

# 11. ARCHAEOLOGICAL, ARCHITECTURAL AND CULTURAL HERITAGE

## 11.1 Introduction

### 11.1.1 Background and Objectives

This section of the Environmental Impact Assessment Report (EIAR) describes the potential impacts of the proposed development on Archaeological, Architectural and Cultural Heritage and has been completed in accordance with the guidance set out by the Environmental Protection Agency (EPA) in 'in particular the Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' (EPA, August 2017).

The proposed development will consist of the following:

1. *Construction of 332 no. residential units:*
  - *93 no. 1 bed apartments*
  - *219 no. 2 bed apartments*
  - *20 no. 3 bed apartments*
2. *Provision of 2,667 sq.m of commercial floorspace.*
3. *Provision of 93 sq.m of community use facilities*
4. *Provision of 470 sq.m of tenant amenity accommodation including shared workspaces, shared dining and lounge facilities*
5. *Provision of 174sq.m creche facility including an external secure play area.*
6. *Provision of 85 no. car parking spaces and provision of realigned road between Gort na Bró and Gateway Retail Park Road.*
7. *Change of use of underground void to 181 bay underground car park*
8. *Provision of shared communal and private open space, car parking, bicycle parking, bin storage, public lighting, site landscaping, services, signage, substation and all associated site development works.*

The full description of the proposed development is provided in Chapter 3 of this EIAR.

The purpose of this chapter is to assess the potential impacts of the proposed development on the surrounding archaeological and cultural heritage resource. This assessment is based on both a desktop review of the available archaeological and cultural heritage data and a site inspection.

### 11.1.2 Statement of Authority

This section of the EIAR has been prepared by Miriam Carroll and Annette Quinn of Tobar Archaeological Services. Miriam Carroll and Annette Quinn are the directors of Tobar Archaeological Services and both graduated from University College Cork in 1998 with a Masters degree in Methods and Techniques in Irish Archaeology. Both directors are licensed by the Department of Culture, Heritage and the Gaeltacht to carry out excavations and are members of the Institute of Archaeologists of Ireland. Annette Quinn and Miriam Carroll have been working in the field of archaeology since 1994 and have undertaken numerous projects for both the private and public sectors including excavations, site assessments (EIAR) and surveys.

### 11.1.3 Policy Context

#### 11.1.3.1 Current Legislation

Archaeological monuments are safeguarded through national and international policy, which is designed to secure the protection of the cultural heritage resource. This is undertaken in accordance with the provisions of the European Convention on the Protection of the Archaeological Heritage (Valletta Convention). This was ratified by Ireland in 1997.

Both the National Monuments Acts 1930 to 2004 and relevant provisions of the Cultural Institutions Act 1997 are the primary means of ensuring protection of archaeological monuments, the latter of which includes all man-made structures of whatever form or date. There are a number of provisions under the National Monuments Acts which ensure protection of the archaeological resource. These include the Register of Historic Monuments (1997 Act) which means that any interference to a monument is illegal under that Act. All registered monuments are included on the Record of Monuments and Places (RMP).

The Record of Monuments and Places (RMP) was established under Section 12 (1) of the National Monuments (Amendment) Act 1994 and consists of a list of known archaeological monuments and accompanying maps. The Record of Monuments and Places affords some protection to the monuments entered therein. Section 12 (3) of the 1994 Amendment Act states that any person proposing to carry out work at or in relation to a recorded monument must give notice in writing to the Minister (Arts, Heritage, Regional Rural and Gaeltacht Affairs) and shall not commence the work for a period of two months after having given the notice. All proposed works, therefore, within or around any archaeological monument are subject to statutory protection and legislation (National Monuments Acts 1930-2004)

#### 11.1.3.2 Policies of the Galway City Development Plan 2017-23

The Galway City Development Plan 2017-2023 outlines a number of policies relating to archaeology and built heritage as follows.

##### **Policy 8.5 Archaeology**

Protect the archaeological heritage of the city.

Ensure that proposed development within the designated city centre Zone of Archaeological Potential is not detrimental to the character of an archaeological site or its setting.

Have regard to the archaeological recommendations of the Department of Arts, Heritage, Rural, Regional and Gaeltacht Affairs on any planning applications.

Endorse the sustainable use of archaeological heritage as an educational and cultural resource and promote public awareness of the archaeological heritage of the city.

Require the surveying, recording or excavation of archaeological heritage during the development process where appropriate.

Seek the preservation in-situ or, at a minimum, preservation by record of archaeological sites/monuments included in the Record of Monuments and Places.

Ensure that any development proposal with potential to impact on archaeological heritage includes for an archaeological assessment. This includes within terrestrial, riverine, inter-tidal and sub-tidal environments.

Promote the protection of the varied industrial heritage of the city and encourage greater appreciation and public awareness of this heritage.

The Development Plan also outlines policies and objective in relation to built heritage such as Protected Structures, Vernacular Structures etc as follows:

#### **Policy 8.2 Built Heritage - Record of Protected Structures**

Encourage the protection and enhancement of structures listed in the Record of Protected Structures.

Ensure new development enhances the character or setting of a protected structure.

Avoid protected structures becoming endangered by neglect or otherwise by taking appropriate action in good time.

Consider the inclusion in the Record of Protected Structure of buildings and structures of special interest.

Consult with the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs regarding any planning applications relating to protected structures and national monuments.

Implement proactive measures to encourage the conservation of protected structures.

#### **Policy 8.4 Vernacular Heritage**

Encourage the rehabilitation, renovation and re-use of existing structures that contribute to the character of the city.

Increase public awareness of the vernacular heritage of the city through publication of the Survey and Inventory of Galway City's Thatched Buildings.

## 11.2 Methodology

The assessment of the archaeology and cultural heritage of the proposed development area included desk-based research, GIS map compilation, and a site inspection. A desk-based study of the proposed development area was undertaken in order to assess its archaeological and cultural heritage potential and to identify features of archaeological or cultural heritage significance within or near to the proposed development site. Site inspection was undertaken in March 2019 to assess any potential impacts on known or previously unrecorded sites or monuments.

### 11.2.1 Desktop Assessment

A number of sources were consulted as part of the desktop assessment of the proposed development in order to ensure that all the known and potential archaeology and cultural heritage of the area was considered as part of this report.

The sources consulted included but were not limited to the following:

- > The Sites and Monuments Record (SMR)
- > The Record of Monuments and Places (RMP)
- > The Topographical Files of the National Museum of Ireland on [www.heritagemaps.ie](http://www.heritagemaps.ie)
- > Down Survey Barony maps (1656-8) ([www.downsurvey.tcd.ie](http://www.downsurvey.tcd.ie))
- > First edition Ordnance Survey map
- > Second edition Ordnance Survey map

- > Third edition Ordnance Survey map
- > Aerial photographs
- > Excavations Database
- > National Inventory of Architectural Heritage (NIAH)
- > Galway City Development Plan 2017-

### 11.2.1.1 Record of Monuments and Places

A primary cartographic source and base-line data for the assessment was the consultation of the Sites and Monuments Record (SMR) and Record of Monuments and Places (RMP) for County Galway. All known recorded archaeological monuments are indicated on 6 inch Ordnance Survey (OS) maps and are listed in this record. The SMR/RMP is not a complete record of all monuments as newly discovered sites may not appear in the list or accompanying maps. In conjunction with the consultation of the SMR and RMP the electronic database of recorded monuments which may be accessed at <http://webgis.archaeology.ie/historicenvironment> was also consulted.

### 11.2.1.2 Cartographic Sources and Aerial Photography

The 1st (1840s) and 2nd (1900s) edition OS maps for the area were consulted as was OSI aerial photography and Down Survey Barony maps (1656-8).

### 11.2.1.3 Topographic Files – National Museum of Ireland

Details relating to finds of archaeological material and monuments in numerous townlands in the country are contained in the topographical files held in the National Museum of Ireland. The townland within which the development is located were checked for such finds on [www.heritagemaps.ie](http://www.heritagemaps.ie).

### 11.2.1.4 Excavations Database

The excavations database is an annual account of all excavations carried out under license in Ireland. The database is available on line at [www.excavations.ie](http://www.excavations.ie) and includes excavations from 1985 to 2019. This database was consulted as part of the desktop research for this assessment to establish if any archaeological excavations had been carried out within or near to the proposed development area.

### 11.2.1.5 National Inventory of Architectural Heritage

This source lists some of the architecturally significant buildings and items of cultural heritage and is compiled on a county by county basis by the Department of Culture, Heritage and the Gaeltacht. The NIAH database was consulted for all townlands within and adjacent to the study area. The NIAH survey for Galway has been published and was downloaded on to the base mapping for the proposed development. The National Inventory of Architectural Heritage (NIAH) is a state initiative under the administration of the former Department of Arts, Heritage and the Gaeltacht and established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999.

The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister for the Department of Culture, Heritage and the Gaeltacht to the planning authorities for the inclusion of particular structures in their Record of Protected Structures (RPS). The published surveys are a source of information on the selected structures for relevant planning authorities.

#### 11.2.1.6 Record of Protected Structures

The dataset for Galway City Protected Structures is available on-line and was added to the base mapping for the proposed development in order to assess any potential impacts to such structures.

### 11.2.2 Geographic Information Systems

A geographic information system (GIS) was used to manage the datasets relevant to the archaeological and architectural heritage assessment and for the creation of all the maps in this report. This involved the overlaying of the relevant archaeological and architectural datasets on georeferenced aerial photographs and road maps (ESRI), where available. The integration of this spatial information allows for the accurate measurement of distances of a proposed development from archaeological sites and the extraction of information on 'monument types' from the datasets. Areas of archaeological sensitivity may then be highlighted in order to mitigate the potential negative effects of the development on archaeological heritage.

### 11.2.3 Field Inspections

The development area was inspected by Tobar Archaeological Services over one day in March 2019. A walk-over survey of the proposed development site was undertaken, and a photographic and descriptive record made of same.

### 11.2.4 Impact Assessment Methodology

## 11.3 Receiving Environment

### 11.3.1 Description of Study Area

The proposed development comprises the construction of circa 332 no. residential units, provision of 2,840 sq. m of commercial floorspace, associated car parking spaces and provision of realigned road between Gort na mBro and Gateway Retail Park Road.

The site is approximately 2.8 hectares in extent and is situated in the townland of Ragoon on the western outskirts of Galway City. It comprises a roughly rectangular area at the east side of the existing Gateway Retail Park and is currently divided into two portions by an existing road which provides access to the aforementioned retail park. The site also includes a change of use for the existing underground void located to the north of the existing retail park. The proposed development site is bound to the east and south-east by a public road and to the north by a modern school. As outlined above, the Gateway Retail Park is situated to the west, west of a public road.

The site itself is largely disturbed, as a result of adjacent past developments. The southern portion is almost entirely occupied by a construction compound which is currently in use. This area is occupied by office containers, car parking facilities and stockpiled material. It is stoned with hardcore/gravel and would not appear to have any remaining in situ topsoil. To the north of the intervening public road the site is largely overgrown and is enclosed at the south and west by a low earthen berm planted with trees. Inside the berm the ground level is much lower, probably representing original ground level and is much overgrown with briars. On the day of the site visit access to this area was possible and showed the area to be grass-covered with localised areas of ground disturbance and an area overgrown with briars towards the north.

### 11.3.2 Archaeological Heritage

For the purposes of this report archaeological heritage includes all recorded archaeological monuments listed in the RMP/SMR and shown on the associated maps, sites identified during archaeological excavations as summarised in the Excavations Database and any find spots listed in the Topographical Files of the National Museum of Ireland.

#### 11.3.2.1 National Monuments

The term ‘national monument’ as defined in Section 2 of the National Monuments Act (1930) means a monument ‘the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto...’. National monuments in State care include those which are in the ownership or guardianship of the Minister for Arts, Heritage and the Gaeltacht (DAHG). Other owners of national monuments are empowered under Section 5 of the National Monuments Act (1930) to appoint the Minister for Culture, Heritage and the Gaeltacht as guardian of such monuments. This means in effect that while the property of such a monument remains vested in the owner, its maintenance and upkeep are the responsibility of the State. Monuments which may be defined as national monuments are also in the ownership or guardianship of Local Authorities which have similar responsibilities under the National Monuments Acts (1930-2004) to DCHG.

For national monuments in the ownership or guardianship of the Minister or a Local Authority or which are subject to a preservation order or temporary preservation order, the prior written consent of the Minister is required for any works at or in proximity to the monument.

No National Monuments are located on or in close proximity to the proposed development site at Ragoon, Galway, the nearest being over 6km to the east.

#### 11.3.2.2 Recorded Monuments

No recorded monuments are located on the proposed development site. The nearest recorded monument is located c. 95m to the east-north-east of the proposed development area and comprises a designed landscape feature (GA094-056). To the south-east of this is a ringfort (GA094-111) which is situated c. 225m to the east of the proposed development site (Figure 3). Given the distance of the proposed development from the aforementioned recorded monuments the proposed development site does not fall within the zone of notification for same.

No information pertaining to the recorded monuments in the vicinity of the site is currently available on the Historic Environment Viewer ([www.webgis.archaeology.ie/historicenvironment](http://www.webgis.archaeology.ie/historicenvironment)). The designed landscape feature may have been associated with Ragoon House (GA094-047) which is located a further 200m to the north-east. Ragoon House is shown on the 1st and 2nd edition OS maps for the area (see section 4.2.1 below) and the designed landscape feature is located within the associated demesne around the house.

The site of the nearest monument GA094-056 was assessed from the adjacent public road. It is currently occupied by a playing pitch and no above-ground trace of this monument is apparent (Plate 11.1). The setting of these monuments has been much altered as a result of modern residential developments and the footprint of the demesne surrounding Ragoon House is consequently no longer identifiable. Ragoon House is also a Protected Structure (see 11.3.3.2 below for further discussion).



Plate 11.1: Site of recorded monument GA094-056 in playing pitch, looking NE from adjacent public road.

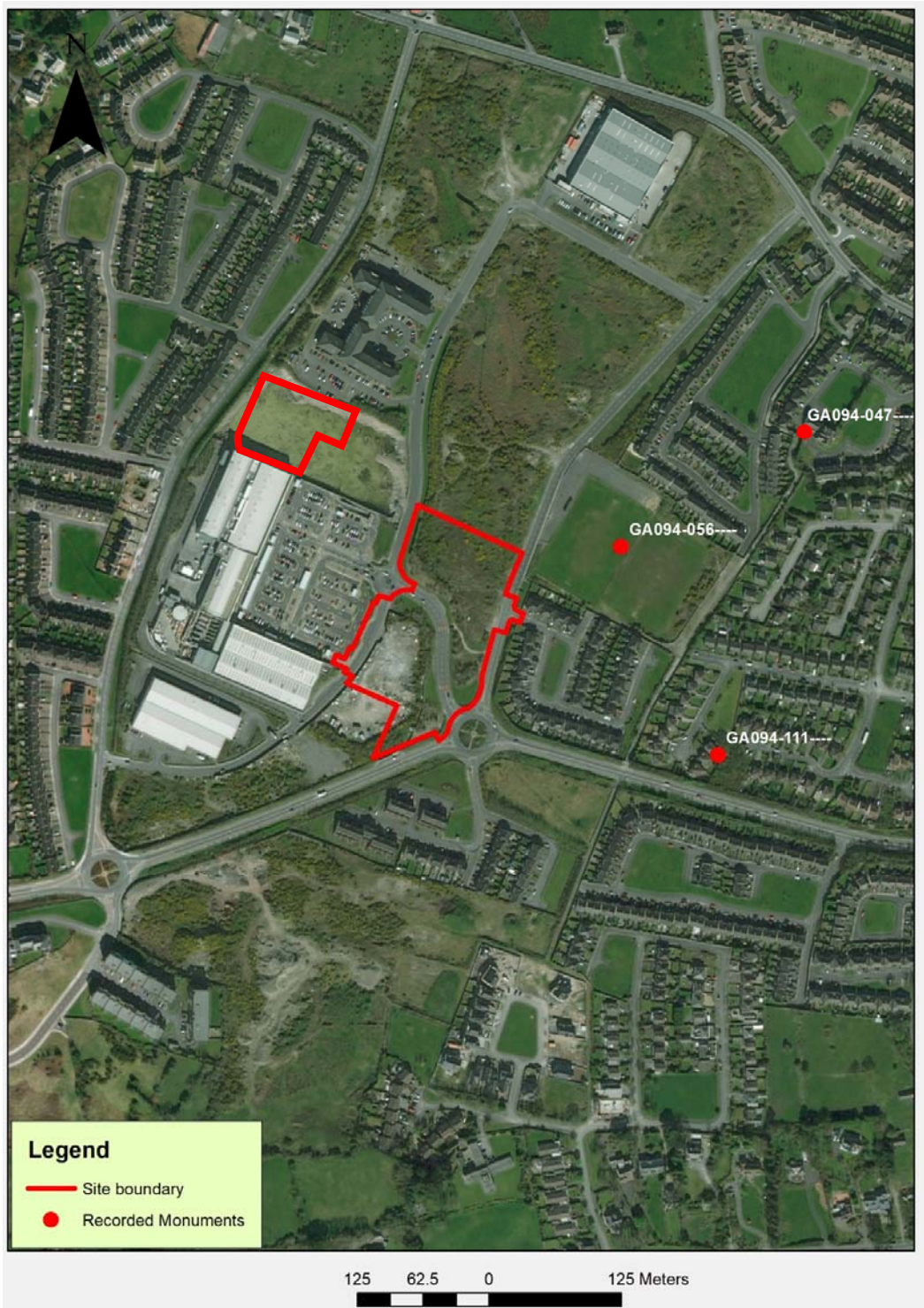


Figure 11.1 Recorded Monuments in the vicinity of the proposed development site



### 11.3.2.3 Excavations Database

A review of the database of excavations undertaken in Ireland yielded three results for Ragoon townland, none of which produced any archaeological finds or features. The following summaries provide an account of the work carried out under licence within the townland of Ragoon and the area of Knocknacarragh.

#### 1993:114 - Ragoon, Galway

County: Galway                      Site name: Ragoon

Sites and Monuments Record No.: N/A    Licence number: 93E0078

Author: Martin Fitzpatrick, New Line, Athenry, Co. Galway.

Site type: Enclosure

ITM: E 526967m, N 725029m

The trial trenching and watching brief at Ragoon took place on 27th May 1993.

On the east shoulder of a ridge running north-west/south-east, the monument consisted of a poorly preserved triangular-shaped enclosure, delimited by boulders averaging 0.9m in height. A total of two trenches were dug mechanically, dissecting the enclosure. The first running north-west/south-east through the middle of the site, the second running perpendicular to the first in a north-east/southwest direction. Apart from the excavation of the two trenches, the digger also removed the boulders delimiting the site, which proved to be of a single course.

The two trenches revealed no archaeological features or deposits, nor was there any indication of onsite activity. The site is of no archaeological importance and may have been, as local history suggests, the work of a local landlord.

#### 1997:215 - Knocknacarragh/Ragoon, Galway

County: Galway                      Site name: KNOCKNACARRAGH/RAHOON

Sites and Monuments Record No.: N/A    Licence number: 96E0018 and 97E0060

Author: Anne Connolly, Archaeological Services Unit Ltd, Purcell House, Oranmore, Co. Galway.

Site type: No archaeological significance

ITM: E 525794m, N 724709m

Six areas were archaeologically monitored in the course of a fifteen-month period as part of the Knocknacarragh Main Drainage Scheme. In those areas where the trenching was monitored (Areas 13), much, and in most cases total, disturbance was a feature of the upper stratigraphy, with tarmac, hard-core and shallow layers of mixed fill of modern nature representing recent activity. Natural sandy subsoils underlay these layers and bedrock occurred directly below this, sometimes at a very shallow depth and sometimes fluctuating to c. 2m below current ground level.

In Areas 4, 5 (under licence 96E0018) and 6 (97E0060), the previously undisturbed green areas, topsoilstripping revealed a shallow, heavily humic layer overlying stones and bedrock. No archaeological features or deposits came to light in any of the areas monitored.

**2001:520 - Knocknacarragh Main Drainage Scheme, Galway**

County: Galway                      Site name: Knocknacarragh Main Drainage Scheme

Sites and Monuments Record No.: Adjacent to SMR 94:20    Licence number: 01E0498

Author: Anne Carey, Archaeological Services Unit Ltd, Purcell House, Oranmore, Co. Galway.

Site type: Monitoring

ITM: E 525794m, N 724709m

Monitoring of the pipeline along existing roadways and through Galway Golf Club was carried out during 2001. Nothing of archaeological significance was discovered. The Knocknacarragh Main Drainage Scheme is an ongoing project and monitoring of further excavations will be carried out in the coming year.

### 11.3.2.4 Topographical Files of the National Museum of Ireland

The database of find spots held in the National Museum of Ireland was checked on [www.heritagemaps.ie](http://www.heritagemaps.ie) for any recorded finds within the study area. No find spots are recorded for the area of the proposed development site. The nearest find spot is situated c. 1.5km to the south-west and comprises a wooden mill shaft.

**National Museum Point: Wooden Mill Shaft (?), Wooden Mould Binding (?)**

Name 1971:954 (a), 954 (b)

Object Type Wooden Mill Shaft (?), Wooden Mould Binding (?)

### 11.3.3 Architectural Heritage

#### 11.3.3.1 Cartographic Record

A review of the available historic mapping for the area does not show any potential archaeological features on the proposed development site. The Down Survey map (1656-8) for Galway names Ragoon but no further detail is apparent as the individual barony maps do not survive. The first edition OS map (1837-1842) does not indicate any features of archaeological potential within the proposed development site, nor does the later second edition map (1888-1913).

The first edition map shows Ragoon House to the north-east and its associated demesne which bounds the proposed development site to the east. Ragoon Stream is also named a short distance to the east. The site itself would appear to have largely consisted of open marshy ground with some field enclosures at the east. The second edition OS map also depicts Ragoon House to the north-east with no structures or features within the proposed development site.



Figure 11.2 Extract from Down Survey map of Galway (1656-8) showing 'Rahoone' to the west of Galway city.

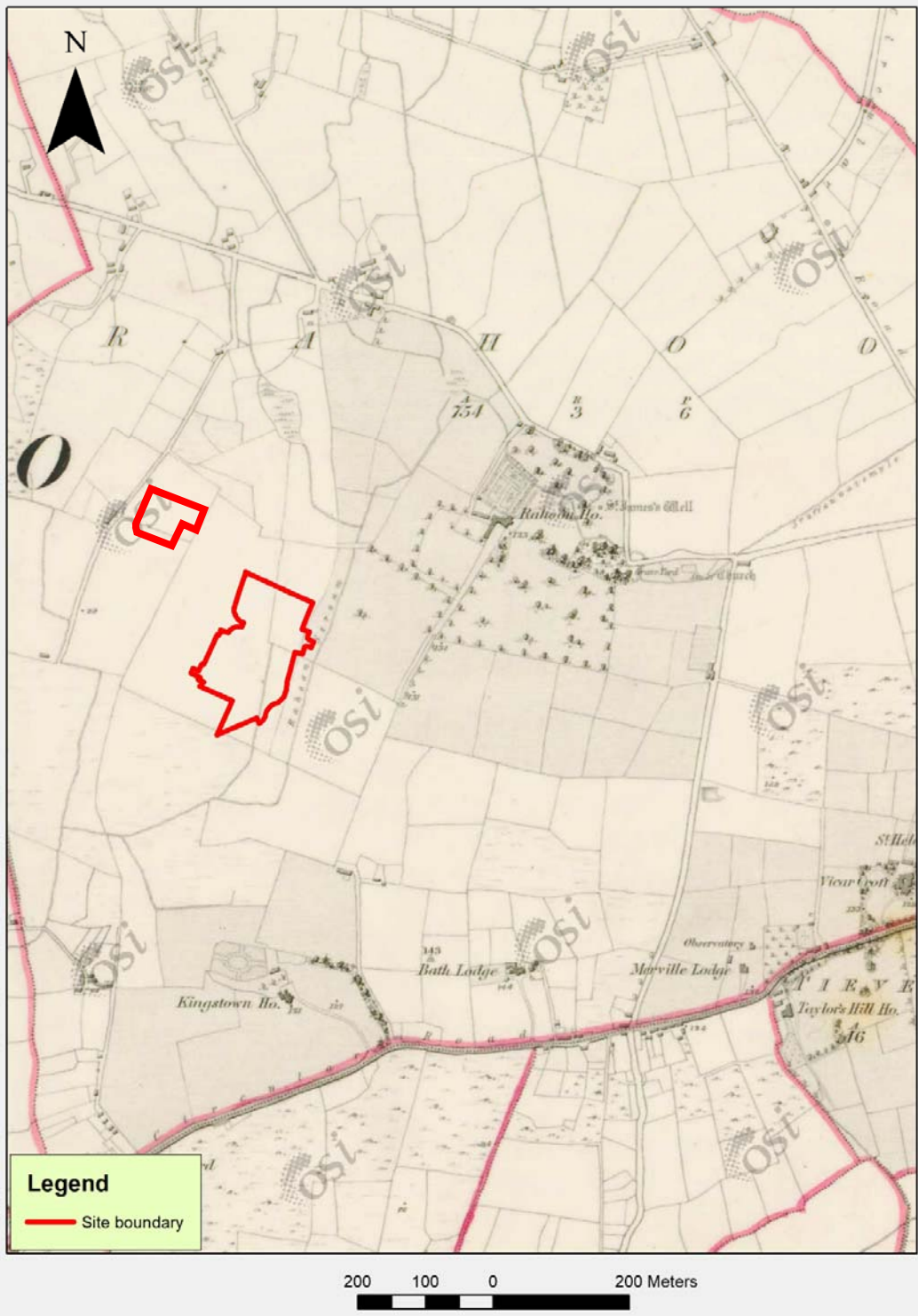


Figure 11.3 Proposed site boundary on 1st edition OS background. Note Rahoon House to NE and associated shaded demesne.

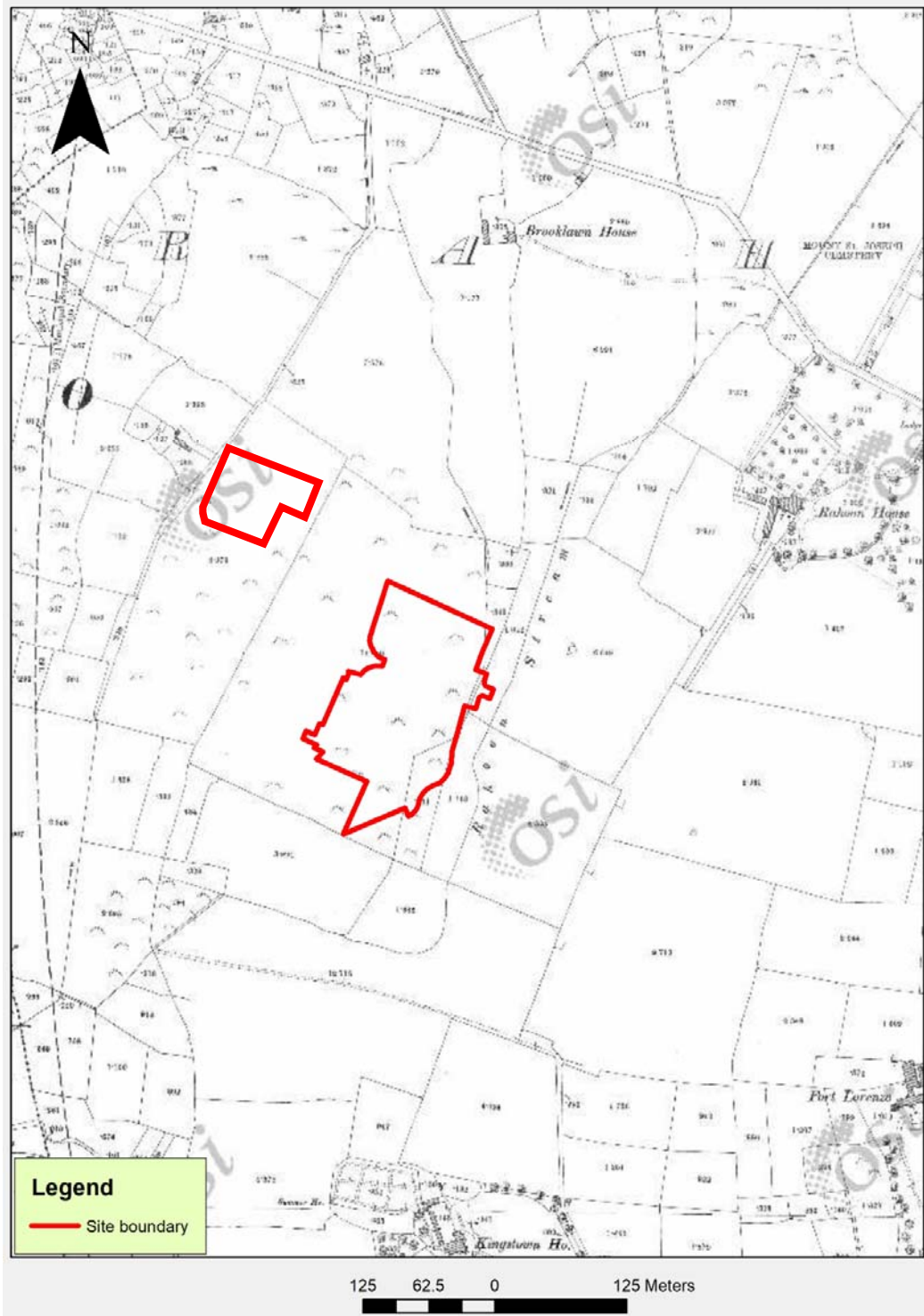


Figure 11.4 Proposed development site boundary on 2nd edition OS background.

### 11.3.3.2 Protected Structures

No protected structures are located on or within the immediate vicinity of the proposed development site. The nearest Protected Structure is the aforementioned Rahoon House (Ref 8301), located c. 298m to the north-east of the proposed development site boundary. The structure comprises a 5 bay two storey over basement house and is now surrounded by modern residential developments. The features

of the Protected Structure include the house itself, a 16th century coat-of-arms, a 17th century doorway, wall, gate piers and reused architectural fragments.



Plate 11.2: Rohoon House (RPS Galway City Council).

It is described in the Landed Estates Database as follows:

*In 1786 Wilson refers to Rahoon as the seat of Mr. French. In the early 19th century it was a Bodkin house, occupied by Roderick O'Connor at the time of the first Ordnance survey. It was held in fee by Thomas C. Dickson at the time of Griffith's Valuation and valued at £27. This house was bought by Kennedy O'Brien in the early 1870s and remained in his family's possession until the 1930s. Buildings are still extant at the site.*

This would imply that the house was in existence by the late 18th century and is depicted on the first edition OS map (1840s).

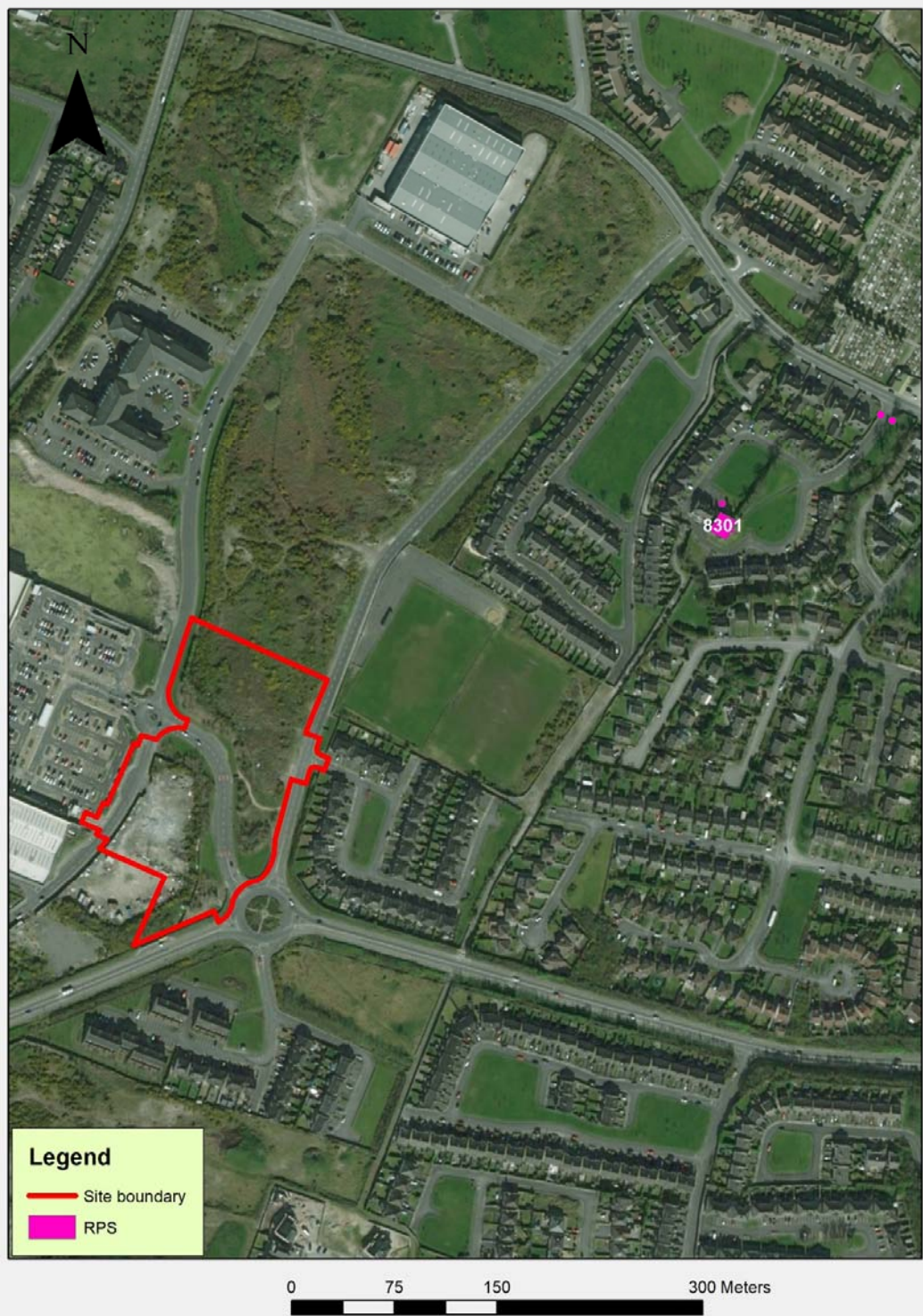


Figure 11.5: Proposed development site boundary in relation to Protected Structure 8301, Ragoon House.

The Architectural Heritage Protection Guidelines for Planning Authorities (2011) discusses the notion of curtilage and attendant grounds associated with protected structures. While the notion of curtilage is not defined by legislation, it is taken to be the 'parcel of land immediately associated with that structure and which is (or was) in use for the purposes of the structure.' (ibid., 191). In the case of a large country house items such as stable buildings, walled gardens, lawns and ha-has may all be considered to form part of its curtilage unless at a distance from the building (ibid.). It is also noted, however, that the

extent of the curtilage of a protected structure would need to be determined on a case-by-case basis and 'ideally should be identified by the planning authority prior to inclusion of the structure in the RPS....' (ibid.). The Guidelines go on to say that in instances where the curtilage of a protected structure has not previously been identified 'a planning authority should take the opportunity to identify its extent at the time of making a declaration in respect of the protected structure' (ibid., 192).

A similar scenario exists when determining the attendant grounds of a protected structure. Attendant grounds are those lands located outside the curtilage but which are associated with the structure and are 'intrinsic to its function, setting and/or appreciation' (ibid.). A planning authority has the power to protect all features of importance which lie within the attendant grounds of a protected structure, however, such features must be specified in the RPS. The Guidelines go on to say that where the curtilage of a protected structure has not been established at the time of inclusion in the RPS, the planning authority should ensure that all important features are either 'a) specified as being in the attendant grounds of the protected structure or b) are themselves entered into the RPS and c) the owners and occupiers notified of the protection.'

The curtilage or attendant grounds of Ragoon House have not been formally identified by the planning authority. In any case, the ground immediately surrounding the house and within its demesne (as depicted on the first edition OS map) which could be suggested as forming part of its curtilage is now occupied by modern residential development and is significantly altered from its original form. The proposed development site at Ragoon is located outside the demesne of Ragoon House and would not have formed part of its curtilage. The lands may have originally formed part of the attendant grounds of the house, however, this association no longer prevails given the change in ownership which has occurred through the decades and the fact that the lands are no longer linked to the use or occupation of the house.

#### 11.3.3.3 NIAH Structures and Garden Survey

No NIAH structures are located on or in the immediate vicinity of the proposed development site. The nearest structure listed in the NIAH are the gate piers (Reg. 30311001) marking the original entrance into Ragoon House which are also included in the Protected Structure (Reg. 8301) discussed above. The piers are described in the NIAH survey ([www.buildingsofireland.ie](http://www.buildingsofireland.ie)) as follows:



Rahoon Road, Ros Geal Estate, Galway, County Galway

30311001



<b>Reg. No.</b>	30311001
<b>Date</b>	1840 - 1880
<b>Previous Name</b>	N/A
<b>Townland</b>	RAHOON
<b>County</b>	County Galway
<b>Coordinates</b>	127375, 225426
<b>Categories of Special Interest</b>	ARTISTIC TECHNICAL
<b>Rating</b>	Regional
<b>Original Use</b>	gates/railings/walls
<b>In Use As</b>	gates/railings/walls

#### Description

Gateway, built c.1860, comprising four gate piers in form of cut limestone Roman Doric-style columns flanking vehicular and pedestrian entrances, with tooled limestone plinths and carved limestone caps. Cast-iron double-leaf and single gates.

#### Appraisal

This gateway makes a strong visual statement at the entrance to the grounds of the former Rahoon House, now Ros Geal estate. It exhibits high quality stoneworking and decorative ironworking, enriching the aesthetic aspirations of the composition.

Rahoon House is also included in the NIAH garden survey which notes that there are 'virtually no recognisable features' extant.

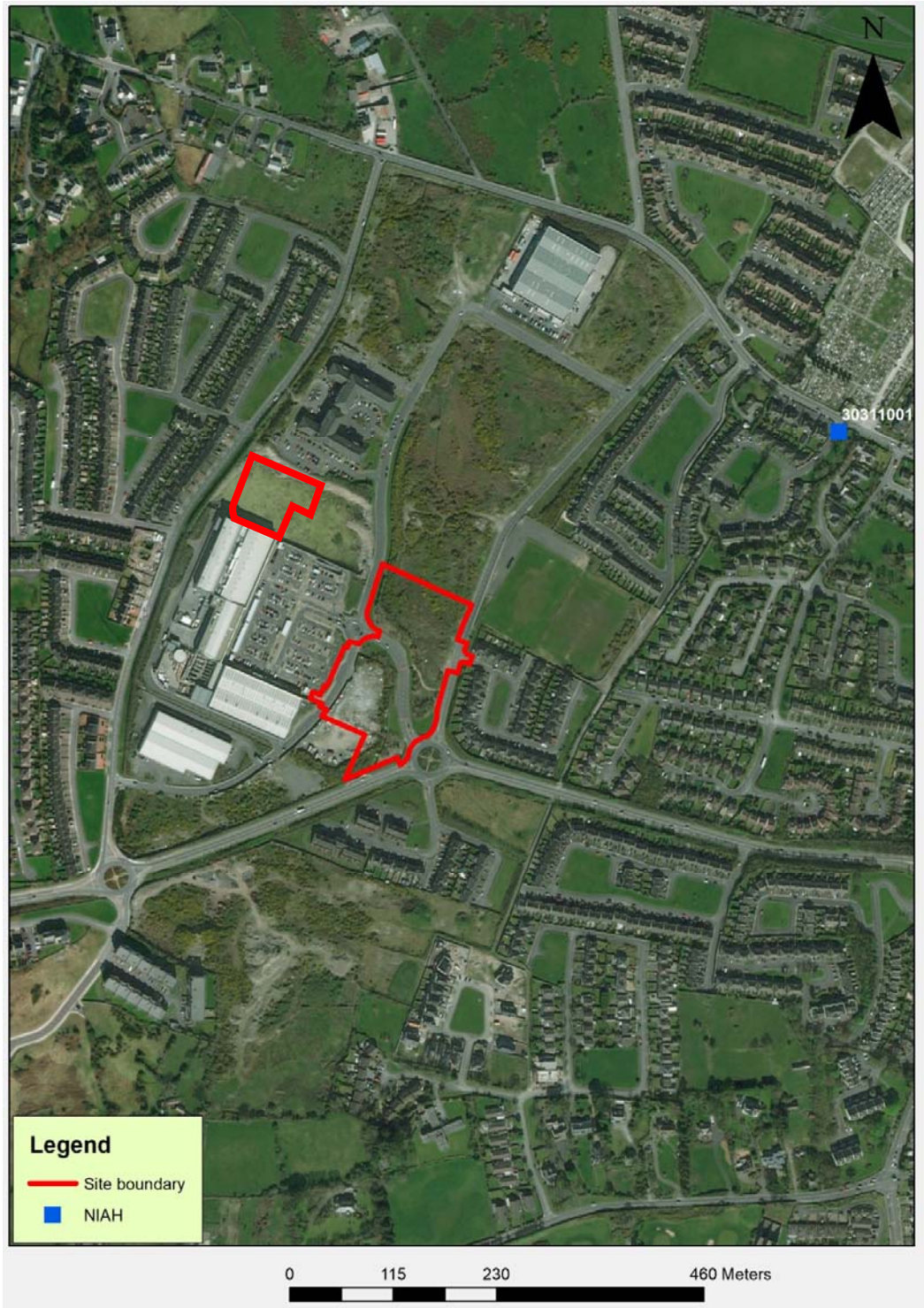


Figure 11.6: Proposed development site boundary in relation to nearest NIAH structure.

## 11.4 Likely and Significant Impacts and Associated Mitigation Measures

### 11.4.1 Do-Nothing Effects

If the proposed residential development were not to proceed, there would be no change to the existing environment. There would be no impact on any potential features/deposits and/or artefacts of archaeological significance which may be located on the site.

### 11.4.2 Construction Phase

#### 11.4.2.1 Direct Impacts

Potential impacts during the construction phase of the proposed development could include damage to recorded monuments, newly recorded monuments, sub-surface features, Protected Structures or items listed in the NIAH by excavations works or tracking machinery etc. The aim of the assessment, however, is to highlight any potential impacts as described above so that suitable mitigation measures may be implemented in order to avoid any such impacts.

##### 11.4.2.1.1 Recorded Archaeological Resource

No National Monuments or recorded monuments are located on the proposed development site. No direct impacts on this resource are therefore identified.

##### 11.4.2.1.2 Newly Recorded Monuments/Sites

No new potential archaeological sites were noted within the proposed development site during the walk-over survey. No direct impacts are therefore identified to this resource.

##### 11.4.2.1.3 Sub-surface Archaeology

The proposed development site has previously undergone extensive ground works and no in situ topsoil would appear to be present in the southern portion of the site. The northern portion of the site, whilst somewhat altered from its original state due to adjacent developments may have extant in situ topsoil in some places. No potential impacts to sub-surface archaeology within the southern portion of the proposed development site are identified.

Despite groundworks associated with adjoining developments in situ topsoil may be present within some areas of the northern portion of the proposed development site. The potential therefore exists for the presence of sub-surface archaeological deposits in this area and appropriate mitigation measures are recommended in order to ameliorate any potential impacts to such features.

##### 11.4.2.1.4 Protected Structures

No protected structures are located on or within the immediate vicinity of the proposed development site, therefore no impacts to this resource are identified.

##### 11.4.2.1.5 NIAH and Garden Survey

No NIAH structures are located on or within the immediate vicinity of the proposed development site, therefore no impacts to this resource are identified.

### 11.4.3 Operational Phase

#### 11.4.3.1 Indirect (Visual) Impacts

Operational impacts are taken to be those that are occurring after the construction phase of the project, when all construction activities have been completed and the proposed development is built. In terms of archaeology and upstanding cultural heritage items these impacts are mainly indirect (visual) impacts.

##### 11.4.3.1.1 Recorded Archaeological Resource

No recorded monuments are located on or within the immediate vicinity of the proposed development site. The nearest monument is located c. 95m to the east-north-east of the proposed development area and comprises a designed landscape feature (GA094-056). The area of the recorded monument is now occupied by two playing pitches and no surface trace of this feature is apparent. The immediate and wider setting of this monument has already been significantly altered by surrounding modern developments. The introduction of the proposed development to this already developed environment will not result in any additional impact to the setting of this monument.

##### 11.4.3.1.2 Newly Recorded Monuments/Sites

No new archaeological monuments were noted on the proposed development site during the site walk-over survey. No indirect impacts on such features will therefore occur.

##### 11.4.3.1.3 Protected Structures

No Protected Structures are located on or within the immediate vicinity of the proposed development site. The nearest Protected Structure is Ragoon House and associated entrance gate piers (Reg. 8301), c. 298m to the north-east. The immediate and wider setting of this protected structure and its curtilage has already been significantly altered by the introduction of residential developments to the lands immediately surrounding the house. The introduction of the proposed development at a distance of almost 300m to this already much-altered landscape will not result in any additional impact to the protected structure.

##### 11.4.3.1.4 NIAH and Garden Survey

No NIAH structures are located on or within the immediate vicinity of the proposed development site. The nearest structure comprises the gate piers marking the original entrance to Ragoon House, c. 450m to the north-east. Ragoon House and lands are recorded in the garden survey which states that virtually no features are recognisable. No indirect impacts to these features are therefore identified.

### 11.4.4 Cumulative Impacts

Cumulative impact is defined as ‘The addition of many small impacts to create one larger, more significant, impact’ (EPA 2002, 33). It is also defined as ‘impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project’ (EC 1999).

In this regard in order to assess overall cumulative effects on archaeology and cultural heritage the proposed project is considered in the context of a number of existing, proposed and permitted developments in the area.

The nearest existing developments comprise retail and commercial properties immediately to the west and north-west, with existing residential developments to the east and north-east. The addition of the proposed development to this already largely altered landscape will not result in a visual impact to any nearby recorded monuments, protected structures or NIAH structures or features.

In terms of potential cumulative direct impacts the southern portion of the proposed development area is not regarded as having any potential for sub-surface archaeological remains therefore no direct cumulative impacts to this resource will occur in this area. Any potential cumulative direct impacts which may occur to sub-surface archaeological features within the northern portion of the proposed development site will be mitigated against as discussed below.

#### 11.4.5 Mitigation

No direct or indirect impacts to the recorded archaeological or cultural heritage resource as a result of the proposed development have been identified therefore no mitigation measures are required.

A potential direct impact to sub-surface archaeological features which may exist within the northern portion of the proposed development site may occur as a result of ground works. In this regard the following mitigation measure is recommended:

- Archaeological monitoring of all topsoil removal should be undertaken by a suitably qualified archaeologist. A report on the monitoring should be compiled on completion of the works and submitted to the relevant authorities.

#### 11.4.6 Residual Impacts

Long term, slight.

The monitoring of topsoil stripping within the site in advance of the proposed development may uncover features of archaeological significance, which in turn may be the subject of preservation by record (excavation). These excavations may add to our knowledge of the archaeological heritage of the site.

#### 11.4.7 Significance of Effects

Based on the assessment above there will be no significant effects.

#### 11.5 Conclusion

No recorded monuments, protected structures or NIAH structures are located within the proposed development site. The southern portion of the site has been developed and subject to ground works, therefore this area has no potential for the presence of sub-surface archaeology. In situ topsoil appears to be present within the northern portion of the proposed development site therefore archaeological monitoring of topsoil removal in this area is recommended.