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LINDSEY ARCHAEOLOGICAL SERVICES

Wash Banks Tidal Defences – Hobhole to Butterwick Low

*NGR: TF 3800 3912 - 4040 4350
Site Code: FSD 99
LCNCC Museum Accn No.: 234.99*

**Archaeological Watching Brief and Pillbox Recording
at Freiston Shore and Boston Haven**

**Report for Halcrow UK
(on behalf of The Environment Agency)**

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*Lincoln County Council
Archaeology Section*

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Summary

Groundworks for improved flood defences between Hobhole and Butterwick Low exposed timber piles and part of a wrecked barge, both suspected to be of nineteenth century date. Three pillboxes were recorded in advance of partial burial by floodbank reinforcement.

Introduction

Lindsey Archaeological Services was commissioned in October 1999 by Halcrow UK (on behalf of The Environment Agency) to undertake an archaeological watching brief during works associated with creating improved flood defences along part of the banks of The Wash (Fig. 1). The watching brief had been requested by the Lincolnshire County Archaeologist as a result of liaison during preparation of the Environmental Statement for the project.

The monitored works included the construction of a trial floodbank at Freiston Shore, linking the existing floodbank (built in 1979) with the 1809 precursor (Fig. 2). Material for the bank was to be extracted from the agricultural land between the floodbanks, producing a wetland area for use as a bird sanctuary. Elsewhere on the scheme, an existing floodbank north of the Haven was to be reinforced with material taken from the side of the Haven floodbank.

Works began in mid-October 1999, and the first archaeological visit by LAS took place on 11th November 1999. Further intermittent visits (by Geoff Tann, Claire Angus, Mick McDaid and Mick Clark) took place until 25th July 2000. A total of 12 visits were made.

The aims of the watching brief were to establish the presence or absence, quality and extent of any archaeological remains, and to record and interpret any archaeological features. The work was carried out in accordance with the general requirements set out in the *Lincolnshire Archaeological Handbook* (Lincolnshire County Council Archaeology Section, 1998). No Brief or Project Design was produced.

Archaeological and Historical Background

The Environment Agency commissioned an Environmental Assessment from Posford Duvivier Environmental in advance of the Wash Banks scheme. The assessment identified 48 separate archaeological features, findspots or significant place-names within the Gibraltar Point to Hob Hole Sluice study area. This total included 24 wartime defence features, mostly relating to World War II

pillboxes along the contemporary floodbank. The remainder of the locations relate to medieval settlements, medieval salterns (near Wrangle), and a single record of a Romano-British occupation site (at Fishtoft). The discovery of a sword has been reported from the vicinity of Freiston Shore.

There is documentary evidence for various phases of reclamation of the coastline within this area after the Norman Conquest. The artificial earthworks of successive floodbanks can be identified on the ground in places, and elsewhere the arrangement of drainage ditches indicates reclaimed land and former coastlines. The image is clouded by the salt-marshes on the seaward side of floodbanks, where grazing and other activity is possible despite occasional interruption by exceptional tides; formal reclamation of salt-marsh by the construction of protective banks is only possible in sustained periods of favourable weather when labour and financial resources are available. The process of reclamation is also driven by the need for extra land, or the wish to improve status by acquiring more land. As a result of the intervening period between deposited marine silts becoming tractable and their formal reclamation, it is difficult to be certain what date remains may be found.

Parts of the Lincolnshire coast have been subject to major transgressions since the Roman period, and areas of former mainland are beneath the North Sea. When land is reclaimed, deeper deposits may be from early areas of inhabited land, and archaeological finds and features may be revealed. Without knowledge of the original topography, it is impossible to predict where prehistoric sites may be found below marine silts.

To further complicate the issue, the processes of marine transgression and regression have been closely followed by the movement of past communities dependent on the sea for food, trade or materials. The actual edge of dry ground, and a zone alongside it, traditionally has been used by small groups willing to accept harsh conditions while they sustained fishing or salt production.

There is little evidence for salterns of any date in the Freiston Shore vicinity; the nearest known Iron Age and Romano-British salterns are at Butterwick and Wrangle, 2.5 and 6km north. However, prehistoric, Roman and Anglo-Saxon remains may be present in the Freiston Shore area, masked beneath later silt deposits.

The Watching Brief

The deposits were recorded using colour photographs, sketch sections and plans. Context numbers were assigned to all archaeological contexts by LAS for recording purposes. These are referred to in the following report and illustrations.

1) Freiston Shore Trial Bank

The first element of the Environment Agency's works was the construction of a trial floodbank at Freiston Shore, in the position of the proposed bank (Fig. 3; Pls. 1 and 2). The intention was to create this bank and to study its capacity to withstand local conditions before the remainder of the bank was formed.

Topsoil stripping of the site of the trial bank and the adjacent intended borrow pit area was monitored, but nothing of archaeological interest was seen (Pls. 3 and 4). The topsoil **1** was 0.35m thick, a dark brown/black silt with no stones but occasional shells. Below the topsoil was subsoil **2**, a light brown sandy silt with numerous very thin horizontal laminations (Pl. 5). Apart from late twentieth century rubbish, only plastic drainage pipes were seen. Excavation of holes for monitoring equipment along the line of the trial bank also revealed nothing but silt deposits.

Excavation of the material from an adjacent borrow pit area for the trial bank proved to be a protracted exercise as there were concerns as to the suitability of the available material. Initially, a constant watching brief was maintained, but this was rapidly scaled down to intermittent visits to check for archaeological remains. The borrow pit for the trial bank eventually extended almost as far as the early nineteenth century floodbank at Freiston Shore. No archaeological deposits were seen in any of the excavations for this.

A ditch was excavated along the landward side of the trial bank, in order to connect existing drains and drainage ditches. At the southern end of this ditch, at a depth of about 1.8m below ground level, a cluster of square-cut and rectangular-cut timbers **3** were exposed at the ditch base, aligned roughly horizontally (Pls. 6 and 7). The timbers were visible across a 12m length of the ditch. Around the timbers, the silt was darker and clayier than the fine brown silt away from them; the darker soil extended vertically close to the upper horizon of the subsoil. This colour and texture difference is presumably the result of the timbers trapping heavier silts, coupled with the organic matter from the rotting timbers.

It was reported that two wrecked coal barges had been known on the salt-marsh east of Freiston Shore before the prison floodbank was built in about 1979. The timbers found in the trial bank ditch were assumed to be from one of those vessels, probably *in situ*.

180m SE of Freiston Shore, a 3m deep NE-SW orientated trench (with its base at 0.75m OD) was machine excavated to a width of 2.5m and extended for a length of 40m through the new floodbank. The trench was to hold a concrete pipe intended to permit control of the flow of water to the bird sanctuary area landward of the new bank.

Approximately 40m east of the new trial bank, the 0.25m thick topsoil **103** was dark brown silt with occasional shells. A 0.6m thick brown silt **104** was immediately below the topsoil, overlying a 0.3m thick grey/brown silt **105**. Below this, and extending to the base of the trench, was a blue/grey silt **106** with occasional black patches. As no archaeological features were revealed during excavation of the first 15m of the trench, monitoring of the remaining length of the trench ceased. No archaeological features were identified in the trench.

2. Vehicular Access across the 1809 Floodbank, Freiston Shore

The new Trial Bank linked with the 1809 floodbank NE of Freiston Shore, and the earlier bank was stripped of vegetation and reinforced (Pls. 4, 8 and 9). Excavation of the borrow pit and construction of the bank blocked the vehicular access that had served the prison estate, so a replacement vehicular access was constructed at Freiston Shore, over the bank to the east of the former Plummers Hotel public house (Pl. 10). Topsoil was removed from the former floodbank and adjacent rough grassland under archaeological supervision using a back-acting machine. The underlying material was then removed to depths of between 0.2 - 0.6m, prior to construction of the new access.

The topsoil was a grey-brown sandy silt **100**, varying in depth between 0.1m beside the prison estate road, to 0.35m on the top of the floodbank. Adjacent to the prison road, a layer of hardcore containing a number of fragments of modern brick **102** was revealed below the topsoil. This was probably material brought in during construction of the road. On the bank, the topsoil overlaid an imported brown silt **101**, used to create the floodbank. At the foot of the bank, on the seaward side, small patches of grey silt were recorded which may have represented fill from a former ditch alongside the floodbank.

3. Haven Borrow Pit area (near Hob Hole)

On 16th May 2000, LAS was informed by Mike Hastings that some vertically driven timbers had been exposed by machines excavating material from behind the Haven floodbank near to the end of Cut End Road. The king piles were about 0.3m square, and apparently positioned diagonally to the water's edge. It was suggested that they represented a former landing stage (Pl. 11). A site visit was made by G. Tann.

The mechanical excavators had produced a 2.2m high cutting edge into the upcast material of the existing bank. Along about 30m of bank, at least ten upright timber piles had been exposed, and there were indications that others had been removed from the same alignments before their potential significance was appreciated (Fig. 4; Pl. 12). The visible timbers were in four NW-SE aligned rows, with the spacing between rows varying from 10m to 4m. Within each row, the post spacing was irregular, with posts as close as 0.65m and as far apart as 2.25m (excluding areas where timbers may have been

removed). The row alignments were not sufficiently uniform to indicate that they were contemporary features, but the similarity of the posts suggested that they had served a common function and were probably of fairly similar date. The lack of uniformity of the post spacings could result from frequent replacement or reinforcement of the features.

One of the piles had a 0.09m x 0.19m cut slot, suggesting either that it derived from an earlier structure, or that it had been braced or attached to other posts (Pl. 13). This was the only evidence of linking timbers within the cluster of piles.

At least two timbers had metal attachments. One had an iron bolt through it, while another (removed by machine) had a 0.65m long narrow iron or steel plate attached to the post's pointed base (Pl. 14). The metalwork was no earlier than the post-medieval period, and may have been nineteenth century or slightly later in date.

The function of these rows of timbers was difficult to determine. Their size and spacing shows that they were not a rapidly erected feature, but their extent seems excessive for a landing stage. It was noted that they were sited near the corner of an earlier floodbank (built between 1872 and 1942), and they may have formed a protection to adjacent land before the floodbank was constructed in 1942.

No further discoveries were reported from the position of the floodbank until 11th August 2000, when a brass-headed cylindrical object with bullet tip was found in the silts by a machine operator. The object was 250mm long and 75mm diameter, and was identified as a potentially dangerous item of military ordnance (Pl. 15). G. Tann was advised of the find, but did not make a site visit. Photographs were taken of the shell before it was disposed of by controlled explosion, and a report was produced by Mike Hastings.

4. Pillboxes

Shortly after commencement of the flood defence works, it was noted by Emma Tidmarsh that three pill boxes not included in the Environmental Assessment were sited on the 1942 floodbank, NW of Tabs Head (Fig. 5). The structures were to be buried with additional material imported to reinforce the bank. Mike Osborne (East Midlands Co-ordinator, Defence of Britain Project) described these pillboxes as Type 23 structures, designed for anti-aircraft defence. One was exceptional in that it had embrasures (gun openings) on two levels (Osborne, pers. comm.). A typical Type 23 pillbox was rectangular, half-roofed and half-open, with a light anti-aircraft weapon in the open section. Each section was about 2.4m square, with access by metal rungs set into the 0.3m thick wall (Lowry 1995, 82-3).

A photographic and measured survey of these three pillboxes and a fourth structure was conducted by Mick Clark and Mick McDaid for LAS on 21st March 2000. The structures were then boarded up to prevent nesting or bat habitation, prior to construction of the new bank. The structures were assigned numbers 1-4 for recording purposes.

Pillbox 1 (Fig. 6; Pls. 16 and 17)

There was clear evidence that the existing floodbank had been constructed or raised after this pillbox was built. Gun embrasures facing the bank had been blocked to prevent soil entering the structure, and the floor level was higher than outside the pillbox (Pl. 18). The date for this section of floodbank is 1942, and it seems likely that the pillboxes were built shortly before the bank, or on an existing low bank.

Pillbox 2 (Fig. 7; Pls. 16, 19, 20 and 21)

This pillbox also appeared to pre-date the floodbank, with shuttering preventing soil entering one embrasure. On the roof of the building, some graffiti was noted which appeared to date from construction of the pillbox (Pl. 22). It was transcribed as

8 SEC

84 AMP C[?].

Pillbox 3 and Structure 4 (Fig. 6)

The most southerly of the recorded pillboxes was built on either a small mound or an existing floodbank (Pls. 23 - 26). 55m to the south, the truncated remains of another concrete building 4 were seen, almost obliterated by the existing floodbank (Pls. 27 and 28).

Conclusions

The flood defence measures are not thought to have caused significant damage to any archaeological features older than the nineteenth century. A timber structure near Tabs Head was observed and recorded during excavation of silt from the 1942 floodbank, and three World War II pillboxes were recorded on the same floodbank NW of Tabs Head before they were covered by additional material. At the depths exposed by these works, there was no evidence of Roman or prehistoric activity.

Acknowledgements

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Richard Nunn and Chris Allwork (Environment Agency); Halcrow staff, including Dr. Valerie Cooper (Senior Environmental Scientist), David Wilson, Steve Goring and Mike Hastings (Resident Engineer); Helen Scarborough, Emma Tidmarsh (Environmental Site Officer, Ecological Services Ltd); Adrian Judge and John Huthwaite (JCE); Eddie Hewitt (Head of Works Services, North Sea Camp Prison);

Jim Bonnor (County Archaeology Section); Susan Smith (Boston Community Archaeologist); Hilary Healey; Mike Osborne (East Midlands Co-ordinator, Defence of Britain Project).

Illustrations were produced by Mick Clark, Mick McDaid and Claire Angus. The report was collated and produced by Jane Frost.

Geoff Tann
Lindsey Archaeological Services
29th January 2001

References

- Lowry, B. (ed.) 1995 *20th Century Defences in Britain: An Introductory Guide*. Handbook of The Defence of Britain Project.
- Robinson, D.N. 1981 *Book of The Lincolnshire Seaside*.

Archive Summary

Field notes
Field sketches
Context sheets
Field plans, elevations and descriptions of pillboxes
Inked plans of pillboxes
Correspondence
Colour photographs: LAS film nos.: 99/136/26-36; 99/150/20-22; 99/155/8-33; 00/27/14-36; 00/28/0-37; 00/42/32-37; 00/47/2-15; 00/56/0-19; 00/65/17-28; four prints and air photograph supplied by Halcrow UK

THE FIGURES AND PLATES

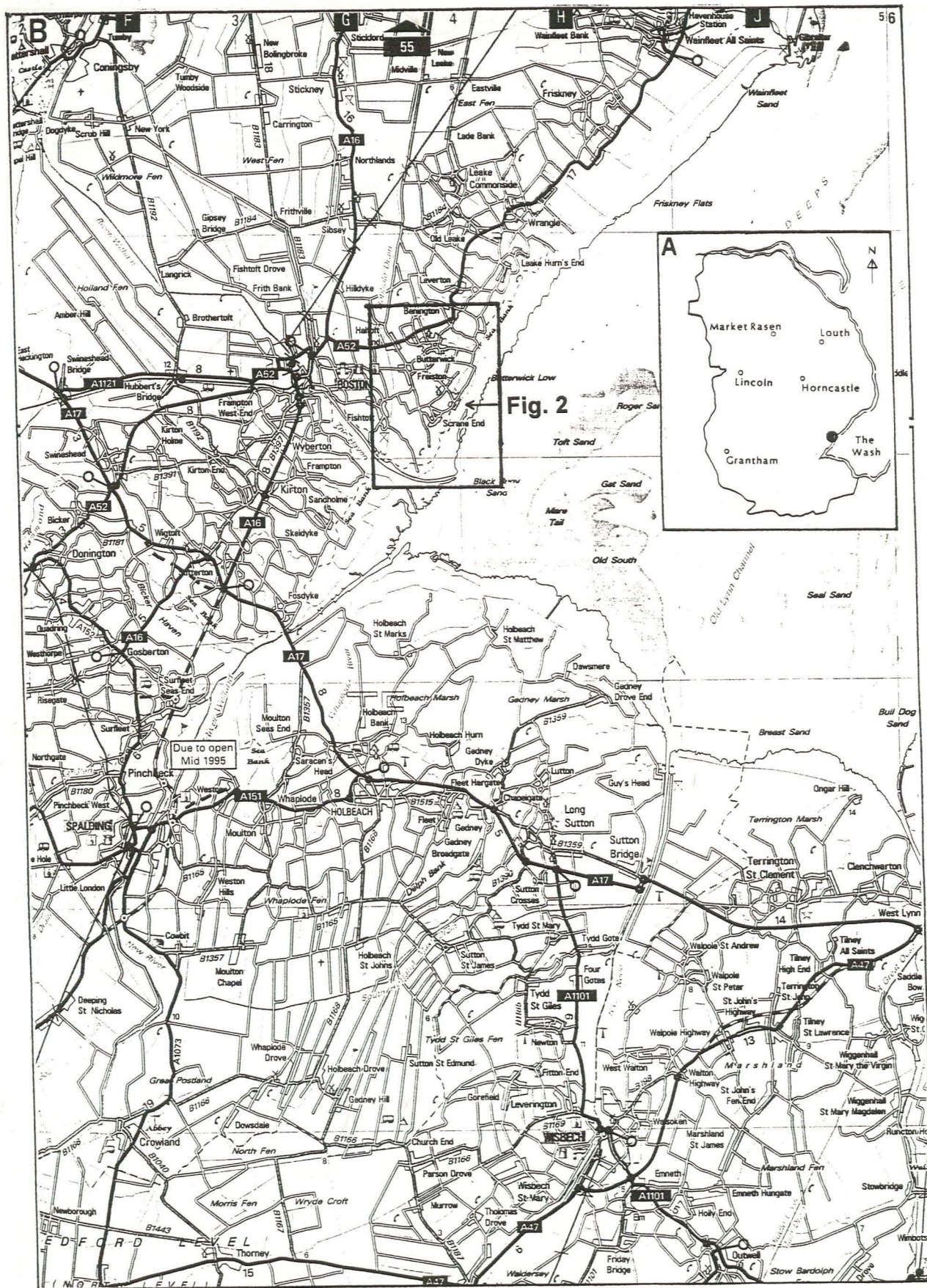


Fig. 1 Location of Freiston Shore.

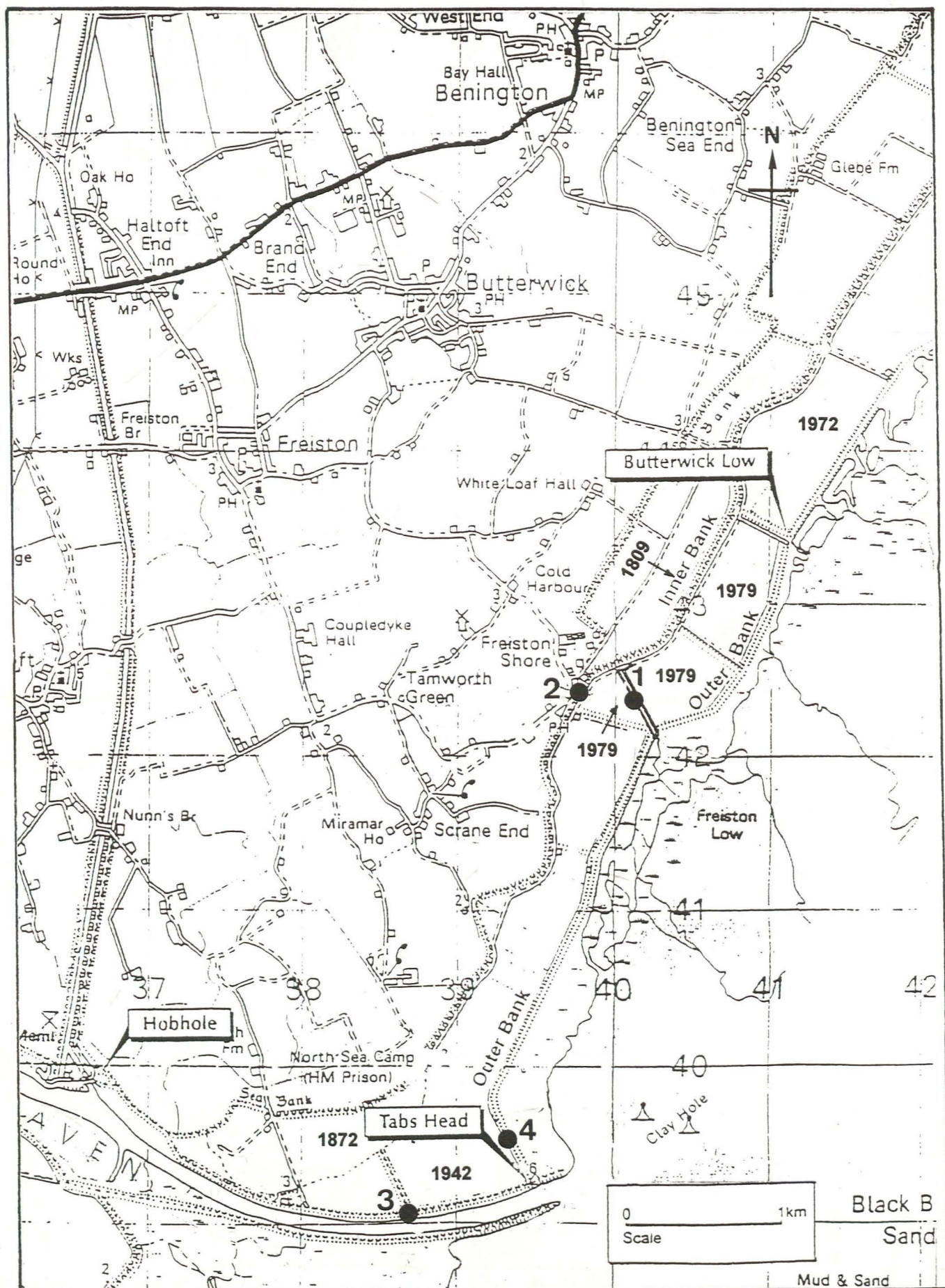
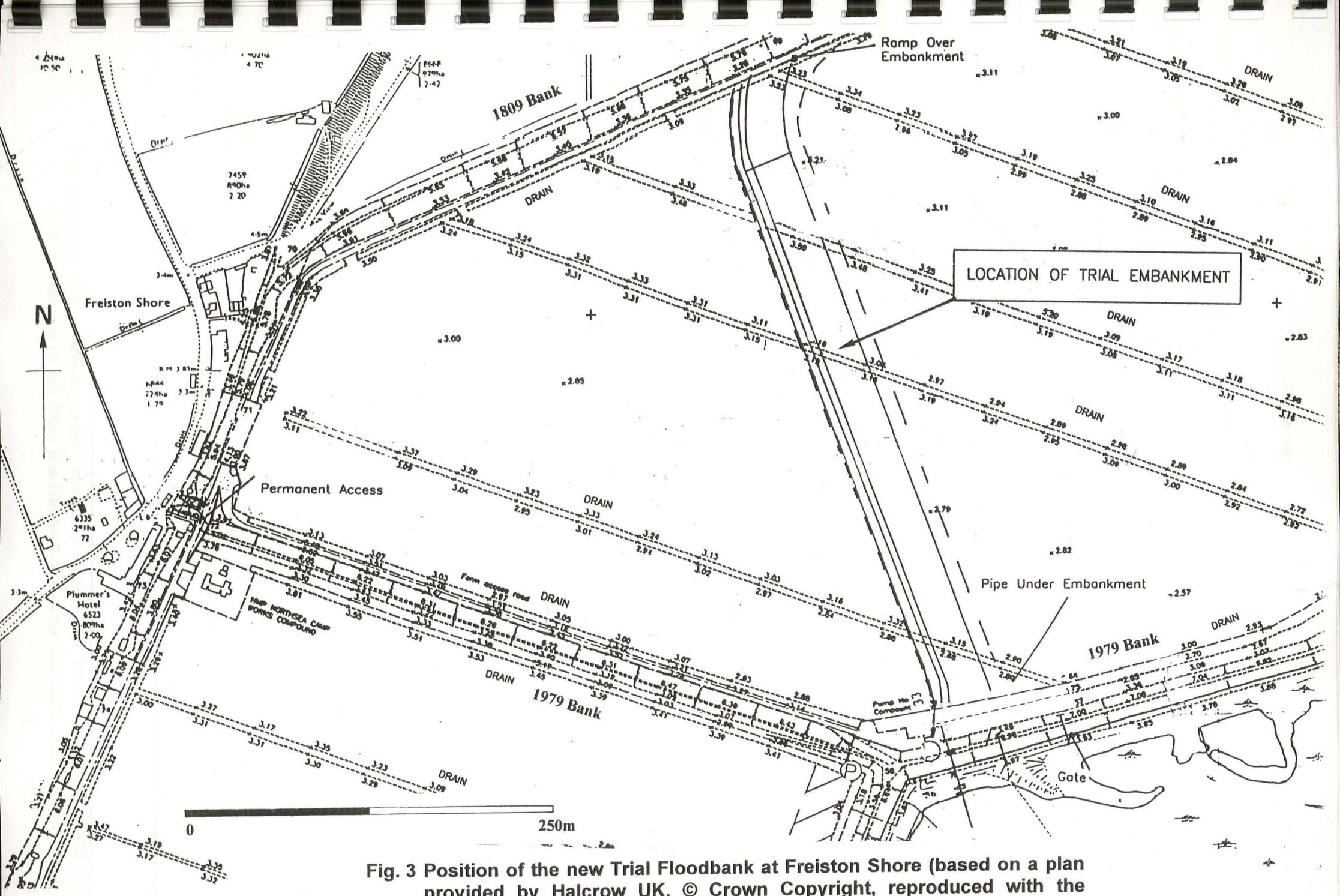


Fig. 2 Freiston Shore and the coastline north of the Haven (based on a map supplied by the Environment Agency). The dates of land reclaimed behind floodbanks are shown; numbers refer to archaeological observations noted in the text. (© Crown Copyright, reproduced with the permission of the Controller of HMSO. LAS Licence No. AL 50424A).



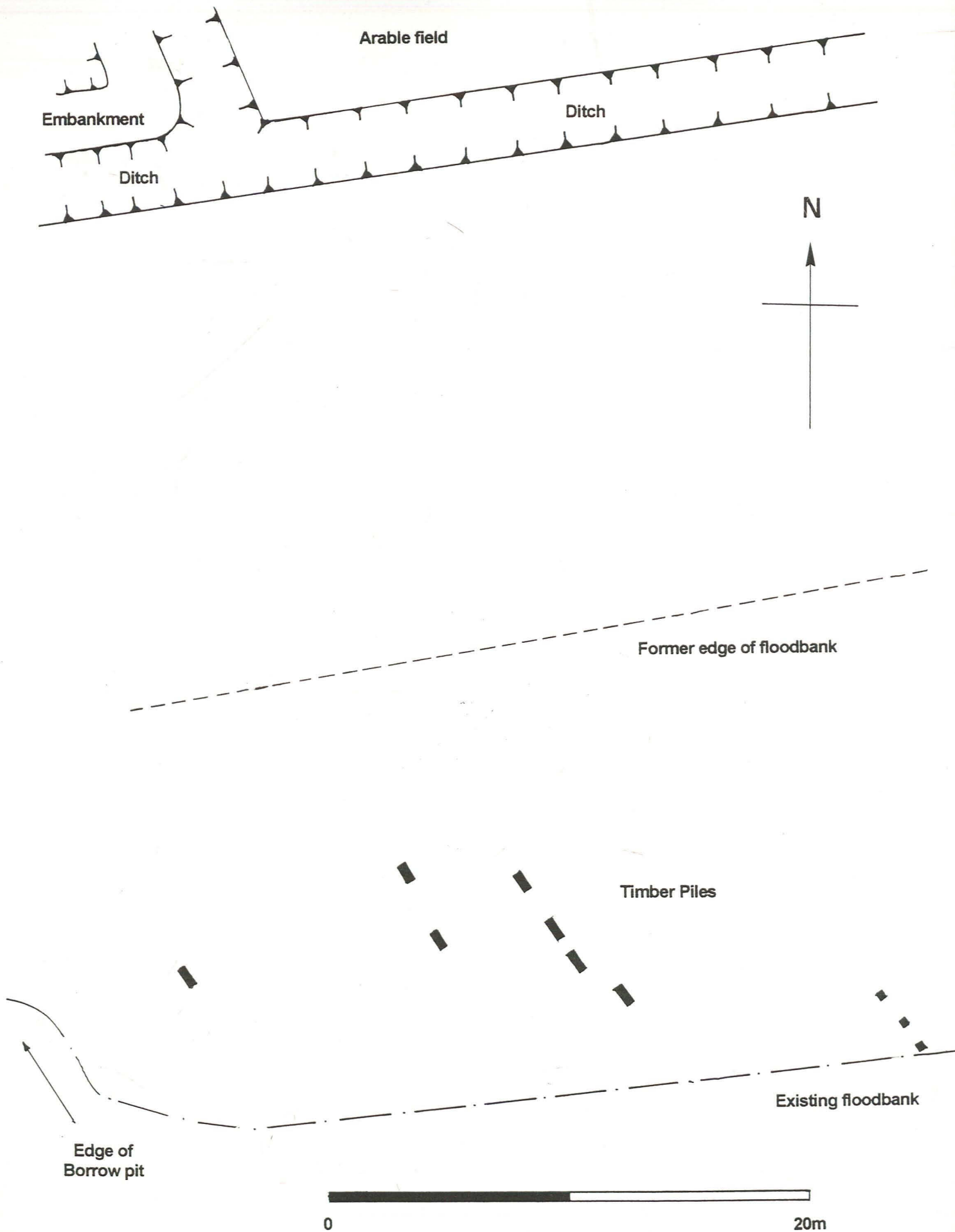


Fig. 4 Sketch plan showing approximate positions of timber piles revealed during removal of silt from the Haven floodbank (McDaid, after Tann).

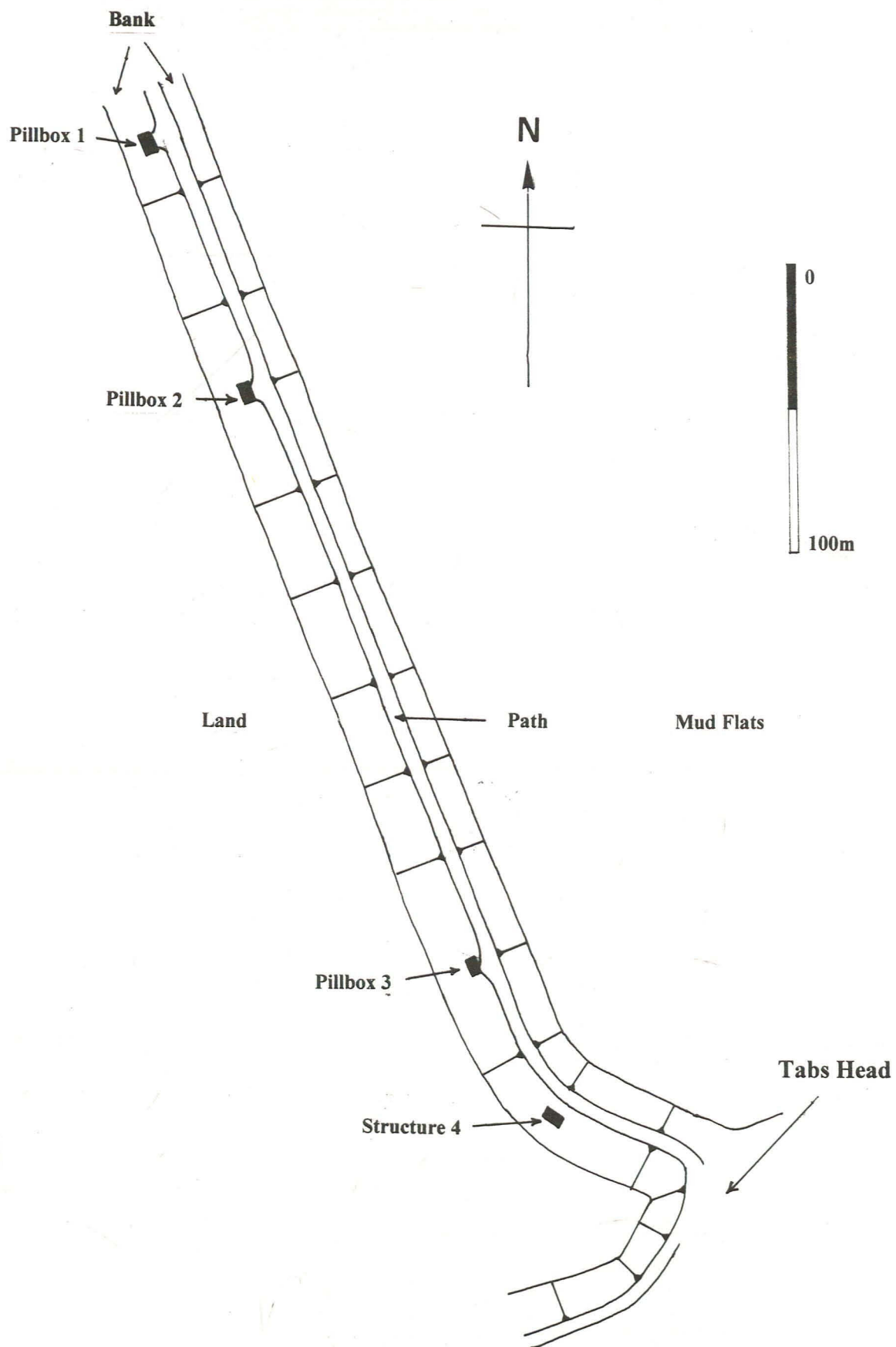


Fig. 5 Location of the three World War II pillboxes recorded NW of Tabs Head (McDaid).

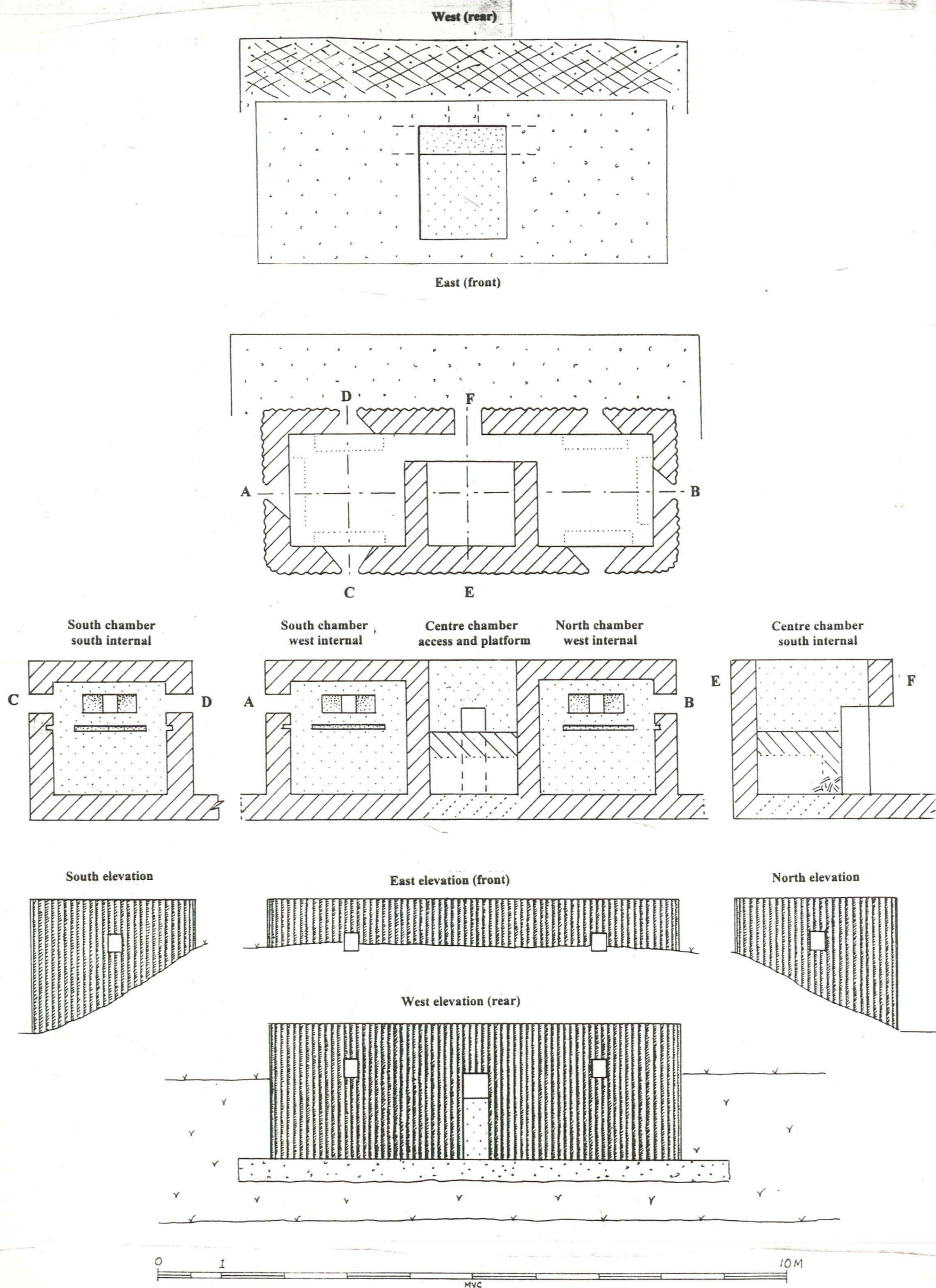


Fig. 6 Plan of pillbox 1, plans, cross-sections and elevations of pillbox 3 (Clark).

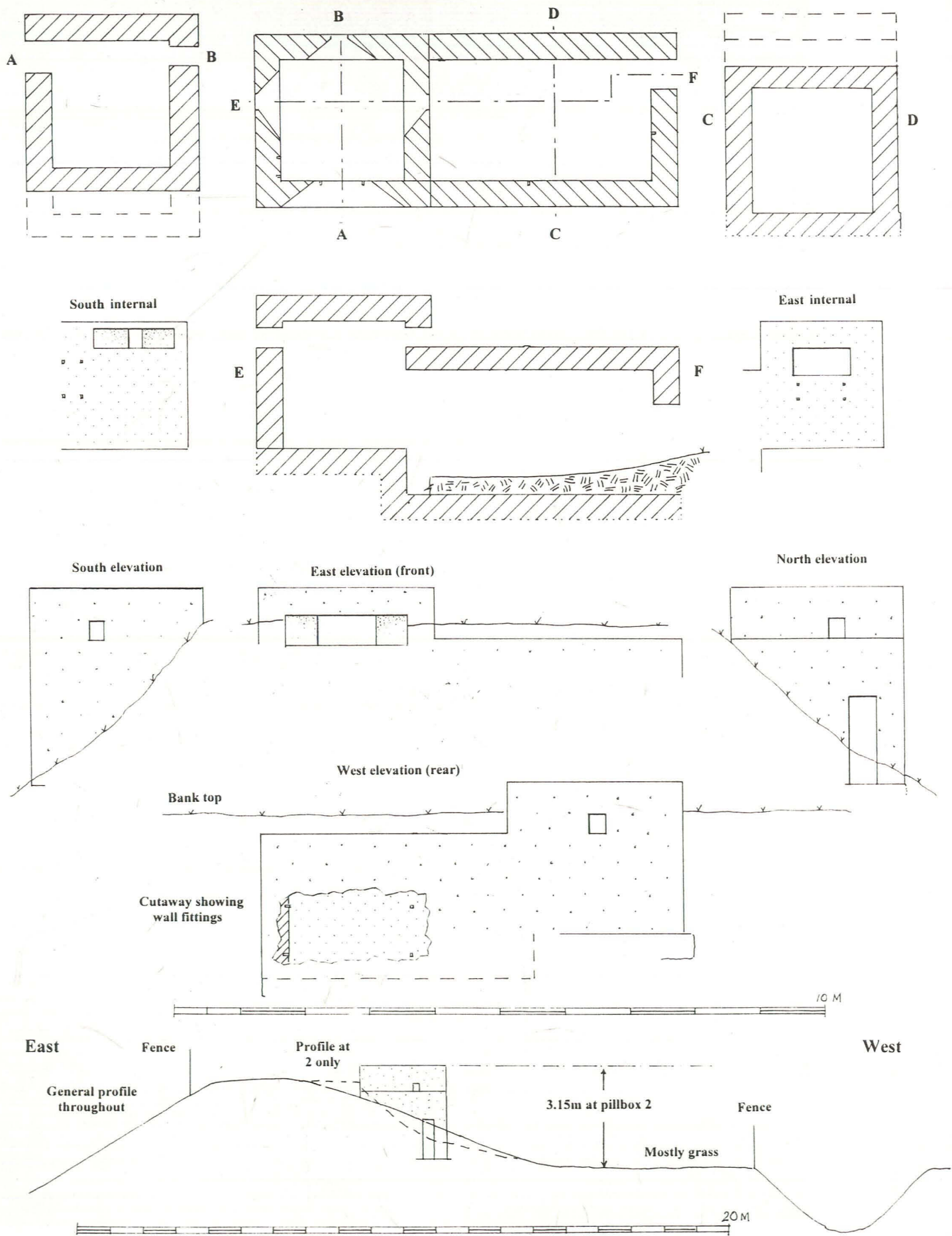


Fig. 7 Plan, cross-sections and elevations of pillbox 2 (Clark).



Pl. 1 Air photograph showing buried creeks in reclaimed land south of Freiston Shore. (Photograph © Environment Agency, reproduced at reduced scale with permission).



Pl. 2 Land reclaimed at Freiston Shore since construction of a floodbank in 1979 (background). The new trial bank was constructed in the field to the left. Looking south.

Pl. 3 Topsoil stripping the site of the trial bank (looking NE towards the 1809 floodbank).





Pl. 4 The new trial bank and associated borrow pit, beside the 1809 flood bank (left). Looking east.



Pl. 5 Topsoil and laminations in the underlying flood silt at the Freiston Shore borrow pit. Scale divisions 0.2m.

Pl. 6 New drainage ditch north of the trial bank, with timbers of a buried wreck visible between the white board and the 1m red/white scale (looking NE).





Pl. 7 Machine-damaged timbers exposed near the ditch base.

Pl. 8 The 1809 floodbank with the prison estate road alongside (looking west to Freiston Shore).





Pl. 9 Topsoil-stripping and reinforcement of the 1809 floodbank (looking west).

Pl. 10 The 1809 floodbank at the rear of premises at Freiston Shore (looking east).





Pl. 11 Timber piles exposed by removal of material from the existing floodbank near Hob Hole (looking north). The houses are on Cut End Lane.



Pl. 12 Excavation of silt from the Haven floodbank (looking east).

Pl. 13 Timber pile with slot within the Haven floodbank (looking north). Scales 2m and 0.3m.





Pl. 14 Metal plate reinforcing the tip of an uprooted timber pile. Scale 0.3m.

Pl. 15 Shell found in Haven floodbank, August 2000. (Photograph supplied by Mike Hastings, Halcrow UK).





Pl. 16 Pillboxes 2 (foreground) and 1 (middle distance) at the side of the 1942 floodbank near Tabs Head (looking NW).

Pl. 17 Pillbox 1, looking south.





Pl. 18 Blocked gun embrasure, pillbox 1. Scale 0.3m.

Pl. 19 Pillbox 2, showing corrugated shuttering blocking seaward facing embrasure (looking south).





Pl. 20 Entrance and interior of pillbox 2.

Pl. 21 Internal platform at southern end of pillbox 2 (scales 0.2m and 0.3m).





Pl. 22 Graffiti in concrete roof of pillbox 2.

Pl. 23 Pillbox 3, looking north to pillbox 2 (near poplars). The entrance platform probably marks the level of the 1942 floodbank.





Pl. 24 Pillbox 3, looking west.

Pl. 25 Central internal platform, pillbox 3.





Pl. 26 Gun embrasure in the east wall of the southern room, pillbox 3. Scale 0.3m.

Pl. 27 Partly covered ruin of structure 4, looking SE.





Pl. 28 Location of structure 4 (marked by standing figure) SE of pillbox 3.

