

CULTURAL HERITAGE & ARCHAEOLOGY 11.0

11.1 Introduction

Golder Associates Ireland Limited ('Golder') has been commissioned by GCHL ('the Client') to produce an Environmental Impact Assessment Report (EIAR). This Cultural Heritage and Archaeology chapter of the EIAR has been prepared for Golder by Charles Mount, and has been undertaken to assess the significant effects, if any, on the cultural heritage, archaeology and architecture that can reasonably be expected to occur as a result of the proposed restoration works at a former sand and gravel pit (as described in Chapter 2.0) in the townland of Ballinderry, Co. Kildare ('the Site').

Outline of Scope of Works 11.2

11.2.1 **Methodology**

This study, which complies with the requirements of Directive EIA 2014/52/EU, is an assessment of the known and potential cultural heritage resource within 1 km of the Site and includes all the information that may reasonably be required to establish a robust and reasoned conclusion on the significant effects of the project on cultural heritage and archaeology, taking into account current knowledge and methods of assessment. It consists of a collation of existing written and graphic information in order to identify the likely context, character, significance and sensitivity of the known or potential cultural heritage, archaeological and structural resource using an appropriate methodology (EPA 2002 and 2003).

The study involved detailed investigation of the cultural heritage, archaeological, architectural and historical The area was examined using information from:
The Kildare County Development Plan 2017 23 me

- The Record of Monuments and Places (RMP) for County Kildare;
- The Sites and Monuments Record;
- The National Inventory of Architectural Heritage;
- Aerial photographs;
- Previous investigations;
- Cartographic sources;
- Documentary sources; and
- A field assessment was carried out on the 22 March 2018 to identify and assess any unknown archaeological sites, structures and previously unrecorded features and possible finds within the application area.

The assessment was prepared by Dr. Charles Mount who has more than twenty-five years of cultural heritage assessment experience. He holds B.A., M.A. and Ph.D. degrees in archaeology as well as a professional diploma in EIA and SEA Management and is a member of the Institute of Archaeologists of Ireland and a member of the Discovery Programme.

11.3 **Existing Environment**

11.3.1 The Landscape

The proposed application area is located in the north-west of Co. Kildare, in the townland of Ballinderry, on OS Six Inch Sheet Kildare No. 3, ca. 4.5 km north-west of the town of Carbury and directly west of the Carbury to Broadford road.





11.3.2 Historical and archaeological background

The following is a brief summary of the archaeological and historical development of the study area and the main types of sites and monuments that are known from the surrounding landscape. It is intended to place the types of sites and monuments in the study area in context. The proposed application area is located in the townland of Ballinderry, Co. Kildare, in the Barony of Carbury and the civil parish of Mylerstown.

11.3.3 Prehistoric period

To date, only one prehistoric feature has been identified in the entire study area; a pit containing Bronze Age pottery in Ballinderry townland (Excavation License No. 05E0050).

11.3.4 Early Medieval period

In the Early Medieval period, the study area formed part of the Kingdom of Uí Fáeláin (MacCotter 2008, 174-7). The area known as Cairbre (Carbury) was occupied by the Ua Ciardha (O'Keary) sept from the mid-10th century AD onwards. There are numerous references to the Ua Ciardha in the Annals of the Four Masters, commencing in 952 and ending in 1176. Typically, settlement in the Early Medieval period is indicated by the presence of enclosed farmsteads known as ringforts. There are no ringforts known from the study area, although two levelled enclosures in Calfstown townland could be the remains of ringforts (see Appendix 11.1).

11.3.5 Medieval period

On the death of Diarmait Mac Murchade, King of Leinster, in 1171 his son-in-law Richard fitz Gilbert de Clare claimed the Lordship of Leinster. By the time of his death in 1176, when Leinster passed to King Henry II, the process of sub-infeudation (the granting of lands by lords to their dependents, to be held by feudal tenure) was well under way in much of Leinster. The Ua-Ciardha Lands in the Barony of Carbury were granted by Strongbow to Meiler fitz Henry, who had landed in Bannow, Bay with his uncle Robert fitz Stephen in May 1169 and had assisted in the conquest of Leinster (Otway, Ruthven 1980, 43).

Fitz Henry entered a monastery in 1216 and, as the had no son, his lands reverted to the successor of Strongbow as Earl of Leinster, William Marshall (Otway-Ruthven 1980, 87). Carbury Barony, not including Carbury Castle, passed, in turn, to Marshall's five sons and eventually to his daughter Sibilla and her husband, William Ferrars. Carbury then passed through their daughter, Agnes Ferrers, to her husband, William de Vescy, and then to their son, William de Vesci. In 1297, William de Vesci surrendered Carbury and Kildare to King Edward I. Carbury Castle and the surrounding lands passed through Sibilla Marshall's daughter, Joan, to her husband, John de Mohun (Sweetman 1879, No. 2324).

The process of sub-infeudation is normally associated with the construction of timber castles, known as motte and baileys. These earthwork fortifications were used to house and defend the Norman lords and their retinues while they set about the process of pacifying and organizing their new fiefs. The motte is a raised earth mound, usually artificial and topped with a wooden or stone structure (the bailey). There are no mottes in the study area. Manorialism describes the organisation of the feudal rural economy and society, and is characterised by the vesting of legal and economic power in a lord, supported economically from his own direct landholding and from the obligatory contributions of a legally subject part of the peasant population under his jurisdiction. In Ireland, the Lord's manor house was also often enclosed by a rectangular moat and these sites are referred to as moated sites. They are a useful indicator of Anglo-Norman settlement. There are no moated sites known in the study area. A cemetery, broadly dating to the 12th to 14th centuries, containing 216 burials in a subcircular enclosure was uncovered in the application area in Ballinderry townland in 2005, indicating substantial Medieval occupation in the study area (Halpin 2005a & b).

By the end of 13th century, the Anglo-Normans in Carbury were coming under pressure from the O'Connor Faly sept of Offaly. By 1284, the lands of John de Mohun at Carbury had been "destroyed by the war of the Irish of Offaly" (Sweetman 1879, No. 2324). Mohun and de Vesci were unable to defend Carbury and so, in 1289, Sir Peter Bermingham was ordered to guard the Marches of Kildare from Rathangan to Tethmoy (Edenderry). In 1305 Sir Piers Bermingham was in control of Carrick Castle, located in the south-west of Carbury, and y 1361 the Berminghams had taken over control of Carbury Castle. On the death of Walter Bermingham it passed, under English law, to his sister's husband, Robert Preston.





The Bermingham's refused to accept the loss of Carbury Castle and allied with the O'Connor Faly sept against the Royal Government in Dublin. In response, the Royal Government had to garrison Carbury Castle.

Throughout this period the Berminghams were in rebellion and the barony was the subject of repeated invasions. The Earl of Desmond and the Baron of Delvin invaded Carbury in 1421 and destroyed the crops of Meiler Bermingham (Annals of the Four Masters 1421). Con O'Connor Faly defeated the Earl of Desmond in 1466 and imprisoned him in Carbury Castle (Annals of the Four Masters 1466.13). Carbury Castle was destroyed Hugh Roe O'Donnell in 1475 (Annals of the Four Masters 1475.12).

11.3.6 Post-medieval period

The Down Survey records that Ballinderry townland was held by Daniel Keigan in 1641, but by 1670 had come to Mary Bermingham (http://downsurvey.tcd.ie).

11.4 Building Assessment

11.4.1 Designated structures

The Kildare County Development Plan 2017-23 was examined as part of the baseline study for this chapter of the EIAR. The review established that there are no Protected Structures situated within the proposed application area. There are two buildings listed as Protected Structures in the Kildare County Development Plan situated within the study area (see Table 11.1 and Figure 11.1).

Number	B03-05 0113 2019 01
Structure type	House
Townland	Ballinderry
Designation	Protected Structure
Data source	Kildare County Development Plan 2017-23
Perceived Significance:	Regional Fortune
Type of impact:	None 🔬 👌
Significance & quality of impact	None conserv

Table 11.1: Structures in the study area in the Record of Protected Structures.





Description	surrounds to window openings to front (south) elevation. Replacement 1/1 timber sash windows, ca.1880. Replacement 6/6 timber sash windows, 2002, to front (south) elevation (with fanlight to Venetian window). Round-headed door opening approached by flight of five cut-stone steps having wrought iron railings. Cut-stone Doric doorcase with open-bed pediment over. Timber panelled door. Sidelights. Spoked fanlight. Set back from road in own grounds. Landscaped
	grounds to site. Detached three-bay single- and two-storey rubble stone outbuilding, ca.1760, to north retaining original aspect comprising two-bay single-storey wing with elliptical-headed integral carriageways and single-bay single-storey gabled advanced end bay with half-attic to left. Gable-ended roofs with slate. Clay ridge tiles. Rendered coping to gables. Traces of cast-iron rainwater goods on rendered eaves course. Squared rubble stone walls with
	traces of lime render over. Square-headed window openings (slit-style). Fittings not visible. Pair of elliptical-headed integral carriageways. Rendered voussoirs (probably over red brick construction): Replacement iron gates, ca.1880. Detached four-bay single-storey outbuilding, ca.1760, to north with elliptical- headed integral carriageways. Reroofed, ca.1930. Gable-ended roof.
	Replacement corrugated iron, ca.1930. Iron ridge tiles. Remains of cast-iron rainwater goods on repared eaves course. Square rubble stone walls with traces of lime render over. Series of elliptical-headed integral carriageways. Red brick dressings. Fittings not discerned.
Mitigation proposal	No mitigation required.
Photos:	- ×

Number	B03-08	
Structure type	House	
Townland	Kilglass	
Designation	Protected Structure	
Data source	Kildare County Development Plan 2017-23	
Perceived Significance:	Regional	
Type of impact:	None	
Significance & quality of impact	None	





Description Mitigation proposal	Detached five-bay two-storey rubble stone house with dormer attic, c.1725, possibly over basement on a symmetrical plan retaining some original fenestration. Renovated and part refenestrated, c.1995. Gable-ended roof with slate. Rolled lead ridge tiles. Replacement roughcast, c.1995, to chimney stacks. Rendered coping to gables. Cast-iron rainwater goods on eaves course. Random rubble stone wall to front (south) elevation (possibly original rendered). Replacement roughcast, c.1995, to remainder. Unpainted. Square-headed window openings (Venetian window to centre first floor). Stone sills. Red brick dressings to front (south) elevation (cut-stone surround to Venetian window with keystone). Some original 6/6 timber sash windows. Replacement timber casement windows, c.1995. Square-headed door opening. Moulded cut-stone shouldered doorcase. Timber panelled door. Overlight. Set back from road in own landscaped grounds. Concrete brick cobbled forecourt to front. Detached three-bay single-storey gate lodge, c.1725, to south-east. Extensively renovated and extended, c.1995, comprising single-bay single-storey return to rear to south with three-bay single-storey parallel range to south (forming quasi-double-pile H-shaped plan). Hipped roofs. Replacement slate, c.1995. Rolled lead ridge tiles. Roughcast chimney stacks. Timber eaves. Cast-iron rainwater goods. Replacement roughcast, c.1995, to walls. Unpainted. Square-headed window openings. Stone sills. Replacement timber casement windows, c.1995. Square-headed door opening. Moulded cut-stone doorcase. Replacement timber panelled door, c.1995. Square-headed window opening. Moulded cut-stone doorcase. Replacement panelled door, c.1995. Gateway, c.1725, to south-east comprising pair of cut-stone piers with cut-stone capping having elongated pineapple finials, cast-iron double gates and sections of flanking cast-iron railings on cut-stone plinth wall.
Photos:	- Martinagation required.
1 110103.	and sections of flanking cast-iron failings on cut-stone plinth wall. No mitigation required.





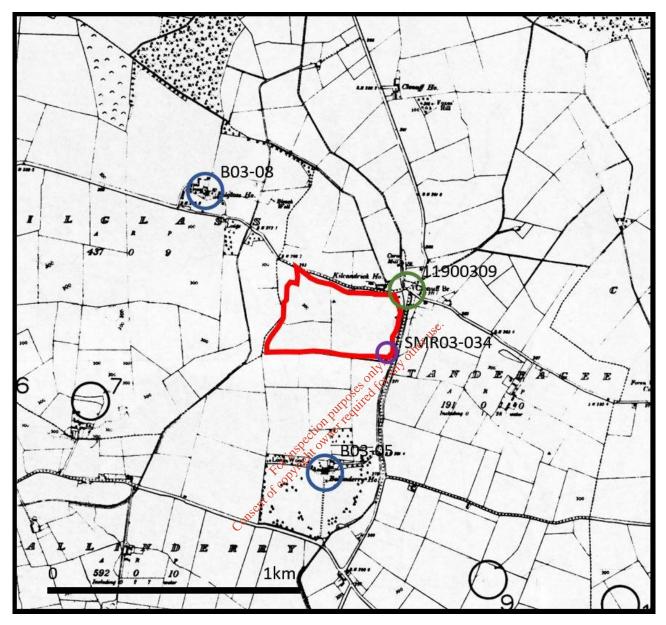


Fig 11.1: Application Site and Identified cultural heritage, archaeological and architectural resources¹

Both Protected Structures are situated approximately 0.45 km distant from the proposed application area. This is considered too far distant to be directly or indirectly impacted by the proposed development.

11.4.2 Non-designated structures

The National Inventory of Architectural Heritage (NIAH), which is maintained by the Dept. of Culture, Heritage and the Gaeltacht, was examined as part of the baseline study for this chapter of the EIAR on 5 March 2018. The review established that there is one structure included in the NIAH (in addition to the Protected Structures recorded above) that is situated within the study area (see Table 11.2 below and Figure 11.1).

Number	11900309
Structure type	Post box

¹ The application area, outlined in red, superimposed on the Record of Monuments and Places map for Co. Kildare. Recorded Monuments are indicated with black circles. Sites in the SMR with purple circles. Protected Structures are indicated with blue circles. Structures in the NIAH are indicated with green circles.





Townland	Tanderagee	
Designation	None	
Data source	National Inventory of Architectural Heritage	
Perceived Significance:	Local	
Type of impact:	None	
Significance & quality of impact	None	
Description	Pier-mounted cast-iron "wall box" post box, extant 1922, with "GR [Georgius Rex]" royal cipher. Set in rendered pier.	
Mitigation proposal	No mitigation required.	
Photos:	-	

The post box is set in a concrete pier on the southern concrete parapet of the Clonuff Bridge, which carries a local road over a mill race. It is situated approximately 50 m to the north-east of the application area and will not be impacted.

11.5 Archaeological Assessment

11.5.1 Recorded monuments

Examination of the Record of Monuments and Places (RMP) for Co. Kildare indicated that there are no Recorded Monument located within the proposed application area (see Fig. 11-1 and Appendix 11.1). There are three Recorded Monuments within the study area. The closest monument to the application area, the site of a burial ground in Kilglass townland (RMP KD003-007---), is situated 0.7 km to the south-west of the application area. All RMP sites in the study area are considered too far distant to be directly or indirectly impacted by the proposals.

11.5.2 Undesignated monuments

Examination of the Sites and Monuments Record (SMR), which is maintained by the Dept. of Culture, Heritage and the Gaeltacht, on 5 March 2018 indicated that there is one site marked within the application area; Ballinderry, Burial ground (KD003-034---). This cemetery was identified during the monitoring of a quarry extension in 2004 (License No. 04e1638, Halpin 2005a &b). It consists of a curving ditch up to 3.3 m wide that encloses a penannular area measuring 70m N-S by ca. 40 m E-W. The cemetery contained 216 skeletons, 147 of which have been left *in situ*. The burials comprised adults, juveniles and neonates and were generally aligned E-W and interred in very shallow grave cuts. No evidence of coffins or grave goods was found. Two fragments of pottery from the upper fill of the ditch were identified as Dublin type ware and local cooking ware of 12th to 14th century date. The cemetery is situated immediately to the south of the entrance to the Site and to the east of the entrance road in the south-east corner of the application area, on land adjacent to the mill race.

11.5.3 Cartographic sources

The Ordnance Survey 1st and 3rd edition six-inch maps and the 1st edition 25-inch maps of the area were examined. The analysis did not indicate any previously unrecorded archaeological sites in the proposed application area or vicinity.

11.5.4 Aerial Photographs

Examination of the Ordnance Survey 1995, 2000 and 2005 imagery, as well as Google Earth imagery from 2006, 2009, 2010 and 2016 and Bing imagery from 2016, did not indicate any additional cultural heritage sites in the study area.





11.5.5 Place name evidence

The place names were extracted from the cartography in order to facilitate the search for structures and monuments and small finds, to help identify any unrecorded monuments or structures, to search for any published papers and documents related to the study area and to assist in the study of the historical development of the area. The English translations of the townland names of the study presented below are based on the Placenames Database of Ireland.

Table 11.3: Townland Names of the Study Area

Townland Name	Translation
Ballinderry	Townland of the oak wood
Cadamstown	Macadam's Town
Calfstown	Town of the Calf family
Clonuff	Black pasture
Kilglass	Green wood or church
Tanderagee	Hill exposed to the wind

11.5.6 Other sources

Examination of the archaeological corpus of works on prehistoric artefacts (Harbison 1969, Eogan 1965, 1983, 2000, Kavanagh 1991, Mount 1989, Simpson 1990), and pottery (O'Rfordáin and Waddell 1993) and Iron Age material (Raftery 1984) revealed no artefact finds from the study area. redforad

Archaeological investigations 11.5.7

Examination of the Excavations Bulletin database of this excavation reports (https://www.excavations.ie) indicated that there have been three licensed archaeological investigations carried out in the study area, all of which were related to the development of the existing quarry.

The existing development was the subject of an EIS, including an assessment of archaeology and cultural heritage, carried out by ACS Ltd and Declan Brassil & Co. Ltd for Goode Concrete Ltd in 2002 (Planning Reg No. 021475; ACS Ltd. 2002). This assessment identified two potential archaeological features that were subsequently investigated through test excavation (Licence number: 02E1803) that identified no archaeological material. The report from the Excavations Bulletin states:

"Ballinderry, Co. Kildare Assessment 02E1803

An assessment was carried out on a number of potential archaeological features identified at the site of a proposed guarry at Ballinderry, Carbury, Co. Kildare. Four trenches were excavated across a low linear platform, two across a linear depression, two across cultivation ridges on the eastern slope of the ridge. and four on a low hill in the centre of the site.

The low linear platform is likely to be the remains of an earlier field boundary at the eastern edge of the site associated with the linear depression, which also appears to represent an earlier field boundary or ditch. The cultivation ridges on the eastern slope were also visible in Field Two, extending from east to west, and clearly post-date the two field boundaries.

A possible former millpond lies outside the proposed development site to the east and will not be affected by the development. However, it is recommended that adequate fencing or a protective bund be erected along the eastern edge of the development to prevent any physical disturbance during the operational life of the site.

No archaeological features were exposed, and no finds were recovered. However, it is recommended that all topsoil- and subsoil-stripping be monitored so that any features that may exist can be exposed and resolved at an early stage."





In late 2004/early 2005, the development was the subject of archaeological monitoring which identified a medieval cemetery. The report from the Excavations Bulletin states:

Ballinderry, Co. Kildare Monitoring; medieval cemetery 04E1638

A licence was granted in December 2004 for monitoring/rescue excavation at a quarrying site for the purpose of extraction of gravel and sand over an overall area of 13.9ha in a greenfield site. This licence is presently on hold, as the developer is stripping the field one section at a time and may not resume stripping for some time. A medieval cemetery was partially excavated on the site in January/February 2005, with roughly 70% of the site remaining in situ until the developer wishes to continue with the excavation. A final report will be submitted when all topsoil-stripping has been completed.

In 2005, further monitoring and test excavation of the development was carried out. The report from the Excavations Bulletin states:

Ballinderry, Co. Kildare No archaeological significance 05E0050

Monitoring was carried out as an element of an ongoing monitoring/rescue excavation in advance of the development of a quarry site in Ballinderry, Carbury, Co. Kildare. This testing was carried out in conjunction with a monitoring/rescue excavation in the same field (see No. 727 above, 04E1638) and was part of recommendations of an assessment carried out by Archaeological Consultancy Services Ltd. This assessment called for the investigation of the development in two phases. Phase 1 called for monitoring of roughly 85% of the development. This phase is ongoing and to date has uncovered a single Bronze Age pit containing sherds of pottery, a post-medieval area of unidentified disturbance and a medieval cemetery with enclosing ditch.

Phase 2 of the investigation called for testing of an area of archaeological potential in the extreme eastern end of the development. This was carried out over the course of two days. Nothing of an archaeological or historical nature was encountered. This area of the development will be subject to further monitoring as part of the overall site investigation.

11.5.8 Field Inspection

A field inspection was carried out on the 22 March 2018. This involved an inspection of all the lands in the application area. No additional items of heritage, structures or monuments were identified. Apart from the area in which the burial ground (SMR KD003-034----) has been preserved *in situ*, the entire application area has been extracted to subsoil levels (see Plates 11-1, 11-2 and 11-3). There was no visible indication of any additional cultural heritage material.

11.6 Significant Impacts

11.6.1 Direct impacts

All proposed restoration works will take place within the existing extraction area. The area of Ballinderry, Burial ground (SMR KD003-034----) will continue to be preserved *in situ* and will not be impacted. There will be no direct impacts on any known items of archaeology, cultural heritage or buildings of heritage interest in the application area or the vicinity.

11.6.2 Indirect impacts

There will be no indirect impacts on any known items of archaeology, cultural heritage or buildings of heritage interest in the application area or the vicinity.

11.7 Mitigation Measures

11.7.1 Direct impacts

In order to continue to preserve the burial ground (SMR KD003-034----) *in situ,* no development works should be carried out in the area to the south and east of the entrance road where the burial ground is situated.



11.7.2 Indirect Impacts

No indirect impacts warranting specific mitigation were identified during the course of the cultural heritage assessment.

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11.8 References

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APPENDIX 11.1

Record of Monuments and Places (RMP) Sites in the Study Area





KD003-007--- Kilglass Burial ground

The Ordnance Survey Letters records a second-hand report that, '... there was an old burial-place in Kilglass townland ...'. In 1954, inhumation burials of seven individuals were discovered in a sandpit. Three burials had been disturbed, but four could be examined. All were extended inhumations in unprotected graves with the skeletal remains orientated NE-SW. The sandpit was subsequently extended and the burial area may have been dug away.

KD003-007--- Enclosure Calfstown

Indicated on the 1st ed. (1838) of the OS 6-inch map as a very large D-shaped enclosure (est. diam. c. 170m ESE-WNW) with a straight SSW side (est. L c. 140m), but not recorded on the latest ed. (1911) of the map. In gently undulating pastureland. There was no visible surface trace of the monument in 1985 (SMR file). Visible as a possible cropmark on a recent aerial photograph (OSi Orthophoto 2005).

KD003-010--- Enclosure Cadamstown

Indicated on the 1st ed. (1838) of the OS 6-inch map as a circular enclosure (est. diam. c. 70m). On a gentle S-facing pasture slope. There was no visible surface trace of the monument in 1985 (SMR file).

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APPENDIX 11.2

Site in the Sites and Monument Records in the Study Area





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KD003-034---- Ballinderry Burial ground

In 2004, archaeological monitoring (Halpin B. Excavation Licence No. 04E1638) of groundworks in advance of a proposed sand/gravel quarry resulted in the discovery and partial excavation of a previously unknown burial ground. A curving ditch (Wth 3.3m; max D 1.9m) was found to enclose a penannular area (diam. c. 70m N-S; c. 40m E-W), unenclosed between NE and S. Two fragments of pottery from the upper fill of the ditch were identified as Dublin type ware and local cooking ware of 12th-14th century date. The enclosed area contained some 216 skeletons, the majority of which have been left in situ. The burials comprised adults, juveniles and neonates and were generally aligned E-W and interred in very shallow grave cuts. No evidence of coffins or grave goods was found.

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FIGURES & PLATES







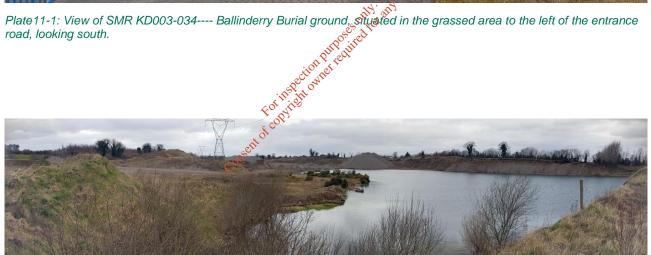


Plate11- 3: Panoramic view of the application area looking west.



Plate11-4: Panoramic view of the application area looking east.

