

NORTHAMPTONSHIRE ARCHAEOLOGY

*GEOPHYSICAL AND TOPOGRAPHIC SURVEYS
AND ARCHAEOLOGICAL EXCAVATION AT
EASTBURY MANOR HOUSE,
BARKING, ESSEX*

NORTHAMPTONSHIRE ARCHAEOLOGY
NORTHAMPTONSHIRE COUNTY COUNCIL

DECEMBER 2001

GEOPHYSICAL AND TOPOGRAPHIC SURVEYS
AND ARCHAEOLOGICAL EXCAVATION AT
EASTBURY MANOR HOUSE,
BARKING, ESSEX

Northamptonshire Archaeology

Library Catalogue No:

Copy No:

Date of accession:

STAFF

Project Manager S Parry MA MIFA
Text P Masters and J Prentice
Illustrations C Jones and P Masters BA HND PIFA
Fieldwork C Jones, P Masters, J Prentice, Ed Taylor and
 Richard Swann
Finds Tora Hylton and Iain Soden

QUALITY CONTROL

	Print name	Signed	Date
Checked by	C Burgess		
Verified by	P Chapman		
Approved by	S Parry		

CONTENTS

1. INTRODUCTION	1
2. BACKGROUND	1
3. LOCATION	2
4. GEOPHYSICAL SURVEY	2
5. ANALYSIS AND INTERPRETATION OF RESULTS (FIGS 2 AND 3)	2
6. TOPOGRAPHIC SURVEY	3
7. EXCAVATION	4
7.1 TRENCH ONE.	4
7.2 TRENCH TWO.	4
7.3 TRENCH THREE.	5
7.4 TRENCH FOUR.	5
7.5 TRENCH FIVE.	5
8. FINDS	6
8.1 CERAMICS	6
8.1.1 Wall tiles	6
8.1.2 Pottery	6
8.2 OTHER FINDS.	7
9. DISCUSSION OF EXCAVATION	8
10. BIBLIOGRAPHY	8

ILLUSTRATIONS

- Fig 1 Site Location, 1:2500
- Fig 2 Grey scale plot of raw data, scale 1:250
- Fig 3 Grey scale plot of enhanced data, scale 1:250
- Fig 4 Location of planting, scale 1:200
- Fig 5 Contour survey of garden, scale 1:200
- Fig 6 Location of trenches
- Fig 7 Trenches 1 and 2; plans and sections
- Fig 8 Trenches 3, 4 and 5; plans and sections
- Fig 9 First Edition Ordnance Survey map, 1862
- Fig 10 Second Edition Ordnance Survey map, 1897

**GEOPHYSICAL AND TOPOGRAPHIC SURVEYS
AND ARCHAEOLOGICAL EXCAVATION AT
EASTBURY MANOR HOUSE,
BARKING, ESSEX.**

ABSTRACT

Detailed geophysical and topographic surveys followed by trial excavation were carried out in the west garden at Eastbury Manor, a National Trust property in Barking, Essex. This work formed part of Phase 1 of archaeological investigations at the property. The geophysical survey produced anomalies denoting the remains of possible garden features. The excavation was targeted at areas identified from the survey and by documentary research. This revealed that the whole of the west garden had been deeply cultivated during the 19th century. No earlier remains survive which may have indicated the layout of a contemporary garden.

1. INTRODUCTION

Eastbury Manor House is a National Trust property in Barking, Essex (Fig 1: NGR TQ 457 838). Northamptonshire Archaeology carried out a geophysical and topographic survey on 13th November 2001, followed by trial excavation between 27th-29th November 2001. This work comprised Phase 1 of the archaeological investigations in the west garden. A new design is planned for this area and before any ground works are carried out archaeological evaluation was proposed to establish whether any remains are present of earlier layouts.

The evaluation met the requirements of a Brief issued by Gary Marshall, (National Trust Archaeologist, Thames and Chilterns region) on 22 November 2000.

2. BACKGROUND

Eastbury Manor is a Grade 1 listed Elizabethan property which is owned by the National Trust and leased to the Borough of Barking and Dagenham (Fig 1).

The west garden measures 17m x 23m and is bounded to the south and west by brick walls, to the east by the west wall of the manor house and to the north by a gravel path. At present the garden is grassed and planted with shrubs and trees but is thought formerly to have been

the kitchen garden due to its proximity to the original kitchens of the house. Evidence survives of the layout of the garden from 1737 until the 1862 First Edition Ordnance Survey map (Fig 9) which shows the area bordered by a perimeter path and divided into two unequal parts. The northern section appears to be planted with trees and shrubs, the southern part is apparently lawn bordered by planted beds. On the 1897 map the whole area is blank with no indication of planting or paths (Fig 10).

A geophysical survey was previously undertaken in 1995, but this revealed little of significance. Therefore it was felt that further, more detailed survey should be undertaken prior to excavation to help determine the archaeological potential of the garden.

3. *LOCATION*

The area of investigation is located immediately to the west of the manor house and is essentially flat, though it does fall slightly to the south (Fig 5). The house is surrounded by a housing estate built in the 1930's which has impinged upon the original setting of the house but is not thought to have significantly changed the topography.

4. *GEOPHYSICAL SURVEY*

The resistivity survey was carried out using a Geoscan RM15 Resistance Meter with a twin electrode configuration in a mobile probe spacing of 0.5m. Transects were spaced 0.5m apart and were walked from west to east in a 'zig-zag' fashion with readings logged at 0.5m intervals. White areas within the plot represent areas that could not be surveyed due to the presence of shrubs and trees.

The data was analysed using the Geoplot v3.0 (Geoscan 2000). In the resultant plots, low resistance is shown as white and high resistance as black. The plots are shown as raw and enhanced data. The data has been despiked, thereby reducing extreme readings as caused by uneven contact with the ground and with stones lying immediately beneath the surface.

The data has also been graphically smoothed and enhanced using a high pass filter (radius 5m gaussian) and a low pass filter (radius 1m gaussian).

5. *ANALYSIS AND INTERPRETATION OF RESULTS (FIGS 2 AND 3)*

The resistivity survey has produced anomalies that could indicate the presence of former garden features.

A linear low resistance anomaly (A), approximately 1.5m wide and running in a west to east direction may denote the remains of the path indicated on the 1862 Ordnance Survey map, though the presence of a path would be expected to be indicated by a reading of high resistance. The low resistance reading may therefore indicate an earth-filled feature representing an area of introduced soil after the removal of the path. A square-shaped high resistance anomaly (B) located slightly off centre to the garden plot suggests an area of masonry or stonework. Anomaly (C) situated on the north side of the path has a slightly higher reading than the rest of this area and may indicate the presence of a structure though the lack of distinct form may simply be the result of uneven levelling of the underlying soil. Along the eastern side of the garden plot is a faint high resistance linear anomaly (D), which may denote remains of an enclosing wall or path edging interrupted by the cross path (A). High resistance anomalies (E) and (F) could indicate spreads of rubble, perhaps relating to the levelling of the area. A linear low resistance anomaly (G) lying roughly parallel to the west side of the house might be the result of a service trench, situated as it is close to four manhole covers. No other significant anomalies were detected.

The magnetometer survey was not carried out as it was not possible to locate a stable zero point in order to balance the instrument. The underlying garden makeup material along with service trenches made it impossible to establish such a point within the grounds of the manor house.

6. *TOPOGRAPHIC SURVEY*

At the same time as the geophysical survey, a topographic survey was undertaken to record all the existing features in the garden and to determine if any variations in the topography of the site might indicate the presence of former features. The survey was made using a Topcon total station theodolite and processed using Intsurveyor and Mapinfo programmes. All of the cultivated areas around the present planting were recorded along with the edges of the grass area and any modern services (Fig 4). A series of levels were also taken in between the areas of planting, these were related to Ordnance Datum (Fig 5) and have been reproduced as contours.

While the garden appears essentially flat, it does slope gently to the south, and along the western perimeter wall is slightly banked. Across the main part of the garden there were no discernible earthwork remains, and this was confirmed by the creation of the contour survey which indicated no measurable features apart from the edges of the small beds around the planting.

7. *EXCAVATION*

Following the surveys five trenches were excavated within the west garden to investigate the stratigraphy and anomalies identified by the surveys. The trenches had been provisionally located prior to the two surveys but some were moved following the results to obtain maximum information (Fig 6).

7.1 *TRENCH ONE*

This trench was placed to investigate the features identified from the First Edition Ordnance Survey map which shows the northern third of the garden as a bed with trees and shrubs, divided from the southern part by a path (Fig 9). Beneath the turf a layer of black sandy loam (Tr 1/1) with gravels up to 25mm was revealed (Fig 7). This contained 19th century china and glass and lay directly on a layer of orange/brown sand and gravel (Tr 1/2). This layer appeared to be the upper part of the natural subsoil and contained no finds. It was cut only by two modern service trenches (Tr 1/3 and 5). The 19th century layer had removed any former garden remains. No indication of the path was found or of any earth-filled feature that might have represented its removal. The anomaly (A) detected by the resistivity survey may be the two parallel trenches for the modern services.

7.2 *TRENCH TWO*

This trench lay on the eastern side of the garden and ran from the west wall of the house across the present path and into the lawn (Fig 6) to investigate the relationship of the garden and house. The trench was located here because to the north are four modern service inspection covers and to the south there was formerly a porch to the present door from the house. There are also drains from down pipes on the house, all of these features suggested prior to excavation that the whole of the path area was likely to be heavily disturbed. At the west end of the trench beneath the lawn, the stratigraphy was the same as in Trench 1 and comprised black sandy loam with gravel inclusions (Fig 7, Tr 2/1). Beneath the current loose gravel path surface was a hard compacted dirty orange gravel and hoggin path surface which was contained between an edging of edge set frogged brick. Though no dating was found from this surface the path must date from the 20th century due to the type of brick edging used. Between the path and the house was a narrow bed, presumably for planting against the wall of the house. This contained a black sandy loam with china and glass along with fragments of ironwork from drain covers and pieces of concrete. These fragments are most likely from the laying of, or alterations to, the present drains. Within the old path

surface was a cut for another service trench which was not excavated and the CAT instrument detected a probable electricity cable immediately to the west of the brick path edging. This almost certainly runs to the flood light located at the south end of the garden and was not excavated.

7.3 *TRENCH THREE*

This trench was located against the south wall of the garden (Fig 6). The same black sandy loam layer (Fig 8, Tr 3/1) containing 19th century china and glass was found and lay over an orange sand and gravel layer (Tr 3/2), the upper surface of the natural. This in turn was cut towards the south end of the trench by a construction trench for the wall (Tr 3/3) and was filled by a dark brown sandy loam (Tr 3/4). The construction trench was not excavated as this pre-dates any garden feature associated with the earliest phase of the garden and has been truncated by the 19th century layer which has removed any potential early garden layers. A modern iron pipe was found cut into the 19th century layer (Tr 3/5).

7.4 *TRENCH FOUR*

Placed against the west wall of the garden, this trench was positioned to investigate the possible blocked opening in this section of wall (Fig 6) and any remains of the perimeter bed indicated on the 1862 First Edition map. However, the stratigraphy was the same as in the other trenches with the upper layer of 19th century material (Tr 4/1) resting directly on the natural subsoil (Tr 4/2). There was no indication of any change in material close to the wall. The vertical joint in the brickwork of the wall continued below ground and three brick courses below ground level two courses of brick were missing horizontally across the space of the possible opening. This may indicate the former position of a sill to the opening. However, there is no indication of any blocking on the west face of this wall so the hypothesis that this was formerly an opening remains unresolved at present. A modern service trench for an electricity cable ran the length of the trench cutting into the subsoil layer.

7.5 *TRENCH FIVE*

This was placed near the centre of the garden to investigate an anomaly detected by the geophysical survey (Figs 2, 3 and 6). The same layer of black sandy loam was uncovered beneath the turf and cutting this was a roughly oval shaped deposit of brick rubble (Tr 5/3).

The rubble comprised fragments of early, probably 16th century brick with mortar adhering to it along with modern frogged brick and salt glazed drain pipe fragments. From amongst the rubble a 1923 half penny was recovered, which along with the later brick and drain fragments, and the fact that it is cut into the 19th century layer, indicate that this feature is of 20th century date. The feature's purpose is not clear but may simply represent a hole created by the removal of a tree or shrub backfilled with rubble.

8. *FINDS*

8.1 *CERAMICS*

8.1.1 *Wall tiles*

Two fragments of plain white wall tile were recovered from Trench 4, context 1. The incomplete stamp on the rear "MADE IN (ENGLAND)" indicates a date after 1900 but the word ABBEY has not been traced. It does not appear to derive from one of the principal tile factories in England (Austwick and Austwick 1980).

8.1.2 *Pottery*

A total of 83 sherds of pottery were recovered, weighing 1208g. None was remarkable and the whole assemblage spans the relatively short period of c1500 to c1900 with all contexts containing pottery dating to the very end of this period. All earlier material was residual in later contexts. The sherds were generally small and abraded.

The material recovered was of the following types:

- ❖ Cistercian ware, c1500-1600
- ❖ Glazed red earthenware, c1500-1650
- ❖ Frechen ware, c1625-1700
- ❖ Combed Staffordshire slipware, c1690-1730
- ❖ Tin glazed earthenware, 17th to 18th century
- ❖ White salt-glazed stoneware, c1720-80
- ❖ Chinese Porcelain, 18th century
- ❖ Pearlware, c1750-80
- ❖ Glazed red stoneware, 18th century

- ❖ Creamware, c1770-1830
- ❖ English bone china, 18th to 19th century
- ❖ English stoneware, 19th century
- ❖ Lustreware, 19th century
- ❖ Doulton stoneware, 19th to 20th century
- ❖ Underglaze blue transfer printed earthenware, 19th to 20th century
- ❖ Unglazed earthenware, 19th to 20th century (flower pots)

From Trench 4, context 1 comes a sherd marked "SURREY", the transfer pattern, in red. An incomplete registration number (Rd No 181....) dates the pattern to 1884 but the vessel may have been made after this. Full pattern registrations (beginning in 1884) are housed at the PRO, Kew (www.thepotteries.org).

The assemblage has no research value and its dating potential is limited by the fragmentary nature of the material. Even the later types may have been moved around considerably.

8.2 *OTHER FINDS.*

The evaluation produced a small collection of nineteenth and twentieth century material. All of the assemblage is from topsoil/garden soil deposits. The assemblage comprises a fragment of H-sectioned window came, a perforated disc manufactured from animal bone, a tapered iron strip with a rounded terminal (possibly a handle from a piece of cutlery), fragments of glass and clay tobacco-pipe.

There are two incomplete clay tobacco-pipe bowls and eight stem fragments. The bowls are sufficiently complete to allow dating, using Oswald's simplified typology using bowl and foot form (1975, 37-41). The bowls provide a date range of c.1810-40, and both are furnished with the manufacturer's initials on the foot or spur. One, a spurred bowl (Oswald Type G24), which dates to c.1810-40, has a stamp on the back of the bowl, comprising the letters BAT ME MILE END framed within a rouletted oval. The spur is stamped with P.P. who may be the manufacturer P. Pope who worked during the mid nineteenth century (Oswald 1975, 143). The other bowl (Oswald Type G14) dates from 1820-40. The letters W.M. are just visible either side of the foot. A manufacturer called William Miller has been recorded as working during 1848-9 (Oswald 1975, 142).

There are 14 fragments of glass comprising fragments of bottle glass and window glass. None of the assemblage is worthy of note.

9. **DISCUSSION OF EXCAVATION**

The excavation of the trenches established that the whole garden had been cultivated to a depth of between 300mm and 450mm during the late 19th century, probably by double digging. On the Ordnance Survey map of 1862 the west garden is shown as being divided between a shrubbed bed along the northern edge and a lawn (Fig 9) with planted borders along the southern and western sides. On the 1897 map (Fig 10) the area is shown featureless though whether this accurately depicts what was in the garden or not is unclear. If it is then the division of the garden had been removed. At this time the house had become essentially a farm house and it is likely that the adjacent walled areas were used as vegetable gardens.

The surface level of the present garden surface would appear to be essentially unchanged and the deep digging of the late 19th century has removed any evidence of earlier schemes. The natural subsoil comprises an orange sandy gravel and was found to have been cut only by modern service trenches and the south garden wall. The brick edged gravel path parallel to the house is of 20th century date and may even be related to the early ownership of the National Trust.

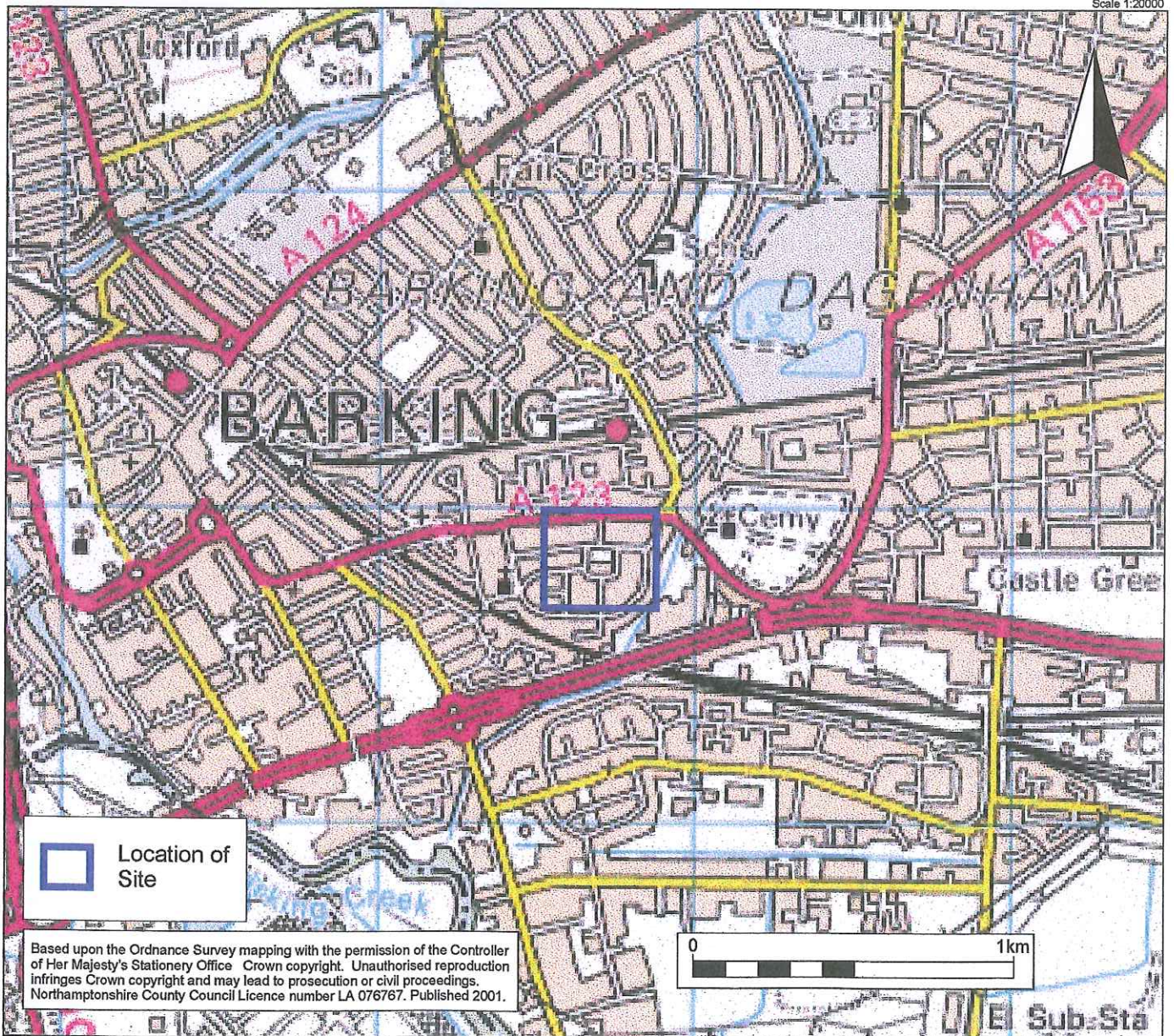
Of the finds, the majority is 19th century in date and comprises mostly domestic china and glass along with clay tobacco pipe. There is little residual 16th or 17th century material which is in keeping with the early period of the gardens development as a pleasure garden since domestic refuse would be disposed of elsewhere.

10. **BIBLIOGRAPHY**

Austwick J, and Austwick B, 1980 *The Decorated Tile*



Scale 1:20000



 Location of Site

Based upon the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationery Office. Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Northamptonshire County Council Licence number LA 076767. Published 2001.

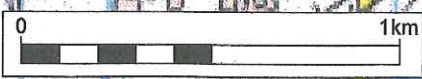
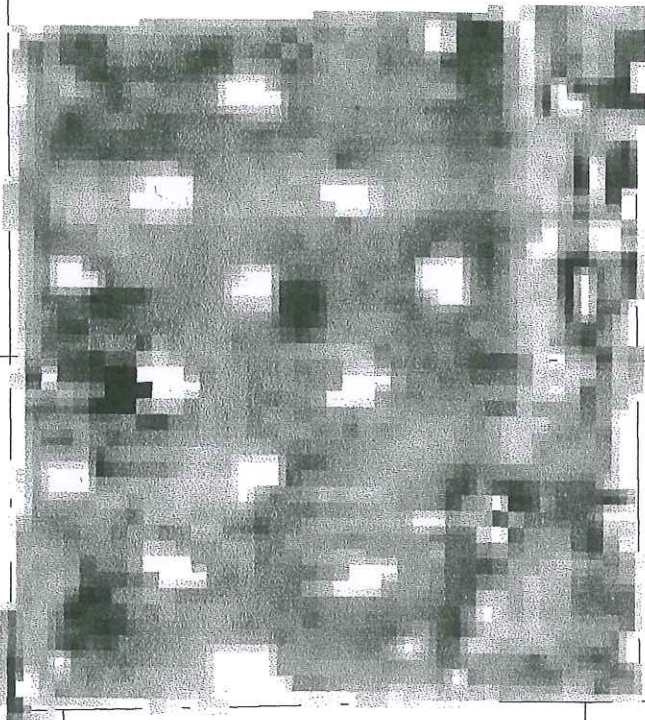
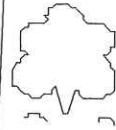
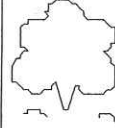
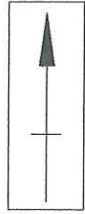


Fig 1

545700



183800

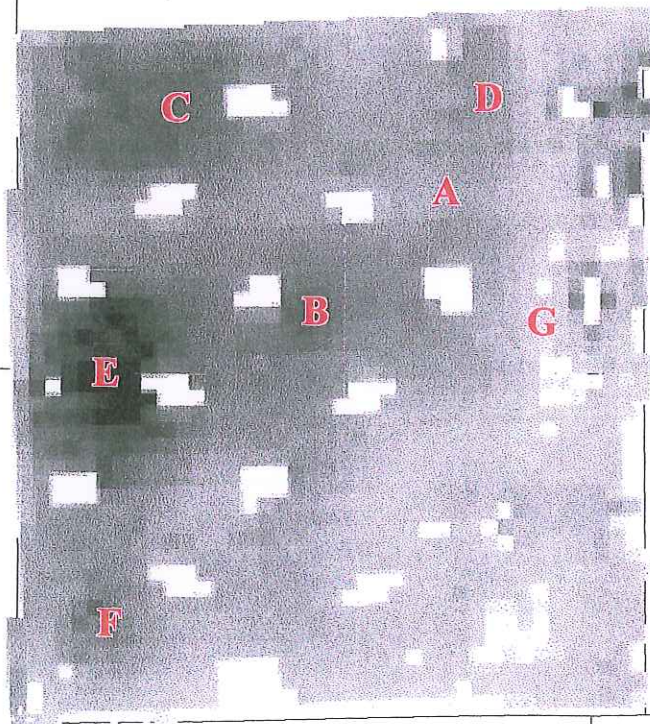
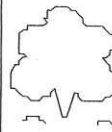
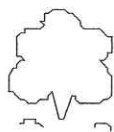
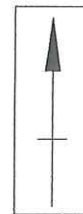


This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Northamptonshire County Council: Licence No. LA 076767. Published 12/11/2001.

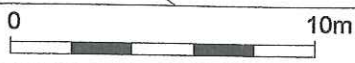
EASTBUR

Fig. 2

545700



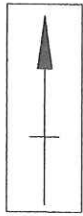
183800






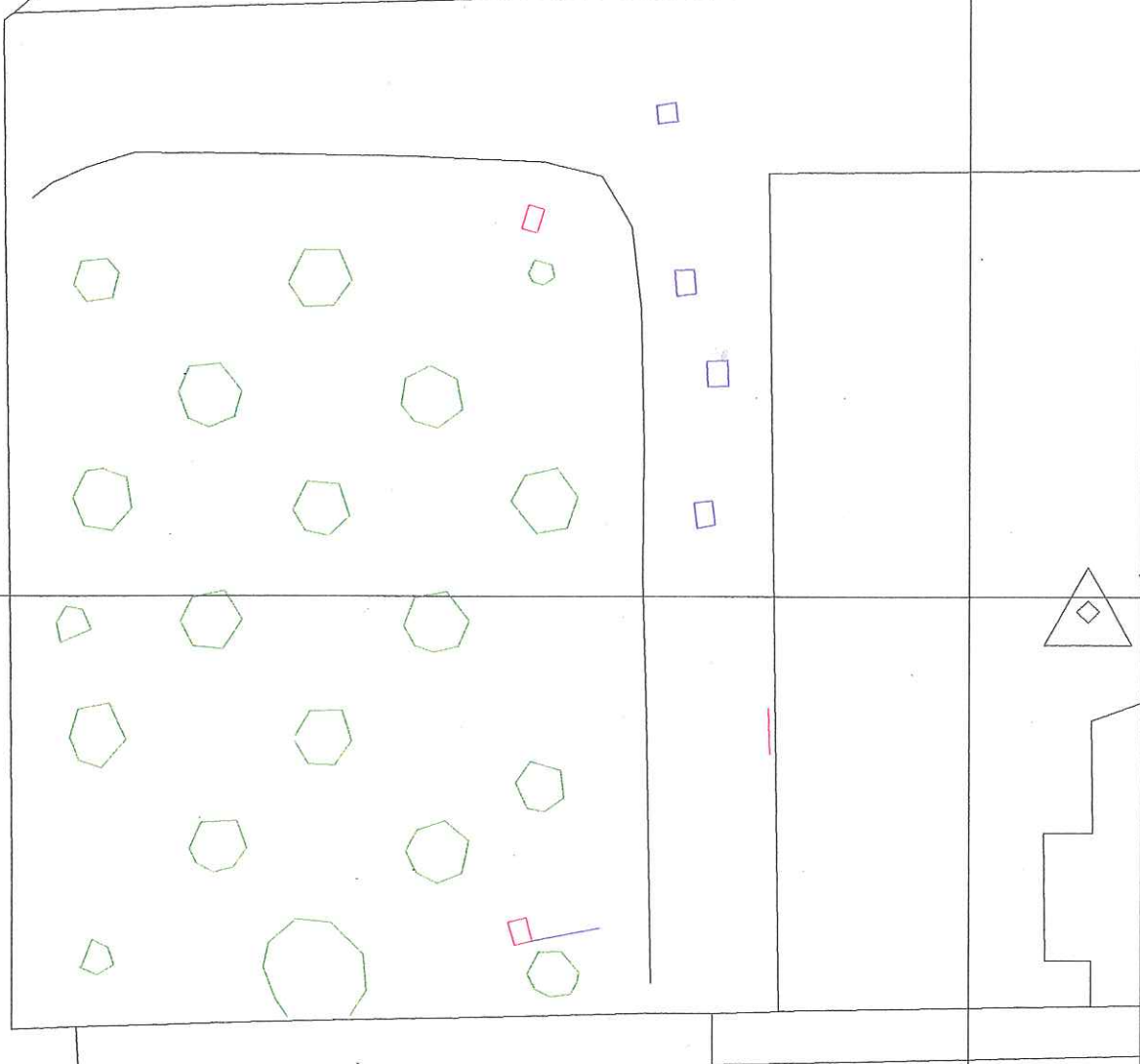
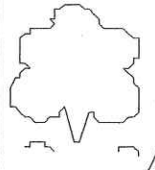
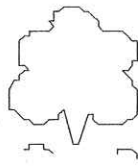
This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Northamptonshire County Council: Licence No. LA 076767. Published 12/11/2001.

EASTBUR

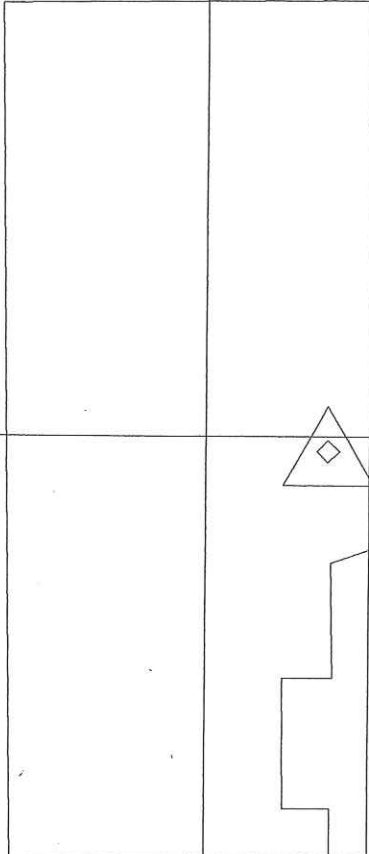
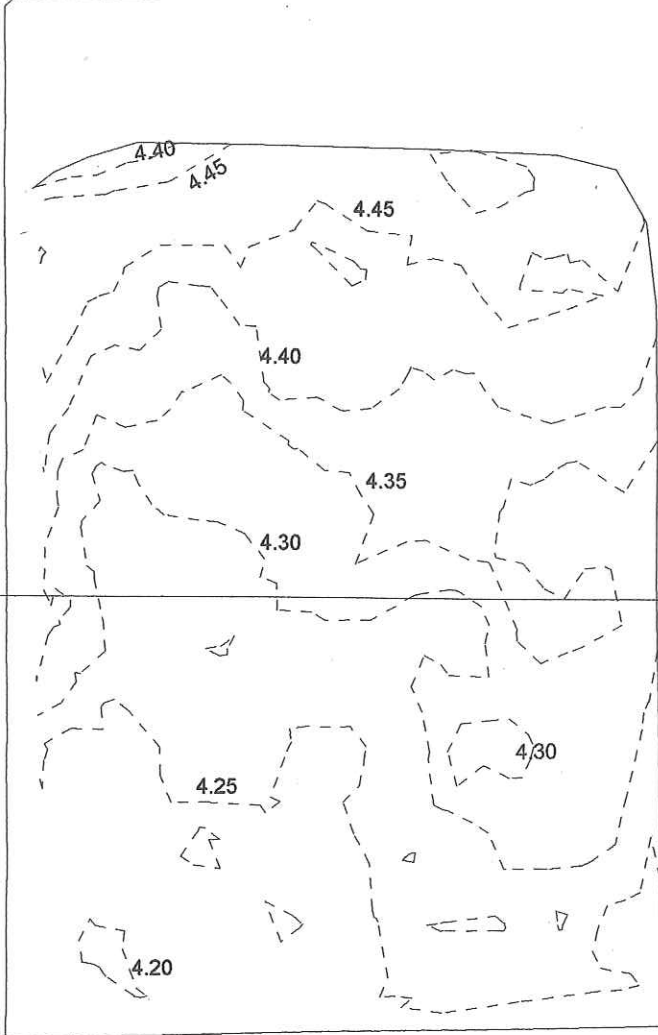
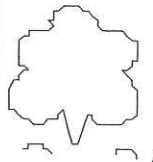
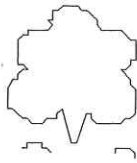
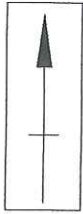
Fig. 3



-  Drains
-  Trees and Shurbs
-  Lights

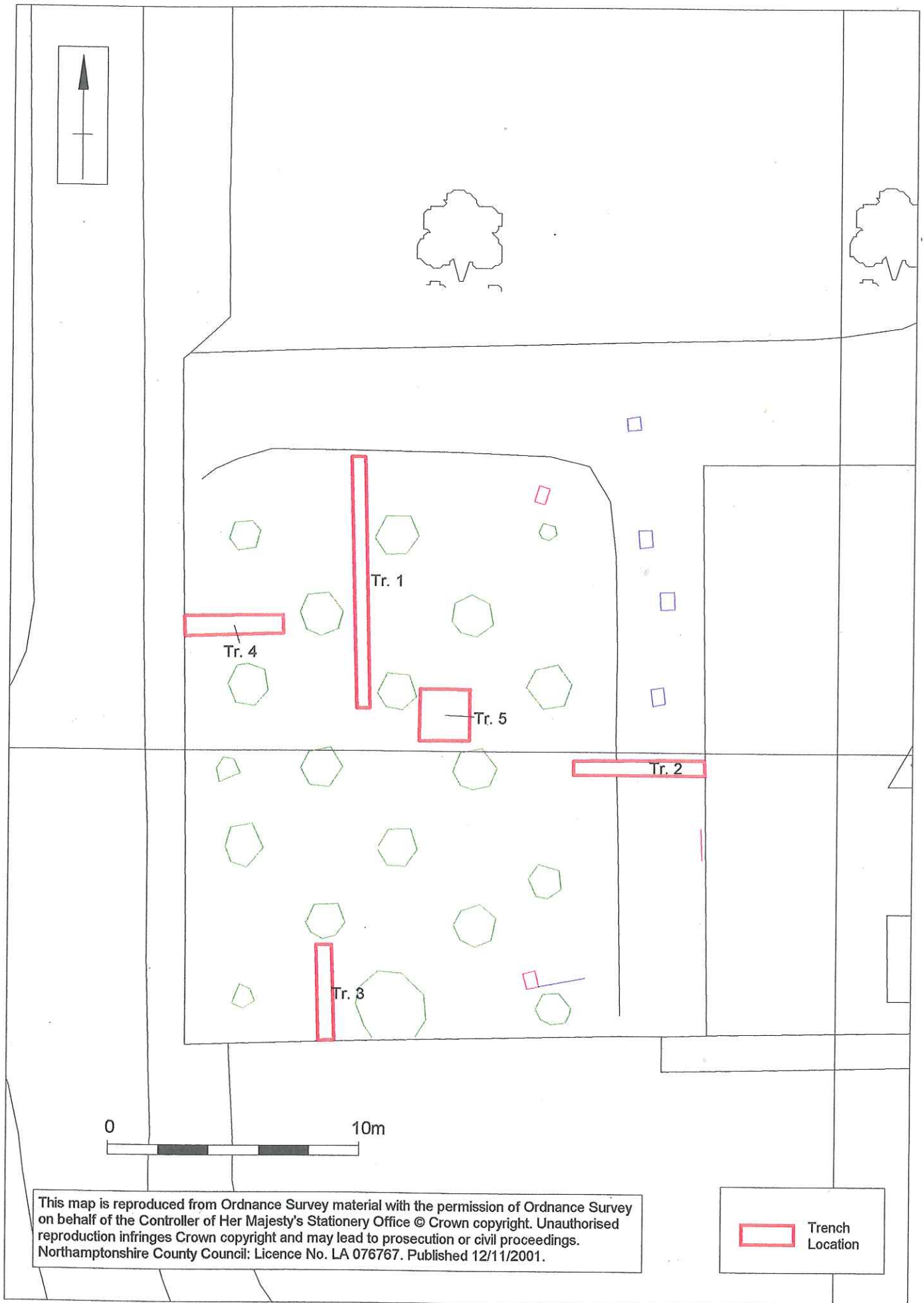


This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Northamptonshire County Council: Licence No. LA 076767. Published 12/11/2001.



Numbers represent height above OD

This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Northamptonshire County Council: Licence No. LA 076767. Published 12/11/2001.

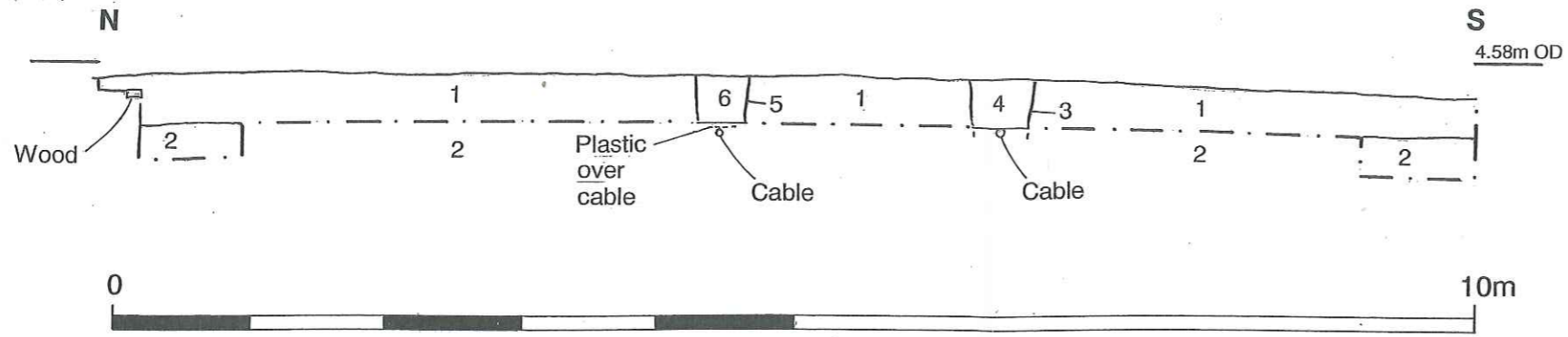


This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Northamptonshire County Council: Licence No. LA 076767. Published 12/11/2001.

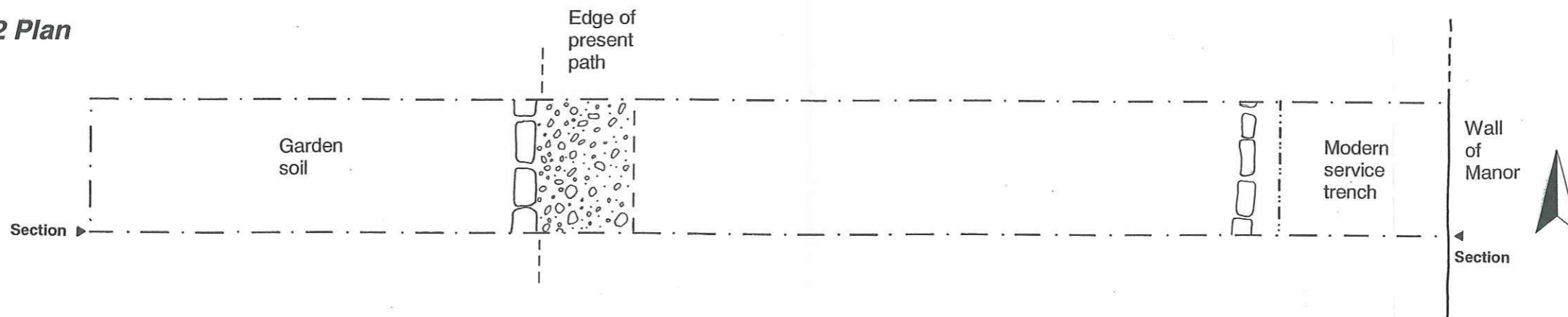
 Trench Location

Fig 6

Trench 1 Section



Trench 2 Plan



Trench 2 Section

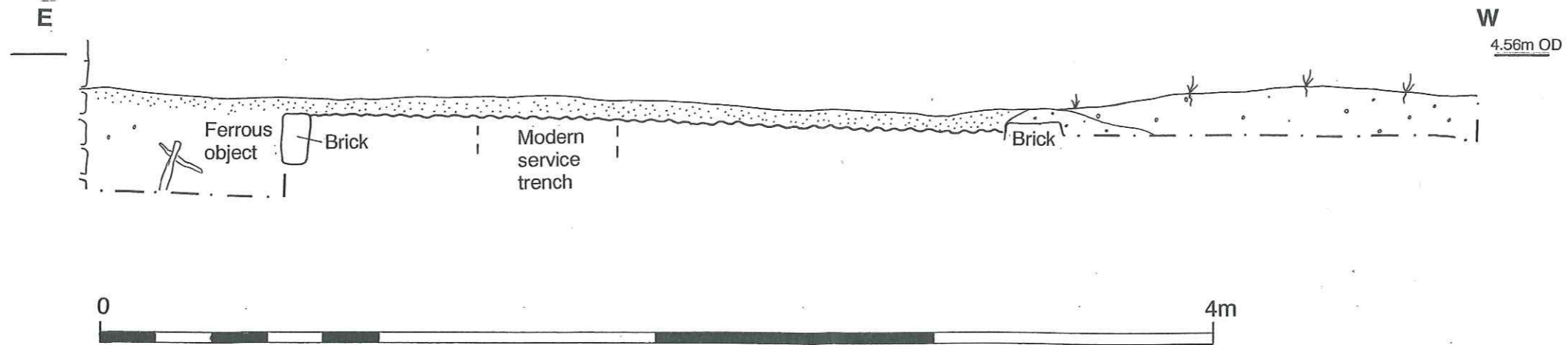
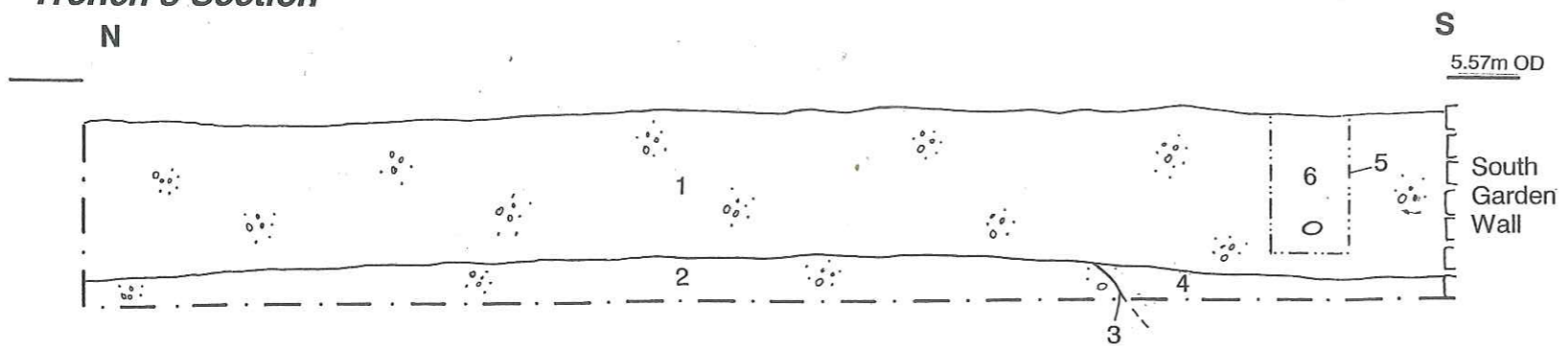
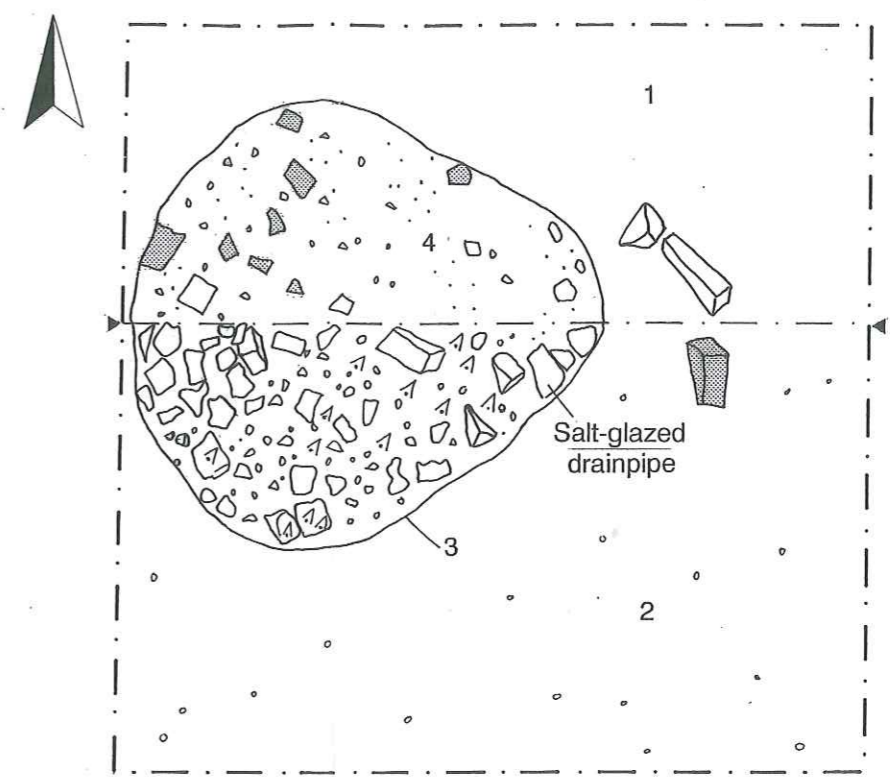


Fig 7

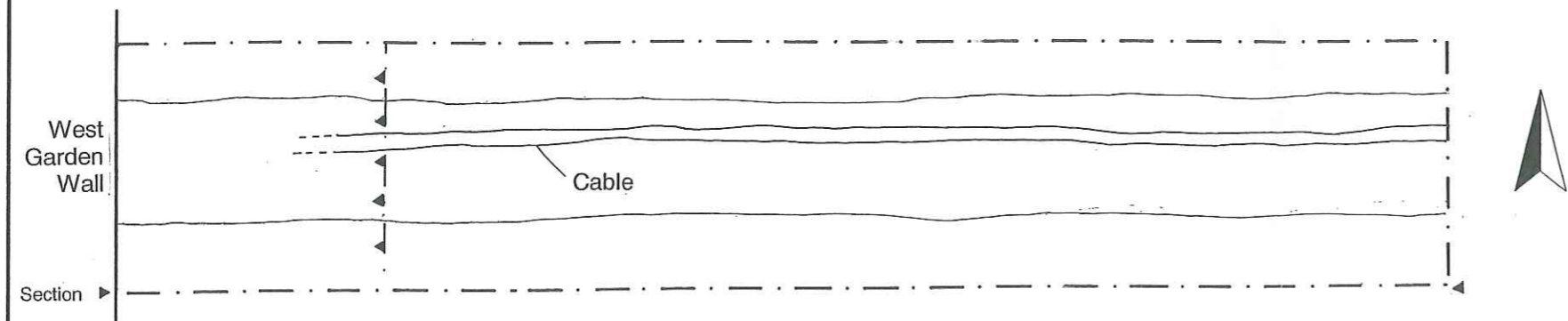
Trench 3 Section



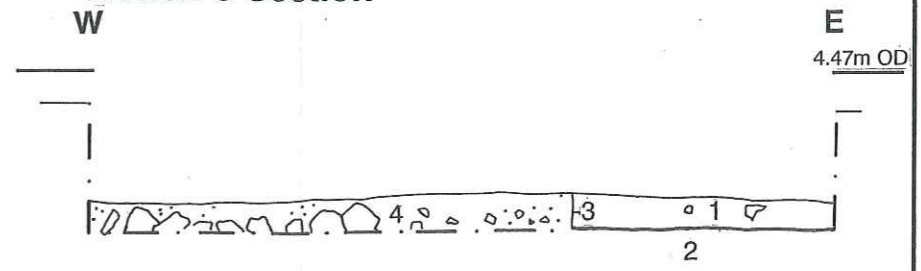
Trench 5 Plan



Trench 4 Plan



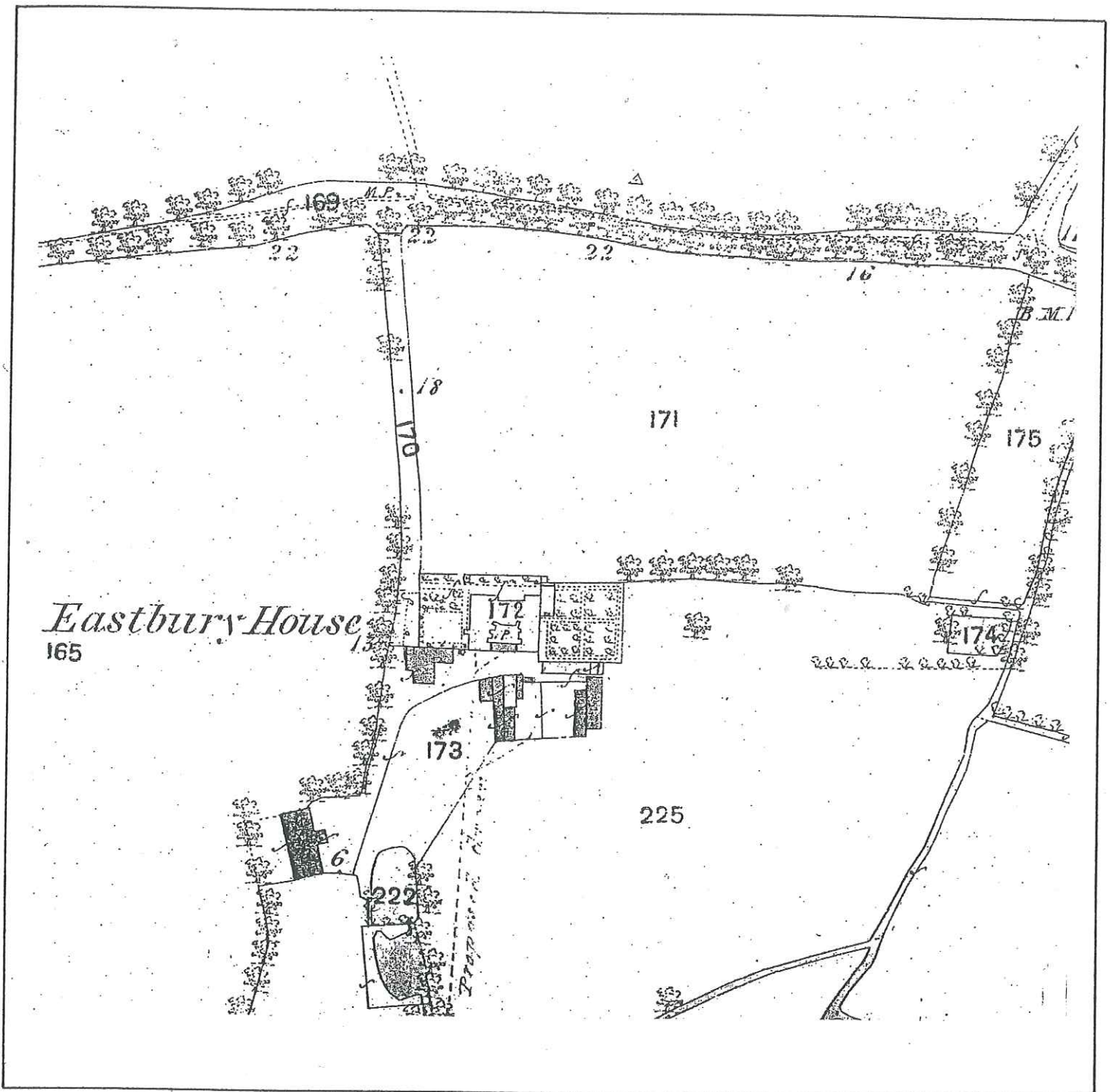
Trench 5 Section

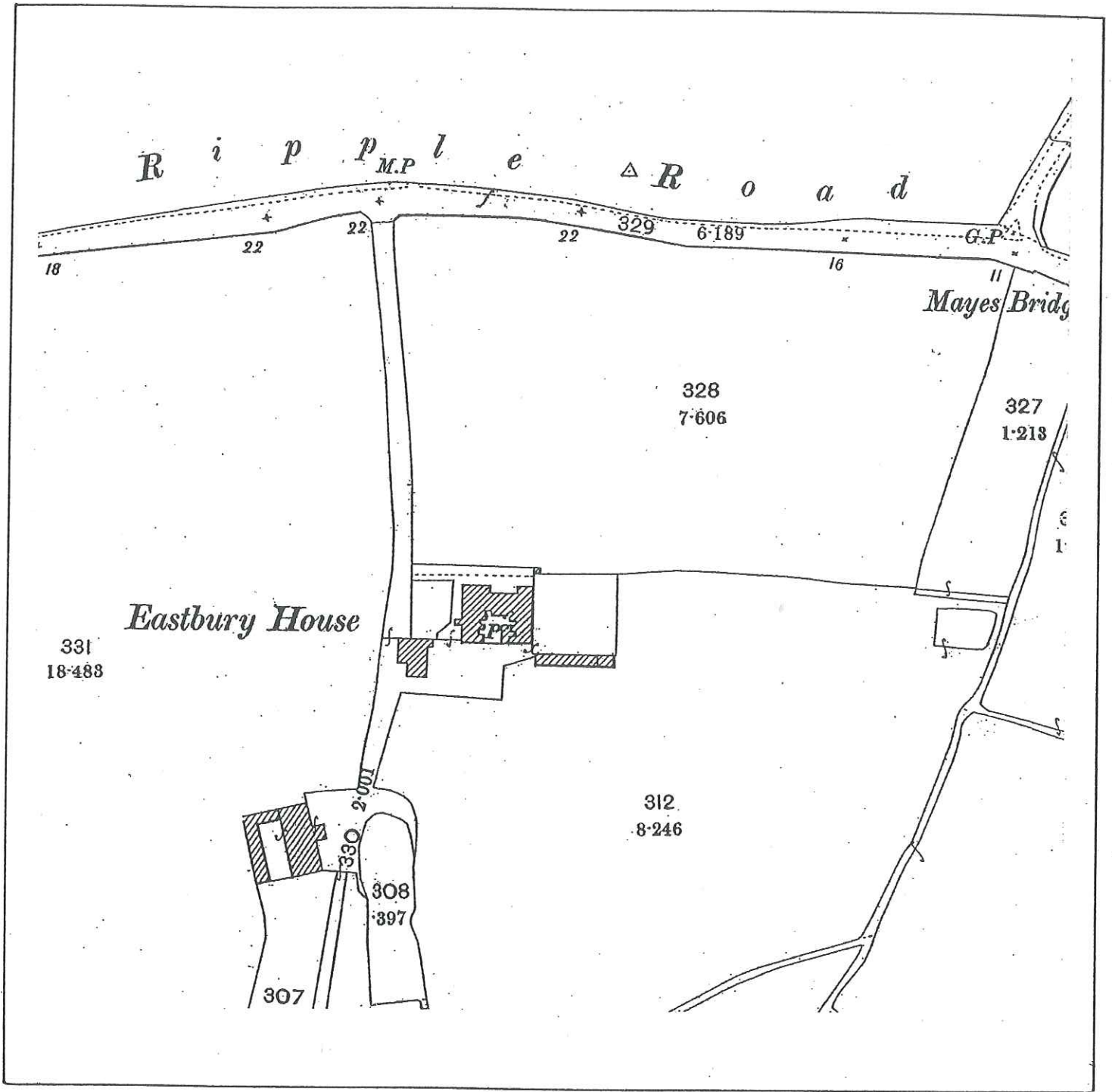


Key
Red Brick



Fig 8







**Northamptonshire
County Council**
Environment Directorate

Northamptonshire Archaeology
2 Bolton House
Wootton Hall Park
Northampton NN4 8BE

Tel: 01604 700493/4
Fax: 01604 702822
