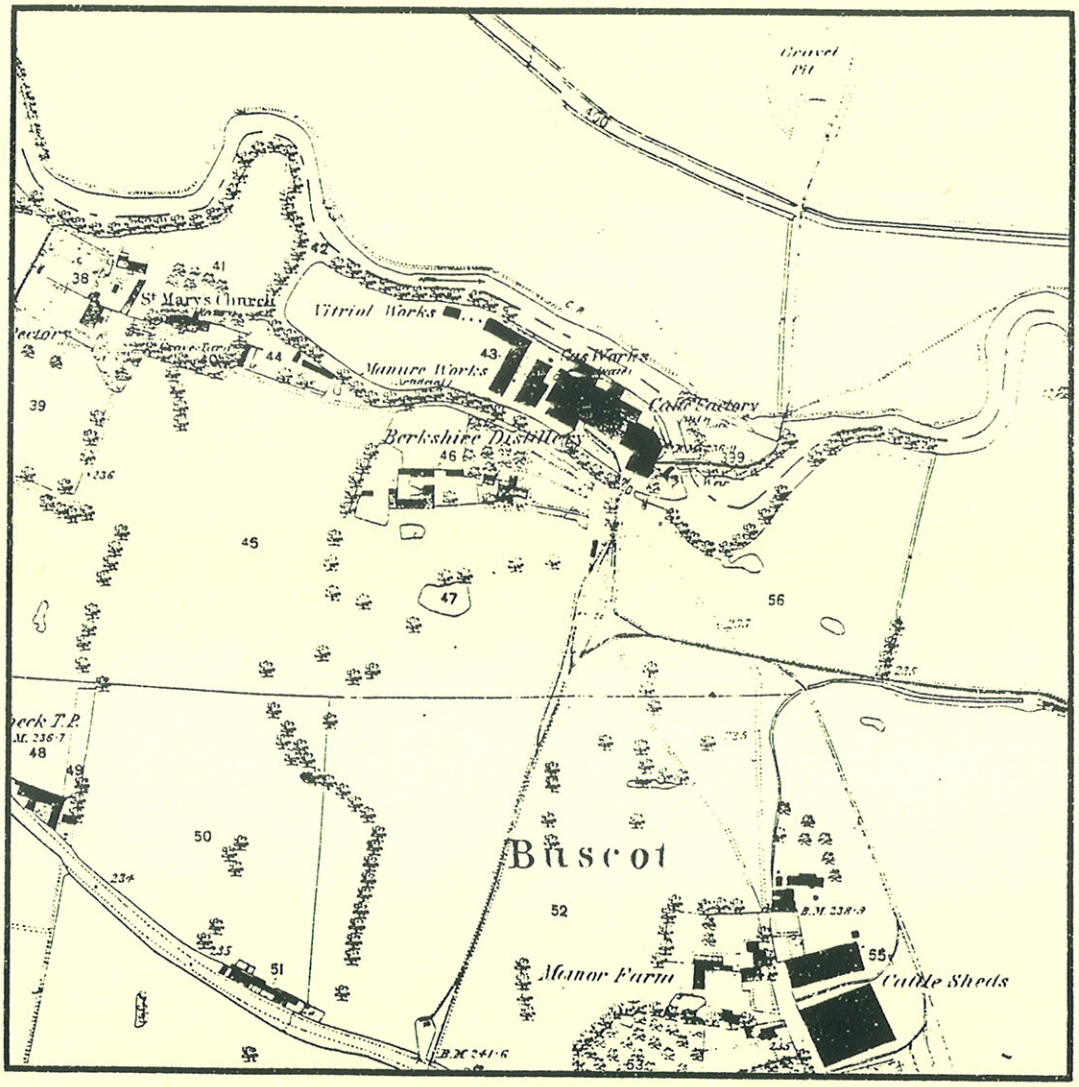
BUSCOT TO FARINGDON WATER MAIN

ARCHAEOLOGICAL WATCHING BRIEF



OXFORD ARCHAEOLOGICAL UNIT

BUSCOT TO FARINGDON WATER MAIN

INTRODUCTION (Fig. 1)

The Buscot to Faringdon pipeline runs for just under 8km. A watching brief was undertaken by the Oxford Archaeological Unit when work was in progress from September to November 1992.

The work was commissioned by Thames Water Utilities Ltd and undertaken to a project design agreed with the Assistant County Archaeologist for Oxfordshire, the Project Engineer and the Archaeologist for Thames Water Utilities Ltd.

STRATEGY

The aim of the watching brief was to establish, investigate and record, the presence or absence of archaeological remains along the working strip of the pipeline. Initially areas near to known archaeological sites were identified and any earthwork features were located in the field.

The stripping of topsoil within the working strip was observed to recover any significant finds from the topsoil and to locate any archaeological features. The stripping was undertaken with a 360° machine equipped with a grading bucket. Linear features were either sample excavated or recorded when the pipe trench cut through them. If discrete features were located these were excavated prior to pipe trenching. Where an earlier ploughsoil was observed and not removed during topsoil stripping, residual finds scatters were looked for and where possible the area was observed during pipelaying. The earlier ploughsoils could have masked underlying archaeological features.

Where there was no topsoil stripping and the pipe was laid straight into the pipe trench the work was observed as it proceeded.

At the W end of the pipeline, Trench 1 was hand dug to locate remains of the victorian waterwheel at Buscot weir.

The pipe trench was generally between 1.00m and 2.00m in depth and between 0.30m and 0.50m in width. The pipes were bedded on and partly covered with fine gravel before the trench was backfilled. Between Faringdon sewage works and Folly Hill reservoir a 12 inch PVC pipe was used. For the section between Faringdon sewage works and Buscot a 6 inch PVC pipe was laid. The width of the easement varied but was generally about 21m and the area of topsoil stripping was generally 10m wide.

TOPOGRAPHY

The geology along the route was predominantly Oxford Clay. At the W end at Buscot the clay is overlain by 1st Terrace gravel at about 71.50m OD. At the E end the pipe rises steeply up the Faringdon scarp which is composed of Lower Corallian limestone. Here the pipeline joins the Faringdon Folly reservoir pipe at 135m OD.

ARCHAEOLOGICAL BACKGROUND

When the proposed route was known consultation between Thames Water Utilities Ltd and the County Archaeological service identified Buscot deserted medieval village (PRN 7535) and a medieval fishpond PRN (12021) N of Faringdon as known areas of archaeological interest affected by the pipeline. At Buscot the pipe trench followed the existing track to reduce impact. To avoid the medieval fishpond the pipeline was moved to the W.

Buscot weir

The area N of the river Thames around Kelmscot is particularly dense in cropmarks. At Buscot Wick a dense area of the cropmarks include a sub-rectangular enclosure (PRN 1410) and the site of a NW-SE orientated Neolithic cursus. The lack of cropmarks around Buscot is probably partly an indication of areas recently under permanent pasture and therefore not receptive to aerial photography.

Earthworks between the present village of Buscot and the isolated 12th-century church, mark the site of the medieval village (PRN 7535). Pottery from fieldwalking has been mainly from 12th to the 14th century in date, concentrated at SU 2265 9785. Romano-British 2nd-century coarse grey ware has also been located from this area.

A Constantine I '*follis*' was also found at Buscot weir and two grey ware jugs were dredged from the weir (PRN 7952).

The most notable 13th to 14th-century group was found within the bank of Buscot weirpool, eroding from a ditch or old stream bed.

In 1859 Robert Campbell bought the Buscot Park estate. Between 1863 and c.1876 the Buscot Park estate was one of the most industrialised farms in 19th-century England. A reservoir to irrigate the 3500 acre (1416 hectare) estate was fed by pumps driven by waterwheels on the Thames; one at Buscot lock with a single wheel and another at Hart's weir, Eaton Hastings, with twin waterwheels. At Buscot lock the industrial complex included a distillery to distil spirit alcohol from sugar beet, an oil cake mill, gas works, vitriol works, and artificial fertiliser works. The sugar beet was brought to the distillery by over 6 miles of narrow-gauge railway. The estate was also equipped with its own telegraph system. The schemes failed partly due to being over-capitalised. By 1879 the complex had gone, much of it dismantled and sold. The estate itself was eventually sold in 1887.

Much of the existing village was built as a model village in 1897.

The waterwheel at Buscot lock stayed in use supplying water to the estate reservoir and to the village. The waterwheel was replaced in 1935 by a reconditioned water turbine, *c.*1880 in date. The turbine is no longer working but is still housed in the existing weatherboarded building roofed with 'roman'- tiles reused from the estate.

BIBLIOGRAPHY

Gray, J.R. (1971) 'An Industrial Farm Estate in Berkshire', *Industrial Archaeology* 8, pp175-185

Mellor, M. & Wilson D.G. (1986) 'Buscot, Oxon Medieval Settlement', *Oxoniensia* 51, pp197-198

RESULTS

TRENCH 1: BUSCOT WEIR (7.40m) (Fig. 2, 3, 4)

On 13th and 14th of October 1992 a small-scale investigation for Thames Water Utilities Ltd was carried out near Buscot lock, along the proposed route of a water service pipe at SU 22964 98032. The site was within the Buscot Park estate, owned by the National Trust.

An E-W trench 7.40m long and 0.50m wide was dug by hand, from the road to a water stop tap adjacent to the turbine hut. This trench formed the proposed route of a one inch water service pipe. The ground surface was much lower half way along the trench so the depth varied from 0.90m at each end to 0.60m mid-way.

Existing remains:

The cast iron waterwheel has been removed but the feeder channel and brick walls of the tail race remain as well as the turbine which replaced the waterwheel. Large limestone blocks have been used where the wheel was supported or mounts for machinery were needed. Wear on the limestone blocks and stains on the brickwork from the wheel rim show where the wheel was positioned.

At the E end of the trench, 0.32m below the present ground surface a solid brick wall (11) was located. The wall was 0.73m thick orientated N-S, at right angles to the tail race wall. The bricks and construction of the brickwork appeared identical to that of the tail race. The bricks varied slightly in size but most were 0.23m x 0.11m x 0.08m. Each brick had no frog but 21 holes running through the bed, 13mm to 14mm in diameter, positioned in three rows of seven.

On the W side 0.56m of the wall was exposed. The bottom of the wall was not located as it was beyond the required depth of the trench. The thickness of the wall was equivalent to three brick lengths. Only on the W side could a sequence of courses be observed clearly. The W side consisted of English bond (course of headers followed by a course of stretchers). On the E side the top course was a stretcher followed by two headers. Running along within the middle of the wall was a row of headers. The southern half of the wall was 0.55m below the present ground surface. Within the brickwork was a solid iron rod 0.04m in diameter; once vertical, but when found it was bent flat onto the wall, presumably when the wall was demolished. On the E face of the wall there were patches of a dark grey render, probably plaster.

The wall was overlain by rubble layers (8) and (9). Layers (12) and (13) abutted the wall. Layer (12) consisted of 'clean' gravel and (13) was a grey clay with occasional brick fragments identical to those in wall (11). Both layers extended at least 1.3m W of the wall.

The deposits (2), (3), (5), (6) to the W of (12) were a sandy silt with a high percentage of gravel and occasional lumps of clay. The gravel and clay probably derived from the truncation and reworking of layers (12) and (13).

FINDS FROM TRENCH 1

The finds from the trench were all modern, mainly brick; a representative sample was kept. All the finds from the demolition layer (8) were kept. Layer (8) contained six fragments of decorated white ceramic wall tile. The tiles had a raised relief design possibly representing two separate types of tile. Various letters are evident on the back of the tiles (M?NTON H?LINS) suggesting they were made by 'Minton Hollins & Co' of Stoke-on-Trent. Some of the plaster adhering to the tiles appeared identical to that seen on the E side of wall (11).

Layer (8) also produced a fragment of slab marble and three fragments of worked oolitic limestone. One limestone fragment has three flat smooth sides with what appears to be a square hole through it. The other two fragments fit together to form a complete ashlar block smooth on all faces: 0.28m in length and 0.06m wide and 0.048m in depth. These limestone architectural fragments could possibly be part of a window surround.

INTERPRETATION

The type of bricks and manner of construction suggest wall (11) was contemporary with the construction of the waterwheel *c.*1863. The 1st edition 25in OS map, surveyed in 1876, shows a building on the S side of the waterwheel approximately six metres by three metres. It also appears on the 1923 OS map. This is certainly the pump house associated with the waterwheel. The brick wall (11), located in the trench would correspond to the W wall of the pump house. The purpose of the iron rod within the wall is not clear but could possibly be a type of mount within the wall. The white wall tiles and architectural fragments are certainly part of the victorian pump house.

BUSCOT WEIR TO LECHLADE ROAD (*c.*550 metres) (Fig. 1)

Along this stretch the pipe trench was cut along the edge of the road so topsoil stripping was unnecessary. Apart from an earlier well constructed cobbled track (30) under the modern road the only features where two similar features probably pits, (33), (35). Both features had near-vertical sides and the bottoms extended deeper than the pipe trench. The features produced no finds. 'Pit' (33) had an earth and limestone fill with clay around the edges. Both 'pits' cut a soil (31), which pre-dates the track (30). The exact nature of these two features was not clear in a trench only 0.30m wide. The only other deposits were coal dust and rubble near to the hand dug trench which were probably contemporary with the Robert Campbell's industrialisation.

BUSCOT TO STEP FARM COTTAGES (*c.*4560 metres) (Fig. 1)

E of Buscot an easement about 900m in length was placed some way into the field to minimize any impact on a line of trees. This area was visited by Hugh Coddington (Deputy County Archaeologist), who noted the absence of any archaeological features.

Running along the Lechlade road the remainder of this stretch of pipeline was laid on the verge of the road straight into a pipe trench, so topsoil stripping was unnecessary. Due to the likely detrimental impact on any archaeological deposits of past works associated with the road this area was not observed.

STEP FARM COTTAGES TO RADCOT ROAD (*c.*1860 metres) (Fig. 1)

This stretch of pipeline had a fenced easement and the topsoil was stripped before the pipe laying.

Two areas of ridge and furrow (20) and (22), were observed within the easement. They were also visible in the field beyond the easement. The furrows (20) were six metres wide from centre furrow to centre furrow. The furrows (22) were eight to nine metres apart. All of the furrows produced post-medieval finds suggesting a late date or subsequent ploughing out of medieval ridge and furrow. The area E of (22) was disturbed by earlier pipelaying associated with the old 14 inch pipe which at this point lies parallel to the new pipe.

Various other features were seen all of them were post-medieval in date (see appendix B). An old boundary ditch (10) was orientated NW/SE, adjacent to the existing hedge. This ditch and a pipe trench (7) cut a post-medieval ploughsoil (2).

A ditch (16) was orientated NW/SE and so probably associated with the furrows (20). A ditch (18), orientated NE/SW and so probably associated with the furrows (22). This ditch could be seen as a depression continuing across the field. At the junction between (16) and (18) a section was hand dug which established ditch (16) cut ditch (18).

RADCOT ROAD TO LONDON STREET (*c.*1020 metres) (Fig 5)

The pipeline crossed the Radcot road, which is situated at approx. 77m OD. The ground rises gently for 400m and then rises steeply up the limestone scarp of Faringdon to Church Path Farm. The line then continues to the N side of London Street at 135m OD. The original proposed route took the pipe across London Street to a connection point leading from Folly Hill reservoir; this was revised to a connection point on the N side of London Street. In the area adjacent to London Street the topsoil reflected a change to the silty sand of Faringdon Hill. As the pipe did not cross the road it did not affect any peripheral features which may exist associated with the castle, of probably 13th-century date, on Faringdon Hill (PRN 3087).

The topsoil stripping along most of this section exposed an earlier post-medieval ploughsoil. The only stretch where some undisturbed natural clay subsoil was exposed, with only small patches of ploughsoil, occurred along the 230m nearest the Radcot road. Pottery was recovered from the spoil heap.

Within this area a spread of limestone was revealed, SU 28895 96220, orientated N/S across the easement. The spread was 2.80m wide and was exposed for a length of 13m .The post-medieval ploughsoil had truncated the stones on the W side. A combination of wet weather and machinery churning up the clay subsoil made a careful examination difficult. It was possible to plan a 2m wide strip and the section was observed during pipelaying. The stones formed a layer 0.07m in depth which overlaid a layer, possibly a ploughsoil, which formed a slight ridge. The limestone was similar to that seen on the Faringdon scarp and were all of a similar size typically 0.05m x 0.03m. The stone spread was not particularly dense or noticeably worn. 12th to 13th-century sherds of pottery were recovered pressed in with the stone. The stone spread was interpreted as a trackway, although due to the adverse conditions and truncation by later ploughing alternative interpretations should also be considered.

The stones within the spread appear too small to be a boundary wall although larger facing stones may have been removed. Although not a prerequisite for a boundary wall there was no sign of a construction trench. The stones could also be a dump along a boundary or within a furrow.

FINDS FROM TRACKWAY Cathy Underhill Keevill

The majority of the pottery consisted of limestone tempered sherds which have parallels in fabric OXBB in Oxford and are also known in Gloucester, described as a Minety type ware. Pottery from the Minety area has been dated the 13th century and consists mainly of tripod pitcher with a thin green glaze. A tripod pitcher base, a strap handle sherd and a glazed fragment in context (24) and (27) represent the only diagnostic sherds present and are probably examples of the main vessel type, A sandy fabric is also present which is similar to Laverstock cooking pot fabric dated also to the 13th-century.

ARCHIVE

The site archive, comprising the site records and artifacts, have been deposited with the Oxfordshire Museum Service. The artifacts have been donated by the landowners.

A Parkinson
Oxford Archaeological Unit
January 1993

APPENDIX A: CONTEXTS FOR TRENCH 1

BUSCOT WEIR TRENCH NEXT TO TURBINE HUT (BFWM 92)					
CXT	TYPE	LENGTH	WIDTH	DEPTH	COMMENTS
1	Layer			0.05	Turf and topsoil
2	Fill			0.33	Modern
3	Fill			0.40	Modern
4	Cut		0.90	0.75	Modern. Filled by 2 & 3.
5	Fill			0.35	Recent
6	Fill			0.35	Recent
7	Layer			0.11	New ground level after demolition of 11
8	Layer			0.14	Rubble from demolition of 11
9	Layer			0.15	Part of rubble deposition
10	Layer			0.12	Coal
11	Wall	1.68+	0.73	0.56+	Victorian Pump house wall
12	Layer			0.56	Clean gravel probably contemporary with wall 11
13	Layer			0.11	Clay layer probably contemporary with wall 11
14	Layer			0.56m	Recent dump layer
15	Cut	4.60		0.70	Modern disturbance filled by 5 & 6
16	Cut			0.32	Construction trench cut
17	Fill			0.32	Fill of construction trench

Measurements in metres

APPENDIX B: CONTEXTS FOR PIPELINE

CONTEXTS FOR FARINGDON BUSCOT PIPELINE (FBPL 92)					
CXT	TYPE	LENGTH	WIDTH	DEPTH	COMMENTS
1	Layer			0.30	Topsoil fields 1 (SU 24730 96550) + Field 2 (SU 27600 96700)
2	Layer			0.50	Post-medieval ploughsoil fields 1 + 2 (contains blue china)
3	Layer			0.05	Post-medieval lens of burnt clay
4	Cut	0.30	0.30	0.20	Filled by 5, post-medieval, doubtful posthole possibly a burrow
5	Fill			0.20	Fill of 4
6	Fill			0.60	Fill of 7
7	Cut		0.60	0.60	Filled by 6, trench for lead pipe, recent
8	Layer			-	Natural Clay
9	Fill			0.80	Fill of 10
10	Cut		1.80	0.80	Filled by 9, NW/SE, with drainage pipe running along it, post-medieval ditch probably recent. Runs along hedge dividing field 1 & 2.
11	Fill			-	Natural clay
12	Layer			0.10	Topsoil field 3
13	Layer			0.20	Post-medieval ploughsoil field 3 (SU 27740 96800)
14	Layer			-	Natural subsoil? field 3
15	Fill			0.14	Fill of 16
16	Cut		1.00	0.14	Filled by 15, post-medieval NW/SE boundary ditch in field 3.
17	Fill			0.18	Fill of 18
18	Cut		1.20	0.18	Filled by 17, post-medieval boundary ditch associated with ridge and furrow in field 3.
19	Fill			0.10	Collective fill of NW/SE orientated furrows (SU 27660 96780)
20	Cut		1.20	0.10	Collective cut for NW/SE orientated furrows
21	Fill			0.10	Collective fill for NE/SW orientated furrows (SU 27760 96800)
22	Cut		1.20	0.10	Collective cut for NE/SW orientated furrows
CONTEXTS FOR TRACKWAY AND FIELD EAST OF FARINGDON RADCOT ROAD					

CONTEXTS FOR FARINGDON BUSCOT PIPELINE (FBPL 92)					
CXT	TYPE	LENGTH	WIDTH	DEPTH	COMMENTS
23	Finds			-	Approx. Grid ref. 288/963
24	Layer	13.00	2.80	0.07	Limestone Trackway
25	Layer			0.20	Ploughsoil overlaid by trackway
26	Layer			0.05	Redeposited clay
27	Layer	13.00	2.80	0.07	Limestone Trackway same as 24
CONTEXTS FOR PIPELINE BETWEEN BUSCOT VILLAGE AND BUSCOT WEIR					
28	Layer			0.28	Modern tarmac road
29	Layer			0.25	Makeup for modern tarmac road
30	Layer			0.16	Cobbles for earlier road
31	Layer			0.32-0.50+	Pre-Victorian ground surface
32	Layer			0.06	Natural subsoil
33	Cut		2.97	0.34+	Pit?
34	Fill			0.34+	Fill of 33
35	Cut		2.84	0.39+	Pit?
36	Fill			0.39+	Fill of 35
37	Layer			0.20	Concrete spur road
38	Layer			0.19	Makeup for 37
39	Layer			0.04	Layer of coal dust
40	Layer			0.13	Layer of demolition rubble

Measurements in metres

Route of Buscot to Faringdon water main

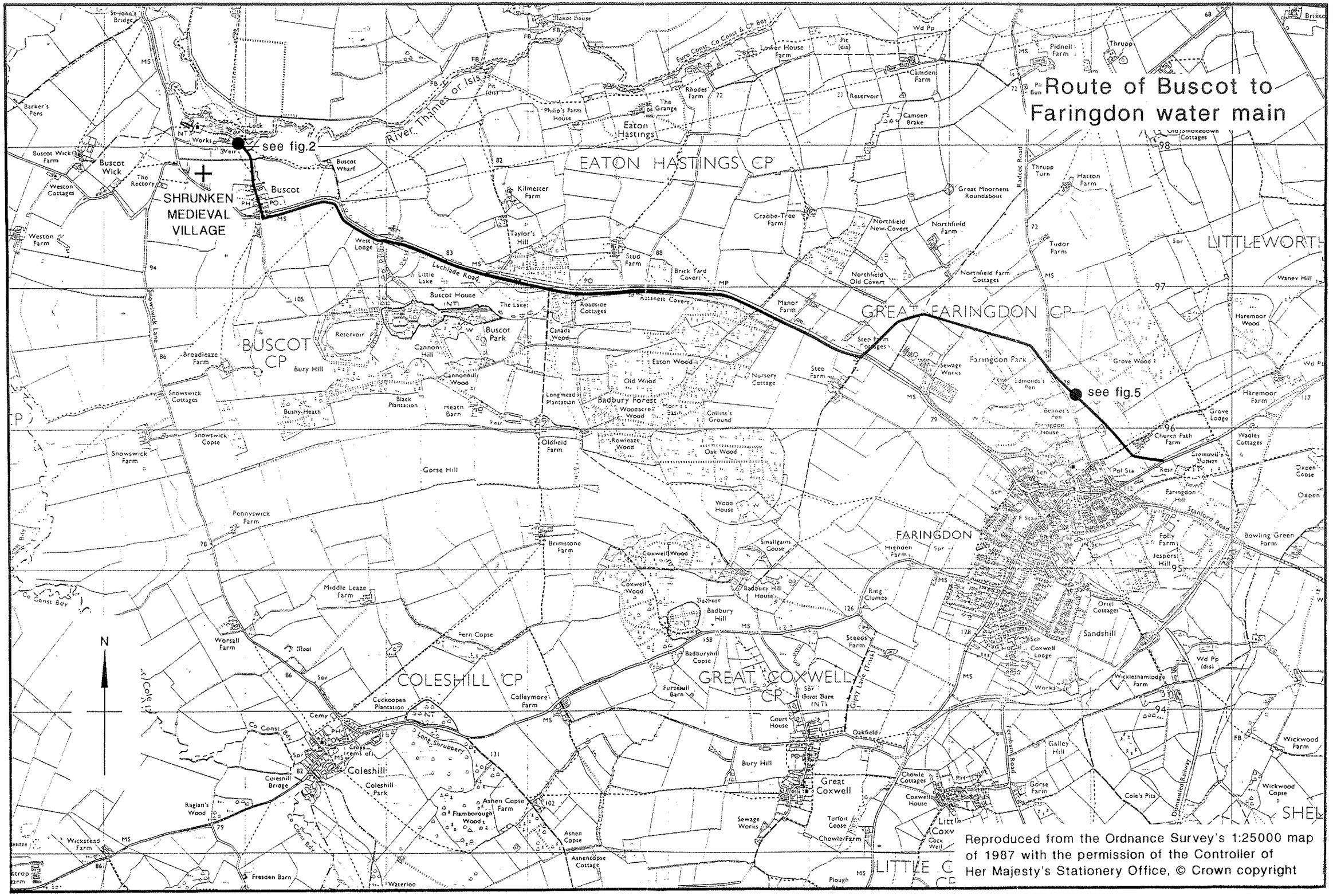


Fig. 1

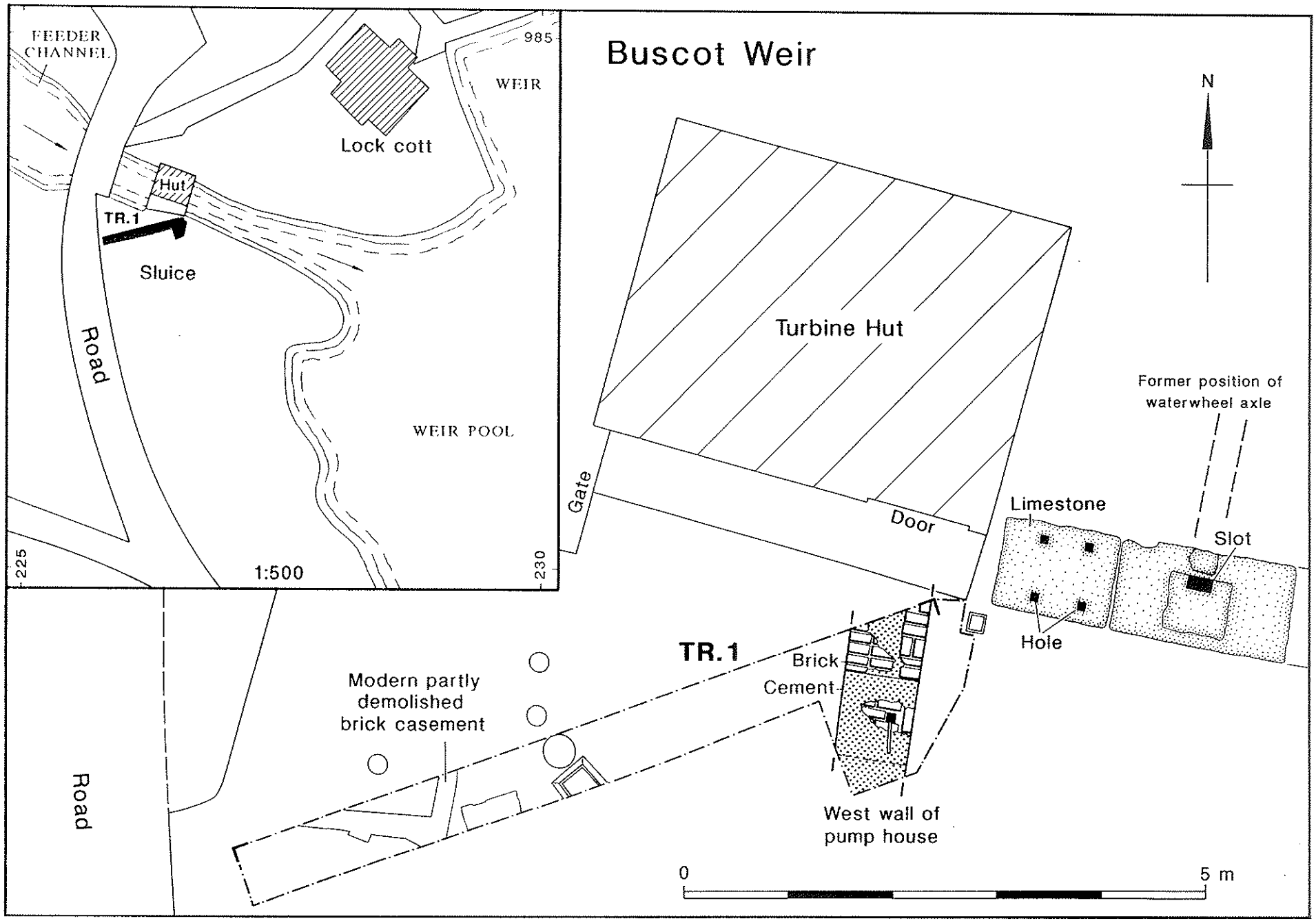

Buscot Weir
FEEDER CHANNEL
985
WEIR
Lock cott
Hut
TR.1
Sluice
Road
WEIR POOL
225
1:500
230
N
Turbine Hut
Former position of waterwheel axle
Gate
Door
Limestone
Slot
Hole
TR.1
Brick
Cement
Modern partly demolished brick casement
West wall of pump house
Road
0
5 m

Fig. 2

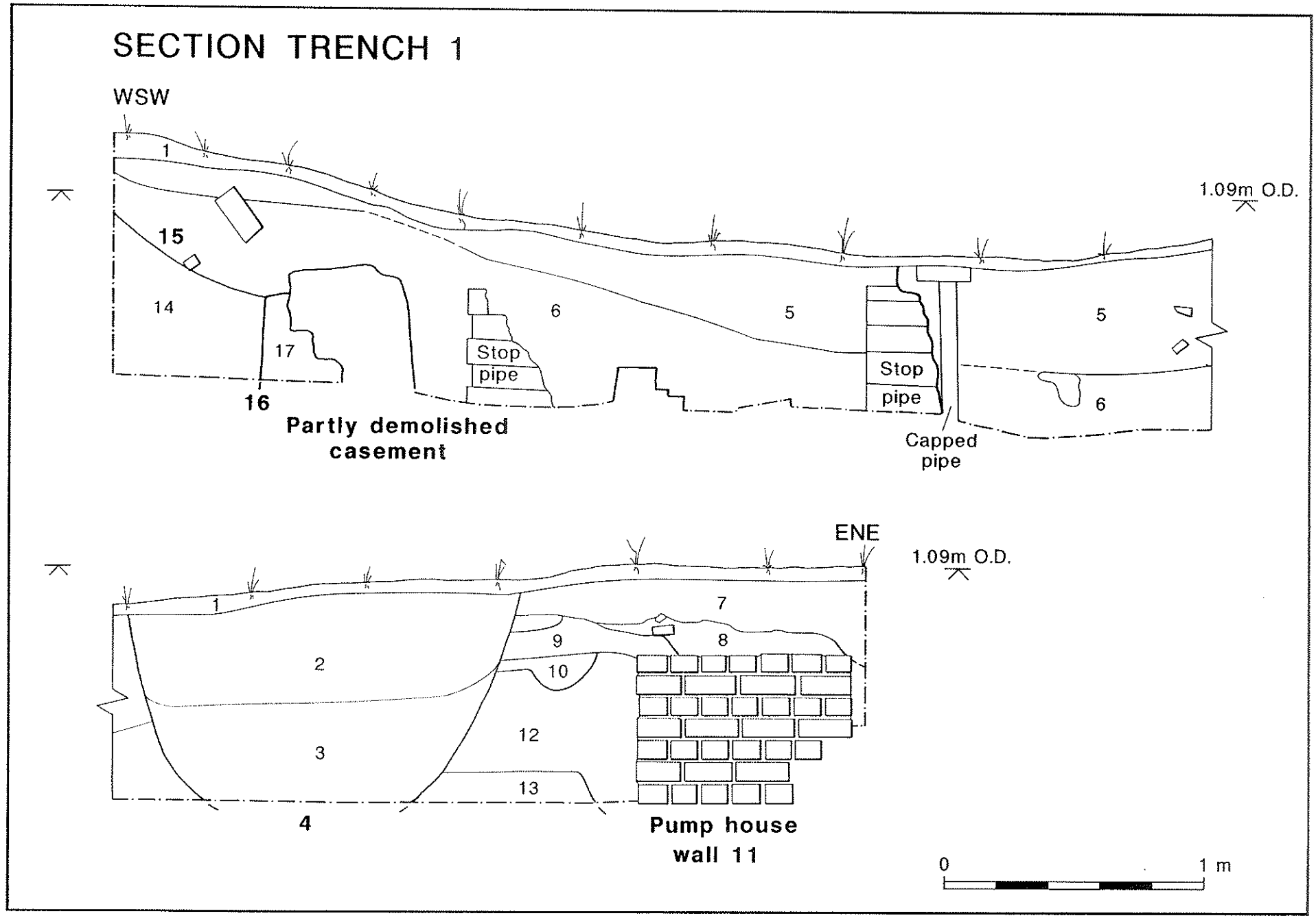

SECTION TRENCH 1
WSW
1.09m O.D.
1
15
14
17
16
Partly demolished casement
6
Stop pipe
5
Stop pipe
Capped pipe
5
6
ENE
1.09m O.D.
1
2
3
4
9
10
12
13
7
8
Pump house wall 11
0
1 m

Fig. 3

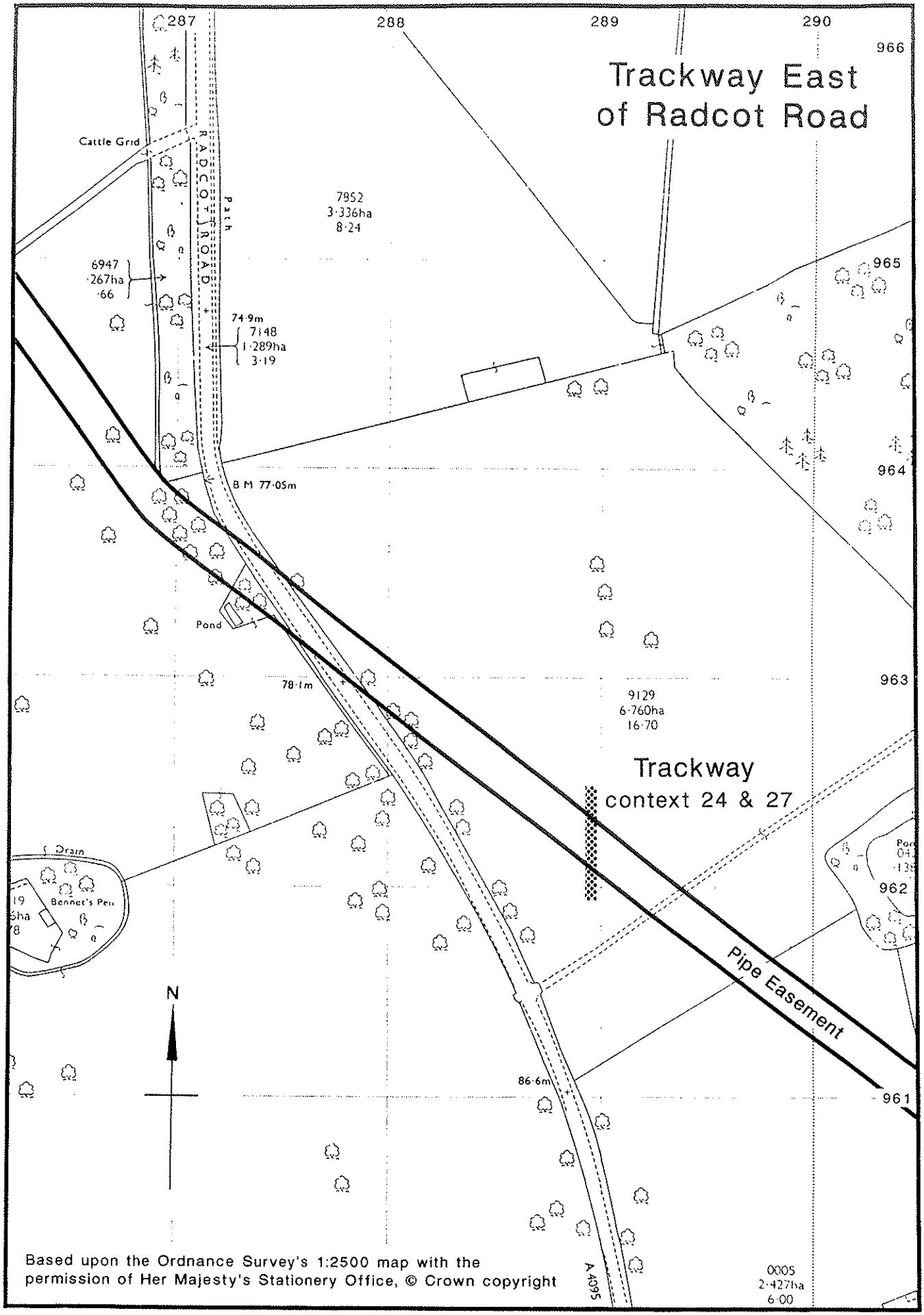

Trackway East of Radcot Road
287
288
289
290
966
965
964
963
962
961
Cattle Grid
RADCOT ROAD
Path
7852
3·336ha
8·24
6947
·267ha
·66
74·9m
7148
1·289ha
3·19
B M 77·05m
Pond
78·1m
9129
6·760ha
16·70
Trackway
context 24 & 27
Drain
Bennet's Pen
Pipe Easement
N
86·6m
A4095
0005
2·427ha
6·00
Based upon the Ordnance Survey's 1:2500 map with the
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Fig. 5

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