situated in the southern part of the town of Ramsgate, in the county of Kent.
- 1.3.2 The survey comprises 0.2 ha of disused, brownfield land. The site was formerly the location of the Elms Club, a social club which shut down in 2020. Immediately to the south of the site is the Ramsgate Jobcentre, Queens House. A small wall and carpark separate the site from the Jobcentre. To the north, the site abuts Clarendon House Grammar School of which a wall and path separate the site from the school building. To the east, the site is bounded by Elms Avenue and to the west by a residential building and car park associated with a petrol station.
- 1.3.3 The survey area is relatively flat at 18 m above Ordnance Datum (aOD).
- 1.3.4 The solid geology comprises Chalk of the Seaford Chalk Formation with overlying superficial geological deposits of clay and silt (BGS 2023).
- 1.3.5 The soils have not been recorded due to the urban and industrial setting; however, they are likely to consist of freely draining lime-rich argillaceous silt to silty loam.

#### 2 ARCHAEOLOGICAL BACKGROUND

#### 2.1 Introduction

2.1.1 The following historical and archaeological background has been compiled using publicly available online resources, combined with the results of Wessex Archaeology's previous investigations in the area, and in-house resources. A 500 m search radius was used.

#### 2.2 Summary of the archaeological resource

2.2.1 There are 253 listed buildings within 500 m of the survey area.

#### Prehistoric

2.2.2 Prehistoric activity within the 500 m radius of the survey area is limited. Currently, only a partly perforated stone mace head from the Neolithic period (4000 – 2200 BCE), found in Ramsgate, provides evidence for activity from this period.

Roman

2.2.3 Roman activity is documented in the wider Kent landscape, but no major activity is documented around the future site of Ramsgate. A limited amount of Roman era activity can be noted around the site, including a Roman pottery urn (possibly the remains of a cremation or inhumation burial) found in St. George's Churchyard in 1948, remains of a Roman pier and a possible building, along with Roman and medieval coins. These discoveries were found during excavations at Ramsgate for a new slipway in the harbour.

Medieval

- 2.2.4 The town of Ramsgate is thought to have begun life as a small fishing and farming hamlet. The earliest formal reference to Ramsgate dates to 1274 – 5, where the town appears in the Kent Hundreds Rolls, both as Remmesgate and Remisgat. In 1357, the area became known as Ramesgate. During the medieval period, the town became part of the Cinque Ports under the limb of Sandwich. The Cinque Ports were a historic group of ports across south-east England. Ramsgate is thought to have become associated with Sandwich 1353.
- 2.2.5 Little of the medieval town remains visible, and no examples exist within the study boundary. The church of St Laurence-in-Thanet is located just outside the study area, 1 km to the north-west of the site. This building is Grade I listed (NHLE 1336662) and is one of the oldest surviving buildings in the town, first built in 1062.

#### Post Medieval

- 2.2.6 The site is situated on the former location of the Tomson and Wotton Brewery malthouse, which was demolished in the 1970s.
- 2.2.7 Ramsgate underwent significant expansion and development in the post-medieval period, with the construction of the Ramsgate Harbour begun in 1749 and completed *c*. 1850. The harbour is the only Royal Harbour in the United Kingdom.
- 2.2.8 During the 18th and 19th Centuries, Ramsgate and its beaches became a popular tourist destination. During this period, the town became known as one of the great English seaside towns.
- 2.2.9 Within the 500 m search radius, many post-medieval structures still survive. Many of these buildings are contemporary with Ramsgate's importance as a tourist destination, a period where the town became particularly wealthy. These include the site of the first Congregational chapel built in 1743, later replaced by the current chapel in 1838 39 (NHLE 1336692); No. 125 (The Old House) and walled forecourt belonging to early 18th Century (NHLE 1085392); Cannon Brewery, established in 1801 (NHLE 1348497); The Clock House, dated to 1817 (NHLE 1336325); the Church of St. George, a Church of England parish church built in 1824 27 (NHLE 1085430); Albion Place Gardens and Madeira Walk, first documented in 1822 and opened to public in 1840 (NHLE 1001386); Cavendish Baptist Church, built in 1840 (NHLE 1348516); Castle Hotel, a late 18th century building which was originally a public house (NHLE 1085380); a terraced road and arcading containing Pulhamite features in the Royal Parade, built in 1893 (NHLE 1336326). The Ramsgate General Hospital (NHLE 1262019) was founded by A. Pugin in 1847 for seamen. This became a General Hospital in 1891.



2.2.10 The concentration of historic buildings dating to the post-medieval period has meant that much of Ramsgate is a designated Conservation Area. Whilst the site itself does not sit within a Conservation Area, many of the highlighted heritage assets come from the Ramsgate Conservation Area.

#### 20th Century – Present Day

- 2.2.11 During the 20th century, Ramsgate's popularity as a seaside destination steadily declined. Instead, Ramsgate took on new roles in both the First and Second World Wars.
- 2.2.12 The town was the first in England to be bombed by Zeppelins during WWI, causing considerable damage. The town also sustained damage from German Navy torpedo boats.
- 2.2.13 In the run up to the Second World War, extensive tunnels (4 miles long) were dug underneath the town to provide shelter for up to 60,000 people in the event of a bombing raid. At the beginning of the War, in October 1939, a Coastal Forces Navy base was established at Ramsgate. Later in the war, the Ramsgate harbour was the main assembly place for small boats during the evacuation of Dunkirk.
- 2.2.14 There is a substantial amount of Second World War related archaeology within the study area. Examples include entrances to the World War II air raid shelter tunnels, including two beneath Ramsgate and one in Liverpool Lawn; a bomb crater to the west of the slipway of Ramsgate harbour; and a possible World War II roadblock and adjacent gun emplacement or guard post on the Royal Parade overlooking Ramsgate Harbour.

#### 2.3 Recent investigations in the immediate vicinity

2.3.1 Several instances of archaeological investigations have occurred within the 500 m study area. Archaeological investigations have mainly been evaluations or watching briefs and include watching briefs at 81 – 85 High Street, land to the rear of 63 – 67 Grange Road, and at Cavendish Baptist Chapel on Cavendish Road, and other evaluations involving trenching at the site of the former Sticky Fingers nursery on Grange Road, the former Caffyns Garage site on Grange Road, and land at Wilson's Road.

#### 3 METHODOLOGY

#### 3.1 Introduction

- 3.1.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team on 18 April 2023. Field conditions were dry throughout the period of survey. An overall coverage of 0.11 ha was achieved, with reductions attributed to vegetation and extant portions of the former social club.
- 3.1.2 The methods and standards employed throughout the geophysical survey conform to current best practice, and guidance outlined by the Chartered Institute for Archaeologists' (CIfA 2014) and European Archaeologiae Consilium (Schmidt *et al.* 2015).

#### 3.2 Aims and objectives

- 3.2.1 The aims of the survey comprise the following:
  - To determine, as far as is reasonably possible, the nature of the detectable archaeological resource within a specified area using appropriate methods and practices; and
  - To inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.



- 3.2.2 In order to achieve the above aims, the objectives of the geophysical survey are:
  - To conduct a geophysical survey covering as much of the specified area as possible, allowing for on-site obstructions;
  - To clarify the presence/absence of anomalies of archaeological potential; and
  - Where possible, to determine the general nature of any anomalies of archaeological potential.

#### 3.1 Fieldwork methodology

- 3.1.1 The GPR survey was conducted using an Impulse Radar CrossOver 4080. This was mounted in a pushcart system and coupled with a Carlson BRx7 GNSS instrument, which receives corrections from a network of reference stations operated by the Ordnance Survey. Such instruments allow positions to be determined with a precision of 0.02 m in real-time and therefore exceed European Archaeologiae Consilium recommendations (Schmidt *et al.* 2015).
- 3.1.2 Data were collected in a parallel method by the dual frequency antenna at a 0.03 m interval, spaced 0.25 m apart. An effective time window of 100 ns was used for the survey. The results from the 400 MHz antenna were considered more appropriate for discussion and are presented in the following paragraphs.
- 3.1.3 Further details of the geophysical and survey equipment, methods and processing are described in **Appendix 1**.

#### 3.1.4 Data processing

- 3.1.5 Data from the survey were subjected to common radar signal correction processes. These comprise amplitude and wobble correction of the radar profile to correct for variance in temperature and soil moisture content, background and bandpass filtering to remove noise in the data from the surrounding area, and XYZ mean line to correct for mosaic effects from variance in the day-to-day conditions during the survey. These steps were applied to all datasets collected across the Scheme.
- 3.1.6 The approximate depth conversion for the 400 MHz antenna is shown in Table 1. These have been calculated on the assumption that the GPR pulse speed through the ground is 0.082 m/ns. It is possible to determine more precisely the average velocity of the GPR pulse through the ground if excavated features at a known depth can be identified in the data. Radargrams were analysed for suitable hyperbolic reflections, which can be used to determine the velocity of the GPR pulse through the subsurface deposits.
- 3.1.7 Further details of the geophysical and survey equipment, methods and processing are described in **Appendix 1**.



# Table 1Relative velocity to depth conversion based on a dielectric constant of 13.35<br/>for the 400 MHz antenna

Time Slice	Time (ns)	Depth (m)	Time Slice	Time (ns)	Depth (m)
1	0–2.34	0–0.1	11	23.49-25.83	0.96-1.06
2	2.35-4.69	0.1-0.19	12	25.84-28.18	1.06-1.16
3	4.7-7.04	0.19-0.29	13	28.19-30.53	1.16-1.25
4	7.05-9.39	0.29-0.39	14	30.53-32.88	1.25-1.35
5	9.4-11.74	0.39-0.48	15	32.88-35.23	1.35-1.45
6	11.74-14.09	0.48-0.58	16	35.23-37.58	1.45-1.54
7	14.09-16.44	0.58-0.67	17	37.58-39.92	1.54-1.64
8	16.44-18.79	0.67-0.77	18	39.93-42.27	1.64-1.74
9	18.79-21.13	0.77-0.87	19	42.28-44.62	1.74-1.83
10	21.14-23.48	0.87-0.96	20	44.63-46.97	1.83-1.93

### 4 GEOPHYSICAL SURVEY RESULTS AND INTERPRETATION

#### 4.1 Introduction

- 4.1.1 Results are presented as greyscale timeslice plots and archaeological interpretations at a scale of 1:500 (**Figures 2** and **3**).
- 4.1.2 The 400 MHz antenna used in this survey has the potential of detecting features to a depth of 2 3 m in optimal conditions, however the total depth reached varies depending on the specific conditions of each area.
- 4.1.3 All features are described in terms of their geophysical character. It is important to stipulate that all the depths referred to in this report are approximate levels below the current ground surface.
- 4.1.1 It should be noted that small, waterlogged or low contrast features may produce responses that are below the detection threshold the geophysical instruments. Excessive disturbance can also impede the ability of geophysical techniques to detect archaeology. It may therefore be the case that more archaeological features may be present than have been identified through these methods.
- 4.1.2 The geophysical survey techniques may also not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g. CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

#### 4.2 Ground penetrating radar survey results and interpretation

- 4.2.1 The geophysical survey has identified anomalies that are likely to be associated with wall foundations and the remnants of former basements.
- 4.2.2 High amplitude linear and amorphous planar responses have been identified in the eastern portion of the site at 4000 A K. The anomalies cover an area of 12 m east west by 17 m north south and are visible between Timeslice 09 (0.77 m 0.87 m depth from surface) and Timeslice 20 (1.83 m 1.93 m depth from surface). The largest and most coherent of these, at A, is 10 m long by 1.6 m wide, with B K ranging in diameter between 1 m 6 m. These responses are indicative of built wall structures, such as foundation remains or basement walls. The internal space created within A, G, J, and K indicates a singular room 11 m by 4 m. The malthouse formerly present on this site was believed to have basements within sections of the building, which these features likely represent.

- 4.2.3 Two amorphous high amplitude complex responses are evident in the eastern portion of the site, at **4001** and **4002**. The anomaly at **4001** is 14 m by 8 m and is visible between Timeslice 08 (0.67 m 0.77 m depth from surface) and Timeslice 20 (1.83 m 1.93 m depth from surface), while the anomaly at **4002** is 3 m by 3 m and is visible between Timeslice 10 (0.87 m 0.96 m depth from surface) and Timeslice 20 (1.83 m 1.93 m depth from surface). These indicate areas of backfilled material within the former basement area. The data suggests larger items of backfill are present against the eastern and western extents, with the central area filled with finer material. There is no suggestion of a void, although it is clear that the top of the basement is aligned at the same horizon depth as a former land surface, likely the concrete slab of the malthouse floor at approximately 0.6 m 0.8 m depth from surface.
- 4.2.4 An amorphous low amplitude response has been identified in the western portion of the site, at **4003**. The anomaly is 5 m by 3 m at its greatest extent and is visible between Timeslice 03 (0.19 m 0.29 m depth from surface) and Timeslice 10 (0.87 m 0.96 m depth from surface). This indicates the trench cut of a modern service.
- 4.2.5 A high amplitude linear anomaly is present in the western portion of the site, at **4004**. It is 5 m long by 1 m wide and is visible in between Timeslice 02 (0.1 m 0.19 m depth from surface) and Timeslice 06 (0.48 m 0.58 m depth from surface). This has been interpreted as a modern service.
- 4.2.6 A rectilinear low amplitude anomaly has been identified at **4005**. The anomaly is 42 m long east west by 11 m wide and is most visible between Timeslice 02 (0.1 m 0.19 m depth from surface) and Timeslice 05 (0.39 m 0.48 m depth from surface). This is a data artefact created by the extant building footprint on the surface, caused by the air gap produced when passing the radar system over the feature.
- 4.2.7 A series of high and low amplitude linear anomalies are present within 4005, at 4006. These anomalies range in length but average at 8 m long north south and are most visible between Timeslice 02 (0.1 m 0.19 m depth from surface) and Timeslice 05 (0.39 m 0.48 m depth from surface). These are data artefacts produced by the gaps in the concrete slab joins on the surface.

### 5 DISCUSSION

- 5.1.1 The GPR survey has produced evidence for an area of basements related to the former malthouse demolished in the 1970s, and remnants of construction methods from the recently demolished social club.
- 5.1.2 A broadly square area represents the position of a former basement related to the malthouse. The feature suggests at least one interior compartment is present in the eastern portion of the site. The top of the basement walls corresponds with a former ground surface, likely the malthouse floor level.
- 5.1.3 Amorphous high amplitude responses within the former basement area suggests backfilling comprised of larger fill material covered with finer material. The responses indicate that there is material piled up against the eastern and western extents of the basement. There is no evidence of voids.
- 5.1.4 The remaining anomalies relate to a service and the footprint of the former social club.



#### REFERENCES

- Chartered Institute for Archaeologists [CIfA] 2014 *Standards and guidance for archaeological geophysical survey.* Reading, CIfA.
- Ordnance Survey 1983 Soil Survey of England and Wales Sheet 6, Soils of Midland and Western England. Southampton.
- Schmidt, A., Linford, P., Linford, N., David, A., Gaffney, C., Sarris, A. and Fassbinder, J. 2015. *Guidelines for the use of geophysics in archaeology: questions to ask and points to consider.* EAC Guidelines 2, Belgium: European Archaeological Council.

#### **Online resources**

- British Geological Survey Geology of Britain Viewer (accessed May 2023) http://mapapps.bgs.ac.uk/geologyofbritain/home.html
- Google Earth website <a href="http://earth.google.com">http://earth.google.com</a> (accessed May 2023)
- Historic England (HE) website <u>https://historicengland.org.uk/listing/the-list/map-search</u> (accessed May 2023)
- Historic England Aerial Photography Maps <u>https://historicengland.maps.arcgis.com/</u> (accessed May 2023)

Heritage Gateway website <u>https://www.heritagegateway.org.uk/gateway</u> (accessed May 2023)

National Library of Scotland (NLS) https://maps.nls.uk/geo/explore/ (accessed May 2023)



#### APPENDICES

#### Appendix 1: Ground Penetrating Radar Survey Equipment and Data Processing

#### **Survey Methods and Equipment**

The ground penetrating radar (GPR) data were collected using a cart mounted shielded antennae with central frequencies suitable for the types of target being investigated. Lower frequency antennae are able to acquire data from deeper below the surface, whereas higher frequencies allow high resolution imaging of near-surface targets at the expense of deep penetration. The exact make and model of equipment varies.

The depth of penetration of GPR systems is determined by the central frequency of the antenna and the relative dielectric permittivity (RDP) of the material through which the GPR signal passes. In general, soils in floodplain settings may have a wide range of RDPs, although around 8 may be considered average, resulting in a maximum depth of penetration c. 2.5m with the GPR signal having a velocity of approximately 0.1m/ns.

The GPR beam is conical in shape, however, and whilst most of the energy is concentrated in the centre of the cone, the GPR signal illuminates a horizontal footprint, which becomes wider with increasing depth. At the maximum depth of the antenna, it becomes impossible to resolve any feature smaller than the horizontal footprint for the corresponding depth. The size of the footprint is dependent upon central frequency, and its size increases as the central frequency decreases.

The vertical resolution is similarly dependent upon the central frequency; for example, the 300MHz antenna, features of the order of 0.05m may be resolved vertically. Antennae with lower frequencies can therefore penetrate more deeply but are less resolute in both horizontal and vertical directions. Choice of antenna frequency is guided largely by the anticipated depth to the target and the required resolution.

GPR data for detailed surveys are collected along traverses of varying length separated by 0.5m with cross lines collected running perpendicular to these traverses at wider separations. The data sampling resolution is governed by the data logger and a minimum separation of 0.05m between traces is collected for all surveys.

#### Post-Processing

The radar data collected during the detail survey are downloaded from the GPR system for processing and analysis using commercial software (GPR Slice). This software allows for both the data and the images to be processed in order to enhance the results for analysis; however, it should be noted that minimal data processing is conducted so as not to distort the anomalies.

Typical data and image processing steps may include:

- Gain Amplifies GPR data based upon its position in the profile, which boosts the contrast between anomalies and background. A wobble correction is also applied during this step;
- Background Filter is used to remove banding noises that are seen across the radargrams
- Bandpass Removes GPR data lying outside a specified range, which removes high- and low-frequency noise.

Typical displays of the data used during processing and analysis:

 Timeslice – Presents the data as a series of successive plan views of the variation of reflector energy from the surface to the deepest recorded response. The variation in amplitude is represented using a greyscale with black indicating high amplitude and white indicating low amplitude responses.



• Radargram – Presents each radar profile in a vertical view with distance along the profile expressed along the x axis and depth along the y axis. The amplitude variation is expressed using a greyscale.



#### Appendix 2 Geophysical interpretation

The interpretation methodology used by Wessex Archaeology separates the anomalies into four main categories: archaeological, modern, agricultural, and uncertain origin/geological.

The archaeological category is used for features when the form, nature and pattern of the anomaly are indicative of archaeological material. Further sources of information such as aerial photographs may also have been incorporated in providing the final interpretation. This category is further subdivided into three groups, implying a decreasing level of confidence:

- Archaeology used when there is a clear geophysical response and anthropogenic pattern.
- Possible archaeology used for features which give a response, but which form no discernible pattern or trend.

The modern category is used for anomalies that are presumed to be relatively modern in date:

• Modern service – used for responses considered relating to cables and pipes; most are composed of ferrous/ceramic material although services made from non-magnetic material can sometimes be observed.

The agricultural category is used for the following:

- Former field boundaries used for ditch sections that correspond to the position of boundaries marked on earlier mapping.
- Ridge and furrow used for broad and diffuse linear anomalies that are considered to indicate areas of former ridge and furrow.
- Ploughing used for well-defined narrow linear responses, usually aligned parallel to existing field boundaries.
- Drainage used to define the course of ceramic field drains that are visible in the data as a series of repeating bipolar (black and white) responses.

The uncertain origin/geological category is used for features when the form, nature and pattern of the anomaly are not sufficient to warrant a classification as an archaeological feature. This category is further sub-divided into:

- Increased magnetic response used for areas dominated by indistinct anomalies which may have some archaeological potential.
- Trend used for low amplitude or indistinct linear anomalies.
- Superficial geology used for diffuse edged spreads considered to relate to shallow geological deposits. They can be distinguished as areas of positive, negative, or broad bipolar (positive and negative) anomalies.

### Appendix 3 OASIS form

## Project Details:

Project name		Site of former Ramsgate Social Club, Elms Avenue, Ramsgate, Kent						
Type of project		Ground penetrating radar survey						
Project description		A broadly square area, delineated by high amplitude features indicative of walls, likely represents the position of a former basement related to the malthouse. The feature suggests at least one interior compartment and is present in the eastern portion of the site. The top of the basement walls corresponds with a former ground surface, likely the malthouse floor level. Amorphous high amplitude responses within the former basement area suggests backfilling comprised of larger fill material covered with finer material. The responses indicate that there is material piled up against the eastern and western extents of the basement inferring the methodology used in the backfill process. There is no immediate evidence of voids, however they cannot be ruled out.						
		A low amplitude feature was apparent in the western portion of the survey. This feature indicates the presence of a cut feature and has been interpreted as a service trench. This feature also contains a high amplitude linear feature which has been interpreted as the modern service. A low amplitude rectilinear feature and a series of high and low amplitude linear features were identified on the site. These correspond to the extent brick work of the former social club and joins in the concrete slab.						
Project dates		Start: 18/04/2023			End: 18/04/202	<b>id:</b> 18/04/2023		
Previous work		Has there been any previous v	vork on the si	ite/area? Unknown				
Future work		Is there any further work plann	ed? Unknow	n				
Project Code:	279200	HER event no.		N/A	OASIS form ID:	wessexar1-	wessexar1-515833	
			NMR no.					
		SM no. N/A		N/A				
Planning Application Ref.		F/TH/22/1550						
Site Status		None						
Land use		Waste ground						
Monument type		N/A Period N/A						
Project Location:								
Site Address	Elms Avenue, Ramsgate	, Kent	Kent				CT11 9BD	
County	Kent	District	Thanet	Parish			Ramsgate	
Study Area	0.2 ha	Height OD	18 m aOD	NGR			637968 164816	
Project Creators:								
Name of Organisation		Wessex Archaeology						
Project brief originator		Bob Britnell – Planning Consultancy (Canterbury)		Project design originator			Bob Britnell – Planning Consultancy (Canterbury)	
Project Manager		Tom Richardson		Project Supervisor			Jake Bishop	
Sponsor or funding body		Bob Britnell – Planning Consultancy (Canterbury)		Type of Sponsor			Private corporation	
Project Archive and Bibliography:								
Physical archive	N/A	Digital Archive	Geophysical survey and report		Paper Archive		N/A	
Report title	Site of former Ramsgate	gate Social Club, Elms Avenue, Ramsgate, Kent				Date	2023	
Author	Wessex Archaeology	Description	Unpublished report			Report ref.	279200.03	







Wessex Archaeology Ltd is a company limited by guarantee registered in England, No. 1712772 and is a Registered Charity in England and Wales, No. 287786; and in Scotland, Scottish Charity No. SC042630. Registered Office: Portway House, Old Sarum Park, Salisbury, Wilts SP4 6EB.