

# The Impact of the Proposed M3 Motorway on Tara and its Cultural Landscape

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## 1. INTRODUCTION

The Hill of Tara emerges around the beginning of the 7<sup>th</sup> century AD, depicted in historical sources as the pre-eminent prehistoric sanctuary of kingship in Ireland, its kings claiming national authority. This elevated status was strengthened by four thousand years of continuous use of the hill as a ceremonial complex which consisted of a necropolis, a sanctuary and a temple complex. This manifold use is evident in the archaeological record. Tara is traditionally central to the story of St. Patrick's conversion of the Irish to Christianity and is the setting for most of the important early Irish sagas. The hill became the touchstone of the Irish political and cultural nationalist movements of 19<sup>th</sup> and 20<sup>th</sup> century, its integrity acclaimed and defended by leading figures in the formation of the Irish nation. This position was most vociferously expressed during the campaign waged against the British-Israelites' explorations for the Ark of the Covenant. Tara's uniquely important position and its potential to yield information about Irish culture and history, was acknowledged by an Taoiseach Eamon de Valera who turned the first sod of Professor Séan P. Ó Ríordáin's 1953 excavation campaign. Following Ó Ríordáin's untimely death, his campaign was brought to a successful conclusion by the Taoiseach's son, Professor Ruaidhrí de Valera. This historical association was transferred to a third generation of this modern political dynasty when Minister Síle de Valera turned the first sod on the Discovery Programme's excavations in 1997.

The threat posed to Tara by that section of the M3 motorway designed to pass between the Hill of Tara and Skreen raises serious cultural issues. The motorway's impact on Tara is specifically addressed in this document. As the leading experts on the history and archaeology of Tara, whose research has been funded by the Discovery Programme (a state-funded body) since 1991, we feel that we are singularly well-qualified to comment on how this proposed motorway will effect Tara and its landscape. We can assess, from a position of knowledge, the relevant parts of the published Environmental Impact Statement (EIS) and associated documentation produced for the planning process. It is our contention that, as planned, the motorway will generate an unacceptable impact, direct and indirect, on the archaeological complex of Tara. In this document we consider a number of different, though clearly interrelated, issues, ranging from the proposed motorway's impact on the archaeological landscape to its detrimental effect on the experience of visiting the hill. We examine how the EIS and subsequent interpretations produced by the National Roads Authority have failed to provide a true reckoning of the potential numbers of archaeological sites and monuments directly affected by the construction of the road and how, instead, they attempt to down-play the measure of impact.

## 2. THE ARCHAEOLOGICAL AND HISTORICAL LANDSCAPE OF TARA

The monuments around Tara cannot be viewed in isolation, or as individual sites, but must be seen in the context of an intact archaeological landscape..  
(*N3 Navan to Dunshaughlin Route Selection*, Margaret Gowen Ltd., August 2000, paragraph 7.3)

A considerable amount is known about the archaeological and historical landscape of Tara, to the extent that it can be mapped out with some confidence. This is due to the reasonably good preservation of key archaeological sites in this rural landscape and the unprecedented amount of documentary references to Tara, from as early as the 7<sup>th</sup> century AD. From an archaeological point of view, this landscape achieves its clearest shape during the later prehistoric and early historic periods (c. 3<sup>rd</sup> century BC – 5<sup>th</sup> century AD), a period that saw the encircling of Tara by a defensive ring of fortifications and linear embankments. The space described by these monuments represents the core of the Tara complex as defined not by archaeologists or historians but by our ancestors. To be sure, these monuments represent the best defensive positions in the immediate vicinity of the Hill of Tara and the lands that they once defended extend some distance beyond them, but at the very least this motorway should avoid this core zone. Identified during the Discovery Programme’s intensive analysis of Tara (1992 to the present), information about this defensive cordon is in the public domain. Its existence is acknowledged in the EIS, where it is conceded that proposed motorway transgresses it.

### The Zone of Archaeological Protection

Common misconceptions exist about the historical relationship between the monuments on the crown of the Hill of Tara and those in its immediate vicinity; where Tara begins and ends as a cultural and archaeological entity; and, how these definitions have been recognised in law and in planning interventions initiated by the heritage services. That Tara does not begin and end with the monuments in State ownership on the hill is recognised in some measure by the fact that throughout the 1980s and 1990s the Zone of Archaeological Protection, as marked on the SMR maps, described a slightly larger area than simply the State-owned land. However, in response to the Discovery Programme’s analysis of the immediate hinterland of Tara, around 1997/8 Duchas re-defined this Archaeological Zone as an ellipse some 6km in diameter around the Hill of Tara (Kilfeather, A. of Margaret Gowen & Co. Ltd 2000 *N3 Navan to Dunshaughlin Route Selection*, paragraph 3.4) with the intention of imposing archaeological conditions on all planning applications falling within this larger zone. This enlarged zone is acknowledged in the EIS (Vol. 4A, section 13, subsection 13.1, paragraph 5 – p. 165), as is the fact that the proposed motorway transgresses it.

As presently defined, the Zone of Archaeological Protection around the Hill of Tara affords some level of heritage monitoring in this important landscape. Though informed generally by archaeological and historical analysis, the zone is primarily a planning guideline and is not intended to define or describe the limits of the Tara complex. Therefore, the question of whether the proposed road occurs inside or outside this zone is largely irrelevant.

### Archaeological & Historical Landscapes

Archaeologists and historians approach the task of defining cultural landscapes through integrated analysis of data from a wide range of sources, such as sites and monuments, cartographic and historical documents, topography, geology, soils and drainage, and placenames. Landscapes thus defined are nothing less than the places that people made of the spaces in which they found themselves, their homelands. Landscapes provide the myriad of things required to maintain human society, from generating its cultural and territorial identity to sustaining its economic well-being.

### The Tara Landscape through Archaeology

Analysis of the Tara archaeological landscape is on-going and has made significant advancements over the past decade. Research to date has demonstrated that the crown of the Hill of Tara is principally a burial ground and *temenos* 'sanctuary'. The impressive concentration of monuments around the summit confirms that the hill was the focal point of a larger ritual and political landscape, with associated settlement sites, and more religious sites, extending into the surrounding countryside. In early prehistory (c. 4000-1500 BC), these tend to concentrate in the area immediately to the east of Tara, with a particular concentration in the fertile and well-drained valley between the Hill of Tara and Skreen, extending in the direction of Dunshaughlin. Indeed, the extant monuments provide unequivocal proof of this simply because there are more sites here than anywhere else in the immediate vicinity of the Hill of Tara. Archaeological analysis elsewhere in Ireland and Britain has demonstrated that although the visible component of the record is strongly biased in favour of funerary monuments, their presence is a reliable indicator of the rather more ephemeral remains of associated settlement sites. This interpretation is confirmed by the geophysical survey carried out as part of the Environmental Impact Assessment (EIA) as well as by the general orientation of the earliest monuments on the summit that are deliberately placed to be observed from the east they are virtually invisible from the west.

Later prehistory heralded an extension and increased regulation of the ceremonial landscape of Tara, a phenomenon that in many ways prefaced the creation of the *ferann rí*, or royal demesne of Tara. Defensive earthworks were built around Tara.. These can be traced extending eastwards towards Duleek and northwards as far as the Boyne. Rosnaree, across-river from Knowth, is a royal settlement of the kings of Tara, while to the south-east of it is the former location of the Painestown ogam stone, a monument possibly commemorating one of the Leinster kings of Tara. The Hill of Tara itself is more closely encircled by a group of strategically-positioned hillforts and an enormous linear earthwork, the configuration of which creates an inner zone of demarcation and defence, leaving no doubt about the traditional and continued importance of this area around the Birth of Christ and into the first few centuries AD. To the immediate east of Tara this territorial line is defined by the promontory forts of Rath Lugh and Edoxtown, near Skryne and Rathfeigh respectively. The proposed motorway ignores and transgresses this line and will, therefore, destroy the spatial and visual integrity of the archaeological and historical landscape of Tara, as well as removing from it key component monuments. Moreover, commanding a high promontory overlooking Lismullin, Rath Lugh was probably designed to control, *inter alia*, access through the valley between Tara and Skryne, for this is the principal entrance into this landscape from the north. If this development goes ahead, Rath Lugh will merely overlook, from a distance of 100m, a motorway, which would be a rather ignominious end for a once proud and important monument.

Monuments on the Hill of Tara itself that relate to this period include the hillfort of Ráith Lóegaire and multi-vallate enclosure known as Ráith na Senad which yielded an important collection of Roman objects providing a 2<sup>nd</sup> to 5<sup>th</sup> century date for this monument.

The Early Medieval Period saw the construction of the ringfort, Tech Cormaic, within the summit enclosure of Ráith na Ríg which is attached to the east side of the Forrad (the assembly and inauguration mound on Tara). There can be no doubt that some of the enclosures and other features revealed in recent geophysical survey and excavation on the crown of the hill also belong to this phase of activity. Indeed, there is a growing body of evidence to suggest that the so-called Tech Midchúarta (Banquet Hall) may also be an Early Medieval construction. While this archaeological evidence provides an intriguing counter-point to documentary evidence of abandonment a little later in the Early Medieval Period, there is no questioning the elite status of Tech Cormaic, and those who occupied it, in the settlement hierarchy of Early Medieval Meath. A royal crannóg was built at Lagore, on the east side of Dunshaughlin, close to the monastery of St. Sechnall (Secundinus), which consequently enjoyed royal patronage. These two events, the founding of the monastery and the building of the crannóg, confirm that Dunshaughlin and its environs are part of the broader archaeological landscape of Tara.

### The Tara Landscape through History

Whereas the above outlines how the Tara landscape might be defined using archaeological information, historical sources also provide important insights into the landscape of Tara.

Early sources confirm that Tara is not a hill that stands alone in County Meath without connection to its hinterland. A common and universal mistake in the presentation of Tara in official and popular literature is to regard Tara as consisting simply of the monuments on the ridge in the townlands of Castleboy and Castletown Tara. In a manner similar to the Boyne Valley complex, Rathcroghan, Co. Roscommon and Navan Fort, Co. Armagh, in archaeological terms Tara was the focal point of an extended ceremonial landscape. On a regional level, Tara was in the medieval kingdom of Brega, a region that extended from the River Dee to the River Liffey and eastwards to the coast. It was the foremost kingdom in medieval Ireland, and indeed, it seems imperative to state with the proposed corridor of the M3 extension from Dunshaughlin to Kells in mind, that its route is going through the heartland of Brega and encountering the immediate hinterland of all its significant sites: Dunshaughlin, Lagore, Trevet, Tara, Skreen, Navan, Teltown, Phoenixtown, Oristown, Emlagh and Kells. At a more local level Tara was the centre of a *ferann rí* 'royal demesne', approximating in modern terms to the Barony of Skreen. If one examines the concept of the *ferann rí* of the kings of Tara in the medieval sources, it is clear that the hills of Tara and Skreen are part of one landscape. The demesne was fiercely defended in the tenth and eleventh centuries by a dynasty known as Clann Cholmáin ('the descendants of Colmán) or alternatively the Uí Máel Sechnaill (O'Melaghlin) from incursion by Norse kings of Dublin and their local allies. Máel Sechnaill mac Domnaill (died 1022) (or Malachy II, Brian Ború's rival, as he is popularly identified) was so attached to Tara that he caused his court poet to use it consistently as a theme in his poetry. A lament written on his death likens Tara to a widow keening her lost husband. Máel Sechnaill fought the battle of Tara in 980 against Amlaíb Cúarán, Norse king of Dublin, for dominance of Brega and especially of his *ferann rí* around Tara. Amlaíb had encroached on Máel Sechnaill's territory and seems to have deliberately endowed a church dedicated to St Columba at Skreen as a defiant act in the heart of royal lands. The dedication to Columba was also provocative for two reasons: Clann Cholmáin were linked to that saint's monastery at Kells and more significantly in the context of Tara, it was in direct opposition – metaphorically and physically – to the dedication of a church to St Patrick at Tara. This perceived conflict between the two hills is expressed in a poem on Skreen composed for Amlaíb by Cináed úa hArtacáin, a poet from among his local allies. The poem opens with the line *Achall ar aicce Temair* 'Achall (an alternative name for Skreen) over opposite Temair'. This is the best expression, through medieval eyes, of the relationship between the two hills: they were part of the same royal landscape. Although not as prominent nationally as Tara, nonetheless Skreen was an important prehistoric and medieval site. The medieval poem lists prehistoric burials (likely to be Bronze Age barrows) dotted on the hill. It became the caput of the manor and town of the Anglo-Norman de Feipo family from the twelfth century onwards, the evidence for which lies in and around Skryne Castle and which was so carefully documented by the late Elizabeth Hickey in her book, *Skryne and the early Normans* (published in 1994).

### 3. MINIMALISING THE IMPACT OF THE PROPOSED MOTORWAY

The existence of an integrated cultural landscape extending beyond the crown of the Hill of Tara is acknowledged in all of the archaeological assessments preparatory to, and including, the EIS. In fact, some of the strongest statements about the true measure of impact of the proposed road on this landscape are to be found in these documents. However, since the publication of the EIS there has been a progressive dilution of these archaeological concerns. Concerns about the numbers of archaeological sites threatened by this development, and indeed the existence of the cultural landscape itself, have been systematically talked-down and dissipated. The same dilution of expert advice and forewarning is highlighted in the Kampsax Report into the EIS prepared for Carrickmines Castle. This report, which was commissioned by the EU Commission, finds that legitimate concerns raised in preliminary archaeological communications to the NRA and Dun Laoghaire Rathdown County Council were so diluted by the time the EIS was published that they were effectively ignored by all parties. The Kampsax Report arrived at this conclusion by tracing the paper trail and the same can be done in this instance. According to the first archaeological report submitted to Halcrow Barry from Margaret Gowen and Co. Ltd.:

The monuments around Tara cannot be viewed in isolation, or as individual sites, but must be seen in the context of an intact archaeological landscape, which should not under any circumstances be disturbed, in terms of visual or direct impact on the monuments themselves' (*N3 Navan to Dunshaughlin Route Selection*, August 2000, paragraph 7.3)

The same document has this to say of the proposed route:

[the route] continues up the stream valley between Tara and Skreen. In addition to being highly visible from the Hill of Tara, the route passes through the archaeologically sensitive landscape of the stream valley (*ibid.*, 6.5.1.). No mitigation would remove the effects of this route on the Hill of Tara or on its outlying monuments. It would have extremely severe implications from an archaeological perspective (*ibid.*, 6.5.3.).

In the EIS we read that “this section of the N3 runs through one of the richest and best known archaeological landscapes in Europe” (EIS – Vol.4A p.165). However, this sentence is in turn quoted directly from Margaret Gowen and Co.’s (hereafter MG Ltd.) report on the archaeology of the proposed route submitted to Halcrow Barry where the rest of the paragraph reads: ‘It would be virtually impossible to underestimate the importance or the sensitivity of the archaeological and historical landscape in this area’ (Margaret Gowen and Co. Ltd., *N3 Navan to Dunshaughlin Route Selection: Archaeology*, August 2000, 3.1). Indeed, substantive archaeological concerns were being raised from as early as 1999 in V.J. Keeley Ltd.’s *Archaeological Assessment Paper Survey, Preliminary Area of Interest N3 Dunshaughlin North to Navan West, Co. Meath* where it is reported that: **Within the core area of less than 2.8 x 1.2km, [of the Hill of Tara] there are in excess of seventy-five known archaeological sites. This represents one of the highest, if not the highest, concentrations of sites per square area in the country.** (para. 2.2.1). However, in the *Brief of Evidence Archaeology Report* published in August 2002, also prepared by MG Ltd., it is stated that: **Most of the sites approached by the route appear to be later in date than the great prehistoric complex on Tara. No sites related to the Tara complex will suffer any physical impact and the route lies approximately 1.5km from the eastern limit of the protected zone around Tara** (para. 4.1). This latter is a significant departure from this company’s original assessment. It is also quite untrue.

#### 4. CALCULATING THE NUMBERS OF THREATENED ARCHAEOLOGICAL SITES BETWEEN DUNSHAUGHLIN AND CANNISTOWN

The identification and recording of archaeological sites along the c.14.5km of the proposed motorway corridor between Dunshaughlin and Kilcarn (EIS, volume 4A). involved a paper-search, field-walking and geophysical survey, which was applied along the proposed ‘road-take’. This geophysical survey is of particular importance because it provides a means of independently reckoning the archaeological potential of the proposed route. The survey used a fluxgate gradiometer employed in scan mode. The shortcomings of this technique, which bear on how the results should be interpreted, are outlined below. Images from the original geophysical report, which was carried out by GSB Prospection, Bradford, are not included in the EIS and instead only a “synopsis of their report” is provided (EIS vol. 4A, 167).<sup>1</sup> This omission prevents independent assessment of this aspect of the report.

Despite all of this analysis, there is particular confusion about (1) the actual number of sites and monuments directly threatened by the proposed motorway and (2) estimations of the potential number of endangered sites and monuments. The EIS is particularly deficient in respect of this latter and this is in part due to the peculiar definition of archaeological sites and monuments employed in the EIS and to problems germane to geophysical prospection.

The EIS lists 2 recorded archaeological monuments (*i.e.* sites listed in the *Record of Monuments and Places* for Co. Meath, vis an enclosure ME038:001 and field system ME038:002) on this section of the road corridor, and a further 18 that occur within 500 meters of it. According to the EIS, a further 7 monuments and 19 areas of archaeological interest were identified during geophysical survey of the road take. The 19 areas of archaeological interest are areas that contain geophysical anomalies described as “circular features”, “linear patterns”, “pits”, “possible

pits”, “ferrous [objects]” etc., consistent with sub-surface archaeological remains (monuments, sites, features or artefacts). We will argue below that all 19 areas should be classified as either sites or monuments. In addition to these, 4 other areas were subjected to detailed geophysical survey but were deemed to be of no archaeological interest. However, in all of them numerous dipolar anomalies were recorded and these are interpreted as ferrous material (i.e. iron objects of indeterminate date and context).

On account of the geophysics, measures were subsequently taken to avoid 3 of the new sites<sup>2</sup> and therefore, the total number of known archaeological monuments and sites that occur on the line of this 14.5km section of the motorway is 26.

The probable reason why only 7 of the sites revealed through geophysics merit the description ‘monument’ in the EIS is because they have enclosing elements, e.g. walls or ditches and appear to be spatially-defined. Notwithstanding the probability that some of the remaining 21 sites are also enclosed, the presence or absence of enclosing features is not, of itself, a measure of cultural significance or of stratigraphical complexity. This complacent disregard for ostensibly unenclosed sites is unscientific and contributes to the underestimation of the numbers and quality of archaeological sites at risk.

Furthermore, insofar as each of these 7 sites comprises of a number of archaeological monuments in association with other features of archaeological significance, they might more accurately be described as archaeological complexes (they are referred to as such in the EIS, Vol. 4A, Section E, subsection 13.3.3.3, p. 175). And since each covers an area of between one and two hectares (though in many instances the true extent of these archaeological complexes remains unknown as many features continue beyond the limits of the detailed geophysical survey) reporting that they are ‘of major archaeological interest’ (EIS, Vol. 4A, Section E, subsection 13.2.3., p. 167) is of little practical value: the fact is they are very big and probably very complex and will be very expensive to ‘resolve’. Moreover, there is no guarantee that they are any less big or less complicated than the remaining 21 sites. On the contrary, they may even prove easier to ‘resolve’.

Twenty-eight new sites (including the three geophysical sites subsequently avoided in the road design) may appear to be a remarkably high concentration of archaeological monuments in one place, but it is also the minimum number of potential sites that will be encountered along this stretch of the motorway. There is absolutely no doubt that further sites will be discovered during the stripping of topsoil and, likewise, there is no guarantee that some these will not prove to be big and complex.

The concentration of archaeological sites in this area is entirely predictable given the status and particularly sensitive nature of the archaeological landscape through which the road passes. Including sites directly in the path of the motorway, there are no fewer than 48 archaeological sites within 500m of the road corridor along this 14.5km stretch (EIS Vol. 4C, Appendix E, 8-12) (i.e. 1 site every 300m). It is not possible for the motorway to be re-routed to avoid all of these sites. It is bizarre, to say the least, that knowing this the authorities selected this route and persist in defending it.

#### **Shortcomings of the geophysical survey**

The geophysical survey in this case involved an initial ‘scanning’ of the proposed route with a fluxgate gradiometer in an attempt to identify areas of potential archaeological significance. The scanning involved walking in parallel lines (8 in total per field), spaced 10m apart, along the proposed road corridor whilst observing ‘**fluctuations in the magnetic signal [...] in the instruments’ display panel**’ (EIS vol. 4A, 167). Scanning of this sort is a subjective procedure. No data is collected for later analysis and its success is dependant on the competence, experience and on-the-spot judgement of the field operator. It is therefore not subject to independent quality control or independent assessment. Despite the shortcomings of the scanning methodology, this is a remarkably high number of sites. It is stated in the EIS that ‘**Variations in magnetic response that were thought to be of archaeological potential were identified at thirty sites along the route of the proposed road**’ (EIS vol. 4A, 167). This is a not inconsiderable number. However, due to the problems attendant on scanning it is inevitable that significant areas of potential archaeological were missed, including sites less than 10m in maximum dimension.

Furthermore, many archaeological features are invisible, or transparent, to gradiometry but may be detected using other techniques, such as electrical resistance.

Despite its obvious limitations, this geophysical survey proved to be particularly successful in identifying areas of archaeological interest. This in its own right testifies to the fact that this area boasts a particularly dense concentration of archaeological sites. Again, there is nothing surprising, or indeed novel, about this observation. In reporting her analysis of the various route options for Halcrow Barry, Dr Annaba Kilfeather of Margaret Gowen Ltd. declared that this route ‘..does pass through an area of enormously high archaeological potential..’ (*N3 Navan to Dunshaughlin Route Selection*, August 2000, paragraph 6.1.1). Testifying at the An Bord Pleanála oral hearing Conor Newman warned of the gross underestimation of the archaeology likely to be encountered and of the likely cost of its ‘resolution’. This expert advice was effectively ignored.

By not describing the shortcomings of geophysical scanning the EIS fails to alert the reader to the fact that while the number of new sites is a minimum, it is also anomalously high. And, moreover, since the data is not then employed to develop a predictive model of potential sites, the EIS fails to provide any statistical reckoning of the likely density of archaeological sites along this road corridor. It is patently obvious that given the present density of recorded sites along this portion of the road corridor, substantially more sites will be uncovered during soil-stripping. Knowing this, control surveys should have been established at regular intervals along the route, but this was not done. Neither will the proposed test-trenching address this issue, because it will only target known sites. The question needs to be asked what happens if the test-trenches hits major archaeology?

## 5. IMPACT OF THE MOTORWAY ON THIS LANDSCAPE

It is clear from the foregoing that the proposed motorway transgresses the core landscape of Tara, severing, visually and physically, the key eastern component of the Skreen ridge from the rest of the archaeological and historical landscape. The landscape itself, therefore, will suffer a major impact, the result of which will be that a reasonably intact cultural landscape will be bisected by a four-lane motorway and its associated interchanges and developments.

Moreover, in passing through the valley between Tara and Skreen, the proposed motorway will be impacting on the area of highest site and monument density in the immediate hinterland of the Hill of Tara. Notwithstanding the fact that the 26 known sites and monuments in the road corridor (and an unspecified number of yet undiscovered sites and monuments) will be scientifically excavated, ultimately they will be destroyed and we maintain that this degree of attrition is unacceptably high. All of the sites and monuments in this area are integral to the cultural landscape of Tara and destroying them in order to replace them with a motorway is a direct attack on the integrity of this landscape and its constituent parts.

<sup>1</sup> The full geophysical report is available for purchase from Meath County Council (79.80 euro) and can be consulted at their offices in Navan.

<sup>2</sup> The road has not been sufficiently diverted to completely avoid one of these 3 monuments. However, no additional geophysical survey has been done to examine the revised route, even though associated features clearly extend into the re-aligned road take.

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