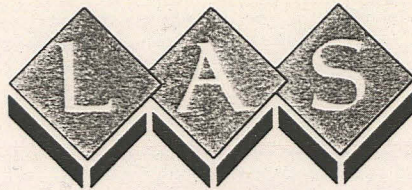


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**LINDSEY ARCHAEOLOGICAL SERVICES**  
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## **Nettleham Village Mains Replacement Scheme:**

**Archaeological Monitoring at  
Washdyke Hill and High Street**

*(NGR: TF 000 752 and TF 006 753)*

Site Code: **NMR 95**  
LCNCC Museum Accn. No. **88.95**

Report prepared for Anglian Water

**May 1996**

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# Nettleham Village Mains Replacement Scheme: Archaeological Monitoring at Washdyke Hill and High Street

NGR: TF 000 752 and TF 006 753

Site Code: NMR 95

LCNCC Museum Accn. No. 88.95

## Summary

*Trenching for a water main in Nettleham was observed in two locations. Two large disturbances cut into the limestone bedrock were seen at Washdyke Hill, close to the projected course of the prehistoric triple linear ditch known from air photographs; one may have been a ditch but the other was probably a backfilled stone quarry. To the north of the Bishop's Palace site, no evidence was found of recognisable medieval activity extending beyond the present boundary.*

## Introduction

Lindsey Archaeological Services (LAS) was commissioned by Anglian Water Services Ltd in July 1995 to monitor trenching of part of the route for a replacement water main in Nettleham laid beneath the village streets (Fig. 1). The Assistant Archaeological Officer of Lincolnshire County Council Archaeology Section had requested an archaeological watching brief on two specified lengths of trench; the western 350m stretch crossed the anticipated location of a prehistoric ditch system thought to be a major boundary, and the other stretch passed the site of the medieval Bishop's Palace.

The pipe trench was cut 1.15m deep beneath the modern road surface, usually beside the pavement on the southern side of the road. Trenching was monitored intermittently between 1st September 1995 and 15th February 1996; 25 visits were made.

## Archaeological Background

### The triple linear ditch

Cropmarks of a linear ditch complex have been identified on aerial photographs to the NW and SE of Nettleham (Everson 1979, 1980 and 1982; Fig. 2; Pls. 1 and 2). The feature appears as a series of up to three almost parallel and closely positioned dark lines where the growing crop reflects different growing conditions over a backfilled ditch cut into the limestone bedrock. Parts of the same or similar triple linear ditch complexes are known at other sites in Lincolnshire and elsewhere. LAS staff have investigated the ditches and associated features on several occasions; the Nettleham feature was examined within the Lincoln city boundary at Nettleham Glebe in 1979, and also off Riseholme Lane in 1993 when an Anglian Water replacement rising main pipeline crossed it in an arable field. The section at Riseholme Lane found three ditches within a 19m total width, with evidence for a bank between two of the ditches (Palmer-Brown and Field 1993). The ditches varied from 3.5m wide to about 4.5m wide, and from 1.2m to over 1.4m deep.

A single sherd of Iron Age pottery was found within the upcast bank material, and a joining fragment was recovered from a ditch fill deposit. Other sherds of a late 3rd century Castor ware container were present in the same fill. Fieldwalking produced Iron Age and Romano-British sherds from the topsoil above and close to the ditches.

At Nettleham Glebe the three ditches were less than 0.65m deep and cut into the natural clayey limestone; the central ditch was narrower and slightly deeper than those which flanked it (Field 1980). A terminal to the central ditch was located, confirming the air photographic evidence that the ditches were discontinuous. The eastern ditch was interrupted by a very narrow piece of undisturbed bedrock, probably the junction of two construction teams' work. A cluster of small post-holes beside the ditch terminal indicated that some activity had centred on the gap, perhaps using a screen or fence. No evidence for any banks was found. Romano-British pottery (including an almost complete Dalesware jar) was found on the site but none of this reliably dated the ditches which were suspected to be earlier.

### **The site of the Bishop's Palace**

Extensive earthworks associated with a former palace for the medieval bishops of Lincoln survive in pasture on the south side of High Street, Nettleham (Pl. 3). The site has been the subject of previous earthwork surveys, documentary research, and a limited archaeological excavation in 1959 (Everson, Taylor and Dunn 1991). Part of the complex has been identified as a mid 14th century garden, the earliest known surviving post-Roman garden site in England.

Nettleham was a royal manor, bestowed on the Bishop of Lincoln in 1101. Together with the usual manorial functions, it served as a base for administration and residential purposes for the bishop and visiting dignitaries. Edward I is known to have stayed there for several days in 1284, 1301 (and probably also in 1303 and 1304). The manor was crenelated after 1336, but damaged in 1536. It seems to have remained in use until about 1585; a royal licence for its demolition was granted in 1630. After its demolition, some of the building materials were used at the Lincoln Bishop's Palace; no buildings remained in 1777.

The existing Methodist chapel building (NE of the earthworks) lies close to the remains of the palace buildings, and carved stones were found in 1899 during construction of the chapel. It is probable that the buildings extended eastward beyond the present chapel, as far as the eastern boundary ditch earthwork on the southern part of the site. Some of the existing stone cottages beside the street may have been ancillary buildings such as stables.

The palace area was bounded by a stone wall (now visible as a low bank) on the southern and western sides. A similar wall has been identified beneath the existing northern boundary wall beside High Street. The present settlement focus along High Street, straddling Nettleham Beck, may have



developed associated with the palace complex; the oldest part of the village is thought to be that around The Green.

The present road course passes close to the modern boundary, apparently immediately beside the grounds of the Bishop's Palace. It was hoped that the watching brief would clarify whether the grounds had previously extended further north, or what use the land north of the boundary had served.

### **The Watching Brief** (Fig. 3)

#### **Washdyke Hill**

1 The trench cut through undisturbed bedrock between Greetwell Lane and the brow of Washdyke Hill. Opposite No. 32 Washdyke Hill, a disturbed area was observed, where the stone was mixed with loam (Pls. 4-7). The feature, about 10m west-east and over 1m deep, was thought to be a backfilled quarry pit.

2. South of 'Hillside', No. 38 Washdyke Hill, another large area of apparently disturbed limestone with soil (extending for more than 25m west-east) was observed, ending to the west in a slope against solid limestone bedrock (Pls. 8 and 9). This disturbed ground lay adjacent to a plot named 'The Old Quarry' and it was interpreted as a backfilled stone quarry, probably of medieval or post-medieval date. It was not possible to tell whether it represented part of the same quarry, over which the road has since been widened, or part of an earlier feature pre-dating the road.

3. At the Cliff Avenue junction, the bedrock was interrupted again for about 7m. Here the trench faces showed mid-brown loam to beneath the trench base (Pls. 10 - 13). A trench cut to the south into Cliff Avenue revealed that the loam extended only a short distance beyond the main trench, but it was thought that the feature continued obliquely. This feature was tentatively identified as one of the expected prehistoric ditches, aligned NW-SE, exposed at an unfortunate angle where its width and profile could not be ascertained. No dating material of any form was seen.

4. The limestone continued another 20m to the west before it was again replaced by disturbed material close to the boundary west of No. 37 Washdyke Hill (Pl. 14). At this location, the nature of the ground was very different; the tarmac and asphalt forming the modern road covered a 0.4m thick layer of redeposited limestone. Beneath this was a layer of dark brown soil at least 0.2m thick which continued below the trench base (Pl. 15). These conditions continued westwards past the junction with Kingsway but the western limit was not observed.

It seemed probable that the natural valley crossed by Nettleham Beck had formerly been considerably deeper and steeper than now, and that comparatively recent raising of the road level had occurred. The former ground surface may survive below the trench base, at least 1.2m lower than the modern road surface.

### **North of The Old Bishop's Palace site (Pls. 16-18)**

5. To the west of the Bishop's Palace site, the tarmac layer sealed limestone lumps (road foundation material) to a depth of 0.5m. Beneath this was a layer of redeposited limestone brash, covering a deposit of yellow/grey clay extending beneath the trench base (Pl. 19). The clay was visible beyond the junction with Watermill Lane.

The ground dips at the junction of Kingsway, apparently in a natural SW-NE valley leading towards Nettleham Beck (Pl. 20). The clay was interpreted as a natural deposit associated with the stream course. Overlying material had been deliberately laid to raise the road level and to provide a firmer surface.

6. 10m east of the junction with Watermill Lane, the underlying limestone bedrock rose to 0.75m below the modern road surface for a short distance (Pl. 21).

7. About 20m east of the bedrock peak, a fuller sequence of apparently undisturbed deposits was recorded. Beneath the road and post-medieval disturbances, a mixed layer of rock with soil (possibly a weathered subsoil) survived to 0.6m below the road surface. The underlying limestone layer varied from brash to more solid rock.

8. Much of the ground to the north of the Old Bishop's Palace site had been disturbed to a depth of at least 0.8m. It was unclear whether this represented a single large disturbance with an uneven base (such as a west-east ditch or a stone quarry) or a series of small pits which had removed most of the earlier and natural deposits. The upper deposits were varied, implying several dumping episodes and the multiple pit explanation was favoured. One feature was about 4m west-east, cut to between 0.6m and 1.1m below the surface; this contained brick rubble within the soil fill (Pl. 22). Another slightly deeper but narrower cut was seen 10m to the east at 9.

### **Conclusion**

It is difficult to identify an archaeological feature in a narrow trench with confidence, particularly when no artefacts are present. The areas of disturbed ground cut by the trench on Washdyke Hill would have been noted during a watching brief as a matter of course, but the anticipation of ditches from a prehistoric boundary system meant that they were considered as of more potential interest than usual. Unfortunately the disturbances caused by other services laid below the road and by nearby quarrying of unknown extent prevented the features being identified reliably. It is suspected that 3 is probably one of the ditches, and that both 1 and 2 are almost certainly stone quarry pits. Any other archaeological features in the vicinity of the valley floor had been obscured by redeposited material and were not exposed in the pipe trench.

The results of observing the trench past The Old Bishop's Palace site were also inconclusive. Grey clay within an extensive feature deeper than the trench was recorded, and interpreted as a natural deposit associated with a

former stream course. It is possible that this feature was either excavated as part of the Bishop's Palace complex or had been utilised in the medieval period; it was not possible to ascertain when it had been levelled and the road constructed across it.

Similarly, adjacent to the existing boundary wall of the site, the natural limestone had been removed along most of the trench but apparently in a piecemeal fashion. Brick rubble within some of the backfill indicated a post-medieval date for levelling that ground but the stone may have been quarried at an earlier date. The modern road (and the pipe trench) would seem to skirt around the periphery of the complex and the question as to whether it crossed intra-mural land or had always been beyond the boundary was unresolved. The absence of recognisable rubbish pits containing medieval pottery perhaps suggests that this land was outside the Palace grounds.

### **Acknowledgements**

LAS were grateful to Anglian Water (especially Katharine Gilliatt) and the contractors M.P. Burke for their co-operation during the watching brief.

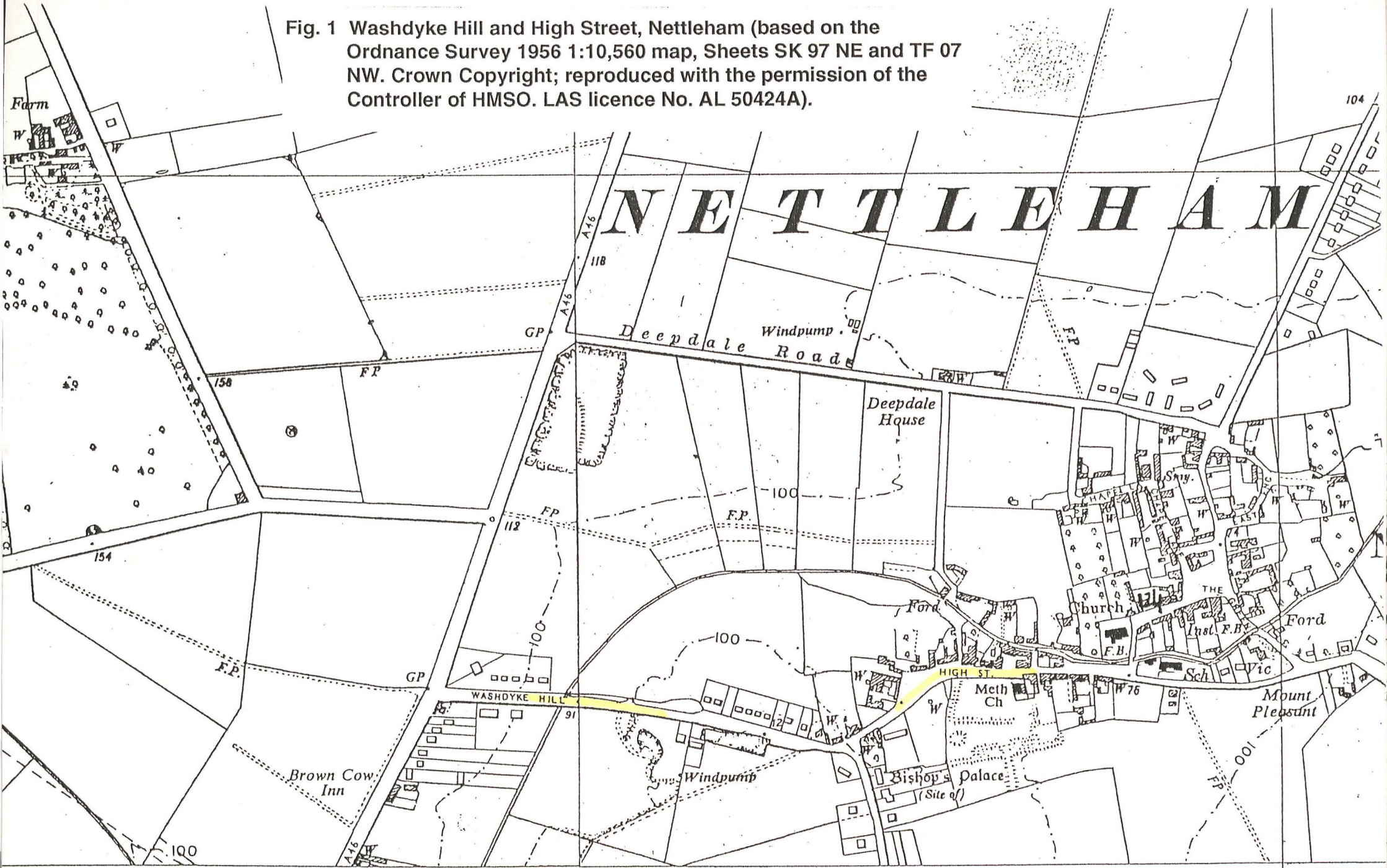
The location of the possible prehistoric ditch was surveyed with help from Mick McDaid. Naomi Field contributed useful background detail about previous investigations of the triple linear ditch. The report was produced by Jane Frost.

Geoff Tann  
Lindsey Archaeological Services  
13th May 1996

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Fig. 1 Washdyke Hill and High Street, Nettleham (based on the Ordnance Survey 1956 1:10,560 map, Sheets SK 97 NE and TF 07 NW. Crown Copyright; reproduced with the permission of the Controller of HMSO. LAS licence No. AL 50424A).



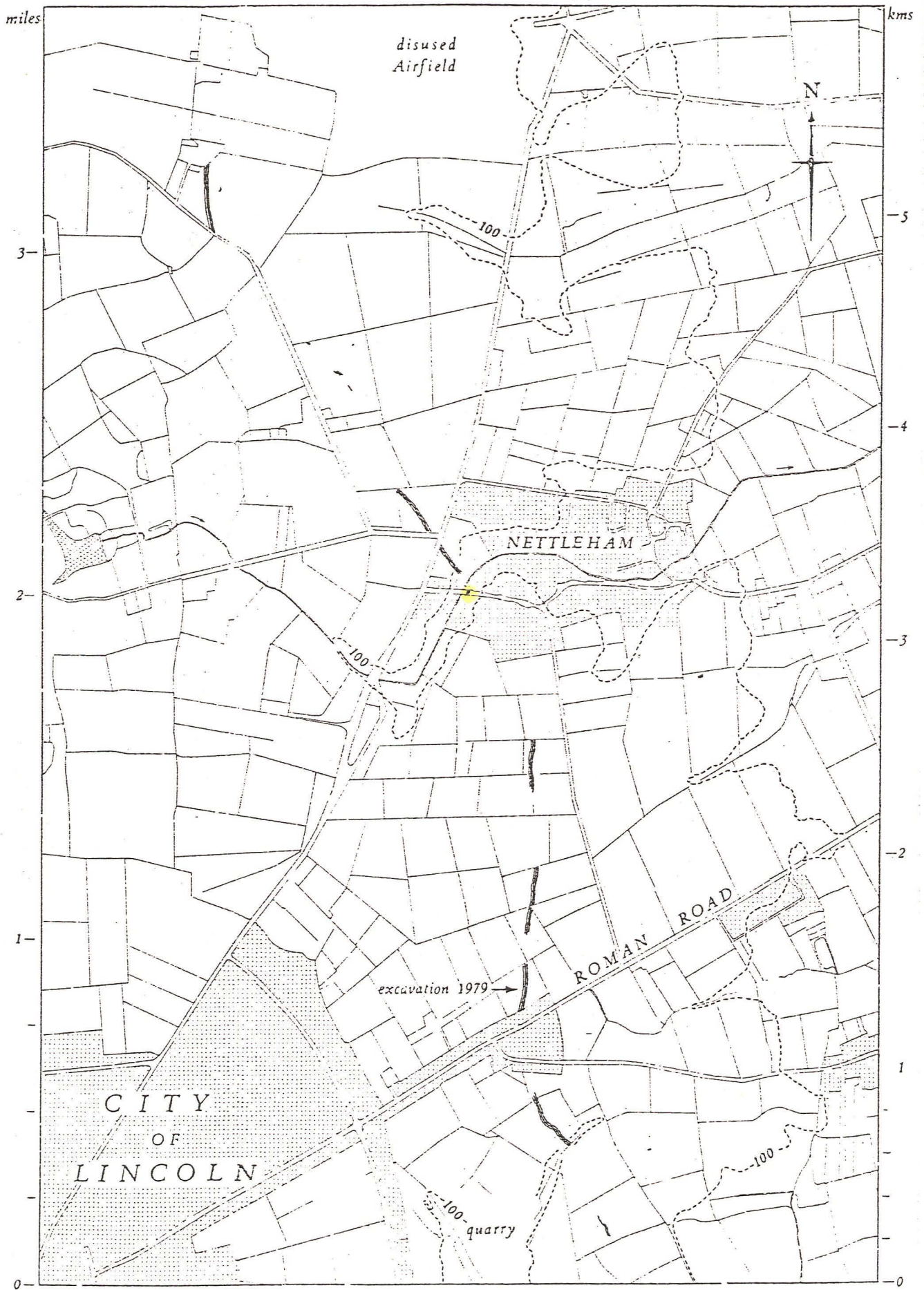


Fig. 2 Course of the triple linear ditch close to Nettleham, as identified from air photographs 1977-1980 (based on Everson 1982, Fig. 8).

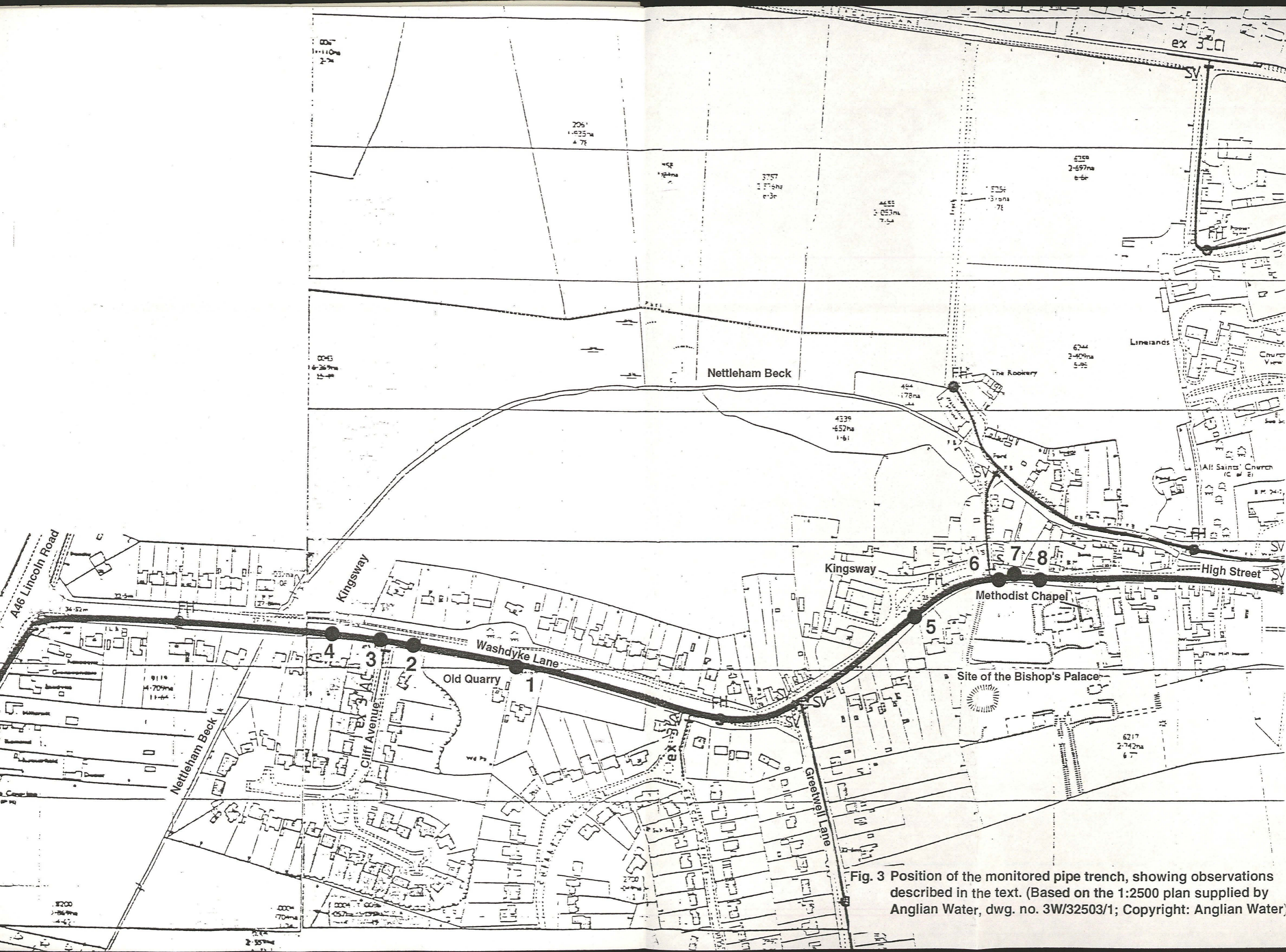
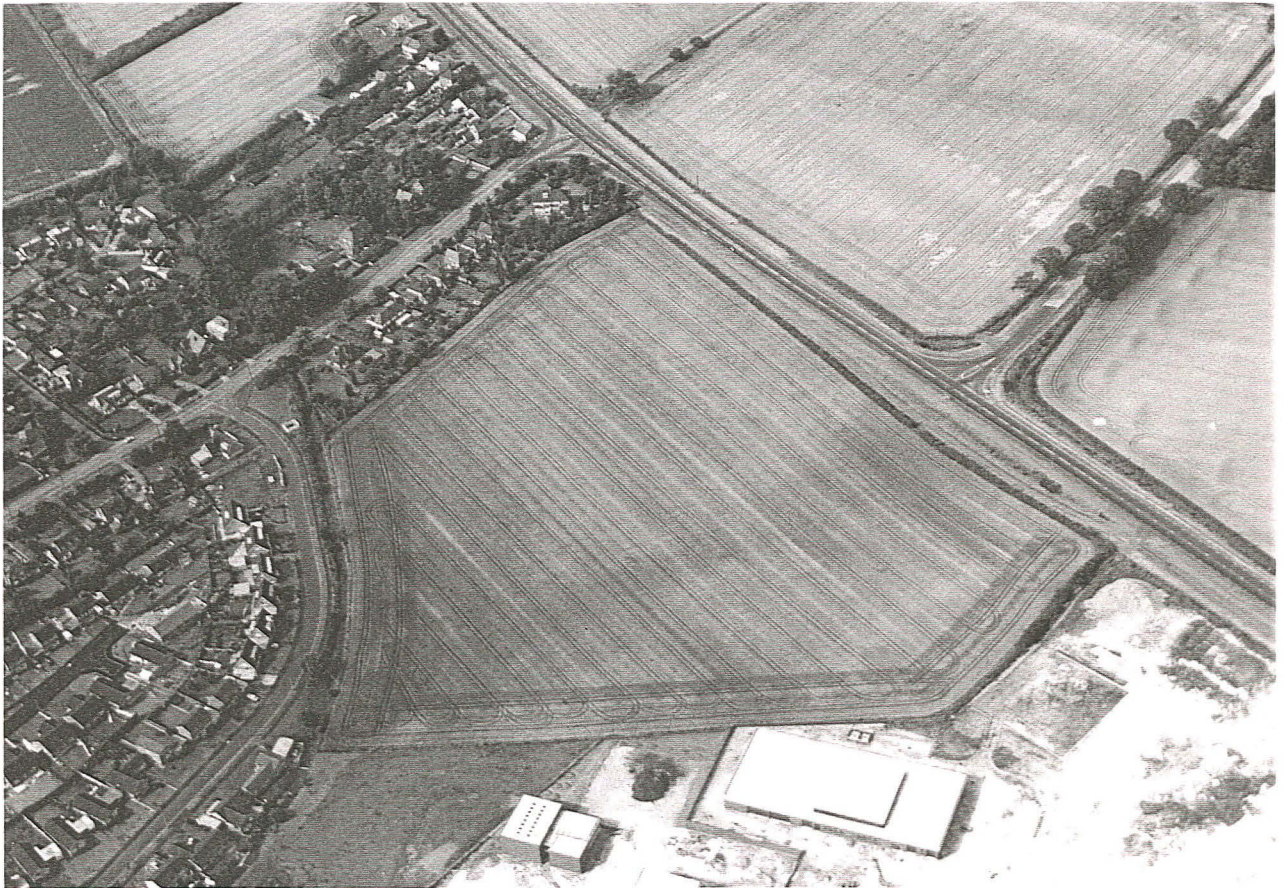


Fig. 3 Position of the monitored pipe trench, showing observations described in the text. (Based on the 1:2500 plan supplied by Anglian Water, dwg. no. 3W/32503/1; Copyright: Anglian Water)



**Pl. 1** Aerial photograph showing course of the prehistoric triple linear ditch, running from Riseholme Lane (upper right) to the Kingsway /Washdyke Hill junction (centre left), looking SW. LAS Photograph ref. 2972/30 [5.8.79 PE]. Copyright reserved.





PI. 2 Aerial photograph showing the prehistoric triple linear ditch between the A46 (right) and Kingsway, Nettleham (left) [looking SW]. The cropmarks are lost on the left, obscured by alluvium from Nettleham Beck. LAS Photograph ref. 2990/9 [31.7.77 PE]. Copyright reserved.



**Pl. 3** Panoramic view of earthworks associated with Nettleham Old Bishop's Palace site (looking west). The boundary wall is sited on a low bank, possibly the limit of the Palace grounds.



Pl. 4 The pipe trench on Washdyke Hill. The 1m photographic scale marks the centre of backfilled feature 1, probably a limestone quarry pit. The eastern edge is marked by red paint in the foreground (looking west).

Pl. 5 Detail of pit 1, marked by red paint and the 1m photographic scale. Dense rock is visible in the trench face in the foreground, with light brown soil within the feature. Looking east.





Pl. 6 Brown soil fill in the centre of 1 (scale divisions 0.2m).

Pl. 7 Change from soil to dense rock at the eastern edge of 1 (marked by paint). Looking west.





Pl. 8 Location of 2, immediately north of The Old Quarry (behind field gate). Dense limestone to the west of the gateway replaced mixed soil and stone to the east, probably backfilling another quarry pit. Looking east along Washdyke Hill.



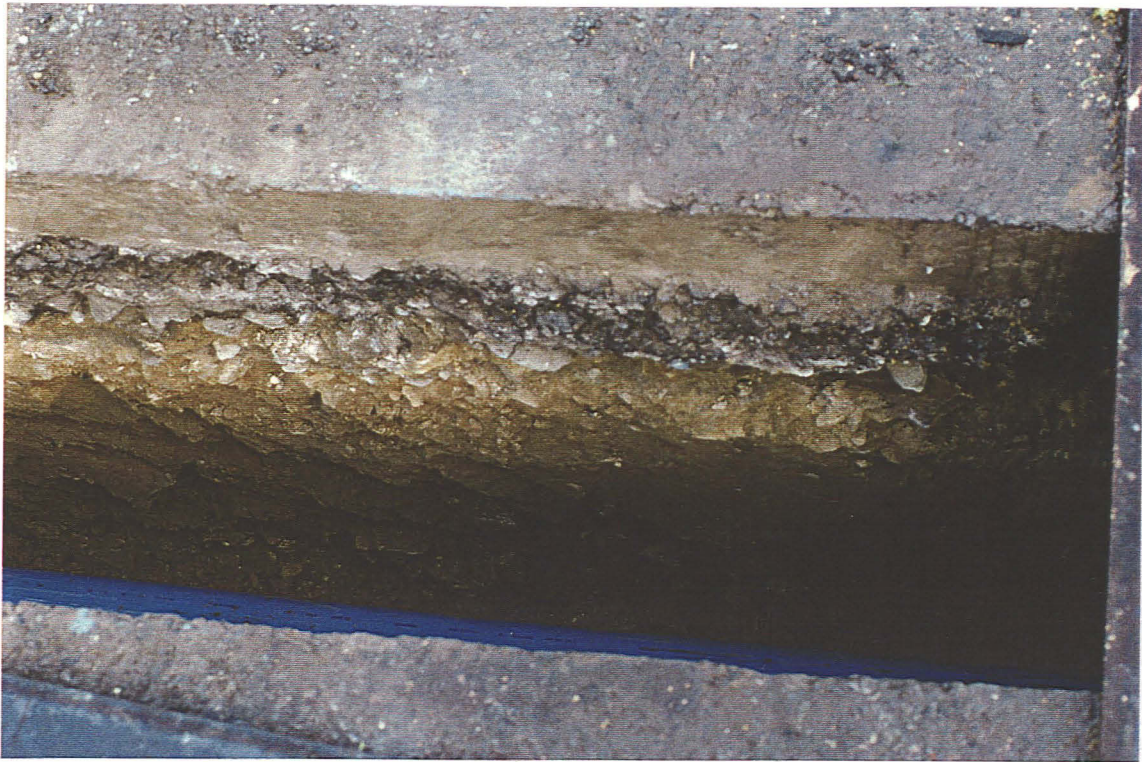
Pl. 9 The western edge of Quarry 2. Dense bedrock extending close to the road surface has been cut to the east (marked by paint) and backfilled with mixed material. Looking east.



Pl. 10 Position of 3, possibly a prehistoric ditch, at the junction of Cliff Avenue and Washdyke Hill. (Looking west, Kingsway and Nettleham Beck on right).



Pl. 11 Composite photograph of soil backfilling 3. The western edge of the feature (left) clearly cuts dense limestone, but the material to the east is almost stone-free. Looking north at the Cliff Avenue junction.



PI. 12 Eastern limit of 3 marked by dense limestone rising from the trench base to near the road foundation (extreme right). Recording was difficult here as access had to be maintained at the junction. Looking north.

PI. 13 Stratigraphy in the Cliff Avenue spur trench suggested that 3 was becoming shallower to the south, possibly aligned NW-SE. Looking east.







Pl. 14 Location of 4, marked by the excavator close to Kingsway (looking west towards the A46).

Pl. 15 Thick deposits of tarmac and redeposited limestone at 4, apparently above buried topsoil. This was interpreted as comparatively recent raising of the road in the Nettleham Beck valley. Any archaeological features would have been below the depth of the trench here.





PI. 16 Position of the pipe trench in High Street NW of the Old Bishop's Palace site (looking NE).

PI. 17 The pipe trench in High Street, north of the Old Bishop's Palace site (looking west).





Pl. 18 High Street lies lower than the adjacent earthworks; it may be aligned over an early ditch or on ground sloping towards the beck. (Looking SW).

Pl. 19 Clay visible at the trench base at 5, beneath the road foundation of large stone lumps and redeposited limestone brash.





Pl. 20 A marked depression, probably of a former tributary of Nettleham Beck, crosses Kingsway close to 5; this may explain the observed clay. (Looking NW).

Pl. 21 Limestone bedrock 6 appeared to the east of 5, marking the eastern side of the natural valley.





**Pl. 22** A post-medieval pit (possibly a stone quarry) was identified at 8. The mixed backfill contained brick rubble, soil and redeposited stone.