

ARCHAEOLOGICAL  
EVALUATION OF THE RIVER  
SEVERN FLOOD DEFENCES AT  
LONGNEY, GLOUCESTERSHIRE

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Illustrated by Carolyn Hunt

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# **An archaeological evaluation on the River Severn flood defences at Longney, Gloucestershire**

**James Goad and Erica Darch**

## **Part 1 Project summary**

*An archaeological evaluation was undertaken on the River Severn flood defences in Longney and Elmore parishes, Gloucestershire (NGR SO 7568 1550 to 7620 1650). The work was undertaken on behalf of the Environment Agency Midlands, who had begun substantial groundworks along the length of the present flood defences, which was thought to threaten archaeological deposits. The project intended to locate these deposits and try and indicate their nature, date and location. During the course of the evaluation, evidence was located in the majority of the trenches of an earlier phase of flood defence. Artefactual material was recovered from this early defence and dated to the 17<sup>th</sup> century. No traces of any earlier archaeological features were discovered.*

## Part 2 Detailed report

### 1. Background

#### 1.1 Reasons for the project

An archaeological evaluation was undertaken on the River Severn flood defences at Longney, Gloucestershire (NGR SO 7568 1550 to 7620 1650), on behalf of the Environment Agency Midlands. The extent of the flood defences affected by the present engineering scheme runs from Elmore Back in the north to Hill Farm in the south. The Environment Agency intended to refurbish the present flood defences by inserting a clay core into the centre of the present earthwork and the Gloucestershire archaeological curator considered that a site of archaeological interest was affected.

#### 1.2 Project parameters

The project conforms to the *Standard and guidance for archaeological field evaluation* (IFA 1999) The project also conforms to a project proposal prepared by Worcestershire Historic Environment and Archaeology Service (WHEAS 2003).

#### 1.3 Aims

The aims of the evaluation were stated in the project proposal/brief: to test the potential for the survival of earlier flood defences within the zone of the bank affected by the refurbishment works. The project would attempt to locate these archaeological deposits and determine, if present, their extent, state of preservation, date, type, vulnerability and documentation. The purpose of this was to establish their significance, since this would make it possible to recommend an appropriate treatment, which could have been integrated with the development programme.

### 2. Methods

#### 2.1 Documentary search

Prior to fieldwork commencing a desk based study was carried out (Miller 2003) which included a search of the Sites and Monuments Record (SMR). In addition the following sources were also consulted in the desk based study:

##### *Cartographic sources*

- J Menett, 1772 *A map of the estate at Dinny in the parish of Minsterworth and Doodings Farm in the parish of Longney, Gloucestershire*. Reproduced from a 1957 copy and reproduced with permission of Gloucester Record Office
- Ordnance Survey map, 1880-1888 Gloucestershire, sheets 32NE and 32 SE (1:10,560) and sheets 32.4; 32.7; 32.8 and 32.12 (1:2500)
- Ordnance Survey 1954, Sheet SO 71 NE (1:10,560)
- Ordnance Survey 1955, Sheet SO 71 SE (1:10,560)
- Ordnance Survey 1974, Sheet SO 71 NE (1:10,000)
- Ordnance Survey 1980, Sheet SO 71 SE (1:10,000)

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*Documentary sources*

- Allen, J R L and Fulford, M G, 1990 Romano-British and later reclamations on the Severn salt marshes in the Elmore area, Gloucestershire, *Trans Bristol and Gloucestershire Archaeol Soc*, Vol 108, 17-32
- Allen, J R L and Fulford, M G, 1990 Romano-British Wetland Reclamations at Longney, Gloucestershire and evidence for the early settlement of the inner Severn estuary. *Antiquities Journal*, Vol 70, part 2, 288-326

## 2.2 Fieldwork

### 2.2.1 Fieldwork strategy

A detailed specification has been prepared by the Service (WHEAS 2003), and the fieldwork was undertaken between 13th and 24<sup>th</sup> May 2003.

Trenching was undertaken shortly in advance of the Environment Agency's refurbishment works along the line of the modern seabank (the present flood defence). Their groundworks were approximately 2.70m wide and 1.60m deep centrally placed along almost the entire length of the defence.

Nine trenches were excavated across the seabank, amounting to just over 299m<sup>2</sup> in area. The area of potential archaeological significance was estimated to be around 28.4ha, with the trenching representing a sample of just over 1%. The location of the trenches are indicated in Figure 2.

The trenches were excavated using a 360° tracked excavator, employing a toothless ditching bucket and under close archaeological supervision. Exposed surfaces were cleaned and recorded and during this procedure, artefactual material was recovered from the sections. In trenches two and eight, some hand excavation was undertaken to investigate the nature of the alluvial deposits below the post-medieval bank. This was also in accordance with aims set out in the proposal. Deposits were recorded according to standard Service practice (CAS 1995). To hasten the recording process, contextual information was included in annotations on the trench drawings.

### 2.2.2 Structural analysis

All fieldwork records were checked and cross-referenced. Analysis was effected through a combination of structural, artefactual and ecofactual evidence, allied to the information derived from other sources.

## 2.3 Artefacts

### 2.3.1 Artefact recovery policy

All artefacts were retrieved by hand and retained in accordance with the service manual (CAS 1995 as amended).

### 2.3.2 Method of Analysis

All hand-retrieved finds were examined. Artefacts were identified, quantified, dated and recorded on a Microsoft Access 1997 database. A *terminus post quem* (TPQ) date was assigned to each stratified context. The pottery was examined and recorded by fabric type according to the fabric reference series maintained by the Service (Hurst and Rees 1992).

## 2.4 Environment

### 2.4.1 Sampling policy

Environmental sampling was not deemed necessary for this project.

## 2.5 The methods in retrospect

The methods adopted allow a high degree of confidence that the aims of the project have been achieved.

## 3. Topographical and archaeological context

The length of river flood defences where this evaluation took place lie along the east bank of the River Severn, in the parishes of Longney and Elmore, around 7km south-west of Gloucester (Figure 1). The geology, soils and topography of the wider area reflect its position on the floodplain of a major post-glacial river, along with land reclamations, for agricultural use, since the Roman period. A ridge of Triassic and earlier rocks contain the deep alluvial silts deposited by the river in this area. The alluvial silts show that a varied wetland environment existed in the area throughout most of the Flandrian period (10000 BC to present), although the present fine loamy soils and the relatively marked differences in surface levels across the general area are largely the result of successive reclamations and associated improvements beginning in the late Roman period (Miller 2003).

A full list of the archaeological sites in the area of the flood defences is given in Miller 2003. These sites represent activity in this large expanse of reclaimed ground, and a sequence of reclamation has been proposed by Allen and Fulford (1990). This sequence comprises the following stages summarised in Miller 2003.

The earliest evidence for the reclamation of land in this area seems to be in the Roman period. Fieldwalking at Bridgemacote Farm and Windmill Hill 2.5km to the east of the river discovered concentrations of Roman material (Allen and Fulford 1990a). Both scatters represent settlement and agriculture on reclaimed marshland. In this area exists the remnants of an 800m earth and stone embankment known as the *Great Wall* (see Figure 6), with slight differences in ground levels either side of it indicating two distinct phases of reclamation (Allen and Fulford 1990a). The *Great Wall* is likely to have bounded the earlier of the two reclamations, either by turning north-east from its present northern limit towards Elmore Back, or by continuing further north to reach the river, and then turning to follow the river bank eastwards. The defences of the later, slightly higher reclamation are represented by an earthen bank that extends for 500m from Bridgemacote Farm to Doodings Farm and by a long established field boundary which suggests the embankment continued to the north-east to join the *Great Wall*. This second set of Roman defences could have survived along the riverbank from a point north-west of Dowdings Farm to the limit of the earlier defences towards Elmore Back and might have taken the form of a substantial stone-faced bank and external ditch similar to the *Great Wall* (Miller 2003).

Bridgemacote Farm and Windmill Hill have also produced pottery of a medieval date, and much of the seabank area subject to this evaluation lay in an area of ridge and furrow from this period. It is clear this land was cultivated (hence the ridge and furrow) and enclosed by the late 18<sup>th</sup> century, as shown by the early maps of the area (Allen and Fulford 1990a, Figure 1b). The documentary evidence does not reveal too much evidence of flood defences constructed in the medieval period. It seems perfectly feasible though, for existing Roman defences to have been maintained, as they would have to have been to protect the agricultural activities occurring by the river, for which there is ample evidence (Allen and Fulford 1990a, Figure 1b).

Since 1815, the local fieldscape has been modified to some extent, with the removal of field boundaries suggesting a greater emphasis on arable cultivation (Miller 2003). The Inclosure map of this date (see Figure 7 for the location of these seabanks) shows the abandoned *Great Wall* defence and a new line further to the west, whose most northern section coincides with part of the present day line of flood defence. The 1880's and 1924 Ordnance Survey maps show large sections of the seabanks in the same location as the present defences. The general condition of these defences seems to have deteriorated to such a degree, that by 1959 they underwent the huge restructuring that show the flood defences in almost exactly the state they are in today (Miller 2003).

#### 4. Results of structural analysis

Modern deposits referenced below were identified by modern material in the sections, including bits of plastic and barbed wire. These are not included in the finds table, which generally have finds collected from the post-medieval bank and the naturally deposited alluvial layers built up against it.

##### *Trench 1*

The first trench opened had the remnants of a post-medieval bank on the eastern side of the section (105) with an alluvial layer (106) built up against it. These sat over an earlier alluvial layer (104), which the bank was composed of. The main body of the new bank was mainly alluvial material 102.

##### *Trench 2*

The former seabank was more clearly visible in this section than in trench 1. A sherd of 17<sup>th</sup> century pot was located in the bank (205), along with post-medieval sherds in the two dark alluvial layers deposited against it (203 and 206).

##### *Trench 3*

This trench didn't display any traces of the former seabank, just naturally deposited alluvial layers (303 and 305) with the modern bank above them (302 and 304).

##### *Trench 4*

Like trench 3 this didn't display any traces of the former seabank, just an alluvial layer at the base (404) and the modern deposits over it (4-3 and 402).

##### *Trench 5*

This trench had evidence of the post-medieval seabank with context 506. A possible later, modern seabank might be reflected in the presence of context 503, but this is more likely to have been part of the same modern construction as 503. Layer 504 is an alluvial build up against bank 506. Layer 505 is the earliest deposit in the trench.

##### *Trench 6*

605 is the former bank and is composed of the same material as alluvial layer 604. The rest of the contexts in the trench are modern.

##### *Trench 7*

Former seabank 705 is composed of the same material as alluvial layer 704. Layer 703 is a layer of alluvium that has built up against it. The rest of the contexts represent the modern seabank.

*Trench 8*

Layer 805 is the former seabank and composed of the earliest layer visible (804). 803 is a layer built up against this whilst the other contexts are modern.

*Trench 9*

Modern truncation (907) has mostly obscured the former seabank in this section but might be just about seen with context 906 or the eastern end of 904.

5. **Results of artefactual analysis**

The artefactual assemblage is listed in Table 1, with Table 2 listing the quantification and dating of the pottery. The trenches and contexts recorded are shown in Tables 3-11 and shown in Figures 3-5.

The material ranged in date from possible medieval to modern, but was mostly post-medieval. Although the level of abrasion varied, the majority was quite abraded.

The largest group of material was pottery (299g), then tile (212g). The material recovered is shown in Table 1, below. The pottery fabrics are displayed in Table 2.

**Table 1**

**The artefactual assemblage**

Context	Material	Type	Total	Weight	Date range	Period
203	Bone	Burnt	1	1		
203	Pot	Mod	3	23	19th C +	Modern
203	Pot	Post-medieval	2	35		Post-medieval
203	Pot	Post-medieval	1	1		Post-medieval
203	Slag		1	17		
204	Pot	Post-medieval	2	116		Post-medieval
205	Pot	Post-medieval	1	111	17th C	Post-medieval
206	Brick		2	71		Post-medieval
403	Glass	Vessel	1	34		Modern
403	Rubber		1	17		Modern
503	Glass	Vessel	5	79		Modern
802	Tile	Pan tile	1	88		Post-medieval
803	Tile	Flat roof tile	1	23		Post-medieval
804	Tile	Flat roof tile	1	25		Post-medieval
903	Tile	Flat roof tile	2	76	13th - 18th C	Medieval / Post-medieval
U/S	Pot	Post-medieval	1	13	Late 18 <sup>th</sup> C	Post-medieval

**Table 2**

**Quantification and dating of the pottery**

Context	Name	Fabric ref	Total	Weight	Form	Date
203	Miscellaneous post-medieval wares	100	1	1		Post-medieval
203	Post-medieval buff wares	91	2	35		Post-medieval
203	Modern stone china	85	3	23		19th C +
204	Post-medieval red ware	78	2	116	Pancheon	Post-medieval



205	North Devon gravel tempered ware	75	1	111		17th C
U/S TR1	Creamware	84	1	13		L18th C

### *Medieval*

The only possible medieval material recovered was 13<sup>th</sup> to 18<sup>th</sup> century flat roof tile, which may have been medieval or post-medieval. No contexts had a medieval *TPQ* date.

### *Post-medieval*

Most of the material recovered dated to the post-medieval period. Contexts with a *TPQ* in the post-medieval period were: 204; 205; 206; 802; 803; 804 and 903.

Apart from the pottery, which has been summarised in Table 2, flat roof tile, pantile and brick were found to date to the post-medieval period. The sherds from context 204 and 205 were larger and a little less abraded than the rest of the pottery.

### *Modern*

Contexts with a *TPQ* in the modern period were: 203; 403 and 503. Apart from the pottery, context 203 also contained a small piece of burnt bone and slag / clinker. Context 403 contained the neck of a glass vessel and its rubber stopper marked 'JEWSBURY & BROWN Ltd J&B MANCHESTER'. Context 503 also contained vessel glass.

### *Significance*

All the stratified pottery came from Trench 2, and the majority of the tile from Trench 8, which may indicate different activities in these areas. However, the assemblage is not large, and this may not be significant. Also the low density of finds does not necessarily indicate settlement occupation in the immediate vicinity.

The presence of slightly less abraded 17<sup>th</sup> century pottery in the bank itself (context 205) and in the alluvial layer under the bank (context 204) in trench 2 suggest that this material has been less disturbed than material from elsewhere in the embankment, although the sherds came from substantial vessels and so may have survived better as a result. This also shows that the bank is post-medieval in date, and not Roman as previous investigation has suggested.

## 6. Discussion

### 6.1 Phase 1 Natural deposits

All trenches showed a number of naturally deposited layers of alluvial silt, though they were not deep enough to expose the layers of natural deposits prior to the first reclamation in the area, or the sequence of fluvial deposition in general.

### 6.2 Prehistoric

No archaeological features or artefacts from this period were found during the course of the project.

### 6.3 Roman

No archaeological features or artefacts from this period were found during the course of the project. Given the depth of the trenches dug during the evaluation and the post-medieval and modern dates for the archaeology/deposits found, it's fair to assume that the presence of a potential Roman bank and ditch, if they exist, may be buried deep below the base of the trenches excavated.

#### 6.4 Medieval

No archaeological features or artefacts from this period were found during the course of the project. Like the Roman flood defences, it's likely that any medieval defences, should they have existed, would likely be buried under layers of silt laid down prior to the ones recorded in the base of the evaluation trenches.

#### 6.5 Post-medieval

Along the course of the evaluated section of the flood defences traces of former banks were noted in most trenches, particularly on the eastern sides of the sections. In two instances dating material was retrieved from the sections to date either the bank itself or the layers of alluvium immediately pre or post dating it. Trench 2 produced post-medieval pot in the layers of dark silt, 203 and 206, that had formed against the former flood defence (205). The bank itself produced Devon gravel tempered ware dating to the 17<sup>th</sup> century. Further to the north trench 8 showed the same remnants of a bank. Composed of the same material that it was overlying, this earlier layer (204) produced pottery from the post-medieval period, as did the silty layer (903) overlying the old bank (906) in trench 9. The bank was visible in section and in most instances showed quite dark grey alluvial layers built up against it on the western or river side. The condition of the bank varied from trench to trench but generally showed some truncation on its eastern side due to re-grading and reconstruction in the 1950's/60's during the major refurbishment work.

#### 6.6 Modern

In many trenches modern material (19<sup>th</sup> century onwards) was recovered from the sections. In trench 2, a piece of 19<sup>th</sup> century pot was found in one of the alluvial layers that had built up against the post-medieval flood defence. Most of the modern material however, which included everything from pottery to glass to brick and barbed wire, was located in the material uppermost in the sections, representing the material used to rebuild the bank in the late 1950's and early 1960's. This reconstruction was concentrated on the west side of the earlier (17<sup>th</sup> century) bank, where more material was dumped, possibly directly from the adjacent river bed as a result of simultaneous dredging of the river ( G. Mathews pers comm.).

### 7. Significance

The evaluation succeeded in locating remnants of a former river flood defence or seabank, which was visible in section in most trenches. From the artefacts recovered from several trenches along the course of the investigated area, this former bank can be dated to the post-medieval period. The 1815 Inclosure map (see Figure 6) shows clearly that a length of defence follows part of the route of the present seabank. Presumably most of this defence existed prior to 1815 and was extended northwards along the riverbank, in the years following. The 1880's Ordnance Survey maps show that the defences extended all the way to Elmore Back (see Figure 7). The archaeological evidence from trenches 8 and 9 confirms the pre-1815 existence of these flood defences. Any limited seabank would have been ineffective against flooding.

No archaeological evidence pertaining to any earlier period was discovered. Although it's perfectly feasible that a Roman seabank existed in this location, as did a possible medieval successor, it's possible that they have become quite deeply buried by alluvial deposition. The trenching revealed layers deposited from the 17<sup>th</sup> century onward, around 2m down from the top of the present seabank. If the rate of alluvial deposition has remained fairly constant down the centuries, any layers dating to the medieval period or earlier, would be below the depth machined down to for this project.

However, given the presence of large area of extant medieval ridge-and-furrow in the fields adjacent to the seabank, it is obvious that the level of this land has remained the same since it was used for that form of cultivation. Given that most of the trenches excavated during this project were up to 2m deep and roughly on a level with these fields, the absence of even a trace of a medieval flood defence is curious. It is possible that much of this area of reclaimed land was not defended by a seabank at all in the medieval period or before. Seasonal flooding might have been a common event for farmers, much as it has been for farmers along the Nile in Egypt.

Any earlier deposits would, therefore, be totally unaffected by the current refurbishment works, even taking in to account the compaction of deposits at the base of the Environment Agency's trenching.

## 8. Publication summary

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, the Service intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

*An archaeological evaluation was undertaken on behalf of the Environment Agency Midlands on the River Severn flood defences at Longney, Gloucestershire (NGR SO 7568 1550 to 7620 1650; GSM 22192). The evaluation trenching succeeded in revealing a post-medieval bank along the line of the present flood defences. This seemed predominantly composed of the layer of alluvium on which it sat on. In most instances this old bank showed a layer of dark grey alluvial build-up against it on the western, river side. This layer was also dated to the post-medieval period. The project also revealed the extent of the late 1950's and early 1960's refurbishment. No archaeology from the Roman or medieval periods was found.*

## 9. The archive

The archive consists of:

5	Fieldwork progress records AS2
2	Photographic records AS3
56	Digital colour photographs
9	Scale drawings
1	Box of finds
1	Computer disk

The project archive is intended to be placed at:

Cheltenham Art Gallery and Museum

Clarence Street

Cheltenham

Gloucestershire GL50 3JT

10. **Acknowledgements**

The Service would like to thank the following for their kind assistance in the successful conclusion of this project, the Environment Agency Midlands and Charles Parry (archaeological curator).

11. **Personnel**

The fieldwork and report preparation was led by James Goad. The project manager responsible for the quality of the project was Derek Hurst. Fieldwork was undertaken by James Goad, finds analysis by Derek Hurst and Erica Darch, with illustration by Carolyn Hunt.

12. **Bibliography**

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13. **Abbreviations**

GSM	Numbers prefixed with 'GSM' are the primary reference numbers used by the Gloucestershire County Sites and Monuments Record.
NMR	National Monuments Record.
SMR	Sites and Monuments Record.
WCRO	Worcestershire County Records Office.
WHEAS	Worcestershire Historic Environment and Archaeology Service

## Appendix 1 Trench descriptions

**Table 3**

**Trench 1**

Site area: See Figure 2 for location

Maximum dimensions: Length: 15.10m Width: 2.50m Depth: 0.65-2.10m

Orientation: East-west

Main deposit descriptions

Context	Classification	Description	Depth below ground surface (b.g.s.) – top and bottom of deposits from top of seabank
101	Turf and topsoil	Light grey friable sandy silt	0-0.35m
102	Modern deposited material for flood seabank construction	Friable mid brown silty sand. Occasional charcoal lumps. Redeposited river alluvium.	0.35-1.50m
103	Layer of alluvium deposited by river	Mid grey sandy silt alluvium. Deposited by river against remnants of former flood defences.	1.50-1.65m
104	Layer of alluvium, used for construction of earlier flood defence	Sticky mid brown silt alluvium	1.65m-
105	Former bank	Mid brown alluvial silt. Similar to 104	

**Table 4**

**Trench 2**

Site area: See Figure 2 for location

Maximum dimensions: Length: 15.55m Width: 2.20m Depth: 0.10-1.80m

Orientation: East-west

Main deposit descriptions

Context	Classification	Description	Depth below ground surface (b.g.s.) – top and bottom of deposits from top of seabank
201	Turf and topsoil	Loose to friable mid grey sandy silt	0-0.40m
202	Make-up material deposited for modern flood defences	Homogenous sticky mid brown sandy silt	0.40-1.20m

	flood defence		
203	Alluvial layer deposited by river against former flood seabank 205	Mid grey sandy silt	1.20-1.50m
204	Alluvial layer	Pale grey brown silt	1.60-1.80m
205	Former, post-medieval flood defence	Friable dark brown sandy clay	0.15-0.85m
206	Alluvial layer deposited by the river against the former flood seabank 205	Mid grey sandy silt with moderate charcoal lump inclusions	1.50-1.60m

**Table 5****Trench 3**

Site area: See Figure 2

Maximum dimensions: Length: 15.10m Width: 2.20m Depth: 2m

Orientation: West-north-west to east-south-east

## Main deposit descriptions

Context	Classification	Description	Depth below ground surface (b.g.s.) – top and bottom of deposits from top of seabank
301	Turf and topsoil	Friable mid grey sandy silt	0-0.25m
302	Modern dumped material for present seabank construction	Friable dark yellow sandy clay	0.30-1.45m
303	Naturally deposited alluvial layer	Firm to friable dark brown sandy clay	1.45-1.85m
304	Modern dumped material for present seabank construction	Loose mid brown silty sand	0.90-1.45m
305	Naturally deposited alluvial material	Light brown alluvial silt	1.85-2.00m

**Table 6**

**Trench 4**

Site area: See Figure 2 for location

Maximum dimensions: Length: 15m Width: 2.20m Depth: 2m

Orientation: North-west to south-east

Main deposit descriptions

Context	Classification	Description	Depth below ground surface (b.g.s.) – top and bottom of deposits from top of seabank
401	Turf and topsoil	Mid grey sandy silt	0-0.25m
402	Dumped sandy deposit for construction of modern seabank	Mixed light and dark grey loose sand	0.25-1.40m
403	Modern dumped clay for construction of modern seabank	Sticky orange silty clay with occasional pathes of light and dark grey sand	0.40-1.50m
404	Naturally deposited alluvial layer	Mid brown alluvial silt	1.70-1.95m

**Table 7**

**Trench 5**

Site area: See Figure 2 for location

Maximum dimensions: Length: 13.85m Width: 2.20m Depth: 1.85m

Orientation: North-west to south-east

Main deposit descriptions

Context	Classification	Description	Depth below ground surface (b.g.s.) – top and bottom of deposits from top of seabank
501	Turf and topsoil	Mid grey silty sand	0-0.35m
502	Deposited to create modern seabank	Mixed light and mid-grey silty sand	0.35-1.40m



503	Deposited to create a phase of the modern seabank	Mixed brown and orange silty clay	0.10-0.80m
504	Naturally deposited alluvial silt which has built up against former flood defence 506	Light grey alluvial silt	1.40-1.55m
505	Naturally deposited alluvial silt	Light grey alluvial silt	1.55-1.85m
506	Remnants of former (possible post-medieval) seabank	Mid brown silty sand	1.40-1.85m

**Table 8****Trench 6**

Site area: See Figure 2 for location

Maximum dimensions: Length: 16.10m Width: 2m Depth: 2m

Orientation: North-west to south-east

## Main deposit descriptions

Context	Classification	Description	Depth below ground surface (b.g.s.) – top and bottom of deposits from top of seabank
601	Turf and topsoil	Mid grey sandy silt	0-0.18m
602	Modern dump of material for construction of present seabank	Friable mid grey sandy silt. Occasional large stones, moderate charcoal inclusions, light rooting and occasional patches of brown clay	0.18-1.40m
603	Modern dumped material. Possibly used in seabank construction	Mid grey sandy silt with moderate charcoal inclusions, barbed wire and wooden stakes/fenceposts	1.30-1.85m
604	Naturally deposited alluvial layer	Light grey brown silt	1.65-2.0m
605	Remnants of former seabank with possible ditch on western side	Friable light brown silt	1.0-1.65 m

**Table 9****Trench 7**

Site area: See Figure 2 for location

Maximum dimensions: Length: 15.40m Width: 2.0m Depth: 2.20m

Orientation: North-west to south-east

## Main deposit descriptions

Context	Classification	Description	Depth below ground surface (b.g.s.) – top and bottom of deposits from top of seabank
701	Turf and topsoil	Mid grey, loose silty sand	0-0.40m
702	Dumped material for present seabank construction	A mixed light and dark grey silty sand	0.40-1.65m
703	Naturally deposited alluvial layer, has built up against former bank 705	Mid grey alluvial silt	1.65-2.0m
704	Naturally deposited alluvial layer	Mid brown alluvial silt	2.0-2.25m
705	Remnants of former floodbank, composed of material taken from 704	Mid brown alluvial silt	1.20-2.0m

**Table 10****Trench 8**

Site area: See Figure 2 for location

Maximum dimensions: Length: 17.10m Width: 2m Depth: 1.82m

Orientation: North-west to south-east

## Main deposit descriptions

Context	Classification	Description	Depth below ground surface (b.g.s.) – top and bottom of deposits from top of seabank
801	Turf and topsoil	Mid grey silty sand	0-0.40m

802	Dumped material for construction of present seabank	Mixed light and mid grey silty sand	0.40-1.25m
803	Modern dumped material for modern seabank construction	Mottled grey and brown sandy clay with occasional stone inclusions and occasional charcoal lumps	1.25-1.50m
804	Naturally deposited alluvial layer, earlier than bank 805	Mid brown alluvial silt	1.50-1.85m
805	Former flood defence, possibly post-medieval	Mid brown silt, identical to 804	1.05-1.70m

**Table11****Trench 9**

Site area:

Maximum dimensions:

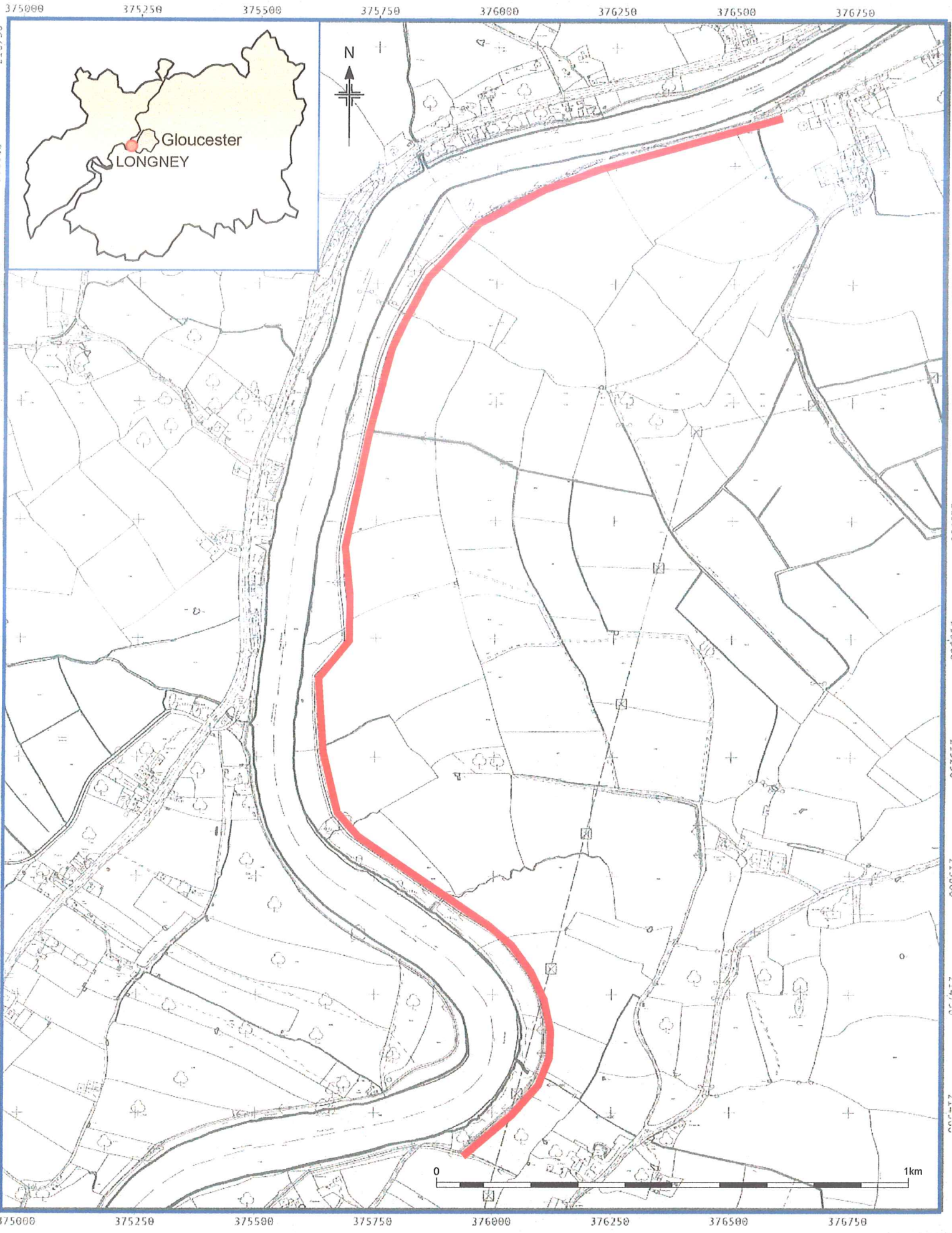
Orientation:

Main deposit descriptions

Context	Classification	Descriptions	Depth below ground surface (b.g.s.) – top and bottom of deposits from top of seabank
901	Turf and topsoil	Mid grey silty sand	0-0.22m
902	Modern dumped material for construction of seabank	Mixed brown and grey silty sand	0.22-1.15m
903	Probably a naturally deposited layer incorporated into the new seabank	Sticky dark grey alluvial silt with occasional large stones.	0.80-1.10m
904	Naturally deposited alluvial silt	Mid brown alluvial silt	1.40-1.90m
905	Modern dumped material within modern cut feature 907	Mixed dark grey and light grey sandy silts. Moderate brick rubble, barbed wire and charcoal inclusions	0.20-1.90m
906	Naturally deposited alluvial silt, same as 904	Mid brown alluvial silt	1.25-1.90m

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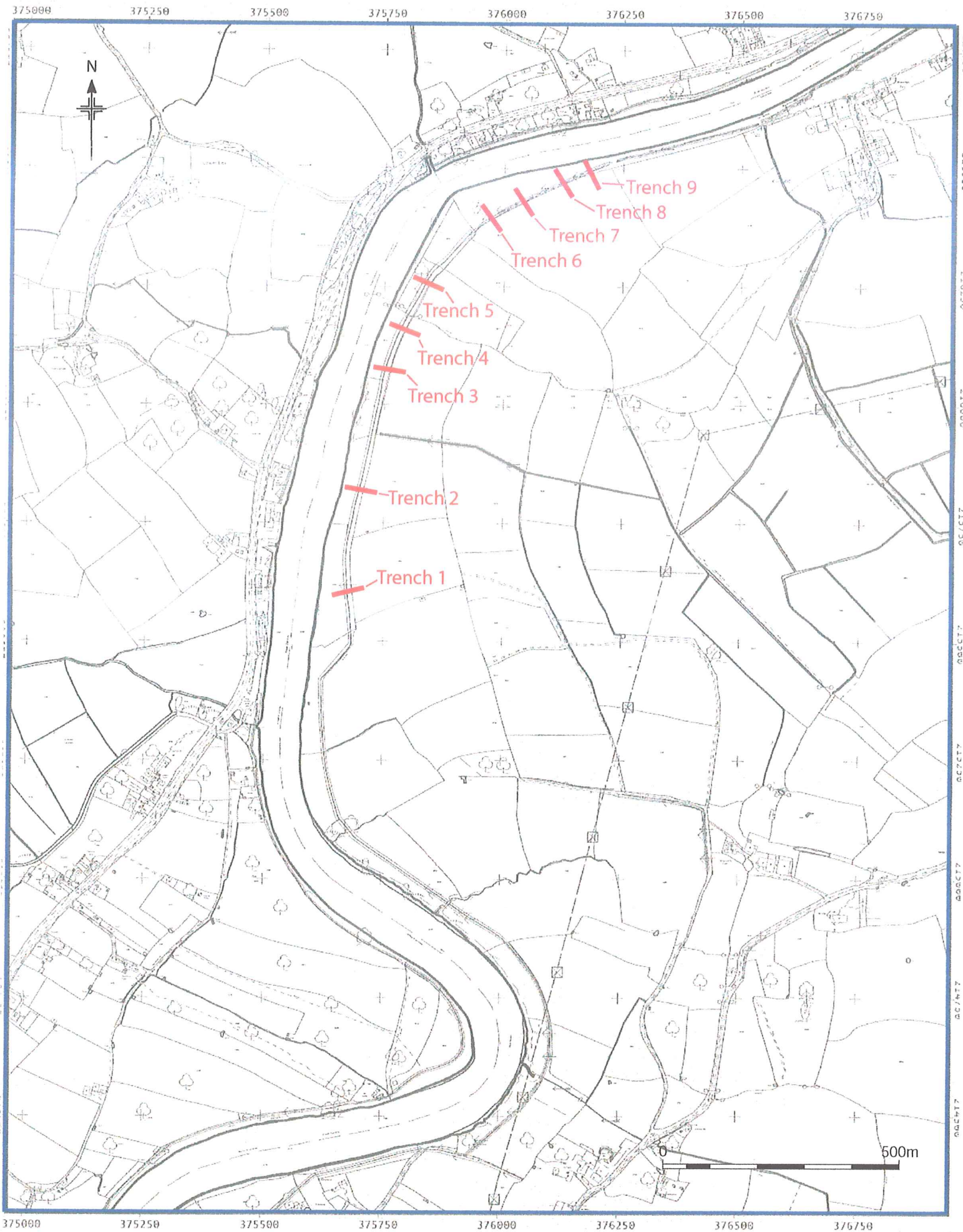
907	Modern feature cut into seabank to dump material	West side of cut stepped, east side straight, filled by 905	
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Location of the site.

Figure 1

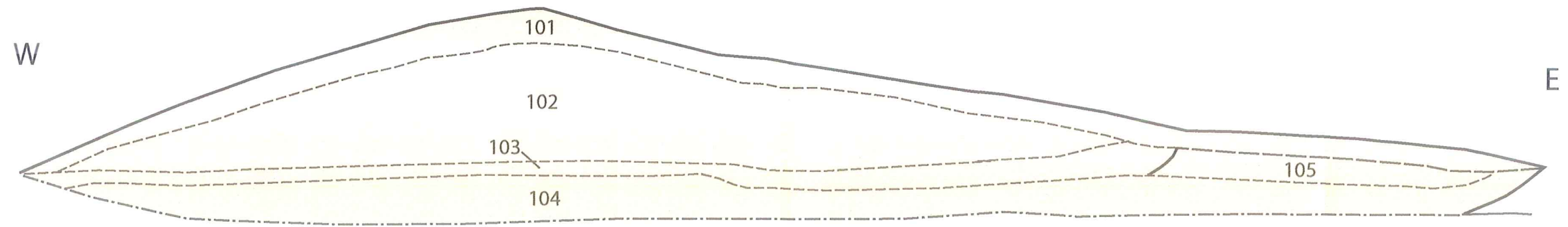


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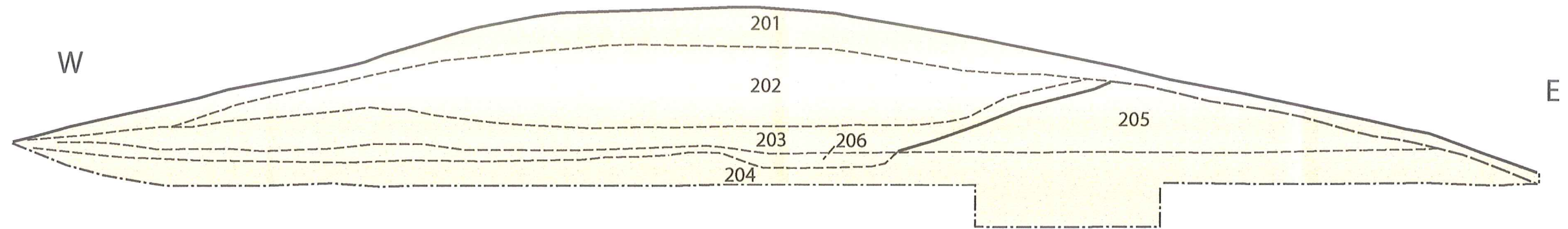
*Location of trenches.*

*Figure 2*

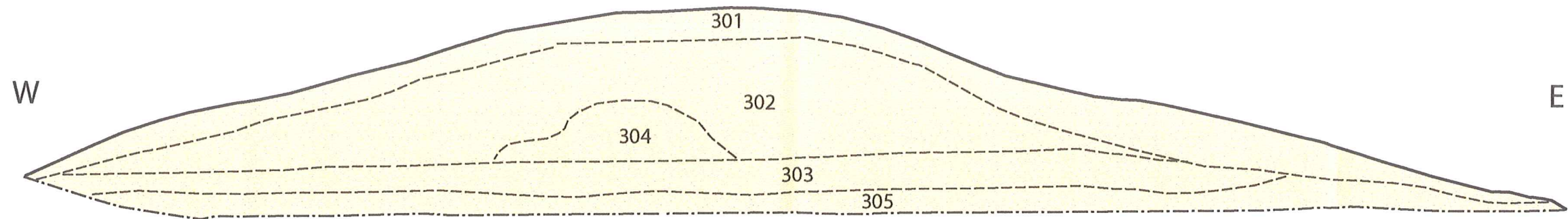
TRENCH 1



TRENCH 2

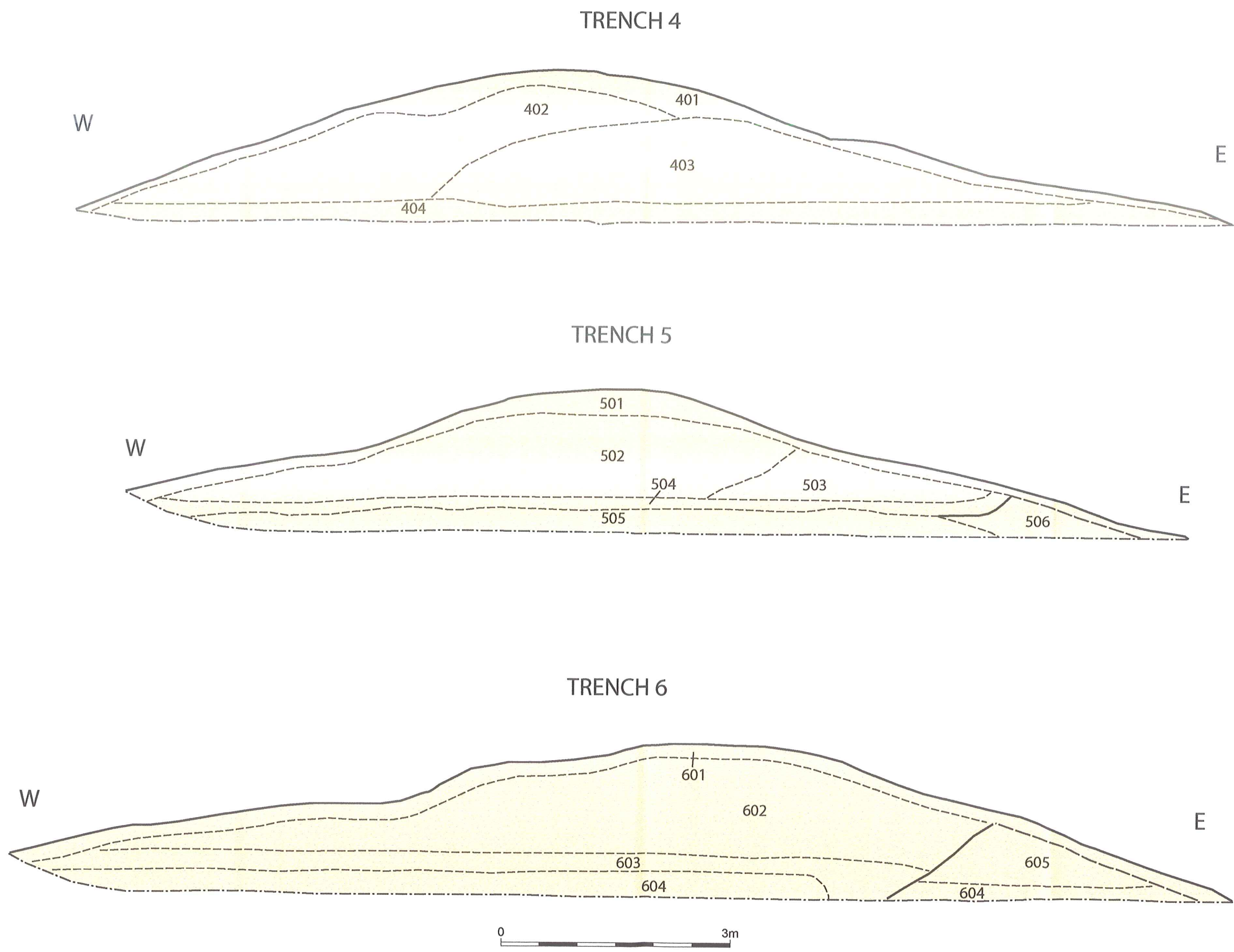


TRENCH 3



Sections 1, 2 and 3.

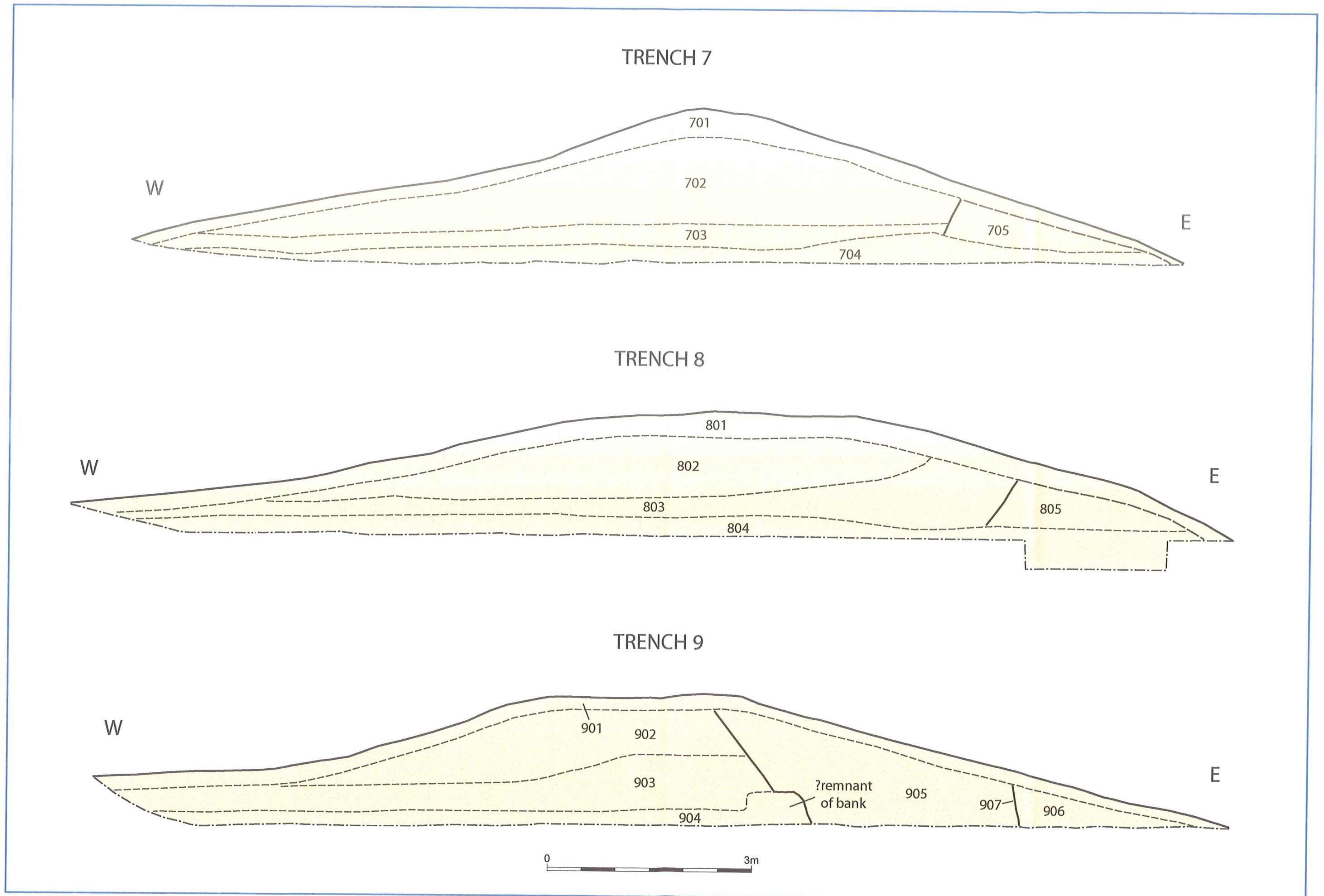
Figure 3



Sections 4, 5 and 6.

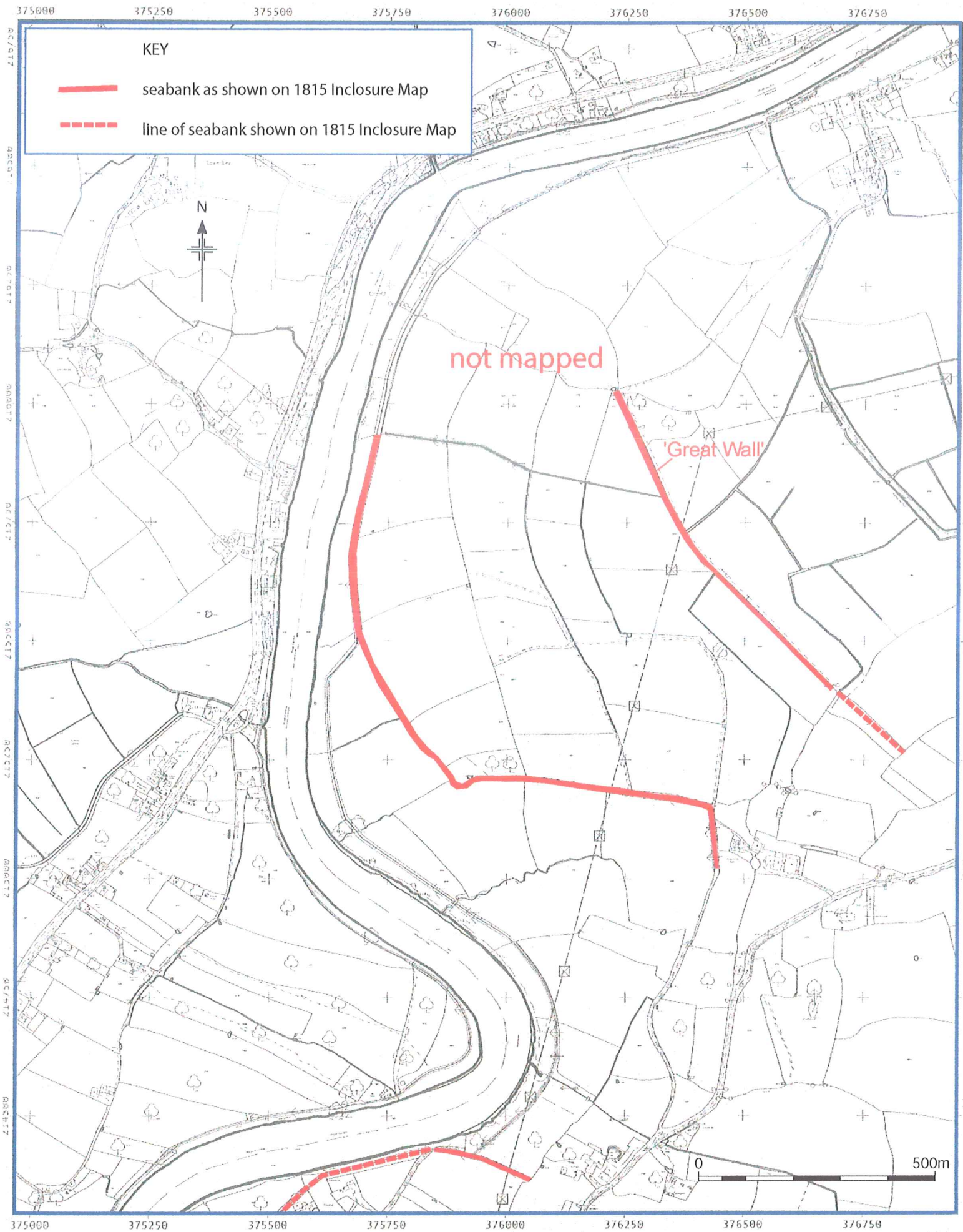
Figure 4





Sections 7, 8 and 9.

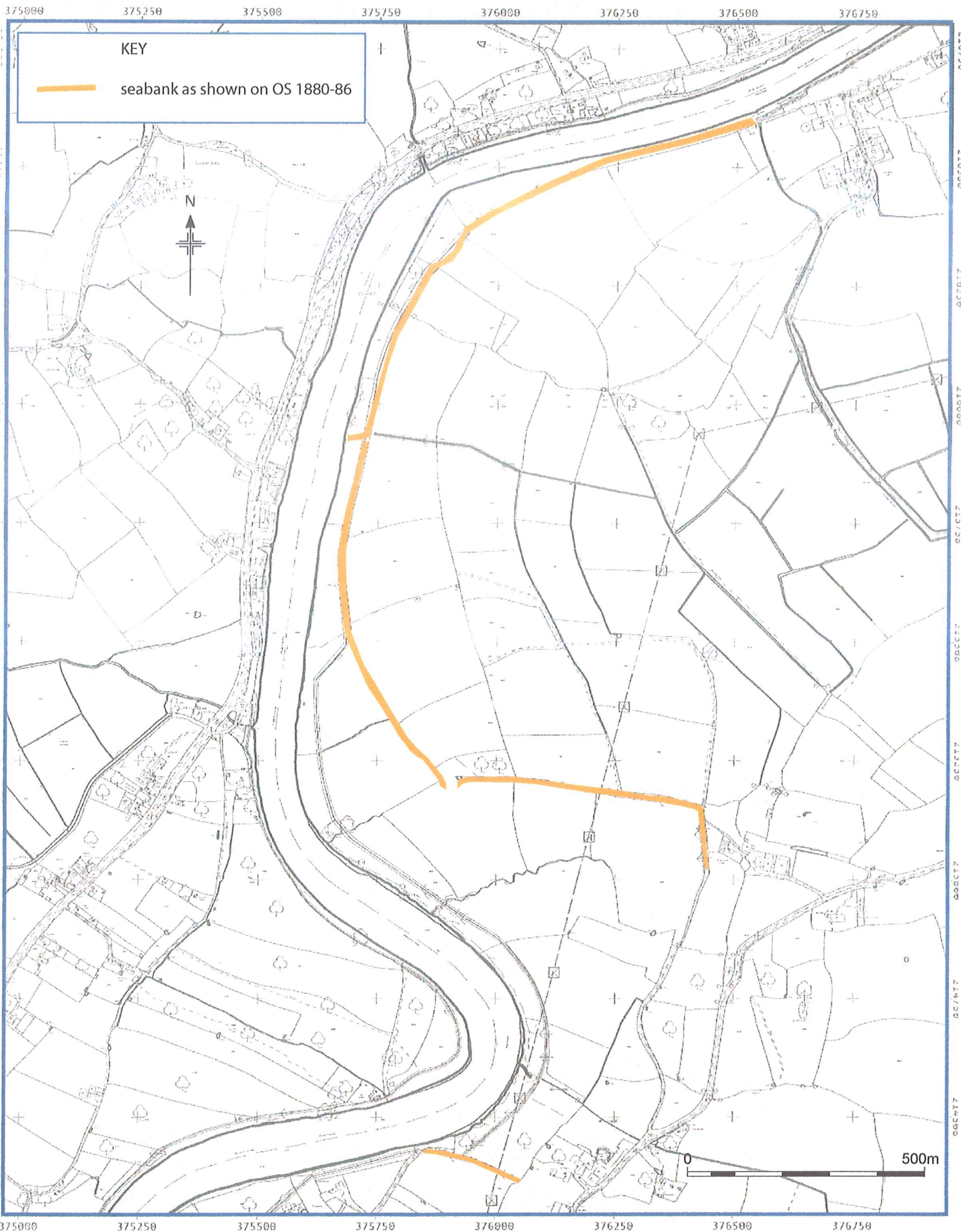
Figure 5



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*Location of seabanks on 1815 Inclosure Map.*

*Figure 6*



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*Location of seabanks on OS 1880-86.*

*Figure 7*