

## ARCHAEOLOGICAL FIELDWORK ALONG THE LINE OF THE BREAN DOWN SEA DEFENCES; NEW EVIDENCE OF LANDSCAPE CHANGE AND HUMAN ACTIVITY

by Michael J Allen, Andrew D. Crockett, M.N. Rawlings and Kevin Ritchie

### Introduction

Following proposals to construct extensive sea defences along the coastline south of Brean Down for some 1.5 km, eight evaluation trenches were excavated in the archaeologically more sensitive area immediately south of the Brean Down sand cliff along the beach (GGAT 1995; Locock and Lawler 1996, fig 11). Evaluation by the Glamorgan-Gwent Archaeological Trust (hereafter GGAT) in October 1995 revealed two areas of significance; the first, within the Scheduled Monument some 50 m south of the sand cliff, produced a number of Beaker sherds, and the stratigraphy could be broadly related to the lower portion of the excavated sequence in the sand cliff (Bell 1990; ApSimon *et al* 1961). The second area was located *c.*50 m further south, adjacent to the current slipway where deeply stratified deposits of palaeoenvironmental significance were encountered (Locock and Lawler 1996).

Archaeological excavation was conducted by Wessex Archaeology in January 1996 and was limited to two trenches (Figure 1); Trench 1 within the scheduled area to record and recover archaeology related to the published sand cliff sequence, and Trench 2 adjacent to the slipway to examine the archaeological and palaeoenvironmental nature of the deeply stratified deposits and to relate these to both the sand cliff sequence, and also the broader sequence as revealed by previous testpitting (Bell 1990, 90-106; Bell 1991). A watching brief associated with the early stages of the construction of the sea defences was conducted and is also discussed here. Currently the archaeological and palaeoenvironmental potential of both the excavations and this first stage of the watching brief have been assessed but no formal post-excavation has yet been conducted. A further watching brief will be in operation from October

1996 to April 1997.

This note, therefore, serves as a summary of the information to date, and in particular outlines the chronological significance and palaeo-environmental information. The latter is largely gleaned from the assessment reports of Dr J. Athersuch (foraminifera and ostracods), Dr Nigel Cameron (diatoms), Dr Rob Scaife (pollen), snails (MJA) and comments on the plant remains by Vanessa Straker and Sarah Wyles.

### Excavations

#### *Trench 1* (Figure 2)

The evaluation trench by GGAT (Trench 8) adjacent to the sand cliff revealed a thin deposit (GGAT layer 20) at 4.38 m OD. This layer produced eight relatively large Beaker sherds, mainly finger nail impressed but at least one comb decorated, together with a number of bone fragments. Above this one horizon (GGAT layer 17) produced 13 Romano-British sherds.

The Wessex Archaeology excavation comprised a trench 12.5 m by 5 m, but our excavations of this area were restricted both by terms of the contract and Scheduled Monument Consent to a maximum depth of 4.5 m OD, ie 0.12 m above the Beaker horizon encountered by GGAT. Not surprisingly, therefore, this trench produced no Beaker pottery. Augering was undertaken to extend the excavated sequence and enable the stratigraphy to be related to Bell's full sequence and the GGAT evaluation trench. Augering within the southern limit of the trench (auger 151) revealed a 0.05 m thick layer over 1 m below the excavated level at 3.17 m OD, and is thought to be the Beaker layer encountered by GGAT (Figure 2).

The construction work (by machining with toothed bucket) will be restricted to a depth of

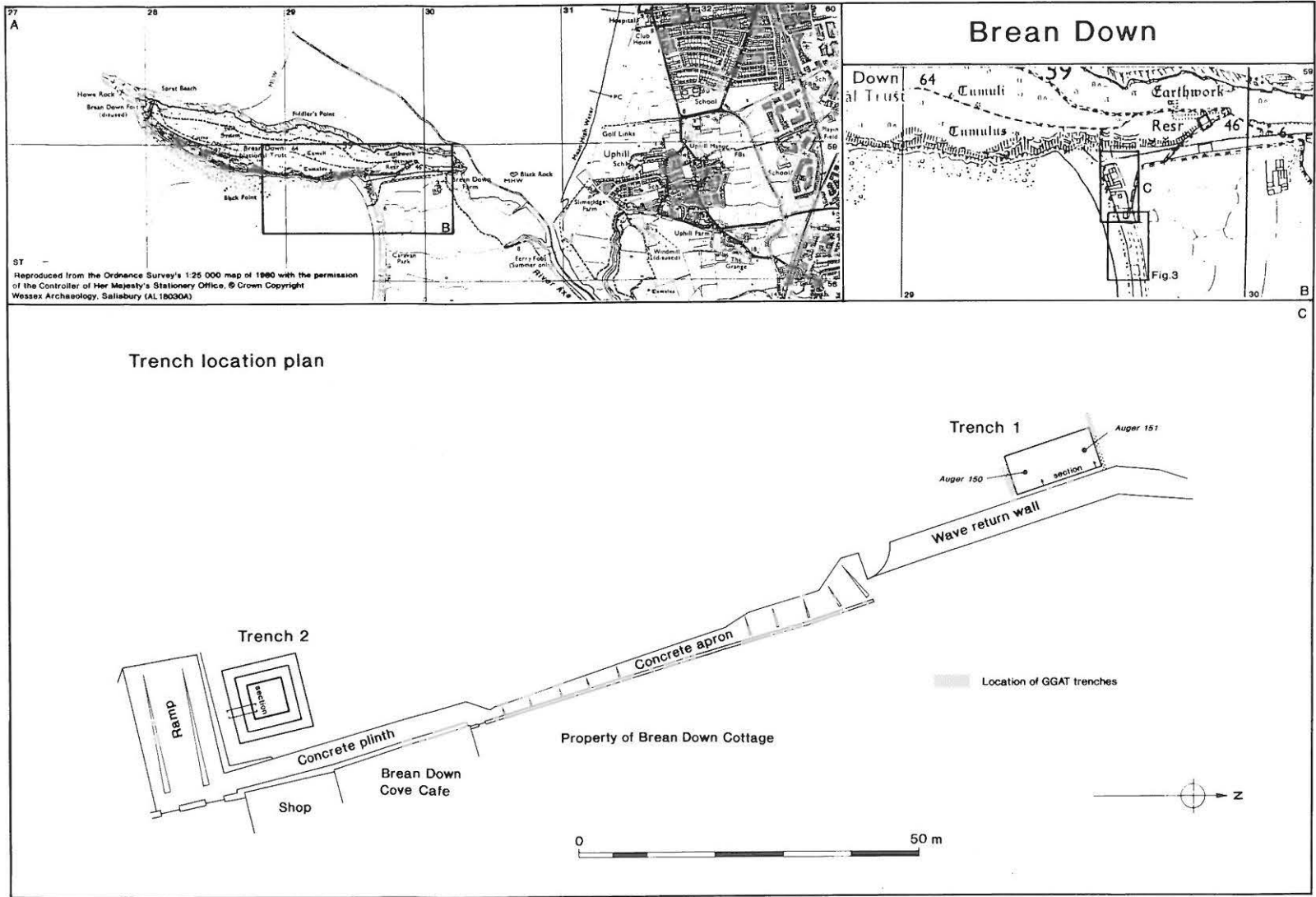


Figure 1: Brean Down evaluations: site location plan

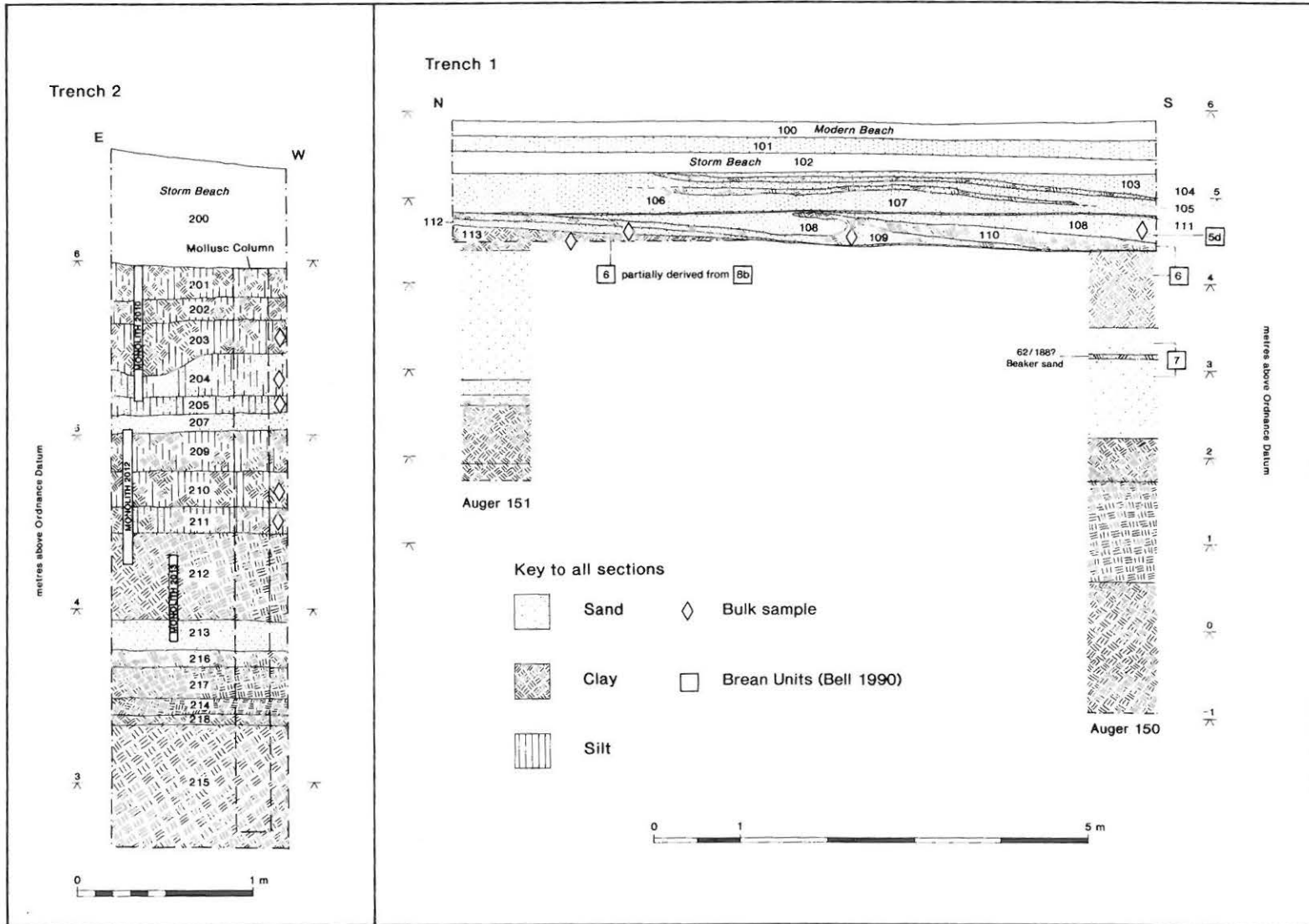


Figure 2: Sections in Trenches 1 and 2

4.5 m OD (ie the level of Wessex Archaeology excavations), which places a minimum of 0.12 m depth between machining and the archaeologically important layer as recorded by GGAT evaluation in trench 8. A full-time watching brief during this operation, however, will be particularly vigilant.

Despite the limited nature of the excavations, some Bronze Age pottery was recovered. The shallow sequence essentially comprised sands and more stable sandy clay horizons. The combination of pottery and sediment descriptions has enabled the sequence to be provisionally tied into the units ascribed by Bell to the sand cliff sequence (Bell 1990). Of significance is a single sherd of Collared Urn from context 108 as this is a vessel form not previously encountered in any of the previous archaeological investigations (ApSimon *et al* 1961; Bell 1990; Bell 1991; GGAT 1995), and this layer is probably equivalent to Bell's unit 5d (Figure 2). The only other pottery finds from this trench were sherds of Early Bronze Age grog tempered pottery from 110, a layer probably equivalent to Bell's unit 6. A series of samples was taken from this shallow sequence and is summarised below.

#### *Trench 2* (Figure 3)

Following the GGAT evaluation, the area to the north of the slipway was targeted for a large trench designed to recover primarily palaeo-environmental data. A trench 5 m by 5 m at its base was positioned at the southern limit of the former evaluation area and encompassed the line of GGAT Trench 1. The trench was excavated to about 1.2 m deep (5.8 m OD) where a surface was exposed and cleaned. It and its underlying layers (204 and 203) contained Romano-British sherds including a single example of 1st or 2nd century AD Samian and Black Burnished and greywares as well as a number of animal bones.

Below this Romano-British horizon excavation by machine continued in 0.1 m spits. The trench was stepped at 1.2 m intervals in accordance with health and safety recommendations.

A full profile of 3.9 m of stratigraphy was exposed beneath the modern beach (ie from 5.64 to 2.76 m OD). Beneath the Romano-British levels was a single sand lens, below which were grey, gleyed, silty and sandy clays (210 and 211,

Figure 2), which may indicate a pre-Romano-British occupation horizon. Some fragments of animal bone were recovered from these layers and although no datable artefacts were recovered, they are tentatively suggested to be Bronze Age, by analogy with previous work (especially Bell's Test Pit VI) and absolute heights. Below these horizons were 'Blue Clays' to c2.75 m OD, separated only by a thin single sand layer. These were considered on site to represent marine deposits. As in previous work at Brean (Allen 1990), both *archaeological* horizons seem to be well picked out by magnetic susceptibility profiles.

Most of the sequence beneath the present storm beach was sampled as undisturbed sediments in monolith tins to c3.8 m OD. Sampling of pure sand lenses by this method, however, proved impossible. The samples were complemented by a complete column of 34 contiguous samples taken at about 0.1 m intervals over some 3.9 m of stratified sediments. In addition, five bulk samples were taken from the archaeologically significant horizons (Figure 2).

#### **Watching Brief** (Figure 4)

During the watching brief of earth moving over a 150 m stretch south of the slipway a Romano-British ditch was recorded in plan, running parallel to the present coastline across at least three construction bays (Figure 3). This section was recorded in a number of places and bulk samples taken. Although only limited exposures were examined, 14 sherds of Romano-British pottery were recovered from the ditch. These included a rim sherd of a Black Burnished ware jar of later Romano-British type (3rd - 4th century AD) and two sherds of greyware were recovered from the upper fills. Seven sherds of early Romano-British pottery were found in the middle ditch fill, one of these from a Spanish Dressel 20 amphora and the others in a coarse greyware. The lower ditch fill contained three sherds of Romano-British pottery, two of which were greywares recovered from a bulk sample.

#### **Environment**

The environmental data presented below is derived only from the assessment, and will require more detailed analysis before final



Figure 3: stepped and sampled section of Trench 2 (see Figure 1) looking south. The ranging poles are 2 m and the upper scale is in 10 cm divisions.

conclusions can be made. Nevertheless, this information already provides some background which may be of wider importance, especially in relation to other archaeological investigations for example in the North Somerset Levels (eg Rippon, this vol.)

The environmental information is considered chronologically, though overall, the remains in all categories were sparse. No single type of data is well enough preserved to provide a definite palaeo-environmental sequence, and so interpretation will, therefore, have to be teased from a combination of all the relatively poor assemblages.

#### *Blue clays*

The basal 'marine clays' produced brackish lagoon and saltmarsh foraminifera communities, while the sparse pollen included halophytes

indicating salt marsh, with reeds and sedges present. These clays, therefore, cannot be considered to have been deposited in a marine environment, but in saltmarsh. Diatoms were not preserved in these contexts.

#### *Early Bronze Age*

Samples of 20 litres from the Early Bronze Age deposits adjacent to the sand cliff were virtually devoid of any remains; only one contained some charcoal. In contrast, samples taken by GGAT from the 'Beaker' horizon were rich in charcoal and charred weed seeds, though no grain or chaff was present in the assessed flots. Land snails were not present in these contexts and pollen from these largely sandy horizons was also very poorly preserved. Nevertheless the pollen spectra comprise largely spores of bracken (*Pteridium aquilinum*) with ribwort plantain

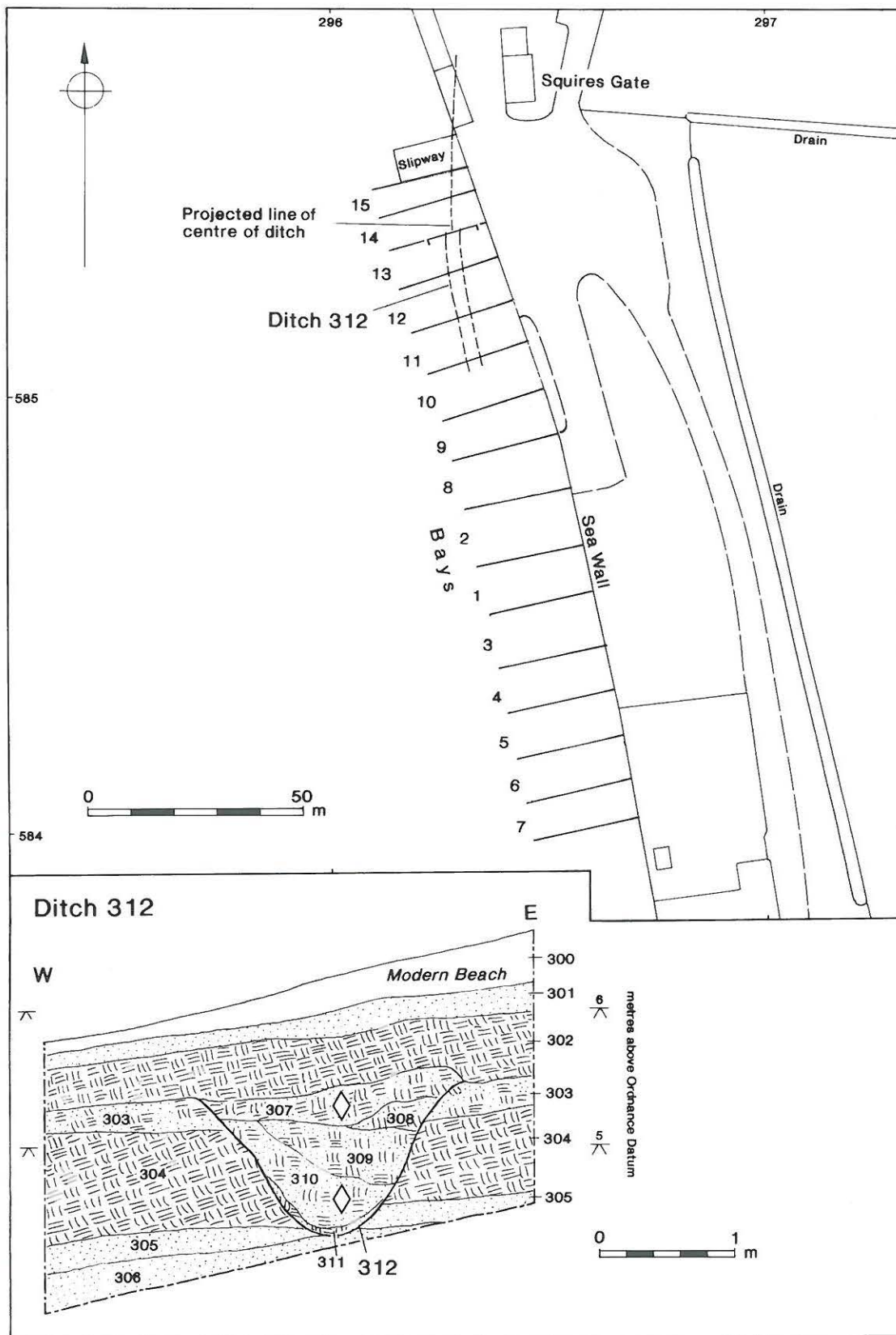


Figure 4: Location and section of ditch 312 recorded during the watching brief.

(*Plantago lanceolata*), *Plantago media/major* type, grasses (Poaceae) and sedges (Cyperaceae). The presence of bracken (*Pteridium*) and local grassland (plantains), with sporadic birch (*Betula*), pine (*Pinus*), oak (*Quercus*) and ash (*Fraxinus*) is indicated. This suggests pasture with a flooding/fluvial aspect. Diatoms confirm this; the terrestrial or semi-terrestrial assemblage with one brackish and marine planktonic species indicates a habitat subject to frequent drying out (salt marsh), with an input of both eroded terrestrial material and freshwater and marine sediment components. The foraminifera included rare species reworked from shallow marine and estuarine conditions. The consensus is open saltmarsh

### The 'Bronze Age' horizon

The putative 'Bronze Age' horizon in Trench 2 revealed a poor and sparse charred plant remain assemblage but limited waterlogging is indicated (Straker pers. comm.). The snails are poorly preserved but occur in the large 20 litre bulk samples. They favour largely open dry habitats, but some brackish water species are also present. The lack of marsh species may indicate dry terrestrial conditions with occasional inundations. Although, again, diatoms have not been preserved, the foraminifera, ostracods and pollen support this hypothesis. The foraminifera and ostracods confirm the presence of shallow sluggish freshwater streams and fresh-brackish pools. Pollen indicates saltmarsh, with grasses dominant (Poaceae) alongside other important halophytic indicators such as *Armeria* 'A' and 'B' line, possible saltmarsh grasses (*Glyceria* and *Elymus*), and plantains with reed and sedges. Some freshwater marsh types are also present (eg sedges), with oak (*Quercus*) and hazel type (*Corylus avellana* type) and sporadic birch (*Betula*), pine (*Pinus*), lindens (*Tilia*), alder (*Alnus*) and beech (*Fagus*) in the background, possibly growing on Brean Down itself.

### Romano-British evidence

The Romano-British evidence from Trench 2 and the ditch recorded in the watching brief indicate drier conditions; the land snail assemblage from Trench 2 is more open and dry than the 'Bronze Age' evidence, but with marine/brackish

estuarine conditions indicated locally. The assemblages from the Romano-British ditch are wholly terrestrial. However, a very poor pollen spectra was recovered from the deeply stratified sequence (Trench 2) with pine (*Pinus*; probably long distance transport) and Lactucaceae (dandelion types) which have robust exines and indicate poor preservation. The lack of halophytes and of evidence for a marine influence suggest a drier grassland pasture than observed in the 'Bronze Age horizon'. Pollen from the ditch is slightly better preserved confirming the presence of bracken (*Pteridium aquilinum*), ferns (*Dryopteris* type) and open drier pasture, while diatoms and foraminifera from the ditch both indicate local shallow marine and brackish water, but also freshwater.

### Discussion

Although only at the assessment stage, this evidence has the potential of providing information of broader relevance than to just the Brean environs. Information about the Romano-British environment associated with the ditch and known Romano-British temple on Brean Down (ApSimon 1964-5), will complement the current research of Stephen Rippon on the North Somerset Levels (this vol). Information from the Bronze Age levels complements test pit work by Bell (1991; and unpub.), but also extends understanding of the landscape setting of the important stratified settlements within the sand cliff (Bell 1990).

### Summary and preliminary conclusions

Although detailed analysis has yet to be undertaken we can already draw some broad conclusions:

1. the extensive marine blue clays represent salt marsh and lagoonal deposition of Bronze Age and earlier date.
2. Bronze Age layers indicate local activity, possible from the settlement (sand cliff section) and dry, but occasionally inundated, saltmarsh to the south.
3. Romano-British activity is reflected in both trenches and in a ditch on the present foreshore; all of these seem to be associated with dry pasture - only limited evidence of truly marine environments was encountered. Activity

included the construction of the ditch, possibly as part of a drainage system.

4. This evidence helps place the Bronze Age settlement at Brean into a wider context, but reveals new evidence of Romano-British activities, possibly associated with land reclamation or sea defences.

Furthermore, the excavations discussed here can be considered an opportunity gained through developer-funding; the construction works here would not have been recorded or entered the archaeological literature, let alone enabled detailed assessment, post-excavation analysis and publication, without the implementation of PPG 16 and the development control of Somerset County Council.

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