An archaeological complex spanning several millennia of human activity was unearthed in the townlands of Borris and Blackcastle, some 300 m south of the modern village of Twomileborris, Co. Tipperary. The site was situated on the N75 link road midway along the proposed route of the M8/N8 Cullahill–Cashel road scheme (Illus. 1). Excavations were conducted by Valerie J Keeley Ltd (VJK Ltd) on behalf of Kilkenny County Council and the National Roads Authority (NRA), following archaeological assessment and testing carried out by VJK Ltd and Margaret Gowen & Co. Ltd in 2005–7. Excavation revealed a large complex of related archaeological features that extended over a span of 950 m along the route (Illus. 2). Technically three separate sites (Sites AR31–33), in effect they formed one large complex of activity. The central and highest part of the three sites was a low, glacial ridge 119 m above sea level. The site extended north and south of this ridge, sloping gently towards low-lying areas adjacent to the Black River to the west.

The road design ensured that any upstanding archaeological monuments in the vicinity of Twomileborris were avoided. These known monuments constituted the tip of an
archaeological iceberg, the greater part being invisible beneath the ground surface. Excavation revealed that since prehistoric times the people who lived, worked, farmed and died in this area had all left their mark. Over the course of the excavations we encountered the settlement, industrial, burial and ritual remains of these former inhabitants. To describe the full range of the evidence is beyond the scope of this paper. It is hoped instead to share with the reader some of the more interesting findings, but a full report will be published in due course. This paper presents a provisional interpretation of the site. Post-extraction work is under way but is at a very early stage. The dates discussed below are approximate only and may be revised. Selected findings from the prehistoric, early medieval and later medieval periods will be described (Illus. 3).

Prehistoric Twomileborris (c. 5500 BC–AD 450)

To the west and south of the site, the River Suir and its many tributaries flow through gently undulating countryside. Further west is the Slieveardagh upland, and beyond it Lough Derg and the Shannon. Large areas of wetland and the Derryville–Littleton bog complexes are found to the north and east of the site. The wetlands have been drained and subjected to intensive peat extraction since the early 20th century. In prehistoric times they would have been larger, wetter and virtually impassable. They would, however, have offered rich potential for the exploitation of wetland plant and animal resources. Although hunting and gathering of wetland species took place, the prehistoric ritual practice of the deposition of artefacts in wetland contexts suggests that wetlands were sometimes perceived in more than practical or worldly terms. An Iron Age shield of wood and leather from Clonoura...
Illus 3—Overall plan of the main excavated features along the M 8/ N 8 route near Twomileborris, showing greyscale image of features detected by geophysical survey beyond the roadtake (Valerie J Keeley Ltd/Target Archaeological Geophysics Ltd).
Illus 4—Plan of prehistoric Enclosure D and associated features (Valerie J Keeley Ltd).
Evidence of prehistoric settlement and funerary activity was found during the excavation. The discovery of a large, enigmatic enclosure (Enclosure D) at Twomileborris shows, however, that ritual activities in the period were not confined to deposition in wetland contexts.

Enclosure D: ditched enclosure with cremation pits
A Late Bronze Age ritual enclosure, Enclosure D, was discovered on low-lying ground adjacent to the confluence of the Black River and a small, unnamed stream. It was oval in plan and measured approximately 95 m east-west by 80 m north-south (Illus. 4). The enclosure was centred on a low knoll with the ground falling away gently on all sides. The entrance faced ESE, was 3.8 m wide and was flanked by a pair of large post-holes. The ditch measured an average of 1.6 m wide and 0.7 m deep and had been widened and deepened in the vicinity of the entrance.

The basal ditch fills adjacent to the entrance were waterlogged, and a human skull fragment was recovered from the northern terminus of the ditch. Elsewhere, the ditch fills displayed evidence of low-intensity in situ burning in the ditch. Animal bone from the burnt layer has been radiocarbon-dated to 800–510 BC (Poz-25206; see Appendix 1 for details). Charcoal and heat-shattered stone were present in varying concentrations throughout the ditch, with the exception of the waterlogged fills. It is unclear whether the charcoal represents the dispersed remains of a number of individual fires or evidence of a single episode when the entire ditch was set alight. A flint scraper was retrieved from this burnt layer.

A cluster of pits and post-holes was located in the raised central area, although these are not thought to represent a domestic structure. The upper fills of the central group of features were charcoal-rich. Two cremation burials and a cattle burial were also present in the interior. The cattle burial is of particular interest. It consisted of selected bones of a mature animal, c. 12 years old (E Miller, pers. comm.), placed in three to four layers in an overlapping, criss-crossing pattern. The bones had been placed in a small, shallow pit, approximately 0.64 m in diameter, into which three small stakes had been inserted prior to the deposition of the bones.

Animal bones are frequently found on prehistoric sites, but deliberate deposition within the precincts of a large ritual enclosure is rare. A layer of animal bone was present in the ditch of a Neolithic henge excavated at Kilshane, Co. Dublin, in advance of the N2 Finglas-Ashbourne road scheme. Here, approximately 300 kg of animal bone consisting of the disarticulated remains of 40–50 juvenile cattle was retrieved from the base of a segmented henge ditch (FitzGerald 2006, 33–5). At Enclosure D a total of 2.2 kg of bone was retrieved from the ditch. A different depositional regime and age profile of cattle are represented at Enclosure D. It is possible that the single elderly animal whose partial remains were placed in the pit had been treated with a particular degree of respect during its life, as in its burial. A bull or cow of above-average productivity or of a new breed may have been kept long after its useful years were behind it. The possibility also exists, however, that the animal had been of special status, independent of its economic value. Maintaining an animal to old age is a tacit acknowledgement of an additional sentimental, symbolic or
cultural value beyond economic usefulness. Perhaps the contemporary holy cows of Asia had parallels in prehistoric Ireland. Post-excavation analysis of the bones will hopefully reveal more information about this interesting deposit.

Circular house
A circular house of probable prehistoric date was also excavated. It was 6.8 m in diameter and the remains consisted of a curvilinear slot-trench and internal structural post-holes with an annex or porch feature at the east (Illus. 5). The area around the house had been severely truncated by later agricultural activity, which had removed any occupation levels and all but the lowest parts of the features cut into the subsoil. A Bronze Age structure of very similar size and form was excavated at Killoran, Co. Tipperary, approximately 10 km to the north of the present site, and has been radiocarbon-dated to the early to mid-second millennium BC (Ó Néill 2005).

Ring-ditches and cremations
In addition to settlement and ritual activity, prehistoric burials were also identified. These included three burial monuments and several groups of cremations, including a flat cemetery of 18 burials. This activity was mostly located on the crest and to the west of the central ridge. Two of the burial monuments were circular ring-ditches, which were devoid of interior features and contained small amounts of cremated bone in the ditch fills. The third monument comprised a rectangular ditch, 4 m long and 2.2 m wide, containing a
central cremation pit. The ditch fills produced burnt and unburnt animal bone. The size of this site and the associated deposits show parallels with Irish prehistoric ring-ditches. Rectangular ditches of this type associated with prehistoric funerary activity are rare, if not unknown, in Ireland.

**Early medieval Twomileborris (AD 450-1169)**

The early medieval period saw an expansion of agricultural activity in Ireland after the hiatus of the Iron Age. By AD 600 ringforts had become the dominant settlement type. But where and how did people live prior to the development of ringforts, what did their settlements look like, and did these settlement types continue to coexist with ringforts? The excavation of a complex of early medieval enclosures at Twomileborris may shed some light on these topics. The enclosures were located near the top of a gentle south-east-facing slope with wide views of the surrounding countryside. Three phases of enclosure (Enclosures A–C) were identified (Illus. 6 & 7). The enclosure complex appears to have changed its form dramatically over time. The three consecutive phases suggest a long continuity of occupation in which enclosures were created to suit the needs or fashion of the time.

**Enclosure B: ‘plectrum-shaped’ enclosure**

The first phase of activity consisted of an oval or ‘plectrum-shaped’ enclosure (Enclosure B) defined by a shallow ditch, an elaborate entrance and an interior palisade. The enclosure measured 42 m in maximum width, with an entranceway 3.2 m wide on the ESE side. The enclosure ditch was U-shaped in profile and averaged 0.94 m in width and 0.62 m in depth. It was slightly wider and deeper in the immediate vicinity of the entrance, which was flanked by a pair of large post-holes, 0.4 m and 0.37 m wide respectively. Between these were three smaller post-holes, leaving a gap of 1.3 m as the actual entrance. The defensive nature of the enclosure suggested by the stout entrance posts is reinforced by the presence of a partial internal palisade, defined by a series of regularly spaced post-holes identified only in the northern and eastern parts of the enclosure. It may originally have been present around the entire perimeter of the enclosure, however, as topsoil cover was thin (0.2 m deep) in the north and east and deeper (0.5 m) elsewhere, indicating possible truncation of the site/this feature by tillage. The basal fill of the ditch has been radiocarbon-dated to AD 400–560 (Poz-25204).

The interior of Enclosure B contained a circular structure, 5.5 m in diameter. There were also 27 pits dispersed throughout. The pits varied in form and are thought to represent hearths and storage and roasting pits. A handle made of red deer antler was present in one pit. A ceramic crucible and iron-working residues were retrieved from the enclosure ditch. The crucible was pyramid-shaped and typical of those from other excavated early medieval settlements. The ditch fills produced 90 kg of animal bone.

Enclosure B is reminiscent of another plectrum-shaped enclosure excavated at Newtown, Co. Limerick. A sample from the basal fill of the Newtown enclosure ditch was radiocarbon-dated to AD 795–1030 and suggests that a wider range of enclosure types was current in the early medieval period than has previously been recognised (Coyne 2006).

The second phase of enclosure activity saw the construction of a small ringfort (Enclosure A, see below). Enclosure B had fallen into disuse and its ditch had completely
filled up naturally before the construction of the ringfort. Enclosure B is an early medieval settlement of the fifth or sixth century pre-dating the construction of a classic ringfort-type enclosure (Enclosure A) in the seventh or eighth century (see below). At Newtown the enclosure continued in use throughout the period of ringfort construction and occupation, whereas at Twomileborris the oval/plectrum-shaped enclosure was succeeded by a ringfort.

Enclosure A: ringfort
The ringfort, Enclosure A, was constructed over the northern part of Enclosure B. No surface trace of the ringfort was visible prior to topsoil removal. It consisted of a circular enclosure ditch with a V-shaped profile measuring 1.35 m wide and 0.7 m deep on average. An east-facing entrance, 3.2 m wide, was flanked by at least one large post-hole adjacent to the southern terminus. The interior of the ringfort contained the remains of four circular structures. These were defined by interior post-holes and, in two instances, by shallow curvilinear gullies. The basal fill of the ringfort ditch has produced a radiocarbon date of AD 677–774 (UB-9100) and, as such, falls within the chronology given for the construction and occupation of the majority of ringforts (Stout 1997, 29). Several iron knives, a quern-stone fragment, a glass bead, a stone gaming-board and 26 kg of animal bone were retrieved from the enclosure ditch.

One of the interior structures (Structure 2) closely corresponds to the description of a house type referred to as a tech nincís in the Críth Gabhlach (an early Irish law-tract on status): "The tech nincís is seventeen feet in diameter . . . half of the interior of the house is taken up with the bed cubicle (imdae), and the other half is paved (plait)" (Kelly 1998, 362). Structure 2
Illus 7—Plan of the early medieval enclosure complex (Valerie J Keeley Ltd).
was 5.2 m in diameter (17 ft) and the northern half of the interior had a cobbled floor surface. The similarity between the excavated and documentary evidence is striking.

Enclosure C: rectangular expansion of ringfort
This later phase continued to use the earlier ringfort (Enclosure A) but as part of a much larger rectangular enclosure (Enclosure C). (Geophysical survey results indicated the extent of Enclosure C outside the area of excavation.) The northern part of the initial ringfort ditch was widened and deepened and incorporated into Enclosure C. This constituted the third and final phase of the early medieval enclosure complex. Enclosure C measured approximately 87 m north–south by 55 m east–west, and approximately 45% of this enclosure was situated outside the landtake for the new road. The larger area enclosed would have allowed a greater range of activities to take place inside the perimeter. A furnace, a smithing hearth, two cereal-drying kilns, several pits, a four-post structure and two circular structures were present in the interior. Two iron knives, metallurgical residues and 76 kg of animal bone were retrieved from the ditch fills.

Early medieval burials
An early medieval cemetery was identified in the interior of Enclosure B (plectrum-shaped enclosure). It is thought to have been in use following the abandonment of Enclosure B and prior to the construction of Enclosure C. The burials are thought to be contemporary with the occupation of the ringfort (Enclosure A). Several recently excavated early medieval sites, such as Raystown, Co. Meath (Seaver 2006), have produced evidence for contemporary settlement and burial activity. Twenty burials in addition to a small amount of disarticulated skeletal material were identified at Twomileborris. The burials comprised 11 adults, one adolescent and eight juveniles and were typical of the period, being characterised by shallow, unlined grave-cuts aligned east–west (Illus. 8). The burials were
generally supine inhumations (resting on the back); 14 were extended, two were flexed (knees drawn up to the chest) and two were crouched. One adult female had been buried with a copper-alloy ring-pin beneath the vertebrae of her neck.

The emerging phenomenon of settlement/cemetery sites raises interesting questions about the close relationship, physical and spiritual, between the living and the dead in this period. The location of the burials at Twomileborris in such close proximity to the ringfort indicates that death and burial were viewed as natural parts of society and settlement. Their presence within the settlement itself suggests that the dead continued to be a part of the community in a very literal sense. This practice of burial within the settlement later gave way to burial in larger community graveyards in consecrated ecclesiastical precincts. Perhaps the large early church site at Liathmore (Liath Mochomog), 2.2 km east of the site on the western edge of the wetland, succeeded the small settlement/cemetery at Twomileborris as the community burial-ground.

**Medieval Twomileborris (AD 1169-1550)**

The medieval period saw the arrival of the Anglo-Normans, who established an enduring presence in the region. The earthwork castles of the first colonists rapidly gave way to a network of manors, boroughs and towns. The expansion of the Anglo-Norman colony into North Tipperary brought a feudal society and corresponding technological and organisational changes, with dramatic consequences for landscape and society.

Twomileborris lay within the cantred (a district comprising a hundred villages) of Eliogarty. Theobold Walter, the first of the Butlers of Ormond, was granted the cantred of Eliogarty in 1185. The cantred had been created from, and was probably coterminous with, the Gaelic territory of Éile Ua Fogartaigh. The modern village of Twomileborris is thought to be the direct descendant of the medieval borough of Burgage Leeth (Buríos leith), established sometime in the late 12th or early 13th century. The borough was held in fief by the archbishop of Cashel in 1312 (Sweetman & Handcock 1886, 282). Boroughs at this time commonly contained a number of houses and burgage plots on either side of a central street, a mill, a market and a parish church and graveyard. Many of these elements have been identified previously at Twomileborris (see Illus. 3). The later medieval features excavated in advance of the road scheme comprised a rectangular building, a vertical watermill, three cereal-drying kilns, a metalworking complex and several enclosures.

**The mill**

The mill would probably have been owned by the lord and would have been an important source of revenue, notwithstanding the considerable expense involved in its construction and maintenance. The remains of a millhouse found during the excavation consisted of a small, square building with stone foundations that had been severely truncated by later drainage works. Immediately east of the millhouse, the wheel-pit as well as several large and well-preserved oak timbers were found. The largest of these, Timber 5, was more than 5 m long and contained several dowels (wooden pegs) and joints. It is thought that a vertical wheel of undershot type rotated directly above this timber; this, in turn, drove a gear-shaft that turned the millstones housed in the millhouse (Illus. 9). A broken millstone was found during the excavation.
Illus. 9—Elevated view of the vertical watermill (AirShots Ltd).

Illus. 10—Elevated view of a stone-built cereal-drying kiln during excavation (AirShots Ltd).
The tenants would have had a feudal obligation to bring their grain to the lord’s mill for grinding, where a tariff for its use was charged. To guarantee income from the mill, possession and use of hand-operated grinding equipment was often prohibited in this period (Bennett 1937, 129–32; Hennessy 2004).

Cereal-drying kilns
Three medieval cereal-drying kilns were also excavated (Illus. 10), on a gently sloping, north-west-facing terrace c. 75 m east of and overlooking the mill. The three kilns, of ‘dumbbell’ type, were all cut into the subsoil and two were partly stone-lined. They contained deposits rich in charcoal and carbonised cereal remains. These kilns were used both to dry and to disinfect grain before grinding and to malt barley for brewing.

Metalworking
A metalworking area, which included two furnaces and three smithing hearths, was excavated to the east of the mill. The furnaces were of a more technologically advanced type than those in use in the early medieval period. They contained a sloping pit to collect the molten slag by a process known as tapping.

The rectangular building
A rectangular structure was excavated adjacent to the west bank of the Black River. It measured 5.8 m by 6 m, was of earthen/clay wall construction and contained the remains of four well-preserved floor surfaces. A foundation subfloor level of sand and gravel, with
inclusions of wood chippings, had been covered by a layer of limestone cobbles, which formed the first floor level. The second floor level comprised a layer of compact orange clay placed above the cobbles. An iron chisel and nail were retrieved from this layer. The third floor level consisted of a compact, sandy silt with occasional charcoal flecking. This deposit contained a lead weight. Thirty stake-holes had been inserted into this deposit, in addition to a shallow internal drain. The fourth and final floor surface was composed of compact clay in the northern half of the structure and an area of large cobbles/flagstones in the southern half, with a large central limestone slab and a hearth. Hammerscale (tiny metal debris that is a by-product of hammer-and-anvil work) was detected in the fills of the hearth and in the vicinity of the large slab. The final period of use is thought to have been related to metalworking, perhaps smithing activity. A midden-type deposit to the south of the structure produced several sherds of imported pottery and two silver coins.

Trade goods and coins
Industrial activities of the type identified at Twomileborris may well have taken place on the outskirts of many medieval boroughs. The trading of agricultural surpluses, the products of metalworking and other crafts were important parts of the local and regional economy. Evidence for luxury imported goods was present in the form of imported pottery. The assemblage included wares from England and France. Pottery vessels containing wine and oil, landed at the great medieval trading port of Waterford, perhaps wound their way upstream along the Suir and its tributaries to Twomileborris. The monetary nature of this economic activity is shown by a hoard of 53 silver pennies found in a pit also containing a carved bone object (Illus. 11). In total, 71 silver coins were retrieved during the excavation of the medieval features. The evidence shows that the borough at Twomileborris was very much a part of the wider Anglo-Norman world.

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Note

1. Site AR 31: Blackcastle townland and Borris townland; NGR 219301, 157725; height 112–118 m OD; excavation reg. no. E2374; ministerial direction no. A027/000.
   Site AR 32: Borris townland; NGR 219402, 157623; height 118–119 m OD; excavation reg. no. E2375, ministerial direction no. A027/000.
   Site AR 33: Borris townland; NGR 219538, 157496; height 113–117 m OD; excavation reg. no E2376; ministerial direction no. A027/000.