Archaeological Strip, Map and Sample

Masons Farm
Hopton, Norfolk

on behalf of
Windcrop

Heather Wallis
November 2012

Project Name	**Masons Farm, Hopton**
Client	**Windcrop**
NHER Event No	**ENF 130136**
Grid reference	**TG 5227 0151**
Date of fieldwork	**14th and 15th November**

Introduction

Planning permission has been sought for the installation of 3 wind turbines at Masons Farm, Hopton (Fig. 1). This has been approved on condition that an archaeological 'strip, map and sample' strategy is applied to the development. A Written Scheme of Investigation (WSI) for the archaeological project was prepared by Iain Soden Heritage Services Ltd and approved by the Norfolk Historic Environment Service. Fieldwork was carried out according to this WSI by Heather Wallis, Archaeologist over a two day period in November 2012.

The installation of the turbines is to be undertaken by Windcrop who commissioned the archaeological works.

Geology

The underlying solid geology of the area is a mix of sands and gravels known as Norwich Crag. Above these the superficial geology is Corton Woods Sands and Gravel Member (British Geological Survey). This till is predominantly sandy with flint, gravel, silts and clays. The overlying soils can be classified as rich loams which are easily farmed.

Modern Topography

The site straddles the 15m contour, a relatively high spot in the context of the surrounding landscape with the marshes of the Norfolk Broads just 4km to the north-west lying at 0m OD. The natural topography of the local area is one or gently undulating low 'hills'.

Ancient Topography

Of significance to the human occupation of this area is the ancient topography which differed considerably from that we see toady. During the prehistoric and Roman periods a large portion of the land *c.*4km to the north of the development area was under water forming what is known as the Great Estuary. The site under consideration was therefore part of an area of 'high' ground to the south of the Great Estuary (known as Lothingland). A similar landscape, the Isle of Flegg, was also present to the north of the ancient estuary. Both these areas had similar soils and topography and the free draining fertile soils were tempting to early settlers. (Williamson 2005).

Nearby a significant feature of the Roman landscape was the fort at Burgh Castle (*c.*4.5km north-west of the present site). This, along with the fort at Caister to the north of the Great Estuary, were built as part of the Late Roman Saxon Shore defences.

During the post-Roman period a sand bar started to form a spit across the mouth of the estuary which led to the deposition of silts and the formation of the flat landscapes of Halvergate Marshes. It is upon this spit that the town of Yarmouth was established allowing medieval, post-medieval and modern settlement expansion to the north of the present site.

Archaeological Background

Prior to works commencing a search of the Norfolk Historic Environment Record was undertaken and a plot of the aerial photographs relating to the area obtained. These indicated that the site lay within an extensive area of multi-period cropmarks (Fig.2) details of which has been discussed by Albone et al. (2007).

Prehistoric evidence in the form worked flints, including tools and implements dating from the Neolithic, Meolithic and Bronze Age periods have been recorded. Cropmarks of ring ditches have been interpreted as Bronze Age round barrows. Extensive field systems dating from the Iron Age (NHER 43494) and Roman (NHER 43495) periods have also bee identified across the area. These include a sinuous trackway (NHER 43529), an enclosure (NHER 43500) and a double ditch (NHER 43494). Occasional finds of a Roman date have also been found.

A distinct break in activity is apparent during the Saxon period as very little evidence of this date has been recovered from the area around the development site. During the medieval period the focus of activity had changed and both artefactual and aerial photographic evidence in located largely to the north and north-west of the site.

More recently the eastern coast of Norfolk was heavily defended during the World Wars and much evidence dating to the period has been identified through the study of aerial photographs.

Overall this area to the south of Gorleston has been heavily studied as development plans have led to a number of desk-based surveys of the archaeology to be produced along with geophysical surveys and programmes of fieldwork (Gibson 1998; White 1998; Hutcheson 1998; Trimble 1999; Penn 2008; Birks 2011). However the results of excavation have often proved disappointing. Where features identified on aerial photographs have survived and been investigated they have seldom produced finds assemblages large enough or diagnostic enough to narrow down the dating the field systems.

Aims

The aim of the fieldwork was to record the significance and nature of any archaeological features on the site prior to their damage or loss and to ensure that the disturbance caused by the development caused minimum disturbance or destruction to the revealed archaeology. The anticipated excavation of features also hoped to recover finds which could help with clarifying the dates of the archaeological features.

Methodology

The location of the turbines and the cable trench was laid out by Windcrop. Excavation was undertaken along the length of the cable trench (113m long) linking the new turbines to the nearby farm buildings (Fig. 3). This narrow trench (0.3m wide) was excavated by machine with a ditching bucket to the depth at which archaeological deposits were first identified or the maximum depth required by the development (0.6m near the farm buildings, 0.9m across the arable field), which ever was encountered first. The base of the trench was cleaned by hand and where features were present these were excavated.

The turbines themselves will have little impact on the below ground deposits as each turbine is supported by a tripod of piles. Although these extend to 3-4m in depth they are only *c*.0.25m in diameter and cannot be constructed in previously disturbed ground. No archaeological work was therefore undertaken on these pile locations.

Archaeological records comprise written, drawn, photographic and survey data. A single context recording methodology was adopted. Sections of the features and sample sections at 5m intervals along the length of the trench were drawn at 1:10. The written record comprises context descriptions on *pro-forma* context sheets. Photographic record consists of black and white negatives and digital photographs.

Works were carried out in full accordance with national and regional guidelines for the treatment of archaeological remains, and in particular the guidance set out in *Standards for Field Archaeology in the East of England* (Gurney 2003) and the *Institute of Field Archaeologists Standard and Guidance for Archaeological Excavation* (1995 revised 2008).

Results

(Fig4, Fig 5 and Appendix)

The natural (03) subsoil seen in the trench was largely a red/orange fine gravel, although patches of courser gravel and yellow sand were also present. Above this was a 0.35m depth of a firm orange brown silt (02) which formed a subsoil over which was *c*.0.3m of rich grey brown loamy silt topsoil (01). These deposits were consistent across the arable field. However along side of and between the farm buildings there had been much recent disturbance (not illustrated). The trench located the footings of the barn and two large pits one containing large iron objects, concrete and car debris and the other containing sands, brick and tarmac.

Six archaeological features were recorded some of which relate to features identified from aerial photographs (Figs 4 and 5). These are described from east to west.

The most easterly feature (**04**) was cut from below the topsoil and through the subsoil into the natural gravel. It was 1.3m wide and 0.45m deep with straight sides and flat base. It's lowest fill (07) was a dark orange brown slightly sandy silt. Above this was an orange coarse sand/fine gravel (06). The uppermost fill was a mid brown orange very gritty silty sand (05). The shape of this feature indicates it is more likely to be a pit rather than a linear feature. It's location directly under the topsoil suggests it is of a relatively recent date.

Features (**08**) and (**10**) are likely to be these of a ditch identified on aerial photographs. Both these features were sealed by the subsoil (02). They had

identical fills (09 and 11) of dark red brown silt with some clay and sand and occasional flints. In section ditch **08** was 0.3m deep and **10** was 0.4m deep.

To the east of this lay a small feature (**12**) 0.5m wide and 0.25m deep. This had a single fill made up of orange brown silty and orange coarse sand/fine gravel (13). In contrast feature **14** was wide and shallow (1.15m x0.10m) filled with a mid orange brown gravelly silt (15).

Ditch **16** can also be seen to be one of the features seen on aerial photographs. In the section of the trench the ditch measured 1.9m x 0.35m deep and contained a single fill of dark yellow brown sandy silt with occasional flint (17).

No finds were recovered during the works so it has not been possible to date the excavated ditches and pit.

Conclusions

The archaeological work did not produce any dating evidence for the features originally identified on aerial photographs; this is consistent with other fieldwork which has taken place in this area (Hutcheson 1998; Trimble 1999) where recovered finds have been few in number. It has however confirmed that these features have not been destroyed by more recent agricultural practices and are in fact sealed by *c*.0.6m of topsoil and subsoil.

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Acknowledgements

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Appendix: List of Contexts

Context No.	Type	Category
01	D	Topsoil
02	D	Subsoil
03	D	Natural
04	C	Pit
05	D	Fill of 04
06	D	Fill of 04
07	D	Fill of 04
08	C	Ditch
09	D	Fill of 08
10	C	Ditch
11	D	Fill of 10
12	C	?Ditch
13	D	Fill of 12
14	C	?Ditch
15	D	Fill of 14
16	C	Ditch
17	D	Fill of 16
18	D	Modern makeup and tarmac surface
19	D	Fill of 20
20	C	Modern pit
21	D	Old topsoil – disturbed 19th/20th century
22	D	Modern dump, topsoil including asbestos fragments

Figure 1. Site location. Scale 1:15000

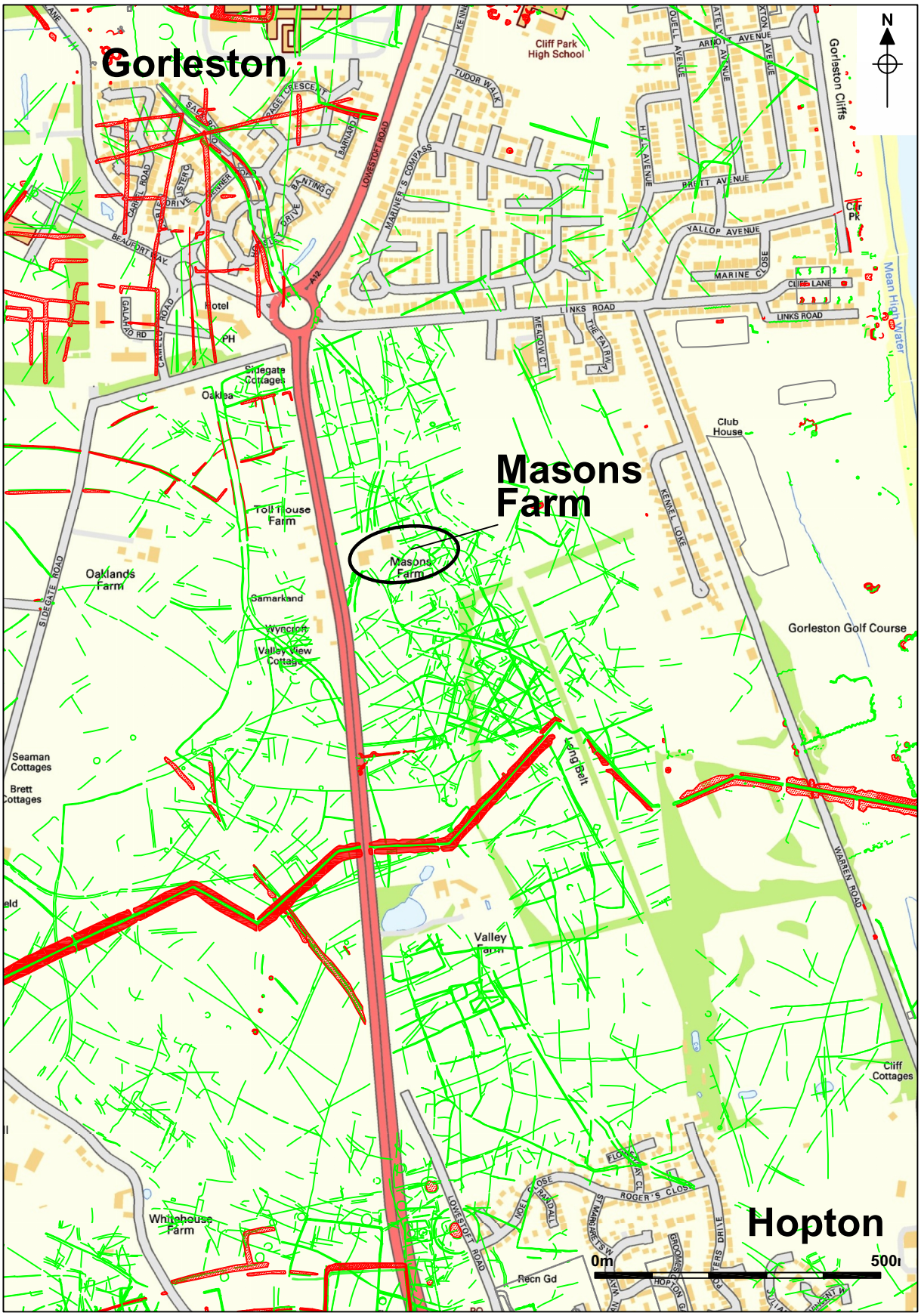

Figure 2. Showing features identified from aerial photographs. Scale 1:10000.

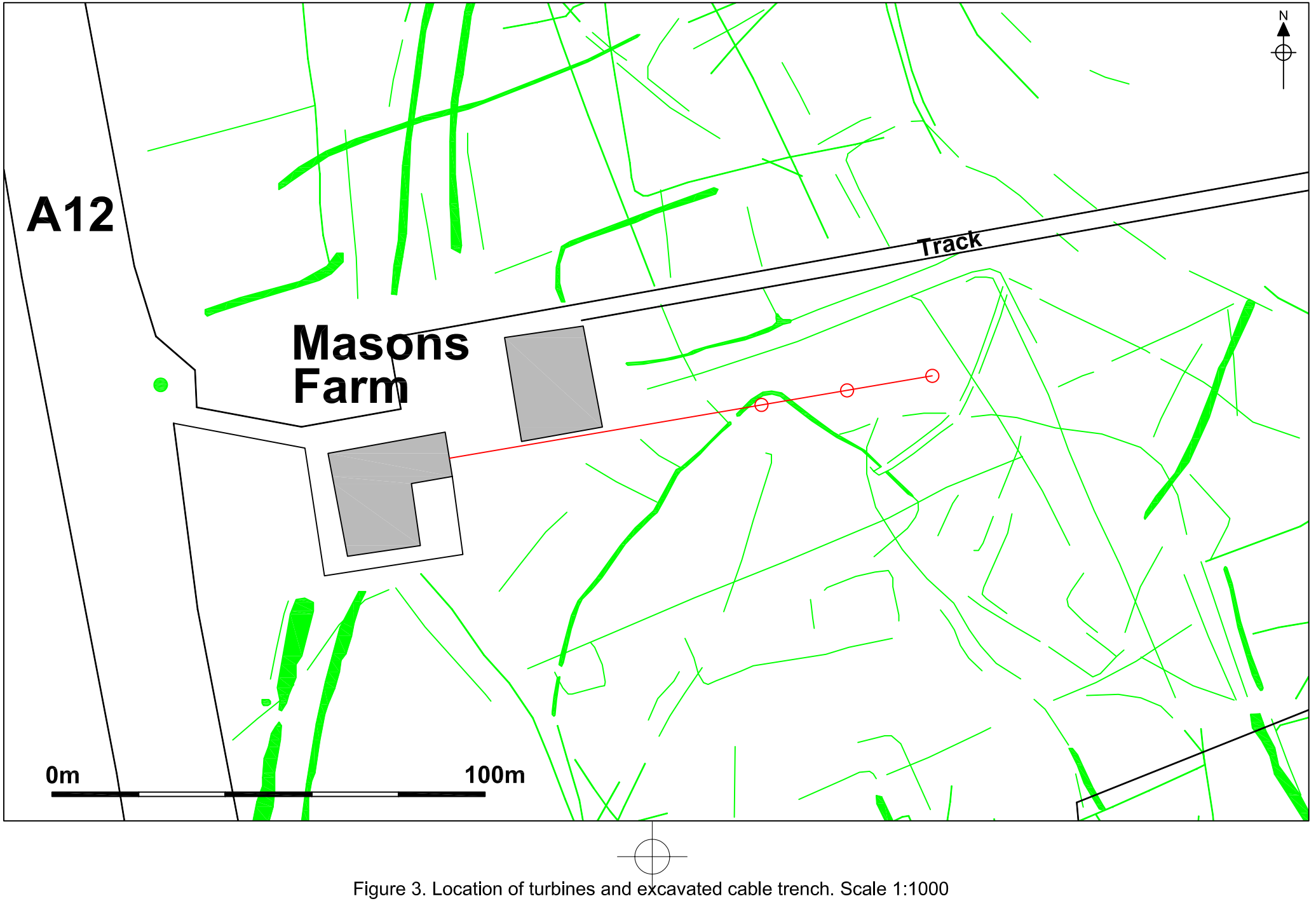

Figure 3. Location of turbines and excavated cable trench. Scale 1:1000

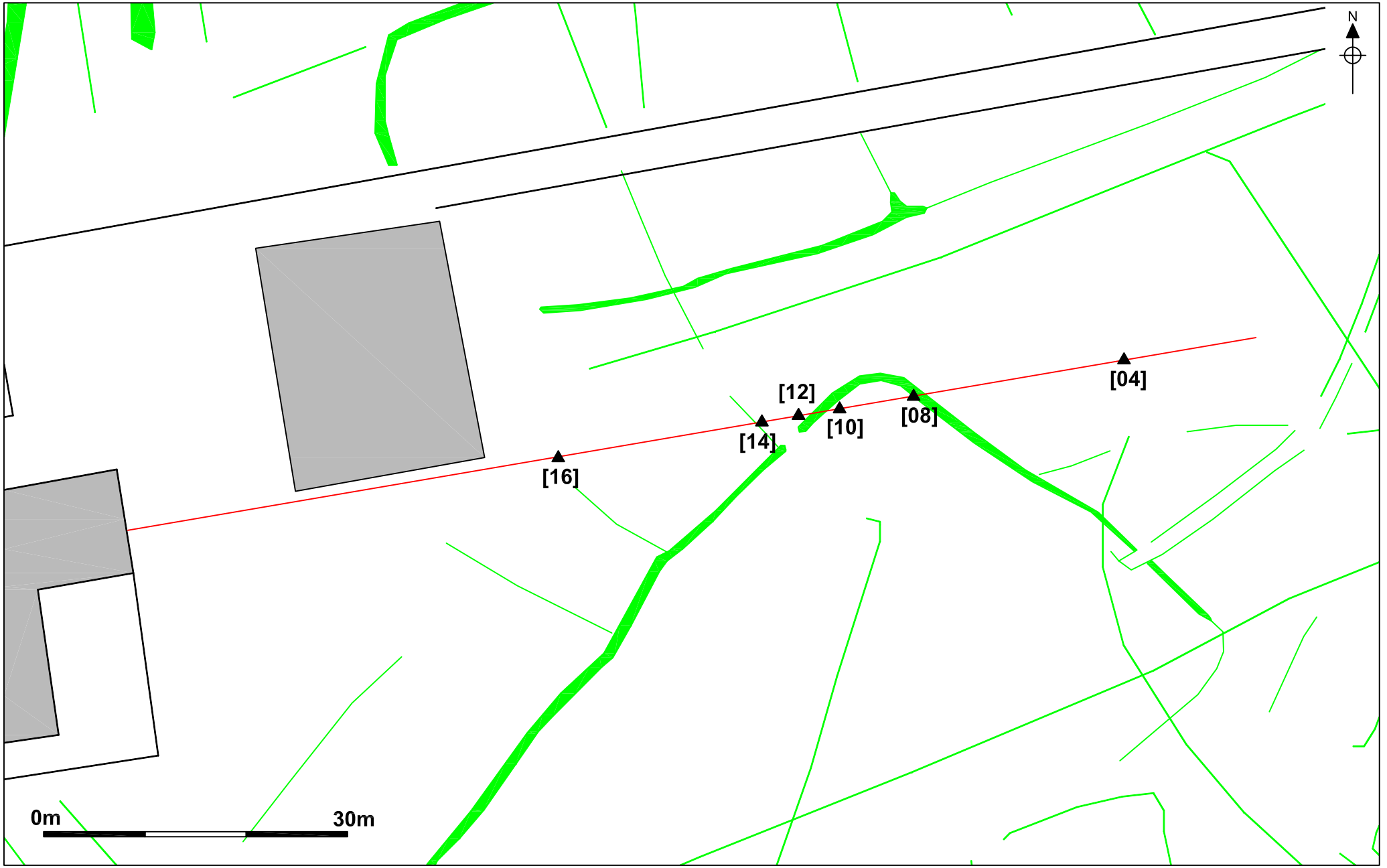

Fig. 4. Location of recorded features. Scale 1:500

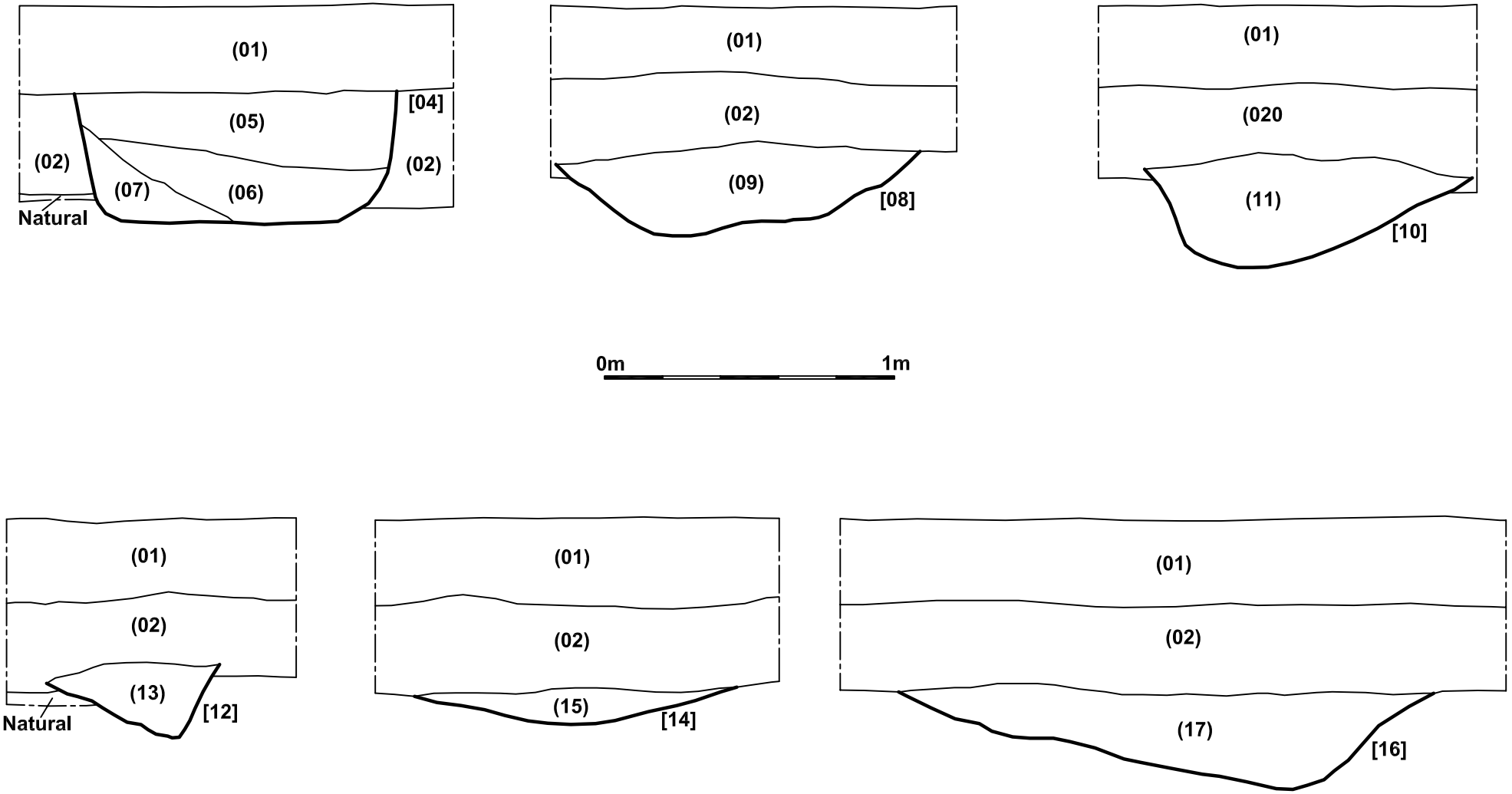

Figure 5. North facing sections. Scale 1:20.