

ARCHAEOLOGICAL TESTING OF A PROPOSED WINDFARM (TURBINE 6) CLEANRATH, INCHIGEELAGH, CO. CORK

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1 ARCHAEOLOGY AND CULTURAL HERITAGE

1.1 INTRODUCTION

This report details the results of an archaeological test excavation undertaken as a Further Information request from Cork County Council (Planning Ref 11/05245). The proposed development consists of an 11 turbine wind farm located at Cleanrath, Inchigeelagh, Co. Cork. An Archaeological and Cultural Heritage Impact Assessment was undertaken by the same author and submitted by the client with the planning application. No recorded archaeological monuments subject to statutory protection are located within the site boundary. A number of newly recorded cultural heritage / archaeological sites were detected during field walking as part of the initial site assessment. These new sites were located within relatively close proximity to T6. The further information from Cork County Council requested that the area of T6 and its associated access road be subject to an archaeological test excavation. The testing was carried out under licence from the Department of Arts, Heritage and the Gaeltacht (Licence No. 11E0335) on the 1st November 2011 by Tobar Archaeological Services.

1.2 PROJECT TEAM AND QUALIFICATIONS

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 the Environment, Heritage and Local Government 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 (EIS/EIA) and surveys.

2 STATUTORY CONTEXT

2.1 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 (Environment, Heritage and Local Government) 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).

Under the Heritage Act (1995) **architectural heritage** is defined to include 'all structures, buildings, traditional and designed, and groups of buildings including street-scapes and urban vistas, which are of historical, archaeological, artistic, engineering, scientific, social or technical interest, together with their setting, attendant grounds, fixtures, fittings and contents...'. A heritage building is also defined to include 'any building, or part thereof, which is of significance because of its intrinsic architectural or artistic quality or its setting or because of its association with the commercial, cultural, economic, industrial, military, political, social or religious history of the place where it is situated or of the country or generally'.



3 THE SITE AND RECEIVING ENVIRONMENT

The proposed development area is located in County Cork approximately 2.5km north-west of Inchigeelagh. The proposed development site is located on relatively high ground varying in height from 200-304m above OD and incorporates a portion of Derrineanig Hill. The west and south of the site is divided by a public road (south-east to north-west). The northern portion of the site is under forestry and a young plantation of forestry is located along the eastern portion of the site. The site measures 2.6km north-south by 2.8km east-west.

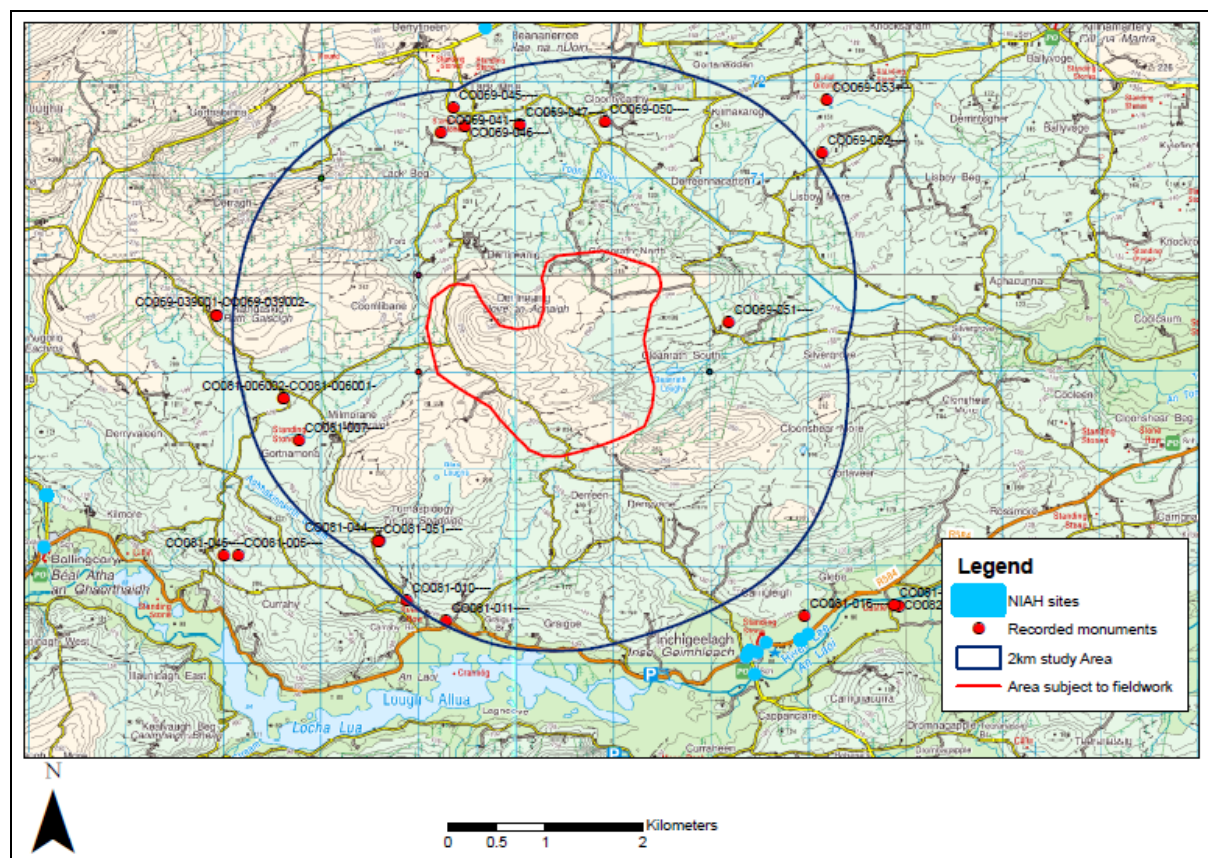


Figure 3-1: Site location map.

The proposed development comprises the construction of an 11 turbine wind farm and substation. The proposed development will involve ground disturbance in the form of topsoil and peat removal in the areas of new proposed roads, turbine hard stand areas and the substation. The key components of the construction phase of the proposed development are shown on Figure 3-2 below.

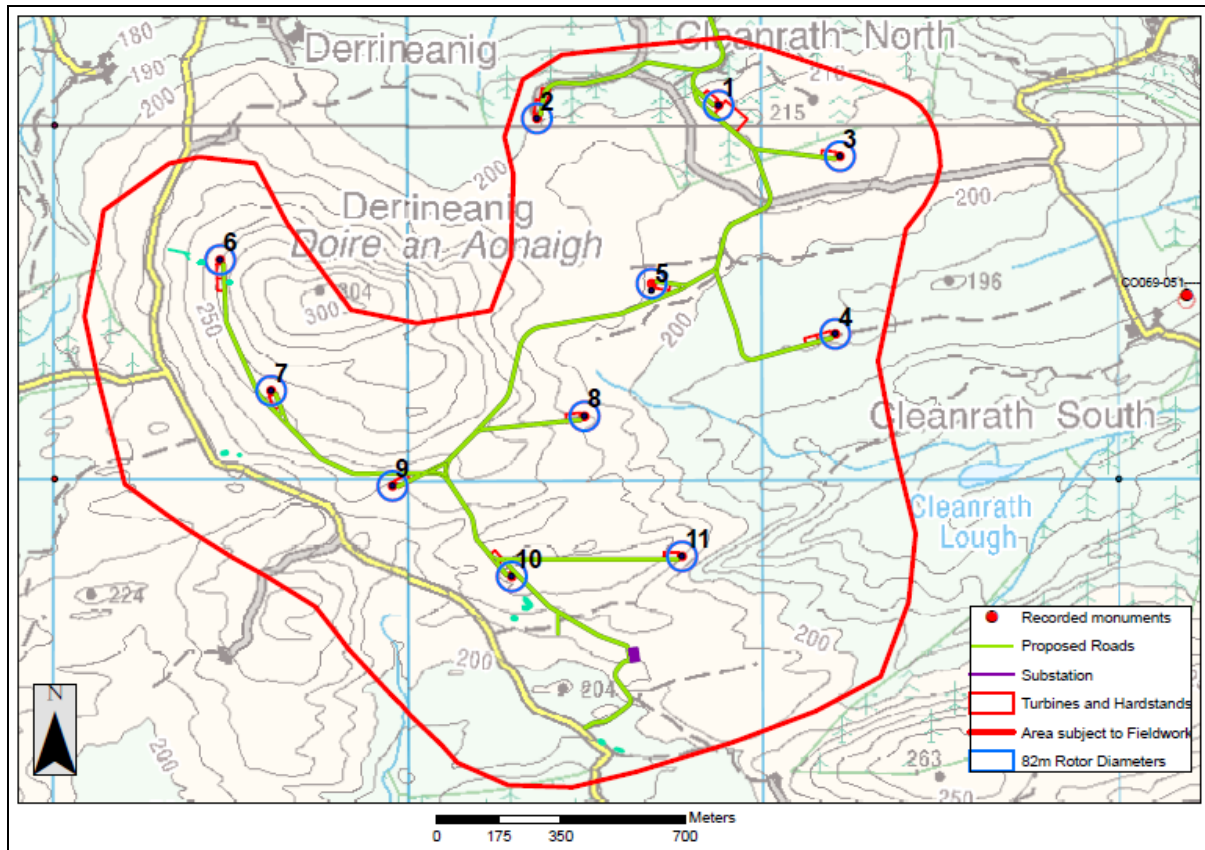


Figure 3-2: Proposed development site.

4 PLANNING REQUIREMENTS

The further information request dating to 29th July 2011 specified the following in relation to archaeology.

3. You are required to engage the services of a suitably qualified archaeologist (licensed under the National Monuments Acts 1930-2004) to carry out pre-development testing at the site of Turbine 6 and approach road to the south (within 150m of the Turbine); establish the presence or absence of sub-surface archaeology associated with the newly identified settlement cluster (hut sites, enclosures etc) to the west and associated walls identified to the east and west of the approach road. No sub-surface work shall be undertaken in the absence of the archaeologist without his/her express consent. The archaeologist is required to notify the National Monuments Service of the Department of the Arts, Heritage and the Gaeltacht in writing at least four weeks prior to the commencement of site preparations. This will allow the archaeologist sufficient time to obtain a licence to carry out the work. The consultant archaeologist shall liaise with the local authority archaeologist and the National Monuments Service during the process. Where archaeological material is shown to be present, avoidance, preservation in situ, preservation by record (excavation) and or monitoring may be



required and the DoAHG and the Planning Authority will advise the Applicant / Developer with regard to these matters. Having completed the work, the archaeologist shall submit a written and digital report as Further Information to the Planning Authority and to the NMS of the DoAHG for consideration. It should be borne in mind that if significant archaeological remains are found, refusal might still be recommended and or further preservation in situ or by record may be required.

5 ARCHAEOLOGICAL BACKGROUND

5.1 ARCHAEOLOGICAL HERITAGE

Archaeological heritage includes all recorded archaeological monuments listed in the RMP/SMR maps and also includes newly discovered sites. These monuments are addressed separately for clarity.

5.1.1 Recorded archaeological monuments within the study area

The study area consists of the areas lying within the proposed development site (Figure 3-2 above) and also those monuments which occur within 2km of same. The Record of Monuments and Places (RMP) and the Sites and Monuments Record (SMR) maps were used to compile a list of known sites which occur within the study area. No recorded archaeological monuments are located within the proposed development site. Thirteen (13) monuments are located within 2km of the proposed site and are listed in Table 5-1 below.

Table 5-1: Recorded Monuments located within 2km of the proposed site.

RMP	NGR E	NGR N	TOWNLAND	MONUMENT TYPE
CO069-041----	119225	71478	LACK BEG	Ringfort – Rath
CO069-045----	119356	71725	LACK MORE	Ringfort – Rath
CO069-046----	119470	71530	LACK MORE	Standing Stone
CO069-047----	120040	71551	CLOONTYCARTHY	Fulacht Fia
CO069-050----	120914	71583	CLOONTYCARTHY	Ringfort – Rath
CO069-051----	122190	69519	CLEANRATH SOUTH	Ringfort – Rath
CO081-006001-	117606	68731	RATHGASKIG	Ringfort – Rath
CO081-006002-	117606	68731	RATHGASKIG	Souterrain
CO081-007----	117766	68295	MILMORANE	Standing Stone
CO081-010----	118875	66646	TURNASPIDOGY	Stone Row
CO081-011----	119281	66438	TURNASPIDOGY	Ringfort - Cashel
CO081-044----	118597	67259	TURNASPIDOGY	Fulacht Fia



CO081-051----	118578	67257	TURNASPIDOGY	Burnt Mound
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Five monument types are represented and date to the prehistoric period as well as the Early Medieval Period. They are as follows: Fulacht Fiadh (3), Standing Stones (2), Stone Rows (1) and Ringforts (6) and Souterrains (1).

5.1.1.1 The Prehistoric Period

Fulachta Fiadh

Fulachta fia are one of the most numerous monuments in the country with thousands in Munster alone. They usually consist of crescent-shaped mounds of burnt soil and stones and represent ancient cooking places. Excavated examples show evidence for a trough which when water-filled is thought to have been used for cooking. The water was boiled by heating stones over a hearth and placing them in the water and in turn cooking the meat. The heated fire-cracked stones were then discarded around the trough, giving the monuments their characteristic horse-shoe shape. These monuments are frequently sited adjacent to or near a water source such as a stream or river or alternatively in low-lying marshy ground. *Fulachta fia* generally date to the Bronze Age (2400-500 BC). The Fulacht Fiadh (CO069-047) is located approximately 1.3km from the northern site boundary.

Standing Stones

Only one standing stone occurs within the 2km study area (CO069-046) and is located approximately 1.6km from the northern site boundary. Standing stones are a common feature of the prehistoric Irish landscape consisting of single, upright stones. They are known by various names such as gallán, dallán and long stone. All standing stones are not necessarily of the same date or have the same function. Excavations of standing stones have shown that some mark prehistoric burials and some may have had a ritual or commemorative function. They have similar axis to standing stone pairs and may therefore date to the Bronze Age (2400-500BC).

Stone Rows

Stone rows are defined as “three or more standing stones intervisible and lying in a straight line” (O’ Kelly 1993, 230). In Ireland there are two major groups of stone rows, one concentrated in the mid-Ulster region, the other in the west Cork/Kerry region of Munster. In the west Cork/Kerry school of stone row construction the builders usually favoured large tall stones, between three and six in number which were usually built in isolation from other monuments. In the Cork/Kerry examples the stones are also often organised in order of height with the tallest stone at the south-western end of the row. The purpose of stone rows is unknown however it is suggested that they had “a ritual,



ceremonial or commemorative role while a number have solar or lunar orientations” (Power *et al.* 2000, 11). The stone row CO081-010 is located c. 2km from the proposed development site.

5.1.1.2 The Early Medieval Period

Raths / Ringforts / Enclosures

Ringforts and enclosures are the most numerous archaeological monuments in the Irish landscape. They consist of a circular or roughly circular area enclosed by an earthen bank formed by material thrown up from the digging of a concentric ditch on its outside. Ringforts are usually enclosed by a single bank (univallate) while bivallate or trivallate ringforts i.e. those enclosed by double or triple rings of banks are less common. The number of banks and ditches enclosing these monuments are considered to reflect the status of the site, rather than the strengthening of its defences. Archaeological excavation has shown that the majority of ringforts functioned as enclosed farmsteads, built during the Early Christian period (5th – 9th century A.D.). Excavation within the interior of the monuments has traced the remains of circular and rectangular dwelling houses as well as smaller huts probably used to stall animals. The enclosing earthworks would also have protected domestic livestock from natural predators such as wolves and foxes. Ringfort CO069-051 is located 759m to the east of the site boundary, CO069-041 is located 1.6km to the north of the site boundary and CO069-050 is located 1.3km to the north of the site.

Souterrains

One souterrain CO081-006-002 is located within the 2km study area and is associated with an enclosure. Souterrains are often found in association with ringforts and may be located within the fort or may originate inside the latter and extend outside the limits of the enclosing elements. They consist of man-made structures comprising a chamber or series of chambers linked by creepways. Two main methods of construction were employed to build souterrains. The first involved tunnelling a passage into the underlying clay or rock from a ‘construction shaft’ which was later backfilled. The second method involved the excavation of an open trench which was lined and capped with stone and then backfilled to conceal its presence. Although large numbers of these monuments have been identified in Ireland their distribution pattern is somewhat uneven (Clinton 2001, 33).

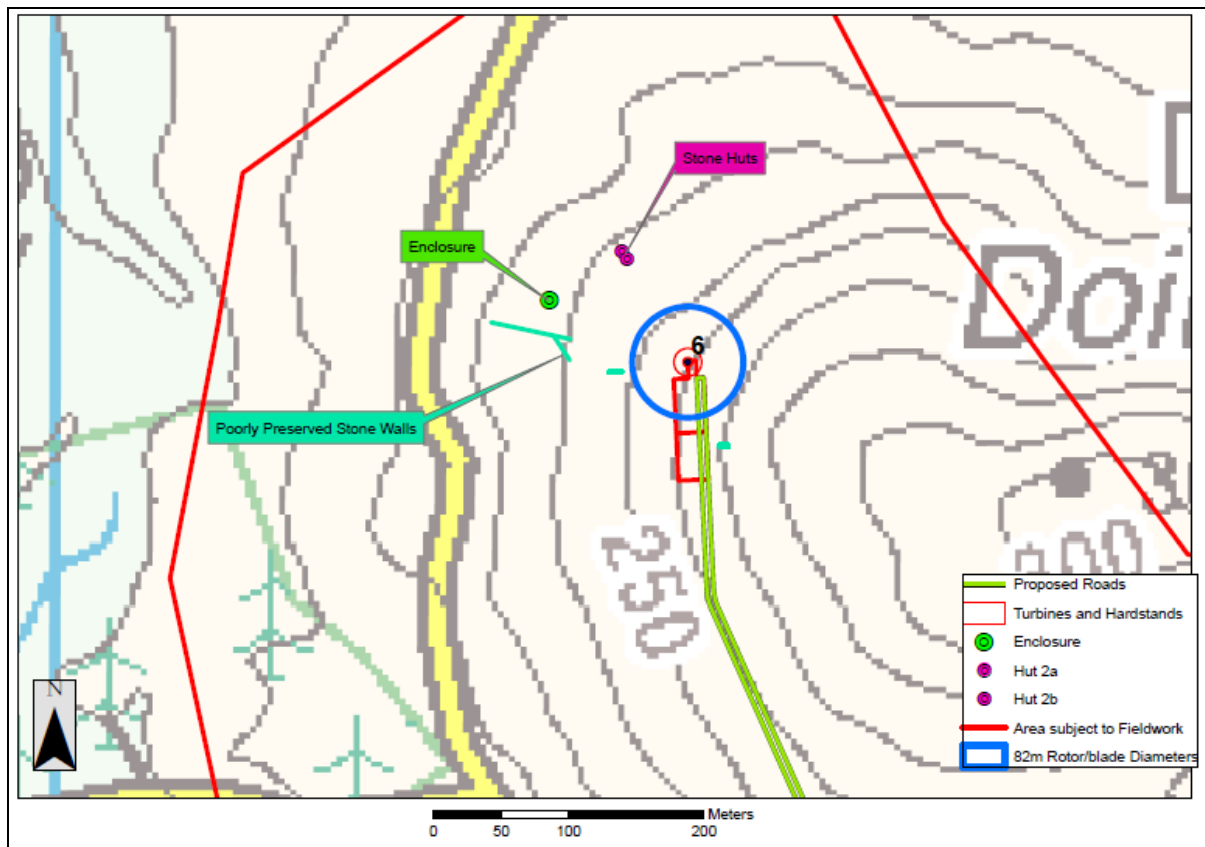
5.1.2 Newly Recorded Monuments located during initial assessment process

The proposed development site was visited and assessed both in September 2010 and January 2011. A stone enclosure (1), two adjoining hut sites (2a and 2b) and associated walls were detected in the north-western portion of the study area (Figure 5-1 and Table 5-2).



Table 5-2 Newly Recorded Sites

Monument	Easting	Northing	Townland
Stone Enclosure 1	119364	69666	Derrineanig
Hut site 2a	119417	69702	Derrineanig
Hut Site 2b	119421	69696	Derrineanig
Associated walls (centre point)	119346	69643	Derrineanig

**Figure 5-1: Newly recorded enclosure, huts and associated walls in relation to T6.**

5.1.2.1 Stone walls and field systems

The majority of features identified within the site consist of poorly preserved stone walls which are sparsely distributed throughout the site. When looked at in isolation, these walls appear fragmentary, discontinuous, dispersed and survive to little more than one-two courses in height. The practice of enclosing fields for agricultural purposes in Ireland dates back to the Neolithic period, with the Céide



fields in county Mayo providing a well known example. Regularly laid out stone-wall enclosed fields are usually interpreted as evidence for a pastoral farming economy while cultivation ridges and clearance cairns indicate that tillage was practiced (Byrne *et al.* 2009, 128, after Caulfield 1983, 195-215). The majority of the stone walls identified within the site are 18th / 19th century in appearance and are marked on the 1st Edition OS maps. The walls associated with the stone enclosure and house and hut sites, however, are not marked on any available edition of OS maps. Distinct construction methods which could potentially assist in dating the walls are not apparent, due mainly to their ruinous state.

The date of walls and field systems may be suggested through association with other monument types. In this case, the walls located within close proximity to the enclosure and huts may date to the same period.

5.1.2.2 Huts

Two adjoining unrecorded huts were noted in the same field as the aforementioned stone enclosure. The huts are in a poor state of preservation and are largely collapsed and overgrown. The dense overgrowth meant that a thorough examination of the structures was not possible. They would appear to consist of circular stone-built structures whose form is not readily discernible due to collapse. The primary function and date of hut sites is again ambiguous. Examples of hut sites are known throughout the country, particularly in upland regions, and are frequently associated with the practice of transhumance or booleying. Transhumance refers to the practice of the seasonal movement of people and their livestock typically to higher pastures in the summer and lower valleys in the winter. In Ireland this practice is known as booleying and is believed to date to the early medieval period, although it continued well into the nineteenth and early twentieth century. The huts at Derrineanig may have functioned as temporary accommodation for semi-nomadic herders, however, their precise date cannot be determined without further investigation.

A number of hut sites were recorded on the lower southern slopes of the western Pap Mountain in 2001 (Coyne and Connolly 2002, 12-13). Two huts were subsequently investigated using limited test trenching in an attempt to glean more information regarding their date and function. A stone axe head and a perforated stone disk were recovered from a thin habitation or floor layer within Hut site A indicating a prehistoric date for this structure. It is suggested that the other huts recorded on the slope of the mountain may be contemporary with hut A and that the builders of the mountaintop cairn on the Paps may have inhabited the hut sites on the lower slopes of the mountains (*ibid.*, 14). A similar inference is drawn from the cairn and numerous hut sites at Turlough Hill in the Burren, Co. Clare (Coyne and O'Mahony, 2008).



Other uses for hillside huts has been noted at Mount Brandon where it is suggested that they functioned as temporary habitations for seaborne pilgrims. It is also thought that they were used as habitation sites such as booleying huts during the year when pilgrimage was not taking place. An extensive series of pre-bog walls was also noted on the southern slopes of Mount Brandon. It is noted in that instance that although pre-dating the bog, the peat may still have been growing well into the medieval period. In this regard such walls could be early medieval in date rather than prehistoric (Archaeology Ireland Heritage Guide No. 29).

Furthermore, the potentially lengthy chronology of hut sites means that while some may be prehistoric others may date to the early or later medieval period or indeed to more modern times (*ibid.*).

5.1.2.3 Circular Enclosure / House

A circular stone enclosure or possible house is located at the north-western side of the study area in relatively close proximity to the two huts and associated walls. It is unclear if this monument represents the remains of a well-preserved and substantial hut or if it was a more permanent habitation site such as a house. It differs from the other hut sites recorded within the study area in size and possibly in thickness of the walls. It measures c. 8m in diameter and is defined by a low stone wall c. 1m in width. In the absence of archaeological excavation however, it is not possible to determine the date of the circular structure at Derrineanig with any certainty.

5.1.2.4 Stone Walls

A number of substantial and well preserved stone walls are located within forestry in the northern area of the proposed development. The walls noted during the site survey are located in an area that appeared to have enclosed fields during the 19th century (1st Edition mapping of 1840s). These walls may well represent simple field boundaries. It is highly likely that they date to the 19th century and are relatively modern in appearance. The walls may be regarded as representing local traditions and skills and would be of local significance in terms of architectural merit. The walls have been breached in a number of places due to their location within forestry and have also collapsed in places. The area where it is proposed to construct Turbine 2 has recently been clear-felled and no stone walls now survive here. Furthermore, the proposed access road is located along an existing track. The walls are shown on the mapping below (Figure 5-2).





Figure 5-2: Extract from 1st Edition map of 1840s showing northern portion of development site where stone walls were located, now within forestry/clear-felled area.

Table 5-3: Stone walls within the study area.

Monument	Easting	Northing
STONEWALL 6A	119475	69073
STONE WALL 6B	119482	69074
STONE WALL 7	119520	69068
STONE WALL 8	120581	68238
STONE WALL 9A	120322	68638
STONE WALL 9B	120327	68635
STONE WALL 9C	120341	68643
STONE WALL 9D	120325	68662
STONE WALL 9E	120295	68607
STONE WALL 10	120536	68259

6 RESULTS OF ARCHAEOLOGICAL TESTING

Archaeological testing of the proposed area of Turbine 6 and its approach road was carried out under licence (11E0335) by Tobar Archaeological Services in November 2011. A total of 6 test trenches were excavated on the site in areas where most ground disturbance is likely to take place, i.e. turbine base, hardstand and proposed road (Figure 6-1). The trenches measured between 19m and 45m in length and 2.2m in width. A large track machine with a 2m wide grading bucket was utilised for the excavation.

The stratigraphy uncovered varied somewhat throughout the site with natural rock appearing at different levels. Natural boulders are strewn across the site and natural ridges of rock became apparent as the testing progressed in a southerly direction along the proposed access road. The sod generally measured 0.3m in depth and the natural consisted of a gravely orange material with natural rock also present in some areas. The results of the testing are detailed below in Table 1.

TABLE 1: RESULTS OF ARCHAEOLOGICAL TESTING

Trench No.	Proposed Structure	Orientation	Length	Width	Depth (m)	Archaeological Features	Plate No.
1	Turbine Base	NW-SE	19m	2.2m	0.3	None	2- 3
2	Turbine Base	NE-SW	22m	2.2m	0.5	None	4
3	Hardstand	N-S	45m	2.2m	0.45	None	5
4	Access Road	N-S	22m	2.2m	0.4	None	6
5	Access Road	N-S	40m	2.2m	0.50	None	7 - 8
6	Access Road	N/S	30m	2.2m	0.50	None	9-10

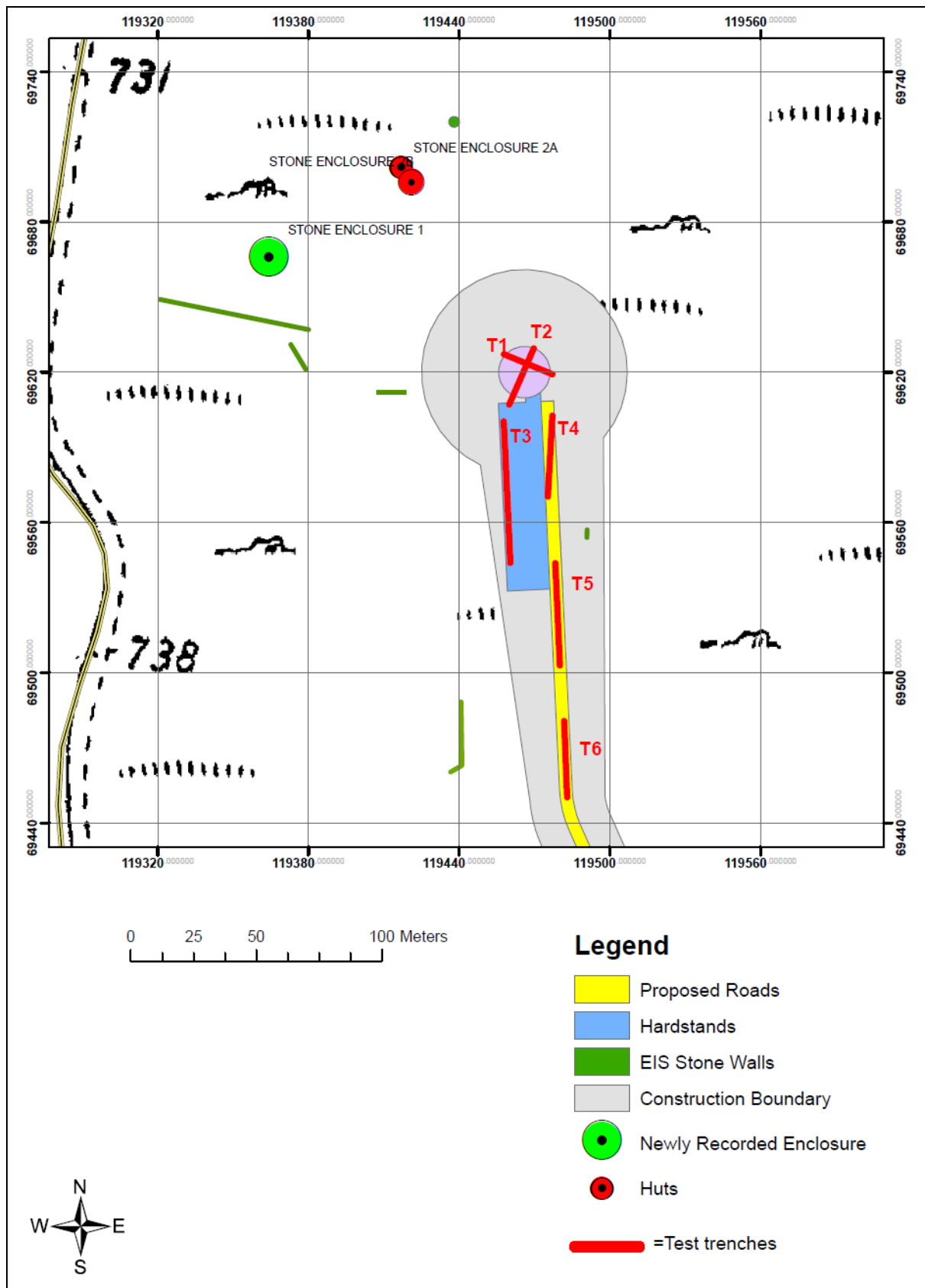


Figure 6-1: Archaeological Test Trench Layout.





Plate 1: View of area of stone enclosure and hut sites from turbine 6.



Plate 2: Test Trench 1 in progress looking West.



Plate 3: Trench 1 (turbine base) looking West.



Plate 4: Trench 2 (Turbine base) looking North.



Plate 5: Trench 3 (hardstand) looking north.



Plate 6: Trench 4 looking North. Natural rock ridges visible throughout the trench.



Plate 7: Trench 5 looking South. Natural rock exposed in places throughout trench.



Plate 8: Trench 5 looking South.



Plate 9: Trench 6 looking South.



Plate 10: Trench 6 looking North.



Plate 11: Area of testing from stone enclosure to north.

7 IMPACT OF PROPOSED DEVELOPMENT ON ARCHAEOLOGICAL LANDSCAPE

7.1 IMPACTS ON ARCHAEOLOGY

The impacts on the archaeological landscape are outlined below. Both potential sub-surface archaeology and above ground archaeological features are included.

7.1.1 Recorded Monuments

No recorded monuments are located within the proposed development area therefore no direct impacts are anticipated in this regard.

7.1.2 Newly recorded Sites

The area that contains the stone enclosure, hut sites and possibly associated stone walls consists of a small green field adjacent to Turbine 6. The potential impact here lies in the loss or damage to the newly detected sites many of which are barely discernible in the landscape. These features should be preserved *in situ* and fenced off during construction works in line with the recommendations made in the Archaeological and Cultural Heritage Assessment (Tobar Archaeological Services). A buffer zone around these features should be established within which no development should take place. The suggested buffer zones for the enclosure and hut sites are shown on Figure 7-1 below. If the suggested buffer zones are put in place prior to the development works no direct impact will take place.



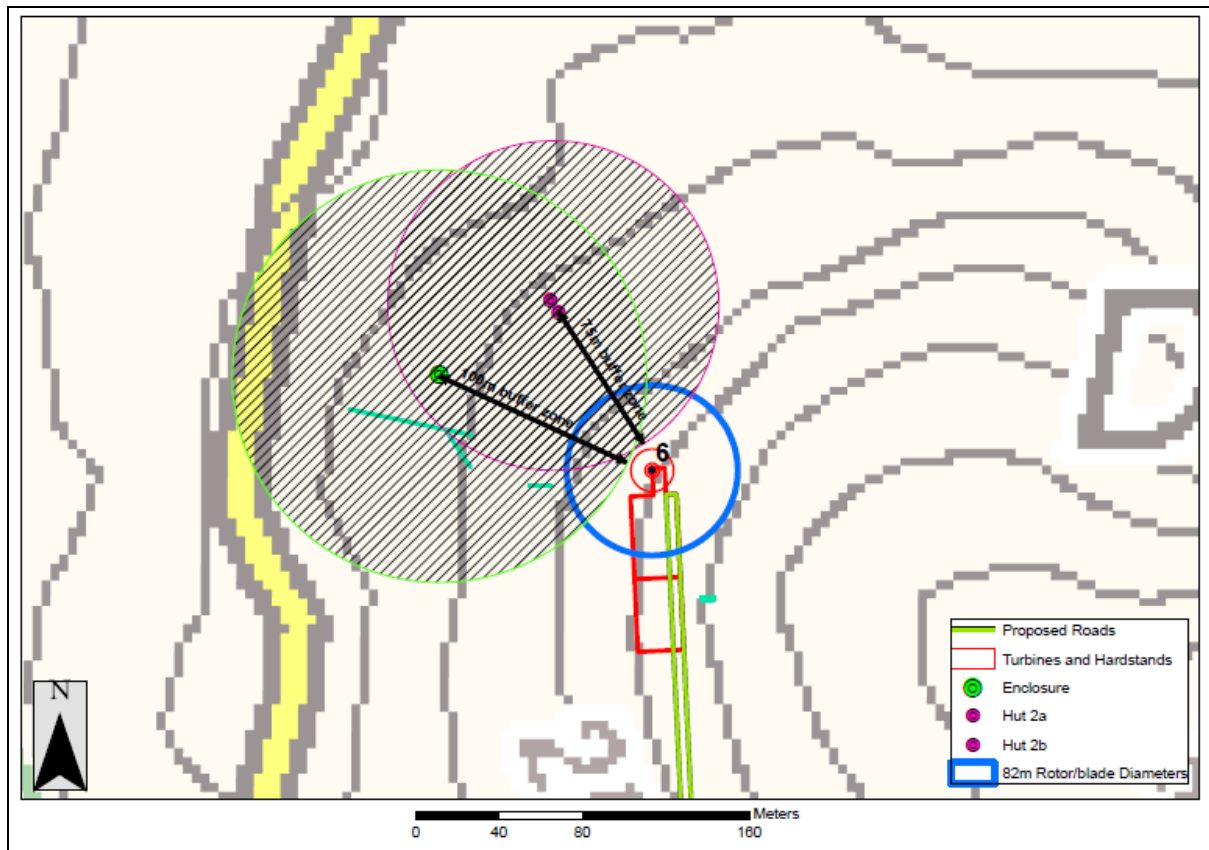


Figure 7-1: Suggested buffer zones for newly recorded sites

7.1.3 Sub-surface archaeological deposits

No archaeological finds, features or deposits were encountered in any of the test trenches excavated either within the area of the turbine base, hardstand or access road. In this regard there will be no direct impact on any sub-surface archaeology in this area.

A programme of archaeological monitoring should be undertaken by a licensed archaeologist during the construction stage of the development. All ground works should be monitored to include peat removal, topsoil removal and any further excavation works.

8 RECOMMENDATIONS

- The enclosure, huts sites and associated walls located adjacent to T6 should be fenced off prior to the commencement of all site works including geo-technical investigations.
- The recommended buffer zones around these monuments outlined in Figure 7-1 should be established and maintained throughout the construction and operational phase of the project.
- The buffer zones and fencing should be established and supervised by an archaeologist prior to the commencement of site works.
- Monitoring of all site works to include geotechnical investigations, cable trenching, excavation of hardstands, turbine bases, substations and internal roads should be undertaken by a licensed archaeologist. A report on the monitoring should be carried out and submitted to the Planning Authority and the DoAHG. If archaeological finds, features, or deposits are encountered during archaeological monitoring the archaeologist will inform the National Monuments Service and the National Museum of same and discuss an appropriate course of action for either the preservation *in situ* (avoidance) or preservation by record (excavation) of the features. A full report on the findings shall be submitted to the DoAHG in accordance with the licensing conditions.

9 REFERENCES

Aalen, F.H.A. *et al.*, 1997, *Atlas of the Irish Rural Landscape*. Cork University Press, Cork.

Burnell, T, 2006, *The anglicized words of Irish Placenames*, Nonsuch publishing.

Cork County Development Plan 2009-2015, Cork County Council.

Clinton, M., 2001, *The Souterrains of Ireland*. Wordwell Ltd., Wicklow.

Department of the Environment, Heritage and Local Government, 2004, *Draft Wind Energy Guidelines*, 2004.



Department of Arts, Heritage, Gaeltacht and the Islands, 1999, Framework and Principles for the Protection of the Archaeological Heritage, 1999.

Guidelines on the information to be contained in Environmental Impact Statements, EPA 2002.

O'Brien, W., 2009, Local Worlds, Early Settlement Landscapes and Upland Farming in South-West Ireland. The Collins Press, Cork.

Power, D. et al., 1992, Archaeological Inventory of County Cork, Vol. 1: West Cork. Stationery Office, Dublin.

Other Sources

Record of Monuments and Places (RMP) for County Cork.

1st Edition 6 inch OS maps (1842).

www.archaeology.ie

www.buildingsofireland.ie

www.irishhistoricmaps.ie

www.loganim.ie

