

Information Note

M3 Clonee to North of Kells Motorway Scheme

Archaeological Investigations – Site at Lismullin, Co. Meath

May, 2007

1. Background – Media Reports.

Recent media reports concerning the important archaeological site discovered by the National Roads Authority at Lismullin, Co. Meath, on the route of the approved M3 road project have called into question the adequacy of the Authority's archaeological practices employed on this major road improvement scheme. These reports have appeared against the background of many years of investigations and excavations, the employment of over 400 archaeologists and expenditure of €23 million to date in dealing with archaeology on the M3, leading to what is perceived in the media to be the discovery of the Lismullin site at this late stage in the road planning and construction process.

Unfortunately, the media reports have not reflected the true situation with regard to the archaeological practices actually employed on the M3 project and the sequence of events leading to the Authority's identification and reporting of what we believed was probably a new national monument. This information note has, therefore, been prepared to bring greater clarity to what is now a matter of considerable public interest and to enhance the understanding of the Lismullin site itself and the processes and challenges involved in its identification.

2. Planning of the M3.

The M3 project is the product of a four year planning process which began in 1999, leading to An Bord Pleanála's decision to approve the proposed motorway in 2003 following a 28 day oral hearing which addressed all issues of concern, including potential impacts on the Hill of Tara and the archaeology of the area. During the planning process, ten route options for the Dunshaughlin/Navan section bypassing Tara were evaluated. Meath County Council and the NRA selected the eventually approved route as being the most suitable when all relevant factors were taken into consideration. Broadly, these factors fall into the categories of engineering, environment and economics, and include safety, cost and technical issues as well as environmental and archaeological sensitivities. All of the route alternatives identified had negative and adverse consequences associated with them. The selected route of the M3 was regarded by the County Council and the NRA as the best-fit solution because it gave archaeological protection a high priority in balance with other needs such as to:

- ❑ avoid house demolition to the extent possible;
- ❑ avoid placing the motorway too close to houses;
- ❑ limit fracturing of residential communities;
- ❑ minimise splitting and disruption of farms;

- minimise visual, noise and air quality impacts, and
- ensure the route fulfils its transportation purpose.

The M3, when completed, will comprise a total of 110 kilometers of new public roads and a further 34 kilometres of access roads. Despite recent reports to the contrary, work is continuing on the M3 motorway project with the exception of a zone in the vicinity of the Lismullin site.

3. Archaeological Investigation Framework.

Statutory Approval/Ministerial Directions.

The archaeological investigations and excavations on the M3 have been undertaken to fulfil the An Bord Pleanála conditions pertaining to the approval of the M3 Clonee to North of Kells motorway and to comply with the directions of the Minister for the Environment, Heritage and Local Government which issued in May, June, October and December 2005. The directions concerned, which are catered for in National Monuments legislation, specify the manner and methodologies to be adopted in dealing with archaeology encountered along the route of the road project. It might also be noted that all archaeological works have been undertaken within the context of the M3 Archaeological Research Framework published by the National Roads Authority and Meath County Council in July, 2005 and as set out in Section 6, Future Archaeological Strategy of The M3 Clonee to North of Kells Motorway, Archaeology Information Series (July 2005) which the Authority and County Council also published.

Strategy/Procedures Adopted.

Archaeological investigations involved a desktop survey, field survey and extensive geophysical survey of the M3 route, following which the scheme was archaeologically tested. A total of 160 sites, including the site in Lismullin townland, were identified in 2004 across the whole scheme.

Further investigations and full archaeological excavation of these 160 sites have been carried out since Ministerial directions were issued in 2005. In accordance with these directions, the work has involved extensive topsoil assessment, including metal detection survey, field walking and test pitting in advance of topsoil removal on all sites on the Dunshaughlin-Navan section which includes the Lismullin site. The purpose of the topsoil investigations is principally to assess the potential for artefacts in the topsoil which may have been disturbed by previous ploughing and become detached from archaeological features beneath the ploughsoil.

Recent Archaeological Investigations at Lismullin.

Topsoil assessment at Lismullin took place over seven weeks between September – November 2006 and over two weeks in January 2007. 810 objects were recovered and typically the majority of these were modern in the form of nails, bolts and other agricultural debris. A small number of late and post-medieval artefacts were retrieved. It has subsequently become apparent that these do not relate to any archaeological features on site but may instead have been introduced by manuring.

Finally, there are a number of corroded iron objects of unknown form and date and these will be x-rayed to aid identification.

In February 2007, on completion of the topsoil assessment, careful mechanical top-soil removal commenced in order to reveal the archaeological features beneath. This was

carried out slowly using flat bladed buckets and under constant archaeological supervision and control. The site was revealed to be a series of small sites of varying dates from Bronze Age to early modern and spread across a large area. When additional features became apparent at the southern edge of the proposed cutting the area was enlarged to establish the full extent of the features as is required under the Ministerial directions. The whole area was then trowelled by hand in order to identify all archaeological features. These additional features consisted of a series of arcs of small stakeholes – the residual traces of where timber posts had once been placed - which emerged to form a large circular enclosure approximately 80m in diameter with an internal enclosure approximately 16m in diameter. This work took place during March, 2007, at the end of which a preliminary plan/drawing of the enclosure was carried out in order to assist in assessing the significance of the enclosure.

At this stage a description of the enclosure was sent to archaeologists in the Department of Environment, Heritage and Local Government and the National Museum of Ireland (3 April, 2007). Following an on-site meeting with both the DOEHLG's Chief Archaeologist and the Director of the National Museum on 5 April, it was agreed that limited works could proceed in order to find sufficient dating evidence and additional information for the formal submission to the Minister. On 18 April 2007, the Authority submitted its findings to the Minister for the Environment, Heritage and Local Government and ceased works on the potential National Monument.

While this is a large site in plan (c. 80m in diameter), the component stakeholes are very small and shallow (15-25cm in diameter) and difficult to distinguish from the surrounding subsoil. This lack of differentiation accounts for the absence of this particular feature on the original geophysical survey of the route. Similarly the unusual small-scale nature of the individual features, i.e. shallow stakeholes, of the enclosure made its identification through testing extremely difficult.

It should be noted that prior to excavation there were no visible archaeological features on the site. It is also apparent that past centuries of ploughing disturbed the upper surface of the site so that the stakeholes were only revealed following topsoil removal.

4. The Site at Lismullin.

In the context of the limited excavation works that have taken place to date the following description and interpretation of the enclosure is preliminary and could be subject to change upon full archaeological excavation, analysis and scientific dating. Detailed topographic survey, palaeoenvironmental studies and soil chemical analysis would further enhance the data gained from full excavation and the combined results would make an important contribution to regional prehistoric studies.

The site is located in the Gabhra Valley, approximately 2km from the Hill of Tara. The valley is characterised by eskers and gravel ridges and the enclosure itself is situated at the centre of a natural hollow surrounded by a ridge of higher ground that overlooks all sides of the monument, which in turn is surrounded by lower ground. Archaeological excavation has revealed that the site at Lismullin has been heavily damaged by past centuries of ploughing, with the result that the surviving features investigated to date are very shallow. A series of smaller sites (including a souterrain and ring ditch) and features ranging in date from Middle Bronze Age to early medieval are dispersed across the large cutting in which the enclosure is located and excavation of many of these has been completed.

The enclosure itself is c. 80m in diameter and formed of a double row of narrow postholes. The two rows are c. 2m apart. The postholes are c. 10-20cm in diameter and spaced c. 60cm apart. A smaller enclosure, c. 16m in diameter, formed of closely-spaced postholes (c. 25cm diameter) is positioned centrally within the outer enclosure. Two radial rows of postholes form a corridor between the eastern entrance of the outer and inner enclosures. Approximately $\frac{3}{4}$ of the enclosure lies within the land take for the motorway scheme. A stone adze or axehead and a fragment of Bronze Age pottery were recovered in the vicinity of the enclosure, while a late Iron Age ring headed pin was recovered from a kiln or furnace outside the enclosure. However, none of these finds was directly linked to the enclosure.

The monument is currently interpreted as a ceremonial enclosure. While there is as yet no direct evidence for dating the Lismullin enclosure, ceremonial enclosures on this scale were constructed at various stages in prehistory including the late Neolithic (4,000-5,000 years ago), the late Bronze Age (3,000 years ago) and the middle Iron Age (2,000 years ago). There are no precise parallels for the enclosure at Lismullin. However, preliminary research indicates that the enclosure is most similar in form to late prehistoric enclosures dating to the Late Bronze Age/Iron Age. Some of its closest parallels are phases of the royal hilltop sites of Emain Macha, Co. Armagh, Dún Ailinne, Co. Kildare and Tara, although Lismullin is of a much smaller scale, is much less complex and appears to represent a single phase of use.

In agreement with the Department of the Environment, Heritage and Local Government and the National Museum of Ireland a small selection of stakeholes in the outer enclosure were excavated and charcoal extracted from their fills has been sent for radiocarbon dating. All archaeological work at the site has been suspended pending receipt of directions from the Minister for the Environment, Heritage and Local Government, as provided for in National Monuments legislation.

5. Archaeological Best Practice.

No one archaeological assessment technique can identify all archaeological remains hidden below topsoil. It is, however, widely acknowledged throughout Europe that archaeological test trenching, as used by the Authority, is the most successful methodology for identifying such sites. Furthermore, the combination of extensive testing, complemented by extensive geophysical survey, as carried out on the M3, is acknowledged as archaeological best practice. The next phase of assessment involves opening a generous area around all sites located including apparently isolated features. It was the combination of these phases of careful and deliberate archaeological assessment and the skill and experience of the archaeologists working on the scheme that led to the discovery of the enclosure at Lismullin.

Further, it should be noted that the strategy adopted by the Authority in conjunction with Meath County Council ensured that 160 sites were identified and that 7 additional sites came to light in the course of the excavations and further investigations. Archaeological works were completed at 166 sites in advance of the commencement of road construction, while the only remaining site is the Lismullin enclosure. The Authority is currently awaiting directions from the Minister in relation to this site.

The Authority takes seriously its responsibilities in relation to archaeology and commits significant financial and personnel resources to ensure that archaeology is dealt with at all stages of national road scheme planning and construction in accordance with best practice techniques and in full compliance with legislation. The Authority expects to spend

in excess of €200 million on archaeological works on national road schemes over the seven-year period of the current National Development Plan.

The planned and structured approach the Authority has developed in relation to archaeology and the scale of our investigations, including test trenching and the use of geophysical survey techniques, are on a par with international best practice and are unparalleled in this country. The Authority remains committed to the continued application of these high standards in the implementation of the national roads programme.

6. Publication of Results.

The results of the archaeological investigations on the M3 have been extensively publicised via a dedicated M3 website, www.m3motorway.ie, NRA Archaeological Discoveries Series leaflets and in articles in popular magazines such as Archaeology Ireland and the NRA's new archaeology magazine, Seanda.