

CHAPTER 14 CULTURAL HERITAGE

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APPENDIX 14.1: DETAILED METHODOLOGY

14.1.1 Desk Based Archaeological Appraisal

1 The following sources were consulted during the desk based evaluation phase of the development.

14.1.1.1 World Heritage Sites

2 Ireland currently has three properties inscribed on the World Heritage List:

- Archaeological Ensemble of the Bend of the Boyne, County Meath in the Republic of Ireland (ROI);
- Skellig Michael, County Kerry (ROI); and
- The Giant's Causeway and Causeway Coast, County Antrim in Northern Ireland (NI).

3 Although these sites do not have specific legislative protection in the Republic of Ireland, potential impacts on these sites would be a material consideration in relation to the granting of planning for a development within their vicinity. There are also a number of sites submitted to the Tentative List of World Heritage Sites which would be afforded similar protection.

4 All World Heritage Sites and sites on the Tentative List were reviewed and, where there was found to be a potential for impact, included in this appraisal.

14.1.1.2 Landscape Conservation Areas

5 Section 204 of the Planning and Development Act, 2000 enables a Planning Authority to designate a Landscape Conservation Area (LCA) within their functional area to preserve a landscape. Although not necessarily designated for cultural heritage reasons, in some instances, such as the Landscape Conservation Area which is being proposed by Meath County Council for the Tara Skryne Region, they may have strong cultural heritage associations.

6 Any proposed or designated landscape areas contained within the Monaghan and Cavan County Development Plans have been included in this appraisal.

14.1.1.3 National Monuments (ROI)

7 An archaeological monument may be a National Monument, if it is in the ownership or guardianship of the Minister or a Local Authority or is the subject of a Preservation Order. The historic town defences of walled towns are also National Monuments.

8 **National Monuments in the Ownership or Guardianship of the State**

9 Lists, by County, of all National Monuments in the ownership or guardianship of the State are available on the www.archaeology.ie website (National Monuments Service, Feb 2010). All such sites located in Counties Cavan and Meath were mapped in GIS and reviewed as part of this appraisal.

10 **National Monuments in the Ownership of a Local Authority**

11 Ascertaining whether archaeological monuments are located on lands in the ownership of a local authority can be difficult, as some local authorities are yet to complete this work. The majority of these sites consist of churches or graveyards that were vested to the Burial Boards by the Commissioners of Church Temporalities during the 1870's. The modern day successors to the Burial Boards are the County Councils and as such these sites, now being in the ownership of Local Authorities, are National Monuments.

12 Surveys of graveyards in Counties Meath and Cavan that address the ownership of the sites are yet to be completed.

13 Church and graveyard sites where the ownership was unknown that could experience impacts from the proposed development were cross-referenced with the Appendices of The Report of The Commissioners of Church Temporalities to see if they were vested to a Burial Board. Where the graveyard was vested to a Burial Board the site was treated as a National Monument. If the ownership of the site could not be ascertained then the site was treated as a potential National Monument.

14 **Monuments Subject to Preservation Orders**

15 A list of monuments covered by Preservation Orders was obtained from the DAHG. All sites contained in the list within Counties Cavan and Meath were reviewed as part of this appraisal.

16 **National Monuments – Walled Towns**

17 In 2008 the then Minister for the Environment, Heritage and Local Government published
the *National Policy on Town Defences* which states:

18 *‘The known and expected circuits of the defences (both upstanding and buried, whether of
stone or embankment construction) and associated features of all town defences are to be
considered a single national monument and treated as a unit for policy and management
purposes. There should be a presumption in favour of preservation in-situ of archaeological
remains and preservation of their character, setting and amenity’.*

19 All walled towns and sites listed as ‘Town Defences’ in the archaeological inventories were
highlighted as National Monuments in this appraisal.

14.1.1.4 Other Archaeological Monuments (ROI)

20 There are a number of lists of archaeological monuments located within the Republic of
Ireland relating to different amendments to the National Monuments Act (1930-2012).

- The Register of Historic Monuments (RHM), which was brought into effect under the 1987 amendment to the act, is not publicly available and was not reviewed as part of this appraisal.
- The Record of Monuments & Places (RMP) was established under the 1994 amendment to the act and required the preparation of lists of archaeological monuments and maps indicating their locations, and the circulation of these to the local authorities. The RMP was reviewed as part of this appraisal.
- The most up to date list of known archaeological monuments is the Archaeological Survey Database (ASD) which is accessible through the www.archaeology.ie website; GIS files are available for download from the site. The database is accompanied by paper records, the Sites and Monuments Records (SMR), which are stored in the National Monument Archive. All archaeological monuments in the ASD in Counties Cavan and Meath were mapped and sites within 2km of the proposed development reviewed as part of this assessment.

14.1.1.5 The Topographic Files of the National Museum of Ireland

21 The topographical files of the NMI identify all recorded finds held in the NMI archive that
have been donated to the state in accordance with national monuments legislation. The files
sometimes include reports on excavations undertaken by NMI archaeologists in the early

20th century. Valuable information that can be gleaned might include the exact location, ground type, depth below ground level and condition when found, of each find. However, the amount and the usefulness of the information available on each find can vary considerably. The topographical files are listed by county and townland and/or street name. All files for townlands in the vicinity of the proposed development were reviewed as part of this appraisal.

14.1.1.6 Previous Archaeological Fieldwork

22 The Excavations Bulletin is both a published annual directory and an on-line database that provides summary accounts of all the excavations carried out in Ireland – North and South – from 1970 to 2010 (currently the latest edition). The online database gives access to almost 15,000 report summaries and can be browsed or searched using multiple fields, including Year, County, Site Type, Grid Reference, Licence No., Sites and Monuments Record No. and Author.

23 All excavations recorded in the online database that have taken place in the townlands in the vicinity of the proposed development were reviewed as part of this appraisal.

24 The NRA archaeological database (<http://archaeology.nra.ie>) contains a description of the results of excavations carried out in advance of various road schemes. In general, the database contains information on sites for which final excavation reports have been received. In a small number of cases, owing to the significance of particular sites, information from preliminary excavation reports has been included in lieu of the final report. Excavations carried out in the vicinity of the proposed development were reviewed as part of this appraisal.

14.1.1.7 Documentary Research

25 Various published sources, including local and national journals, were consulted to establish a historical background for the proposed development details of which are contained in the bibliography.

14.1.1.8 Cartographic Research

26 Analysis of historic mapping shows how the landscape has changed over time. The comparison of editions of historic maps can show how some landscape features have been created, altered or removed over a period of time. Sometimes features that appear on these

early maps are found to be of potential archaeological and/or architectural significance during fieldwork. For this appraisal the following historic maps were consulted:

- The Down Survey (1654-1656);
- First edition Ordnance Survey 6" Maps, County Westmeath & Meath, (1836–1837); and
- Second edition Ordnance Survey 25" Maps, County Westmeath & Meath (1909–1913).

27 EirGrid also commissioned a LiDAR survey of the proposed route. LiDAR data can be displayed in a number of formats, for the purposes of the assessment LiDAR data was made available in two forms, as high resolution orthophotography that assisted in the identification of archaeological, architectural or cultural heritage sites, structures, monuments or features and in the assessment of potential impacts and as point cloud data that could be used to generate hillshade models in GIS software. The point cloud data was commissioned in relation to the Teltown ZAA in order to attempt to identify previously unrecorded archaeological sites.

14.1.1.9 Toponyms

28 Townland names are useful in terms of understanding the geology, archaeology, land use, ownership and folklore of an area. The names can provide information on families, topographical features, and historical incidents. In terms of the built environment many names reference churches, fords, castles, raths, graveyards, roads and passes etc. Townlands are the smallest administrative land divisions used in Ireland and are in fact the only surviving administrative structure with a continuous history of development going back to medieval times if not earlier. Irish townlands generally relate not to settlements, but land units and as such they acquired legal title at an early date. They are the basic divisions of the countryside and were carefully recorded in the maps and books that accompanied the great land transfers of the seventeenth century. Many townland names feature in the Down Survey (circa. 1655) but it wasn't until the 1830s and 1840s that all the townlands of Ireland were compiled during the survey of the first edition of the Ordnance Survey maps. In the compilation of the Ordnance Survey scholars such as Eugene O'Curry and John O'Donovan were commissioned to provide the Survey with the anglicised forms of the Irish place-names, and it is these anglicised forms that have been in general use ever since. In compiling

the following data a number of resources were consulted including the Placenames Database of Ireland www.logainm.ie and *Irish Names of Places* by P.W. Joyce (1913).

14.1.1.10 Orthophotography and Satellite Imagery

29 The usefulness of aerial photographs is that they allow for a different perspective, 'the distant view'. Archaeological sites may show up on the ground surface, depending on their state of preservation, by light and shadow contrasts (shadow marks), tonal differences in the soil (soil marks) or differences in height and colour of the cultivated cereal (crop marks).

30 During the course of this appraisal a number of different sources of aerial imagery were consulted, including:

- Hi resolution Orthophotography Commissioned by EirGrid for the development in 2010.
- Ordnance Survey Ireland Orthophotography from 2005, 2000 and 1995; and
- Google Earth Satellite Imagery.

14.1.2 Field Inspections Archaeological

31 The field inspection survey sought to verify the location and extent of known archaeological sites and to record the location and extent of any newly identified features. The field inspection also endeavoured to identify other unrecorded areas of archaeological potential within the vicinity of the development that may be impacted upon.

32 The field inspection involved:

- Evaluation of tower locations where access was permitted by landowners for impacts upon known or previously unrecorded archaeological sites, structures, monuments or features that may be impacted upon by tower construction activities;
- Evaluation of proposed access routes for known or previously unrecorded archaeological sites, structures, monuments or features that may be impacted upon by construction traffic accessing the site; and
- Evaluation of all known archaeological sites in the vicinity of the proposed development that may experience impacts upon their setting.

14.1.3 Desk Based Evaluation Architectural

14.1.3.1 Architectural Conservation Areas

33 Section 81 of the Planning & Development Act allows for the designation of Architectural Conservation Areas (ACA). An architectural conservation area (ACA) is a place, area, group of structures or townscape, taking account of building lines and heights, that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or that contributes to the appreciation of a protected structure, and whose character it is an objective of a development plan to preserve.

34 All ACAs within 5km of the proposed development were mapped in GIS and included in this appraisal.

14.1.3.2 Record of Protected Structures

35 Section 10 of the Planning and Development Act 2000 required that *'each [county] development plan must include policy objectives to protect structures or parts of structures of special interest and to preserve the character of architectural conservation areas within its functional area'*. This is achieved through the compilation of a list of structures which are deemed to be of architectural, historical, archaeological, artistic, cultural, social, scientific or technical importance, the list, referred to as the Record of Protected Structures (RPS) is included in the development plan.

36 Cavan and Meath County Councils made available their RPSs in GIS format for the purposes of the appraisal.

37 It is noted that the RPS lists do not include all structures that may be deemed to be of special interest and further desk based research was undertaken to try and ascertain whether there were other structures in the vicinity of the scheme that may be of importance. Likewise, during the fieldwork staff were vigilant of the potential for previously unrecorded structures that may be impacted upon by the development and any that were noted are included in this appraisal.

14.1.3.3 National Inventory of Architectural Heritage

38 These surveys, established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999, provide the basis for the recommendations of the Minister for the Environment, Heritage

and Local Government to the planning authorities for the inclusion of particular structures in their RPS (Department of Environment Heritage & Local Government, 2011).

39 Similar to the RPS there is a list for each county of structures deemed to be of architectural, historical, archaeological, artistic, cultural, social, scientific or technical importance. The results of the National Inventory of Architectural Heritage (NIAH) surveys are available, for each county that has been completed, on the www.buildingsofireland.ie website and all sites within 2km of the proposed development were included in this appraisal.

14.1.3.4 Demesne Landscapes and Historic Gardens

40 Counties Meath and Cavan contain many demesne landscapes and historic gardens, characteristic of a particular period of settlement in the Country. The Councils recognise the contribution that these planned landscapes make to the landscape, their significance as a source of information about the past and also that they are often the important setting of a Recorded Protected Structure.

41 The Architectural Section of the DAHG is in the process of a multi-phase study looking at demesne landscapes and historic gardens that appear as shaded areas on the first edition Ordnance Survey Maps, circa. 1830.

42 *'The objective of this survey is to begin a process of understanding of the extent of Ireland's historic gardens and designed landscape. Sites were identified using the 1st edition Ordnance Survey maps. These were compared with current aerial photography to assess the level of survival and change.'* (Department of Arts, Heritage and the Gaeltacht, 2011).

43 All demesne landscapes and historic gardens located within 2km of the proposed development have been included in this appraisal.

14.1.3.5 Cartographic Research and Orthophotography

44 Analysis of early maps informs the evaluation process with the locations of early habitation sites and sites of architectural potential as well as how they have changed over time. Such sites range from individual house sites, wells and lime kilns to larger industrial features including bridges, mills, canals and railways, and the large demesnes and country houses with their historic gardens. The final phase of this evolution is evident when the early mapping is cross referenced with aerial photography.

45 Sites of potential architectural interest were noted in GIS and the mapping taken into the field to inform consultants on the ground. During fieldwork the consultants had detailed aerial photography and first edition Ordnance Survey mapping to assist them in evaluating the potential impact on both known and previously unrecorded sites of architectural interest.

46 Sources consulted during this phase of the evaluation included:

- First edition Ordnance Survey 6" Maps, County Westmeath & Meath, (1836–1837);
- Second edition Ordnance Survey 25" Maps, County Westmeath & Meath (1909–1913);
- Hi resolution Orthophotography Commissioned by EirGrid for the Project in 2010;
- Ordnance Survey Ireland Orthophotography from 2005, 2000 and 1995; and
- Google Earth Satellite Imagery.

14.1.4 Field Inspections Architectural

47 The field inspection survey seeks to verify the location and extent of known architectural sites and to record the location and extent of any newly identified sites or features. A field inspection should also endeavour to identify any other sites or features of architectural heritage importance within the vicinity of the proposed development that may be impacted upon.

48 As such, the field inspection involved:

- Evaluation of all tower locations where access was permitted by landowners for impacts upon known or previously unrecorded sites, structures or features of architectural interest that may be impacted upon by tower construction activities;
- Evaluation of proposed access routes for known or previously unrecorded sites, structures or features of architectural interest that may be impacted upon by construction traffic accessing the site; and
- Evaluation of all known architectural sites in the vicinity of the proposed development that may experience impacts upon their setting.

14.1.5 Methodology for Evaluation of Impacts on Setting

49 The Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas, (ICOMOS, 2005) defines setting in the following way:

50 *'The setting of a heritage structure, site or area is defined as the immediate and extended environment that is part of, or contributes to, its significance and distinctive character.'*

51 *Beyond the physical and visual aspects, the setting includes interaction with the natural environment; past or present social or spiritual practices, customs, traditional knowledge, use or activities and other forms of intangible cultural heritage aspects that created and form the space as well as the current and dynamic cultural, social and economic context.'*

52 The methodology employed in this appraisal used a matrix as a guide to evaluate the significance of impacts on the setting of an archaeological, architectural or cultural heritage sites. The matrix ensures a consistent approach that takes into account a sites 'Sensitivity to Impacts on Setting' and the 'Magnitude of the Impact' that the site is likely to experience as a guide to evaluating the 'Significance of the Impact'.

14.1.5.1 Evaluation of Sites Sensitivity to Impacts on Setting

53 The evaluation of sensitivity is made irrespective of what the magnitude of the impact may be, or what the consultant feels the final significance of the impact may be, however, it is vital that the type of development is taken into account. Overhead lines have a form that is linear and upstanding in the landscape and therefore they have an influence over a wide geographic area.

54 Evaluation of a site's 'Sensitivity to Impacts on Setting' is based upon the following criteria:

- degree of legislative protection;
- preservation / above ground expression;
- group value;
- documentary / historical / artistic references;
- amenity value (accessibility, published material such as maps / leaflets / guides, parking, visitor information etc.);

- viewer incidents (how many and what type people would be affected i.e. visitors to the site, walkers along mapped routes who's focus is on the landscape, travellers / commuters along nearby road / rail links etc.);
- landscape setting;
- other developments that have already impacted on the setting of the site; and
- views or vistas from the site and to the site from the surrounding landscape.

55 Based on the above criteria the sensitivity of a site to impacts on setting was classified as being very high, high, moderate, low or none i.e. no sensitivity.

56 The Sensitivity of a Site to Impacts on its setting is a function of many criteria, not least of which is the status a site holds in the psyche of the people. This can be largely intangible and therefore there is leeway allowed for in the evaluation of a site's sensitivity and also evaluation of the Significance of the Impact in the final Matrix to allow for a degree of professional judgement.

14.1.5.2 Evaluation of the Magnitude of the Impact

57 The evaluation of the 'Magnitude of the Impact' that the proposed development will have on a site is an indication of the scale of the effect that the proposed development will have irrespective of the sensitivity of the site.

58 The effects of a development such as this on the setting of sites are largely visual, but the magnitude of the impact is more than just a function of the distance that a site is located from the line route, the following factors are also taken into account:

- topography, relating to the proposed route line and the site in question;
- screening;
- the scale of the development;
- approach and leaving angles of the route line in relation to the site;
- cumulative impact of other development in the vicinity; and
- views and vistas both to and from the site.

59 Using the above criteria the Magnitude of the Impact is evaluated as being major, substantial, modest, minor or none.

14.1.5.3 Matrix

60 The results of the above evaluation of a site's 'Sensitivity to Impacts on Setting' and the 'Magnitude of the Impact' are used in the following matrix to guide the evaluation of the significance of the impact of the proposed development on the setting of archaeological, architectural and cultural heritage sites.

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Table 1: Matrix for the Evaluation of Significant of Impacts on Setting.

	Magnitude of the Impact				
Sensitivity to Impacts on Setting	Major	Substantial	Modest	Minor	None
Very High	Profound	Profound / Significant	Significant / Moderate	Moderate / Slight	None
High	Profound / Significant	Significant / Moderate	Moderate / Slight	Slight / Imperceptible	None
Moderate	Significant / Moderate	Moderate / Slight	Slight / Imperceptible	Slight / Imperceptible	None
Low	Moderate / Slight	Slight / Imperceptible	Slight / Imperceptible	Imperceptible	None
None	None	None	None	None	None

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