

INDEX DATA	RPS INFORMATION
Scheme Title  M6 Widening : Junctions 16-20 Cheshire	Details  Report on Earthwork Survey.
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Contractor  <del>Anthony Souter</del> <del>and Partners</del> Ed Dennis (Anp)	
County Cheshire	
OS Reference SJ75	
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Double sided	
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**M6 WIDENING : JUNCTIONS 16 - 20**  
**REPORT ON EARTHWORK SURVEY**

Date	Originator	Checked	Approved	Status
November 1994	E Dennison (AWP)	D Johnston (AWP)	E Sharkey (AWP)	Final

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# M6 WIDENING : JUNCTIONS 16 - 20, CHESHIRE

## REPORT ON EARTHWORK SURVEY

### 1 Introduction

- 1.1 In August 1994, Anthony Walker and Partners (AWP) produced a Cultural Heritage (Archaeology) Volume 2 Specialist Report conforming to the requirements of the Department of Transport's Design Manual for Roads and Bridges, Volume 11 "Environmental Assessment" (DMRB). This identified 138 sites of archaeological, architectural and/or historic interest within a study corridor defined for the M6 widening scheme.
- 1.2 The report recommended that four sites should be the subject of a detailed earthwork or topographic survey (Areas 1, 11, 16 and 20 on figures 1.1 to 1.6). Two additional areas were added to the programme following design changes (Areas 2 and 19) while Area 9 was included following the identification of an earthwork platform during an initial site inspection. The total area finally allocated for earthwork survey was 15.67 hectares.

### 2 Methodology

- 2.1 The survey work was carried out using EDM total station optical equipment with data processed on CivilCad software. The position at ground level of all upstanding earthworks, buildings and other structures considered to be of archaeological, architectural or historic interest were recorded and the survey information was plotted at 1:500 scale. Sufficient background information was also collected to allow the survey area to be readily located through the use of field boundaries, buildings and other topographical features and the survey was integrated into the Ordnance Survey national grid and other survey stations. In all cases, the area of survey was confined to those fields directly within the proposed construction corridor.
- 2.2 The earthwork surveys were carried out in September 1994. The survey data was plotted at a scale of 1:500 for field checking and interpretation, and hachured and contoured plans were produced at 1:500. The plans accompanying this report are reduced reproductions of these.

### 3 Results

#### Area 1 (adjacent to Junction 16) (see figure 2)

- 3.1 The Volume 2 Specialist Report identified an area of ridge and furrow earthworks in a field to the south-west of Brookwood Hill Farm, centred on NGR SJ778526 (site 1/01). These earthworks had been plotted from aerial photographs taken between 1973 and 1990 but they were not visible during a site visit carried out in June 1993, although they may have been hidden by long grass. They were assigned a medium grade of importance in the Volume 2 Specialist Report.

- 3.2 At the time of the earthwork survey, the field was in pasture and the grass was up to 0.3m in height. The boundaries of the approximately triangular field were formed by a mixture of post and wire, post and rail fencing and hedges.
- 3.3 The northern and eastern boundaries of the field are shown on the 1838 Barthomley tithe map; the other boundaries have been formed as a result of the construction on the M6 motorway and its junction with the A500. The field was named as "Motish Yard" in 1838 which, it has been suggested, possibly means "full of bits of straw". No distinguishing features such as ponds or pits are shown on the 1838 tithe map or the 1882 Ordnance Survey first edition 6" map (sheet 57).
- 3.4 The long grass at the time of the survey meant that it was not possible to identify any of the ridge and furrow earthworks. However, when viewed from the A500, the south-eastern part of the field appeared to contain alternate bands of light and dark vegetation running down the slope (in the area of 'a' on figure 2 (Area 1)). It is likely that these relate to slight ridge and furrow earthworks that were shown on the aerial photographs.
- 3.5 A number of other features were also identified by the survey. In the northern part of the field is a shallow-sided irregularly-shaped depression, approximately 35m long and 1.5m deep and aligned southwest-northeast ('b'). It widens towards its south-west end, reaching a maximum width of approximately 30m. The south-east side of the depression may once have been continuous with a short length of bank which lies approximately 12m to the north-east. The shape of the depression suggests that it may be a former sand or marl pit, or a pond.
- 3.6 Along the north-eastern boundary of the field are a number of shallow, irregularly shaped hollows; most are located close to trees and so may have developed through cattle poaching. The south-eastern side of the field slopes steeply southwards towards the existing fence line. Between the bottom of the slope and the fence line is an irregularly shaped level area, approximately 105m long and up to 20m in width ('c'); the present county boundary between Cheshire and Staffordshire runs along the bottom (south side) of this slope and it may once have been formed by a watercourse. A number of modern drainage features are located within this level area.

#### Area 2 (north-east of New Farm) (see figure 2)

- 3.7 The Volume 2 Specialist Report identified an area of ridge and furrow earthworks and other features, possibly representing field boundaries, in a field centred on NGR SJ77155325 to the north-east of New Farm (site 1/05). These were visible both on aerial photographs taken between 1953 and 1990 and during a field visit carried out in October 1992. The site was given a medium grade of importance in the Volume 2 Specialist Report.
- 3.8 At the time of the earthwork survey, the field was in pasture with most of the grass being relatively short. The field boundaries were formed by a mixture of post and wire fence and hedgerows.

- 3.9 The 1838 Barthomley tithe map shows the survey area to have been formed by four separate fields, numbered as 352, 353, 359 and 361 on the apportionment (see figure 2). The north-western part of the present field, in the angle between Radway Green Road and Smithy Lane, was formerly a small approximately rectangular field containing two small buildings, numbered as 352 and listed as "House, outbuildings, garden and orchard" on the apportionment. The field to the west, number 353, was named as "House and meadow", although no buildings are depicted. The buildings are not shown on the 1882 Ordnance Survey first edition 6" map (sheet 57). The northern part of the boundary between fields 361 and 353 is depicted as a stream.
- 3.10 The survey area is effectively split into two parts by a curvilinear depression running from the north side of the field to the south-east corner ('a' on figure 2 (Area 2)). It has a level bottom with banked sides standing up to 1.5m in height. At its northern end, it is approximately 15m wide with both sides clearly visible; however, at the eastern end only the north bank was clearly defined, the south bank being formed by a very slight earthwork. The north bank represents the former field boundary shown on the 1838 tithe map between fields 353, 359 and 361. Another bank runs approximately parallel to the north side of the depression at its north end, but set back up to 10m to the east.
- 3.11 At the western end of this depression is a shallow, semi-circular platform approximately 25m across ('b'). It has a small drainage channel curving around its west side, which may have deposited the material forming a slight semi-circular spread to the north-east of the platform.
- 3.12 To the west of the depression is a sub-rectangular area of ridge and furrow earthworks, orientated approximately east-west and standing to a maximum height of 0.3m ('c'). In the north-west part of this area is a sub-rectangular depression approximately 45m long and 1.5m deep. This is probably the remains of a pond ('d') which has been cut through, and so post-dates, the ridge and furrow. The south side of the ridge and furrow is formed by a shallow ditch, approximately 125m long. This represents an old field boundary between fields 361 and 360, the ditch now contains a number of modern drainage features.
- 3.13 To the east of the curvilinear depression 'a' is an irregularly shaped area of ridge and furrow earthworks, orientated approximately north-south ('e'); these are very slight, standing some 0.25m in height. In the north-east corner of this part of the site are two shallow linear ditches which converge to form a small island of ground approximately 40m across ('f').
- 3.14 It is likely that the buried remains of the two buildings depicted on the 1838 tithe map are present in this area; although two platforms ('f' and 'g') are evident, there are no specific earthworks relating to the buildings.

### **Area 9 (north of Bostock Hall) (see figure 3)**

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- 3.15 The Volume 2 Specialist Report identified a field to the east of Bostock House as containing the former moated site of Bostock Hall (site 2/14) (NGR SJ77385695 centred). The majority of this area now lies under the M6 motorway but the field immediately to the north is named in the 1841 Hassall tithe map as "Pigeon House Croft" (field 232), suggesting that it may have been the site of a dovecote. A Roman road known as King Street, linking Sandbach with Warrington, may also have run through the northern end of the field, although its actual course is uncertain (site 2/13). Site 2/14 was given a high grade of importance and site 2/13 a low grade of importance in the Volume 2 Specialist Report.
  - 3.16 At the time of the earthwork survey, the field was in grass which had just been cut for silage. The boundaries of the now approximately triangular field are formed by a mixture of post and wire fence, post and rail fence, hedge and hawthorn trees.
  - 3.17 A low earthwork platform is located in the northern end of the field ('a' on figure 3 (Area 9)). It is defined by an east-west 70m long bank which, although spread, stands to a height of 0.5m. The bank has returns to the north at either end; at the west end, the return curves to the west and south, creating a shallow depression.
  - 3.18 A much smaller wedge-shaped platform was also identified adjacent to the east side of the field ('b'). This is approximately 30m across and stands up to 0.5m in height. A shallow sub-circular depression and a slight bank were located immediately to the south of this platform. At the south end of the field are two very slight banks, standing to a height of 0.25m, which may once have been linked to form an approximately northwest-southeast orientated feature.
  - 3.19 The earthworks to the east of the small platform, on the east side of the field, probably represent the remains of a small oval pond and a section of field boundary which is shown on the 1841 Bechton tithe map. The slight banks at the south end of the field may also have been part a field boundary or possibly part of the now infilled moat shown to the north of Bostock Hall in 1841. Nothing appears in the position occupied by the large platform on the tithe map or the 1882 Ordnance Survey first edition 6" map (sheet 57); it may represent a building platform. No earthwork evidence for the possible course of King Street Roman road was noted.

### **Area 11 (south-east of Lower Roughwood Mill) (see figure 3)**

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- 3.20 The Volume 2 Specialist Report identified the site of a leat (site 3/03) to the east of Lower Roughwood Mill, which had formerly provided the water supply to this building (NGR SJ77555815 to SJ78025796 linear). Although the leat had been cut into two by the construction of the M6 motorway, it survives in varying conditions on either side. The leat was assigned a low grade of importance in the Volume 2 Specialist Report.

- 3.21 The mill is shown on a 1777 map of Cheshire named as "Betchton Mill". In 1829 it is named as "Roughwood New Mill", suggesting that the older structure may have been demolished. However, there are different phases of brickwork visible in the surviving structure, suggesting that all or part of 18th century mill was incorporated into the new building. The mill and leat are shown on the 1840 Betchton tithe map, where the tail race appears to have emerged from a point to the south-west of the mill to run above ground along one side of field 785 (which is named as "Pingot", meaning "a small piece of land") before entering a stream. A similar arrangement is shown on the 1875 Ordnance Survey first edition 25" map (sheet 50.14), where a "sluice" is marked just outside the south-eastern extent of the survey area. Water was diverted into the leat from the stream which issued from the pond at Higher Roughwood Mill.
- 3.22 At the time of the earthwork survey, the steep slope to the west of the M6 motorway through which the leat ran was covered with dense vegetation. The leat was revealed to be aligned approximately northwest-southeast, running approximately 10m above the bottom of the steep slope. It is embanked on its downslope side and survives to a width of 0.9m. It no longer carries a flow of water and is heavily silted up; no brickwork or other lining material could be seen.
- 3.23 The leat would have carried water to the north-east side of a brick-built rectangular lean-to positioned on the south-east side of the main building. The exact course of the leat near the wheel-house was difficult to trace, and it may have been carried part of the way on a wooden trough or launder. A brief examination of the mill showed the overshot wheel to be *in situ* although in a poor state of preservation. The wheel was partly submerged in stagnant water as the tail race had been blocked with breeze blocks, leaving only a small outlet pipe. The course of the tail race between the mill and the stream to the south-west was not visible above ground.

#### **Area 16 (north of Bridge 16) (see figure 4)**

- 3.24 The Volume 2 Specialist Report identified an area of ridge and furrow and other earthworks in a field on the north side of Wards Lane (NGR SJ76006450 centred) (site 4/27). They were given a medium grade of importance in the Volume 2 Specialist Report.
- 3.25 At the time of the earthwork survey the field was in pasture. The boundaries of the approximately rectangular field were formed by a mixture of hedgerows and post and wire fencing. The centre of the field contains an area of woodland and ponds.
- 3.26 Well-defined ridge and furrow earthworks, orientated northeast-southwest and standing up to 0.3m in height and 5m wide, lay in the northern two thirds of the field. At the southern end of the field, the ridge and furrow was overlain by a bank and an area of built-up ground, probably resulting from tipped material being spread during the construction of the M6 motorway.

- 3.27 The central part of the field, and the ridge and furrow, had been disturbed by a number of other earthworks, now located within a wooded area surrounded by a hedge, approximately 110m long and 40m wide. At the southern end of this wood are six sub-rectangular depressions approximately 2m deep, paired either side of a central linear ridge that stands to a height of approximately 3m. The depressions were saucer-shaped in profile and the three on either side of the central ridge were linked by narrow channels. No trace of any lining survived in the depressions, although some appeared to have firm edges which may once have been revetted. The northern end of the wood also contained a number of other depressions but these were much less regular in shape or profile and were more overgrown.
- 3.28 The 1840 Bradwall tithe map shows that the survey area was divided into four fields, numbered 56, 57, 58 and 349 on the apportionment, with a wooded central area similar in shape to the one present today. Fields 58 and 349 occupied the southern part of the field now covered by the dumped material; field 349 is named as "Marl Field" and field 58 was named as "The Ridings", meaning "cleared land". Fields 56 and 57 ran either side of the wooded area and were known as "Golden Field" and "Higher Wich Field" respectively. In Cheshire, the term "wich" is usually associated with salt manufacture, possibly meaning "land adjoining brine pits or salt boiling houses".
- 3.29 The Ordnance Survey 1872 first edition 25" map (sheet 42.14) depicts four of the paired depressions in the southern part of the wood as un-named ponds, with the outline of five other depressions indicated by dashed lines. The depressions are probably associated with the extraction of marl which was used as a sweetener on agricultural land and many similar groups of features can be seen in the surrounding area. The channels that connected the depressions may have been a way of draining water from an active to a disused marl pit. However, given the "wich" field name of an adjacent piece of land, it is also possible that the depressions were linked to salt extraction and manufacture.

#### **Area 19 (south of River Croco) (see figure 4)**

- 3.30 The Volume 2 Specialist Report identified several fields of well-preserved ridge and furrow earthworks in the area around Hill Farm and Primrose Farm (site 5/13) (NGR SJ74606655 and SJ7476635 centred). The earthworks were visible on aerial photographs taken between 1947 and 1990 and were extant during the preliminary walkover survey which was undertaken in October 1992. This site was assigned a medium grade of importance in the Volume 2 Specialist Report.
- 3.31 The survey area is shown as two fields on the 1839 Sproston tithe map, numbered as 166 and 172 on the apportionment. These are named as "Lower Breeches" and "Upper Breeches" respectively, meaning "land (newly) broken" (into arable cultivation) in both cases.

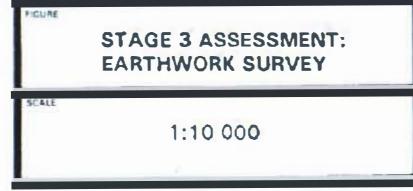
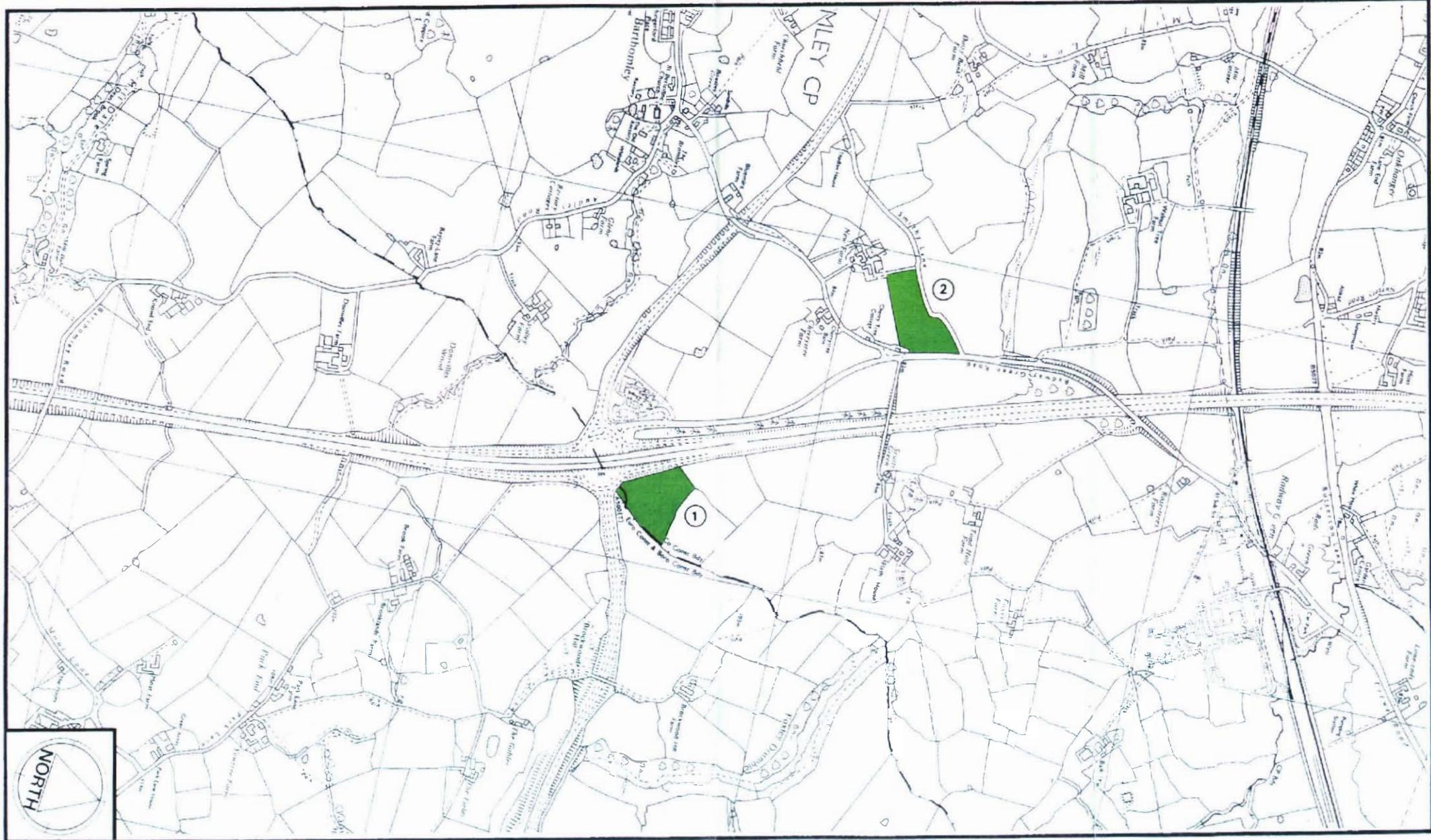
- 3.32 At the time of the earthwork survey, the large field was in pasture with the grass relatively short. The field boundaries were formed by a mixture of post and wire and post and rail fencing. The earthwork survey was confined to the area of proposed disturbance, that is the western half of the field.
- 3.33 The ridge and furrow is orientated approximately north-south and stands up to 0.75m in height and 7m wide (average). The earthworks run at right angles to the general slope of the field, which falls away to the north towards the River Croco which formed the northern boundary of the survey area. A slight 'reverse-S' bend could be seen at the south end of the ridge and furrow. This form of ridge and furrow is generally considered to be medieval and/or early post-medieval in date, and so it may be that the "newly broken ground" referred to by the field name is also of this date. In places, the ridges are being eroded by the stream, suggesting that the latter is not on its original course. An area of ridge and furrow shown on aerial photographs on the east side of the field had been buried beneath a large bank of dumped material, a situation already noted in Area 16.

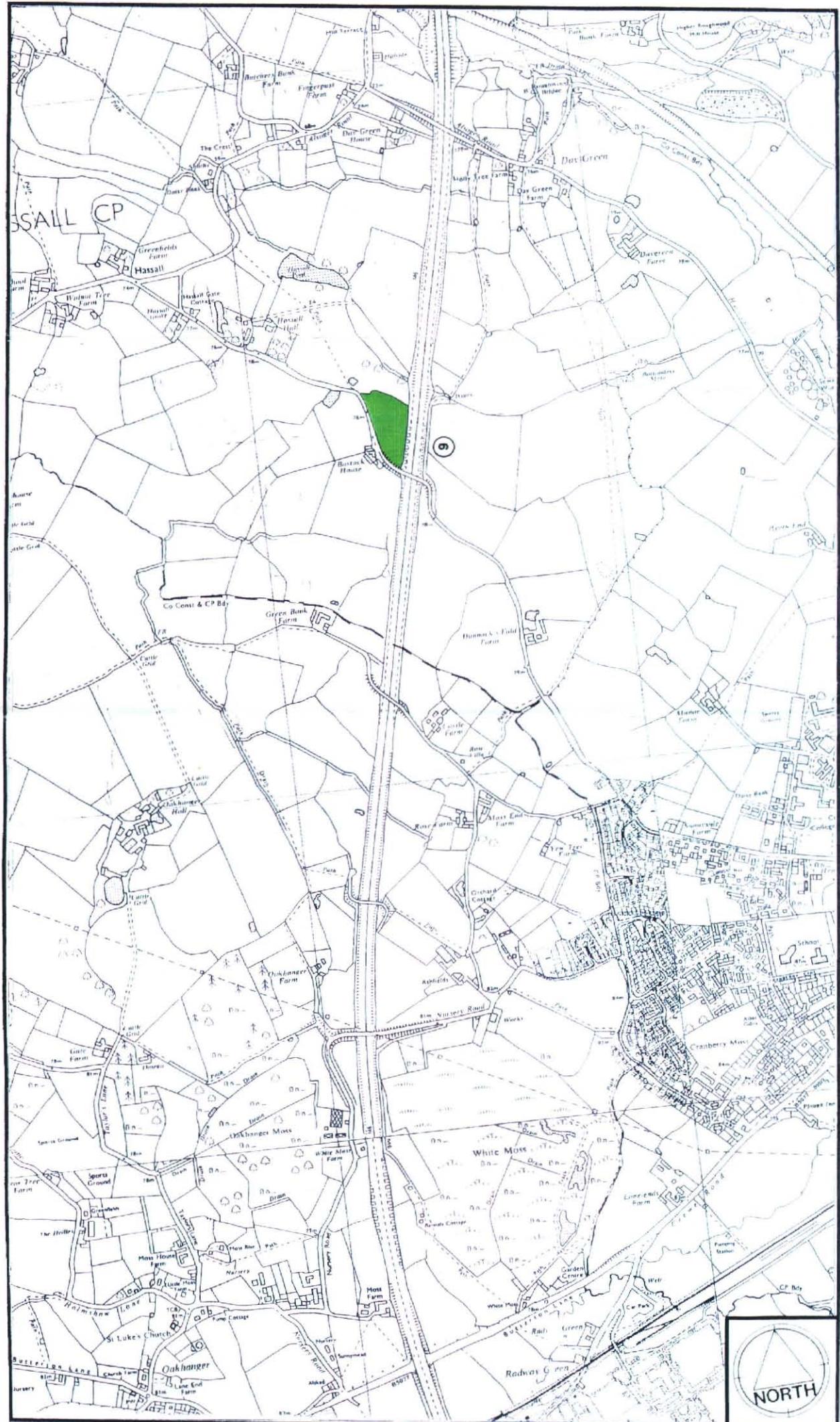
#### **Area 20 (south of Mill Lane Farm) (see figure 4)**

- 3.34 The Volume 2 Specialist Report identified two fields of ridge and furrow earthworks visible from the M6 motorway to the south of Mill Lane Farm (site 6/03) (NGR SJ73906805 and SJ74056815 centred). The western field, in which the earthwork survey took place, was covered in long grass at the time of the preliminary walkover survey in June 1993 and no features were visible. The site was nevertheless given a medium grade of importance in the Volume 2 Specialist Report.
- 3.35 On the 1844 Cranage tithe map, the survey area appears to have been split between fields 410 and 411, named as "Vetch Yards" and "Black Croft" in the apportionment. The name "Vetch Yards" refers to an area where vetch, a valuable fodder plant, was grown while "Black Croft" means "land with dark soil or vegetation"; the blackened soil could be caused by fire, surface water or coal. The extreme south end of the survey area was incorporated into a wood in the later 19th century, as shown on the Ordnance Survey first edition 25" map (sheet 42.5).
- 3.36 At the time of the earthwork survey, the field was in pasture with the grass being up to 0.3m in height. The boundaries of the approximately rectangular field are formed by a mixture of post and wire and post and rail fencing.
- 3.37 Apart from a slight north-south bank, the earthwork survey did not reveal any ridge and furrow earthworks, probably due to the fact that they were obscured by long grass rather than a genuine absence. A tree lined bank, approximately 140m long and standing up to 0.5m in height, ran parallel to the east side of the field. It returned at either end, the southern return being formed by a shallow depression. This bank probably represents the west side of field 411 as shown in 1844. A much shallower bank ran south from this depression, approximately aligned with the larger bank to the north.

#### **4 Conclusions and recommendations**

- 4.1 All the earthworks recorded by the survey are minor landscape features, perhaps with the exception of the earthwork platform identified in the northern part of Area 9 which might represent the site of a former building or buildings. The position of two former buildings can be identified from cartographic evidence in the eastern part of Area 2, adjacent to Radway Green Road; the buildings do not appear as earthwork features although the platforms on which they are likely to have been situated do.
- 4.2 The ridge and furrow earthworks in the various survey areas are of a variable condition. That contained in Area 19 is the best preserved, and forms part of a more extensive field system presently extending to the east along the southern bank of the River Croco. However, elements of this system have already been disturbed by previous motorway construction. A similar situation was identified in Area 16. The leat identified in Area 11 as formerly serving Lower Roughwood Mill has also been cut by the M6 motorway.
- 4.3 The ponds within the woodland in Area 16 are important in that they represent an interesting aspect of earlier rural industrial processes, but this area lies outside the proposed motorway widening corridor. Similarly, the majority of the features identified in Area 2 will not be affected by the proposals.
- 4.4 The earthwork surveys have recorded those surviving earthworks which lie within the proposed motorway widening corridor between Junctions 16 and 20. The majority of these features, such as field banks, ridge and furrow and ponds, are of low or medium grade importance and it is considered that this detailed survey programme is sufficient to record these upstanding features in advance of their destruction (preservation by record).
- 4.5 The two possible building platforms identified in Areas 2 and 9 are likely to contain features of specific archaeological interest. Area 9, because of its association with the site of a medieval moated manorial complex and its proximity to the possible course of a Roman road, is already allocated for further archaeological investigation through trial excavation, and it is recommended that a watching brief during the initial phases of construction is carried out in Area 2, to record any features of archaeological interest that might be uncovered.

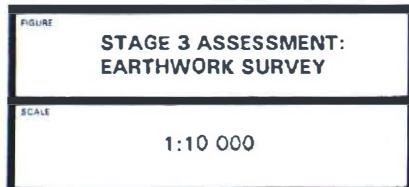




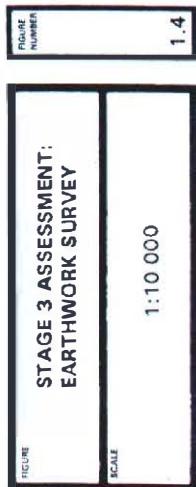
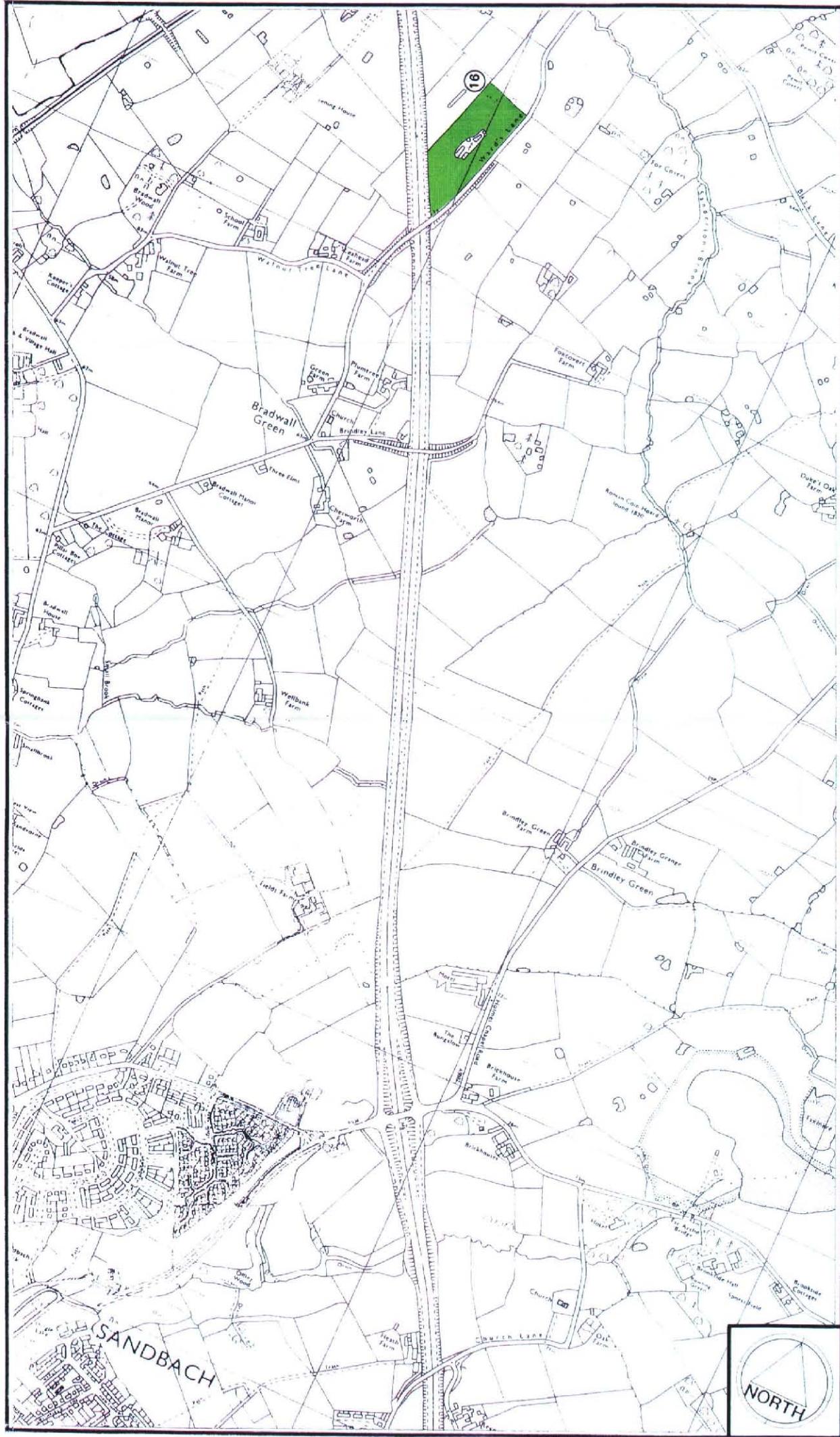


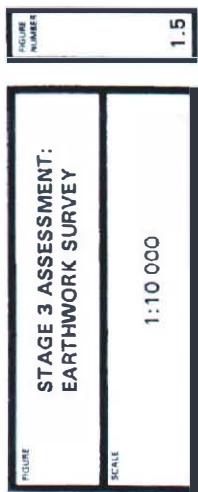
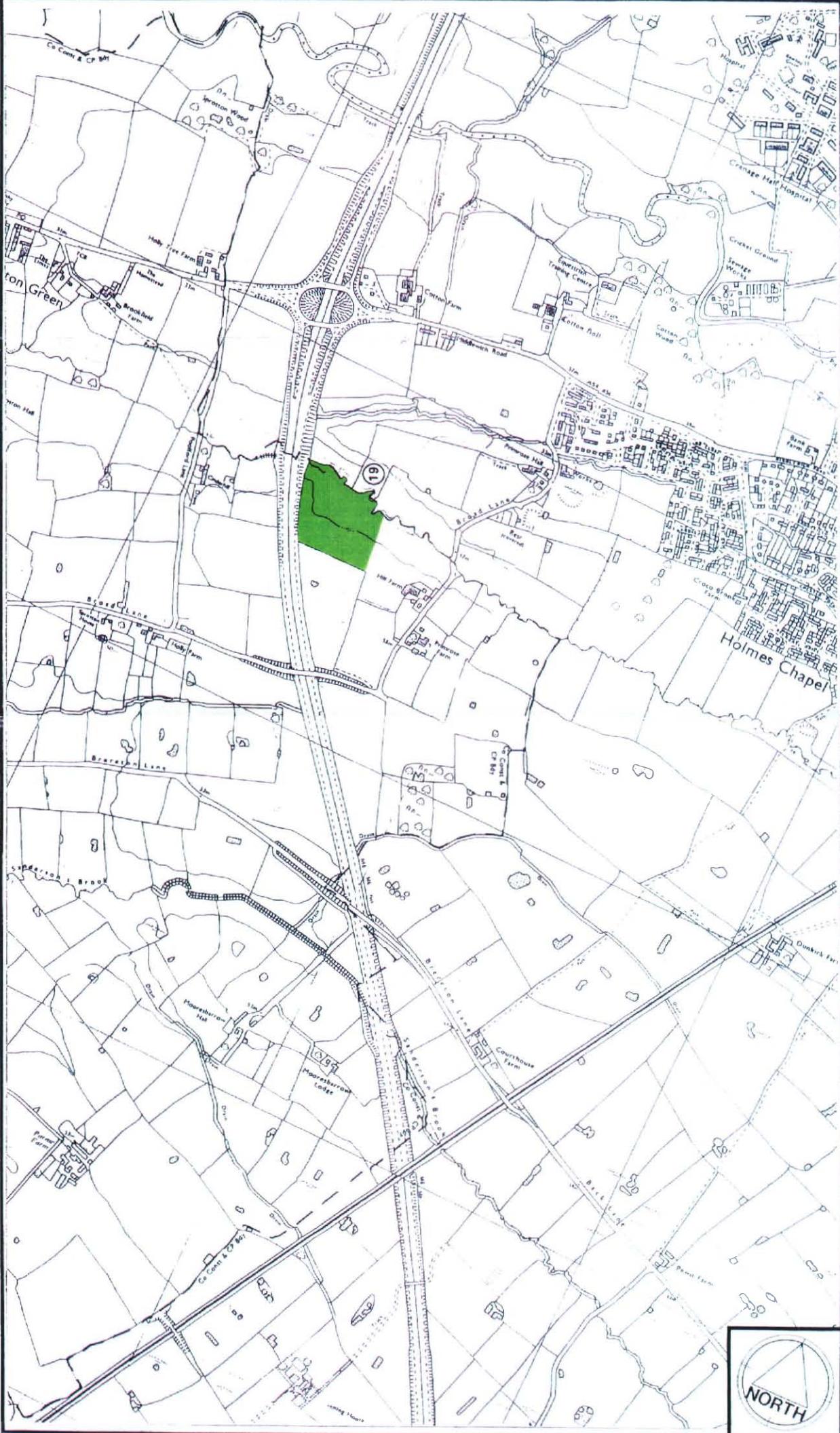
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**FIGURE NUMBER**  
1.3





STAGE 3 ASSESSMENT:  
EARTHWORK SURVEY

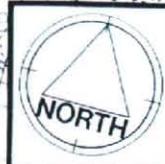
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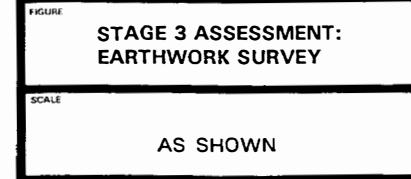
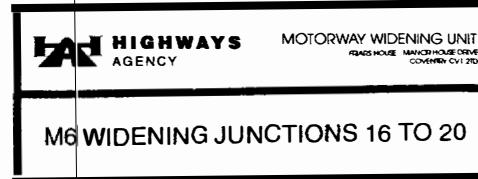
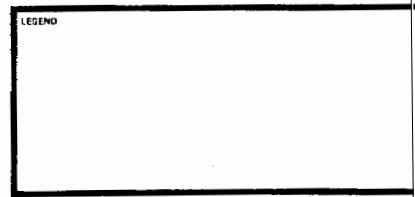
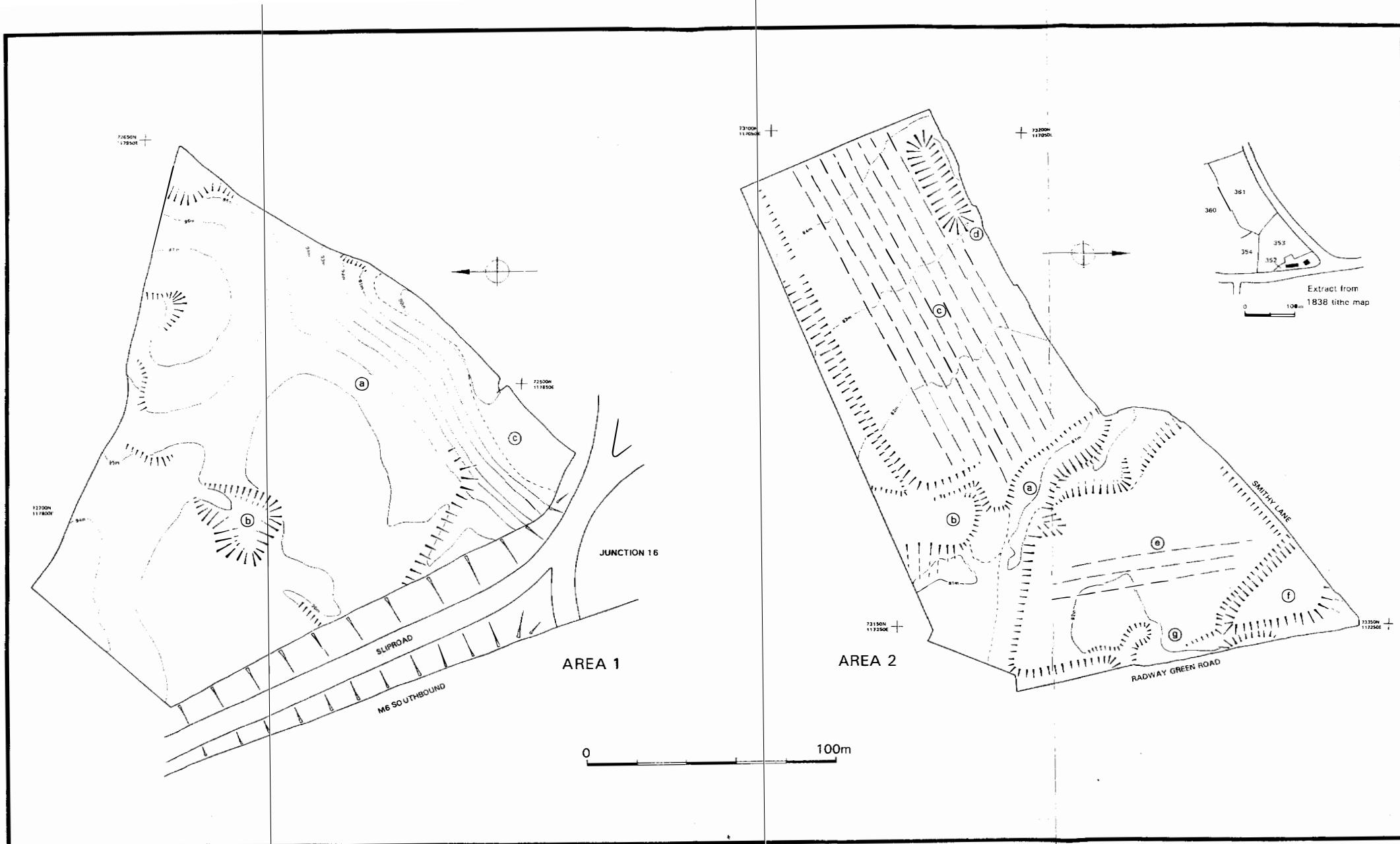
M6 WIDENING JUNCTIONS 16 TO 20

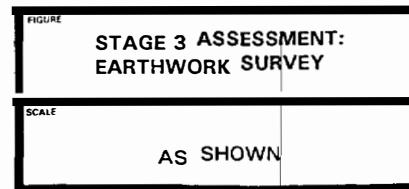
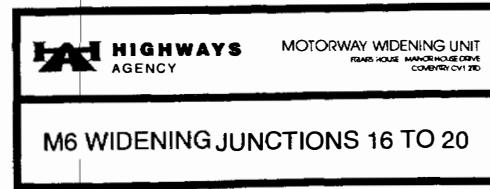
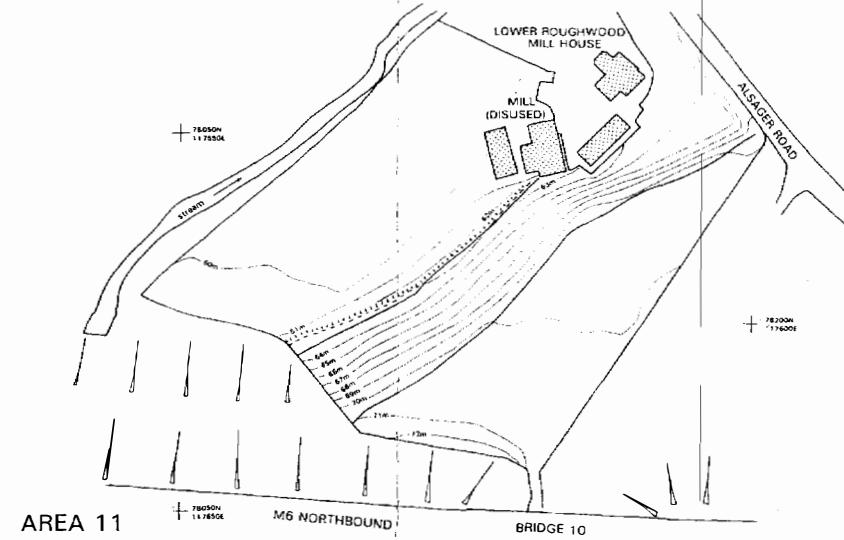
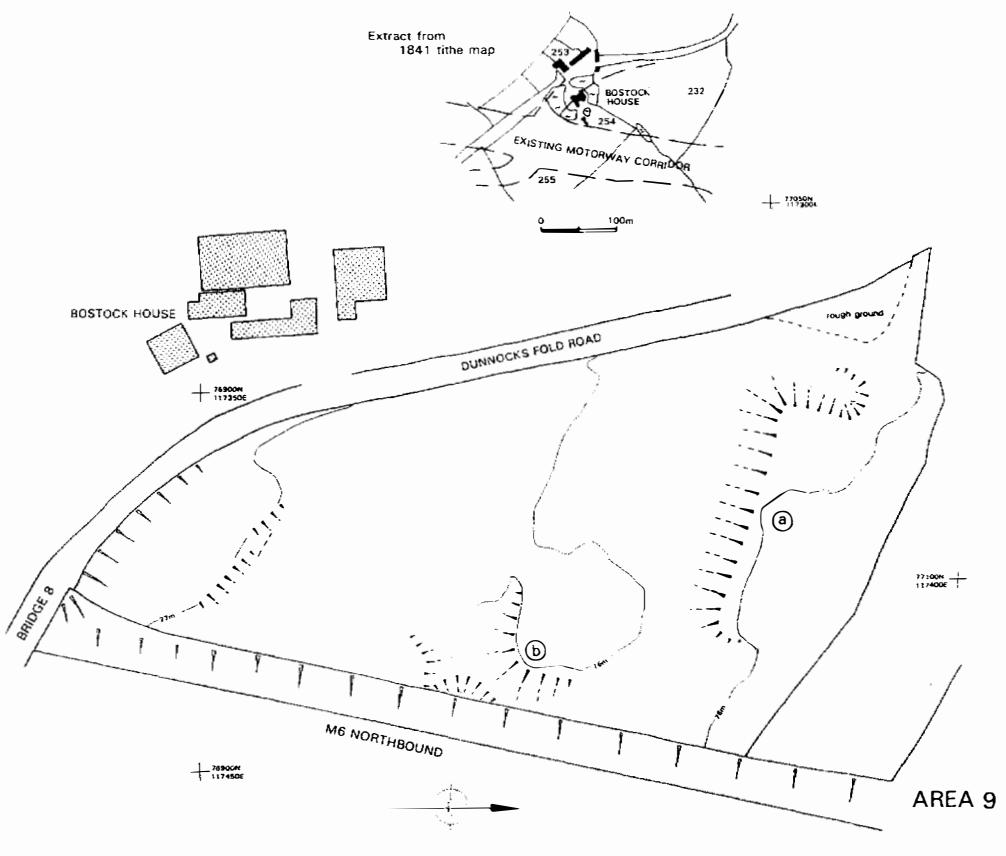


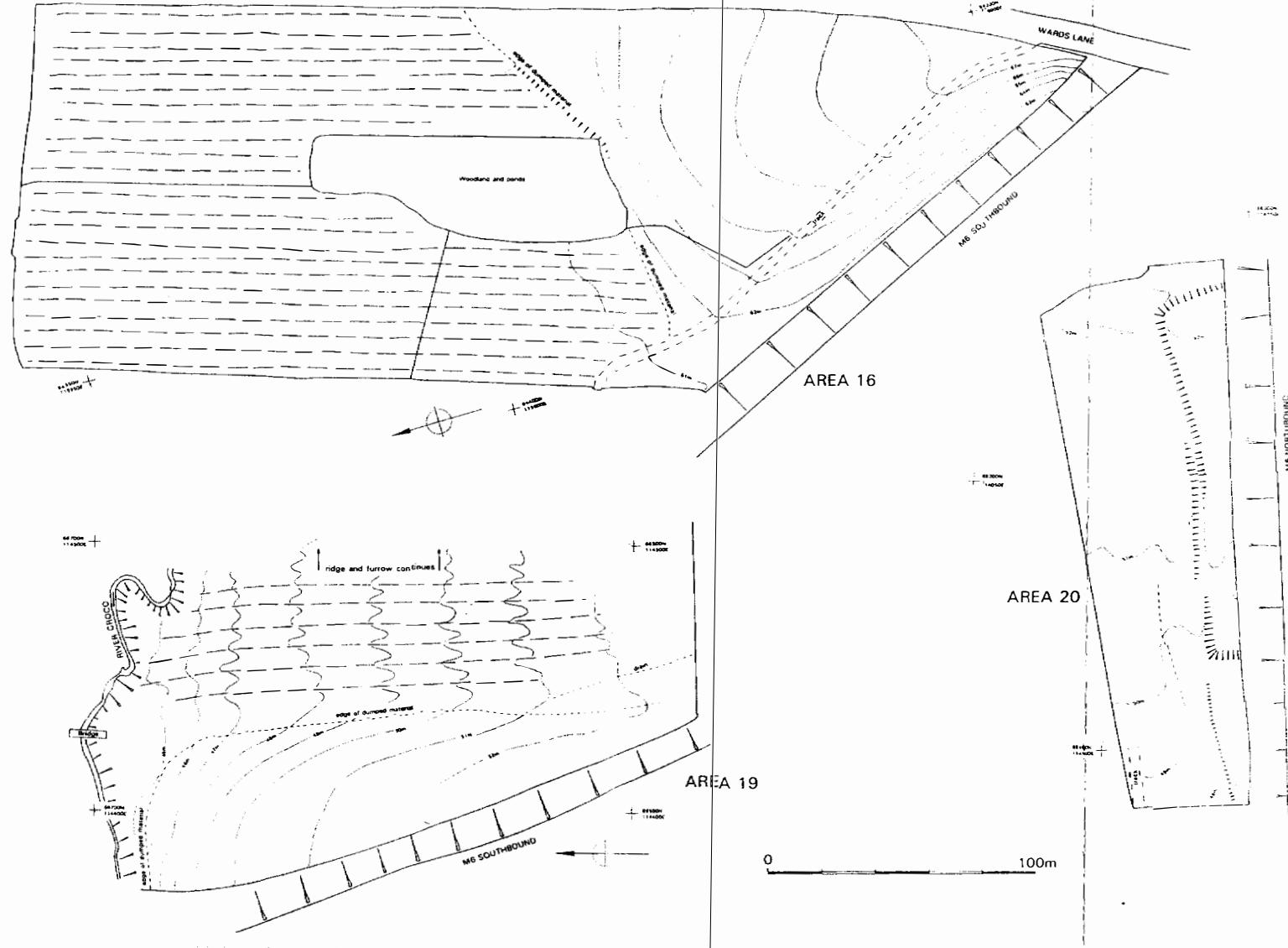
MOTORWAY WIDENING UNIT  
HIGHWAYS AGENCY

LEGEND  
13 FIELDWORK AREAS  
 AREA OF EARTHWORK SURVEY









LEGEND



**HIGHWAYS**  
AGENCY

MOTORWAY WIDENING UNIT  
PEASHOUSE, MARSHALL HEDGES  
COVENTRY CV1 2DQ

**M6 WIDENING JUNCTIONS 16 TO 20**

FIGURE

**STAGE 3 ASSESSMENT:  
EARTHWORK SURVEY**

SCALE

**AS SHOWN**

FIGURE

NUMBER