

## **13.0 CULTURAL HERITAGE AND ARCHAEOLOGY**

### **13.1 Introduction**

This Cultural Heritage and Archaeology assessment undertaken for a proposed residential development (c. 14.3ha gross site area, 10.8ha nett development area) at Clonminch, Tullamore, Co. Offaly (Fig 13.1) has been prepared by Archer Heritage Planning Ltd for Steinfort Investments Fund. The desk based study of existing sources and field survey for this assessment was undertaken by Archer Heritage Planning Ltd and was augmented by geophysical survey and test excavations. It seeks to identify and record the location, nature and dimensions of any archaeological or cultural heritage features, fabric or artefacts that may be impacted by the proposed works. The assessment gauges the level of development impact and includes recommendations for the mitigation of any sites or features of cultural heritage interest present within the development area. The assessment was undertaken by Aidan O’Connell BA MIAI, Senior Archaeologist, Archer Heritage Planning Ltd, an excavation licence eligible archaeologist with 20 years experience in archaeological assessment.

### **13.2 Study Methodology**

#### **13.2.1 Desktop Study**

The Desktop study availed of the following sources:

- Record of Monuments and Places (RMP)/ Sites and Monuments Record
- Topographical Files of the National Museum of Ireland
- Aerial photography
- Historical maps
- Documentary research
- Relevant on-line databases (e.g. Excavation Bulletin; NRA Archaeological Database).

#### **13.2.2 Field Based Assessments**

The desktop study has been augmented by field-based assessments to further define the archaeological potential of the site:

- A field inspection took the form of a non-intrusive walkover survey to assess land-use patterns, site topography and the identification of sites of archaeological and cultural heritage interest.
- Geophysical survey was undertaken across the site under detection device consent 19R0209 issued to J Leigh by the Department of Culture, Heritage and the Gaeltacht (Leigh 2019) in order to define and locate buried magnetic anomalies of archaeological potential across the site.
- Phase I Test Excavation was undertaken in October 2019 under licence (19E0658) to the Department of Culture Heritage and the Gaeltacht in consultation with the National Museum of Ireland in order to test the archaeological potential of geophysical anomalies and the general archaeological potential of the site.
- Phase II Test Excavation was undertaken in July 2020 under license (20E0343) to the Department of Culture Heritage and the Gaeltacht in consultation with the National Museum of Ireland in order to test the archaeological potential of additional areas of the site not assessed by geophysical survey or Phase I Test Excavation.

#### **13.2.3 Guidance and Legislation**

Archaeological and cultural heritage protection in Ireland is provided by a number of international and national mechanisms. These include but are not limited to:

- National Monuments Acts 1930-2004;
- Architectural Heritage & Historic Properties Act. 1999.;
- Planning & Development Act. 2000, as amended;
- European Convention on the Protection of the Archaeological Heritage. 1992.

The Framework and Principles for the Protection of the Archaeological Heritage (1999) outlines the State's general principles in relation to the management and protection of archaeological heritage. This document outlines that avoidance of developmental impacts on archaeological heritage and preservation in situ of archaeological sites and monuments are always the preferred option. When a site, or part of a site, has to be removed due to development, then preservation by record must be undertaken, i.e. through excavation and recording.

Offaly County Council recognises the value and significance of the county's archaeological heritage, and the importance of fostering a greater public appreciation of this heritage. Through policies and objectives contained in the Offaly County Development Plan (2014-2020), they seek to conserve, raise awareness and promote enjoyment of all aspects of the built, natural and cultural heritage of the county. Stated policies and objectives include:

- AAHP-04 It is Council policy to apply the following principles to the archaeological heritage:
  - To facilitate appropriate guidance in relation to the protection of the county's archaeological heritage.
  - To promote public awareness of the rich archaeological heritage in this area.
  - To protect and enhance archaeological monuments and their settings and Zones of Archaeological Potential.
- AAHP-07 It is policy of the Council to promote awareness of, and access to, the archaeological inheritance of Offaly.
- AAHP-08 It is Council policy to ensure that development in the immediate vicinity of a recorded monument is sensitively sited and designed so that it does not significantly detract from the monument. Where upstanding remains exist, a visual impact assessment may be required.
- AAHP-09 It is Council policy to inform and seek guidance from the National Museum of Ireland if an unrecorded archaeological object is discovered, or the National Monuments Service of the Department of Arts, Heritage and the Gaeltacht in the case of the discovery of an unrecorded archaeological site, in accordance with National Monuments legislation.
- AAHP-10 It is Council policy to ensure that full consideration is given to the protection of archaeological heritage when undertaking, approving or authorising development in order to avoid unnecessary conflict between development and the protection of the archaeological heritage.
- AAHP-11 It is Council policy to ensure that all development proposals affecting sites specified in the Record of Monuments and Places or Zones of Archaeological Potential are referred to the prescribed bodies (as set out in the Planning and Development Act 2000, as amended) and to have regard to the advice and recommendations of the prescribed bodies in relation to undertaking, approving or authorising development.
- AAHP-12 It is Council policy to ensure that when an unrecorded archaeological object or site is discovered, any works that threaten the object or site are immediately suspended and that the appropriate Government agency is informed.
- AAHP-13 It is Council policy to protect historical burial grounds within Offaly and encourage their maintenance in accordance with conservation principles.
- AAHP-14 It is Council policy to facilitate appropriate guidance in relation to the protection of the archaeological heritage in the area covered by the plan.

- AAHP-17 It is Council policy to protect archaeological sites and monuments, underwater archaeology, and archaeological objects, which are listed in the Record of Monuments and Places, and to seek their preservation in situ (or at a minimum, preservation by record) through the planning process. It is Council policy to seek to protect important archaeological landscapes from inappropriate development.
- AAHO-02 It is an objective of the Council to protect all structures listed in the Record of Protected Structures, that are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest throughout the county.
- AAHO-04 It is an objective of the Council to secure the protection (i.e. preservation in situ or at a minimum protection by record) of all archaeological monuments included in the Record of Monuments and Places as established under Section 12 of the National Monuments (Amendment) Act 1994, and their setting.
- AAHO-05 It is an objective of the Council to protect and preserve archaeological sites and their settings discovered since the publication of the Record of Monuments and Places and the publication of the Urban Archaeology Survey.

In the production of this Environmental Impact Assessment report, guidance was sought from relevant publications. These include but are not limited to:

- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018) (Department of Housing, Planning and Local Government)
- Guidelines on the information to be contained in environmental impact assessment reports, EPA, 2017 (Draft)
- EIA Directive 2014/EU/52
- Advice notes on current practice in the preparation of Environmental Impact Statements, EPA, 2003.
- Environmental Impact Assessment (EIA), Guidance for Consent Authorities Regarding Sub-Threshold Development (DoEHLG 2003).
- Development Management Guidelines (DoEHLG, 2007).
- Guidelines on the information to be contained in Environmental Impact Statements, EPA, 2002

### **13.3 Receiving Environment**

#### **13.3.1 Brief historical & archaeological background**

The site lies less than 1.5km south-east of the centre of Tullamore. Tullamore lies in the ancient district of *Fear Ceall*, translating as ‘men of the woods’ or ‘men of the churches’ and, in the Early Medieval period there were numerous monastic centres in the wider area, including Durrow, Clonmacnoise, Birr and Lynally (Byrne 1995). The parish originally formed part of the lands of the abbey of Durrow prior to the Dissolution of 1534 (Lewis 1837). The district was acquired by the Moore family in 1620, although the family continued to reside at Croghan Castle until the early 1700’s. It was around this time that they secured a barrack to house 100 foot soldiers in 1716, which provided the impetus for expansion of the town. Following the death of Charles Moore, 1<sup>st</sup> Earl of Charleville in 1764, his estates including the lands at Tullamore passed to his the Bury family, who oversaw the development of the town including the attainment of County town status in 1833, replacing Daingean. The Grand Canal linked Tullamore to Dublin in 1798 and the county jail was built in 1826, followed by the courthouse in 1835. The earldom of Charleville was extinguished in 1874 and thereafter, merchants and farmers came to prominence with malting, distilling, stone quarrying and distribution as the main sources of employment in the area (Byrne 1995).

13.3.2 Record of Monuments & Places

The Record of Monuments and Places (RMP) is a statutory inventory of archaeological sites protected under the National Monuments Acts 1930-2004 (Section 12, 1994 Act), compiled and maintained by the Archaeological Survey of Ireland (ASI). The inventory concentrates on pre-1700 AD sites and is based on a previous inventory known as the Sites and Monuments Record (SMR) which does not have legal protection or status (see [www.archaeology.ie](http://www.archaeology.ie)). There are no recorded monuments located within the application area. The closest recorded site (OF017-041) is located c. 220m to the east and consists of a metalworking site (of unspecified date) recorded along the route of the N52 Tullamore Bypass. A ringfort (OF017-010) located c. 340m to the NE of the subject site is indicative of early medieval (AD 400-1200) settlement in the surrounding landscape (Figure 13.2; Table 13.1).

*Table 13.1: Archaeological sites within 1km of the proposed development*

SMR No	Class	Townland	ITM	Distance to site
OF017-009	Redundant record	Tullamore	634579, 724745	980 m to NW
<p>The identification of a 'habitation site' at this location (listed in the SMR (1988) was based on a survey report by Oliver Davies in 1942 who recorded: 'On the sides of the path leading up to the church on S.W. which is the steepest and highest end I found that the natural very fine sand (on loamy clay), interspersed with streaks of lime deposit, is overlain with about 18 inches of humus. At about 6 inches above the till I found pottery fragments and very occasional pieces of charcoal. There was no definite layer, and any finds at this level would have slipped down from a habitation site on top of the hill where there is a wide platform S.W. of the church.' (copy of ITA Survey 1942, SMR file). The church is nineteenth century in date, has no graveyard attached and there was no earlier church located on top of this hill. Archaeological testing in 2004 (licence no. 04E0065) and 2006 (licence no. 05E1198) revealed no evidence for this 'habitation site' (Delaney 2007; Sullivan 2008). An examination of the 'pottery' fragments in the National Museum of Ireland has identified them as 'in fact, mortar or plaster and probably cement-based' (pers. comm. A. Halpin, 8 May 2015). There is no evidential base to support the identification of this site as a monument.</p> <p>Compiled by: Paul Walsh; Date of upload: 8 May 2015</p>				
OF017-010	Ringfort-rath	Cloncollog	635928, 723647	340 m to NE
<p>Located on high ground with extensive views in all directions. Poorly preserved oval shaped enclosure (74m E-W by 54m N-S) enclosed by earthen bank (Wth 3 - 1m, int. H 1.5m), fosse (Wth 2; int. H 1.5m) and poorly preserved external bank visible at N only. No entrance feature visible. Possible ringfort.</p> <p>The above description is derived from the published 'Archaeological Inventory of County Offaly' (Dublin: Stationery Office, 1997). In certain instances the entries have been revised and updated in the light of recent research. Date of upload: 23 May 2011</p>				
OF017-041	Metalworking site	Cloncollog	635832, 732492	220 m to E
<p>Cloncollog 2 is located approximately 2.5km east-south-east of Tullamore town centre. The pasture field was irregular in plan and sloped gently from north-east to south-west. A pit was identified (Context 006) in Trench 26 c. 375m from the south-western end of the centre-line trench and was excavated by Linda Hegarty of Headland Archaeology under licence No. E2850 in February 2007. This pit was situated 150m north-east of the building recorded as Cloncollog 1 (see No. 1450 above). The pit was circular in plan measuring 0.45m in diameter and 0.38m in depth. It had sharp breaks of slope on the top with near vertical sides. The base was flat with sharp breaks of slope. Around the surface and sides of the pit was between 0.05 and 0.1m of oxidised clay, suggesting intense in situ heat. It contained two fills. The primary fill consisted of loose black/brown silt with approximately 50% charcoal inclusions. Lumps of highly vitrified slag/conglomerated material and solid metal material (non-magnetic) were identified throughout this fill. This fill was 0.2m deep and covered the base of the pit. Overlying this fill was moderately compact grey/brown silt with approximately 15–20%</p>				

SMR No	Class	Townland	ITM	Distance to site
charcoal inclusions. Lumps of highly vitrified slag/conglomerated material were identified around the edges of this fill, which reached a depth of 0.2m. Due to the high archaeological content of this feature an additional trench (26a) was stripped of topsoil. It was excavated south-west of pit (006) measuring 17.6m, running parallel with the centre-line trench and connecting with Trench 25. Nothing of further archaeological significance was identified (Bennett 2010, 400).				
Compiled by Caimin O'Brien				

### 13.3.3 Topographical Files

The National Museum of Ireland Topographical Files is the national archive of all known antiquities recorded by the National Museum listed by county and townland/ street. These files relate primarily to artefacts but also include references to monuments and contain a unique archive of records of previous archaeological excavations. The Museum files present an accurate catalogue of objects reported to that institution from 1928. A basic search of the NMI finds database was undertaken by staff of the Irish Antiquities division of the NMI on behalf of Archer Heritage Planning. The townlands of Clonminch, Gayfield, Cloncollog, Meelaghans, Cloncon, Derrybeg, Derrygolan, Ballard and Spollanstown were searched. There are two bronze axeheads recorded in Clonminch townland. There is no further information available on these artefacts, which are presumed to be indicative of Bronze Age activity. The only other find recorded in the vicinity of the site is a leather object retrieved from a bog in Ballard townland. Details of stray finds are listed below in Table 13.2.

*Table 13.2: Archaeological stray finds in the vicinity of the site*

Location	Museum No.	Description
Clonminch	1991:65	Bronze Axehead
Clonminch	1991:66	Bronze Axehead
Ballard	2017:108	Leather object found in bog

### 13.3.4 Cartographic Sources

Analysis of historic mapping can show human impact on landscape over a prolonged period. Large collections of historical maps (pre- and early Ordnance Survey maps as well as estate or private maps) are held at the Glucksman Map Library, Trinity College and other sources (UCD Library, Ordnance Survey Ireland, local libraries and published material). The development of the site and its vicinity recorded through nineteenth and twentieth century cartography are described in Table 13.3 below (Figure 13.3). No potential archaeological features were recorded within the subject site.

*Table 13.3: Cartographic sources relating to the site*

Map	Date	Description
Historic 6inch	1838	The site is comprised of more numerous smaller fields than currently exist and there are several buildings along the east/west running laneway that bisects the site as well as another cluster in the northern part.
Historic 25inch	1909-10	Some consolidation of the field pattern has taken place with the majority of buildings noted in the earlier map now no longer extant.

### 13.3.5 Aerial Photography

Aerial photography (or other forms of remote sensing) may reveal certain archaeological features or sites (earthworks, crop marks, soil marks) that for many reasons may not be appreciated at ground level. Online orthostatic photographs of the site were examined (Ordnance Survey Ireland 1995, 2000 & 2005; Google/Bing Maps 2018). No potential archaeological sites were identified within the subject site. However, a potential earth-cut enclosure was identified to the east of the site (Figure 13.4; Table 13.3).

*Table 13.4: Aerial Photographs*

Aerial Photograph	Date	Description
OSi	1995	Black and white photograph. The site is shown in its current layout with some relict field boundaries visible. The housing estates to the north-west are only partially developed with the N52 yet to be constructed.
OSi	2005	The housing estates to the north-west are in their current form, otherwise no change.
OSi Digital Globe	2011-2013	Some relict field boundaries are visible and the N52 has been constructed along the south-eastern boundary. A potential earth-cut enclosure noted in Greenfield to the east of and outside the subject site.
Google Earth	2019	No change
Google Earth Pro	2018	No change

### 13.3.6 Previous Archaeological Excavations

The Excavation Bulletin is a database of summary accounts of archaeological excavations in Ireland and Northern Ireland from 1970 to 2008. Summaries relating to archaeological excavations undertaken by the National Roads Authority are also available on-line and were consulted for any adjacent sites. Reports on licensed archaeological works are also held by the Archive Unit of the National Monuments Section. There were no previous archaeological excavations within the subject site but several have taken place within the wider landscape (see Table 13.5). The closest excavations which yielded archaeological material were an isolated pit of unspecified date recorded in Clonminch Townland and a metalworking site at Cloncollog 2.

*Table 13.5: Previous archaeological investigations in the wider area*

Excavation No.	RMP	OS Ref	Location	Ex. Bulletin Ref.	Author
99E0152	N/A	629385, 725039	Tullamore/Ballycowan	1999:751	Rob Lynch
Monitoring of SI works for Tullamore Water Supply Improvements. No archaeology found.					
A033, E2493	N/A	633855, 725319	Tullamore	2006:1701	Tom Janes
Test excavations carried out in advance of the proposed N52 Tullamore bypass. Thirteen areas of					

Excavation No.	RMP	OS Ref	Location	Ex. Bulletin Ref.	Author
archaeological potential were identified in the testing. Five of these areas were shown to comprise isolated small features and consequently were fully excavated.					
A033; E2849	N/A	635743, 723279	Clonminch	2007:1450	Linda Hegarty
Cloncollog 1 was excavated in February 2007 in advance of the N52 Tullamore Bypass. The rubble footings of a building (Context 009) were identified 150m south-west of a pit at Cloncollog 2 (see No. 1451 below). Context 009 comprised the corner footing stones of a stone structure. The remains of the house identified consisted of a right-angled corner with both lengths measuring 2.5m. The cut for the foundation was c. 0.45m in width and consisted of moderately compact mid-dark-brown silty clay with inclusions of large sub-angular stones. A house is marked on the first-edition OS map of 1838; it is most likely to be this house identified in the testing.					
A033; E2850	N/A	635793, 723329	Clonminch	2007:1451	Linda Hegarty
Cloncollog 2 is located approximately 2.5km east-south-east of Tullamore town centre. A pit was identified (Context 006) in Trench 26 c. 375m from the south-western end of the centre-line trench and was excavated in February 2007. This pit was situated 150m north-east of the building recorded as Cloncollog 1 (see No. 1450 above). The pit was circular in plan measuring 0.45m in diameter and 0.38m in depth. It had sharp breaks of slope on the top with near vertical sides. The base was flat with sharp breaks of slope. Around the surface and sides of the pit was between 0.05 and 0.1m of oxidised clay, suggesting intense in situ heat. It contained two fills. The primary fill consisted of loose black/brown silt with approximately 50% charcoal inclusions. Lumps of highly vitrified slag/conglomerated material and solid metal material (non-magnetic) were identified throughout this fill. This fill was 0.2m deep and covered the base of the pit. Overlying this fill was moderately compact grey/brown silt with approximately 15–20% charcoal inclusions. Lumps of highly vitrified slag/conglomerated material were identified around the edges of this fill, which reached a depth of 0.2m.					
A033; E2851	N/A	634118, 722682	Clonminch	2007:1454	Linda Hegarty
Clonminch 1 is located c. 1.5km south of Tullamore in gently undulating farmland under pasture at the time of testing. A spread of charcoal-rich silt and oxidised clay was identified 47m from the western end of the centre-line trench and was excavated in February 2007. This was a subcircular deposit of compact charcoal-rich sandy silt with frequent inclusions of burnt clay and an area of oxidisation at its centre. It measured 1.5m east-west by 1.4m and was 0.05m deep. An area measuring 4m by 4m was opened around the feature but no further archaeological deposits were identified. A small sample was recovered for environmental analysis.					
E003818	N/A	632654, 722407	Ballard to Clonminch	2008:101	Ross MacLeod
Peatland monitoring was undertaken on behalf of Offaly County Council as part of the advance archaeological works contract for the N52 Tullamore bypass. The work was in the townlands of Ballard to Clonminch, Co. Offaly, 0.25km south of Tullamore town. Monitoring took place on 1.25km stretch of peatland which had previously been under commercial forestry. No archaeological features or deposits were identified during the course of this investigation.					
12E0181	N/A	633841, 723059	Clonminch	2012:499	Tony Cummins
Test trenching at the site of a proposed distillery and warehouse complex at Clonminch, Tullamore was undertaken as part of an EIS for the development. Nothing of archaeological significance was noted.					

### 13.3.7 Architectural Heritage

Local Authorities have a statutory responsibility to safeguard architectural heritage in accordance with Part IV of the Planning and Development Act 2000. Under S.51 (1), a Council must compile a Record of Protected Structures (RPS), which lists all structures which are of special *architectural, historical, archaeological, artistic, cultural, scientific, social or technical* interest. The protection,

unless otherwise stated, includes the exterior and interior of the structure, lands lying within its curtilage (boundary), other structures and their interiors within the curtilage, plus all fixtures and fittings which form part of the interior or exterior of any of these structures. Buildings can be added to, or deleted from the RPS at any time, though generally this occurs when the development plan is being reviewed.

The National Inventory of Architectural Heritage (NIAH) was established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. Its purpose 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. It is intended to provide a basis for recommendations of the Minister of Culture, Heritage and the Gaeltacht (DCHG) to Local Authorities for the inclusion of particular structures in Records of Protected Structures (RPS).

There are no Protected Structures or structures recorded on the NIAH located within the subject site. St Catherine's Cemetery, Clonminch is a Protected Structure; Offaly County Council RPS no. 33-08. This cemetery lies c. 500m to the south of the Clonminch site beyond the N52 road. There are mature hedgerows and road infrastructure, *i.e.* signage and sound-barrier fencing, associated with the N52/R443 roundabout between the cemetery and the Clonminch site. There would be no significant impact from development on this Protected Structure. Additional structures recorded on the NIAH in the immediate environs of the Clonminch site include Violet Cottage, Reg. No. 14917018; and St. Joseph's Cemetery, Reg. No. 14917017. The details are shown below in Table 13.6.

*Table 13.6: Protected Structures in vicinity of proposed development*

Reg. No.	Address	Description	Date	Distance from site
RPS 33-08  NIAH 14917027	St. Catherine's Cemetery, Clonminch	Saint Catherine's Cemetery at Clonminch, opened in 1852, is bounded by random rubble wall with tooled capping and cast-iron gates. Varied grave markers and obelisk stone monuments and cast-iron railings throughout graveyard.	1850- 1860	500m to south
NIAH 14917018	Violet Cottage, Clonminch	Detached three-bay single-storey house, built c.1860, with attic, extension and outbuildings to rear. Pitched slate roof with terracotta ridge tiles, rendered chimneystacks, gable finials and bargeboards to gable eaves, half dormer windows with bargeboards and timber finial. Timber sash windows with stone sills and flat-headed arch. Red brick above windows. Round-headed door opening with red brick arch surround, timber spoked glazed fanlight and replacement timber double doors. Random rubble front wall with random rubble gate piers wrought-iron railing to driveway and wrought-iron pedestrian gate.	1840- 1880	80m to NW



Reg. No.	Address	Description	Date	Distance from site
NIAH 14917017	St. Joseph's Cemetery, Spollanstown, Tullamore	Cemetery, established c.1860, accessed by gates. Ruled-and-lined render to walls with painted capstones. Pair of tooled limestone gate piers capped with stone crosses on limestone plinth. Cast- and wrought-iron gates. Pedestrian gate to north. Flat, recumbent and standing grave markers. Central cross monument and a large number of high cross style grave markers.	1840- 1880	750m to north- west

### 13.3.8 Toponyms

Research into a site or areas place name (or toponym) can provide information relating to an areas heritage or previous land use. Many townland names were anglicised by the time the Ordnance Survey (OS) began in the 1830s and when townland names were standardised in the Townland Index (1851).

- Clonminch translates as *Cluain na mBinnse* meaning Plain of the Benches. *Binnse móna* are benches of turf for cutting and perhaps indicates an area where turf was harvested in the past.
- Gayfield gets its title from a personal name.
- Cloncollog translates as *Cluain Colg* meaning meadow or pasture of the sword.

Details were taken from [www.logainm.ie](http://www.logainm.ie).

### 13.3.9 Walkover Survey

The site was visited by Liam Coen of Archer Heritage Planning Ltd on 30th Nov 2018 in dry, overcast conditions (Plates 13.2-13.2). The site is situated in a generally flat, gently undulating landscape and currently set out in arable fields. The field boundaries comprise mature hedgerows. The remains of a former laneway extend eastwards into the site from the R443 road and is now overgrown, an informal laneway extends northwards from the south of the site. The site topography was not indicative of any areas with potential earthworks or buried archaeological sites/deposits. No areas of archaeological potential were identified in the walkover survey.

### 13.3.10 Geophysical Survey

Geophysical survey was undertaken across the site under detection device consent 19R0209 issued to J Leigh by the Department of Culture, Heritage and the Gaeltacht (Leigh 2019; see Figure 13.5). Some responses of potential interest were recorded in the northern half of the application area. A small area indicative of a burnt spread of material was located towards the northwest of the subject site. Several linear responses and trends forming a vague rectilinear pattern were also recorded. Although it is possible these may represent former field divisions, it is also possible that they represent archaeological ditch-type features. Further linear responses and trends within the data most likely represent former field divisions and are considered most likely agricultural in origin. Modern magnetic disturbance in the south-eastern field results from modern material that has been ploughed through

the field. Although former field divisions are discernible in the magnetic disturbance, more subtle responses of potential interest may be masked and remain undetected.

#### 13.3.11 Phase I Test Excavation

Test excavation was undertaken within a large part the subject site in October 2019 in mixed weather conditions (O'Connell 2019). A total of 43 test trenches with a combined length of 4135 linear metres were excavated within the site (8% of the available area, 92447 sq m; see Figure 13.6).

Test trench locations were agreed in advance with the Department of Culture Heritage and the Gaeltacht in consultation with the National Museum of Ireland. The fieldwork was carried out under licence 19E0658 issued to Aidan O'Connell. Trenching sought to test geophysical anomalies and the general archaeological potential of the site. All test trenches were excavated with the aid of a 14 tonne mechanical excavator equipped with a toothless grading bucket and under constant archaeological supervision. Trenches were excavated as far as the upper subsoil surface or the top of the upper archaeological horizon. Trenches were backfilled following completion of archaeological works.

A single archaeological site was recorded in the course of test excavation. This was a ploughed-out *fulacht fia* located at the northwest of the site in Trenches 1-3, which was initially identified in the preceding geophysical survey (Figure 13.6-13.7; Plates 13.3-13.4). Within the tested area it had overall dimensions of 15m N/S by 10m E/W, but extended to the east under an overhead powerline which hampered further trenching beyond the eastern side of Trench 1. There were six separate features associated with the *fulacht fia*:

- F1 was an area of burnt mound material located in Trench 1. It had dimensions of 10.5m N/S x 2.7m E/W and extended beyond both sides of Trench 1.
- F2 was an area of burnt mound material located at the intersection of Trench 2 and Trench 3. It had dimensions of 4.7m E/W x 1.9m N/S and may mark the location of one or more pits or troughs.
- F3 was the remains of a possible pit located towards the south of Trench 2. It comprised an area of mid-brown peaty silty clay with dimensions of 3.7m N/S x 1.8m E/W. It was cut at the north by a modern land drain.
- F4 was a possible pit or trough filled with burnt mound material located in Trench 2 with dimensions of 2.9m N/S x 1.8m E/W.
- F5 was the possible remains of a pit located at the north of Trench 2. It comprised an area of mid-brown peaty silty clay with dimensions of 3.7m N/S x 1.8m E/W.
- F6 was a thin spread of charcoal enriched staining on the subsoil surface in Trench 3 with dimensions of 2m E/W x 1.7m N/S.

A final potential archaeological feature (F7) was recorded towards the western end of Trench 3 and consisted of a mid-brown peaty silty clay with dimensions of 2.7m E/W x 1.8m N/S. This may be the remains of a pit, cut on its eastern side by a modern land drain.

Further geophysical anomalies throughout the remainder of the site were interpreted as variations in the underlying geology with the exception of a field boundary ditch recorded in Trenches 33-37. No further archaeological features were recorded.

#### 13.3.12 Phase II Test Excavation

Three areas of the site were not subject to Geophysical survey or Phase I Test Excavations. These were the northern boundary of the site, the area for the provision of piped services/pumping station running northwards from the site and a portion of land to the NE of the site. These areas comprised approximately 2ha (see Figure 13.8). Consequently, a second phase of test excavation was undertaken in July 2020 in order to assess the archaeological potential of these areas. This work was undertaken under licence (20E0343) issued to Liam Coen by the Department of Culture Heritage and the Gaeltacht in consultation with the National Museum of Ireland. A total of 9 test trenches with a combined length of 566 linear metres were excavated within the site (Figure 13.8; Plates 13.7-13.10). Trenches were targeted on the footprint of the proposed development at locations agreed in advance with the Department of Culture Heritage and the Gaeltacht in consultation with the National Museum of Ireland. All test trenches were excavated with the aid of a 14 tonne mechanical excavator equipped with a toothless grading bucket and under constant archaeological supervision. Trenches were excavated as far as the upper subsoil surface or the top of the upper archaeological horizon. Trenches were backfilled following completion of archaeological works. A single archaeological site was recorded in the course of test excavation. This was a ploughed-out *fulacht fia* (burnt spread) located at the east of the site in Trenches 7-8a (Figure 13.8-13.8; Plates 13.7-13.8). Within the tested area it had overall dimensions of 7m N/S x 9m E/W. It consisted of a thin spread of charcoal enriched silty clay with frequent burnt stone inclusions.

#### 13.3.13 Summary of Baseline Data

This Archaeological Assessment report sought to identify and describe known and potential archaeological or cultural heritage constraints within and/or immediately adjacent to a proposed development site at Clonminch, Tullamore, Co. Offaly. The assessment took the form of desktop study, geophysical survey and archaeological test trenching. The following factors were identified in the course of the assessment (see Figure 13.10):

- The site is large in scale occupying an area of roughly 10.8 Ha nett development area.
- There are no recorded monuments situated within the site boundaries.
- No new potential archaeological sites were noted on examination of aerial photo and cartographic sources within the subject site.
- A potential enclosure was identified c. 250m to the east of the subject site.
- There are no Protected Structures within or adjacent to the site.
- No archaeological excavations have been undertaken previously within the subject site.
- Previous excavations in the wider landscape have uncovered small-scale isolated archaeological sites at Clonminch 1 & Cloncollog 2.
- Numerous anomalies of archaeological potential were recorded in the course of geophysical survey, including a probable *fulacht fia* at the northwest of the subject site.

- The remains of a ploughed out *fulacht fia* were recorded in the course of Phase I Test Excavation at the northwest of the subject site (hereafter *Fulacht Fia 1*).
- The remains of a second ploughed out *fulacht fia* were recorded in the course of Phase II Test Excavation at the northeast of the subject site (hereafter *Fulacht Fia 2*).

#### 13.3.14 Assessment of significance

The 2 spreads of fire-cracked stones recorded at the subject site are interpreted in advance of full excavation/radiocarbon dating as the remains of ploughed out *fulachtaí fia* of probable Bronze Age (2500-800 BC) date. This assessment of significance (see Table 5) follows the criteria listed in 'Advice Notes on Current Practice in the preparation of Environmental Impact Statements' (EPA 2003) and Appendix 2 of the Guidelines for the Assessment of Archaeological Heritage Impact of National Road Schemes (NRA. 2006, 51).

*Table 13.7: Assessment of significance*

<b>Status</b>	The sites are not listed in the RMP and consequently have no specific statutory protection.
<b>Rarity</b>	The sites are currently interpreted as <i>fulachtaí fia</i> . Numerous comparable sites are listed in the Sites and Monuments Record and numerous comparable sites have been excavated in advance of development works.
<b>Visibility</b>	The sites have no surface expression.
<b>Fragility</b>	The landowner has been made aware of the location, existence and significance of the site. There is no immediate threat to the site.
<b>Amenity Value</b>	n/a
<b>Local Importance</b>	The sites have potential to shed light on prehistoric settlement patterns in the area and may be broadly contemporary with the bronze axeheads recorded in the topographical files.
<b>Archaeological potential/ predicted remains</b>	The predicted remains at <i>Fulacht Fia 1</i> comprise earth-cut pits/troughs with associated burnt mound material (heat-shattered stone in a matrix of charcoal rich clay). In some instances, troughs can be waterlogged and can be lined with timber/wattle or stone. The predicted remains at <i>Fulacht Fia 2</i> comprise a thin spread of burnt mound material. No earth-cut pits/troughs have been identified yet at this site.
<b>Documentary References</b>	n/a

Following this examination of the criteria, it is suggested that the identified *fulachtaí fia* are of moderate significance on a local scale.

#### 13.4 Characteristics of the Proposed Development

The proposed development will consist of the provision of residential houses, apartments and a crèche, neighbourhood/medical centre with all associated site works (Figure 13.8). A detailed description of the proposed development is provided in Chapter 3 of this EIAR.

#### 13.5 Potential Impact of the Proposed Development

The greatest threat to unrecorded, buried archaeological sites/ features occur during the construction stage and include all ground disturbance works undertaken at this stage (excavations and other groundworks including the provision of access roads and service trenches), movement of machines and

storage of material in sensitive areas. In the absence of the mitigation measures described below, significant likely impacts on archaeology and heritage would be direct, negative and permanent.

#### 13.5.1 Cumulative Impacts

Should development proceed at this location, it is anticipated (see below; Section 13.6 Mitigation Measures) that archaeological monitoring of groundworks will be undertaken. Should additional archaeological sites or features be recorded in the course of these works significant cumulative impacts on archaeology and heritage from the proposed development would be direct, negative and permanent in the absence of additional mitigation measures.

Should future developments be undertaken at adjacent Greenfield areas, there may be cumulative impacts on archaeology and heritage should buried archaeological sites or features be recorded at these locations.

#### 13.5.2 Interactions between impacts on different factors

Should development proceed at this location, it is anticipated (see below; Section 13.6 Mitigation Measures) that archaeological monitoring of groundworks will be undertaken. Should additional archaeological sites or features be recorded in the course of these works further mitigation measures will be required in order to offset the impact of development works. In the event that archaeological features are preserved in situ under green space, this will have an effect on landscaping design/planting and maintenance.

### 13.6 Mitigation Measures

Mitigation measures shall be undertaken as directed by the Department of Housing, Local Government and Heritage (DHLGH, previously DCHG) in compliance with national policy guidelines and statutory provisions for the protection of archaeology and cultural heritage.

#### RECOMMENDED MITIGATION MEASURE 1:

Should development proceed at this location, it is recommended that the 2 *fulachtaí fia* identified in the course of advance archaeological assessment be fully recorded and excavated under licence to the Department of Housing, Local Government and Heritage.

#### RECOMMENDED MITIGATION MEASURE 2:

Should development proceed at this location, it is recommended that groundworks across the remainder of the site be monitored by a suitably qualified archaeologist.

### 13.7 Predicted Impacts of the Proposed Development

The predicted impacts of the proposed development on archaeology and heritage will be direct, negative and permanent. However, it is anticipated that these impacts will be mitigated by full implementation of the measures described in Section 13.6 (above).

#### 13.7.1 Worst Case Scenario

Should development proceed at this location in the absence of the mitigation measures described above, the impact on archaeology and cultural heritage would be profound, direct, negative and permanent.

### 13.8 **Residual Impacts**

It is not currently anticipated that there will be any residual impacts on archaeological features or sites encountered as it is understood that any archaeology uncovered will be resolved in advance of the construction stage of the proposed redevelopment. However, should further buried archaeological sites or features be recorded in the course of future archaeological monitoring and require preservation-in-situ, there may be a negative impact from human traffic degrading the archaeological feature. However, remaining topsoil will provide a protective buffer rendering this potential impact imperceptible.

### 13.9 **Monitoring**

It is proposed that all future archaeological works be carried out in accordance with the requirements of the DHLGH and the planning authority and under licence to the DHLGH in consultation with the National Museum of Ireland.

### 13.10 **Difficulties Encountered**

No difficulties were encountered in the course of the project.

### 13.11 **References**

#### 13.11.1 **Bibliography**

Byrne, M. 1995 'Tullamore', in A Simms & J H Andrews (eds) *More Irish Country Towns*. Mercier, Dublin.

Leigh, J 2019 'Geophysical survey report; Clonminch, Tullamore, Co. Offaly. Detection Device Consent 19R0209'. Unpublished report prepared for Archer Heritage Planning on behalf of Bennett Properties.

Lewis, S. 1837 *A topographical dictionary of Ireland*, London

O'Connell, A. 2019 'Test Excavation Report; Clonminch Masterplan, Tullamore, Co. Offaly; Archaeological Assessment. Licence 19E0658'.

#### 13.11.2 **Web References**

Online Excavations bulletin [www.excavations.ie](http://www.excavations.ie) [accessed 04<sup>th</sup> May 2020]

Aerial Photography <http://map.geohive.ie/mapviewer.html> [accessed 05<sup>th</sup> May 2020]

Online Archaeological Survey of Ireland [www.archaeology.ie](http://www.archaeology.ie) [accessed 05<sup>th</sup> May 2020]

Architectural Heritage [www.buidingsofireland.ie](http://www.buidingsofireland.ie) [accessed 06<sup>th</sup> May 2020]

Offaly County Development Plan [www.offaly.ie/eng/Services/Planning/Development-Plans/County-Development-Plan-2014-2020](http://www.offaly.ie/eng/Services/Planning/Development-Plans/County-Development-Plan-2014-2020) [accessed 07<sup>th</sup> May 2020]

### 13.12 **Appendices**

1. Geophysical Survey Report.

2. Phase I Test Excavation Report.
3. Phase II Test Excavation Report.