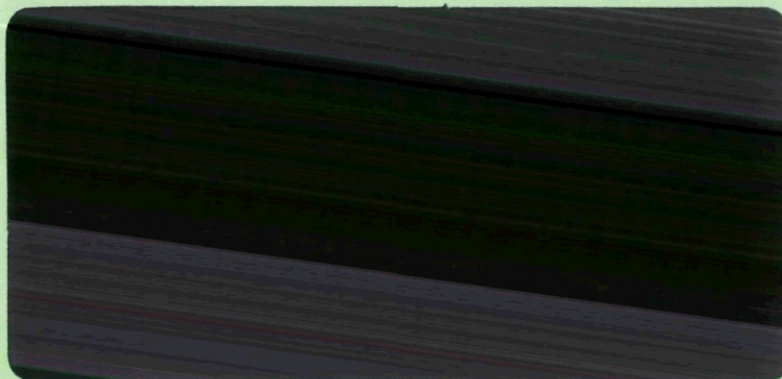


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**ARCHAEOLOGICAL EVALUATION OF
WBB RIVERS DIVERSION AND TIPPING AREA,
TEIGNGRACE, DEVON**

by

T.H. Gent

Exeter Archaeology

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1. INTRODUCTION

This report describes the results of an evaluation excavation undertaken by Exeter Archaeology (EA) during November and December 1996 in the area of a proposed river diversion programme and tipping area associated with the clay extraction industry (centred at SX 847 755). This work was commissioned by Watts, Blake, Bearne and Company plc (WBB), on the advice of Devon County Council (DCC), following the identification of potential archaeological deposits in the area during earlier assessments (Gent 1996a; 1996b). The assessment and evaluation procedure has been undertaken in accordance with guidelines contained within DoE *PPG16 Archaeology and Planning* (1990) and CBI *Archaeological Investigations Code of Practice for Mineral Operations* (1991).

2. THE SITE

The proposed river diversion and tipping area lies between 1km and 2km to the south of the village of Chudleigh Knighton and 1km to the south-east of the A38 (Fig. 1). The present confluence of the rivers Teign and Bovey, situated at SX 8481 7550, lies roughly central to the east side of the assessment area.

Eighteen trenches were opened to investigate suspected archaeological features and deposits (Fig. 2). The areas of archaeological potential had been identified through a combination of a study of aerial photographs and documentary research, the results of a geophysical survey commissioned following the recommendations of the earlier assessment (Johnson 1996), and structured fieldwalking in selected areas. These methods had resulted in the identification of:

- i two suspected enclosures (areas 1 and 6; Fig. 2);
- ii a linear feature crossing the enclosure in area 1;
- iii a possible medieval farm (area 5);
- iv an unidentified Y-shaped feature (area 4);
- v a suspected mill (area 2);
- vi an area of prehistoric activity represented by an intense flint scatter (area 3).

Sixteen of the trenches (areas 1-5) were excavated on land rising gently from the floodplain to the south-west of the river confluence. The remaining two (area 6) were opened on a spur of raised ground projecting between the two river channels.

3. GEOLOGY AND TOPOGRAPHY

Across the level floodplain, Holocene alluvial deposits overlie bands of mixed kaolinitic clay, clay silt, sand and lignite of the Bovey Formation. Periglacial gravels lie in braided bands between the two. The alluvium is overlain by sandy and coarse loamy soils. At least one former course of the Teign is still visible as a curvilinear depression, running roughly parallel with the present channel.

Between the mill leat and the road leading from Brocks Farm to Ventiford Cottages, a slightly raised area (containing areas 3 and 4) lies between the true floodplain and adjoining higher ground. This avoids all but the worst seasonal flooding and appears not to have been disturbed by the meandering course of the rivers since the end of the last glaciation.

displayed signs of rapid, initial silting to a depth of 0.4m. The more humic upper fills contained 31 sherds of late 3rd-4th century AD Romano-British pottery. No internal features were observed.

Trench B (Figs 4, 5)

Trench B (9.75m x 6m) was positioned to expose the north-western section of the enclosure ditch, and to ascertain its relationship with the diagonal linear crossing area 1. A V-shaped ditch (528) was revealed crossing the trench. It was 2.1m wide and 1m deep (below the surface of the subsoil) and possessed a narrow (0.15m wide) level base. As in trench A, the enclosure ditch displayed signs of rapid, initial silting to a depth of 0.4m, and the more humic upper fill contained 11 sherds of late 3rd-4th century AD Romano-British pottery. No internal features were observed.

On the western side of the trench, the enclosure ditch cut the linear feature (646) at right angles. The linear feature was 2.4m wide. It was not excavated, but its darker upper fills contained three sherds of pottery which have been tentatively assigned (awaiting specialist analysis) to the late prehistoric period.

Trench C (Figs 3, 5)

Trench C (15m x 1.3m) was positioned to expose the northern section of the suspected enclosure ditch and to locate any possible features within the enclosure. A V-shaped ditch (533) was exposed towards the northern end of the trench. It was 1.8m wide and 0.8m deep (below the surface of the subsoil) with a narrow (0.25m wide) level base. Again, the ditch showed signs of rapid, initial silting to a depth of 0.35m. The more humic upper fills yielded 12 sherds of late 3rd-4th century AD Romano-British pottery. A large post-hole (535), at least 1m wide and 0.45m deep, was located 2m to the south of the ditch. At distances of 9.6m and 12m respectively to the south of the ditch, a pit or post-hole (541; 0.6m wide, 0.2m deep) and a post-hole (543; 0.3m wide and 0.2m deep) were also exposed.

Trench D (Figs 3, 6)

Trench D (16m x 1.3m) was positioned to expose the eastern section of the enclosure ditch and to locate any internal features. A V-shaped ditch (545) was revealed towards the northern end of the trench. It was 1.6m wide and 0.8m deep (below the surface of the subsoil) with a narrow (0.2m wide) level base. The ditch displayed signs of rapid, initial silting to a depth of 0.3m. The more humic upper fills contained ten sherds of late 3rd-4th century AD Romano-British pottery.

A large post-hole (551; 0.7m wide and 0.36m deep) was located 1.2m to the west of the ditch. At distances of 6.4m and 6.6m respectively to the west of the ditch, a small post-hole (555; 0.1m wide and 0.14m deep) and a post-hole or pit (557; 0.4m wide and 0.12m deep) were also exposed. Between the two most westerly post-holes and the single example, a gully (553; 1.2m wide and 0.25m deep) lay 1.5m to the west of, and on a similar alignment to, the V-shaped ditch.

Trench E (Figs 4, 6)

Trench E (6m x 6m) was positioned to expose the south-eastern section of the enclosure ditch and to ascertain its relationship with the diagonal linear crossing area 1. The enclosure ditch was not revealed, but a roughly V-shaped ditch (560) partly exposed at the western side of the trench was taken to be part of the diagonal linear feature. It was 1.7m wide and 1m deep (below the surface of the subsoil) with a level base almost 0.5m wide. The feature displayed signs of rapid, initial silting, and had been recut to a depth of 0.6m. No finds were recovered.

Trench F (Figs 4, 6)

Trench F (8m x 1.3m) was positioned to examine the diagonal linear feature crossing area 1. A V-shaped ditch (566) was exposed. It was 2.4m wide and 1.1m deep (below the surface of the subsoil) and possessed a level base which was almost 0.5m wide. There were signs of rapid, initial silting followed by two episodes of recutting: the first to a depth of 0.9m, the second to 0.7m. No finds were recovered.

5.2.2 **Area 2** (Figs 2, 7)

Below the stone bridge to the east of Brocks Farm, the north-eastern bank of the mill leat was lined with stones (638) indicating the possible position of a former mill. In addition to a detailed inspection of the bridge and its environs, an 8m by 3.5m area of topsoil was removed from the southern end of this stonework (Fig. 7) between the mill leat and an oak tree situated on the boundary of the field to the north-east.

This exposed a rough metallised surface (628) lying between the stone lining to the leat (638) and the roots of the oak tree. Damage to both the stonework and the surface was apparent in the western half of this area, alongside the leat, where the stone lining had been very roughly rebuilt (639). Set at right-angles to the leat at the eastern end of the area, large undressed granite slabs formed the capping (637) to a culvert, presumably an element of field drainage. The metallised surface continued beyond this culvert to the east, heading towards the open field via a gateway.

Two trenches (trenches R and S), both 0.5m in width, were hand-dug across the area, revealing that up to 1m of made ground had been lain over the clay subsoil to support the 0.1m-deep metallised surface (i.e. 628). The latter had been frequently repaired. However, no additional features or finds were encountered to indicate the presence of a mill.

5.2.3 **Area 3** (Fig. 8)

Three small 2m² trenches (J, K and L) were positioned to investigate sub-surface anomalies suggested by the magnetometer survey within the southern end of the area of highest flint density identified during fieldwalking (section 5.1). No archaeological features were identified.

Two other trenches (M and N), located in a T-shape at the northern extent of the area of highest flint density, exposed a mottled orange/brown gritty clay silt subsoil. This proved to be a thin (0.06m-0.1m) layer (608) overlying yellow clay silt gravels. Between the disturbed ploughsoil and the subsoil, banded deposits of a largely alluvial origin lay to a maximum depth of 0.6m. This material produced 907 struck flints. Additional flintwork was also recovered from both the mottled orange/brown subsoil, and areas of disturbance within the underlying gravels. Disturbance to the subsoil was investigated at selected positions within the two trenches, but no differentiation could be made between root action and possible archaeological features.

5.2.4 **Area 4** (Fig. 9)

Trenches P and Q measured 1.3m wide, and were 9.4m and 6.2m in length respectively. They were positioned to investigate elements of a curvilinear Y-shaped feature which had produced particularly high magnetometer responses (Johnson 1996, 10, Fig. 11).

Two gullies were present within trench P. One (583) had gently sloping sides and was 1.8m wide and 0.25m deep; the other (603) was more steep-sided and measured 1m wide and

at least 0.4m deep. These features cut into gravels which gave indications of fluvial activity. In trench Q, another gully (580), 1.5m wide and at least 0.2m deep, was revealed. A possible post-hole (575), 0.7m wide, lay 1.1m to its west.

Gully 603 was filled with a slightly dirty version of the local river gravels, and gullies 583 and 580, clearly sections of the same feature, contained dirty redeposited subsoil. No obvious explanation for the high magnetometer readings was evident.

5.2.5 Area 5 (Fig. 10)

Trench G (6m long and 1.5m wide) was excavated to expose the known remains of Twelve Oaks Cottage. A mud-bonded, stone walled structure was revealed, the wall (593) built within a shallow construction trench (616) dug into the sandy subsoil. Within the building, an area of cobbling (596) was separated by lime mortar-bonded stone dividing walls from a red brick surface (589), the latter taken to be an entrance hallway. These surfaces were built upon a thin make-up layer (597) placed directly on the subsoil.

No indication of any earlier structures were found. The only developments to the building were a lime-mortar bonded stone dividing wall (614) placed at right angles to the brick surface edge, directly on the cobbled surface, and a concrete floor (594/5) laid over the cobbles to the north.

5.2.6 Area 6 (Fig. 11)

The geophysical survey had identified a series of curvilinear features within this area, a selection of which resembled the ditches of a possible prehistoric enclosure (Johnson 1996, 9, Fig. 9). Trench W (11.5m x 1.3m) was positioned to examine a possible enclosing ditch, and trench X (6m x 1.3m) was positioned to investigate a linear feature to the south.

Trench W revealed a 1.1m-wide feature (840) crossing the trench at right-angles. This proved to be a 0.26m-deep gully with gently-angled sides. It contained two fills, the lower (842) resembling a slightly dirty version of the gritty clay-silt subsoil. This gradually became more humic to form the upper fill (841), which at the surface displayed no difference to the overlying topsoil.

Following the removal of 0.3m of topsoil from trench X, a 1.5m-wide feature was exposed which crossed the trench roughly east-west. This transpired to be a modern field drain (843), producing half-bricks and riven slate from amongst its stony lower fills. A further field drain (845) joined this feature from the north.

6. CONCLUSIONS

6.1 Area 1

The excavations in this area identified the presence of a ditched and banked enclosure. Pottery recovered from the fills of the ditch(es) indicate that this was in use during the late 3rd-4th century AD.

It was originally thought, on the basis of the geophysical survey, that the enclosure extended to the south-east. However, no extension was located, and it would appear that the bank and ditch were almost circular. The remains of the internal bank examined at the western side indicated that, in this area at least, truncation from ploughing has been minimal.

A total of six possible post-holes were located in trenches C and D, indicating the presence of at least a limited number of structures within the enclosure. The shallow gully exposed in trench D probably represents the remains of a trackway crossing the area. Its date is unknown.

Where excavated, the profile of the diagonal linear ditch was similar to that of the enclosure ditch. Some form of stock control may be suggested, and episodes of maintenance were evident. The similar alignment of the ditch and the remains of the possible trackway exposed in trench D may indicate a contemporaneous existence, the one dictated by the other. Which came first is not known. The stratigraphic relationship between the enclosure ditch and the linear ditch indicates that the enclosure post-dated the linear feature. It is possible, based on the interim interpretation of the pottery from its upper fills, that the linear feature is of late Iron Age date.

6.2 Area 2

No conclusive evidence was found for remains of the mill in the immediate area of the bridge over the leat. However, it is thought that both the bridge and the metalled surface represent a robust thoroughfare for traffic running to and from the mill itself. The remains of the mill building are probably located a short distance to the south, on the north-eastern bank of the leat. It is thought unlikely that it lies further downstream of the kink in the leat, some 70m to the south of the bridge.

Documentary evidence suggests that the bridge and associated features, if related to the mill, must be at least 17th century in date.

6.3 Area 3

Substantial evidence of a Mesolithic presence in the belt of land between the floodplain and the higher ground is provided by the 1436 flints recovered from both the excavations and fieldwalking in the area. Many of these appear to have been struck from local river pebbles, and the procurement of such material may thus have been a prime motive for the utilisation of this area. Mesolithic activity undoubtedly originally extended onto the floodplain itself, however, the scouring action of the meandering rivers have since removed all indications.

The large number of blade-cores, blade production waste and primary waste flakes recovered, in comparison with a very low number of implements, suggests that the area was used for the initial preparation of the flint. The resulting semi-prepared flint was possibly taken elsewhere for further attention. These visits to procure flint may well have been short in duration, but possibly occurred yearly for decades or even centuries.

Short-term annual visits would probably have involved the setting up of flimsy structures. However, the seasonal flooding of this strip of land is expected to have largely eradicated any archaeological evidence for these. Small stakeholes and the remains of fires may have been largely lost, leaving limited structural evidence and the detritus from the lithic technology.

6.4 Area 4

Figure 9 illustrates the character of the subsoil and drift geology into which the channels exposed in trenches P and Q were cut. This shows the remains of earlier channels. These had

silted, and been subsequently recut by the features which were excavated. These are thought to be either periglacial channels, or the silted remains of a stream.

The remains of a spring-stream might explain the particularly high magnetometer readings obtained from the fill of channel 580/583. Ferrous material, for example, carried in suspension by the spring water, possibly being responsible.

6.5 Area 5

Trench G exposed the remains of a single-phase structure. The wire-cut construction of the primary flooring indicates that it is unlikely to have been constructed much before 1800. This date is corroborated by the cartographic evidence. No earlier features or archaeological finds were recovered from the area.

6.6 Area 6

Neither trench W nor X produced any evidence of archaeological features. The gully in trench W was thought to be a periglacial channel; the features in trench X were modern field drains.

7. FURTHER REQUIREMENTS

7.1 Excavation

In advance of the rivers diversion scheme, further archaeological excavation is required in order to investigate the known Mesolithic remains identified in area 3. Both the abundant lithic remains and any possible structural evidence require additional recovery through excavation, especially in light of the rarity and quality of the known archaeological survival of this period in the area.

Before the tipping area to the west is utilised, the known Romano-British enclosure and its associated features, including the linear ditch and trackway, require additional recording through excavation. The nature of the proposed tipping will both remove known remains from future investigation, and may alter the present state of preservation through both compression and chemical leaching.

7.2 Palaeoenvironmental sampling

In order to identify deposits with the potential for the preservation of palaeoenvironmental indicators, such as peat, and also to identify the maximum depths of relict river channels, a survey comprising a series of boreholes or small machine-dug test pits is required across the area of the floodplain.

It should also be noted that anaerobic riverine deposits also have the potential for the preservation of archaeological artefacts such as worked wood and leather.

7.3 Watching brief

Notwithstanding the requirements listed in sections 7.1 and 7.2, a suitably qualified archaeologist will be required to monitor all stages of the proposed rivers diversion scheme and ground preparation for the tipping area. This will enable the recognition of any exposed archaeological or palaeoenvironmental deposits requiring additional investigation and recording.

The watching brief may be of particular importance in the area of the bridge and associated features on the mill leat. Here, the work close to the avoided area, which will encompass the bridge and the mill leat to the kink some 70m to the south, may reveal remains of the suspected mill and associated features.

7.4 Method statement

For the work outlined in sections 7.1-7.3, method statements will need to be prepared by the archaeological contractor and approved by Devon County Archaeological Service, who will monitor the execution of this work.

ACKNOWLEDGEMENTS

The project was commissioned by Watts, Blake, Bearne and Company plc (WBB), and administered by J. Briggs (WBB) and P.J. Weddell (EA). The fieldwork was undertaken by Exeter Archaeology (EA) during November and December 1996, and directed by the author. The illustrations were prepared by S. Blackmore. The geophysical survey was undertaken by Oxford Archaeotechnics Ltd, under the direction of A.E. Johnson. Volunteers from the Devon Archaeological Society assisted with the fieldwalking. During the excavations the site was visited by F.M. Griffith (DCC) and Major B. Pleydell.

BIBLIOGRAPHY

- Gent, T.H. 1996a *Rivers Teign and Bovey: river diversion. Archaeological assessment*. EA Report No. **96.24**.
- Gent, T.H. 1996b *Rivers Teign and Bovey: river diversion tipping area. Archaeological assessment*, EA Report No. **96.29**.
- Johnson, A.E. 1996 *Rivers Teign and Bovey: Proposed diversion. Topsoil Magnetic Susceptibility & Magnetometer survey*, Oxford Archaeotechnics Limited Survey Ref: **0991096/TBD/WBB**.



Fig. 1 Location of survey area (reproduced from the 1989 Ordnance Survey 1:25000 Pathfinder map 1342 with the permission of the Controller of Her Majesty's Stationery Office, © Crown Copyright).

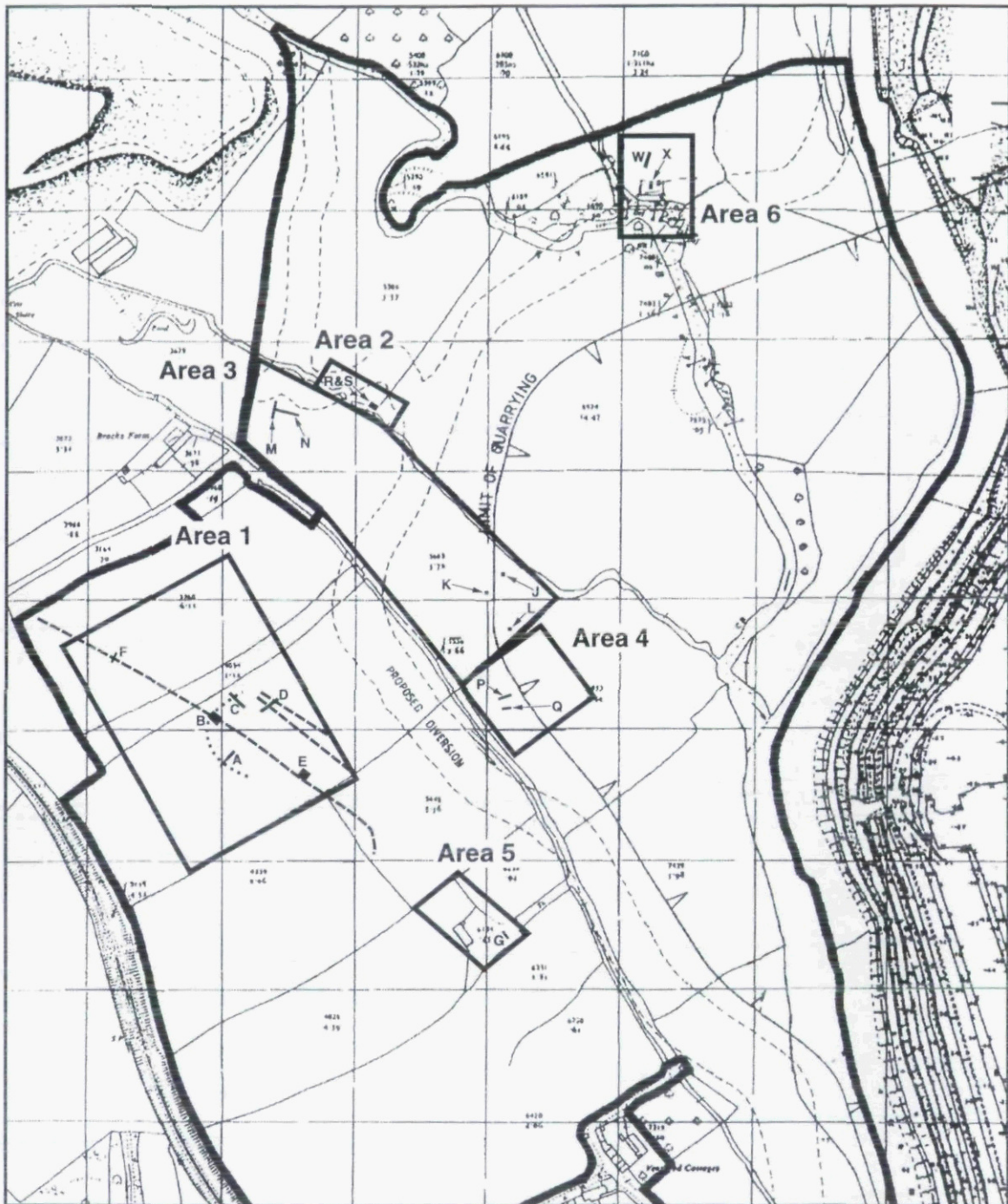


Fig. 2 Excavated areas, showing the trenches, the enclosure and associated ditch, (reproduced from the Ordnance Survey 1:2500 map SX 8475 with the permission of the Controller of Her Majesty's Stationery Office, © Crown Copyright).

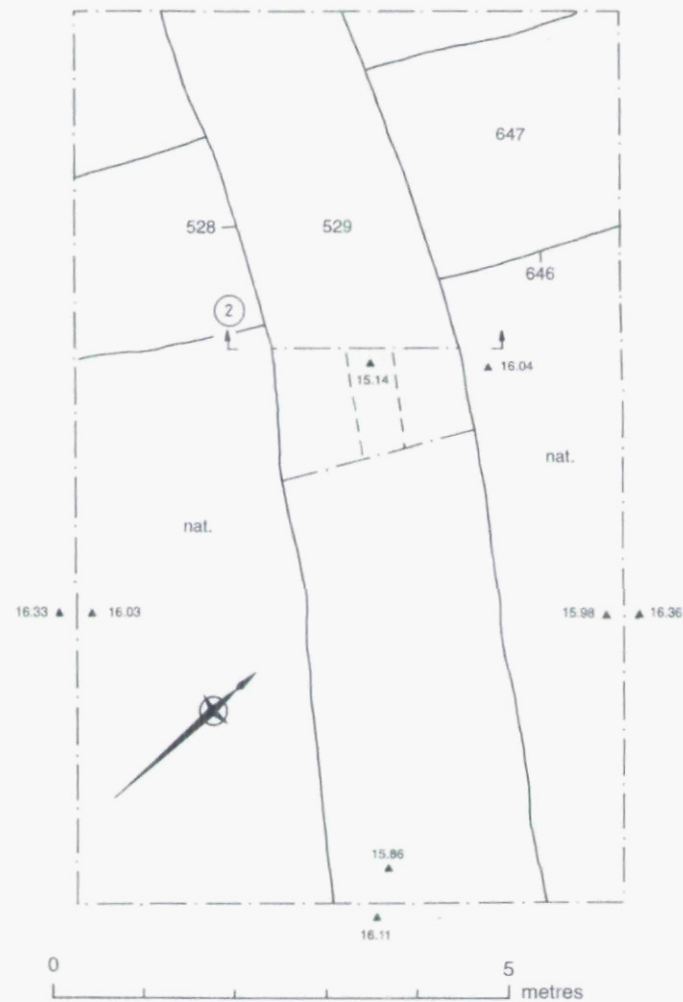
Trench A



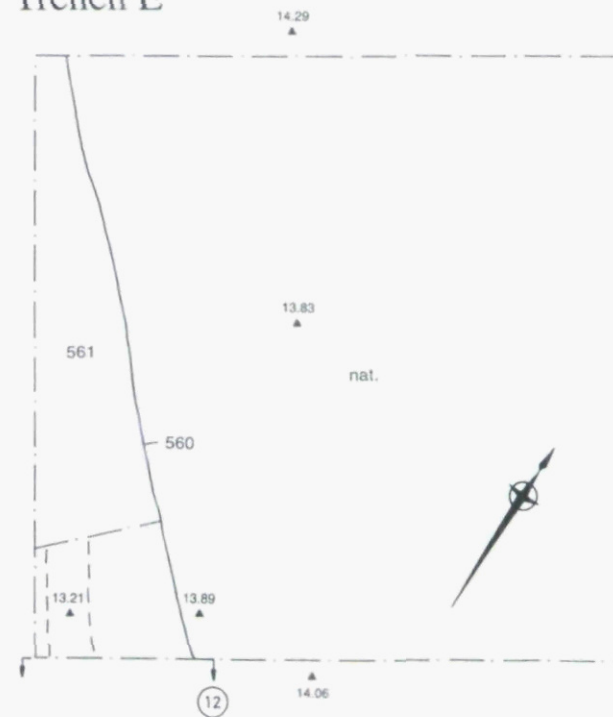
Fig. 3 Area 1. Plan of trenches A, C and D.

Area 1 Plans

Trench B



Trench E



Trench F

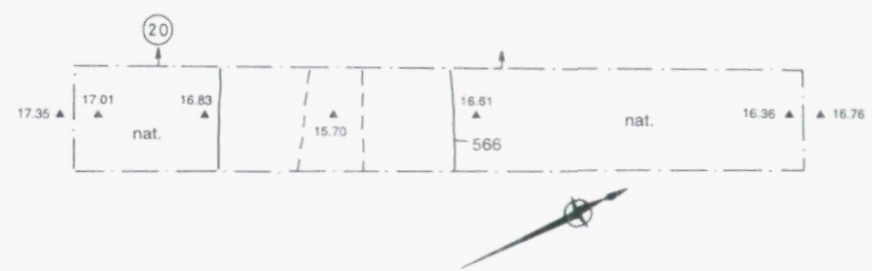


Fig. 4 Area 1. Plan of trenches B, E and F.

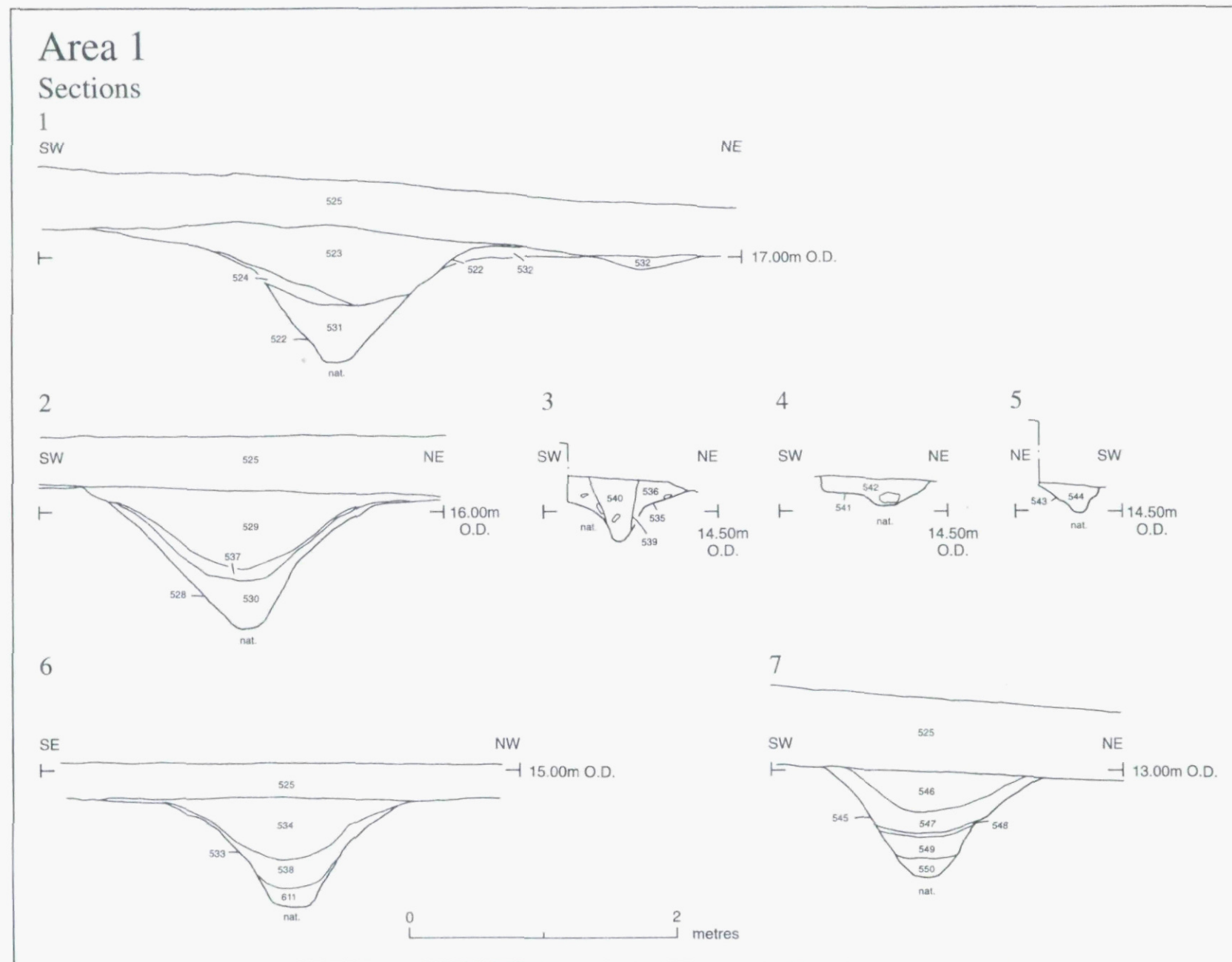


Fig.5 Area 1. Sections 1-7.

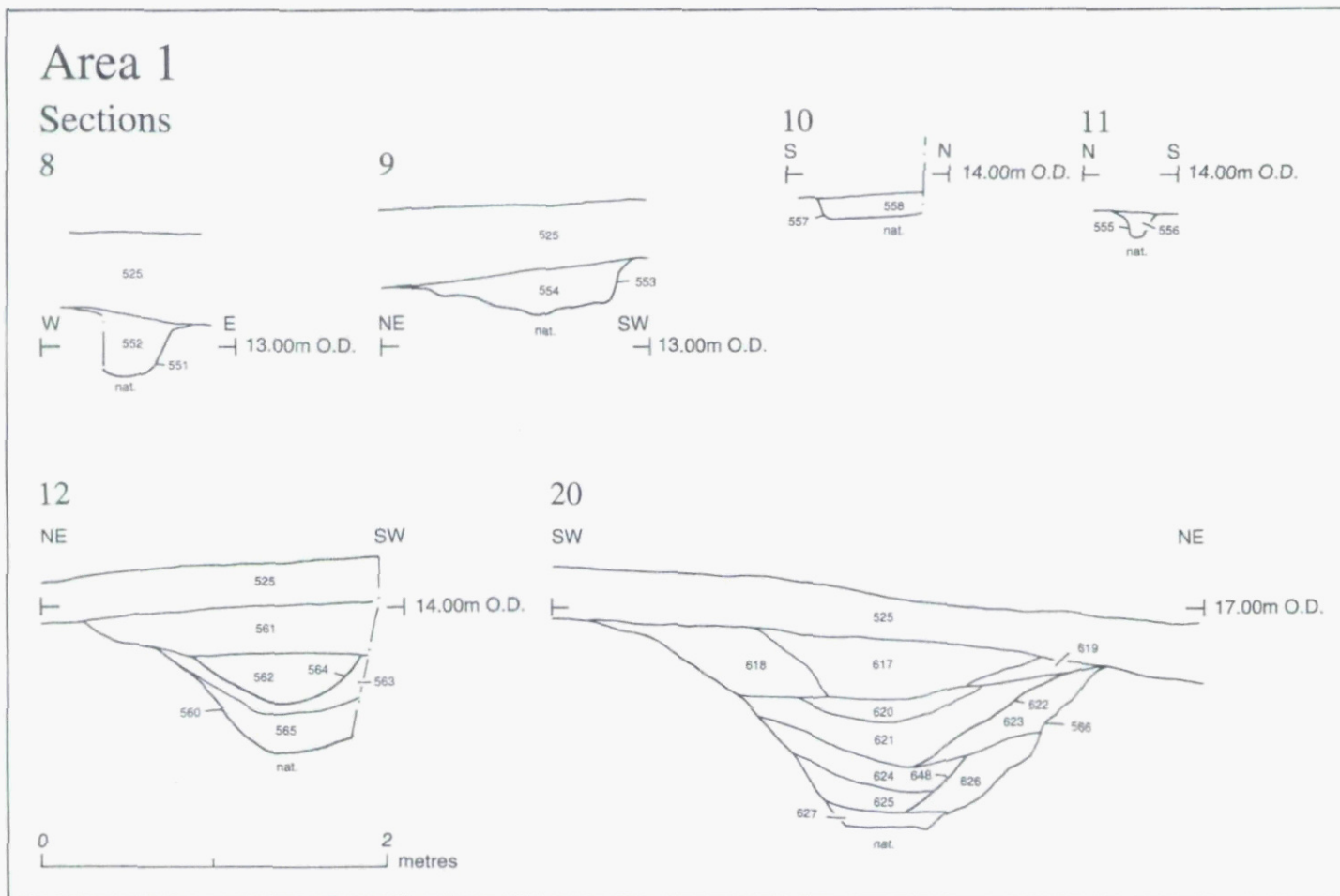


Fig. 6 Area 1. Sections 8-12, 20.

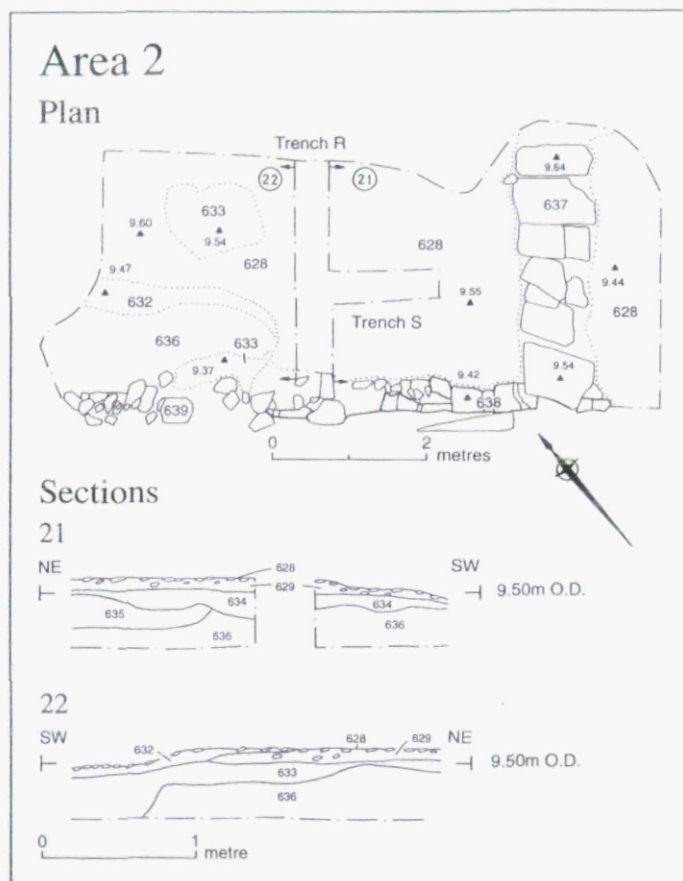
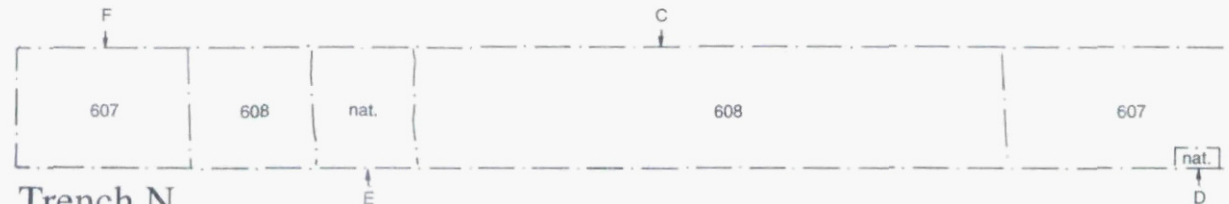


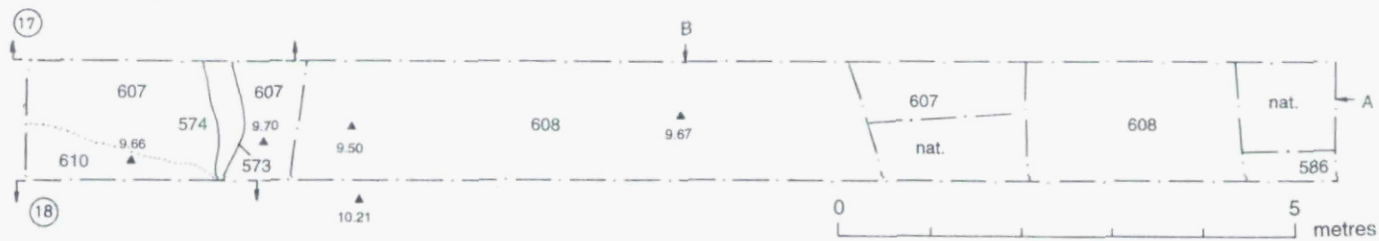
Fig. 7 Area 2. Plan and sections.

Area 3 Plans

Trench M

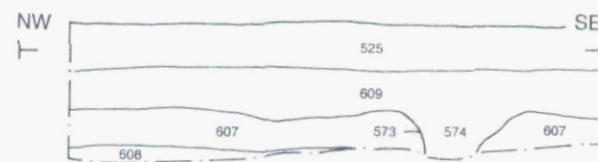


Trench N

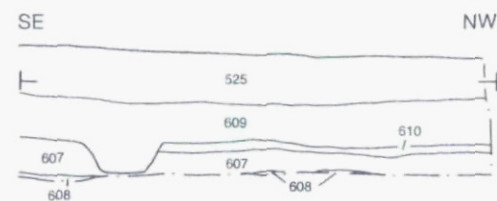


Sections

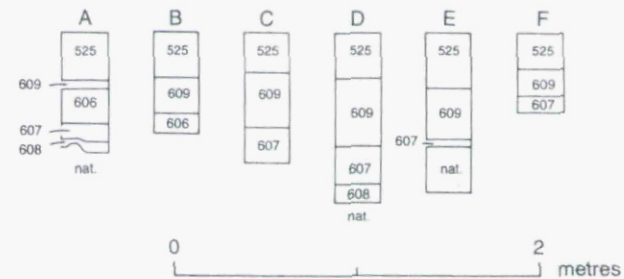
17



18



Columns



datum heights 10.00m O.D.

Fig. 8 Area 3. Plans, sections and columns.

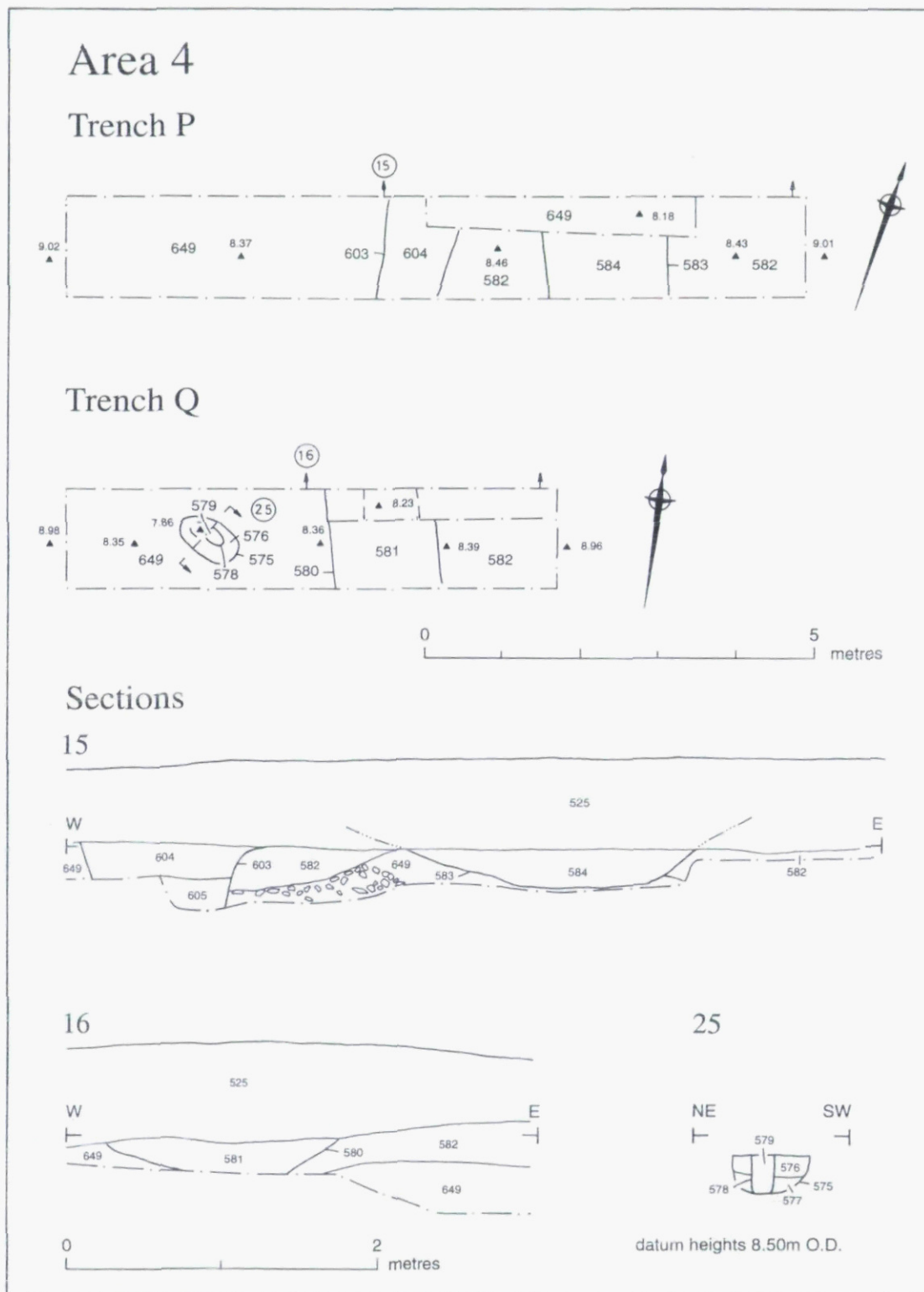
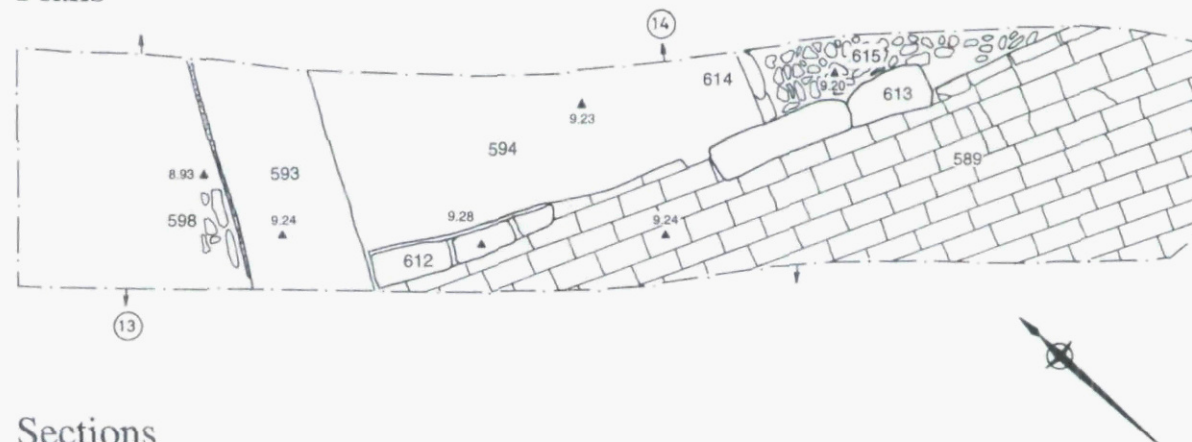


Fig. 9 Area 4. Plans and sections.

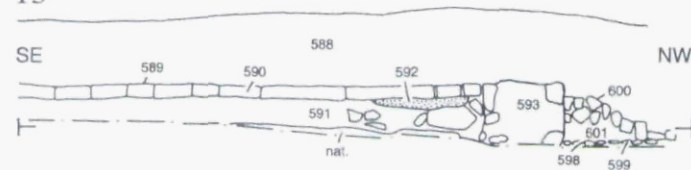
Area 5 Trench G

Plans

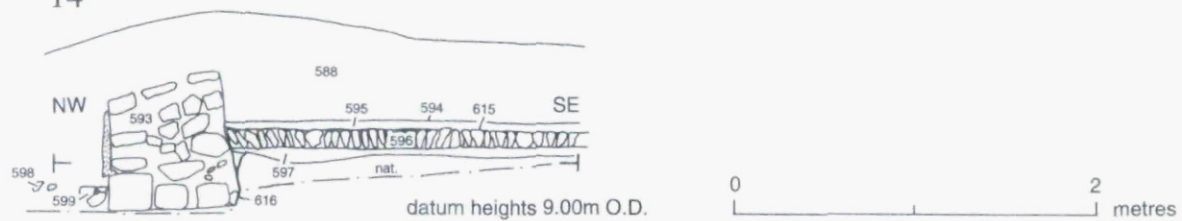


Sections

13



14

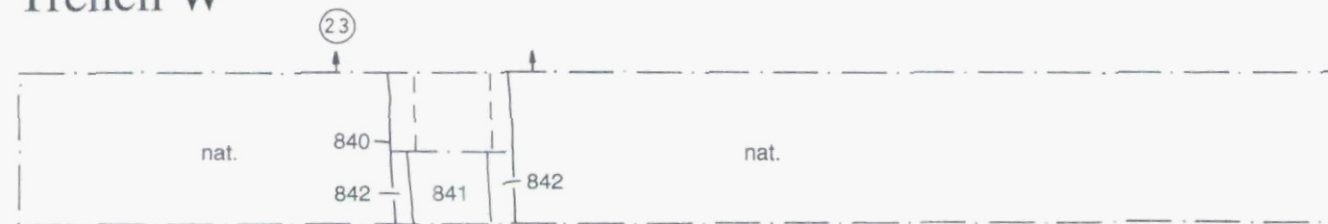


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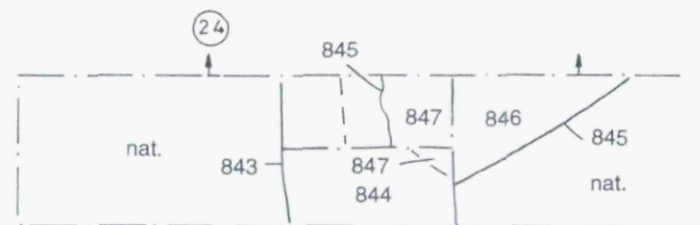
Fig. 10 Area 5. Plan and sections.

Area 6 Plans

Trench W

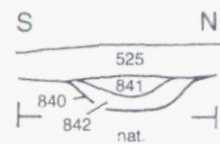


Trench X

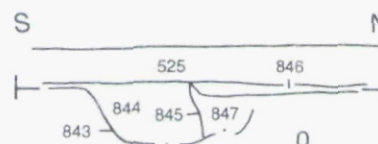


Sections

23



24



datum arbitrary



Fig. 11 Area 6. Plans and sections.