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Component 4000, Thorpe Business Park, Austhorpe, Leeds West Yorkshire

Preliminary Summary of Results of Monitoring and Investigation Work

A programme of archaeological monitoring and recording (watching brief) was undertaken over the course of eight weeks between the 20/10/03 and11/12/03 on Component 4000 of the Thorpe Business Park (Austhorpe, Leeds). The site consisted of ploughed fields and the site of the former Brown Moor Farm. It lay to the west of R1 and to the north of Barrowby Lane, and varied in elevation between 80m AOD at the northern end to 95m AOD adjacent to the lane. Two archaeological sites of post-medieval and early C20th date had previously been identified as existing within this area (M. Newman 1994), Brown Moor Pit (site 19) and the associated railway embankment (site 20). However, the presence of Late Iron Age/Romano-British remains was also suspected on the basis of geophysical survey results on land immediately to the east. During the archaeological monitoring further significant remains were encountered across the site. The archaeological evidence was multi-period dating from the Iron Age to the early C20th and represented industrial, agricultural and settlement activity within the area. Most of the archaeological features has suffered truncation as a result of later ploughing.

Component 4000 was separated into two fields by Brown Moor Farm and its access track. The field to the west of the farm was recorded as Area 1 and that to the east as Area 2 (see Figure 1). Remains dating to the Late Iron Age/Romano-British period were found in both areas. The remains consisted of four zones of activity, two in Area 1 and two in Area 2. Whilst there were no stratigraphic relationships between the groups of features, the majority shared similar alignments and were considered to be contemporary.

Within the southern portion of Area 1 and the most elevated position on site were the remains of several linear ditches and a curvilinear gully. There was no perceptible form to the features and they may have constituted boundary divisions within a more extensive field system that has not survived in its entirety.

Towards the northern portion of Area 1 was a more coherent area of archaeological activity. This took the form of successive phases of ditches and gullies and appeared to form the edge/corner of a field boundary or agricultural subdivision, which extended beyond the excavation limit. Within the south western corner of these features were further gullies that formed a sub-rectangular enclosure possibly utilised for animal husbandry.

In Area 2 there was more substantial multi-phased settlement evidence, which extended throughout the area. The remains comprised a D-shaped enclosure and some traces of internal curvilinear gullies, which may have been interior boundary divisions or the remnants of round house structures. The ditches of the enclosure had been successively re-cut and two later ditches of the same period truncated it. Further features of a similar nature were uncovered to the west of the D-shaped enclosure though they

were less extensive. These were in the form of two gullies and post-holes and may represent settlement evidence. To the east of the D-shaped enclosure was a large curvilinear ditch and a curvilinear gully along with a large rectangular pit, suggestive of another focus of settlement activity. All of the archaeology within Area 2 was observed extending beyond the limit of excavation, suggesting that further archaeological remains exist to the north and east of Area 2. Although artefactual evidence was not abundant, some diagnostic material including part of a beehive quern and a sherd of Iron Age pottery were recovered.

Extensive remains of plough furrows in Areas 1 and 2 are likely to have been of a post-medieval or medieval date and relate to the ploughed-down remains of ridge and furrow cultivation. Three pits containing burnt material were also located in the central portion of Area 1 and were considered to be of medieval date. These pits may represent single episodes of activity, such as the clearance of fire debris, rather than more established settlement evidence.

The post-medieval to early C20th period was represented by two significant archaeological sites and during this phase of work additional archaeological evidence for this period was uncovered. Sections were recorded through the railway embankment north-west of Brown Moor Pit and monitoring was also undertaken during the partial reduction of the pit mound. In Area 1 a brick culvert was recorded on the western edge of the pit heap and five probable shafts were located around the edge of the Area. In Area 2, an extensive portion of disturbed ground, including coal spreads and two ditches were encountered. (The removal of the coal spreads will be monitored during subsequent ground levelling works). These deposits and features are also likely to be related to coal mining activity.

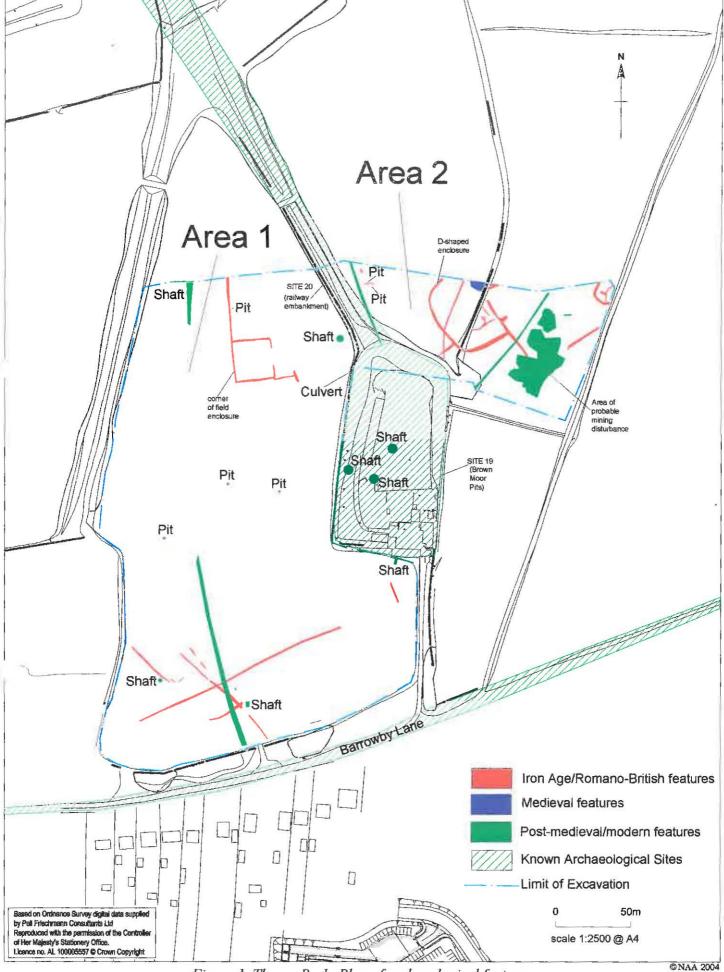


Figure 1 Thorpe Park: Plan of archaeological features

GREEN PARK, AUSTHORPE, LEEDS

ARCHAEOLOGY

Green Park is located between Austhorpe Lane and the Thorpe Park development on the east side of the Leeds conurbation. The proposed park measures 46.8ha and comprises a variety of formal and informal landscapes. The design is set out in the Green Park Masterplan (drawing LD/327/04/Rev6) and is a proposal by Leeds City Council Parks and Countryside Service.

This document has been prepared by Northern Archaeological Associates for Leeds City Council and sets out the archaeological background to the park; the design strategy as it relates to heritage; the likely impacts; and, the mitigation measures that are proposed.

Background

A significant amount of archaeological research, investigation and reporting has previously been undertaken within the proposed Green Park and the adjacent Thorpe Park development. These works provide a considerable body of evidence which underpins current understanding of the baseline conditions within the proposed Green Park site.

The area surrounding Austhorpe Hall was the subject of a geophysical survey in July 2004 and a detailed earthwork survey was carried out by English Heritage and subsequently enhanced by NAA (2005). Sample excavation has been undertaken by the East Leeds History and Archaeology Society in 2004 (Allday) on remains close to Austhorpe Hall and, in 2005, NAA undertook monitoring and excavation during the installation of the Green Park sewer which transacted the park area from south-east to north-west. A geophysical survey of an area of proposed sports pitches was also undertaken in 2005, together with a limited evaluation of the line of Grim's Ditch. In 2008, archaeological monitoring was undertaken by NAA during construction of newt ponds and associated access works.

Grim's Ditch

A section of Grim's Ditch within the proposed Green Park, immediately to the west of Thorpe Park, is designated as a scheduled monument (originally SM 31513, now National Heritage No. 1020350). The course of the monument to the south of Barrowby Lane, on the western edge of the existing Thorpe Park business park is also scheduled (SM 32143, NH 1018795) as are sections further south of the A63, to the west of Bullerthorpe Lane. These all form components of a single major boundary feature. The monument, which originally comprised a substantial bank with a ditch running along its eastern face, is orientated north to south (with possible breaks along its length) and has been traced for c.8km along the eastern side of Leeds. Investigation of part of the monument in advance of the M1-A1 Link Road, and during construction of the access to Thorpe Park, suggests that it was constructed during the Early-Middle Iron Age with a possible re-definition in the later Roman period (Wheelhouse 2001).

Although no earthwork remains now survive within Green Park, a section of the monument has been scheduled. This section coincides with an earthwork marked in this location on early Ordnance Survey maps and a section of ditch identified by geophysical survey (ASWYAS 1997). A combination of map regression work and trial trenching by NAA in 2005 has determined that Grim's Ditch can be traced as an unbroken sub-surface feature as far north

as the Leeds-Selby railway line. Although this latter section is not scheduled, it is considered to be of national importance.

Other Prehistoric and Roman remains

A geophysical survey undertaken in 2004 of the field immediately south of Austhorpe Hall identified a roughly square triple-ditched enclosure, a probable round barrow and evidence of an Iron Age/Romano-British field system located south-east of Austhorpe Hall. Sample excavation of the enclosure ditches recovered Roman pottery, which dated to the 2nd-3rd centuries AD. Further elements of the field system and a palisade trench were recorded in 2005 during construction of the Green Park sewer, although no significant remains were recorded during a geophysical survey of proposed sport pitches in the southern part of Green Park. In 2008, monitoring of the access to construct newt ponds in the north-eastern part of Green Park recorded a further concentration of features (ditches, pits, post-holes, a stone surface and a wall foundation) which dated to the Roman period. While the precise form of this site was uncertain, the intercutting nature of many of the features implied multi-phase occupation. The pottery assemblage recovered during the investigations predominantly dated to the mid-3rd to mid-4th centuries and suggested a focus of activity within the first half of the 4th century. Other finds included a large stone basin and a Roman altar.

Austhorpe Hall (NH 1256314) Grade II*

Austhorpe Hall is a red brick house with stone dressings dating originally to 1694, but with 19th century alterations. The building is thought to be a rare survival of a rural version of the type of late 17th century merchant's house being built in Leeds at this time. The house lies on the east side of Austhorpe Lane and is on the edge of Green Park, although not included within it. It is likely that the building perpetuates the site of an earlier medieval manor. An earlier hall building is recorded in 1574 and it is likely that some earlier buildings may have extended beyond the existing curtilage.

The present house is two storeys in height and seven bays wide with cellars and attics. A series of traditional farm brick outbuildings lie further to the north south and are detached from the main house. The main frontage of the house faces south with gardens to the south and east. The ha-ha, the garden walls and iron gate which border the gardens are also listed (NH 1256318). The English Heritage 2004 survey suggested that the gardens extended further to the south than they do now and that additional elements may be preserved in the field.

Within the area of Green Park to the north and east of Austhorpe Hall, the remains of two trackways, two possible building platforms and several areas of medieval and post-medieval ridge and furrow have been recorded. While some of these elements are potentially associated with the hall, the trackways appear to be related to coal mining.

Coal Mining

Coal mining and related remains within Green Park include the site of the Adelaide Pit, a spoil heap (or ramp) and a railway embankment. The latter feature linked the former West Yorkshire Pit, south of Green Park, and Brown Moor Pit to the east, to the main Leeds to Selby railway. Investigations during the construction of the Green Park sewer (2005) and the formation of newt ponds in the north-east corner of the site (2008) identified a concentration of post-medieval mining activity in those fields immediately to the south of the railway. Layers of mining waste were found to overlie an earlier phase of ridge and

furrow. This phase of dumping had resulted in a large plateau of material being formed, beneath which several shafts were identified.

Design Strategy

The present masterplan for Green Park has been carefully designed to preserve recorded earthworks and below ground archaeological remains as far as possible, to respect the alignment of Grim's Ditch and to enhance the setting of Austhorpe Hall. The park will retain and enhance many existing features such as hedgerows and meadows. Upstanding ridge and furrow earthworks will be retained in parkland north and south of Austhorpe Hall. Although an area of ridge and furrow to the north-east will be partially planted with woodland, the earthworks will be left in-situ and a feature block will be left unplanted.

The playing pitches have been located towards the south-eastern side of the park principally to accommodate the views of local residents who wished to see the pitches and associated facilities located away from Austhorpe Lane. One playing pitch has been located across the line of a section of Grim's Ditch, but levels would be built up to create a more level surface and no sub-surface drainage would be installed. The remainder of the pitches are set back from the monument. A small changing room pavilion is proposed to the east of Grim's Ditch, to be close to dedicated parking on the edge of Thorpe Park. The building would be set back from the monument.

A SuDS basin has been deliberately aligned along an unscheduled section of Grim's Ditch in order to combine the need to provide drainage control with an opportunity to show the alignment of the monument. The Suds basin will take the form of a dry swale for most of the year and would reflect the position of the ditch. A combination of interpretation panels and markers at this and other points would be used to increase understanding of the monument and highlight its location within the landscape.

The trees within the formal avenue and within a grove at the east end of the avenue have been interrupted where they coincide with the line of Grim's Ditch in order to emphasise the alignment of the monument and to enhance views along it.

The park has been designed to provide access for all. Structured bitumen footpaths measuring 2.5m wide are required to facilitate movement through the site and to accommodate cyclists. Several footpaths cross the line of Grim's Ditch due to the need to achieve east-west movement through the site, but the foundations of the paths would be shallow and would not have a significant impact on the monument. Rolled stone paths 2m wide would be installed in existing and proposed woodland and 3m wide grass paths would be mown throughout the long grass meadow areas.

A formal garden based upon the award winning 'Scent of a Roman Garden' exhibited at the Chelsea Flower Show in 2007 will be created close to, but outside the area where the Roman altar was found in 2008. This garden will provide an exciting opportunity to enhance understanding of a range of aspects of Roman culture through the plants and their uses. It will also create a feature which would be used as a focus for interpretation of the Roman remains within the park.

A series of interpretation boards, fingerposts and lecterns will be strategically placed within the park. The boards and lecterns will give information about the local archaeology, history,

flora and fauna using a combination of images and text. The sign posts will give clear direction to visitors to areas of interest and trail features will be installed at points around a designated route for educational purposes.

Impacts

The creation of Green Park will have a limited adverse impact upon known archaeological remains and provides an exciting opportunity to interpret the archaeology within the area and thus improve public understanding and appreciation of this significant resource. On balance the proposals are considered to be beneficial.

A short section of Grim's Ditch will be removed as a result of a deliberate decision to locate a drainage basin along a short section of the monument, thereby allowing the line of the ditch to be revealed as an earthwork feature and enhance opportunities for interpretation of the monument. The section of the monument affected is unscheduled but is of national importance. Given appropriate archaeological excavation in advance and further inputs into the exact position and size of the swale feature, it is considered that this impact would be beneficial.

A junior sports pitch will also be located across a section of Grim's Ditch, however, levels will be built up and no drainage will be installed below the pitch surface. Soils would be removed and replaced using vehicles with a low pressure footprint. The section of the monument affected is unscheduled, but is of national importance. The impact is considered to be minor adverse and can be effectively mitigated.

The proposed sports pavilion will have no direct impact on any known archaeological remains although it is located some 20m to the east of Grim's Ditch due to the need for it to be close to the off-site carparking. It is considered that the pavilion would have a slight adverse impact on setting of Grim's Ditch.

An area of ridge and furrow north-east of Austhorpe Hall will be over-planted with trees to create an area of woodland. There will be a gradual loss of visibility of the earthworks as the woodland matures. The earthworks have been recorded in previous surveys and the impact is considered to be minor adverse.

The construction of the sports pitches to the west of Grim's Ditch will have no impact on any recorded archaeological remains, however, they will require a cut and fill operation to create level playing surfaces. There is some limited potential for unrecorded later prehistoric or remain remains of field systems to occur in this area. The impact is considered to be minor adverse and can be effectively mitigated.

The construction of the bitumen surfaced footpaths will require limited topsoil stripping over the line of Grim's Ditch at several points. The depth of excavation would be shallow (c.300mm) and there would be no significant impact on the monument or any other below ground remains and can be effectively mitigated.

Mitigation

A staged programme of archaeological works will be undertaken in order to mitigate any potential impacts on below ground archaeology as a result of the creation Green Park. These works would include, but not be limited to, geophysical survey of the remaining areas of the sports pitches which have not been previously surveyed; archaeological monitoring of all groundworks and investigation of any remains affected by those works; a programme of strip, map and record across the area of the sports pitches; the investigation of the section of Grim's Ditch where the SuDS basin would be sited; the preparation of report on the results of this work; and, the preparation of images and text for use on interpretation boards and lecterns. The opportunity for community participation in the excavation of the section of Grim's Ditch would be explored with local groups and societies.

A written scheme of investigation (WSI) will be prepared by Northern Archaeological Associates on behalf of Leeds City Council which will detail the archaeological mitigation strategy. This document will be agreed with West Yorkshire Archaeological Advisory Service (WYAAS) and will be submitted to Leeds City Council in order that the work should form part of an agreed scheme of works.

The Green Park will be managed and maintained by Leeds City Council Parks and Countryside Service. A management plan will be drawn up for the archaeological remains within the park in order that their location, significance and sensitivity is clearly set out so that appropriate maintenance is undertaken and control measures are in place to avoid unnecessary damage occurring.

Conclusion

The creation of the park which will involve the establishment of parkland around Austhorpe Hall, the removal of a large section of Grim's Ditch from active cultivation, the establishment of a significant amount of interpretation to aid understanding, and the implementation of long term management strategy for the park will all have a significant beneficial impact on conservation and public understanding and appreciation of the archaeological resource.

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