

**BURGH LE MARSH BYPASS,
LINCOLNSHIRE**

**ARCHAEOLOGICAL WATCHING BRIEF
REPORT**

Site code	BLMB 06
NGR:	TF 4727 6708 - 5162 6471
PCA Ref:	06/279
LCCM Acc No:	2007.12

Report prepared for
Jacobs
by

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Comment RL - roadworks were generally built up and did not impact on underlying archaeology therefore only seen when groundworks needed as bunding - very often therefore the construction methodology precluded plan recording

Summary

- An archaeological watching brief was undertaken along the route of the new A158 Burgh le Marsh Bypass. This was conducted by Pre-Construct Archaeology (Lincoln) for Jacobs on behalf of their clients, Lincolnshire County Council.
- Archaeological features and deposits were relatively infrequent and consisted of ditches, pits and a post-hole, most of which were within a confined area. Some of these were dated to the Roman period, while others were of post-medieval or later origin. A late Iron Age or early Roman period deposit was also encountered that displayed indications of salt manufacture and crop processing.
- The report concludes that the area covered by the bypass route traversed an area containing relatively little archaeology and confirmed the results of previous archaeological investigations, both intrusive and non intrusive. No evidence for the existence of the Burgh Le Marsh Roman road (SMR 42062) was found and it is suggested that this may have been severely truncated by past agricultural activity.

1.0 Introduction

Pre-Construct Archaeology (Lincoln) was commissioned by Jacobs on behalf of Lincolnshire County Council to undertake an archaeological watching brief along the route of the new A158 Burgh le Marsh Bypass, Burgh le Marsh, Lincolnshire.

These works were undertaken at the request of East Lindsey District Council to fulfil the requirements of a condition attached to a planning application. This approach is consistent with the recommendations of *Archaeology & Planning: Planning Policy Guidance Note 16* (Department of the Environment, 1990), *Management of Archaeological Projects* (English Heritage, 1991), *Standards and guidance for archaeological watching briefs* (IFA, 1999 as revised) and the LCC document *Lincolnshire Archaeological Handbook: A Manual of Archaeological Practice*, 1998.

2.0 Location and description

Burgh Le Marsh is approximately 6.5km west of Skegness, in the administrative district of East Lindsey. The town is situated on a sand and gravel island lying at 5m AOD; the area to the west rising gently to 22m AOD, while the east levels out across reclaimed salt marsh and alluvial deposits.

The route for the new A158 bypass skirts Burgh Le Marsh 500m to the north, crossing Orby Lane, Common Lane and the Ingoldmells Road between NGR TF 4727 6708 - TF 5162 6471 (fig.1).

The geology of the route corridor comprises of Holderness Association typical stagnogleys on chalky till and glaciofluvial drift to the west, and Wallasea 2

Association Pelo-Alluvial gleys on reclaimed alluvium to the east (British Geological Survey, 1996).

3.0 Archaeological context

A Roman settlement is believed to have existed at Burgh le Marsh, where burials have been found, and finds of pottery, tile and coins, although it has proved difficult to ascertain the size or status of this settlement (Whitwell, 1992). The projected line of the main Roman road (SMR 42062) from Lincoln to the coast is believed to cross through the settlement on a northwest-southeast alignment, suggesting that it was of some significance (see fig.1), (*ibid*).

It is uncertain when the current town was established. Its name suggests a Saxon origin, *burgh* being the Old English word for 'a fortified place', the affix of *le Marsh* meaning 'place in the marsh' (Mills, 1993). A mound known as Cock Hill (SMR 4613) approximately 1km to the south-east of the centre of the road corridor is believed to represent a 6th or 7th century barrow internment, (Leahy, 1993) while the town is also recorded in the Domesday Survey of AD 1086, (ADS, 2007).

The known archaeology within the immediate area is limited; the projected line of a Roman road (SMR 42062) is shown on the current edition of the Ordnance Survey map for this area, although its position in this area is unproven (see fig. 1).

Previous work along the new road corridor was conducted in 2003 by PCA which took the form of a fieldwalking survey, the results of which concluded that there were possibly few archaeological remains along the route corridor. A geophysical survey was also undertaken in the same year by Pre-Construct Geophysics (PCG), followed by another in 2004. Both surveys showed few indications of significant archaeological remains, although two possible areas of ridge and furrow were identified which coincided with some of the previous fieldwalking results. The location of a possible structure was also identified and correlated with results of fieldwalking. Between chainage points 2300-2600, areas relating to possible ditches and burning were also recorded (Bunn,2003).

Trial excavation was undertaken by Archaeological Project Services (APS) in 2005. The results identified a sequence of natural deposits and also a post-medieval ditch situated towards the eastern extremes of the area, while undated features were located towards the western end of the route corridor close to Orby Lane (APS, 2005).

4.0 Methodology

Lincolnshire County Council (LCC) commissioned Jacobs to manage a programme of archaeological works during the construction of the new bypass. The potential impact on the archaeology within the area was assessed via field evaluation, field walking, geophysical survey and also desk-based studies by Jacobs, as part of an environmental impact assessment (EIA). The scope of works was detailed in a methodology that was agreed by the Senior Built Environment Officer of Lincolnshire County Council.

The agreed methodology was followed by Pre-Construct Archaeology (Lincoln) during the watching brief, and any amendments were only implemented after

discussion and agreement with both Jacobs and the Senior Built Environment Officer of Lincolnshire County Council.

The fieldwork was carried out by Mike Daley, Nevile Hall and the author over a period of 104 days, between 31st August 2006 and 3rd May 2007.

5.0 Results

Natural sequence

Mid bluish/grey boulder clay (200) was observed throughout the route corridor, approximately 0.90m below existing ground level. This was overlain by a sub-soil horizon (103), although in some areas this was not present and was 'replaced' by a layer of alluvial clay (125) that also sealed context (200) and, where present, archaeological features. Ploughsoil (001) was present across the entire site, and contained a mixed assemblage of unstratified finds, ranging from middle to late Neolithic flints, a Roman brick fragment and pottery sherds dated between the 17th-20th century (Appendices 5, 7, 8).

Three linear features were exposed along the formation level of the road corridor between chainage points 800-1100 (fig.2). Feature [104] was orientated north-south, while [108] lay on an east-west orientation. Both appeared to be undated shallow ditches, situated approximately 0.20m below existing ground level. Approximately 40m west of chainage point 1100, another ditch [110] was recorded within the south flanking drainage ditch cut. This was considerably larger than the other two, measuring 2.95m in width and 0.40m in depth. Its fill, (111), was devoid of any dating evidence (figs. 2 and 7).

Feature [113], a much steeper and deeper ditch, was located at chainage point 1200, aligned north-south. It was 2.60m in width, 1.20m deep and contained two fills: (114) and (115), both of which contained no dating evidence, it also truncated layer (103), (figs. 3 and 7).

The remaining archaeological features encountered were clustered around the junction of the new road corridor and Orby Lane, between chainage points 2300-2600. These comprised a succession of ditches and gulleys but also two pits and a solitary post-hole (figs. 4, 6 and 7).

All of the ditch/gulley features in this area were on a north-south alignment, with the exception of feature [154] which was aligned east-west. Features [127], [139] and [146] were the only dated features, containing pottery sherds of between 1st and late 3rd century AD. The fill of [139], (144) displayed environmental evidence in the form of (oat and barley grains) and suggests the dumping of waste from a corn drying kiln in the vicinity (see Appendices 3 and 6).

Ditch [154] measured 2.60m wide and 0.80m in depth, it contained a basal fill (155) which was sealed by blue alluvium (124).

Gully [127] was 1.30m wide and 0.60m deep and it was cut through layer (130), (125) and natural clay (200). The secondary fill of this feature (129) contained

See App. 6 - WHEAT PREDOMINATED WITH SOME OAT AND BARLEY - RT

pottery sherds dated between the late 1st-early 2nd centuries AD, as well as environmental indicators suggesting cereal processing of the same period (Appendices 3 and 6). Layers (125) and (130) extended 2m to the east where they were truncated by a second ditch/gulley [150].

Feature [139] was relatively large, 2.65m across and 1.80m deep. Its basal fill (144) produced pottery of the mid 2nd century AD date and further palaeoenvironmental data, of a similar character to that associated with (129), and was sealed by (140). (Appendix 6). It also truncated the natural clay and a thin alluvial band (143) to the east. Sealing this band and associated with the ditch, context (141) appeared to be up-cast from ditch construction, with this material forming a bank, overlain on its east side by a charcoal-rich layer (142) that contained 2nd century pottery.

Ditch [146] was 1.30m wide and 1.00m deep. Its upper fill (148) contained late 2nd century pottery. (Appendix 3). This feature truncated an earlier ditch, [145].

Remaining, undated, features included: [134] a shallow north to south orientated ditch containing multiple fills; (135), (136), (137) and (138) and sealed by (124). Ditch [131] and its associated fill (132), this truncated (133) a deposit which indicated possible salt making activity. A large ditch [165] which measured 2.20m in width and 1.20m in depth contained three fills; (166), (167), (168). The ditch truncated the sub-soil layer (164) and was sealed by topsoil (001). Relatively close to this feature, to the immediate east was a series of four gulleys; [156], [157], [159] and [158], all of which truncated (164), whilst [159] also truncated ditch/gulley [157]. All four features were sealed by alluvial clay (124). * Further to the south-east of were two ditches; [169] and [172]. The first of these ditches contained one fill (170), while the second feature contained a basal fill (174) followed by (173). Both features cut through the natural soil (200) to a depth of 0.80m, their respective fills were sealed by alluvium (124).

Finally, and slightly to the north of this area of activity, three features were exposed; two shallow pits [118] and [119] and a single post-hole [120]. All three features were subject to excavation and recording in plan (fig.10). * Both of the pit fills (121) and (122) were environmentally sampled and revealed evidence indicating the presence of *Quercu* (Oak) and occasional non-oak species within the charcoal sampled and although neither of them contained dating evidence they were sealed by a dateable layer (117) containing 3rd-4th century AD pottery (see fig. 6, Appendix 3 and Plate 7).

A controlled area strip of approximately 300m x 40m in extent was also conducted across the projected alignment of the Roman road between chainage points 1100-1400 (see fig.1, Appendix 1, & plate 1). No evidence of the road was encountered, or any other archaeological remains.

* ON SECTIONS
ARE SEALED BY
(163) RT
IS (163) SAME AS
(124) ?

(fig.10)

6.0 Discussion and conclusion

Contexts across the site consisted of natural and archaeological deposits, linear ditches, pits and a post-hole. The concentration of archaeological features and deposits were mainly around the junction of the bypass route with Orby Lane, while a few ditch features were evident further to the east (figs. 2 and 3).

The earliest archaeological deposit encountered was (133), this produced evidence of salt making debris in the form of burnt clay and associated with the late Iron Age and early Roman periods. Evidence of burning was also present here and recorded as an anomaly during the previous gradiometer survey of this location, (Bunn, 2003).

SEE APP. 4 - INCLUDED RECOGNISABLE ITEMS
- CLIP + TRAY FRAG.

Pits and a post hole [118], [119] and [120] were encountered 80 meters to the north of the above deposit and sealed by (124), a layer of alluvium which sealed datable Roman features. These features could be associated with the salt making evidence, rather than any form of large scale settlement activity which was lacking across the site as a whole. Although series of gullies to the north-east may be evidence of this for they are perhaps too slight to represent field boundaries.

The larger ditches encountered most likely represent Roman field boundaries, while the undated ditches also recorded throughout the site and which share similar characteristics could also be of the same period, being sealed by the same alluvial layer (124).

The bank (141) associated with ditch [139] is interesting, in that it seals a layer of alluvium (143), a layer that may possibly represent a buried/relic land surface, (fig. 7).

This watching brief has concluded that archaeological remains identified along the bypass route are associated mainly with agricultural activity dating from the Roman periods as well as later Post-Medieval and modern times along with some small scale industrial processes such as salt making of the late Iron-Age and early Roman periods.

The late Iron-Age and early Roman evidence of salt manufacture ties in with what is already known of the immediate area, such as that at Orby and so therefore is not entirely unexpected throughout this region of the county. This, the field boundaries of similar dates and cereal processing point to ephemeral activity which may possibly be associated with the un-located Roman settlement at Burgh Le Marsh.

Failure to find evidence of the Roman road could be due to this area of the site having suffered ground disturbance by modern services and/or agricultural practices.

7.0 Statement of potential

Site archive

- An archive of written, drawn, photographic and object elements is in preparation and will be deposited at the Lincoln City and County museum within six months of the completion of this report. This shall be done in

accordance with the standards set out under chapter 16 of the LCC document, *Lincolnshire Archaeological Handbook: A Manual of Archaeological Practice*, 1998.

Access can be gained by quoting the L.C.C. Museum accession number 2007.12

Finds

- Seven post-medieval pottery sherds requiring no further work or special curation requirements.
- Twenty three Roman pottery sherds requiring no further work or special curation requirements.
- One Roman brick fragment requiring no further work or special curation requirements.
- Three Neolithic struck flints requiring no further work or special curation requirements.
- Six burnt clay fragments requiring no further work or special curation requirements.
- One undateable iron nail and one modern fragment of an iron vessel requiring no further work or special curation requirements.
- Three animal bone fragments requiring no further work or special curation requirements.

Environmental samples

- Five environmental samples requiring no further work or special curation requirements.

8.0 Effectiveness of methodology

The methodology required the monitoring of all topsoil and or other overburden removal throughout the site area along the bypass route and all its associated service trenches, drainage etc. Close scrutiny of archaeological features and deposits was at times difficult throughout the bypass route, solely due to the rapid nature of the engineering work, while recording of features exposed throughout the large drainage ditches flanking either side of the route was somewhat easier and only occasionally made difficult due to the rapid filling of them by groundwater. The controlled strip in the area thought to contain evidence of the Roman road was effective, in that it clearly displayed that the road no longer appeared to exist in this area.

9.0 Acknowledgments

Pre-Construct Archaeology (Lincoln) would like to thank Jacobs for this commission, the Senior Built Environment Officer at Lincolnshire County Council and also May Gurney for their co-operation during site works.

10.0 References

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The Commission on the Status of Women, in its report to the General Assembly of the United Nations, has drawn attention to the need for a comprehensive approach to the development of women and children.

The Commission has also emphasized the importance of the role of women in the development process, and has called for a more equitable distribution of resources and opportunities.

In the light of the above, the Commission has recommended that the United Nations should continue to support the efforts of the Commission on the Status of Women, and should also take steps to ensure that the needs of women and children are fully met.

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Appendix 1: Colour Plates



Plate 1: General working shot of part of the road corridor.



Plate 2: Natural sequence. Looking South.



Plate 3: Context [154]. Looking East.

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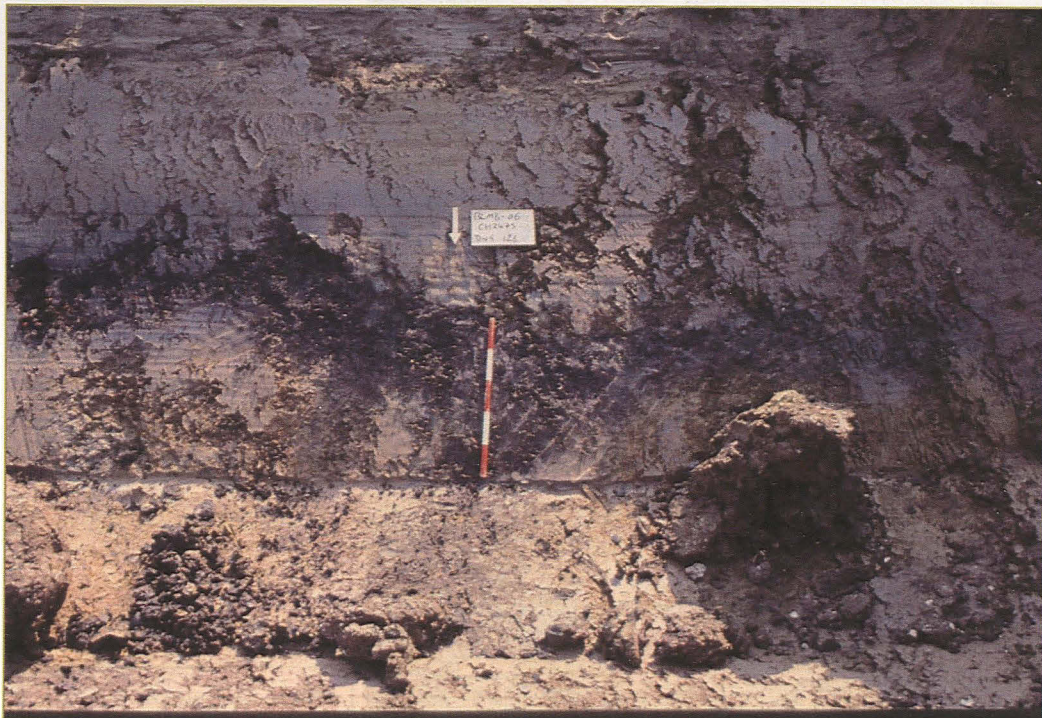


Plate 4: Context [127]. Looking South.



Plate 5: Context [139].
Looking South.



Plate 6: Context [146].
Looking North.

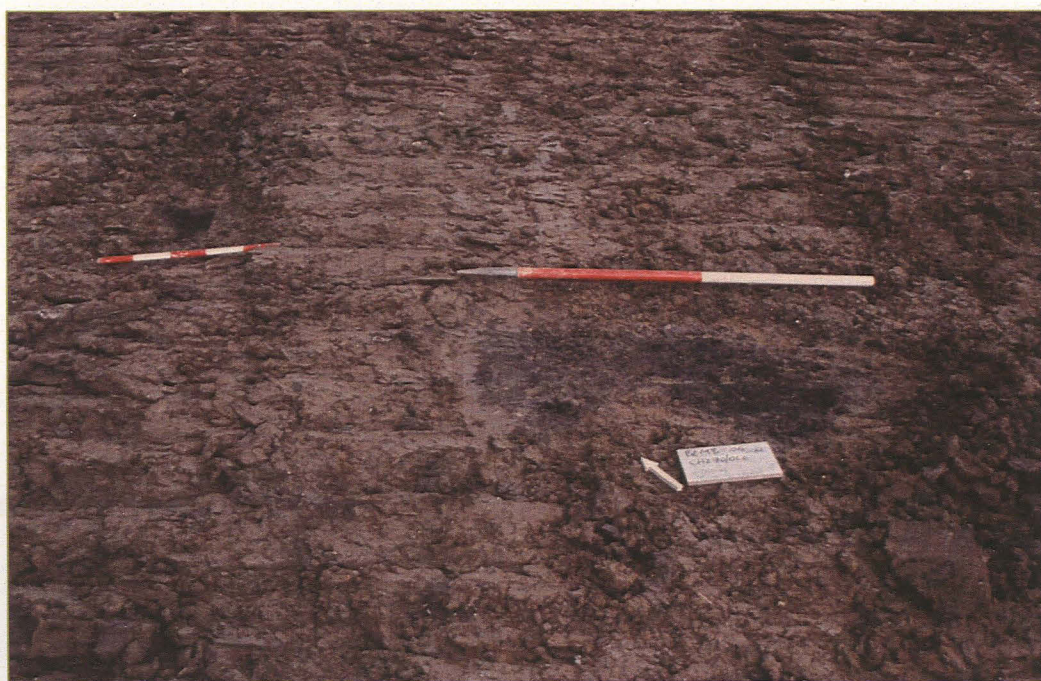


Plate 7: Contexts: [118], [119] & [120] pre-excavation shot. Looking North-East.



Plate 8: Controlled strip across area projected line of Roman road. Looking South-West.

Appendix 2: Context descriptions

(001) Topsoil.

(103) Subsoil.

[104] Linear gully orientated N/S with irregular break of slope at both top and base, irregular base and profile. 1.50m in width and ? in depth.

(105) Dark brownish grey silty clay, with frequent tarmac and concrete fragments. Backfill of modern gully.

[108] Curvilinear gully orientated N/W-S/E with gradual break of slope at both top and base, concave base and a U shaped profile. 5-6m in length, 0.45m in width and 0.14m in depth.

(109) Dark greyish brown silty clay, 5.60m in length, 0.48m in width and 0.14m in thickness. Natural silting up of feature [108].

[110] Linear ditch orientated N/S with a gradual break of slope at both top and base, concave base and a U shaped profile. 3.00m in width and 0.70m in depth. Possible medieval or post-medieval field boundary.

(111) Mid greyish silty clay, 2.60m in width and 0.55m in thickness. Primary organic rich silt of feature [110].

(112) Dark greyish brown silty clay, 0.30m > and 0.60m in thickness. Machine deposited levelling backfill of topsoil.

[113] Linear ditch orientated N/S with a gradual break of slope at both top and base, concave base and a U shaped profile. Field boundary ditch of modern origin.

(114) Mid greyish brown clayey silt, 1.10m in width and 0.50m in thickness. Primary fill of feature [113].

(115) Dark blackish clayey silt, 2.60m in width and 0.80m in thickness. Silting deposit within feature [113].

(117) Mid yellowish brown silty clay, 0.20m in thickness. Layer of alluvial clay sealing the fill of (122) and associated features.

[118] Sub-circular pit, with a gradual break of slope at both top and base, concave base and a U shaped profile. A maximum diameter of 0.48m and 0.10m in depth. Pit that is truncated by later pit [119].

[119] Sub-circular pit, with gradual break of slope at both top and base, concave base and a U shaped profile. Maximum diameter of 0.53m and a depth of 0.14m. Pit truncating feature [118].

[120] Circular post-hole, with sharp break of slope at top and gradual at base, concave base and a V shaped profile. 0.20m in diameter and 0.15m in depth.

(121) Dark blackish brown silty clay with occasional medium sized well sorted charcoal flecks. Charcoal rich fill of pit [118]. Sample number <01>.

(122) Dark blackish brown silty clay with occasional small well sorted charcoal flecks. Carbonised fill of pit [119] and almost identical to (121).

(123) Mid greyish brown silty clay with moderate small well sorted charcoal flecks. Charcoal rich fill of [120].

(124) Mid brownish brown clay, 0.50m[>] in thickness. Layer truncated by features [118] and [120].

ACCORDING TO TEXT (124) OVERLIES [118]

SEE ALSO MATRICES [120]

(125) Mid greyish blue clay. Band of alluvial clay natural.

RT
5/10/09

[127] Linear ditch, with a gradual break of slope at both top and base, concave base and a V shaped profile.

(128) Light grey silty clay with moderate small well sorted charcoal flecks. Primary alluvial silting of feature [127].

(129) Dark greyish black silty clay with occasional small, medium, large well sorted charcoal flecks, cbm fragments and flecks of fired clay. Charcoal rich fill of feature [127] contemporary with (130).

(130) Dark greyish black silty clay with occasional small, medium and large well sorted charcoal and burnt clay flecks and fragments. 2.50m in width and 0.14m in thickness. Heavily carbonised layer associated with possible salt production and truncated by [127].

[131] Linear ditch orientated N/W-S/E with gradual break of slope at both top and base, concave base and a U shaped profile. Terminus of ditch.

(132) Dark greyish black silty clay with occasional small well sorted charcoal flecks. Carbonised rich fill of [131] and comparable with (129).

(133) Dark greyish black silty clay with rare small well sorted charcoal and burnt clay flecks and fragments. 3.00m in width and 0.15m in thickness. Layer similar to (130).

[134] Linear orientated N/S, with gradual break of slope at both top and base, concave base and a U shaped profile. Terminal end of feature and similar to that of [146].

(135) Dark brownish grey silty clay with rare small well sorted charcoal flecks. Primary alluvial silting of feature [134].

(136) Dark greyish black silty clay. Secondary silting of feature [134].

(137) Mid greyish silty clay. Layer of silting within feature [134].

(138) Mid brownish grey silty clay. Layer of alluvial sealing feature [134].

[139] Linear ditch orientated N/S, with a sharp break of slope at top and gradual at base with a concave base and a U shaped profile. Large ditch.

(140) Dark blackish grey silty clay, with occasional small well sorted charcoal flecks. Secondary silting of ditch [139].

(141) Mid reddish brown clay with occasional small well sorted angular, rounded and platy stone. Bank material associated with feature [139].

(142) Dark greyish black silty clay with occasional small well sorted charcoal flecks. Layer associated with and overlying (141).

(143) Mid greyish blue clay. Alluvial clay layer.

(144) Mid greyish clay with occasional small well sorted charcoal flecks, 0.84m in width and 0.20m in thickness. Primary water deposited silt of ditch [139]. The charcoal within this deposit has been eroded into it from context (142).

[145] Linear ditch orientated N/S with a sharp break of slope at top, concave base and a U shaped profile.

[146] Pit or ditch feature, sharp break of slope at top and gradual at base, base concave and a U shaped profile. Truncates feature [145].

(147) Dark greyish brown silty clay with iron staining. Fill of feature [145].

(148) Mid greyish brown silty clay. Secondary fill of [146].

(149) Light greyish brown silty clay. Primary silting up of feature [146].

[150] Linear ditch orientated N/S with sharp break of slope at top and gradual at base, concave base with a V shaped profile. Truncates (130).

(151) Mid reddish brown silty clay. Natural silting of feature [150].

[154] Pit or ditch feature, gradual break of slope at both top and base, base concave and a U shaped profile.

(155) Mid brownish grey silty clay with occasional medium sized well sorted charcoal fragments and also small well sorted fired clay fragments. Primary fill of feature [154].

(200) Mid bluish grey boulder clay.

where are descriptions 156-174

Appendix 3: The Roman pottery

R.S. Leary

An archive catalogue was compiled for all the pottery according to the standard laid down by the Study Group for Romano-British Pottery (Darling 2004). Pottery was recorded detailing specific fabrics and forms, decorative treatment, condition, cross-joins/same vessel and was quantified by sherd count, weight and rim percentage values, giving estimated vessel equivalents. All the pottery from the site was catalogued in the archive and the stratified pottery was examined in order to date the features. CLAU codes are included where possible.

The Fabrics

- GRB1 grey wares. A group of grey fabrics tempered with moderate quantities of medium-sized quartz not otherwise subdivided due to the endless variations in the attributes and impossibility of either consistently identifying subgroups or identifying their sources
- FLB2 oxidised, medium quartz tempered ware with white slip. Grey core. A mortarium flange may be from the Swanpool kilns.
- OAB1 oxidised, medium quartz tempered ware. Grey core. Possibly abraded FLB2
- OBB yellowish buff with moderate, medium quartz and sparse orange clay pellets.

Vessel types

Seven vessel forms were identified. Jars included two rusticated jars, a type dating to the late first – early second century, a jar with a fairly thin everted rim, probably dating to the earlier Roman period, perhaps second century, and a wide-mouthed jar with hooked rim internally burnished. This last type belonged to the late Roman period in the third or fourth century and the details of the form point towards a third century date. Another jar in a white-slipped oxidised fabric was present in context 001 and 103. White-slipped jars like this are very unusual for the Roman period and it cannot be closely dated. One flange in a white-slipped, oxidised fabric came from context 001 and this belonged to a flanged mortarium. Although insufficient of the vessel survived for close dating a second century date is likely. Sherds from a carinated beaker of a type common in Lincolnshire from the late first to the early second century were present in context 133. A large sherd from a thick walled bowl with rounded, hooked rim came from 142. This compare well with vessels made at Rookery Lane kiln (Webster 1960 nos 28-32) in the fourth century or perhaps very late in the third century. A similar vessel type was also present in an early fourth century group at Lincoln (Darling 1999 fig. 3540 nos 498-499).

Vessel type	Nos	Grams	Rim %
beaker	3	21.4	10
bowl	1	99	20
indeterminate	4	17.8	
jar	12	357.1	26
mortarium	1	9.9	
wide-mouthed jar	2	90.1	15
Total	23	595.3	71

Table 1 Vessels present

Chronology

The earliest pottery, the rusticated jars, belongs to the late first-early second century and came from context 129 with the rim of an everted jar probably also of early Roman date. A sherd from a second rusticated jar, belonging to the same date range, came from context 133 along with sherds from a carinated beaker (Darling 1984 fig. 17 no. 94 dated late first-early third century. A date in the early second century would fit these types. A further sherd from the carinated beaker was identified in context 001. Two grey ware sherds came from contexts 144 and 148, the former part of a jar base, the latter an undiagnostic sherd. These are not closely datable within the Roman period but are unlikely to be earlier than the mid-second century. The late wide-mouthed jar from context 117 and the bowl from 142 are both of third or more probably fourth century date. These rare the latest sherds present. No early Roman types of the mid-late first century were present or later types of the mid-late fourth century. Activity seems to have been restricted to the early second century and the late third or early fourth century.

Pottery supply

Most of the pottery is likely to be of local origin within Lincolnshire and the mortarium may be a Lincoln product.

Fabric	Nos	Grams	Rim %
FLB2	4	130.6	21
GRB1	16	457.1	50
OAB1	1	4.3	
OBB	2	3.3	
Total	23	595.3	71

Table 2 Fabrics

Bibliography

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Appendix 1 Catalogue

Id	Context	Bag	Date	Fabric	CLAU codes	Description	N os	Gram	Abrasi on	Part	CLA U code	Form description	Vessel type	RimD	RimP	Comments	Dec tec	Dec moti f	Dec pos	Same
8	1	CH1140R PET 3/5/7 SW	RB	FLB2	OXWS	oxidised, medium quartz tempered ware with white slip. Grey core	1	86. 2	V	R+B	JEV	everted rim	jar	20	21					
1	1	CH960	2	FLB2	OXWS	oxidised, medium quartz tempered ware with white slip. Grey core	1	9.9	A	FLG	MB F	flanged mortarium	Mortar ium							
11	1	CH1100	RB	GRB1	GREY	grey ware, medium, quartz- tempered	1	20	A	BDY		closed vessel	jar							
3	1	CH310/OLE	RB, prob M2+	GRB1	GREY	grey ware, medium, quartz- tempered	1	87. 7	U	BDY		closed vessel	jar							
10	1	CH1100	L1- E3	GRB1	GREY	grey ware, medium, quartz- tempered	1	6.5	M	BDY	BK CA R	carinated beaker	beake r							133
4	1	CH310/OLE	RB	OAB1	OX	oxidised, medium quartz tempered ware. Grey core. Possibly abraded FLB2	1	4.3	V	BDX			indete rminat e							

Id	Context	Bag	Date	Fabric	CLAU codes	Description	N os	Gram	Abrasi on	Part	CLA U code	Form description	Vessel type	RimD	RimP	Comments	Dec tec	Dec moti f	Dec pos	Same
7	103	CH1024	RB	FLB2	OXWS	oxidised, medium quartz tempered ware with white slip. Grey core	2	34.5	A	BDY		closed vessel	jar							
2	117	CH290/OLE	3-4	GRB1	GREY	grey ware, medium, quartz-tempered	2	90.1	M	RIM	BW M343	wide-mouthed jar with hooked rim	wide-mouthed jar	30	15		burnished		inside rim	
17	129		L1-E2	GRB1	GREY	grey ware, medium, quartz-tempered	1	4	M	BDY	J	rusticated jar	jar			dark grey surfaces and core and light grey margins	rusticated	linear	outside body	
18	129		2	GRB1	GREY	grey ware, medium, quartz-tempered	1	8.5	A	RIM	JEV	everted rim	jar	16	5	Misfired?grey core and brown/grey surfaces				
19	129		UNK	OBB	OX	Yellowish buff with moderate, medium quartz and sparse orange clay pellets	2	3.3	V	BDX			indeterminate			Yellowish buff with moderate, medium quartz and sparse orange clay pellets				
6	130		RB	GRB1	GREY	grey ware, medium, quartz-tempered	1	4.1	V	BDY		closed vessel	jar				grooved	single	outside body	

Id	Context	Bag	Date	Fabric	CLAU codes	Description	N os	Gram	Abrasi on	Part	CLA U code	Form description	Vessel type	RimD	RimP	Comments	Dec tec	Dec moti f	Dec pos	Same
14	133		L1-E2	GRB1	GREY	grey ware, medium, quartz-tempered	1	5.3	M	BDY	J	rusticated jar	jar				rusticated	linear	outside body	
13	133		L1-E3	GRB1	GREY	grey ware, medium, quartz-tempered	1	4.5	M	BDY	BKCA R	carinated beaker	beaker							001 CH1100
12	133		RB	GRB1	GREY	grey ware, medium, quartz-tempered	2	56.7	M	BDY		closed vessel	jar							
15	133		L1-E3	GRB1	GREY	grey ware, medium, quartz-tempered	1	10.4	M	RIM	BKCA R	carinated beaker with everted rim tip	beaker	15	10					
16	142		L3-4	GRB1	GREY	grey ware, medium, quartz-tempered	1	99	M	PRO		heavy bowl with rounded undercut rim	bowl	18	20					
9	144		RB, prob M2+	GRB1	GREY	grey ware, medium, quartz-tempered	1	50.1	U	BAS		simple base	jar							
5	148		RB	GRB1	GREY	grey ware, medium, quartz-tempered	1	10.2	V	BAS			indeterminate							

Appendix 4: Assessment of the Fired Clay.

Alan Vince

A small collection of finds from an archaeological intervention on the line of the Burgh Le Marsh Bypass, carried out by Pre-Construct Archaeology (Lincoln) Ltd, was submitted for identification and assessment.

The fired clay includes waste from the preparation of salt which is probably of later prehistoric or early Roman date. One of the iron finds is undatable and the other of recent date.

Description

Fired Clay

Two collections of fired clay were submitted. Both have similar fabrics when examined at x20 magnification: a silty, micaceous clay with organic voids and sparse inclusions of subangular quartz and polished quartz up to 1.0mm across and rounded red mudstone up to 3.0mm across. In all cases, the groundmass is variegated with laminae of light-coloured clay with a higher quartz content than the remainder.

The collection from context 001 consists of two fragments with a flat surface, which is salt-surfaced as a result of heating in the presence of calcium carbonate and brine.

The collection from context 133 consists of four fragments which include one clip used to secure salt-making containers in place in the hearth or oven and one fragment of such a container.

Assessment

The fired clay from context 133 is debris from salt working. The quantities found are very low. The character of the clay is consistent with a local source (polished quartz does not occur in deposits in the Lindsey Marshes since it is derived from Lower Cretaceous deposits which outcrop around the western and southern sides of the Wolds). Such briquetage is probably of later prehistoric or early Roman date since elsewhere in the country it is clear that lead pans replaced clay containers in the later Roman period. Salt-working sites of medieval and post-medieval date in Lincolnshire produce very little briquetage, which is probably residual.

Appendix 5: Lithics catalogue and assessment

Jim Rylatt

1.0 Introduction

This report concerns a small assemblage of lithic material recovered during archaeological fieldwalking on the Burgh le Marsh bypass. Three pieces of struck flint were retrieved. One piece had diagnostic traits indicative of early Neolithic lithic technology, the other two pieces being products of early or middle Neolithic industries.

2.0 Method of study

All of the lithic artefacts have been physically examined in order to create an archive catalogue. The attributes of each piece are noted in order to determine its place in the reduction sequence, describe observable characteristics of the lithic technology utilised and provide an assessment of its functional potential. The catalogue also records the presence of patination, cortex and whether the piece has been burnt. Each piece has been weighed and metrical data is recorded for complete flakes, tools and cores. Selected artefacts have been examined with a x3 hand-lens to determine whether there is any evidence of localised modification that could be indicative of use.

3.0 Catalogue

Context No.	Type	Size	Description
001	Blade-like flake	34x17mm 2.9g	Secondary flake with flat platform, pronounced bulb and feathered termination; dorsal scars indicate 2 removals from same platform; cortex thin, rounded and abraded - c. 60% of surface; milky patination; post-depositional damage to margins; brown translucent flint. E.Neo/M.Neo
001	Flake	24x33mm 5.9g	Irregular secondary flake with moderately pronounced bulb and irregular termination; dorsal scars indicate 4+ removals from same platform - possibly from a blade & flake core; cortex thin, rounded and abraded - c. 35% of surface; post-depositional damage to margins, including modification of platform; brownish-grey translucent flint. E.Neo/M.Neo
103 (CH1060)	Blade	51x17mm 4.4g	Tertiary blade with abraded platform, small pronounced bulb and feathered termination; dorsal scars indicate 5 removals from same platform; post-depositional damage to margins; greyish-brown semi-translucent flint. E.Neo

NB: measurements are only given for complete flakes - the first figure relates to the maximum length, measured perpendicular to the striking platform; the second to maximum breadth, measured at a right angle to the length.

NOT
LOCATED?
NO MENTION
IN
STRATIGRAPHIC
SECTION

4.0 Discussion

4.1 Raw materials

All three lithic artefacts were produced from flint. Two pieces had small areas of surviving cortical surface indicating that the raw materials were derived from secondary deposits, probably water-transported pebbles and cobbles either forming river terraces or glacio-fluvial sheet deposits.

4.2 Condition

One piece had a slight patina on its flake surfaces, but the other two did not have any such surface modification. All three pieces had some post-depositional damage to the flake margins. None of the worked flint displayed any evidence that it had been burnt. The absence of burnt flint could partly reflect the small size of the assemblage.

4.3 Character of the assemblage

The small size of the assemblage severely limits the information that can be ascertained, but these three flakes provide an indication of a prehistoric presence within the road corridor. All three pieces are broadly indicative of early to middle Neolithic industries; utilised from c. 4000 - 2500BC. The very small quantity of lithic material recovered during the archaeological intervention suggests that Neolithic activity in this area was brief and ephemeral.

Appendix 6: Environmental Assessment

Diane Alldritt PhD

1. Introduction

- 1.1 A total of five sample flots together with charred material sorted from four of the retents were scanned for carbonised plant macrofossils. An assessment of the potential for any future work was also made. Samples originated from a series of parallel ditches and two intercutting pits, and carbon rich deposits were observed throughout excavation of these features.

2. Methodology

- 2.1 Bulk environmental samples were processed by Archaeological Services WYAS using an Ankara style water flotation system (French 1971). Flots were collected in a 300 μ m sieve and the heavy fraction (the retent) was collected in a 1mm mesh. The retents were sorted by eye for artefacts and ecofacts and were also scanned using a magnet. The flot, once dry, was scanned using a low powered binocular microscope at magnifications of x4-45. Flot sizes were fairly small, typically between <0.5ml to 15ml of charred material, but despite this, they proved to be rich in cereal grain. Sample 3 (129) proved particularly abundant so for the purposes of assessment only 50% of the cereal grains were identified from this sample. Retent material produced between 10ml and 50ml of charcoal fragments and cereal grain, apart from sample 5 (148) which produced no charred plant remains. Charcoal from both flots and retents was scanned briefly to determine quantities of oak and non-oak types in order to establish the potential for radiocarbon dating any short-lived types present. The charcoal was not fully identified at this stage.
- 2.2 Plant nomenclature utilised in the text follows Stace (1997) for all vascular plants apart from cereals, which follow Zohary and Hopf (2000).

3. Results

- 3.1 All results are presented in Table 1 and discussed below.

4. Discussion

- 4.1 Carbonised cereal grain was concentrated in two samples, 3 (129) and 4 (144), both of which were from ditch fills. A range of cereal types was recorded from these ditches, including wheat, barley and oats, with the wheat types, particularly *Triticum spelta* (spelt wheat) and *Triticum aestivum* (bread wheat) the most commonly recorded. The flot from sample 3 (129) was almost entirely composed of cereal grain, mostly in a very good state of preservation, and containing very little of the usual indeterminate charred detritus associated with charcoal samples. Preservation was such that a number of very delicate specimens of *Triticum spelta* glume bases (spelt wheat chaff) were recovered intact. Both samples also contained traces of

other cereal types but in much lower quantities, sample 3 (129) produced four specimens of *Avena* sp. (oat), whilst sample 4 (144) had fourteen oat grains and two *Hordeum vulgare* sl. (barley). The evidence, therefore, is indicative of the dumping of waste material from a corn-drying kiln or other processing/cooking activities.

4.2 Weed seeds from the samples were relatively scarce and consisted of three *Bromus* sp. (bromes), a grassy field weed, and two specimens of *Chrysanthemum segetum* (corn marigold) an agricultural field weed, from sample 3 (129). These were most likely associated with the cereal crop and the low numbers recovered do not suggest particularly weedy fields, although corn marigold was considered a particularly virulent pest during the medieval period.

4.3 Charcoal fragments were not identified at this stage, although pieces were briefly scanned to distinguish oak from non-oak types. The retent from sample 1 (122), a pit fill, produced the most charcoal, with approximately 90% of this appearing to be *Quercus* (oak). Occasional non-oak deciduous types were also visible in this sample. In sample 2 (121), also a pit fill, all of the charcoal examined from the retent looked like oak type. Sample 3 (129) proved more interesting in producing a mixed charcoal assemblage, with most probably not oak. One piece in particular is worthy of note, most likely hazel roundwood, which is highly suitable for radiocarbon dating. This piece of small branch wood had seven growth rings. Other charcoal fragments from this sample may also prove to be hazel. Samples 4 (144) and 5 (148), both ditch fills, produced no charcoal.

5. Conclusions and Further Work

5.1 The assessment of environmental samples revealed the use of three different cereal types, namely wheat, barley and oats, with spelt wheat most likely the dominant crop under cultivation. Analysis of the weed macrofossils has indicated the crop fields were not particularly weedy. Brief assessment of the charcoal has suggested the use of both oak and hazel, although other non-oak types are also probably present in the assemblage.

5.2 Burgh Le Marsh has the potential to be a very interesting site producing carbonised plant material such as cereals, weeds and cereal chaff, mostly very well preserved and in fairly large quantities. Charcoal recovery was also high and there is good potential for the identification of short-lived deciduous types suitable for radiocarbon dating. Further work on this set of samples could be carried out, in order to fully identify the range of charcoal types present, and to identify the remaining 50% of cereal grain recovered from sample 3 (129). Further excavation work or processing of existing environmental samples from this site also has significant potential to produce interesting and informative data regarding the agricultural economy of Lincolnshire at this time.

Table 1. Carbonised plant remains

Sample	1	2	3	4	5
Context	122	121	129	144	148
Feature	Pit	Pit	Ditch	Ditch	Ditch
Total CV flot/retent	<0.5ml/50ml	<0.5ml/10ml	15ml/10ml	5ml/2.5ml	<2.5ml/-
Modern	0	0	<2.5ml	5ml	<2.5ml
Carbonised Cereal Grain and Chaff	Common Name				
<i>Avena</i> sp.			4	14	
<i>Triticum spelta</i>			7	6	
<i>Triticum spelta</i> glume bases			9		
<i>Triticum aestivum</i>			13	4	
<i>Triticum aestivum</i> sl.				11	
<i>Triticum</i> sp.			28	23	
<i>Hordeum vulgare</i> sl.				2	
Indeterminate cereal grain (+embryo)			22	56	
Carbonised Weeds					
<i>Chrysanthemum segetum</i>			2		
<i>Bromus</i> sp.			3		
Indeterminate weed		1			
Charcoal					
<i>Quercus</i>	oak	90%	100%	25%	
<i>Corylus</i>	hazel			50%	
Other non- <i>Quercus</i>	other non-oak	10%		25%	

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Zohary, D. and Hopf, M., 2000, *Domestication of Plants in the Old World* (3rd Edition)

Acknowledgements

Client

Pre-Construct Archaeology

Project management

Jane Richardson PhD

Report

Diane Alldritt PhD

Sample processing

Zoe Horn

Appendix 7: Post med pottery and tile archive.

	Context	cname	full name	sub fabric	form type	sherds	vessels	weight	part	date
	001	GRE	Glazed Red Earthenware	Bolingbroke?	bowl	1	1	51	base	late 17 th to 18th
	001	GRE	Glazed Red Earthenware		large bowl	1	1	44	BS	17 th to 18th
WHAT IS CONTEXT 007? NOT IN CONTEXT LIST OR MENTIONED IN TEXT P 1170 →	007	GRE	Glazed Red Earthenware	coarse	?	1	1	1	BS	mid 16 th to 17th
	007	NOTS	Nottingham stoneware		hollow	1	1	5	BS	18th
	007	NOTS	Nottingham stoneware		small bowl	1	1	34	base	18th
	095	SLIP	Unidentified slipware	Yorks?	large bowl	1	1	41	rim	late 18 th to early 20th
	122	BL	Black-Glazed wares		large bowl	1	1	27	rim	late 18 th to early 20th

This is the fill of one of the pits, sealed beneath alluvium. Intensive? or wrong number?
NOT ACCOUNTED FOR IN TEXT

Appendix 8: Roman brick archive.

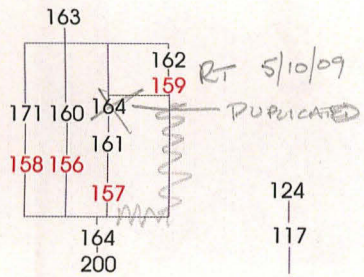
<u>Context</u>	<u>cname</u>	<u>full name</u>	<u>fabric</u>	<u>frags</u>	<u>weight</u>	<u>description</u>	<u>date</u>
001	RBRK	Roman brick	fine fabric with light marbling	1	413	very unusual; not seen before in county ?; 110+100x30mm;fabric includes some shale and moderate fe;smooth on both upper and lower surfaces;possible half beassales	Roman

Appendix 9: Matrix

105
104
Section 102

109
108
Section 104

001
103
200
Section 110



Section 134

124
117
122
119
121
118
200
Section 115

124
138
137
136
135
134
200
Section 128

001
124
140
144
200
Section 129

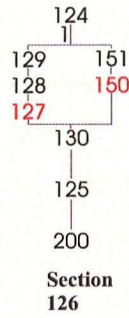
142
141
143

SEALS
142

124
170
169
200
Section 136

124
173
174
172
200
Section 137

112
111
110
103
200
Section 108



001
124
147 148
145 149
200
Section 130

001
168
167
166
165
164
200
Section 135

124
132
131
133
200
Section 127

001
115
114
113
103
200
Section 109

124
155
154
125
Section 133

Numbers in red show cuts.

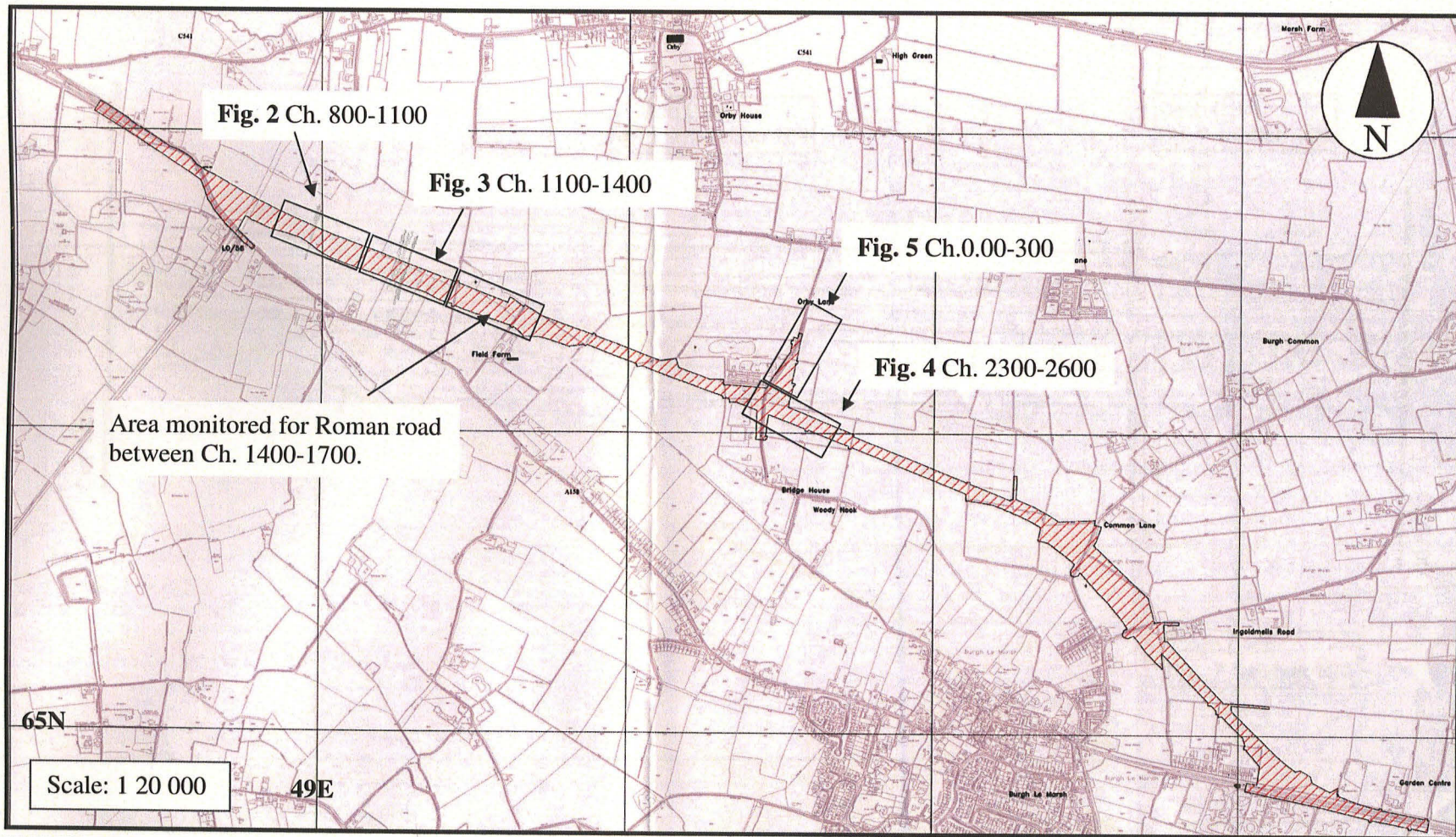


Fig. 1: Burgh le Marsh bypass route, showing areas where archaeology was recorded.

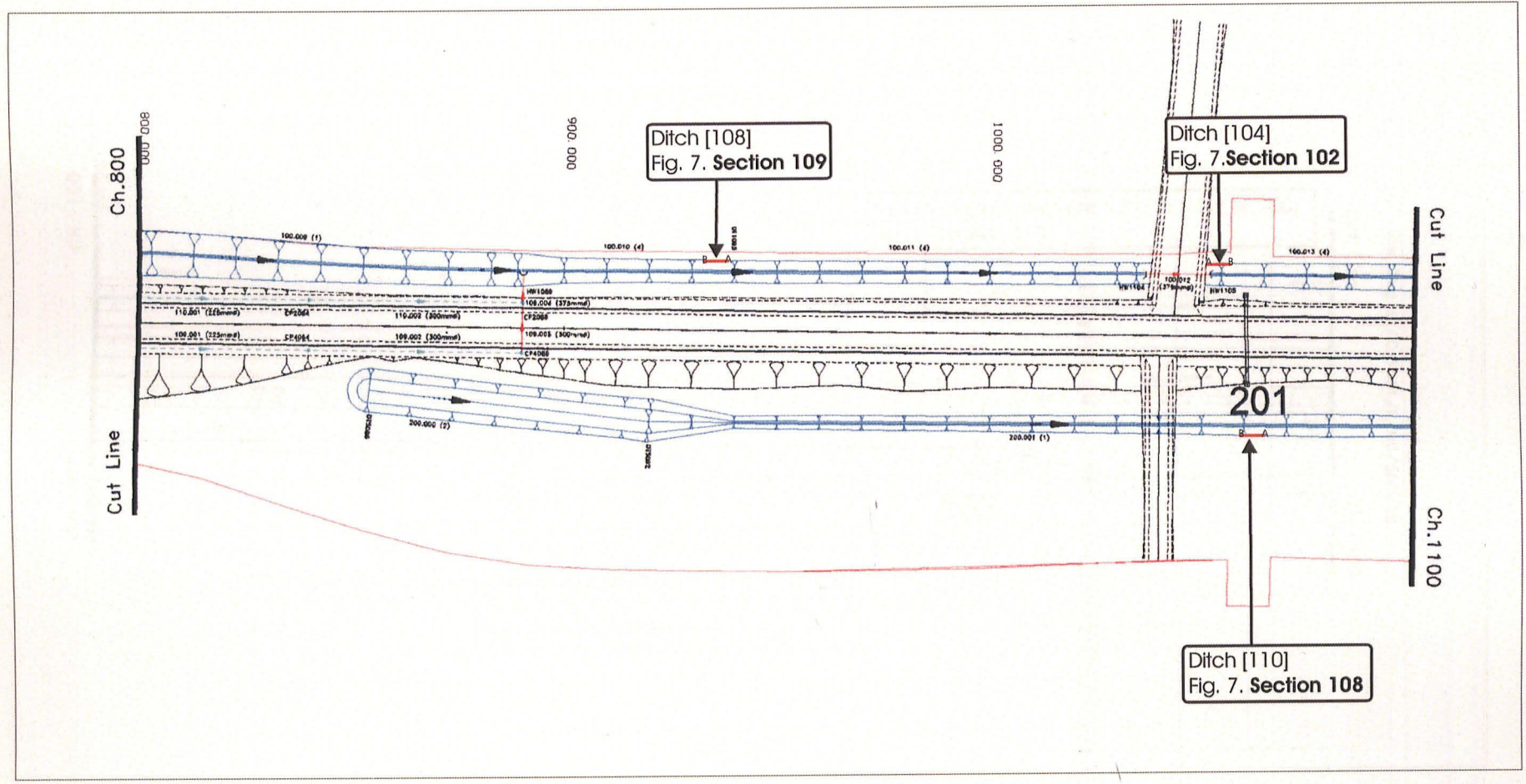
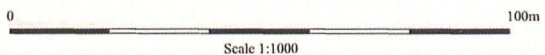
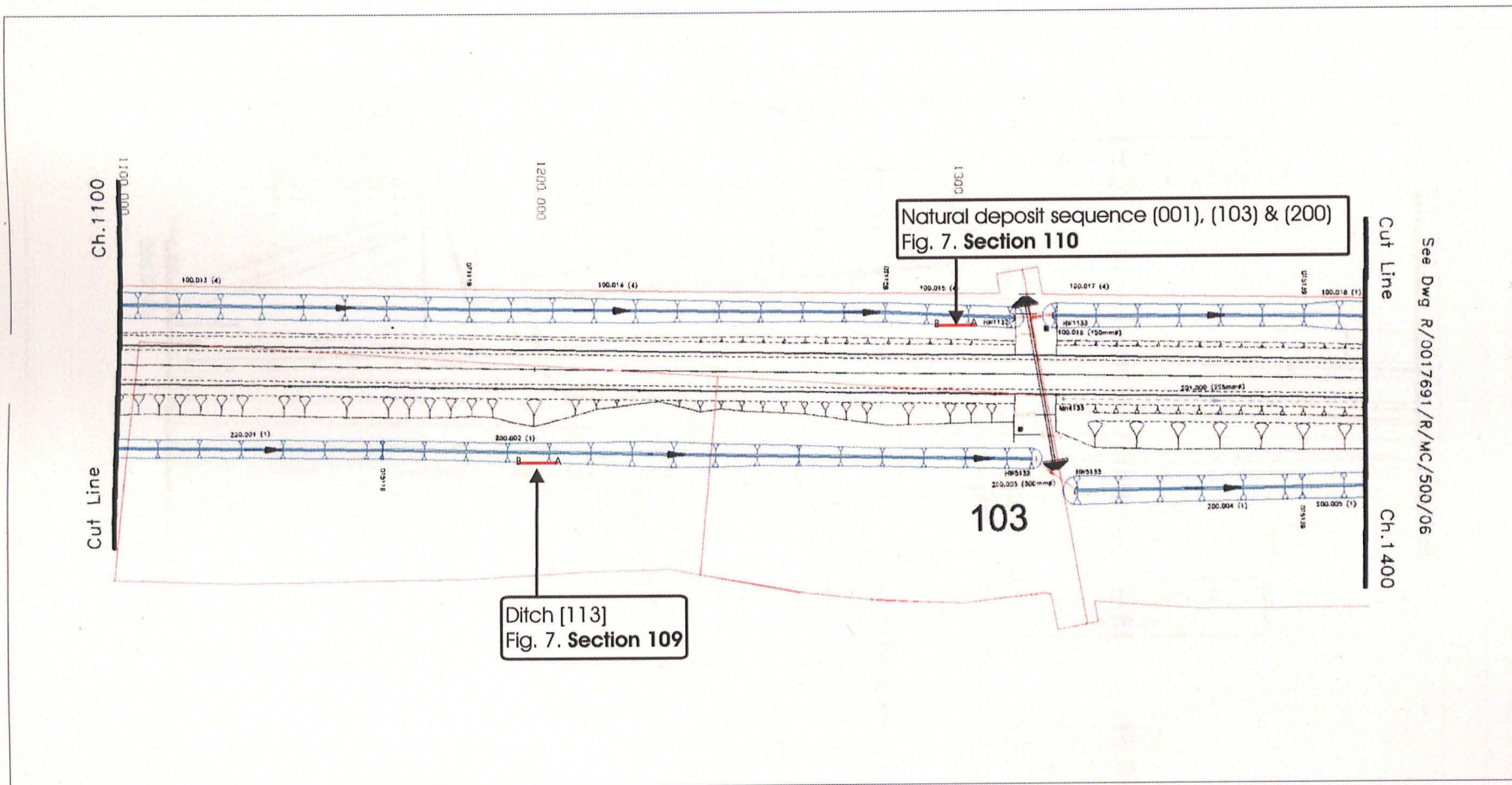


Fig.2: Features located between chainage points 800-1100

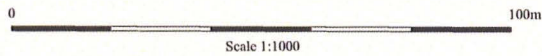
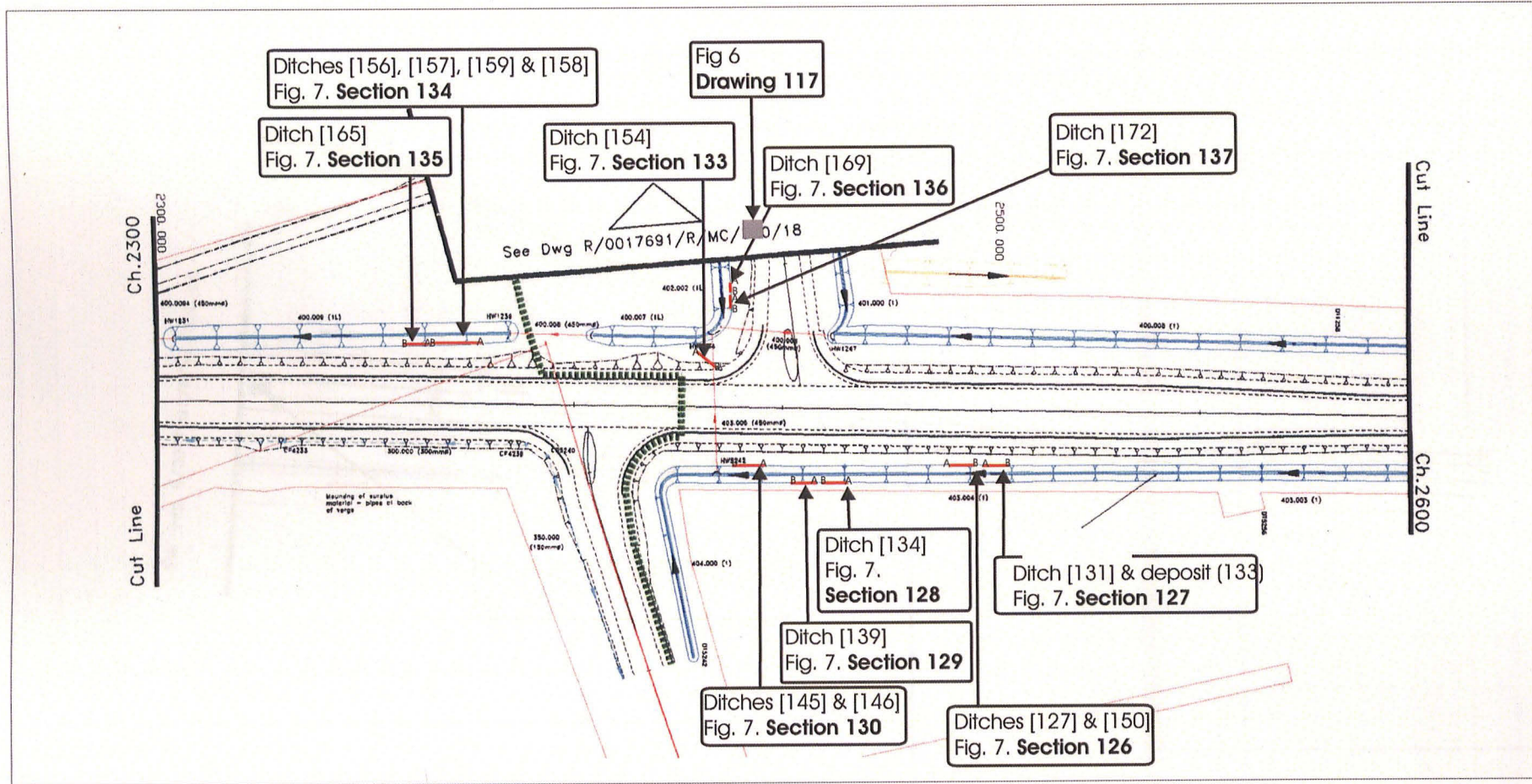
Key	
	Filter Drain
	Carrier Drain
	Headwall
	Drainage Ditch (See R/0017691/R/MC/500/50/01)
	Drain reference, Drainage Ditch type (1)
	Proposed Pedestrian Facility
	CPD Boundary
	Accommodation works: ditch diversions
	Surface Water Channel with Type B Narrow Filter Drain (Drg No. 0017691/R/MC/500/50/04 and HCD F21)
	Chamber
	Oil Separator/Interceptor (See 0017691/R/MC/500/50/03)
	Type B Narrow Filter Drain to HCD F20
	Type B Chamber to HCD F12



Scale 1:1000

Fig.3: Features located between chainage points 1100-1400

Key	
	Filter Drain
	Carrier Drain
	Headwall
	Drainage Ditch (See R/0017691/R/MC/500/SD/01)
	Ditch reference, Drainage Ditch type (1)
	Proposed Pedestrian Facility
	CPO Boundary
	Accommodation works: ditch diversions
	Surface Water Channel with Type B Narrow Filter Drain (Drg No. 0017661/R/MC/500/SD/04 and HCD F21)
	Chamber
	Oil Separator/Interceptor (See 0017691/R/MC/500/SD/03)
	Type B Narrow Filter Drain to HCD F20
	Type B Chamber to HCD F12



Key			
	Filter Drain		Surface Water Channel with Type 8 Narrow Filter Drain (Drg No. 0017661/R/MC/500/50/04 and HCD F11)
	Corridor Drain		Chamber
	Headwall		Oil Separator/Interceptor (See 0017661/R/MC/500/50/03)
	Drainage Ditch (See R/0017691/R/MC/500/50/01)		Type 8 Narrow Filter Drain to HCD F20
	Drain reference, Drainage Ditch type (1)		Type 8 Chamber to HCD F12
	Proposed Pedestrian Facility		
	CPO Boundary		
	Accommodation works: ditch diversions		

Fig. 4: Features located between chainage points 2300-2600

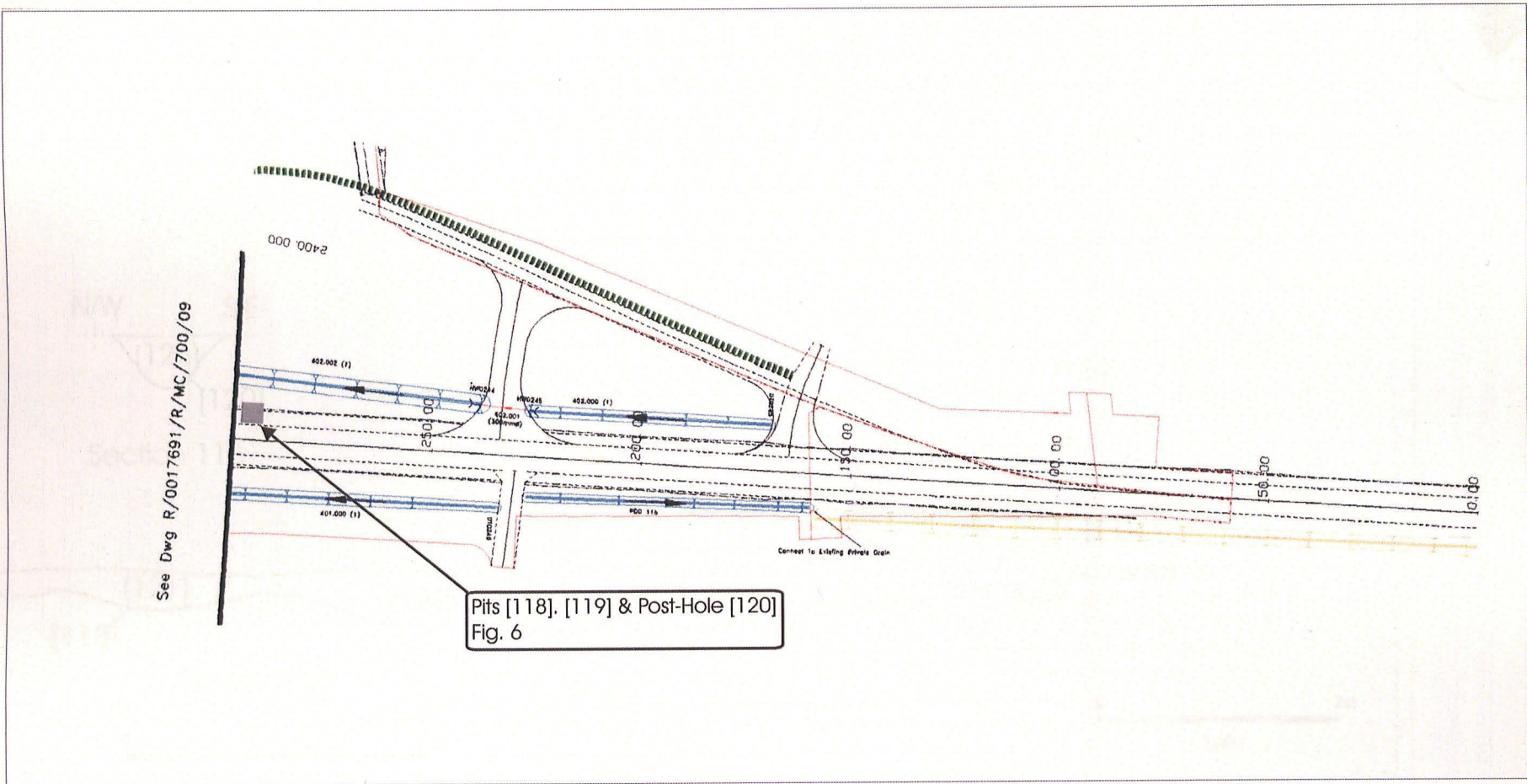
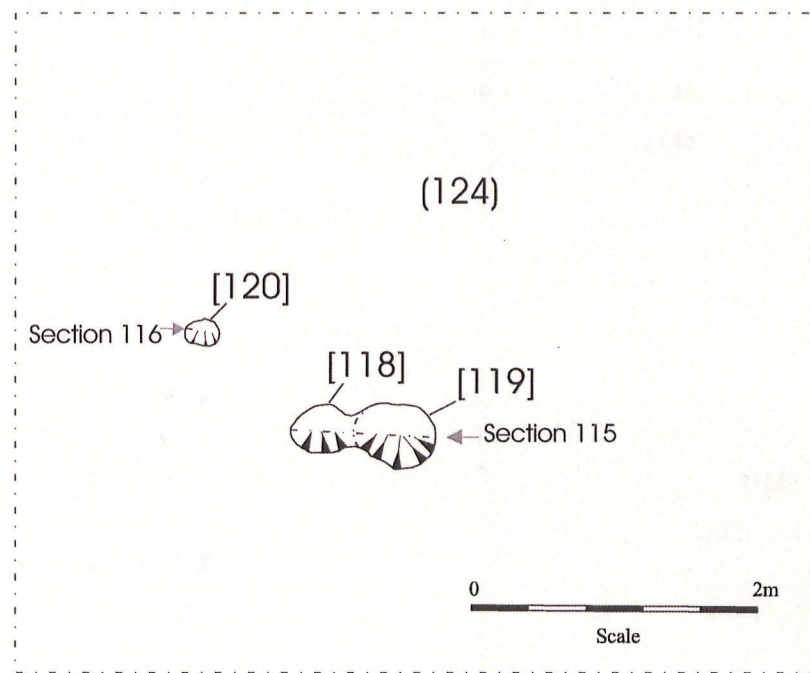
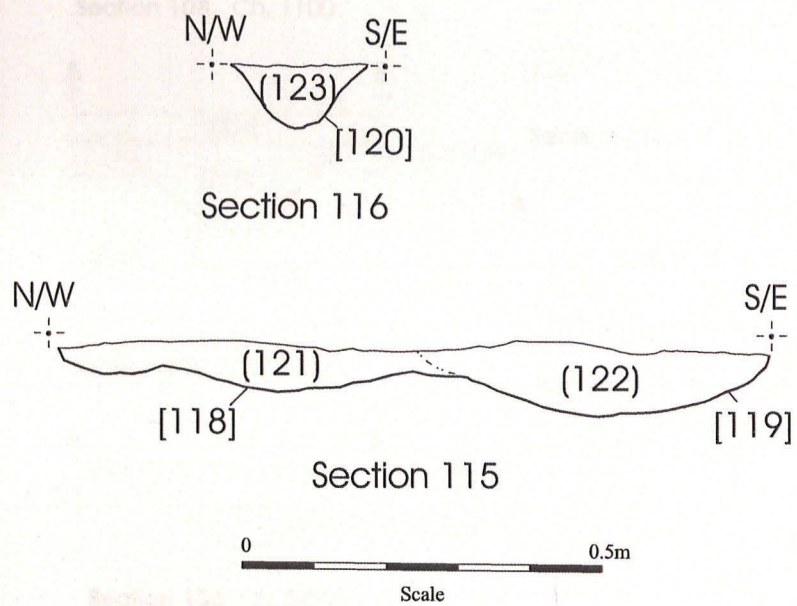
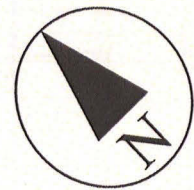


Fig. 5: Features located between chainage points 0.00-300

Key	
	Filter Drain
	Carrier Drain
	Headwall
	Drainage Ditch (See R/0017691/R/MC/500/50/01)
	Ditch reference, Drainage Ditch type (1)
	Proposed Pedestrian Facility
	CPO Boundary
	Accommodation works: ditch diversions
	Surface Water Channel with Type B Narrow Filter Drain (Orig No. 0017691/R/MC/500/50/04 and HCD F21)
	Chamber
	Oil Separator/Interceptor (See 0017691/R/MC/500/50/03)
	Type B Narrow Filter Drain to HCD F20
	Type B Chamber to HCD F12



Drawing 117. Ch. 270

Fig. 6: Features drawn at 1:50 in plan and 1:10 in section at A4.

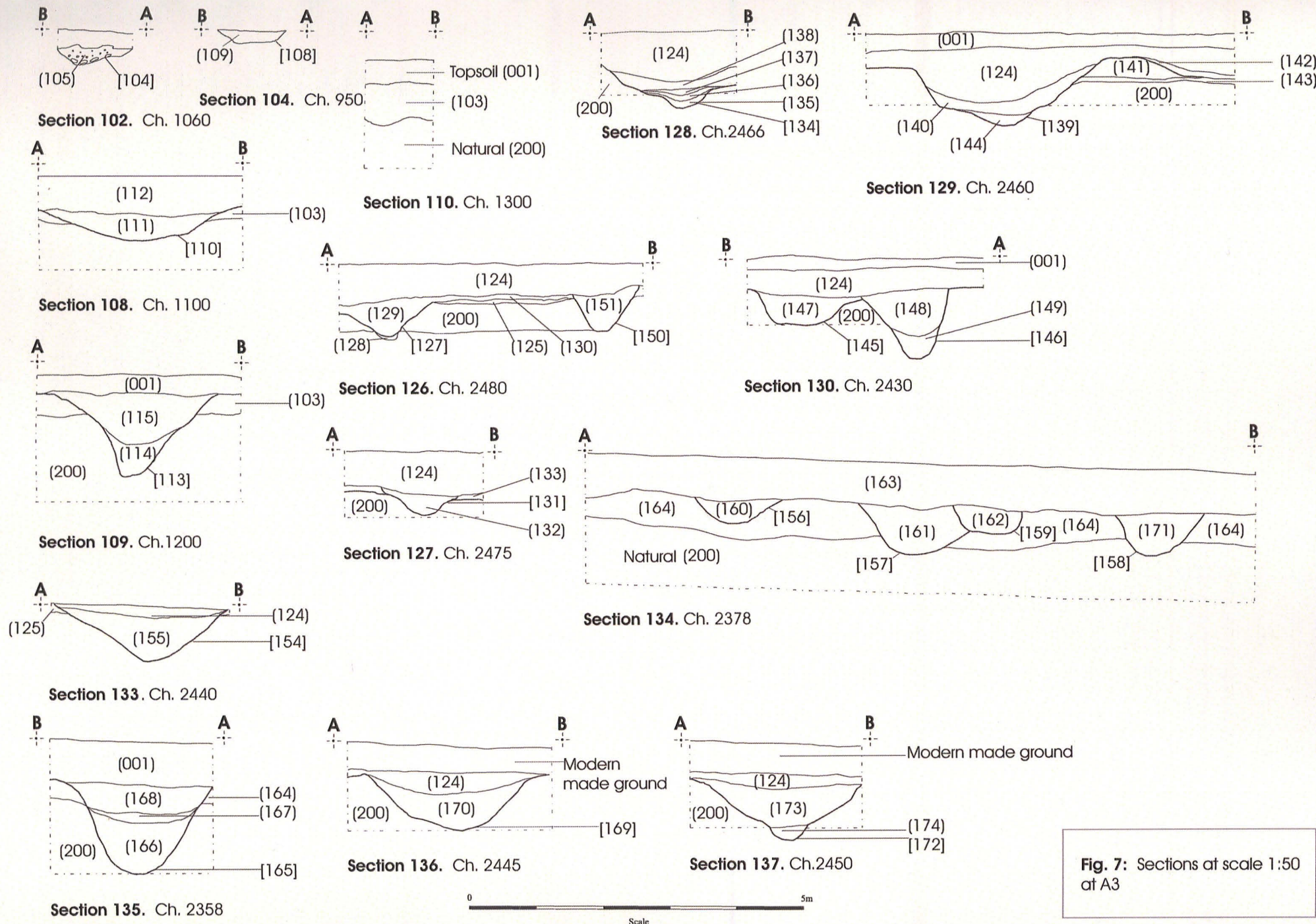


Fig. 7: Sections at scale 1:50 at A3