



INDEX DATA	RPS INFORMATION
Scheme Title A40 Longford to M50 (Gorsley) Improvement	Details Archaeological survey Phase 2: Over causeway.
Road Number A40-M50	Date September 1993
Birmingham University Contractor Field Archaeology Unit	
County	
OS Reference	
Single sided <input checked="" type="checkbox"/>	
Double sided	
A3 <input type="checkbox"/>	
Colour <input type="checkbox"/>	

**Birmingham University Field Archaeology Unit**

**Report No.265**

**September 1993**

**A40 Longford to M50 (Gorsley) Improvement  
Archaeological Survey Phase 2: Over Causeway**

**prepared for Parkman Consulting Engineers  
on behalf of the Department of Transport**

**by**

**P.J. Leach, FSA MIFA**

**For further information please contact:  
Simon Buteux (Manager), Peter Leach or Iain Ferris (Assistant Directors)  
Birmingham University Field Archaeology Unit  
The University of Birmingham  
Edgbaston  
Birmingham B15 2TT  
Tel: 021 414 5513  
Fax: 021 414 5516**

**A40 Longford to M50 (Gorsley) Improvement  
Archaeological Survey Phase 2 Over Causeway**

**CONTENTS**

1.00	Introduction .....	1
2.00	Background .....	1
3.00	The Site.....	2
4.00	Method .....	2
5.00	Results .....	3
6.00	Interpretation .....	4
7.00	Recommendations.....	5
8.00	Acknowledgements .....	5
9.00	References.....	6

**Figures**

Fig. 1	Location Map
Fig. 2	Archaeological evaluation trenches
Fig. 3	Section and Profile through Trench C, Dock Branch Railway and Over Causeway

## **A40 Longford to M50 (Gorsley) Improvement Archaeological Survey Phase 2 Over Causeway**

### **1.0 Introduction**

This report documents an archaeological assessment at Over Causeway, Gloucester by BUFAU for Parkman Consulting Engineers on behalf of the Department of Transport in September 1993. The project was undertaken on the basis of recommendations arising from an earlier 'desk top' study of the locality (Dingwall 1993), as a contribution towards a study of River Severn flood mitigation options (Parkman 1993).

The Phase 2 site evaluation involved trial trench excavations across the suspected line of a Roman and medieval road and causeway. The results are documented as follows, and no further archaeological investigation or preservation option should apply here in the event of the removal of a section of the Over Causeway and Dock Branch Railway as proposed.

### **2.0 Background**

Studies in connection with the A40 Longford to M50(Gorsley) Improvement scheme have recommended the removal of a section of the Over Causeway and Dock Branch Railway as a contribution towards the mitigation of flooding in this part of the Severn floodplain (Parkman 1993). To assess the archaeological implications of such proposals a 'desk top' study was commissioned from BUFAU early in 1993.

Arising from this came a recommendation that further assessment was required to test the site's potential for the preservation of buried archaeological features. Specifically, was the possibility that remains of the Roman and medieval road and causeway linking Gloucester to the ancient crossing point of the River Severn at Over could be affected by the removal of the 19th-century road and railway embankments (Fig.1).

To test this hypothesis it was proposed in the 'desk top' assessment that trial trenches should be cut and recorded, primarily across the Dock Branch Railway line (Dingwall 1993, 4.2). In documenting that procedure this report represents a second phase of archaeological assessment for this site, from which more informed recommendations can be made.

### 3.0 The Site

The historical and archaeological context for the locality is reviewed in the initial report (op cit). To reiterate briefly the specific potential: the Roman and medieval western route to and from Gloucester approaches the original crossing point of the River Severn Western Channel here, its alignment suggesting that it coincides with the southern end of the embankments proposed for removal in flood mitigation works. No surface evidence of this ancient route survives in the area today, but the 19th-century road and rail embankments may have preserved beneath them some remains of earlier roads and causeways. To evaluate this hypothesis trial trenching was proposed which would seek to establish the presence, context, condition and age of any remains relating to former roads, buried landsurfaces, or other archaeological evidence in the area.

### 4.0 Method

Three mechanically excavated trenches were located along the western edge of the Dock Branch Railway embankment (Fig.2). Initially, the intention was to extend the trenches further east to section the full width of this embankment and the western edge of the road causeway. In the event this procedure was modified to avoid undermining a surviving length of track and services alongside it on the east side of the railway. Furthermore, it became evident as machine excavation progressed that the depth and structure of the embankment would render the original excavation strategy impracticable and that the evidence required to test the archaeological hypothesis was probably obtainable from the three trenches as cut.

The depth of deposits encountered necessitated the stepping of trench sides during excavation for safety of access and recording. The latter involved some hand definition and cleaning of features and the deposit sequences encountered, and the creation of written, surveyed, and photographic records of that evidence - the archive from which this report is drawn

The fieldwork was undertaken within a period of one week between 6th and 10th September 1993, in accordance with an Indemnity issued by the site owners - British Rail, and safety policies laid down by the University of Birmingham and Parkman Consulting Engineers. Backfilling and reinstatement of the excavations has been accomplished in accordance with the programme originally agreed.

## 5.0 Results

Three trenches were excavated with a JCB mechanical excavator; from north to south identified as A,B and C (Fig.2). Each was commenced from the bottom or lower part of the west railway embankment slope, terminating in the track bedding between 2 and 6m west of the remaining section of line. At this point up to 4m depth of deposit was exposed in each trench, reducing to 2m or less westwards down the embankment slope. Each trench was stepped down along its south side for safety and to facilitate access. In each trench the main north section was recorded along with other features encountered and exposed. Broadly speaking, the sequence of deposits and events interpreted for each trench was the same (Fig.3).

Groundwater was encountered at approximately 7.20m AOD, at which point excavation was halted. The base deposit here was a stiff gleyed silty clay, mottled grey and buff-brown and of unknown depth. This was identified as layers 1006, 2004 and 3003 in Trenches A,B and C, respectively, and appears to be a naturally deposited alluvium. Above or penetrating this deposit were features or deposits which appear to be elements of the railway embankment.

Trench A extended furthest to the east across the railway embankment, revealing the west face of a coursed stone wall foundation (F 1) aligned approximately N.-S. at its east end. The full width and depth of this feature was not exposed but banked against it to the west was a dump of well consolidated silty clay (1005), up to 2m. thick but thinning to the west, and containing occasional fragments of brick and slag. Above this and sealing also the top of the wall foundation were up to 1m. of deposits, including brick and slag rubble, coal, track ballast and humic soil.

In Trench B two sections of wall foundations were revealed, both aligned approximately N.-S., of drystone construction and 1m. wide. That to the west (F 3) was roughly built, c 1m. high and apparently set into the underlying natural alluvium. Between this and a second wall to the east was a deposit of dumped, silty clay (2001) up to 2m. thick and continuing eastwards beneath the railway embankment for an unspecified distance. Into this clay was set a more substantial wall foundation (F 2), over 1.5m. high and built of coursed Lias limestone blocks and stone rubble. Both walls and the clay dump were again sealed beneath deposits of stony rubble with brick, slag, coal, track ballast and humic soil, up to 1m. thick.

The third and largest trench (C), south of B, also exposed two sections of wall foundations, neither of which were cut through. The more substantial of these (F4) was aligned approximately N-S. across the trench, comprising a 1m. wide and over 1.3m. high structure of well dressed and closely fitted sandstone blocks with mortar bonding. The base and inner east face of this wall were not seen. To the west a dump of silty clay with occasional brick and slag fragments (3002) abutted and sealed the wall, merging indistinctly into the natural alluvium beneath and beyond. At a higher level to the east was exposed the west face of a massive mortared brick foundation (F5) less than 1m. high, aligned approximately N.-S., but otherwise of unknown extent. This feature was buried beneath deposits of claysoil and rubble and humic stony soil up to 1.5m. deep, which spread down the embankment westwards to seal the dumped clay and earlier wall foundation.

No portable finds or artefacts have been kept from this evaluation, but identifiable material of 19th-century or more recent date, including brick, tile, glass, ceramic and metal were associated with almost every deposit encountered in the three trenches. The notable exception was the natural alluvial clay, sterile of artefacts and structurally quite different from other contexts.

#### 6.0 Interpretation

From the evidence recorded in all three trenches it was apparent that the only evidence of manmade structures to survive in this area relate to the construction and operation of the Dock Branch Railway. Natural alluvium was reached in the base of each trench, and no finds or remains which seem to pre-date those of the railway were apparent. From the admittedly incomplete information obtained, construction of the railway embankment was clearly a substantial piece of engineering. At least two parallel lengths of buried wall were set along the western edge of the embankment, to be infilled and buried with 2m. or more of redeposited clay. The outer wall is represented by F3 and F4 in Trenches B and C, and the inner by F2 in B, although this was not seen in Trench A. The wall F1 in that trench may represent another line of walling further to the east beneath the tracks. The dumped clay and the wall foundations were evidently set well down into the horizon of natural alluvium although no clear cut can now be traced. It is clear, for example, that the wall foundations in Trenches B and C at least, were set at a level well below the present surface of the alluvium beneath the osier beds immediately to the west (Fig 3).

At the time of its construction it was doubtless apparent to the Victorian engineers that the Dock Branch Railway would require very firm foundations across an alluvial floodplain subject to regular periodic inundation. The structures encountered in this evaluation were evidently designed for this purpose and set well down into the pre-existing land surface. In these circumstances any earlier structures or deposits will almost certainly have been erased, accounting for the absence of such evidence in the evaluation trenches. Although trenching could not be extended across the full width of the railway, the evidence along its western edge suggests that the scope and effect of the foundation works would apply throughout. It was not possible to examine any of the structure of Telford's road causeway just to the east but it is possible that a similar procedure could have destroyed the remains of any earlier causeway beneath; or at this point, where Telford's Over Causeway diverges away to the north, used any earlier remains as a quarry. Whatever the exact course of events, the effect here appears to have been a total destruction of pre-19th century structures or levels (excepting those of natural origin) beneath the Dock Branch Railway.

#### **7.0 Recommendations**

- i) In the absence of evidence for the survival of remains relating to pre-19th century roads/causeways or other archaeology, the proposed removal of a section of the Dock Branch Railway and Telford's Over Causeway should have no significant effect on known archaeological resources.
- ii) No further archaeological investigations or procedures for mitigating the effects of this removal appear to be required here, however, provision should be made for an archaeological watching brief and any necessary recording at the time of removal. The absence of significant archaeology, as demonstrated in this assessment, does not guarantee that such remains are totally absent.

#### **8.0 Acknowledgments**

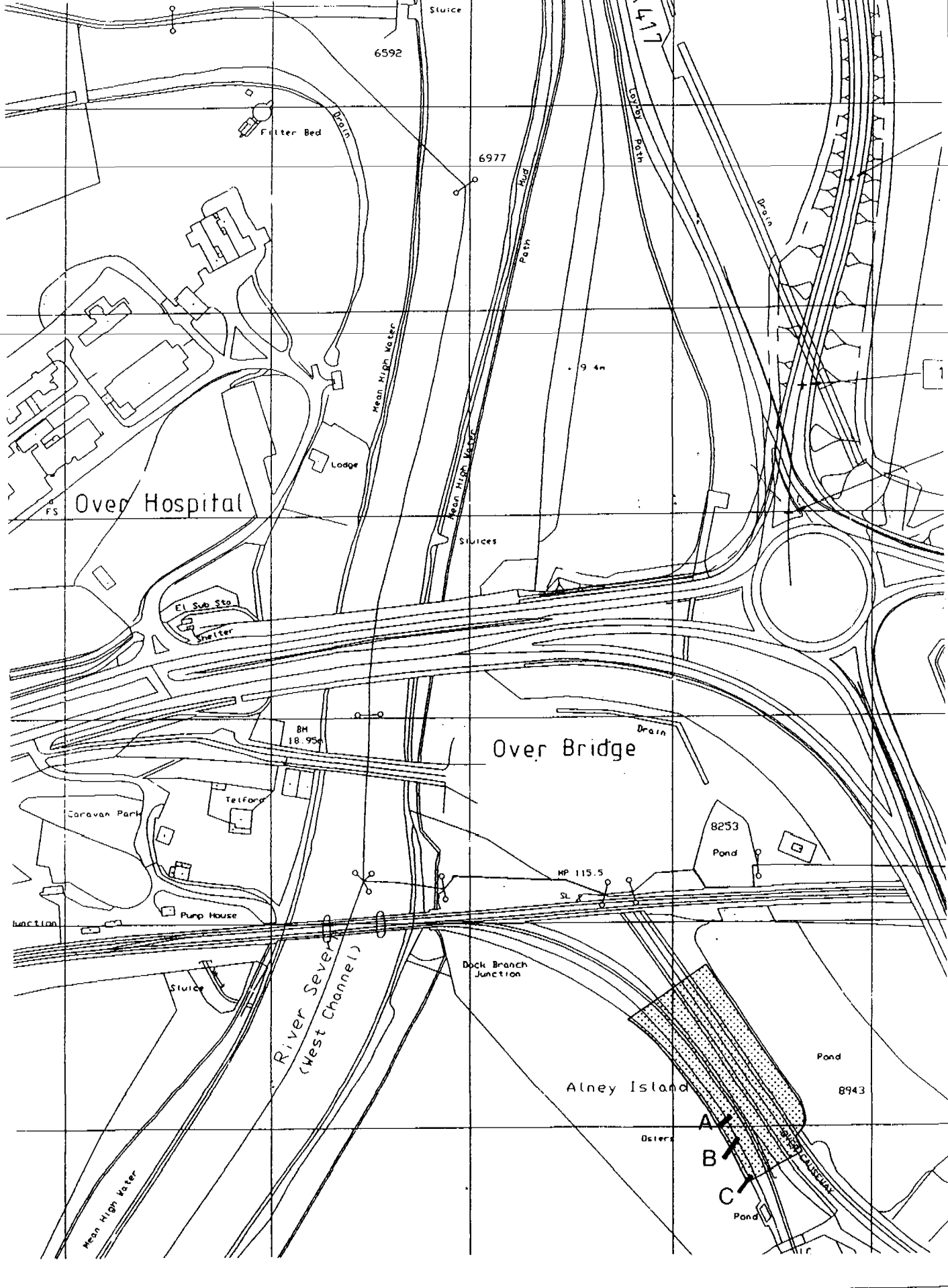
For liason and support we are grateful to Mathew Anderson, Parkman Consulting Engineers; Derek Brown, Gloucester City Council; and Peter Kyrsta, British Rail; and to O'Connor Plant Hire, Cheltenham for excavation and reinstatement. The project was overseen by Peter Leach and directed in the field by Rebecca Roseff with the assistance of Amanda Bennett, Mark Hewson and Mark Williams (BUFAU). The report was produced by Mark Breedon (illustrations) and Ann Humphries.



9.0 References

Dingwall 1993 *Archaeological Survey Phase II River Severn Mitigation Measures, Alney Island, Gloucester*. BUFAU Report no 245.

Parkman 1993 *Working Paper Severn Floodplain Crossing Mitigation Options* Report no 3554/OR/43a.



AREA TO BE REMOVED



TRIAL TRENCHES

Figure 1

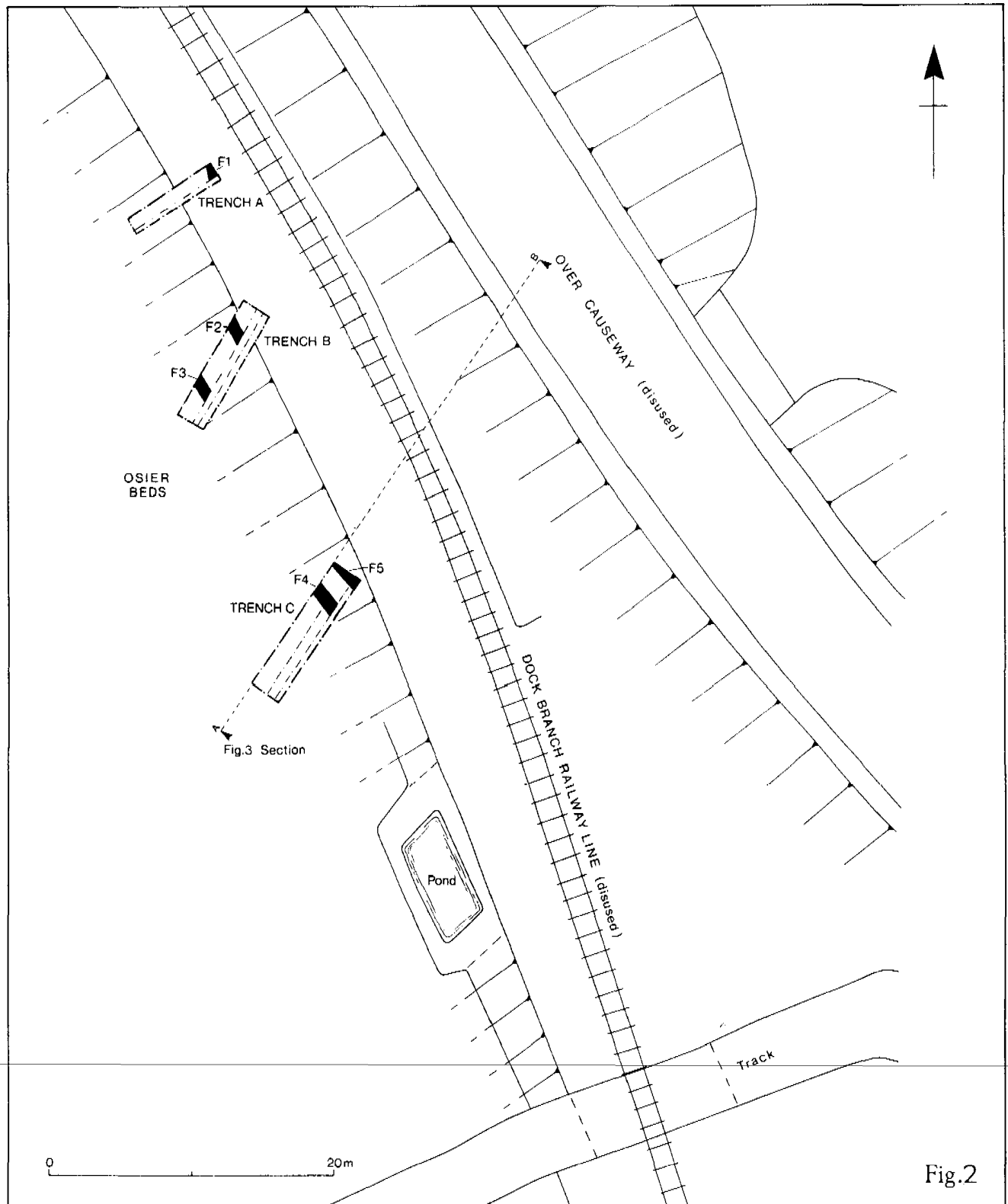


Fig. 2

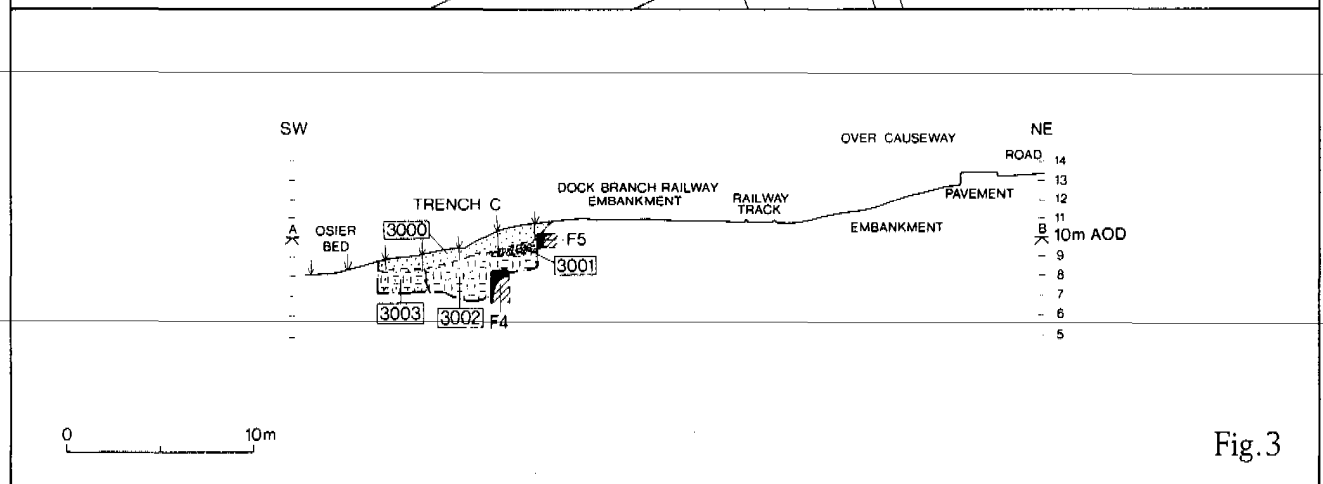


Fig. 3