

**Land at Port Victoria Road, Grain, Kent;
Archaeological and Built Heritage Statement and Impact Assessment**

NGR Site Centre: 588934 176296

Planning Application Number: MC/18/1871

Site Code: NA



Report for;

Mr and Mrs Murison

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SWAT ARCHAEOLOGY

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Land at Port Victoria Road, Grain, Kent; Archaeological and Built Heritage Statement and Impact Assessment

Summary

SWAT Archaeology has been commissioned by Mr & Mrs Murison to prepare a Heritage statement relating to the proposed development area (Site) of Land at Port Victoria Road, Grain, Kent.

There is a requirement under the National Planning Policy Framework (NPPF) for the client to explain the significance of any particular designated heritage assets that have been identified in the vicinity of the study site and demonstrate any potential impacts that a proposal will have upon their significance.

The following assessment has demonstrated that the Site lies close to the Scheduled Ancient Monument of coastal artillery defences on the Isle of Grain. This includes a fort and a number of batteries, one of which is to the north of the Site and at the western edge of the MOD area of land.

This demonstrates that the significance of these assets resides in their setting and historical interest. Since 1956, the Scheduled asset has not had any direct relationship with the Site. Even when the land was owned by the military, the area of the Site did not have any direct relationship with the Scheduled Monument other than providing openness to the south of the Grain Battery for the line of fire. That said, the potential for archaeological remains does still exist. The proposed Site is located within an area of Palaeolithic potential and remains associated with the Iron Age, Roman and medieval periods are recorded within the surrounding area.

The northern area of the site, in closest proximity to the Scheduled Monument, is proposed to be retained as an ecological area and the removal of the cadet hut, which is closest to the battery and currently resides within the area of the line of fire will immediately improve the setting of the heritage asset. Recognising the importance of the need to retain the openness in the area of the firing arc, the revised proposals have re-sited the residential houses away from the firing arc and also further away from the Grain Battery in order to reduce the impact upon its setting and retain the importance of the openness of the firing arc area. Surrounding the houses will be soft landscaping and native hedging which will separate the heritage asset from the residential development within the site. The eastern boundary of the site will help retain the openness with metal railing rather than a hard demarcation of the site boundary and the inclusion of interpretation boards is also welcomed but should be recognised that his battery is only part of a much larger heritage site and any opportunity to provide information and place this site within the wider context

should also be considered. It has been considered by Historic England that the proposed development under the previous iteration of six houses will result in minimal harm to the significance of the Scheduled Monument as a whole, through alteration to setting and following that, these revised proposals of just five houses away from the firing arc will go even further to mitigate their concerns and have even less impact. The officer's report at Medway Council had also considered that the previous proposal provided sufficient economic and public benefits to outweigh any less than substantial harm, and given that the harm has been reduced, these public benefits still apply in relation to the amended scheme.

Land at Port Victoria Road, Grain, Kent; Archaeological and Built Heritage Statement and Impact Assessment

NGR Site Centre: 588934 176296

1 INTRODUCTION

1.1 Planning Background

1.1.1 Swale & Thames Survey Company (SWAT) was commissioned by Mr & Mrs Murison (the 'Client'), to carry out an Archaeological and Built Heritage Statement and Impact Assessment relating to a proposed development area of Port Victoria Road, Grain, Kent centred on National Grid Reference (NGR) 588934 176296 (Figure 1).

1.1.2 An outline planning application for proposed development works was submitted to Medway Council on the 22nd June 2018 and includes the following;

MC/18/1871 Outline application with some matters reserved (appearance and scale) for construction of six dwellings (houses) with associated estate road, provision of 14 on-site car parking spaces, new pavement along the site road frontage and an on-site reptile habitat.

1.1.3 The site proposals have been through a number of reiterations and design changes in working with Medway Council and Historic England. Original plans included proposals for nine residential units. This was subsequently amended to six residential units following concerns raised, with one dwelling being moved out of the firing arc, and whilst Historic England noted that these proposals resulted in 'less than substantial' harm and Medway Council were supportive of the scheme that it was refused by Members at the Medway Planning Committee, against Officer recommendation. The sole reason for refusal being:

"by reason of its siting within the setting of Grain Fort and obstruction of the line of fire of the Grain batteries would adverse impact on the setting of the nearby Scheduled Monument. It is considered that the cumulative community benefits resulting from the development would not outweigh the identified resulting long term harm to the schedule Monument and as such the proposed development would be contrary to Policy BNE20 of the Local Plan and would not be in compliance with paragraph 196 of the NPPF."

1.1.4 In acknowledgement of the significance and elevated status of the Site and its firing arc the client has since revised its proposals further to remove the entire residential development outside of the area of the line of the firing arc and reduce the number of residential units to

five. Whilst this document was originally prepared to support the original planning application so that Historic England, Medway Council and Kent County Council (Heritage & Conservation) can assess the impact of the proposed development, it has been revised in order to take into account the updated proposed development plans and to support the Client's new planning application for this site. This report also refers to Historic England's comments made in their report dated 29th November 2019 and the Case Officer's report at Medway Council based on the previous planning application of six residential houses.

1.1.5 This document comprises the baseline for this impact assessment.

1.2 Site Description

1.2.1 The proposed site is currently a field situated on the northern side of Port Victoria Road at the eastern edge of the village of Grain, located within an area called the Isle of Grain. Grain is situated on the eastern end of the Hoo Peninsular and separated by the Yantlet Creek from the adjoining parishes of Stoke and Allhallows. The village overlooks the confluence of the Medway and Thames rivers with Sheerness on the opposite side of The Medway. The Site is currently a field of circa two thirds of an acre. To the south and west are residential developments with a public footpath bordering the boundary to the west. To the north is a redundant army cadet hut now used for storage. Beyond the hut, to the north and east is the scheduled Ancient Monument area of the Coastal artillery defences on the Isle of Grain, which is a country park. The Site lies on broadly level ground at an average height of approximately 11m aOD (Figure 1).

1.3 Scope of Document

1.3.1 Despite not being set out as a requirement by the Council after the pre-application advice was received by them, this assessment was requested by the Client in order to determine, as far as is possible, the nature, extent and significance of the development affecting the settings of designated heritage assets. The assessment forms part of the National Planning Policy Framework (NPPF) requirement and is intended to inform and assist with decisions regarding heritage assets and is to be used in the support of planning applications associated with the proposed development.

1.3.2 The Statement was carried out in accordance with the current guidelines as defined by the Chartered Institute for Archaeologists (CIfA 2014). The purpose of a Statement is to establish

the known or potential cultural heritage resource in a local, regional, national or international context. This specifically includes:

- the identification of site specific statutory and non-statutory cultural heritage constraints (including planning constraints)
- the identification of published and unpublished archaeological events
- the examination of available cartographic and documentary sources
- a walkover survey to assess the surviving cultural heritage resource
- an assessment of potential impacts upon the setting of nearby heritage assets

2 LEGISLATIVE AND PLANNING POLICY FRAMEWORK

2.1 Introduction

2.1.1 National legislation and guidance relating to the protection of, and proposed development on or near, important archaeological sites or historical buildings within planning regulations is defined under the provisions of the Town and Country Planning Act (1990). In addition, local authorities are responsible for the protection of the historic environment within the planning system.

2.1.2 The National Planning Policy Framework was updated in July 2018 and is the principal document which sets out the Government's planning policies for England and how these are expected to be applied. It provides a framework in which Local Planning Authorities can produce their own distinctive Local Plans to reflect the needs of their communities.

2.2 National Planning Policy Framework (NPPF)

2.2.1 The Historic Environment, as defined in the National Planning Policy Framework (NPPF 2018): Annex 2, comprises:

'all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.'

2.2.2 NPPF Annex 2 defines a Heritage Asset as:

'a building monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage

interest. Heritage assets include designated heritage assets and assets identified by the local planning authority (including local listing)'.

2.2.3 NPPF Section 16: Conserving and enhancing the historic environment sets out the principal national guidance on the importance, management and safeguarding of heritage assets within the planning process. The aim of NPPF Section 16 is to ensure that Local Planning Authorities, developers and owners of heritage assets adopt a consistent approach to their conservation and to reduce complexity in planning policy relating to proposals that affect them.

2.2.4 Paragraph 185 of the NPPF states that:

'Local planning authorities should set out in their Local Plan a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. In doing so, they should recognise that heritage assets are an irreplaceable resource and conserve them in a manner appropriate to their significance. The planning authorities should take into account:

- a) The desirability of sustaining and enhancing the significance of heritage assets, and putting them to viable uses consistent with their conservation;*
- b) The wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;*
- c) The desirability of new development making a positive contribution to local character and distinctiveness; and*
- d) Opportunities to draw on the contribution made by the historic environment to the character of a place.'*

2.2.5 Paragraph 189 of the NPPF states that:

'In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum, the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate

expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.'

2.2.6 Paragraph 190 of the NPPF states that:

'Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account to the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.'

2.2.7 The NPPF, Section 16, therefore provides the guidance to which local authorities need to refer when setting out a strategy for the conservation and enjoyment of the historic environment in their Local Plans. It is noted within this, that heritage assets should be conserved in a manner appropriate to their significance.

2.2.8 The NPPF further provides definitions of terms which relate to the historic environment in order to clarify the policy guidance given. For the purposes of this report, the following are important to note:

- **Significance.** *The value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting. For World Heritage Sites, the cultural value described within each site's Statement of Outstanding Universal Value forms part of its significance.*
- **Setting.** *The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.*

2.2.9 The NPPF advises local authorities to take into account the following points in paragraph 192 when drawing up strategies for the conservation and enjoyment of the historic environment;

a) The desirability of sustaining and enhancing the significance of heritage assets and preserving them in a viable use consistent with their conservation;

b) The positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and wider social, cultural, economic and environmental benefits that the conservation of the historic environment can bring;

c) The desirability of new development in making a positive contribution to local character and distinctiveness.

2.2.10 Paragraphs 193 and 198 consider the impact of a proposed development upon the significance of a heritage asset.

2.2.11 Paragraph 193 emphasises that when a new development is proposed, great weight should be given to the asset's conservation (and that the more important the asset, the greater this weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.

2.2.12 Paragraph 194 notes that any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of:

a) Grade II listed buildings, or grade II registered parks or gardens, should be exceptional;

b) Assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.*

2.2.13 Paragraph 195 states that where a proposed development will lead to substantial harm (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

a) The nature of the heritage asset prevents all reasonable uses of the site; and

- b) No viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and*
- c) Conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and*
- d) The harm or loss is outweighed by the benefit of bringing the site back into use.*

2.2.14 Conversely, paragraph 196 notes that where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

2.2.15 The NPPF comments in paragraph 201, proffers that not all elements of a Conservation Area or World Heritage Site will necessarily contribute to its significance. Loss of a building (or other element) which makes a positive contribution to the significance of the Conservation Area or World Heritage Site should be treated either as substantial harm under paragraph 195 or less than substantial harm under paragraph 196, as appropriate, taking into account the relative significance of the element affected and its contribution to the significance of the Conservation Area or World Heritage Site as a whole.

2.2.16 Paragraph 198 states that Local Planning Authorities (LPAs) should not permit the loss of the whole or part of a heritage asset without taking all reasonable steps to ensure the new development will proceed after the loss has occurred.

2.2.17 Paragraph 200 encourages LPAs to look for new development opportunities within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably.

2.2.18 Any LPA based on paragraph 202, should assess whether the benefits of a proposal for enabling development, which would otherwise conflict with planning policies, but which would secure the future conservation of a heritage asset, outweigh the disbenefits of departing from those policies.

2.3 Designated Heritage Assets

2.3.1 Designated heritage assets are defined in NPPF Annex 2 as:

‘World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wreck Sites, Registered Park and Gardens, Registered Battlefields and Conservation Areas designated under the relevant legislation.’

2.3.2 Designation is a formal acknowledgement of a building, monument or site’s significance, intended to make sure that the character of the asset in question is protected through the planning system and to enable it to be passed on to future generations.

2.3.3 Statutory protection is provided to certain classes of designated heritage assets under the following legislation:

- Planning (Listed Buildings and Conservation Areas) Act (1990);
- Ancient Monuments and Archaeological Areas Act (1979); and
- Protection of Wrecks Act (1973).

2.3.4 There are a number of criteria to address and they include the impact of the proposed development on the significance of the Heritage Assets.

Heritage Assets

2.3.5 Any Heritage Asset that includes a World Heritage Site, Scheduled Monument, Listed Building, Wreck, Registered Park or Garden, Conservation Area or Landscape can be identified as having a degree of significance meriting consideration in planning decisions. Heritage Assets are the valued components of the historic environment and will include designated Heritage Assets as well as assets identified by the Local Planning Authority during the process of decision making or through the plan making process.

Setting

2.3.6 The surroundings in which a Heritage Asset is experienced is of importance. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make take several guises; a positive or negative contribution to the significance of an asset, the ability to appreciate that significance or it may have a neutral effect with no changes observed.

Significance

2.3.7 The value of a Heritage Asset to this and future generations because of its heritage interest.

That interest may be archaeological, architectural, artistic or historic. Significance may be informed by a number of factors which may include; assessment of the significance of the site, setting and building, where relevant, under a number of headings:

- Historic significance – the age and history of the asset, its development over time, the strength of its tie to a particular architectural period, the layout of a site, the plan form of a building and internal features of special character including chimneystacks and fireplaces.
- Cultural significance – the role a site plays in an historic setting, village, town or landscape context, the use of a building perhaps tied to a local industry or agriculture and social connections of an original architect or owner.
- Aesthetic/architectural significance – the visual qualities and characteristics of the asset (settlement site or building), long views, legibility of building form, character of elevations, roofscape, materials and fabric special features of interest.
- Archaeological significance – evolution of the asset, phases of development over different periods, important features, evidence in building fabric and potential for below ground remains.

2.4 Planning Policy Guidance

Planning Policy Guidance that help to preserve the built and archaeological heritage are:

Conservation Principles, Policy and Guidance (Historic England, 2008)

2.4.1 Historic England sets out in this document a logical approach to making decisions and offering guidance about all aspects of England's historic environment. The Conservation Principles, Policies and Guidance are primarily intended to help ensure consistency of approach in carrying out the role as the Government's statutory advisor on the historic environment in England. Specifically, they make a contribution to addressing the challenges of modernising heritage protection by proposing an integrated approach to making decisions, based on a common process.

2.4.2 The document explains its relationship to other policy documents in existence at that time, including Planning Policy Statement 1: Delivering Sustainable Development (2005), which includes the explicit objective of '*protecting and enhancing the natural and historic environment*' Included in this document are references to Historic England's policies providing detailed guidance on sustaining the historic environment within the framework of established government policy. In particular, the document details from Planning Policy Guidance note (PPG) 15 Planning and the Historic Environment (1994) and PPG16 Archaeology and Planning (1990) those general principles that are applicable to the historic environment as a whole.

2.4.3 The policy document provides details about a range of Heritage Values, which enable the significance of assets to be established systematically, with the four main 'heritage values' being:

- *Evidential value. This derives from the potential of a place to yield evidence about past human activity. Physical remains of past human activity are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them especially in the absence of written records, the material record, particularly archaeological deposits, provides the only source of evidence about the distant past.*
- *Historical Value. This derives from the ways in which past people, events and aspects of life can be connected through a place to the present. It tends to be illustrative or associative. Illustration depends on visibility in a way that evidential value (for example, of buried remains) does not. Places with illustrative value will normally also have evidential value, but it may be of a different order of importance. Association with a notable family, person, event, or movement gives historical value a particular resonance.*
- *Aesthetic value. This derives from the ways in which people draw sensory and intellectual stimulation from a place. Aesthetic values can be the result of the conscious design of a place, including artistic endeavour. Equally, they can be the seemingly fortuitous outcome of the way in which a place has evolved and been used over time.*
- *Communal value. This derives from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory.*

Communal values are closely bound up with historical (particularly associative) and aesthetic values but tend to have additional and specific aspects. These can be commemorative and symbolic values reflect the meanings of a place for those who draw part of their identity from it or have emotional links to it. Social value is associated with places that people perceive as a source of identity, distinctiveness, social interaction and coherence. Spiritual value attached to places can emanate from the beliefs and teachings of an organised religion, or reflect past or present-day perceptions of the spirit of place.

Historic Environment Good Practice in Planning Notes

2.4.4 In March 2015, Heritage England produced three Good Practice Advice in Planning (GPA) notes. The notes provided information on good practice to assist local authorities, planning and other consultants, owners, applicants and other interested parties in implementing historic environment policy in the National Planning Policy Framework (NPPF) and the related guidance given in the National Planning Practice Guide (NPPG). GPA1 covered *'The Historic Environment in Local Plans'*. GPA2 provided advice on *'Managing Significance in Decision-Taking in the Historic Environment'* and GPA3 covered *'The Setting of Heritage Assets'*. As of March 2017, GPA4 entitled *'Enabling Development and Heritage Assets'* was still in draft format.

GPA2: Managing Significance in Decision-Taking in the Historic Environment.

2.4.5 The guidance focuses on understanding the significance of any affected heritage asset and, if relevant, the contribution of its setting to its significance. The significance of a heritage asset is the sum of its archaeological, architectural, historic, and artistic interest. The document sets out a number of stages to follow:

- Understand the significance of the affected assets
- Understand the impact of the proposal on that significance
- Avoid, minimise and mitigate impact in a way that meets the objectives of the NPPF
- Look for opportunities to better reveal or enhance significance

- Justify any harmful impacts in terms of the sustainable development objective of conserving significance and the need for change
- Offset negative impacts on aspects of significance by enhancing others through recording, disseminating and archiving archaeological and historical interest of the important elements of the heritage assets affected.

2.4.6 Since heritage assets may be affected by direct physical change or by change in their setting it is important to be able to properly assess the nature, extent and importance of the significance of a heritage asset and the contribution of its setting early in the process to assist with any planning decision-making in line with legal requirements.

GPA3: The Setting of Heritage Assets.

2.4.7 This document emphasises that the information required in support of applications for planning permission and listed building consents should be no more than is necessary to reach an informed decision, and that activities to conserve or invest need to be proportionate to the significance of the heritage assets affected along with the impact on the significance of those heritage assets.

2.4.8 The NPPF makes it clear that the setting of a heritage asset is the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.

2.4.9 The contribution of setting to the significance of a heritage asset is often expressed by reference to views, a purely visual impression of an asset or place which can be static or dynamic, including a variety of views of, across, or including that asset, and views of the surroundings from or through the asset, and may intersect with, and incorporate the settings of numerous heritage assets.

2.4.10 It covers areas such as cumulative change, where the significance of a heritage asset has been compromised in the past by unsympathetic development affecting its setting. To accord with NPPF policies, consideration still needs to be given to whether additional change will further detract from, or can enhance, the significance of the asset. Change over time and understanding any history of change will help to determine how further development within

the asset's setting is likely to affect the contribution made by the setting to the significance of the heritage asset.

2.4.11 The implications of development affecting the setting of heritage assets ought to be considered on a case-by-case basis and since conservation decisions are based on the nature, extent and level of a heritage asset's significance, Historic England recommends the following broad approach to assessment, undertaken as a series of steps:

- Step 1: Identify which heritage assets and their settings are affected.
- Step 2: Assess whether, how and to what degree these settings contribute to the significance of the heritage asset(s).
- Step 3: Assess the effects of the proposed development, whether beneficial or harmful, on that significance.
- Step 4: Explore the way to maximise enhancement and avoid or minimise harm.
- Step 5: Make and document the decision and monitor outcomes.

2.4.12 The guidance reiterates the NPPF in stating that where developments affecting the setting results in 'substantial' harm to significance, this harm can only be justified if the development(s) deliver(s) substantial public benefit and that there is no other alternative (i.e. redesign or relocation).

Historic England has also published three core Advice Notes, which provide detailed and practical advice on how national policy and guidance is implemented. These documents include; '*Historic England Advice Note 1: Understanding Place: Conservation Area Designation, Appraisal and Management*' (25th February 2016), '*Historic England Advice Note 2: Making Changes to Heritage Assets*' (25th February 2016) and '*Historic England Advice Note 3: The Historic Environment and Site Allocations in Local Plans*' (30th October 2015).

2.5 Local Policies

2.5.1 Medway Council has a Local Plan adopted in 2003, retained in 2007. The plan has a policy relevant to SAM.

POLICY BNE20: SCHEDULED ANCIENT MONUMENTS

2.5.2 Development affecting scheduled ancient monuments or other nationally important sites will not be permitted if it would: (i) damaged or destroy such sites; or (ii) be detrimental to their setting.

3 METHODOLOGY

3.1 Sources

3.1.1 A number of publicly accessible sources were consulted prior to the preparation of this document.

Archaeological databases

3.1.2 Although it is recognised that national databases are an appropriate resource for this particular type of assessment, the local Historic Environmental Record held at Kent County Council (KCCHER) contains sufficient data to provide an accurate insight into catalogued sites and finds within both the proposed development area and the surrounding landscape.

3.1.3 The National Heritage List for England (NHLE), which is the only official and up to date database of all nationally designated heritage assets is the preferred archive for a comprehensive HER search.

Cartographic and Pictorial Documents

3.1.4 A full map regression exercise has been incorporated within this assessment. Research was carried out using resources offered by the Kent County Council, the internet, Ordnance Survey and the Kent Archaeological Society. A full listing of bibliographic and cartographic documents used in this study is provided in Section 9.

Aerial photographs

3.1.5 The study of the collection of aerial photographs held by Google Earth was undertaken (Plates 1-5).

Secondary and Statutory Resources

3.1.6 Secondary and statutory sources, such as regional and periodic archaeological studies, archaeological reports associated with development control, landscape studies, dissertations and research frameworks are considered appropriate to this type of study and have been included within this assessment.

Walkover Survey

3.1.7 The purpose of the walkover survey was to;

- Identifying any historic landscape features not shown on maps.
- Conduct a rapid survey for archaeological features.
- Make a note of any surface scatters of archaeological material.
- Identify constraints or areas of disturbance that may affect archaeological investigation.

3.1.8 The results of the walkover survey are detailed in Section 5 of this document

4 ARCHAEOLOGICAL AND HISTORICAL RESOURCE

4.1 Introduction

4.1.1 The Isle of Grain is an island with a navigable channel until Post Medieval times. The island is approximately 3 ½ miles long and 2 ½ miles wide, formed by the Yantlet Creek, although it is no longer an island. This ran from The Medway river to The Thames river. The area was predominately marsh land being low-lying with two settlement areas initially. One in the centre on higher ground at Walland and one to the east being Grain. Written as '*Greon*' in old English meaning gravelly or sandy. It has also been spelt as Green, Gryen, Grayne and Graine. Grain historically was referred to as St. James' Grain named after the parish church.

4.1.2 The most profitable region for gaining resources, such as fishing, salt-working and hunting wild-fowl, was at the water's edge and the former early prehistoric shoreline is an area very difficult to identify, if it remains at all. The Hoo Peninsular area was subject to prehistoric activity with evidence of Bronze Age implements and enclosures and settlements. The Bronze Age also provides evidence for salt production where fragments of pottery vessels are found with structural remains of hearths and brine tanks. In the wider area around the Site and the village of Grain, there has been seen a number of ring ditch type cropmarks, which whilst undated suggest prehistoric activity in the area. The Romans also utilised the Hoo Peninsular and the Isle of Grain in that period, especially in relation to salt manufacture at the coastal areas. Anglo-Saxon activity is limited although a coin has been found in the area of the oil refinery to the south of the Isle of Grain and the Anglo-Saxon chronicles refers to an entry for

Viking forces at nearby Shoeburyness in Essex as well as the church of St. James' having Anglo-Saxon origins.

- 4.1.3 The village does not have its own entry in the Domesday Book. At the time of the conquest the Peninsula was subdivided, with Cliffe, Cooling, Grain and Stoke all becoming manors in their own right. The village is mentioned in documentation in the 12th century. The manor of Grain was held by the Archbishop of Canterbury until the dissolution by Henry VIII. It is not known where the manor house, if there was one, was located. The parish church dedicated to St. James is essentially a 12th century construction, greatly altered in the early 20th century.
- 4.1.4 Reclamation of the marshes began in the 12th century. This created pastureland to support sheep. It is clear from documentary and archaeological evidence that salt production continued into the Medieval period although it is believed to have ended around the 14th century as a result of foreign competition. That said, maps of the late 18th century show sites of salt production suggesting it still continued in some shape or form. Attempts were made in later centuries to re-establish the industry unsuccessfully.
- 4.1.5 The Hoo peninsular has historically been an area notable for regular flooding during the 16th century and the marshlands associated with malaria in the 16th-18th centuries, which probably accounts for the lack of urbanisation in the area. Hasted comments in 1797, that *'the farmers and landowners do not live in Hoo and that the area is only inhabited by those who directly make a living from it'*. The area was renowned for sheep farming on the salt marshes in this period and great effort went into maintaining sea walls to protect the valuable low-lying grazing land. The area was dominated by scattered farms.
- 4.1.6 In the 19th century, the farming land diversified into fruit and hop growing. In 1801, the population of the Isle of Grain was just 191. The village contained the parish church, a poor house and hostelry. In 1826, a congregational chapel was opened on a road leading southward from the village known as Chapel Lane. By the turn of the 20th century, the population rose to 774.
- 4.1.7 Eventually the creek filled up and a single road crossed it until 1823. The creek was reopened to allow a short cut for barges at spring tide saving having to go around The Nore, at the north east point of the island. However, by 1835, road access had been reinstated.
- 4.1.8 Due to its strategic position at the confluence of the Thames and Medway, The Isle of Grain has attracted military attention. Some earthen batteries were built in the 17th century

following the Dutch Raids in the Medway. In the mid-19th century, Grain Tower was built on a tidal mud flat to the south east of the village, as a form of Martello type of tower. Grain fort was built between 1861 and 1868 with a battery area to the south of the fort in an area called Smithfield Marshes named Dummy Battery. The Grain Fort worked in conjunction with other forts on the Hoo Peninsular and also at Sheerness on the Isle of Sheppey to the east of the Isle of Grain. Through the remainder of the 19th century, there was an increased military presence to the east and south of the village of Grain and two more batteries were built, Wing Battery to the east of the Site and Grain Battery in 1901, north of the Site.

4.1.9 The north west area of the island became a firing point and trials battery from 1917.

4.1.10 In 1878, the Hundred of Hoo Railway Company was established. The first part of the line to be opened was in March 1882, from Cliffe to Sharnal Street. In subsequent years the line was extended by 3.5 miles to Grain, where a deep-water pier was built on The Medway with the aim to connect a ferry service to nearby Sheerness called Port Victoria, so called as it was used by Queen Victoria, located at the south eastern end of the Isle of Grain. The line was not successful and the ferry service ceased in 1901, with the pier falling into disuse by 1931. The station closing completely in 1951, when the land was utilised by an expanding oil refinery.

4.1.11 The southern part of the Isle of grain, in the Walland area became increasingly industrial during the 20th century. To the north east of Port Victoria, on the coast was an RNAS Grain Aerodrome Seaplane Station. This opened in 1912 as an experimental station, also known as RAF Port Victoria, which closed in 1925.

4.1.12 The Admiralty had created a storage facility in the southern part of the island in 1908. The first oil refinery on the Hoo Peninsula was opened at Kingsnorth in 1932 referred to as the Berry Wiggins oil refinery, at Kingsnorth. In 1948 work started on the construction of a new BP oil refinery, then one of the largest in the country, on the southern end of the Isle of Grain. Between 1971 and 1982 Grain Power Station was also built adding to the industrialisation of the area. This led to an increase in population on the Isle of Grain to 1403 by 1961 where it continued to grow.

4.1.13 The forts and batteries became redundant by 1956 and were demolished in the 1960s with the exception of Grain Tower. The oil refinery closed in 1981 and a container terminal called Thamesport was constructed on part of the site. The Isle of Grain Power Station ceased operating in 2012 and has now been demolished.

4.2 Historical Map Progression

Andrews, Dury and Herbert map, 1769

4.2.1 Andrews, Dury and Herbert published their atlas some thirty years before the Ordnance Survey, immediately becoming the best large-scale maps of the county. This shows a sparsely populated landscape, dominated by marshy areas. The Yantlet Creek can be seen in the west forming the island and the saltings are clearly shown. On the eastern and central higher ground are many small hamlets. The Church of St James is incorrectly labelled St. Peter's in this map. To the east, across the water, can be seen Sheerness on the Isle of Sheppey (Figure 17).

Hasted, 1798

4.2.2 The area is still sparsely populated and predominately marshy. The church is correctly labelled here as St. James'. The area is still scattered houses and access to the island can be seen to the south. The salt pan industry is continuing. There has also been a fort constructed at Sheerness (Figure 18).

Isle of Grain Tithe Map, 1842

4.2.3 The tithe map shows greater detail. There is a cluster of houses south west of the church where there is a widened area of road. Leading eastwards off of that widened area are two roads. The northern one heads towards the Farmstead of St James. The southern road that heads eastwards towards Whitehouse Farm. However, the road direction has changed, and it now curves round southwards in the area of the Site rather than heading diagonally straight for the farm as per previous maps. The Site is in a large area designated 128 on the northern side of this road. It is part of a large field of some 47 acres that was owned by Henry Connup and occupied by John Smith. The field was called St James and it was arable, no doubt belonging to St James' Farm. To the west on the northern side of the road is another farm called Baytree Farm (Figure 19).

Ordnance Survey 1st Edition map, 1864

4.2.4 This is the first properly scaled OS map. The road on which the Site sits is Chapel Road that at the bend turns into Smithfield Road (now Called Port Victoria Road), heading towards the coastline. It is named as Chapel Road due to the Bethel Chapel situated on it. Whitehouse Farm to the south still exists with agricultural buildings on three sides, whereas St. James's Farm to the north appears much smaller. Evidence exists to show Grain Fort was built from 1861 and due to national security interests, it is not recorded on this map. The key evidence

that something is occurring by St James's Farm, where there is a building labelled Royal Engineers Office, suggests it is likely that some of the buildings around it were to house the constructors. The centre area of the village is still small. The sea walls have been built allowing much of the area in the east to be reclaimed (Figure 20).

Ordnance Survey 2nd Edition map, 1896

4.2.5 The fort and batteries are still not shown on the mapping. To the west of the Site, Baytree Farm is now a smithy. The village now has a school, post office and an Inn although it still appears to be predominately scattered housing and farmsteads. To the east of the Site, Smithfield Road is more of a track rather than a road, with the main road going south past Whitehouse Farm (Figure 21).

Ordnance Survey 3rd Edition map, 1908

4.2.6 South of the Site between the road and Whitehouse Farm, a Coastguard Station has been built with a row of cottages for the workers. There are signs of more housing within the village centre with infill. The fort and batteries are still left off the mapping (Figure 22).

Ordnance Survey 4th Edition map, 1931

4.2.7 The fort and batteries are shown for the first time. Whitehouse Farm has been surrounded by new residential development. These are thought to be accommodation built for the Naval air Station called 'Bungalow Town'. The village to the west has also grown in size. The footpath that previously ran from the area of St James's Farm to Chapel Road has altered its path and now runs alongside the western boundary of the Site. The Site is still part of a wider field area south and west of the batteries (Figure 23).

4.3 Kent County Council Historic Environment Record (HER)

4.3.1 A search of the KCC HER was carried out on the 17th October 2019, centred on the proposed site with a search radius of 1.25km. The search provided evidence for archaeological remains dated from the prehistoric period and including the Roman, medieval and post-medieval periods. A catalogue of find sites/spots is included in Appendix 2 with map data shown on Figures 3-16.

4.3.2 Overall, there is very little in the way of recorded archaeological remains within the search area that predate the post-medieval period (Figure 6), although underlying geological deposits are of Palaeolithic interest and the site falls within the Medway Valley Palaeolithic

Project (Figure 15). A Palaeolithic flint is recorded at Clubb's Pit (TQ 87 NE 129) and a Late Iron farm settlement is recorded to the north of the Site at Gravel pit near Rose Court Farm (TQ 87 NE 1062 and TQ 87 NE 14). At the same site a Late Roman cemetery is recorded; while on the north-eastern edge of Grain the Church dedicated to St. James (TQ 87 NE 1077) represents a relatively empty recorded medieval landscape (Figure 5).

4.3.3 By the post-medieval period and into the modern era the area around the proposed site becomes much more significant, with the construction of the Grain Fort and associated Coastal Artillery Fortifications. This monument is discussed further in Section 6 below.

4.4 Aerial Photographs

1940's

4.4.1 1940's aerial photographs show the proposed site clearly (Plate 1) with air raid shelters in the southwestern corner and a distinct lack of field boundaries. To the direct north Grain Battery is clearly outlined and the gun emplacements on the top of the battery can be seen. Within the field to the east of the Site, there seems to be a number of smaller huts and what looks like a ditch running south west to north east. This field between the Grain Battery and the Wing Battery was used as a military camp which included the two air raid shelters located in the south west corner of the Site; Plate 6 taken from Wing Battery across this field shows these huts.

4.4.2 A footpath runs alongside the western side of the Site from Chapel Road northwards past the battery. Another track runs between the Grain Battery and the Wing Battery seen to the east. On the southern side of Chapel Road is the Bungalow Town estate of houses. South of this the row of Coastguard Cottages (Plate 1).

1960's

4.4.3 By the 1960's the current Site boundaries are in place and separated from the disused battery to the north. The Site appears to be empty, is grass, with the remains of the air raid shelters still visible (Plate 2). To the south east of the Site at Bungalow Town, many of the houses have been removed leaving behind the hall; now adopted as the village hall. To the west of the Site is still a field but there has been a significant amount of new housing within the village.

1990

4.4.4 By the 1990's the field west of the Site is occupied by extensive housing. The fort and batteries have been demolished above ground. Part of the area of the Grain Battery is allotments and between the Site and the Grain Battery a cadet hut has been erected (Plate 3). The Site itself is rough grass and the field to the east is short grass with a number of cropmarks. Many of the cropmarks suggest field boundaries but some cannot be clearly explained and may relate to trenches placed during the First and or Second World War. The cropmarks in the wider area most likely represent earlier drainage channels.

2003

4.4.5 The Site is now scrub and bushes and is particularly overgrown in the area of the air raid shelters. The area of the batteries and fort are now less obvious as the vegetation has grown up and around them. The field to the east is a recreation ground (Plate 4).

2018

4.4.6 Very little has changed by 2018, although an area of grass disturbance can be seen within the centre of the site (Plate 5).

LIDAR

4.4.7 The LIDAR mapping is useful as the digital terrain model removes buildings and vegetation. This allows us to review the profile of the various features as they currently are beneath the vegetation. Within the Site, in the south west corner are the remains of the air raid shelters. To the north are the earthworks remains of the Grain Battery. The resolution is not clear enough to identify each of the gun emplacements but shows that there is still a sizeable mound in place. The clear outline of the battery confirms all map data in that earthworks associated with the Grain Battery do not extend into the Site. The remaining earthworks of the fort and Wing Battery can also be identified with the fort having far deeper and steeper earthworks than that of Wing Battery, which shows that it is set lower within the landscape (Figure 12)

5 WALKOVER SURVEY

5.1 Text

5.1.1 A walkover survey was undertaken on the 15th May 2019. The Site is a field surrounded by concrete posts and metal fencing with trees and bushes growing against the fence in places, with an entrance in the middle of the southern boundary from Port Victoria Road. In the south west corner are the remains of two air raid shelters of which, the roof is no longer in place and it is overgrown. These were previously considered by Dr. Paul Wilkinson PhD., MCIfA, FRSA of SWAT in correspondence dated 19/12/17 and provided as part of the submitted application following a site visit on the 19th October 2017. In conclusion, they were considered of no significant loss as a consequence of the proposed development. These are obviously a remnant from the Second World War when the land was under the control of the MOD. As a consequence, the Site is essentially not level ground being higher in the south west corner. Previous uses for the land have been for keeping horses, although it is considered too small for that purpose now and has a temporary portacabin located on the land for a doctor's surgery. Since then the land has been unused and as a result, despite fencing and gates, it has attracted at times the illegal dumping of waste leading to an unkempt appearance. To the north can be seen the cadet hut, which is currently used for storage. On the eastern boundary is a public footpath alongside residential houses (Plates 7-17).

5.1.2 Beyond the plot in which the cadet hut sits can be seen a significant amount of vegetation overlying the Grain Battery. The Scheduled area is part of a country park where a number of footpaths weave around the structure and along the sea wall. There is no obvious indication at all as to what lies underneath this mass of vegetation. To reach the top of the battery, there is a single path up and down the slopes on the eastern and western side, which allows access to one of the concrete capped areas of one of the four-gun emplacements. Views from the top are essentially restricted to a few metres due to the vegetation.

5.1.3 Bordering the eastern side of the proposed Site is a maintained recreational field of short mowed grass. Beyond which is the Wing Battery. Again, this is also covered in a mass of vegetation with no obvious indications of a structure having been there, which also arrests any views too. Even on the eastern side facing the coast, views of the sea are now restricted due to the height of the top of the sea wall. It is not possible to view the Site from the top of the sea wall nor can you identify Grain Battery from that point.

5.1.4 The fort is also extremely overgrown and set on land that is higher than the batteries. Even at the top, where the guns were originally placed, looking across to the Site, all that is seen is the vegetation from tree lines across the country park.

6 ASSESSMENT OF HERITAGE ASSETS

6.1 Introduction

6.1.1 No designated heritage assets are recorded within the site.

6.1.2 The proposed development Site is adjacent to Grain Fort and Coastal Batteries, which are listed as a Scheduled Ancient Monument (Listing 1019955 – see Appendix 1).

6.1.3 The Grain Battery is a designated heritage asset and is immediately north of the proposed Site. For illustrative purposes, Figure 11 illustrates the various locations and names of the buildings and earthworks that are listed as the Scheduled Monument, including; Grain Fort; Grain Battery; Wing Battery; Medway Boom, Grain Tower and the southern Dummy Battery (Figure 11).

6.1.4 The following assessment seeks to identify the significance of these heritage assets and to what extent the proposed Site contributes to their significance. Particular attention has been given to the Grain Battery, which is located directly north of the proposed Site.

6.2 Grain Fort and Associated Coastal Artillery Fortifications

Architectural Interest

6.2.1 A detailed report produced by RCHME (1998) provides a detailed and illustrated account of the origins and development of the Fort, along with all other associated defence structures and earthworks. A summary of that report is provided herewith;

6.2.2 Grain Fort was built between 1861 and 1868 and designed as a garrisoned and defensible semi-circular keep surrounded by polygonal earthworks and four caponiers. An internal earthwork comprised an additional five caponiers. The Fort is the largest of all the associated monuments, and plans documenting the layout (dated 1895) provide details regarding the use of many of the structures RCHME (1998). The final design included seven guns in the form of the 6" rifled muzzle loader, a type of large artillery, invented in the mid-19th century but replaced in the late 19th century by the 10" rifled breech loader.

- 6.2.3 The Fort remained in use until 1956 and *'was substantially altered between 1961 and 1975'* (RCHME 1998:35). The monument was largely levelled and the complete removal of the keep and infilling of the resulting cleared area, of earth and rubble, created the modern flat inner core that is present today. Although the external earthworks largely survive, demolition works, although destructive above ground, had the effect of preserving some of the features under the current ground levels along with any underground tunnels being unaffected by the demolition works thereby remaining buried in-situ.
- 6.2.4 Grain Battery originally designed to use four guns, only had three at the time it went out of use in 1935. Documentation regarding the plans do exist showing the four placements facing the sea within a simple oval shape and out of all the batteries, had the most straightforward design in a known standard pattern. The rear of the placements included buildings containing latrines, cook-house, command posts along with underground tunnels and magazine stores. Access was via the north. The gun emplacements were infilled and sealed in the 1960s and the buildings on the western side removed (RCHME 1998).
- 6.2.5 Grain Tower is an innovative version of the Napoleonic Martello Towers built on the south and east coast of England. Other examples of similar towers were built elsewhere along The Mersey and at Pembroke. There were internal alterations between 1910-12. A searchlight emplacement was added on the side in the Second World War along with a free-standing barrack block added to the north west side of the tower.
- 6.2.6 Wing Battery built in 1895 was to an improved design in that it was set lower into the landscape. Original plans suggest this battery was little altered during its life and with the battery infilled and sealed, many features are thought to still survive below.
- 6.2.7 The original auxiliary battery to the fort was 1km south of the fort and is known as Dummy Battery. Originally due to have 16 breech loaders, only four were installed in the 1870s, possibly due to subsidence. Documentation in the form of the original plans do not appear to exist but the 1904 alterations do. The demolition in the 1950s severely altered the profile, allowing a moat to form.

Historical Interest

- 6.2.8 The fort and batteries are from the 19th and 20th centuries and form part of a greater set of defences in The Thames and Medway situated on the confluence of the two rivers, downstream from London. The Naval dockyard at nearby Chatham, to the east, opened in

1570. The first fort in the area was at Sheerness in the 17th century when a separate Naval dockyard was built. Given the proximity of the Isle to Grain to Sheerness Point it made sense for another fort to be built opposite Sheerness. Documentary evidence from 1532 refers to defences on Sheppey and Grain in the form of Morris pikes, demi-canon and culverins. In 1667, the Dutch entered the River Medway and three earthen batteries were constructed on the Grain side in response, but it is thought that these went out of use soon after. During the 18th century, defence consisted of floating batteries anchored off the coast at Grain.

6.2.9 There were apprehensions concerning the defence of The Thames and Medway during the Napoleonic War in the early 19th century but it was only in 1846 that any action was taken, and the Grain Tower was built to contain cannons. In the 1860s following a review of coastal defences, it was decided to build a fort at Grain. Quick firing guns were installed during the 1880s in coastal batteries to counter threats from torpedo boats and, as part of this in 1895, a new battery on the southern side of the fort, called Wing Battery, was constructed. This battery contained two large rifled muzzle loaders and two quick firing guns.

6.2.10 Further reviews, at the beginning of the 20th century, for defence purposes resulted in strengthening the arrangement at Grain. A new battery was built in 1901 and known as Grain Battery which was to be armed with four 6" breech loaders. The Dummy Battery was rebuilt three years after and the remaining batteries upgraded to include magazines, shelters, command posts and searchlights.

6.2.11 During the First World War the area saw increased activity. The coastal area was protected by barbed wire and trenches along with machine guns added. Anti-aircraft guns were positioned at the Dummy Battery to support the nearby RNAS seaplane station further south. After the First World War, the weaponry was removed from the Wing and Dummy Batteries. By 1935, Grain Battery was disarmed.

6.2.12 At the start of the Second World War, Grain Fort had two 6" breech loaders. Grain Tower was altered in relation to holding new larger, faster guns. An anti-aircraft battery was built at White Hall Farm and the coastal region had anti-tank defences.

6.2.13 In 1956, it was decided to close all artillery forts, which resulted in the demolition of much of the above ground structures with some earthworks reduced or filled in; although much of the underground structures and tunnels remain.

6.3 The Setting

- 6.3.1 The fort and batteries were located here facing the river Medway on higher ground, opposite the earlier fort at Sheerness. The area on the Isle of Grain, to the south, was considered too low. The land was acquired by the military between 1861 and 1863 and the Site is included within this area with the boundary to the west being the trackway between St. James's Farm and Baytree Farm.
- 6.3.2 Originally the Fort and Batteries would have had clear coastal views out towards the Medway. The top of the structure, where the gun emplacements were, are the highest point of the structures and would be similar in height to that of a two-storey house at the grain Battery. The present setting of the Grain Battery, which is covered heavily in vegetation, prevents any intervisibility with the Site or its other surroundings. The potential line of fire from the guns that were located on the Grain Battery at the southern end, crosses the north east corner of the Site (Figures 26 & 27). The group of houses on the southern side of Port Victoria Road already impedes into this edge of the line of fire.
- 6.3.3 The view towards the Site from the coast is impeded by the dense vegetation in the area. In addition, access to the Grain Battery was from the north. Of lesser significance is the landward side of the battery, which were originally kept open to aid defence. The setting has already been altered by the encroachment of the residential houses which abuts the Grain Battery at the western boundary. The Site was part of a larger field that was used as part of a military encampment, although the Site was clearly separated from the rest of the field by the 1940s having been deemed to have limited importance to the MOD.
- 6.3.4 The presence of the cadet hut to the immediate north of the site currently hinders intervisibility from the south.

7 DEVELOPMENT PROPOSALS AND ASSESSMENT OF IMPACT

7.1 Development Proposals

- 7.1.1 The proposed development comprises of five residential houses with an ecology area in the northern and eastern parts of the site. The proposed houses are located along the southern extent of the Site. The existing cadet hut at the north eastern corner of the site will be removed (Figure 2).

7.1.2 At the current time it is unknown which foundation design will be used. That said, the difference between standard trench fill foundations and piled foundations with ring beams is minimal when it comes to impact area and depth. Added to this, the requirements for service trenches and drainage are also unknown, although depths between 0.5m and 1m below the existing ground are assumed.

7.1.3 As the site is relatively level and currently under scrub, it is also assumed that no ground raising will be required and that the excavation of existing vegetation, turf and topsoil will be required prior to the construction of roads, access, plot formation areas, and any other aspects associated with the works.

7.2 Assessment of Physical Impact

7.2.1 Assessment of the findings from the KCC HER would suggest that the possibility for archaeological remains is relatively low. That said, there are a few elements that need to be taken into consideration. Archaeological sites from around the Grain peninsula have recently started to increase with the extent of modern development allowing access to areas that were previously arable. Grain itself is located just beyond the intertidal zone with former marshland directly to the east before the sea is reached. Such areas tend to produce archaeological sites due to the favoured position on higher ground adjacent to the sea. Iron Age and Roman settlements are recorded to the north of Grain and the presence of the medieval church would suggest that the area around the site may have been occupied during these periods. It needs to be mentioned, at this point, that the absence of earlier remains may also be down to the extensive earthworks and construction associated with Grain Fort and the associated monuments. Earlier archaeological evidence, should they have been present, would have been heavily impacted during construction of the defensive sites.

7.2.2 It is clear, that the construction of Grain Fort and all the associated monuments had a large impact on the eastern coast of Grain. That said, there are areas that remained unaffected. Cartographic evidence and aerial photography clearly show the extent of the monuments, as does the LIDAR imaging. There is no evidence to suggest that any feature or earthwork associated with the monuments was ever located within the proposed site. The Site itself was not considered as a key area to the MOD, and its connection with the fort and batteries were severed with the sale of the land into private ownership in the 1940s. It is therefore suggested that the proposed development will have a low/negligible effect on physical archaeological remains associated with the Fort.

7.2.3 Although the monuments are clearly outside the proposed development area, it is suggested that peripheral military activity is taken into consideration. Frequently areas around fortifications are used for other military purposes, such as training, campsite accommodation, storage, roads, etc. The presence of unknown subterranean features should also not be ruled out and the existing air raid shelters should be taken into consideration.

7.2.4 It is therefore suggested that the proposed development will have a low to moderate effect on archaeological remains associated with 19th and 20th century military activity and that any such remains can be addressed by an appropriate planning condition (a programme of archaeological work).

7.3 Assessment of Physical Impact (Setting Assessment)

7.3.1 Step 1 of the methodology recommended by the Historic England guidance *The Setting of Heritage Assets* (see *Methodology* above) is 'to identify which designated heritage assets might be affected by a proposed development. Development proposals may adversely impact heritage assets where they remove a feature which contributes to the significance of a designated heritage asset or where they interfere with an element of a heritage asset's setting which contributes to its significance, such as interrupting a key relationship or a designed view'. Consideration was made as to whether any of the designated heritage assets present within or beyond the 1.5km study area (Figure 1) include the site as part of their setting, and therefore may potentially be affected by the proposed development. Assets in the vicinity identified for further assessment on the basis of proximity and intervisibility comprise:

- Grain Fort and Associated Artillery Fortifications

Grain Fort and Associated Artillery Fortifications

7.3.2 Despite the demolition, filling in and sealing of the structures in the 1960s and 1970s, the site is now recognised as having national significance given its Scheduled status. The various types and developments of the historic fortifications on a site used over a 100-year period tells the story of the defence of the Medway and changing technological approaches from the 1850s up to the Second World War. The Grain battery is not considered to be a rare design and it appears that the majority of the structure does survive under the mound. It had a short lifespan of use, just over 30 years, and was the least altered of all the batteries. That being said, the setting is considered important as the Grain Battery was required to defend the

confluence of three rivers; the Medway, The Swale and the Thames, and coastal access to southeast England and London.

7.3.3 The visual setting of the Monuments is therefore of high importance. The area to the east of the Site remains open, although vegetation obscures the view to Wing Battery, the Fort and the coast. The historical setting of Grain Battery has already been affected by the modern residential development to the west, where it abuts the rear of the Battery and also to the south east, where the residential development on the southern side of Port Victoria Road extends into the edge of the line of fire from the Battery. The relationship between the Site and the area of the batteries and fort was severed in the 1940s when it came into private ownership. There still remains a buffer of land between Grain Battery and the Site and its sits outside of the Scheduled area as a result.

7.3.4 Firing lines of the guns at the Fort Battery are also considered, particularly the closest, southernmost gun (Figure 26). After consulting plans provided by the RCHME (1998), which shows a 30° angle from the horizontal (of the centre line of the four guns), the firing arc of the southern gun has been plotted and clearly cuts across the north-eastern corner of the proposed Site. There is currently a limited view of the Grain Battery from Port Victoria Road due to the placing of the existing cadet hut, which is also located within the southern gun firing arc.

7.3.5 The area of each of the monuments is currently heavily vegetated and limits any intervisibility between the structures, although it is recognised that scrub clearance would increase the visibility of the monument from the Site.

7.3.6 It is worthy of note that any impact caused to the significance of the heritage asset under the previous application of six residential unit was considered as 'less than substantial' in accordance with NPPF Paragraph 196 and a view concurred by Historic England. The land has recently been left unused and as a result, despite fencing and gates, it has attracted the illegal dumping of waste leading to an unkempt appearance to the area. Given the amended design of five residential units entirely outside of the area of the firing arc, the 'less than substantial' impact is now lessened further.

7.3.7 Given the above it is concluded that the extent of the heritage asset's original setting is limited by its natural landscape boundaries, and that the proposed development Site will have a minimal impact to the visual setting of the Monument as a whole as concurred by Historic England in November 2019 where they say that the previous reiteration of the proposed

development 'would result in relatively low levels of harm to the significance of the scheduled monument as a whole'. Grain Battery retains much of its structure under the mound of vegetation. It is considered to have historical interest and its setting towards the coast that forms its primary heritage significance. However, it must be appreciated that any residential development on the proposed Site may have a negative impact on the openness around the Grain Battery on the southern side, from Port Victoria Road but this has been significantly mitigated by sensitive changes in design to avoid the area of the firing arc and greatly lessen any 'less than substantial' impact further.

7.3.8 The client in recognition of the importance and significance of the firing arc has already agreed to the removal of the cadet hut as part of the proposals through a S106, which currently impedes upon the firing arc and is the closest structure to the battery and will have a significant improvement on the setting of the scheduled monument as a result and will further address Historic England's concerns raised in their comments of November 2019. In addition, further consideration has been given as to the siting of the new residential houses within the plot, which now forms a linear development facing the road and are at the furthest point possible away from the scheduled monument. Attention has particularly been paid to the placement of these to ensure that the easternmost plot also does not impede upon the firing line of the battery and that the entire residential element of the proposal remains outside of the firing arc.

7.3.9 Therefore, the considered mitigation has currently been adopted in the design of the proposed development in ensuring that the views to the north have been retained when entering the site with metal railings and that the eastern boundary also has metal railings to native hedging to provide an open aspect and in keeping with the recreation area to the east. This design change to the boundary treatment is in clear mitigation to Historic England's comments in November 2019 whereby they had raised concerns that 'boundary fences/planting would nevertheless still interrupt the arc'.

7.3.10 The Client has already proposed to offer public benefits in the form signage boards and has accepted this as a condition to any application. The location of which are highlighted in Figure 2 as point A and point B. Point A is intended to detail the history of the battery with point B detailing the importance of the firing arc. In addition, the developer will look to arranging for information regarding the sites history to be publicised within the Parish magazine and also within the Parish noticeboard.

7.3.11 Paragraph 196 of the NPPF notes that where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use. In this case the Council has acknowledged in their Officer's planning report for June 2020 a number of public benefits, under the previous proposal when the application was for 6 residential units. Those public benefits include the following:

- Demolition and removal of the cadets building that was constructed before the designation of Grain Fort as a heritage asset from the setting of the scheduled monument and return of the land in visual form to improve the setting of the Grain Fort in perpetuity.
- To turn the northeast corner of the application site together with the Cadets' building land into a biodiversity area and habitat for translocation of reptiles from the rest of the application site and complement the adjoining public open space. In so doing also ensure that the fort line of fire would be permanently kept open and free from any structures.
- Construction of 6 no new market housing in a very sustainable location at a time when the Council is in short of five years housing land supply and there is a need to provide more housing in the borough in response to the growing housing need. Moreover, in the context of a village the size of Grain, the proposed 6 houses would be a reasonably significant development.
- Keep the number of dwelling houses to no more than 6 no and design the layout of the development so that the northeast corner of the site, adjacent to the army cadets land remains permanently open in order to contribute positive contribution to the setting of the schedule monument.
- Tidy up the land, improve visual and residential amenities of the nearby residents and put the land into a long term viable use that will have long environmental benefits.
- The scheme would generate economic benefit through both the construction and the activities of future residents of the proposed houses such residents would also contribute socially to the village.

- To extend eastward the existing pavement that currently terminates in front of 67 Chapel Road and just before the PROW to include the application site frontage.
- To installing a notice board to provide background information about the scheduled Monument facility.

7.3.12 The latest changes to the proposals for 5 houses further strengthens many of these public benefits with a larger ecology area, further improving the setting of the scheduled monument, whilst a reduction in the number of units from 6 to five, will still retain the economic and benefit for housing provision, along with improvement to the pavements and tidying up of the land.

7.3.13 To summarise, there is an historical functional association between the land within the site and the Scheduled Monument in that its purpose was to retain a clear line of sight for the firing arc. It has been considered that the proposed development will result in minimal harm to the significance of the Scheduled Monument as a whole, through alteration to setting as well as providing sufficient public benefits to outweigh any less than substantial harm. The revised development layout with the removal of the cadet hut and by ensuring that none of the proposed residential properties will fall within the area of the firing arc is an improvement upon the previous proposed designs and mitigates against the previous concerns raised by Historic England.

8 CONCLUSION

8.1 Introduction

8.1.1 The purpose of this Built Heritage Statement was to assist the Local Authority to understand the impact of the proposed development as required by the NPPF on the significance of any Heritage Assets affected, including any contribution made by their setting. This Heritage Statement has been prepared by SWAT Archaeology for Mr & Mrs Murison in support of the application for proposed developments of Land at Port Victoria Road, Grain, Kent.

8.1.2 This report has demonstrated that the Site lies close to the Scheduled Ancient Monument of coastal artillery defences on the Isle of Grain. This includes a fort and a number of batteries, one of which is to the north of the Site and at the western edge of the MOD area of land.

8.2 Archaeological Resource

8.2.1 The assessment has demonstrated that the Site lies close to the Scheduled Ancient Monument of coastal artillery defences on the Isle of Grain. This includes a fort and a number of batteries, one of which is to the north of the Site and at the western edge of the MOD area of land.

8.2.2 This demonstrates that the significance of these assets resides in their setting and historical interest. Since 1956, the Scheduled asset has not had any direct relationship with the Site. Even when the land was owned by the military, the area of the Site did not have any direct relationship with the Scheduled Monument other than providing openness to the south of the Grain Battery for the line of fire. That said, the potential for archaeological remains does still exist. The proposed Site is located within an area of Palaeolithic potential and remains associated with the Iron Age, Roman and medieval periods are recorded within the surrounding area.

8.3 Setting

8.3.1 No designated heritage assets are recorded within the site.

8.3.2 The northern area of the site, in closest proximity to the Scheduled Monument, is proposed to be retained as an ecological area. The removal of the cadet hut which currently falls within the area of the firing arc is to be removed, providing an immediate benefit to the openness of the area closest to the battery. The amended proposed development includes the re-siting of the houses further away from that of the battery so that they are facing onto Port Victoria Road. This ensures that none of the proposed housing plots will impede upon the firing arc of the Grain Battery. Surrounding the houses will be soft landscaping and native hedging which will separate the heritage asset from the residential development within the site. The eastern boundary of the site will help retain the openness with metal railing rather than a hard demarcation of the site boundary and the inclusion of interpretation boards is also welcomed. Therefore, it is our view that this is a significant improvement upon the earlier proposed designs.

8.3.3 It is recognised that the Grain Battery is only part of a much larger heritage site and any opportunity to provide information and place this site within the wider context should also be considered. However, it should be highlighted that the Grain Battery and the wider scheduled complex is outside of the ownership of the Client and as such they do not have control over the area.

8.3.4 Historic England highlighted within their comments for the previous application for six houses at the site that there would be minimal harm to the significance of the Scheduled Monument as a whole, through alteration to setting. The revised development layout with the removal of the cadet hut and by ensuring that none of the proposed residential properties will fall within the area of the firing arc, mitigates against the previous concerns raised by Historic England. Therefore, it is considered that the revised design will further minimise any already less than substantial harm to the setting of Grain Battery. The planning case officer commented that there were a number of public benefits to the scheme under the previous application in that that these would outweigh any less than substantial harm. Therefore, given that under the revised scheme, with any less than substantial harm impact reduced further, this viewpoint should still apply to the revised scheme.

9 OTHER CONSIDERATIONS

9.1 Archive

9.1.1 Subject to any contractual requirements on confidentiality, two copies of this Heritage Asset Assessment will be submitted to the LPA and Kent County Council (Heritage) within 6 months of completion.

9.2 Reliability/Limitations of Sources

9.2.1 The sources that were used in this assessment were, in general, of high quality. The majority of the information provided herewith has been gained from either published texts or archaeological 'grey' literature held at Kent County Council, and therefore considered as being reliable.

9.3 Copyright

9.3.1 Swale & Thames Survey Company and the author shall retain full copyright on the commissioned report under the Copyright, Designs and Patents Act 1988. All rights are reserved, excepting that it hereby provides exclusive licence to Mr & Mrs Murison (and representatives) for the use of this document in all matters directly relating to the project.

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11 APPENDICES

11.1 Appendix 1: Statutory List Description

Coastal artillery defences on the Isle of Grain, immediately east and south east of Grain village

Heritage Environment Record Number: TQ 87 NE 8

List Entry Number: 1019955

National Grid Reference: TQ 88972 76405, TQ 89077 76559, TQ 89193 76555, TQ 89231 75655, TQ 89261 76119, TQ 89642 76043.

Type of Record: Scheduled Monument

Date of Listing: 6th July 1979

Period: Medieval

Summary: The monument, which falls into six separate areas of protection, includes five 19th century coastal artillery fortifications, including a gun tower, a fort and three batteries, and later 20th century additions, including two searchlight emplacements, constructed on low-lying ground on the eastern reaches of the Isle of Grain, commanding the entrance to the River Medway. They formed part of the wider Thames and Medway defences and, with the positions on the opposite side of the channel at Sheerness, provided a fixed, first line of defence to protect the important naval dockyards and commercial ports from a seaborne attack. Grain Tower was constructed in response to fears of a French invasion during the mid-19th century, and is located on a tidal mudflat which projects into the Medway channel. The three-storeyed, roughly oval artillery tower, is brick-built with walls faced in granite ashlar, and is Listed Grade II. Its design resembles that of the martello towers, built along the south and east coast of England in the early 19th century. A thick central column rises from the basement to the top of the tower, from which springs the barrel vaulted first floor ceiling which supports the gun position on the roof. The first-floor doorway, the lintel of which is incised with the tower's completion date of 1855, is reached by boat at high tide or, originally, by steps at low tide approached from the shore by a causeway of concrete block and timber construction. Cartographic evidence suggests that the causeway was moved from its original north west to south east alignment to its present east-west position by 1889. The first floor provided accommodation for the garrison, with ammunition and supplies stored in the basement below. An internal staircase rises from first floor level to the gun platform on the roof, designed to carry one 56-pounder and two 32-pounder cannon, mounted on traversing carriages behind an encircling parapet. In the years leading up to World War I, the tower became the western anchor point for a chain boom defence across the mouth of the Medway to Sheerness, and remains of the chain survive around the base of the tower. Remnants of the fixed, timber section which connected the tower to Grain beach, and extended beyond the tower towards the central channel, can also be seen at low tide. The roof of the tower was also remodelled to accommodate the emplacements and support structures for two 4.7in quick-firing (QF) guns, installed to cover the boom, and two new magazine chambers were inserted at

first floor level. Much of the southern emplacement survived the further, radical alterations made to the roof during World War II. The tower was re-armed in 1940 with a twin 6-pounder QF gun, to deal with incursions by high-speed German torpedo boats, and a coastal artillery searchlight emplacement was added to the side of the tower to assist the gun during night attacks. Accompanying structures include a battery observation tower located on the roof behind the emplacement and a free-standing barrack block, constructed on stilts, with access from the tower on its north western side, providing extra accommodation for the wartime detachment. Many original features survive from this period, including the remains of an electrically powered cage lift, installed at first floor level to meet the gun's requirement for a rapid supply of ammunition. Grain Fort was added to the coastline during the 1860s, on the recommendation of the 1859 Royal Commission into the Defences of the United Kingdom Fortifications, to support Grain Tower and the defences at Sheerness. The fort consisted of a north-south aligned, semi-circular brick keep, enclosed on its eastern front by a ditch, and a large, heptagonal earthwork beyond, designed to support the armament. The western gorge wall of the keep extended to meet the ends of the rampart, and the compound was completely enclosed by a substantial outer ditch. The keep provided accommodation on two levels, for at least 250 men, and was arranged around a central parade. The parade was entered through a passageway in the gorge wall, defended by two demi-bastions and approached through a gap in the rampart. The keep was further protected by five caponniers constructed within the surrounding ditch. Subterranean passages led from two of these structures, beneath the rampart, to four caponniers in the outer ditch. The main magazine survives within the north eastern passage, and was surveyed in 1999. Many of its original fittings survive, including the remains of the ammunition lift and some of the notices labelling various components of the magazine. Subsidiary magazines, and ancillary chambers, were located beneath the terreplein, which was designed to support 13 heavy, rifled muzzle-loaders (RMLs) and was accessed, via a covered way, from the inner ditch. The armament underwent a series of upgrades before the final allocation of two 6.2in guns in World War II for close defence, and a spigot mortar at each end of the terreplein, traces of which survive. Grain Fort was decommissioned in 1956 and its appearance subsequently altered by the demolition of its keep, and the partial infilling of the surrounding ditch. In addition to this substantial Royal Commission fortification, a series of open batteries were constructed along the coastline to the south. The first was built in the 1860s, approximately 1km south of Grain Fort and, originally known as Grain Battery, was renamed Dummy Battery in 1901. The two positions were linked by a communications road which was carried on an earthen bank across marshland to the south of Smithfield Road. The bank survives as an earthwork, up to 2m high and 4m wide. Two small structures, built at the southern end of the bank during World War I, are thought to be related to the telephone system or power supply for the battery. On dryer ground to the north, the road was carried in a sunken way, protected by the bank on its seaward side. The north-south aligned Dummy Battery was defined by a J-shaped earthwork, enclosed by an outer ditch on its eastern front. The concrete core of the earthwork originally supported a linear arrangement of 11in RMLs. The weapons were upgraded to 6in breech-loaders in 1895, and these, in turn, were replaced by two 4.7in QF guns in about 1904-5, linked by a covered way, with an underlying magazine, and a battery control post to the south. The main magazine was protected beneath a large rectangular blast mound to the rear. The battery was abandoned after World War II, and

subsequent earth moving during the 1950s exposed the concrete core and emplacements, and the ditch became flooded. The ancillary structures were also demolished at this time, and their floors can be traced on the ground behind the emplacements. Major advances in military technology during the late 19th century, led to the strengthening and modernisation of coastal defence, including the addition of two new batteries at Grain. The first, Wing Battery, was built immediately south of Grain Fort in 1895. It is defined by a north-south aligned, broadly lozenge-shaped bank, enclosing a central, rectangular hollow, entered at its southern end from the western gorge. The gorge is formed by the road running south to Dummy Battery. The gently sloping profile of the battery was designed to be almost invisible to a seaborne attacker, and its surrounding ditch contained an unclimbable fence for added protection. It was equipped with two 11in RMLs and a pair of 4.7in QF guns, arranged in a line along the forward rampart, with magazines and detachment shelters below. The range finder positions were located on the rampart to the north and west, and the concrete remains of these survive. Several structures were added to the central hollow during World War I, but these were demolished, and the emplacements infilled, after the site was abandoned in 1956. Grain Battery was constructed to the west of Wing Battery in 1900, and remained in use until the 1930s. Its roughly rectangular, earthen mound was designed to carry a linear arrangement of four 6in breech-loaders on the terreplein. On its south western front the battery was enclosed by a ditch, which curves around the southern end of the earthwork, and contained an unclimbable fence which extended to the rear. A slight outer bank was constructed along its seaward side, to help conceal the ditch from view. The battery was entered by a road from the north, which passed through a gate in the fence. It continued behind the forward rampart, providing access to the guns and their magazines, and to shelters constructed beneath the road. The support buildings for the detachment were located on its western side, and these were levelled, and the emplacements infilled, during the 1960s. The remains of two electric searchlight emplacements, installed before the outbreak of World War I, survive on the esplanade. Each consists of a small, rectangular, concrete chamber with an apsidal extension on the seaward side which housed the lights. The southern emplacement was extended to the rear by the addition of a small square room. There is now little trace of the complex system of anti-invasion defences, including machine gun emplacements and barbed wire entanglements, which were added to the coastline during both World Wars, although a strip of anti-tank obstacles survives along the beach to the north of the monument. A number of features within the area of the monument are excluded from the scheduling. These are as follows: the modern shed, situated behind the rampart of Grain battery; all modern fences, railings and gates; modern steps and benches; the surfaces of all modern paths and the surface of the modern esplanade, although the ground beneath all these features is included.

11.2 Appendix 2 – KCC HER Data

KHER Ref	Type	Period	Distance	Description
TQ 87 NE 23	Marine	Post Medieval	c. 1035m	WRECK Royal duke
TQ 87 NE 24	Marine	Post Medieval	c. 1035m	WRECK London
TQ 87 NE 25	Marine	Post Medieval	c. 1035m	WRECK Maria
TQ 87 NE 26	Marine	Post Medieval	c. 1035m	WRECK William
TQ 87 NE 27	Marine	Post Medieval	c. 1035m	WRECK Rochford
TQ 87 NE 28	Marine	Post Medieval	c. 1035m	WRECK Agnes
TQ 87 NE 29	Marine	Post Medieval	c. 1045m	WRECK Edward
TQ 87 NE 30	Marine	Post Medieval	c. 1035m	WRECK Harry
TQ 87 NE 31	Marine	Post Medieval	c. 1035m	WRECK Borstal
TQ 87 NE 32	Marine	Post Medieval	c. 1035m	WRECK New unity
TQ 87 NE 33	Marine	Post Medieval	c. 1035m	WRECK Jonathan
TQ 87 NE 34	Marine	Post Medieval	c. 1035m	WRECK Ballerat
TQ 87 NE 35	Marine	Post Medieval	c. 1035m	WRECK Lady macadam
TQ 87 NE 36	Marine	Post Medieval to Modern	c. 1035m	WRECK Christiana
TQ 87 NE 37	Marine	Post Medieval to Modern	c. 1035m	WRECK George and Frances
TQ 87 NE 38	Marine	Post Medieval to Modern	c. 1035m	WRECK Fritz
TQ 87 NE 39	Marine	Post Medieval to Modern	c. 1035m	WRECK Lady of the wave
TQ 87 NE 40	Marine	Modern	c. 1035m	WRECK Calpie
TQ 87 NE 41	Marine	Modern	c. 1035m	WRECK Richard
TQ 87 NE 42	Marine	Post Medieval to Modern	c. 1035m	WRECK Lady Bessie
TQ 87 NE 43	Marine	Post Medieval to Modern	c. 1035m	WRECK Cobden

KHER Ref	Type	Period	Distance	Description
TQ 87 NE 44	Marine	Post Medieval to Modern	c. 1035m	WRECK Dashing wave
TQ 87 NE 46	Marine	Post Medieval	c. 1035m	WRECK William
TQ 87 NE 47	Marine	Post Medieval	c. 1035m	WRECK Lucy
TQ 87 NE 48	Marine	Post Medieval	c. 1035m	WRECK Swan
TQ 87 NE 49	Marine	Post Medieval	c. 1035m	WRECK Columbus
TQ 87 NE 50	Marine	Post Medieval	c. 1035m	WRECK Mary
TQ 87 NE 51	Marine	Post Medieval	c. 1035m	WRECK Wadstray
TQ 87 NE 52	Marine	Post Medieval	c. 1035m	WRECK Molly
TQ 87 NE 53	Marine	Post Medieval	c. 1035m	WRECK London
TQ 87 NE 54	Marine	Post Medieval	c. 1035m	WRECK Maria
TQ 87 NE 55	Marine	Post Medieval	c. 1035m	WRECK Pitt
TQ 87 NE 56	Marine	Post Medieval	c. 1035m	WRECK William
TQ 87 NE 57	Marine	Post Medieval	c. 1035m	WRECK Polly
TQ 87 NE 58	Marine	Post Medieval	c. 1035m	WRECK Nancy
TQ 87 NE 59	Marine	Post Medieval	c. 1035m	WRECK Gallant schemer
TQ 87 NE 60	Marine	Post Medieval	c. 1035m	WRECK Jane
TQ 87 NE 61	Marine	Post Medieval	c. 1035m	WRECK Ackerman
TQ 87 NE 62	Marine	Post Medieval	c. 1035m	WRECK Hibernia
TQ 87 NE 63	Marine	Post Medieval	c. 1035m	WRECK Nelly
TQ 87 NE 64	Marine	Post Medieval	c. 1035m	WRECK Bremezer
TQ 87 NE 65	Marine	Post Medieval	c. 1035m	WRECK Unknown
TQ 87 NE 66	Marine	Post Medieval	c. 1035m	WRECK Matchless
TQ 87 NE 67	Marine	Post Medieval	c. 1035m	WRECK HMS Nottingham
TQ 87 NE 68	Marine	Post Medieval	c. 1035m	WRECK HMS Northingham
TQ 87 NE 71	Marine	Post Medieval	c. 1035m	WRECK Margaret
TQ 87 NE 76	Marine	Post Medieval	c. 1035m	WRECK Brighton
TQ 87 NE 77	Marine	Post Medieval	c. 1035m	WRECK Emily

KHER Ref	Type	Period	Distance	Description
TQ 87 NE 80	Marine	Post Medieval to Modern	c. 1035m	WRECK Redwood
TQ 87 NE 82	Marine	Modern	c. 1035m	WRECK Resolvo
TQ 87 NE 83	Marine	Modern	c. 1245m	WRECK Unknown
TQ 97 NW 145	Monument	Modern	c. 1145m SE	Unknown
TQ 87 NE 87	Marine	Modern	c. 1035m	WRECK Danube iii
TQ 87 NE 88	Marine	Modern	c. 1035m	WRECK Go ahead
TQ 87 NE 89	Marine	Modern	c. 1035m	WRECK Thomas Connolly
TQ 87 NE 90	Marine	Modern	c. 1035m	WRECK Carry on
TQ 87 NE 96	Marine	Post Medieval to Modern	c. 1035m	WRECK Calluna
TQ 87 NE 97	Marine	Post Medieval to Modern	c. 1035m	WRECK Lorna
TQ 87 NE 98	Marine	Post Medieval	c. 1035m	WRECK Richard
TQ 87 NE 99	Marine	Modern	c. 1035m	WRECK Success
TQ 87 NE 102	Marine	Modern	c. 1035m	WRECK Dashing wave
TQ 87 NE 103	Marine	Modern	c. 1035m	WRECK Berwick
TQ 87 NE 104	Marine	Modern	c. 1035m	WRECK Wouldham
TQ 87 NE 105	Marine	Post Medieval to Modern	c. 1035m	WRECK Minnie
TQ 87 NE 106	Marine	Modern	c. 1035m	WRECK C120
TQ 87 NE 107	Marine	Modern	c. 1035m	WRECK Antje
TQ 87 NE 108	Marine	Post Medieval	c. 1035m	WRECK Lady Bessie
TQ 87 NE 110	Marine	Post Medieval	c. 1035m	WRECK Malvina
TQ 87 NE 112	Monument	Modern	c. 445m SE	Site of a Defence electric light, near Smithfield Marshes, Isle of Grain
TQ 87 NE 119	Monument	Post Medieval to Modern	c. 725m SE	Causeway linking the Isle of Grain and Grain Tower
TQ 87 NE 120	Monument	Modern	c. 1070m NW	Site of barracks for an anti-aircraft battery, near White Hall Farm

KHER Ref	Type	Period	Distance	Description
TQ 87 NE 123	Monument	Modern	c. 565m N	Base for a temporary structure associated with Grain Fort, Isle of Grain
TQ 87 NE 124	Monument	Modern	c. 540m N	Mound and hollow features, Isle of Grain
TQ 87 NE 125	Monument	Modern	c. 610m N	Site of First World War Coast Artillery Searchlight serving Grain Fort, Isle of Grain
TQ 87 NE 126	Monument	Modern	c. 565m N	Site of a shelter or bunker associated with the Grain Batteries, Isle of Grain
TQ 87 NE 1077	Listed Building	Medieval to Modern	c. 495m N	Church of St James, Isle of Grain
TQ 87 NE 1076	Listed Building	Post Medieval	c. 170m SSW	White House Farmhouse
TQ 87 NE 1079	Listed Building	Post Medieval to Modern	c. 970m ESE	Grain Tower, Isle of Grain
TQ 87 NE 1078	Listed Building	Post Medieval to Modern	c. 435m NW	The Hogarth Inn, Grain, Isle of Grain
TQ 87 NE 12	Monument	Post Medieval	c. 1010m SSE	Buda battery, Isle of Grain
TQ 87 NE 14	Monument	Late Iron Age	c. 1050m NW	Iron Age settlement, Gravel pit near Rose Court Farm, Isle of Grain
TQ 87 NE 1086	Building	Modern	c. 115m SSW	Barrack buildings in front of Coast Guard cottages, Grain
TQ 87 NE 1090	Building	Modern	c. 140m W	Army married quarters
TQ 87 NE 1101	Building	Modern	c. 115m SW	Army married quarters
TQ 87 NE 1094	Building	Modern	c. 275m N	'Rissington', former army married quarters, Isle of Grain
TQ 87 NE 1096	Building	Modern	c. 700m N	White Hall Farm battery, Isle of Grain
TQ 87 NE 1095	Monument	Modern	c. 380m SE	Defence Electric Light position
TQ 87 NE 1100	Building	Modern	c. 405m SE	Engine House
TQ 87 NE 1091	Building	Modern	c. 430m SE	Plinth for twin 6 pounder quick firing battery observation tower
TQ 87 NE 1093	Monument	Modern	c. 270m NNW	Spigot Mortar Pedestal
TQ 87 NE 1092	Building	Modern	c. 155m SE	Spigot Mortar Pedestal
MKE71351	Findspot	Early Medieval or Anglo-Saxon to Medieval	c. 985m W	Early Medieval copper alloy strap fitting
MKE71755	Findspot	Post Medieval	c. 735m NW	Post Medieval silver coin
TQ 87 NE 1102	Monument	Unknown	c. 395m NNW	Cropmark of a ring ditch, to the north of Grain
TQ 87 NE 1103	Monument	Unknown	c. 395m NNW	Cropmark of a possible ring ditch, to the north of Grain

KHER Ref	Type	Period	Distance	Description
TQ 87 NE 1104	Monument	Unknown	c. 395m NNW	Cropmarks of a field system, to the north of Grain
TQ 87 NE 1105	Monument	Unknown	c. 955m NW	Cropmark of a ring ditch, to the north west of Grain
TQ 87 NE 1106	Monument	Unknown	c. 800m NW	Cropmarks of ring ditch, to the west of Grain
TQ 87 NE 1108	Monument	Unknown	c. 920m NW	Cropmarks of a field system, to the north west of Grain
TQ 87 NE 1107	Monument	Unknown	c. 1210m WSW	Cropmark of a ring ditch to the west of Grain
TQ 87 NE 130	Building	Modern	c. 235m NW	George VI pillar box, Chapel Road / Grayne Avenue, Grain
TQ 87 NE 1116	Farmstead	Post Medieval to Modern	c. 1100m NW	Rose Court Farm (Rosecourt Farm), Isle of Grain
TQ 87 NE 1117	Farmstead	Post Medieval	c. 1005m NNW	White Hall Farm, Isle of Grain
TQ 87 NE 1120	Farmstead	Post Medieval	c. 1090m WNW	Perry's Farm, Isle of Grain
TQ 87 NE 1121	Farmstead	Post Medieval	c. 1165m W	Wilford's Farm, Isle of Grain
MKE83401	Farmstead	Post Medieval	c. 690m W	West Bear
TQ 87 NE 1118	Farmstead	Post Medieval to Modern	c. 155m SSW	Whitehouse Farm, Isle of Grain
TQ 87 NE 1119	Farmstead	Post Medieval	c. 270m NNW	St James's Farm, Isle of Grain
MKE83405	Farmstead	Post Medieval	c. 425m N	Parsonage Barn
MKE83406	Farmstead	Post Medieval	c. 370m N	Outfarm south east of Parsonage Barn
MKE83440	Farmstead	Post Medieval	c. 630m WNW	Outfarm adjacent to Lee's Cottages
TQ 87 NE 1112	Crash Site	Modern	c. 980m SW	Crash site of Dornier Do17Z-3
TQ 87 NE 1113	Crash Site	Modern	c. 305m S	Crash site of Messerschmitt Bf109E-4
TQ 87 NE 143	Monument	Unknown	c. 620m SW	Cropmark of a ring ditch, to the south west of Whitehouse Farm
TQ 87 NE 1115	Findspot	Unknown	c. 545m NNW	Stone head found in Clubb's Pit, opposite Grain Church
TQ 87 NE 20	Marine	Modern	c. 900m	Unknown
TQ 87 NE 1124	Farmstead	Post Medieval	c. 140m W	Baytree Farm, Isle of Grain
TQ 87 NE 1125	Building	Post Medieval to Modern	c. 345m W	Bethel Congregational Chapel, Grain, Isle of Grain

KHER Ref	Type	Period	Distance	Description
TQ 87 NE 146	Building	Post Medieval to Modern	c. 175m SSE	'Medtha', Grain, Isle of Grain
TQ 87 NE 147	Building	Post Medieval to Modern	c. 75m SW	'Old Guard House, Grain, Isle of Grain
TQ 87 NE 148	Building	Post Medieval to Modern	c. 465m N	Old School House, Grain, Isle of Grain
TQ 87 NE 149	Building	Post Medieval to Modern	c. 465m N	Site of former National School, Grain, Isle of Grain
TQ 87 NE 150	Building	Post Medieval to Modern	c. 270m WNW	Site of a former Bethel Chapel and Sunday School, Grain, Isle of Grain
TQ 87 NE 151	Building	Post Medieval to Modern	c. 480m NNW	The Old Vicarage, Grain, Isle of Grain
TQ 87 NE 1004	Monument	Post Medieval	c. 510m NE	Windmill on Grain, Isle of Grain
TQ 87 NE 1027	Monument	Unknown	c. 570m NE	Site of two circular enclosures, Grain
TQ 87 NE 1025	Monument	Modern	c. 750m SE	Defensive installation, Isle of Grain
TQ 87 NE 1024	Monument	Post Medieval to Modern	c. 1055m NNW	Enclosure, near Grain Gravel Pit (formerly White Hall Farm), Isle of Grain
TQ 87 NE 1023	Monument	Post Medieval	c. 475m SE	Site of a Jetty, near Smithfield Marshes, Isle of Grain
TQ 87 NE 1007	Monument	Post Medieval	c. 860m SSE	Site of a Black Beacon (inner?), Smithfield Marshes, Isle of Grain
TQ 87 NE 1008	Monument	Post Medieval	c. 890m SSE	Site of a Black Beacon (outer?), Isle of Grain
TQ 87 NE 1057	Monument	Post Medieval to Modern	c. 905m S	Site of White Beacon, Smithfield Marshes, Isle of Grain
TQ 87 NE 1056	Monument	Post Medieval	c. 230m SE	Independent Wharf, Isle of Grain
TQ 87 NE 1042	Monument	Modern	c. 825m N	Site of a gravel pit tramway, Isle of Grain
TQ 87 NE 1043	Monument	Modern	c. 370m SE	Site of a Groyne, near Grain, Isle of Grain
TQ 87 NE 1044	Monument	Post Medieval to Modern	c. 370m SE	Outfall Sewer/sluice at Grain, Isle of Grain
TQ 87 NE 1045	Monument	Modern	c. 420m SE	Wharf, near Grain, Isle of Grain
TQ 87 NE 1046	Monument	Modern	c. 555m SE	Site of an Outfall Sewer, Smithfield Marshes, Isle of Grain
TQ 87 NE 1047	Monument	Post Medieval to Modern	c. 585m SSE	Site of North Black Beacon, near Grain, Isle of Grain

KHER Ref	Type	Period	Distance	Description
TQ 87 NE 1048	Monument	Modern	c. 655m SSE	Site of a Beacon, Smithfield Marshes, Isle of Grain
TQ 87 NE 1049	Monument	Modern	c. 805m SSE	Site of an Outfall, Smithfield Marshes, Isle of Grain
TQ 87 NE 1051	Monument	Modern	c. 490m NNE	Spigot mortar emplacement at Grain Fort, Isle of Grain
TQ 87 NE 1052	Monument	Roman	c. 1050m NW	Late Roman cemetery, Gravel Pit near Rose Court Farm, Isle of Grain
TQ 87 NE 1053	Marine	Post Medieval to Modern	c. 1100m	Remains of large barge or fishing vessel
TQ 97 NW 147	Monument	Unknown	c. 1130m SE	Rectangular feature/structure, near Grain Tower, Isle of Grain
TQ 87 NE 1058	Building	Modern	c. 365m NNE	Coast Artillery searchlight, east of Grain Fort, Isle of Grain
TQ 87 NE 1059	Building	Modern	c. 375m SE	Anti-aircraft gun emplacement, Smithfield Marshes, Grain
TQ 87 NE 1062	Landscape	Early Mesolithic to Late Iron Age	c. 1240m SSE	Peat exposure, near Grain Power Station, Isle of Grain
TQ 87 NE 1063	Building	Modern	c. 530m SE	Ammunition Locker, Smithfield Marshes, Isle of Grain
TQ 87 NE 129	Findspot	Lower Palaeolithic to Middle Palaeolithic	c. 915m W	Palaeolithic flint artefact, Clubb's Pit, Isle of Grain
TQ 87 NE 118	Monument	Post Medieval to Modern	c. 180m SE	Road connecting Grain Fort and Dummy battery, Isle of Grain
TQ 87 NE 91	Listed Building	Modern	c. 830m N	Anti-tank obstacles, Grain
TQ 87 NE 111	Monument	Modern	c. 730m SSW	Grain Power Station, Isle of Grain
TQ 87 NE 8	Monument	Post Medieval to Modern	Adjacent to PDA	Grain Fort and associated coastal artillery fortifications, Isle of Grain
TQ 87 NE 9	Monument	Post Medieval to Modern	c. 150m E	Remains of wing battery, Isle of Grain
TQ 87 NE 10	Monument	Post Medieval to Modern	c. 610m SE	Remains of Grain battery, renamed Dummy Battery, Isle of Grain
TQ 87 NE 1089	Building	Post Medieval to Modern	c. 70m S	Coast Guard Cottages, Isle of Grain
TQ 87 NE 1080	Building	Post Medieval to Modern	c. 200m W	'Rose Terrace', Naval married quarters, Grain, Isle of Grain
TQ 87 NE 1082	Building	Post Medieval to Modern	c. 240m NNE	Grain Fort, Isle of Grain

KHER Ref	Type	Period	Distance	Description
TQ 87 NE 1026	Monument	Post Medieval to Modern	Adjacent to PDA	Remains of Grain Battery, Isle of Grain



Figure 1 Site location map, scale 1:640,000 and 1:10,000.



Figure 2 Proposed Development Area (MSD Architects)

Insert HER DATA

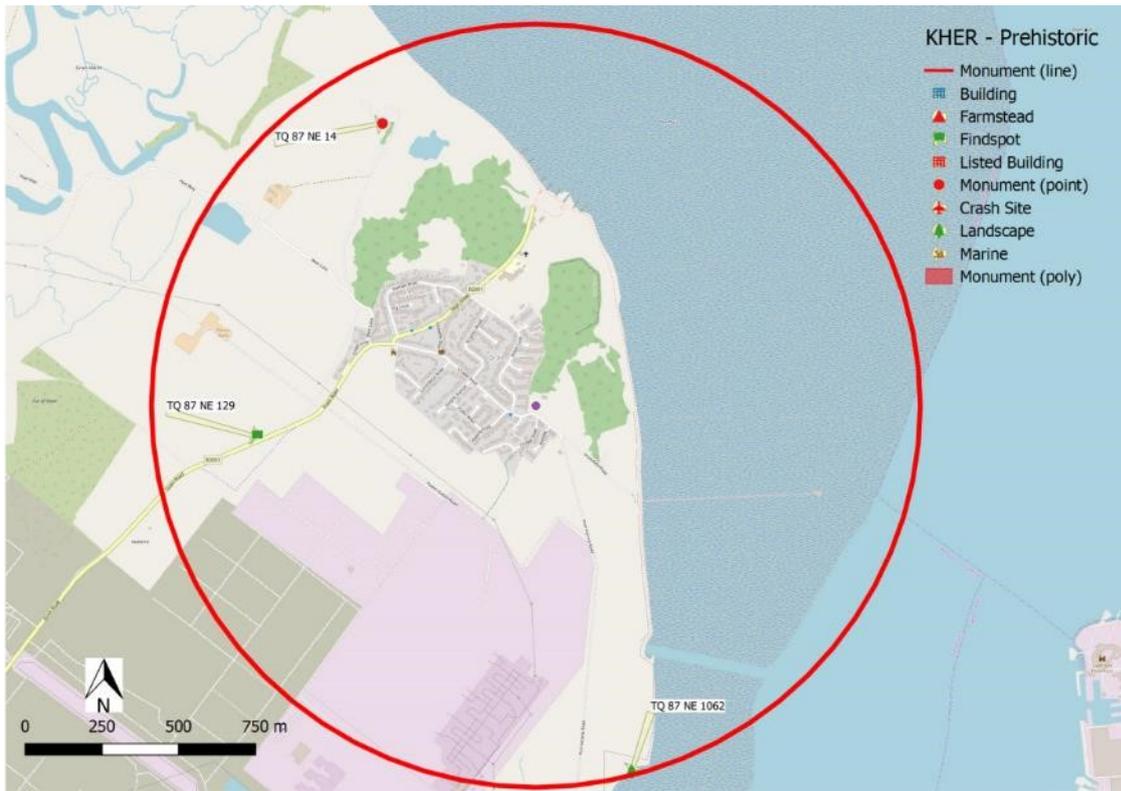


Figure 3 KHER - Prehistoric

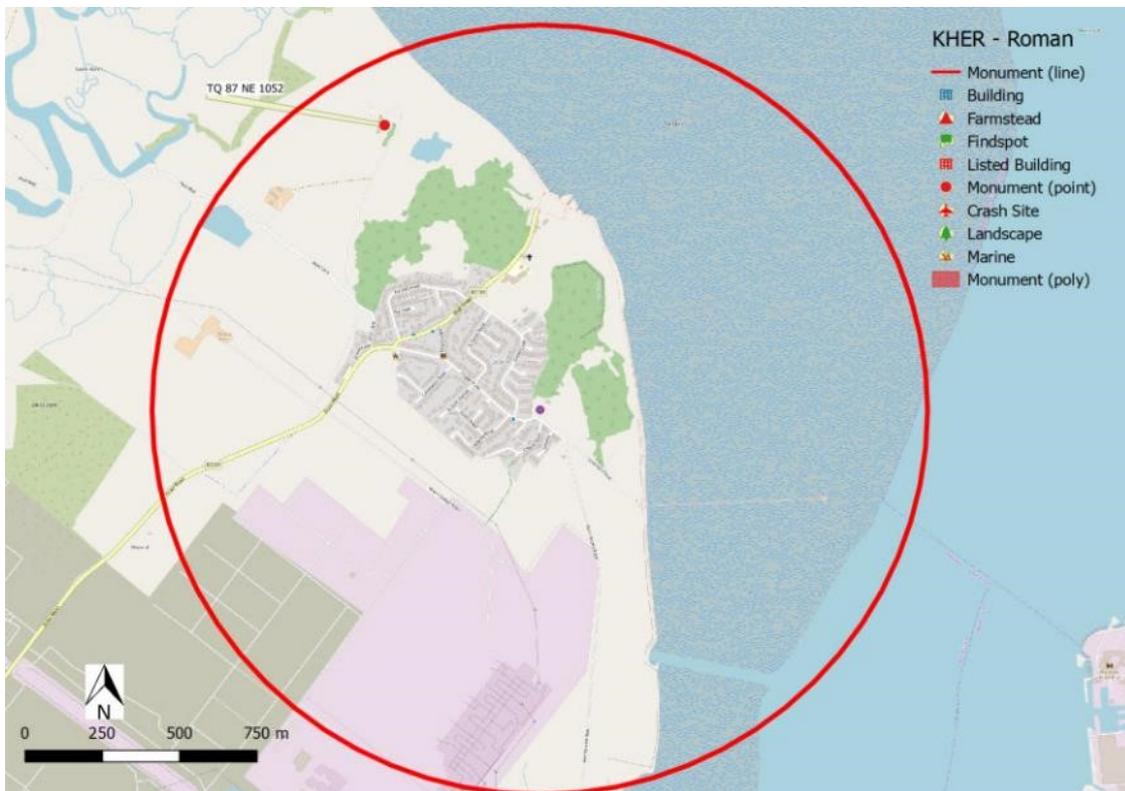


Figure 4 KHER – Roman



Figure 5 KHER - Anglo-Saxon/Medieval

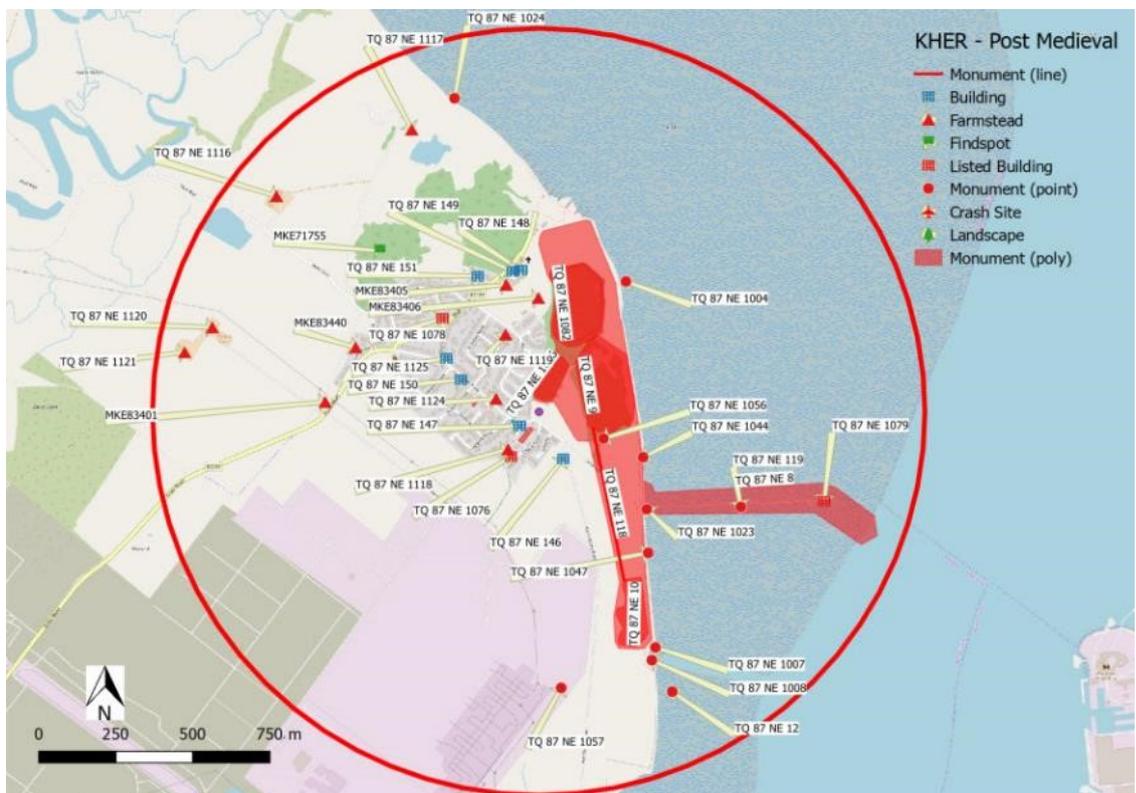


Figure 6 KHER - Post-Medieval

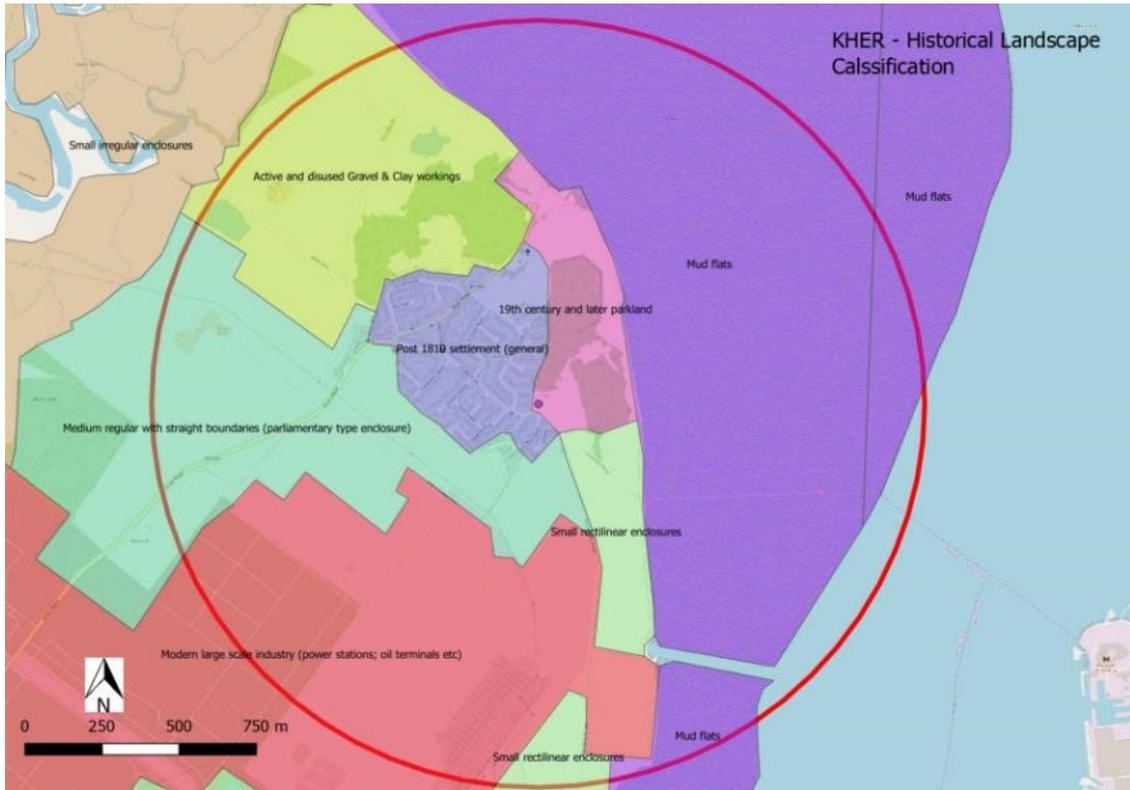


Figure 9 KHER - Historic Landscape Classification



Figure 10 KHER - NMP Lines



Figure 13 KHER NMP Project

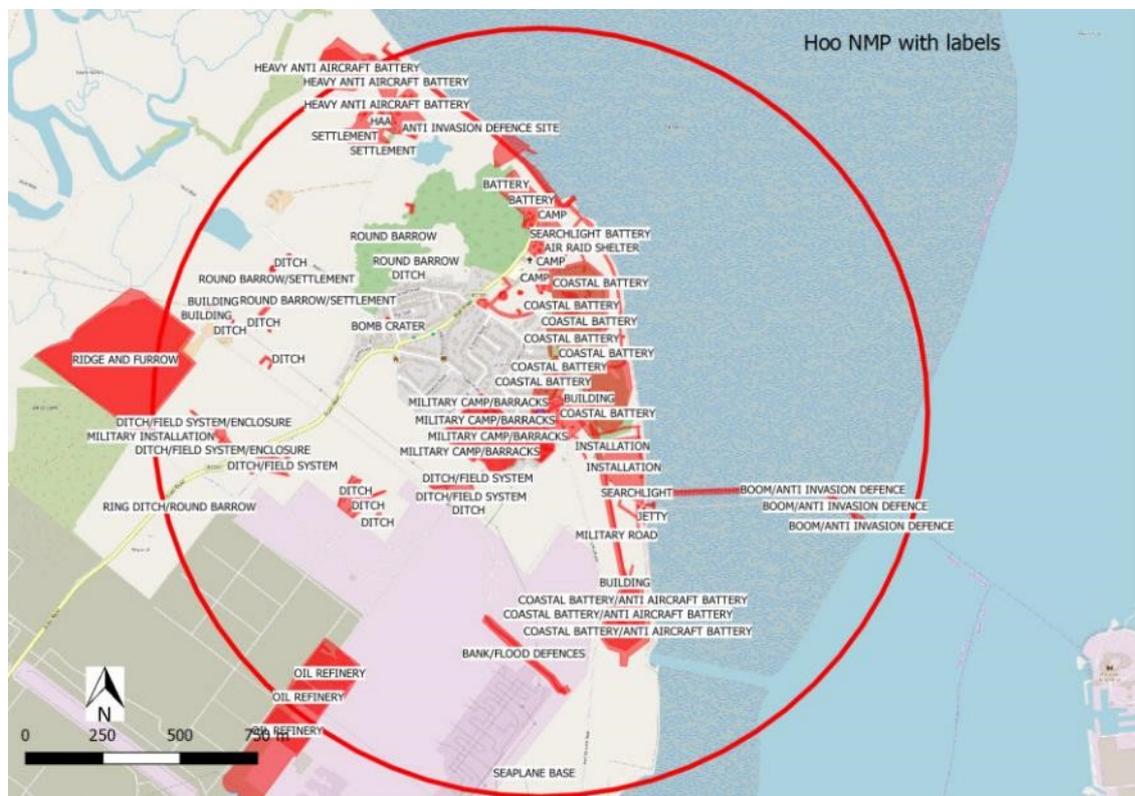


Figure 14 NMP Project, with labels



Figure 15 KHER - Palaeolithic Project



Figure 16 KHER - Scheduled Monuments



Figure 17 Andrew, Dury and Herbert Map from 1769



Figure 18 Hasted, 1798



Figure 19 1842 Isle of Grain Tithe Map

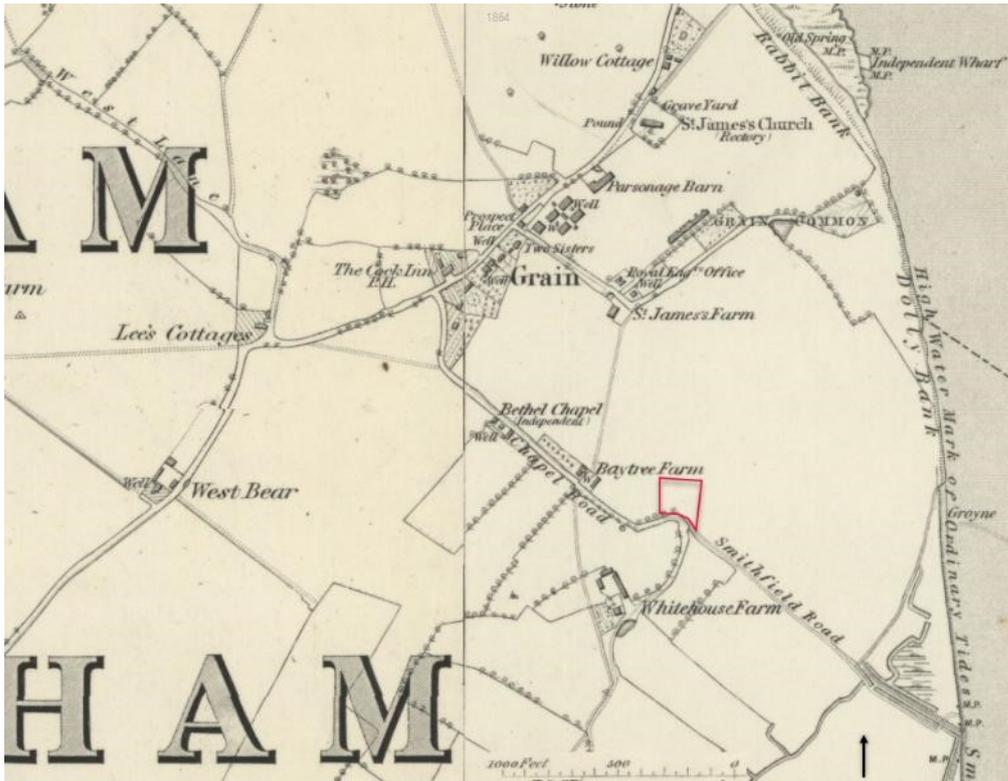


Figure 20 1st Edition Ordnance Survey Map, 1864

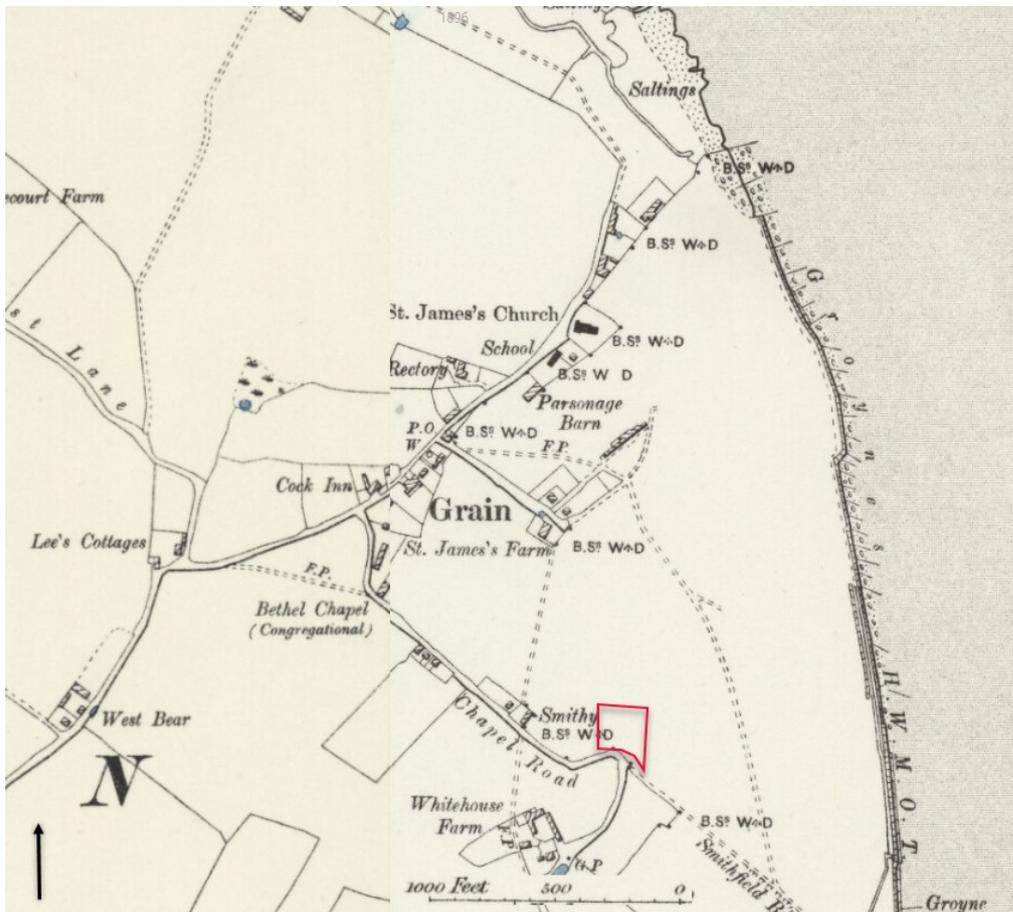


Figure 21 Historic OS Map from 1896

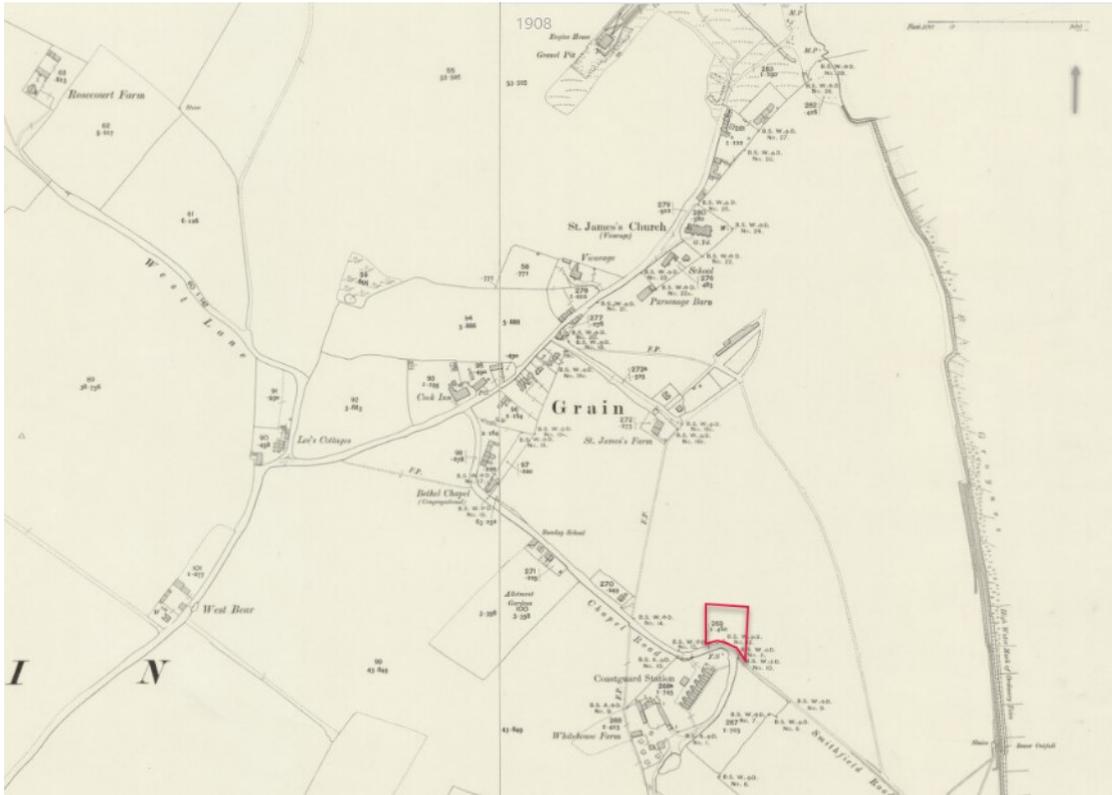


Figure 22 3rd Edition Ordnance Survey Map, 1908

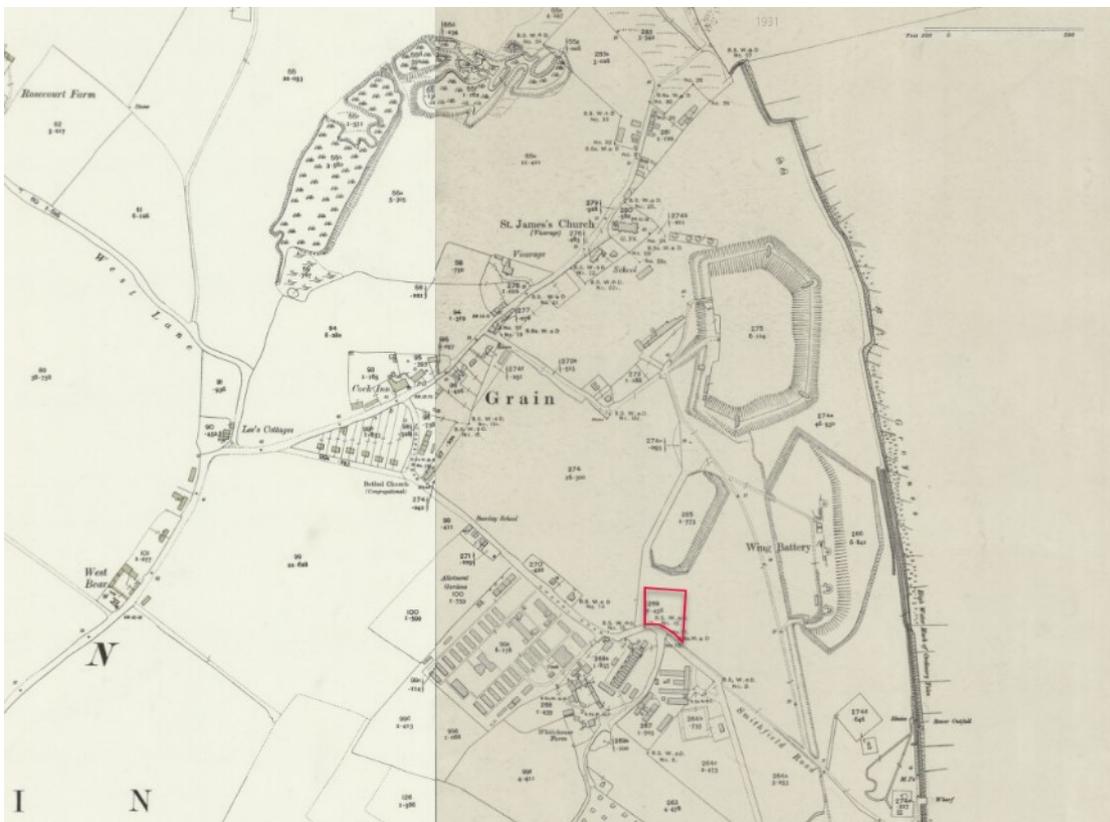


Figure 23 4th Edition Ordnance Survey Map, 1931



Figure 24 Aerial Photograph highlighting the various aspects that make up the Scheduled Ancient Monument

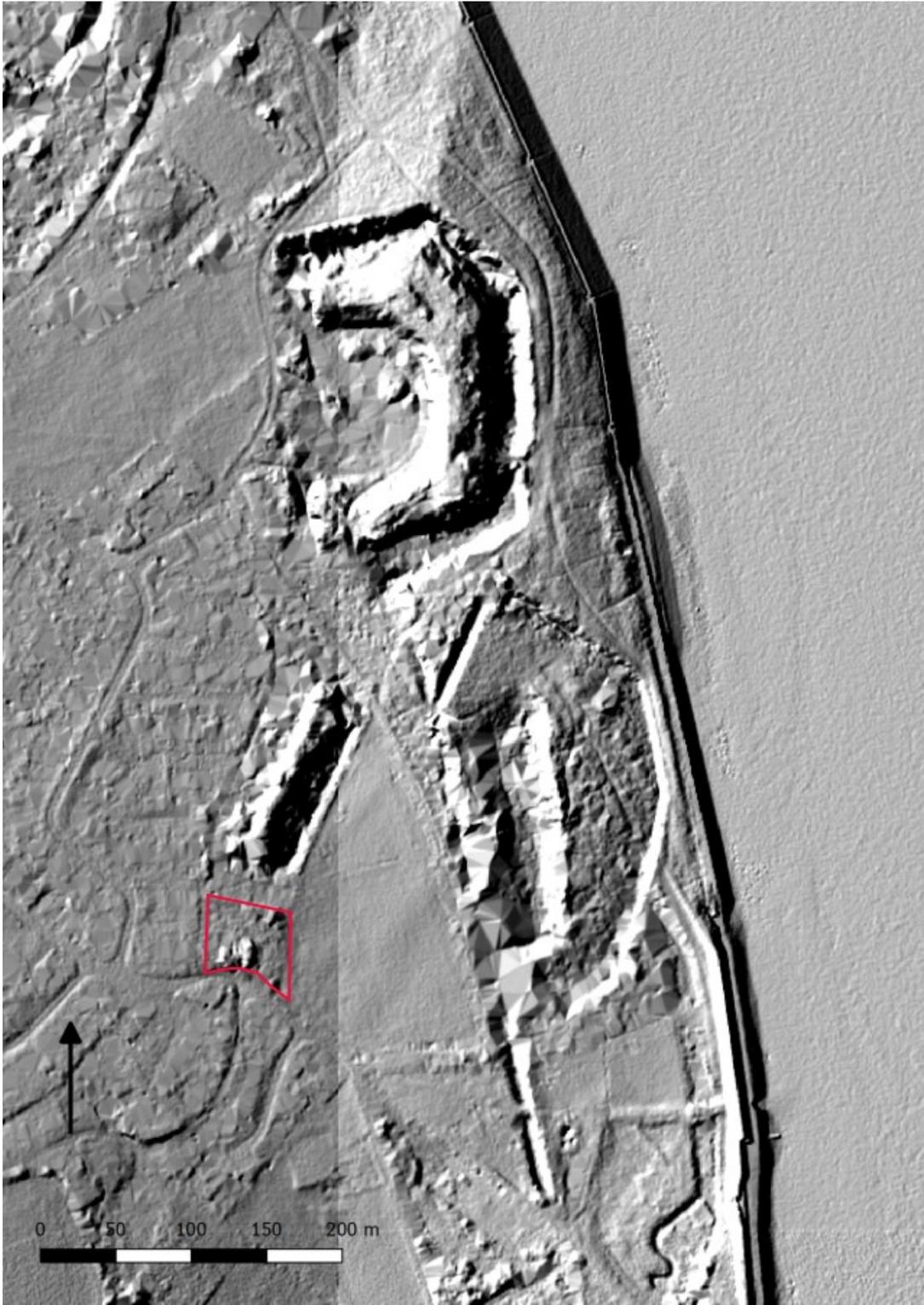


Figure 25 LIDAR, 1m Composite DTM (Environment Agency)

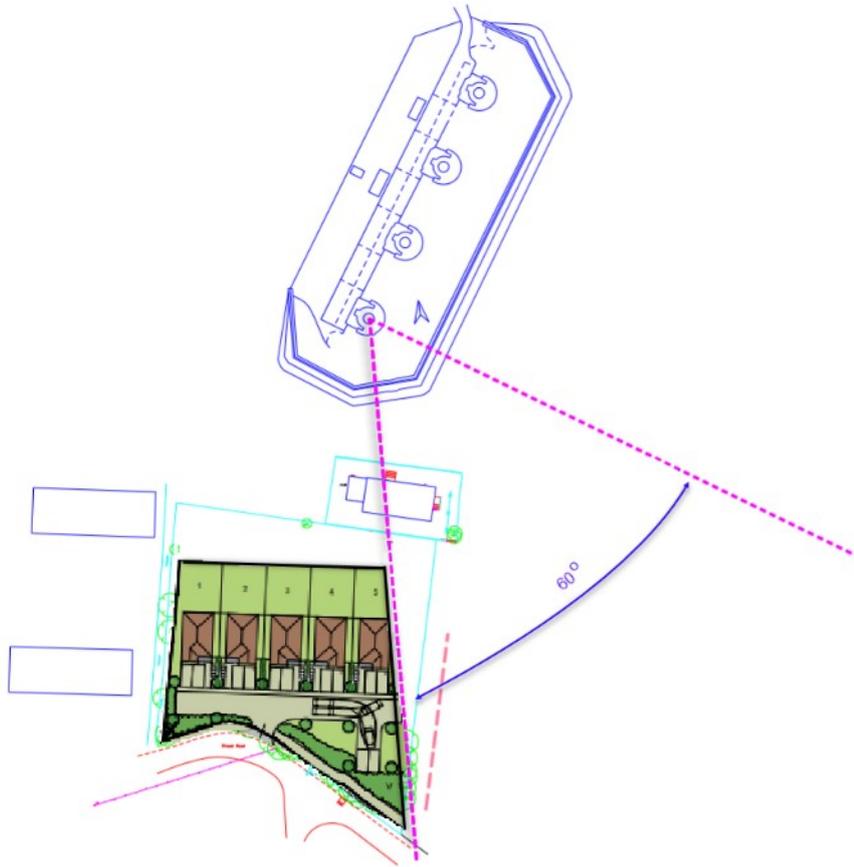


Figure 26 Grain Battery southern gun firing arc



Figure 27 Grain Battery southern gun firing arc (1940's AP)

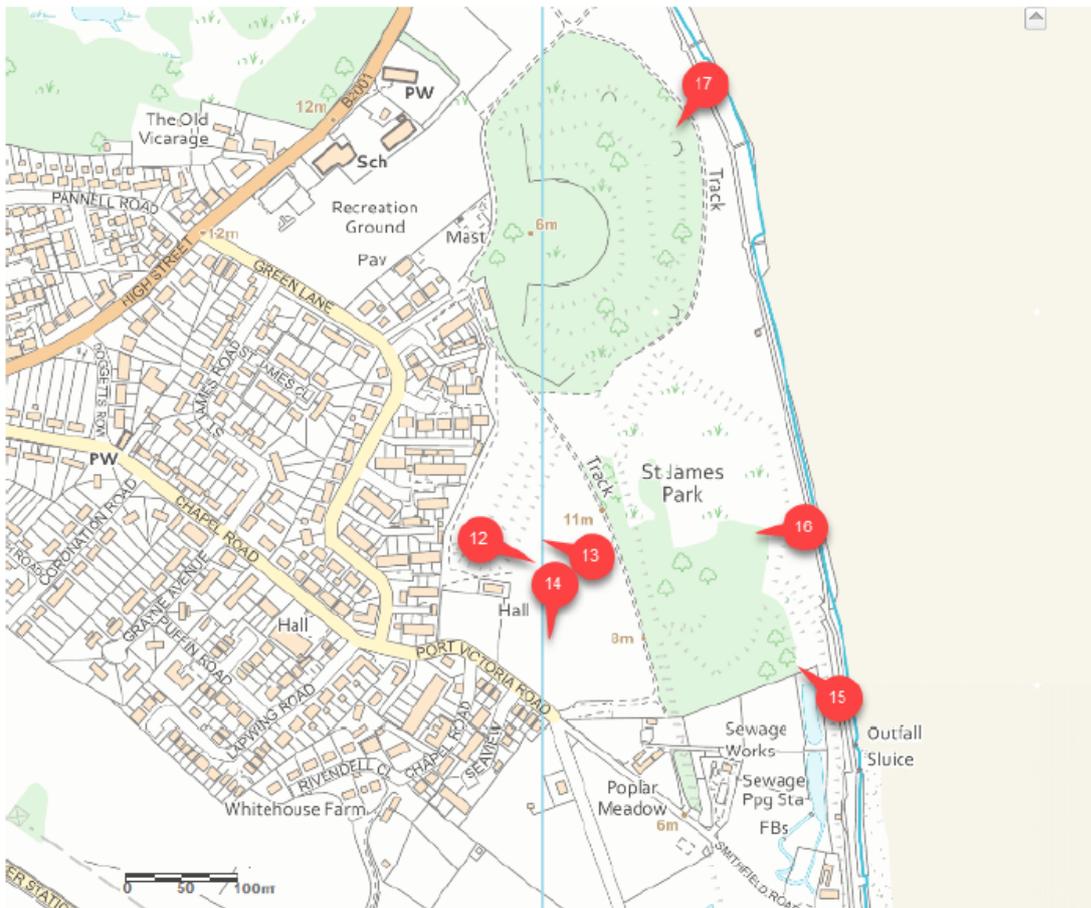
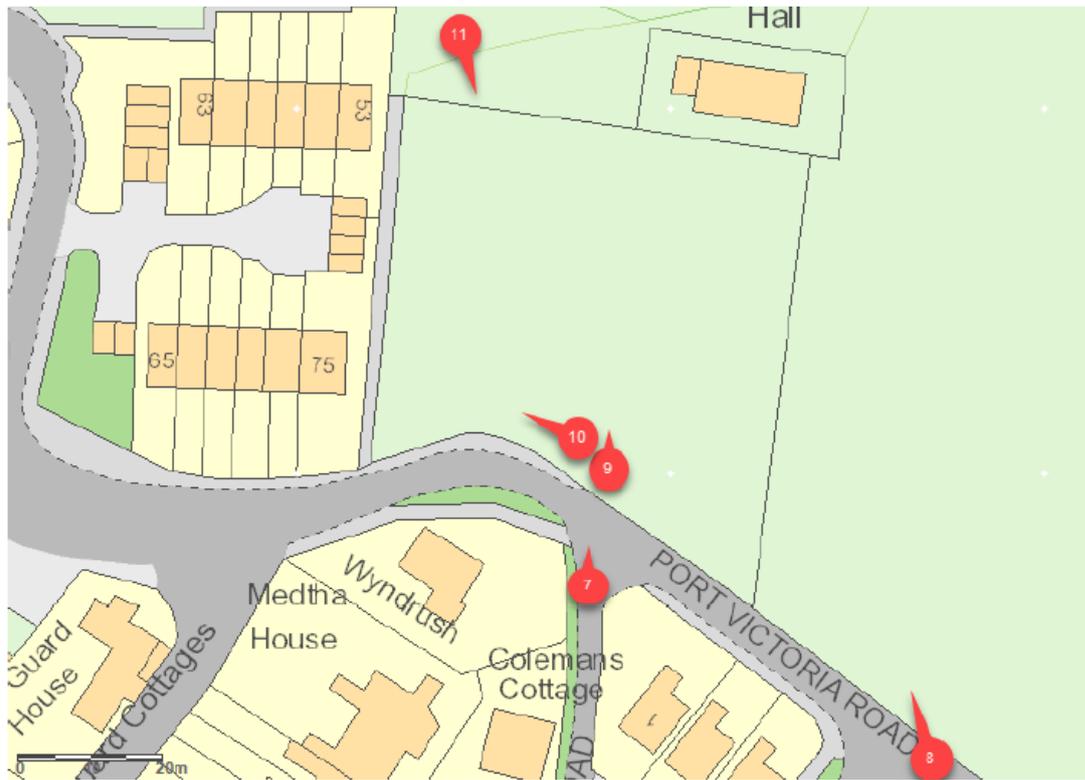


Figure 28 Plate Locations



Plate 1 Aerial Photograph, 1940's (Google Earth)



Plate 2 Aerial Photograph, 1960's (Google Earth)



Plate 3 Aerial Photograph, 1990's (Google Earth)



Plate 4 Aerial Photograph, 2003 (Google Earth)



Plate 5 Aerial Photograph, 2018 (Google Earth)



Plate 6 Photograph taken during the First World War showing the rear of Wing Battery and the buildings stationed there. Looking towards the Site.



Plate 7 Entrance to the site (facing NNE).



Plate 8 View along the eastern boundary looking towards Grain Battery from the road (facing N).



Plate 9 View of across the Site from the entrance (facing NNE).



Plate 10 View of across the Site towards the remains of the air raid shelters (facing NW).



Plate 11 View across the Site from the northern boundary (facing S).



Plate 12 Looking towards Wing Battery from one of the gun emplacements on Grain Battery (facing SE).



Plate 13 View of Grain Battery from the recreation field (facing N)



Plate 14 View facing the houses on the southern side of Port Victoria Road on the edge of what was the southern line of fire from Grain Battery (facing SSE)



Plate 15 View of Wing Battery from the sea wall (facing NW)



Plate 16 View towards the Site from the sea wall blocked by the vegetation from Wing Battery (facing W)



Plate 17 View across the fort from the sea wall towards the Site (facing SW)