

**A REPORT TO  
JOYNES PIKE  
& ASSOCIATES LTD  
CONSULTING ENGINEERS**

**FEBRUARY 2005**

**ANCHOR STREET,  
LINCOLN**

**ARCHAEOLOGICAL  
WATCHING BRIEF  
IN CONJUNCTION WITH  
GEOTECHNICAL INVESTIGATIONS**

**PREPARED BY  
MIKE JARVIS ARCHAEOLOGICAL SERVICES**

**MJAS REPORT No.: 527**



MJAS Report No. 527: Anchor Street, Lincoln  
Archaeological Watching Brief in Conjunction with Geotechnical InvestigationsANCHOR STREET,  
LINCOLNARCHAEOLOGICAL WATCHING BRIEF  
IN CONJUNCTION WITH  
GEOTECHNICAL INVESTIGATIONS

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## ANCHOR STREET, LINCOLN

### ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS

#### NON TECHNICAL SUMMARY

- Between the 28<sup>th</sup> October and 22<sup>nd</sup> December 2004, Mike Jarvis Archaeological Services, undertook an archaeological watching brief on behalf of Joynes Pike and Associates Ltd (Consulting Engineers) during geotechnical investigations at the above site location.
- Previous investigations have revealed the site to contain deposits associated with the Roman, medieval, post-medieval and modern periods.
- Trial pits were excavated to sample deposits associated with the site's post-19<sup>th</sup> century occupation, natural and the riverside retaining wall.
- For the most part, the watching brief corroborated the results made during first phase of the geotechnical investigations, although the discovery of waterlogged deposits close to the present-day river frontage has highlighted a new area of potential study.
- Although the results of this watching brief have provided only limited information regarding the archaeological content of the site, an overall enhancement of knowledge of the area has been achieved with regard to the survival and extent of archaeological deposits. This information together with the results from previous investigations will be of value in future decision making in the management of the sites archaeological resource.



## ANCHOR STREET, LINCOLN

### ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS

#### 1.0 INTRODUCTION

Between the 28<sup>th</sup> October and 22<sup>nd</sup> December 2004, Mike Jarvis Archaeological Services (MJAS) undertook an archaeological watching brief on behalf of Joynes Pike and Associates Ltd (Consulting Engineers) during the second and concluding phase of geotechnical investigations at the above site location. Phase one of the investigation was carried out during March 2004 (Jarvis 2004).

#### 2.0 SITE LOCATION AND BACKGROUND

The site is located to the west of High Street and to the north of Gaunt Street. The Upper River Witham forms the western boundary of the site and Tanners Lane the north. National Grid Reference: SK 97167 70590 (Fig. 1). Previous archaeological investigations on the site in 2002 (Trimble 2002), 2003 (Jarvis 2003) together with Phase One of these geotechnical investigations in 2004 (Jarvis 2004) revealed the site to contain potentially important evidence of Roman, medieval and post-medieval activity together with extensive remains associated with its more recent industrial use (see Fig. 2).

#### 3.0 AIMS AND METHODOLOGY

The aims of the watching brief were:

- To produce an archive record of deposits and remains generally within the constraints of the groundwork contractors' programme and working methods with due regard to current health and safety legislation.
- To produce a report on the archaeological importance of the discoveries.
- To produce a project archive from which the potential for further study and academic research could be assessed.
- To provide information for accession to the County Sites and Monuments Record (SMR) and the Lincoln Urban archaeological Database (UAD).

The watching brief required the monitoring of 26 machine-excavated trial pits (nominally 2m long and 600m wide— see Figs. 2 and 3). Trial Pits 25 - 41 sampled post-19<sup>th</sup> century industrial deposits, and trial pits 42 - 47 (excavated to depths of up to 3m), assessed the natural deposits on the site. Trial Pits 48 -50, located at the western edge of the site, assessed the riverside retaining wall and were similarly deep.

A number of borehole also formed part of the geotechnical investigations, and although not monitored during the watching brief, the borehole results have been included in the report (see 4.2 and Appendix 5).

The archaeological record was secured by means of trench-side notes and scale drawings. A comprehensive photographic record was also compiled.



## 4.0 RESULTS AND CONCLUSIONS

### 4.1 TRAIL PIT RESULTS (Figs. 2 - 4 and Pl. I)

#### TP25

Undated mid-dark brown sand ([062]) was recorded 500mm below ground level (7.04m OD). Sealing [062] was [061] a sandy soil deposit containing frequent brick rubble together with sand/limestone. Above [061] was a concrete floor surface (ground level – 7.54m OD).

#### TP26

Excavation revealed a mid-dark brown sand silt ([065]) with occasional pot (11<sup>th</sup> – 12<sup>th</sup> century), bone and tile (12<sup>th</sup> – 16<sup>th</sup>) was recorded approximately 450mm below ground level (6.09m OD). Above [065] lay deposits of ash and clinker ([063] and [064]), which were sealed by a layer of brick and concrete (ground level – 6.54m OD).

#### TP27

An undated deposit of sandy soil [067] was recorded 600mm below ground level (5.36m OD). Above [067] lay [066], a loose, sandy soil with frequent concrete and brick fragments. Above [066] was a concrete floor (ground level – 6.06m OD).

#### TP28

Mid-brown sand silt ([070]) lay 800mm below ground level (5.33m OD). Above [070] lay deposits [068] and [069], sandy soils containing frequent ash and clinker sealed by a layer of concrete (ground level – 5.83m OD).

#### TP29

Undated mid brown sandy soil [071] lay 300mm below ground level, immediately beneath a capping layer of concrete (ground level – 6.73m OD).

#### TP30

Deposit [075], clayey sand was recorded 450mm below ground level (5.47m OD). Above [075] were a series of ash and brick deposits ([072] – [074]) sealed by a layer of concrete that formed ground level (5.92m OD).

#### TP31

The investigation of TP31 revealed a deposit of mid-brown sandy soil ([079]) 1m below ground level. Sealing [079] was a series of ash and clinker deposits ([076] – [078]) capped by a concrete floor.

#### TP32

A deposit of dark grey/black slightly clayey soil ([082]) lay 800mm below ground level (5.34m OD). Above [082] were two layers ([080] & [081]) each contained frequent ash and clinker. Overlying [080] was a 200mm thick concrete floor (ground level – 6.14m OD).

#### TP33

A mid-brown sandy silt ([084]) lay c. 300mm below ground level (6.23m OD) and was sealed by [083] a narrow band of ash and clinker. Capping [083] was a concrete floor (ground level – 6.53m OD).



**TP34**

A mid-brown sand soil ([089]) with occasional limestone and infrequent pottery (late 11<sup>th</sup> – late 13<sup>th</sup>) lay 700mm below ground level (5.62m OD). Above [089], lay a series of brick rubble and mortar deposits ([085] – [088]) capped by a concrete floor (ground level – 6.32m OD).

**TP35**

A single sherd of late 11<sup>th</sup> – late 14<sup>th</sup> century pot was recovered from mid-brown sandy soil ([093]) that lay c. 600mm below ground level (5.92m OD). Above [093], lay extensive deposits of brick rubble ([091] and [092]) sealed by topsoil ([090] – 6.52m OD).

**TP36**

Excavation of TP36 revealed [097] a mid-brown sandy soil 900mm below ground level (5.35m OD). An undated band of crushed limestone ([096]) sealed [097] and was itself overlain by two extensive deposits of brick rubble ([095] and [094]). Ground level – 6.25m OD.

**TP37**

Mid-brown sand, [100], contained a single sherd of 13<sup>th</sup> century pot and 12<sup>th</sup> – 16<sup>th</sup> century tile and lay 800mm below ground level (5.06m OD) and was sealed by [099], an extensive deposit of brick rubble. Above [099] was topsoil [098] (6.26m OD).

**TP38**

A quarry tile floor [103] was revealed c. 650mm below ground level (5.63m OD). Above the floor lay an extensive deposit of brick rubble ([102]) sealed by topsoil ([101] – 6.28m OD).

**TP39**

Mid-brown sand ([106]) was revealed at 5.90m OD (300mm below ground level). Above [106] was a layer of ash ([105]) sealed by topsoil ([104] – 6.20m OD).

**TP40**

Excavation of TP40 was intended to further investigate the steel tank/trough previously discovered during the excavation of TP24. A 4.50m length of the structure was exposed and was revealed over 1.50m deep. The full extent and function of the tank/trough remains unclear (ground level – 6.18m OD).

**TP41**

A deposit of mid-brown sand ([112]) was revealed c. 300mm below ground level (5.83m OD) sealed by a narrow band of stone ([111]). Above [111] was a layer of ash/clinker ([110]) sealed by topsoil [109]. Capping topsoil was a concrete floor surface (ground level – 6.13m OD).

**TP42**

The excavation of TP42 revealed natural sand ([119]) at 3.74m OD (2.40m below ground level). Above natural was [118] mid-grey sand containing abundant water snail (c. 4.04m OD) sealed by ([117]) an extensive (1.20m thick) deposit of mid-brown sandy silt with a few sherds of pot and tile dating to between the 13<sup>th</sup> and late 16<sup>th</sup> centuries together with a few large animal bones (top – 5.04m OD).

Overlying [117] was a series of dumps containing frequent brick rubble, ash and clinker ([113] – [116]) capped by a concrete floor surface (ground level – 6.14m OD).



**TP43**

Natural clay ([125]) was recorded 2.20m below ground level (3.76m OD). Sealing natural was [124], a light yellow/brown sand with bands of grit containing frequent tile and snail shell (3.96m OD). Above [124] was [122/123] an extensive, deposit of brown, slightly clayey silt with occasional pot and tile dating to the 13<sup>th</sup> to 14<sup>th</sup> century (top – 4.96m OD) that was sealed by [121], a 800mm thick deposit of ash and clinker overlain by a layer of bricks sealed by tarmac (ground level – 5.96m OD).

**TP44 (Fig. 3)**

Investigation of TP44 revealed natural sand ([130]) 1.60m below ground level (4.42m OD). Above natural was [129] a friable, sand soil containing frequent animal horn cores together with some pot and tile of mid-late 12<sup>th</sup> to 14<sup>th</sup> century date (top – 5.12m OD). An undated mid-brown sandy soil [128] sealed [129] and was overlain by [127] a deposit of ash and clinker. Capping [127] was a surface of bricks sealed by tarmac (ground level – 6.02m OD).

**TP45**

Natural sand ([144]) was encountered 2.50m below existing ground level (3.60m OD). Above [144] lay [134], pale brown sand mixed with bands of peat and infrequent pot (12<sup>th</sup>), tile and animal bone (top – 4.30m OD). Sealing [134] were two undated silt deposits ([132] and [133] – top – 5.50m OD) sealed by [131] an ash/clinker layer capped by a concrete floor (6.10m OD).

**TP46 (Fig. 3)**

Excavation of TP46 identified natural sand 1.75m below ground level (4.35m OD). Above natural was [139] a 1.25m thick, mid-dark brown sand soil with pottery spanning the mid-3<sup>rd</sup> to early 14<sup>th</sup> centuries (5.60m OD). Sealing [139] were industrial deposits [138] – [135] above which lay a concrete floor (ground level - 6.10m OD).

**TP47 (Fig. 3)**

Natural sand was encountered 1.90m below ground level (4.68m OD). Above natural was [142] an extensive (1.50m thick) deposit of mid-brown sandy soil with occasional Roman pottery (4<sup>th</sup> century), tile (12<sup>th</sup> – 14<sup>th</sup>) and limestone fragments (top – 6.18m OD). Above [142] was an ash soil ([141]) sealed by a 200mm thick concrete floor (6.58m OD).

**TP48 (Fig. 3 & Pl. I)**

Natural clay was revealed 2.30m below ground level (4.37m OD). Above natural was layer [147] a dark grey peat with frequent round wood and snail shell inclusions (4.62m OD) and was sealed by [148] dark grey/black sand with organic (round-wood) inclusions together with a small quantity of medieval roof tile (c. 4.96m OD).

Cut into [148] was [154] the brick foundations for the existing river wall. A reinforced concrete wall (possibly a later addition) [153] sat on top of the foundations. Two extensive deposits of ash and clinker ([149] and [150]) lay against the inner face of [153]. Sealing [150] was [151] a brick floor that was sealed by a tarmac surface ([152] – ground level 6.67m OD). Immediately to the west of [153] was the remains of a further partially collapsed brick wall ([155]) that appeared to rest on layer [148] (top – 5.24m OD).

**TP49**

Due to water in the trial pit, it was not possible to precisely establish the depth of natural (approximate depth c. 3.91m OD). An undated mid-brown sandy soil [160], with frequent bands of peat, lay 1.30m below ground level (top - 4.61m OD).



The river retaining wall ([161]) truncated [160]. The wall was revealed as 800mm wide and 2m high. The base of the wall lay at 3.91m OD (the same height as the river level). To the east of [161] and above [160], was a band of brick rubble and mortar ([159]) believed to be a construction surface associated with the retaining wall (5.26m OD). Deposits of ash and clinker ([157] and [158]) overlay [159] and were in turn capped by ([156]) a concrete floor (ground level – 5.91m OD).

#### TP50

Natural sandy clay ([167]) was noted c. 2.20m below ground level (3.84m OD). Overlying natural was [166], mid-brown silt containing bands of peat (top – 5.04m OD). Above [166] was [165] an extensive deposit of ash and clinker.

The river retaining wall [162] truncated deposit [165] (base of wall – c. 4.04m OD). Above [165] and abutting the inner face of the retaining wall was concrete floors surfaces ([163] and [164], ground level – 6.04m OD).



Plate 1: Trial Pit 48 (looking south). Note the grey/black organic layer ([148]) lying at the base of the retaining walls brick foundations.

Table 1: Trial Pit data showing OD height of existing ground level and the top of pre-19<sup>th</sup> century deposits.

Trial Pit	Ground Level OD	Top of Pre-19 <sup>th</sup> Century Deposits	Top of Natural Deposits
TP25	7.54m OD	7.04m OD	
TP26	6.54m OD	6.09m OD	
TP27	6.06m OD	5.36m OD	
TP28	5.83m OD	5.33m OD	
TP29	6.73m OD	6.43m OD	
TP30	5.92m OD	5.47m OD	
TP31	N/a	N/a	



TP32	6.14m OD	5.34m OD	
TP33	6.53m OD	6.23m OD	
TP34	6.32m OD	5.62m OD	
TP35	6.52m OD	5.92m OD	
TP36	6.25m OD	5.35m OD	
TP37	6.26m OD	5.06m OD	
TP38	6.28m OD	5.63m OD	
TP39	6.20m OD	5.90m OD	
TP40	6.18m OD	5.68m OD	
TP41	6.13m OD	5.83m OD	
TP42	6.14m OD	5.04m OD	3.74m OD
TP43	5.96m OD	4.96m OD	3.76m OD
TP44	6.02m OD	5.62m OD	4.42m OD
TP45	6.10m OD	5.50m OD	3.60m OD
TP46	6.10m OD	5.60m OD	4.35m OD
TP47	6.58m OD	6.18m OD	4.68m OD
TP48	6.67m OD	5.07m OD	4.37m OD
TP49	5.77m OD	4.47m OD	3.77m OD
TP50	6.04m OD	5.04m OD	4.04m OD

#### 4.2 SUMMARY OF BOREHOLE RESULTS (Fig. 2 and Appendix 5)

##### BH7

Natural deposits (orange/brown sands) occurred, 2.20m (4.25m OD) below ground level. Overlying natural was deposits of concrete, sand and ash with brick inclusions (ground level – 6.45m OD).

##### BH8

Natural sand occurred at 4.07m OM (2.10m below ground level). Sealing natural were dark brown sandy soils with ash and brick inclusions. A layer of concrete formed existing ground level (6.17m OD).

##### BH9

Natural sand lay 4.60m below ground level (1.47m OD). Sealing natural were clayey soils with brick, ash and clinker sealed by a layer of concrete (6.07m OD).

##### BH11

Deposits of natural orange/brown sand were recorded 900mm below existing ground level (5.25m OD). Above natural lay a sandy soil with brick and ash inclusions. This was sealed by concrete (ground level – 6.15m OD).

##### BH12

Natural gravely sand was recorded at 0.90m OD (5.20m below existing ground level). Overlying natural were sand and clay soils with brick, ash and clinker (ground level – 6.10m OD).

##### BH13

Orange brown sand was recorded at 1.73m OD (4.10m below ground level). Sealing natural were a series of sand and clay soils with brick and stone fragments. A layer of concrete sealed the aforementioned and formed existing ground level (5.83m OD).



#### BH14

Deposits of firm, dark brown sandy clay with pockets of organic material were recorded 1.90m below ground level (4.00m OD). Above natural lay a brown sandy soil that was sealed by concrete rubble and a cobbled surface (ground level – 5.90m OD).

**Table 2: Borehole data showing estimated OD height of natural below existing ground level.**

Borehole	Ground Level OD	Natural? OD	Depth
BH7	6.45m OD	4.25m OD	2.20m
BH8	6.17m OD	4.07m OD	2.10m
BH9	6.07m OD	1.47m OD	4.60m
BH10	N/a	N/a	N/a
BH11	6.15m OD	5.25m OD	0.90m
BH12	6.10m OD	0.90m OD	5.20m
BH13	5.83m OD	1.73m OD	4.10m
BH14	5.90m OD	4.00m OD	1.90m

#### 4.3 CONCLUSIONS

*In conclusion, the localised nature and limited scope of the geotechnical investigations has resulted in little exposure of the site's pre-19<sup>th</sup> century archaeological resource, although the discovery of waterlogged material, close to the river edge, has revealed a potentially new source of information.*

*The small quantity of datable material recovered during the watching brief similarly provides little insight into the nature of these earlier deposits however, previous investigations on the site suggest Roman, medieval and post-medieval deposits are present on the site, although the limited extent of the investigations prevents their interpretation beyond a very basic level.*

*Post-19<sup>th</sup> century deposits revealed during the investigations further corroborate the findings made during earlier archaeological and geotechnical investigations, with evidence of widespread levelling of the site during the 19<sup>th</sup> century together with extensive evidence of the sites more recent industrial use.*

*The borehole investigation similarly provides little interpretative information relating the archaeological content of the site, although it has revealed natural deposits to lie between 0.90m and 4.60m below ground level.*

*Although the results of this watching brief have proved largely negative, an enhancement of knowledge of the area has been achieved with regard to the survival and extent of archaeological deposits on the site. This information will be of value in future decision making in the management of the archaeological resource.*

#### 5.0 ACKNOWLEDGEMENTS

MJAS would like to thank Joynes Pike and Associates Ltd (Consulting Engineers) for commissioning the watching brief and post-fieldwork analysis. Thanks are also extended to Mr Michael Jones (City Archaeologist, City of Lincoln Council).

Maps contained in this report are reproduced from Ordnance Survey material with the permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown Copyright. MJAS Licence No. 100042473.

Fig. 2 of this report is based on a borehole & trial trench location drawing supplied by Joynes Pike and Associates Ltd (Consulting Engineers).



## 6.0 BIBLIOGRAPHY

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### NOTE

THIS REPORT IS PRESENTED ON THE UNDERSTANDING THAT FURTHER INFORMATION MAY EMERGE, MJAS CANNOT THEREFORE BE HELD RESPONSIBLE FOR LOSS, DELAY OR DAMAGE ARISING OUT OF THIS REPORT.



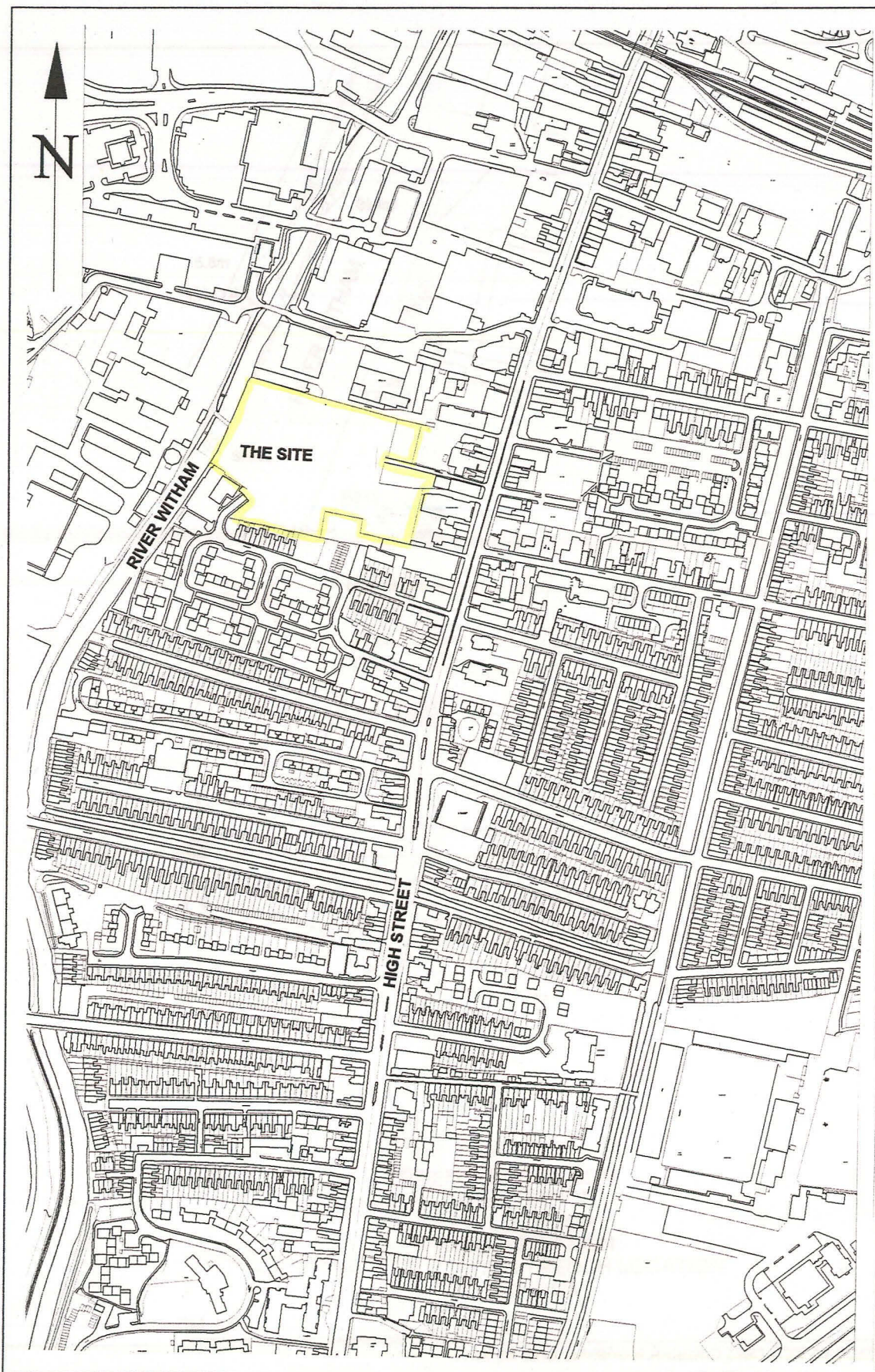


Fig. 1: Site location map (scale 1:5000).



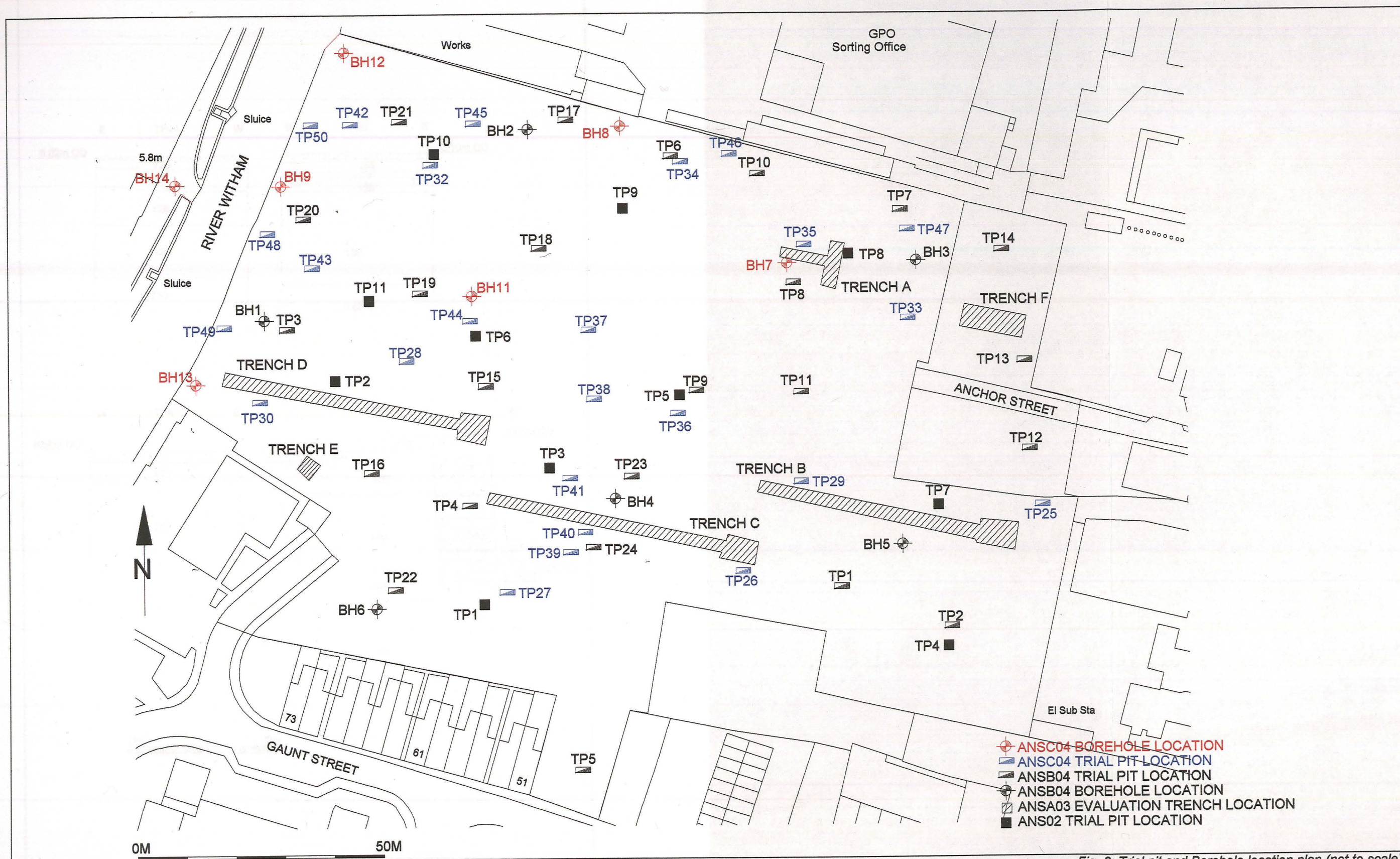


Fig. 2: Trial pit and Borehole location plan (not to scale).



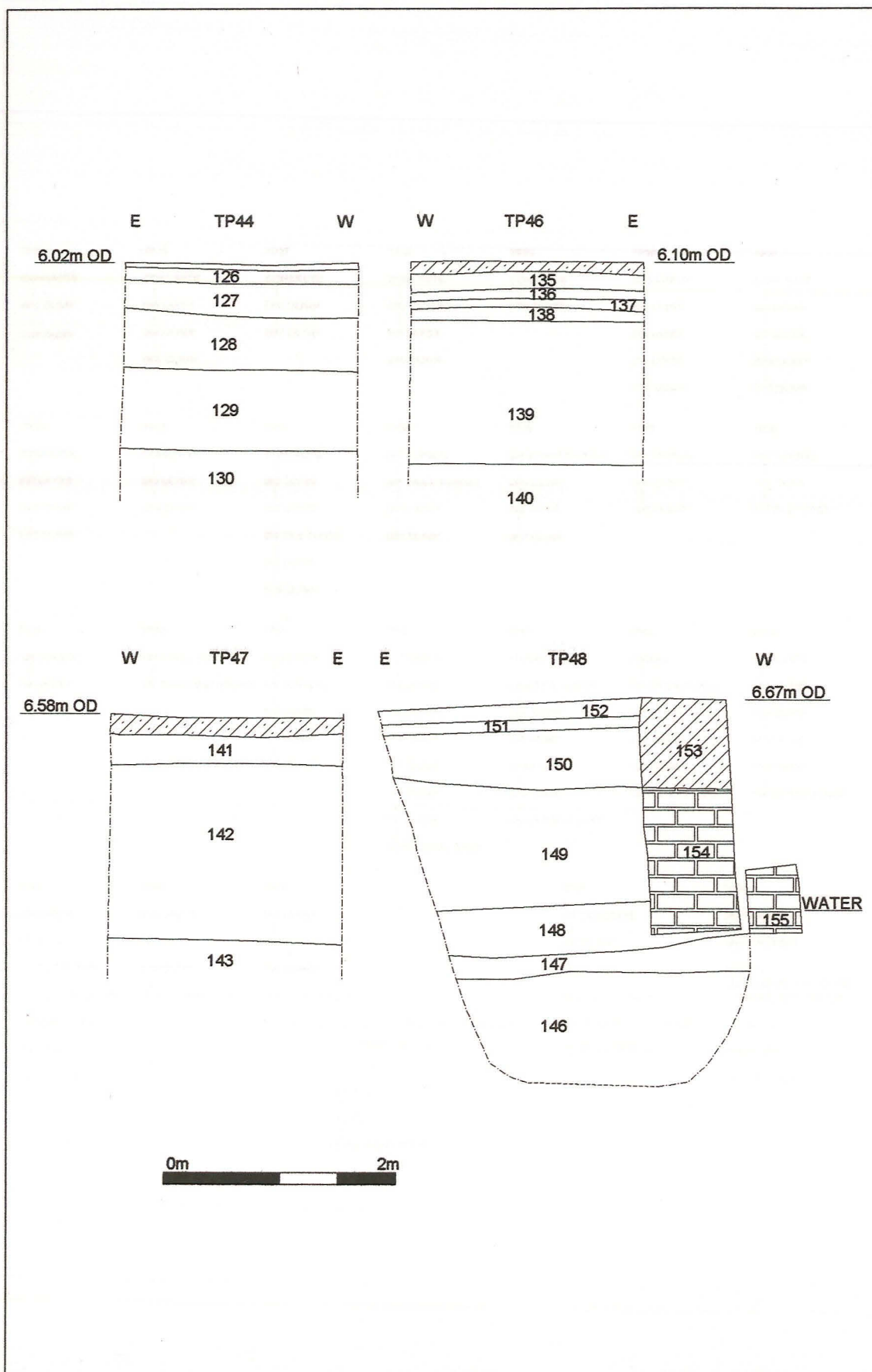
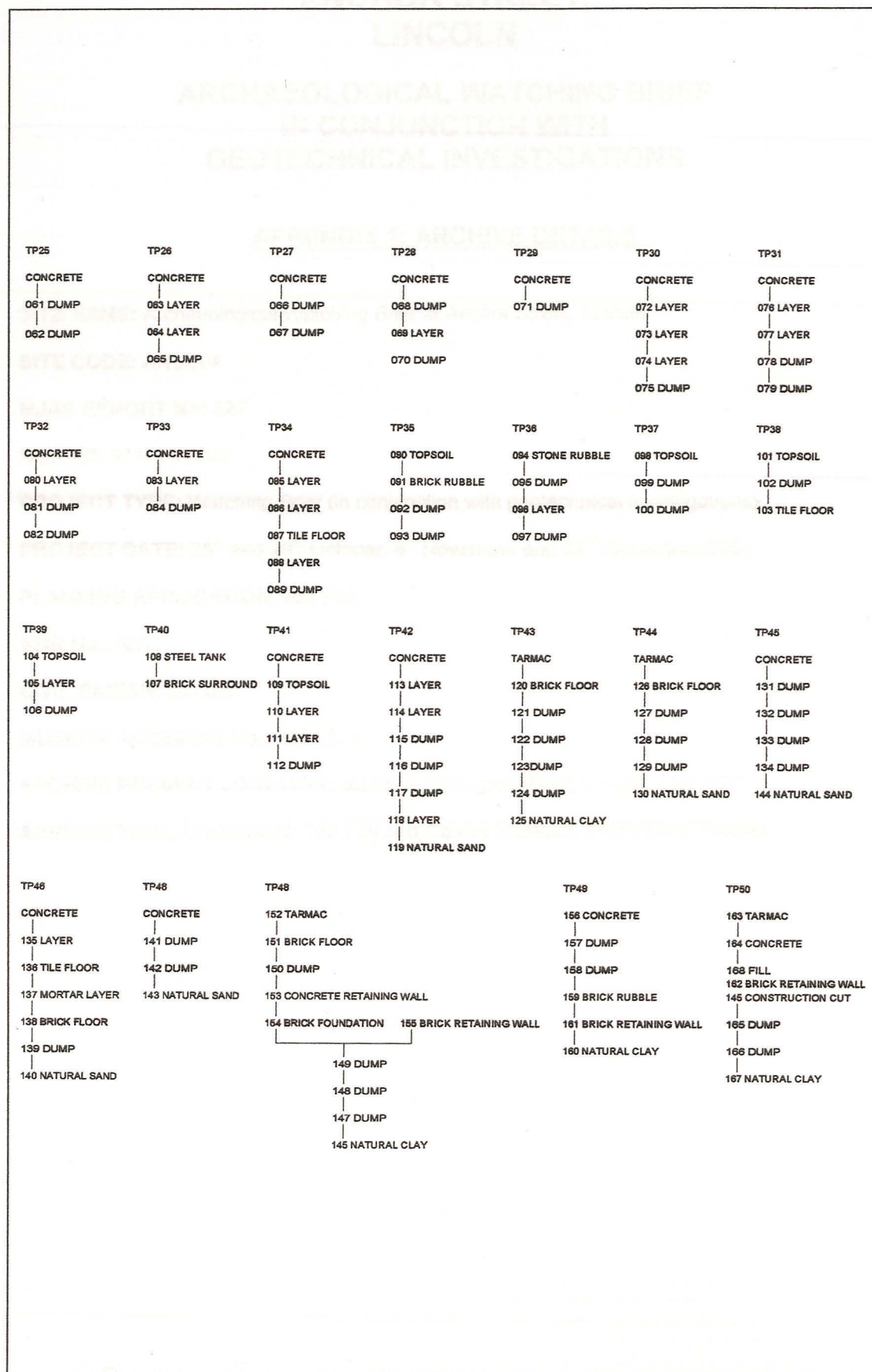


Fig. 3: Example trial pits sections TP44, 46-48 (scale 1:50).



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**Fig. 4: Stratigraphic matrices (all trial pits).**



## **ANCHOR STREET, LINCOLN**

### **ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS**

#### **APPENDIX 1: ARCHIVE DETAILS**

**SITE NAME:** Archaeological Watching Brief at Anchor Street, Lincoln

**SITE CODE:** ANSC04

**MJAS REPORT No:** 527

**NGR:** SK 97167 70590

**PROJECT TYPE:** Watching Brief (in conjunction with geotechnical investigations)

**PROJECT DATE:** 28<sup>th</sup> and 29<sup>th</sup> October, 8<sup>th</sup> November and 22<sup>nd</sup> December 2004

**PLANNING APPLICATION No.:** N/A

**SMR No.:** N/A

**CIVIL PARISH:** Lincoln

**MUSEUM ACCESSION No.:** 2004.234

**ARCHIVE PRESENT LOCATION:** MJAS, 1 Torrington Road, Lincoln, LN2 2DP

**ARCHIVE FINAL LOCATION:** The City and County Museum, Friars Lane, Lincoln



## ANCHOR STREET, LINCOLN

### ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS

#### APPENDIX 2: CONTEXT SUMMARY

Context	Trial Pit	Description
061	TP25	Mid-dark brown sandy soil with fragments of sandstone and limestone, brick fragments and some burnt sand.
062	TP25	Friable, mid-brown sandy soil with occasional small limestone fragments, pebbles, infrequent charcoal and tile flecks.
063	TP26	Ash/clinker.
064	TP26	Clayey sandy ash with clinker.
065	TP26	Mid-dark brown sandy silt with occasional animal bone fragments and roof tile. Infrequent small angular limestone fragments.
066	TP27	Heavy but loose light brown sandy/concrete with pebbles and brick.
067	TP27	Mid-dark brown sandy soil with occasional angular limestone fragments and pebbles.
068	TP28	Ash clinker slag
069	TP28	Mid-brown sandy soil, brick flecks, small angular limestone fragments and dark grey silt.
070	TP28	Mid-dark brown sandy silt with small limestone flecks.
071	TP29	Mid-brown sandy soil with infrequent small angular limestone fragments.
072	TP30	Ash and clinker.
073	TP30	Dark clay soil with brick rubble.
074	TP30	Sand with small angular sandstone fragments.
075	TP30	Dark brown clay coarse sand with frequent small tile and brick flecks and fragments of infrequent charcoal and animal bone.
076	TP31	Ash, clinker.
077	TP31	Sand.
078	TP31	Ash and clinker bands with occasional lumps of iron slag.
079	TP31	Mid to dark brown sandy soil with occasional charcoal and small angular limestone fragments.
080	TP32	Black ash, clinker and slag.
081	TP32	Bands of ash and slag, clinker and brick rubble.
082	TP32	Dark grey/black slightly clayey soil with tile flecks and small angular limestone fragments.
083	TP33	Ash/clinker.
084	TP33	Mid-brown sandy silt with small limestone fragments and occasional pebbles.
085	TP34	Mid-dark brown sandy soil with frequent pebbles.
086	TP34	Pale brown sand/mortar with frequent pebbles.
087	TP34	Quarry tile floor.
088	TP34	Pale brown sandy/mortar with brick and tile rubble.
089	TP34	Mid-brown sandy soil with occasional limestone fragments.
090	TP35	Topsoil.
091	TP35	Brick rubble.
092	TP35	Dark brown sandy soil with frequent brick rubble, concrete and roof



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		slate.
093	TP35	Mid-brown sandy soil with occasional limestone fragments.
094	TP36	Stone and rubble.
095	TP36	Brick rubble in mid-brown sandy soil.
096	TP36	Pale brown crushed limestone fragments.
097	TP36	Mid-brown sandy soil.
098	TP37	Topsoil (mid-dark brown sandy soil).
099	TP37	Brick rubble and pebbles.
100	TP37	Mid-brown sandy soil with limestone fragments and infrequent animal bone.
101	TP38	Topsoil.
102	TP38	Mid-dark brown sandy soil with frequent brick, tile, slate glass and wood.
103	TP38	Quarry tile floor.
104	TP39	Topsoil (mid-dark brown sandy soil).
105	TP39	Ash and clinker with limestone fragments.
106	TP39	Mid-brown sandy soil with occasional small limestone fragments.
107	TP40	Brickwork.
108	TP40	Steel tank.
109	TP41	Topsoil.
110	TP41	Ash and clinker.
111	TP41	Pale yellow sand and sandstone.
112	TP41	Mid-brown sandy soil.
113	TP42	Ash and clinker.
114	TP42	Friable, light brown mortar.
115	TP42	Loose brick rubble with ash and clinker.
116	TP42	Loose brick and pale brown mortar fragments.
117	TP42	Loose-firm, light-mid brown sandy silt with occasional-frequent small angular/sub-rounded limestone fragments and occasional animal bone.
118	TP42	Firm, mid-grey sand containing abundant water snail shells.
119	TP42	Natural sand.
120	TP43	Brick floor.
121	TP43	Loosely compacted bands of ash and clinker.
122	TP43	Mid-dark brown slightly clayey silt with occasional small angular/sub-rounded limestone fragments, small rounded pebbles (up to 30mm <sup>3</sup> ) and oyster shell.
123	TP43	Mid-dark brown slightly clayey silt with occasional animal bone, oyster shell together with small angular limestone fragments.
124	TP43	Firm, light yellow/brown sand containing narrow bands of a dark coarse grey/brown sand with frequent small fragments of tile.
125	TP43	Firm grey clay (river clay) with bands of dark grey/brown gritty sand containing very frequent water snail shells.
126	TP44	Brick floor.
127	TP44	Deposit of ash, clinker and brick rubble.
128	TP44	Loose-firm, mid brown sandy silt with occasional small-medium sized limestone fragment.
129	TP44	Friable, mid-dark brown sandy soil with frequent small-medium sized limestone fragments and occasional-frequent animal horn-core (cow?).
130	TP44	Natural yellow sand.
131	TP45	Ash and clinker.
132	TP45	Firm, pale brown clayey soil with frequent small limestone chippings.
133	TP45	Loose-firm, mid-dark brown silt soil with infrequent small angular limestone fragments.
134	TP45	Firm, light-pale brown sand containing bands of dark brown organic material (peat) with very infrequent animal bone.



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135	TP46	Loose deposit of limestone chipping.
136	TP46	Quarry tile floor.
137	TP46	Narrow band of loose pale brown mortar.
138	TP46	Brick floor.
139	TP46	Loose-firm, mid-dark brown sandy silt with occasional small angular limestone fragments and oyster shell.
140	TP46	Natural yellow sand.
141	TP47	Dark grey/brown ash soil.
142	TP47	Mid brown sandy silt with occasional small limestone fragments and pottery.
143	TP47	Natural yellow sand.
144	TP45	Natural yellow sand.
145	TP48	Construction cut for wall [162].
146	TP48	Firm/friable light brown sand with light grey clay lenses throughout.
147	TP48	Dark grey peat-like organic material with frequent round wood (birch?) and water snails.
148	TP48	Dark grey/black sand with organic (round-wood) inclusions.
149	TP48	Loosely compacted bands of ash and clinker with frequent brick and tarmac inclusions.
150	TP48	Dark brown deposit of ash and clinker.
151	TP48	Brick floor.
152	TP48	Tarmac surface.
153	TP48	Reinforced concrete retaining wall.
154	TP48	Brick retaining wall.
155	TP48	Brick retaining wall (foundations?).
156	TP49	Concrete surface.
157	TP49	Layer of ash/clinker.
158	TP49	Loose compaction, mid-grey sand soil.
159	TP49	Loose layer of brick rubble and light brown mortar.
160	TP49	Mid-brown sandy soil with bands of peat and sand below.
161	TP49	Brick retaining wall.
162	TP50	Brick retaining wall.
163	TP50	Tarmac surface.
164	TP50	Concrete.
165	TP50	Loose layer of ash and clinker.
166	TP50	Mid-brown silt with possible peat bands within
167	TP50	Natural sand.
168	TP50	Construction cut infill – brick, concrete etc.



## ANCHOR STREET, LINCOLN

### ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS

#### APPENDIX 3: FINDS REPORTS

##### **Animal Bone**

*By Jennifer Kitch*

The assemblage is small, providing a limited amount of data. The overall condition is good.

Context [129] consists entirely of cattle horn cores, from both adult and juvenile individuals. The cut marks displayed on the majority of horn cores are consistent with skinning and horn removal. The assemblage is too small to imply full scale tanning industry, however these related activities were taking place within the locality.

The remaining animal bone contexts provide little further information save the presence of the species. Cut marks on the large mammal sized vertebra (probably cattle) and on the cattle radius are consistent with meat removal cut marks, often associated with domestic refuse.

##### **Roman Pottery**

*By B J Precious*

*The pottery has been recorded to the basic archive level according to the guidelines laid down by the Study Group for Roman Pottery using the computer codes and pottery recording system of the former City of Lincoln Archaeology Unit, and sherd count and weight in grams as the measures.*

This site produced 13 sherds weighing 192g of Roman pottery from three contexts ([065]: TP26; [139]: TP46; [142] TP47). The pottery is in good condition. The sherd/weight ratio falls within the average range at 14.7g. There are no sherd joins.

The Roman assemblage is predominantly late Roman in date, which corresponds well with the principal groups from previous excavations at the former Anchor Street Works (see Precious: August 2003 and March 2004). Context [065] is the exception, consisting of a single grey ware rim sherd from a more sophisticated cooking pot with definite lid seating of mid-2<sup>nd</sup> century date, together with one post-Roman sherd.

Two undiagnostic body sherds came from context [139], one of which is in shell-tempered Dales ware of at least mid-3<sup>rd</sup>, into the 4<sup>th</sup> century date.

The largest group of ten sherds came from context [142] of homogenous 4<sup>th</sup> century date. Most of the pottery consists of grey wares; often with burnished decoration similar to those produced at the Swanpool kilns during the later Roman period, and are mainly domestic, cooking wares. There are also a number of finewares: a beaker, a bowl and a handled flagon, from the Nene Valley kilns, and a fragment of fine, but undecorated Parisian-type ware. A sherd from a Dales ware cooking pot completes the group.

The pottery is in stable condition and should be retained for further work.



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References

Jarvis, M 2003, *The Former Anchor Street Works, Anchor Street, Lincoln, Archaeological Evaluation*, CLAU Report 515

Jarvis, M 2004, *Archaeological Watching Brief in conjunction with Geotechnical Investigations, Anchor Street, Lincoln*, MJAS Report 521



## ANCHOR STREET, LINCOLN

### ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS

#### APPENDIX 4: FINDS ARCHIVE

##### Animal Bone

Context	Taxon	Element	Side	Butch	Cond	No.	Weight	Notes
117	Large	Thoracic Vertebra	B	0	1	1	71g	
117	Large	Thoracic Vertebra	B	1	2	1	53g	Single cut on the right side of the spinous process
117	Cattle	Radius	R	1		1	0g	
129	Cattle	Horn core	R	0	2	1	46g	Broken at base
129	Cattle	Horn core	L	1	2	1	48g	Juv, Three cuts at the base of horn core on the frontal bone of the skull
129	Cattle	Horn core	R	1	2	1	161g	Shallow cut on the occipital and on the frontal of the skull below horn core
129	Cattle	Horn core	R	1	2	1	50g	Juv, cuts encircling horn core at the base, and cuts on the frontal bone of the skull
129	Cattle	Horn core	L	0	2	1	111g	Broken at the tip.
129	Cattle	Horn core	L	0	2	1	67g	Juvenile
129	Cattle	Horn core	L	1	1	1	195g	Six cuts on the occipital at the base of the horn core
129	Cattle	Horn core	R	1	2	1	75g	Chop at the base of the horn core
129	Cattle	Horn core	L	1	2	1	82g	Two cuts on the occipital at the base of the horn core
134	S/G	Mandible	L	0	2	1	57g	3-5 years old

##### Roman Pottery

Context	Fabric	Form	Dec	Alter	Comments	Sherds	Weight
065	GREY	J105			RIM ONLY	1	15g
065	ZDATE				M2C+/POSTRO?		
065	ZZZ				GREY J105 ONLY; TP26		
139	DWSH	J			BS	1	8g
139	GREY	J			BS	1	3g
139	ZDATE				M3C+		
139	ZZZ				TP46		
142	DWSH	J			BS	1	14g
142	GREY	BD	BIA		BASE	1	10g
142	GREY	CLSD			BS	1	32g
142	GREY	CLSD	B		BS BURNISHED SHLDR	1	46g
142	GREY	CLSD	B		BS	1	7g
142	GREY	CP	LA	SOOTEX	BS	1	6g
142	NVCC	BFB?			BS	1	32g
142	NVCC	BK	ROUZ		BS BKPM?	1	2g
142	NVCC	F			BS HANDLE SCAR	1	14g
142	PART	CLSD	B		BS	1	3g
142	ZDATE				4C		



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142	ZZZ				IN TEXT AS 147; TP47		
					TOTAL	13	192g

**Tile**

Context	Cname	Full Name	Fabric	Sub Type	Frag	Weight	Description	Date
065	PNRDISC	Discarded peg, nib or ridge tile	7		2	446g	flat roofer; same tile	mid 12 <sup>th</sup> to 16 <sup>th</sup>
065	PNRDISC	Discarded peg, nib or ridge tile	7		3	263g	flat roofer	mid 12 <sup>th</sup> to 16 <sup>th</sup>
089	PNRDISC	Discarded peg, nib or ridge tile	7		1	47g	no surfaces	mid 12 <sup>th</sup> to 16 <sup>th</sup>
100	PNRDISC	Discarded peg, nib or ridge tile	1		1	49g	flat roofer; mortar	mid 12 <sup>th</sup> to 16 <sup>th</sup>
123	PNRDISC	Discarded peg, nib or ridge tile	1		7	606g	flat roofer	mid 12 <sup>th</sup> to 14 <sup>th</sup>
129	PNRDISC	Discarded peg, nib or ridge tile	1		3	319g	flat roofer; mortar incl over breaks	mid 12 <sup>th</sup> to 14 <sup>th</sup>
142	PNRDISC	Discarded peg, nib or ridge tile	LSWA		1	74g	flat roofer	mid 12 <sup>th</sup> to 14 <sup>th</sup>
146	PNRDISC	Discarded peg, nib or ridge tile	1		1	52g	flat roofer	mid 12 <sup>th</sup> to 16 <sup>th</sup>
148	NIB	nibbed tile	1	3A	1	150g	right corner; mortar	13 <sup>th</sup>
148	PNR	Peg, nib or ridge tile	7		2	311g	flat roofer; mortar	mid 12 <sup>th</sup> to 16 <sup>th</sup>
148	PNRDISC	Discarded peg, nib or ridge tile	1		1	135g	flat roofer	mid 12 <sup>th</sup> to 16 <sup>th</sup>
148	PNRDISC	Discarded peg, nib or ridge tile	7		2	56g	flat roofer; same tile	mid 12 <sup>th</sup> to 16 <sup>th</sup>
148	PNRDISC	Discarded peg, nib or ridge tile	7		1	302g	flat roofer; mortar	mid 12 <sup>th</sup> to 16 <sup>th</sup>

**Post-Roman Pottery**

Context	Cname	Full Name	Sub Fabric	Form Type	Sherds	Weight	Decoration	Part	Ref No	Description	Date
065	LFS	Lincolnshire Fine-shelled ware		?	1	4g		BS			11 <sup>th</sup> to 12 <sup>th</sup>
089	LSW2	13 <sup>th</sup> to 14 <sup>th</sup> century Lincoln Glazed Ware		jug	1	46g		BS			early/mid to mid/late 13 <sup>th</sup>
089	ST	Stamford Ware	B/G	jar/pitcher	1	5g		BS		glaze	late 11 <sup>th</sup> to mid 12 <sup>th</sup>
093	LLSW	Late Lincoln Glazed ware		jug	1	22g	grooved shoulder	BS			late 14 <sup>th</sup> to late 15 <sup>th</sup>
100	LSW2	13 <sup>th</sup> to 14 <sup>th</sup> century Lincoln Glazed Ware		jug	1	2g		BS			13 <sup>th</sup>
117	LSW2	13 <sup>th</sup> to 14 <sup>th</sup> century Lincoln Glazed Ware		jug	1	7g		BS		cu glaze	13 <sup>th</sup>
117	LLSW	Late Lincoln Glazed ware	LSWA	large jar	1	8g		BS			late 14 <sup>th</sup> to late 15 <sup>th</sup>
117	LSW4	15 <sup>th</sup> century Lincoln Glazed Ware	purple glazed	handled bowl/jar	1	52g		rim	DR 1	waster; handle blown off in kiln	late 15 <sup>th</sup> to early/mid 16 <sup>th</sup>
123	MEDX	Non Local Medieval Fabrics	reduced; med-coarse sandy	jug	1	16g		BS		splashed glaze; thin oxid ext surface; abundant med-coarse	mid 12 <sup>th</sup> to 13 <sup>th</sup>



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Context	Cname	Full Name	Sub Fabric	Form Type	Sherds	Weight	Decoration	Part	Ref No	Description	Date
										sub round to round quartz	
123	LSW2	13 <sup>th</sup> to 14 <sup>th</sup> century Lincoln Glazed Ware	fine fabric	face jug	1	17g	part applied face	BS		cracked during firing	13 <sup>th</sup>
129	NSP	Nottingham Splashed ware	fine/sandy	jug	1	12g		BS			mid/late to late 12 <sup>th</sup>
134	LEMS	Lincolnshire Early Medieval Shelly		jar	1	26g		rim			12 <sup>th</sup>
139	LSW2/3	13 <sup>th</sup> to 15 <sup>th</sup> century Lincoln Glazed Ware	fine fabric	large jug	1	89g	lower body cordon	BS		spacer scar	13 <sup>th</sup> to early 14 <sup>th</sup>



## ANCHOR STREET, LINCOLN

### ARCHAEOLOGICAL WATCHING BRIEF IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS

#### APPENDIX 5: BOREHOLE LOGS



Borehole ID:  <b>BH101</b>	Client: <b>ALLISON HOMES EASTERN LTD</b>	Start Date: -		
	Site: <b>ANCHOR STREET, LINCOLN</b>	End Date: -		
Job No: <b>11040027</b>		Backfill Date: -		
Drilling Equipment: Cable percussion rig		Co-ords: <b>497208E - 370609N</b>	Field Records: <b>SD/2004/01</b>	www.joynespike.co.uk
		Ground Level:	Logged: <b>SD</b>	Chkd:  
			Appr:	

Strata Description	Depth (m)	Level (m)	Legend	Sample Type	Sample Depth (m)	Tests	Groundwater Records	Backfill Details
MADE GROUND: comprising reinforced concrete.	0.10			B2	0.20-0.60			
	0.60			D48	0.30			
MADE GROUND: comprising sandy base with brick, cement, stone and ash.				B3	0.60-1.10			
	1.60			D24	1.00			
MADE GROUND: comprising brown sand with crushed stone, brick and cement.	2.20			D23	1.20-1.63			
				D6	1.60			
MADE GROUND: comprising loose brown sandy soil with gravel medium to coarse.	3.10			D6	1.70-2.15			
				B8	1.70-2.20			
Loose to medium dense, orange/brown SAND with small fragments of brick.				B10	2.20-2.70			
				D24	2.20-2.65			
Alternating bands of medium dense orange/brown gravelly SAND and sandy clay.				D11	2.85			
				D12	3.10			
				SD13	3.20-3.65			
				B14	3.20-3.70			
Medium dense brown SAND and GRAVEL	6.40			D15	3.70			
				SD16	4.00-4.45			
				D21	4.00			
				D17	4.70			
				SD18	5.00-5.45			
				B19	5.00-5.50			
				D20	5.80			
				SD21	5.90-6.35			
				B22	5.90-6.40			
				D23	6.90-7.40			
				D24	7.70			
				D25	8.00-8.50			
				D26	9.00			
				B29	9.10-9.60			
				D28	9.70			
				B29	9.80-10.25			
				D30	10.90-11.30			
				D30	11.80			
				B32	12.00-12.50			
				D46	12.70			
				B35	12.80-13.25			
				D43	13.60			
				D36	13.90-14.30			
				D37	14.60			
				SD39	15.00-15.30			
				B40	15.00-15.50			
				D41	15.80			
				SD42	16.10-16.40			
				D36	16.70			
				SD43	17.00-17.25			
				B45	17.00-17.50			
				D46	17.80			
				B48	18.30-19.00			
				SD47	18.50-18.75			
				D49	19.50			
				SD50	20.00-20.25			
Very stiff clay from 19.0m.								
End of Borehole at 20.00 m	20.00							

Remarks:	Sample Type Key D - Disturbed Representative B - Bulk Representative S - Spot Non-Representative W - Water U - Undisturbed Representative J - Jar Sample (C) - Cone SPT (S) - Spoon SPT
Sheet: <b>Sheet 1 of 1</b>	



Borehole ID: <b>BH102</b>	Client: <b>ALLISON HOMES EASTERN LTD</b>  Site: <b>ANCHOR STREET, LINCOLN</b>	Start Date: -  End Date: -  Backfill Date: -	<div style="font-size: 48pt; font-weight: bold; margin: 0;">JPA</div> <div style="font-weight: bold; margin: 0;">JOYNES PIKE &amp; ASSOCIATES LTD</div> <div style="font-size: 10pt; margin-top: 5px;">www.joynespike.co.uk</div>
Job No: <b>11040027</b>	Drilling Equipment: Cable percussion rig	Co-ords: <b>497174E - 370637N</b>  Field Records: <b>SD/2004/01</b>	
Ground Level: -		Logged: <b>SD</b>  Chkd: -  Appr: -	

Strata Description	Depth (m)	Level (m)	Legend	Sample Type	Sample Depth (m)	Tests	Groundwater Records	Backfill Details
MADE GROUND: comprising concrete.	0.20			B4	0.60-0.90			
MADE GROUND: comprising dark brown, sandy soil with ash and fragments of brick and concrete.	0.60			B5	0.90-1.20			
	1.70			B9	1.90-2.40			
MADE GROUND: comprising loose dark brown sandy soil with fine to medium gravel of ash and brick	2.10			SD10	2.50-2.95			
	3.10			B11	2.50-3.00			
MADE GROUND: comprising loose, dark brown sandy soil with pockets of orange/yellow sand.				D14	3.70			
				SD15	4.10-4.55			
				B16	4.10-4.60			
Loose, orange/yellow SAND.				SD17	5.00-5.45			
Medium dense orange/brown gravelly SAND, gravel, fine to coarse, sub-angular rounded quartzite.				SD18	5.70			
				SD19	5.80-6.25			
				B20	5.80-6.30			
				D21	6.50			
				SD22	6.80-7.25			
	7.70			D23	7.70			
Medium dense, orange/brown SAND and GRAVEL with occasional pockets of sandy clay..				B25	7.70-8.20			
				SD44	7.70-8.15			
				D28	8.80-9.30			
	9.60			D29	9.60			
Dense, orange/brown, SAND and GRAVEL, gravel sub angular to rounded cobbles of quartzite.				B30	9.70-10.20			
				D31	10.00			
				D32	10.50			
				D33	11.00			
	11.65			D34	11.60			
Soft to very stiff, grey/black, clay with shell fragments.				B36	11.70-12.30			
				B41	13.90-14.30			
				B46	16.00-16.50			
Very stiff clay with bands of weak mudstone from 16.0m.				B51	18.00-18.50			
End of Borehole at 20.00 m	20.00							

Remarks:	<div style="font-size: 8pt;">           Sample Type Key            D - Disturbed Representative            B - Bulk Representative            S - Spot Non-Representative            W - Water            U - Undisturbed Representative            J - Jar Sample            (C) - Cone SPT            (S) - Spoon SPT         </div> <div style="font-size: 8pt; margin-top: 5px;">           Sheet: <span style="float: right;">Sheet 1 of 1</span> </div>
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Borehole ID: <b>BH103</b>	Client: <b>ALLISON HOMES EASTERN LTD</b>	Start Date: -			
	Site: <b>ANCHOR STREET, LINCOLN</b>	End Date: -			
Job No: <b>11040027</b>		Backfill Date: -			
Drilling Equipment: Cable percussion rig		Co-ords: <b>497106E - 370625N</b>	Field Records: <b>SD/2004/01</b>		www.joynespike.co.uk
		Ground Level:	Logged: <b>SD</b>	Chkd:	

Strata Description	Depth (m)	Level (m)	Legend	Sample Type	Sample Depth (m)	Tests	Groundwater Records	Backfill Details
MADE GROUND: comprising concrete.	0.10			D1	0.50			
MADE GROUND: sandy soil, with gravel of bricks, stone and boulders of concrete.	0.30			B2	0.50-1.00			
				D3	1.00			
MADE GROUND: loose, dark brown, clayey soil with brick, ash and clinker.	2.00			SD4	1.20-1.65			
				B6	1.20-1.70			
MADE GROUND: dark brown, clayey sand with fine gravel of brick.				D5	1.70			
				D7	2.00			
				SD8	2.00-2.45			
				B9	2.00-2.50			
				D10	2.50			
	4.60			B11	2.60-3.00			
Medium dense, orange/ brown SAND with organic material.				D12	3.50			
				B17	3.50-4.00			
				D13	4.00			
	5.70			D15	4.60			
Dense, orange/brown, SAND and occasional gravel and bands of sandy clay.				SD16	4.60-5.05			
				D18	5.70			
				B19	5.70-6.20			
				D20	6.40			
				SD21	6.70-7.15			
			D22	7.20				
			SD23	7.50-7.95				
	9.00			B25	7.50-8.00			
Dense orange/brown SAND and GRAVEL, sub rounded to rounded, of quartzite.				D24	8.00			
				SD26	8.20-8.75			
				D27	9.00			
				SD25	9.10-9.55			
				B29	9.10-9.60			
				D30	10.00			
				B31	10.00-10.50			
				D32	10.70			
				D33	11.00-11.50			
	11.60			SD35	11.50-12.25			
Soft to very stiff, grey/black, clay with shell fragments.				D34	11.70			
				B36	11.80-12.30			
				SD37	13.00-13.45			
				D38	13.60			
				SD39	14.00-14.35			
				D41	14.80			
				SD42	15.10-15.40			
				D43	15.60			
				SD44	16.00-16.30			
			B45	16.00-16.50				
			D46	16.80				
			SD47	17.10-17.40				
				D48	17.95			
				SD49	18.20-18.40			
				B50	18.20-18.70			
				D51	18.90			
				SD52	19.00-19.20			
				D53	19.50			
				SD54	20.00-20.20			
End of Borehole at 20.00 m	20.00							

Remarks:	Sample Type Key D - Disturbed Representative B - Bulk Representative S - Spot Non-Representative W - Water U - Undisturbed Representative J - Jar Sample (C) - Cone SPT (S) - Spoon SPT
	Sheet: <b>Sheet 1 of 1</b>



Borehole ID: <b>BH105</b>	Client: <b>ALLISON HOMES EASTERN LTD</b>	Start Date: -			
	Site: <b>ANCHOR STREET, LINCOLN</b>	End Date: -			
Job No: <b>11040027</b>		Backfill Date: -			
Drilling Equipment: Cable percussion rig		Co-ords: <b>497144E - 370603N</b>	Field Records: <b>SD/2004/01</b>		www.joynespike.co.uk
		Ground Level:	Logged: <b>SD</b>	Chkd:	Appr:

Strata Description	Depth (m)	Level (m)	Legend	Sample Type	Sample Depth (m)	Tests	Groundwater Records	Backfill Details
MADE GROUND: comprising concrete.	0.20			D1	0.35			
MADE GROUND: light orange/brown, sandy soil, with gravel of brick, ash and stone.	0.90			B3 D2 SD4 B5 D6 SD7	0.50-1.00 0.90 1.20-1.65 1.20-1.70 1.90 2.00-2.45			
Loose, brown/orange SAND with occasional gravel sub-angular to rounded, quartzite.	2.90			B8 D9 D10 SD11 B12 D13 SD14 D15 SD15 D17 SD15 B19 D20 SD21 D22 SD23 B25 D24	2.00-2.50 2.80 2.95 3.00-3.44 3.00-3.50 3.80 4.10-4.55 4.80 5.00-5.45 5.50 5.70-6.15 5.70-6.20 6.50 6.50-7.25 7.50 7.60-8.60 7.60-8.10 8.40			
Medium dense, orange/brown gravelly SAND, gravel coarse with occasional boulders.	9.50			D39 B27 B28 D32 D15 D30 D31 D32 B34 D33 D35 SD36 B37 SD38 D39 SD40 B42 D42 SD43 D44 SD45 B46 SD48	8.50-9.00 9.00-9.50 9.50-10.00 9.50 10.40 10.60-11.00 11.30 11.50-12.00 12.50 12.70 12.70-13.10 12.70-13.20 13.80-14.05 14.40 15.00-15.30 15.00-15.50 15.80 16.10-16.40 16.70 17.00-17.30 17.00-17.50 18.00-18.25			
Dense orange/brown SAND and GRAVEL.	12.60							
Soft to very stiff, grey/black, clay with shell fragments.								
Bands of weak mudstone and frequent shells from 17.0m.								
End of Borehole at 20.00 m	20.00			SD52	20.00-20.25			

Remarks:	Sample Type Key D - Disturbed Representative B - Bulk Representative S - Spot Non-Representative W - Water U - Undisturbed Representative J - Jar Sample (C) - Cone SPT (S) - Spoon SPT
	Sheet: <div style="text-align: right;">Sheet 1 of 1</div>



Borehole ID:  <b>BH106</b>	Client: <b>ALLISON HOMES EASTERN LTD</b>  Site: <b>ANCHOR STREET, LINCOLN</b>	Start Date: -  End Date: -  Backfill Date: -	<div style="font-size: 48pt; font-weight: bold; margin: 0;">JPA</div> <div style="font-weight: bold; margin: 0;">JOYNES PIKE</div> <div style="font-weight: bold; margin: 0;">&amp; ASSOCIATES LTD</div> <div style="font-size: 10pt; margin-top: 5px;">www.joynespike.co.uk</div>	
Job No: <b>11040027</b>	Co-ords: <b>497118E - 370651N</b>	Field Records: <b>SD/2004/01</b>		
Drilling Equipment: <b>Cable percussion rig</b>	Ground Level: -	Logged: <b>SD</b>		Chkd: -

Strata Description	Depth (m)	Level (m)	Legend	Sample Type	Sample Depth (m)	Tests	Groundwater Records	Backfill Details
MADE GROUND: sandy soil, with brick, ash, ceramics and concrete.	1.20			D1	0.50	N=8(C)		
MADE GROUND: orange/brown sandy clay, with brick, ash, animal bones and roots.		B2		1.00				
				D3	1.20			
				SD4	1.70			
				B5	2.00			
				D6	2.20-2.65	N=10(C)		
				D7				
	3.10			SD8	3.10			
MADE GROUND: grey, sand with fine fragments of brick.				D9	3.20-3.65	N=9(C)		
				SD10	3.20-3.70			
				B11	4.00			
				D12	4.30-4.75	N=13(C)		
				SD13	5.00			
Medium dense, orange/brown gravelly SAND gravel, fine to coarse, sub angular to rounded quartzite.	5.20			D14	5.20-5.70			
				B16	5.25-5.70	N=25(C)		
				SD15	5.60-5.70			
				B16	5.70	N=18(C)		
				D17	6.20-6.65			
				SD18	7.00	N=21(C)		
Medium dense SAND and GRAVEL with bands of sandy clay.	7.80			D19	7.10-7.55			
				SD20	7.10-7.60			
				B21	7.80	N=19(C)		
				D22	8.00-8.45			
				SD23	8.00-8.50			
Dense orange/brown SAND and GRAVEL, fine to coarse and cobbles with occasional boulders, angular to sub-rounded.	9.20			B24	8.70	N=39(C)		
				D25	9.20-9.65			
				SD26	9.20-9.70	N=40(C)		
				B27	10.00			
				D28	10.00-10.50			
Soft to very stiff, grey/black, clay with shell fragments.	11.10			B30	10.10-10.45	60/350 mm(C)		
Bands of limestone from 12.0m.								
				SD29	11.10			
				D31	11.20-11.65			
				SD32	11.20-11.70	50/425 mm(C)		
				B33	12.00			
				D34	12.30-12.70	52/375 mm(C)		
				SD35	13.00			
				D36	13.30-13.65			
				SD37	13.30-13.80	50/425 mm(C)		
				B38	14.00			
				D39	14.30-14.60	50/387 mm(C)		
				SD40	15.00-15.20			
				D41	15.20			
				SD42				
End of Borehole at 20.00 m	20.00							

Remarks:	Sample Type Key D - Disturbed Representative B - Bulk Representative S - Spot Non-Representative W - Water U - Undisturbed Representative J - Jar Sample (C) - Cone SPT (S) - Spoon SPT  Sheet:
	Sheet 1 of 1



Borehole ID: <b>BH107</b>	Client: <b>ALLISON HOMES EASTERN LTD</b>	Start Date: -			
	Site: <b>ANCHOR STREET, LINCOLN</b>	End Date: -			
Job No: <b>11040027</b>		Backfill Date: -			
Drilling Equipment: Cable percussion rig		Co-ords:	Field Records: <b>SD/2004/01</b>		www.joynespike.co.uk
		Ground Level:	Logged: <b>SD</b>	Chkd:	
				Appr:	

Strata Description	Depth (m)	Level (m)	Legend	Sample Type	Sample Depth (m)	Tests	Groundwater Records	Backfill Details
Reinforced concrete	0.20			D1	0.50			
Brown, sandy soil with fragments and whole bricks, and stone and ash.	1.30			B3	0.50-1.00			
		D2		1.00				
Brown, clayey soil with gravel of brick and stone.	2.60			B4	1.20-1.70	N=12(C)		
		D5		1.50				
Loose to medium dense, brown/grey, sand with occasional fine gravel of brick fragments.	4.10			D6	2.00	N=13(C)		
		D7		2.10				
Medium dense, orange/brown, SAND, with occasional fine gravel of rounded quartzite.	5.50			B8	2.10-2.60	N=8(C)		
		B10		2.70-3.20	N=11(C)			
Medium dense to dense, brown, SAND and GRAVEL, gravel medium to coarse with occasional cobbles, rounded to sub angular quartzite.	10.00			D9	2.70			
		D11	3.20	N=15(C)				
		SD12	3.20-3.65					
		B13	3.20-3.70					
		D14	4.10	N=16(C)				
		SD15	4.10-4.55					
		B16	4.10-4.60	N=19(C)				
		D17	4.70					
		SD18	5.10-5.45	N=19(C)				
		D19	5.60					
End of Borehole at 10.00 m			SD20	5.80-6.25				
		B21	5.80-6.30	N=21(C)				
		D22	6.60					
		SD23	6.80-7.25					
		B24	6.80-7.30	N=27(C)				
		D25	7.50					
		D26	7.80-8.30					
		B27	8.80-9.50	N=29(C)				
		D29	10.00					

Remarks:	Sample Type Key D - Disturbed Representative B - Bulk Representative S - Spot Non-Representative W - Water U - Undisturbed Representative J - Jar Sample (C) - Cone SPT (S) - Spoon SPT
Sheet: <b>Sheet 1 of 1</b>	



Borehole ID:  <b>BH108</b>	Client: <b>ALLISON HOMES EASTERN LTD</b>	Start Date: -		
	Site: <b>ANCHOR STREET, LINCOLN</b>	End Date: -		
Job No: <b>11040027</b>		Backfill Date: -		
Drilling Equipment: Cable percussion rig		Co-ords: 	Field Records: <b>SD/2004/01</b>	www.joynespike.co.uk
Ground Level: 		Logged: <b>SD</b>	Chkd: 	Appr: 

Strata Description	Depth (m)	Level (m)	Legend	Sample Type	Sample Depth (m)	Tests	Groundwater Records	Backfill Details
Pavement cobbles.	0.08			D1	0.40			
Concrete rubble.	0.15			B3	0.50-1.00			
Brown, sandy soil, with ash and cobbles of slag and pockets of dark brown organic material.	1.90			D2	1.00			
	2.40			B5	1.20-1.70	N=4(C)		
Soft to firm. Dark brown, SANDY CLAY, with pockets of organic material.	3.30			D6	1.90			
				SD7	2.00-2.45	N=14(C)		
Dark brown, clayey PEAT, with frequent fragments and whole shells.	3.30			B8	2.00-2.40	N=2(C)		
				SD10	2.50-2.95			
Loose to medium dense, black/grey sand with black organic staining.	5.40			B11	2.50-3.00			
				D9	2.50			
Loose to medium dense, black/grey sand.	6.70			U12	3.00-3.45	N=16(C)		
				D13	3.65			
Medium to dense, black/grey SAND and GRAVEL, gravel sub angular to rounded, quartzite and flint.	10.00			SD14	3.80-4.25	N=14(C)		
				B15	3.80-4.30			
Dense, black/brown, SAND and GRAVEL, with cobbles and boulders, sub angular to rounded of quartzite.	11.50			SD16	4.50-4.95	N=10(C)		
				B17	4.50-5.00			
Soft to very stiff, grey/black, clay with shell fragments.				D18	5.30			
				SD19	5.40-5.85	N=19(C)		
				D20	6.00			
				SD21	6.50-6.95	N=22(C)		
				B22	6.50-7.00			
				D23	7.10	N=25(C)		
				B24	7.20-7.70			
				D25	8.00	N=27(C)		
				D26	8.00-8.50			
				D27	9.00-9.50	N=40(C)		
				B28	9.70-10.15			
				SD29	10.40-11.40			
				SD31	10.40	N=25(C)		
				B32	10.50			
				D30	11.50	N=36(C)		
				D33	11.50-11.95			
				SD34	11.50-12.00			
				B35	12.00			
				D36	12.50-12.80	50/400 mm(C)		
				SD4	13.00			
				UB37	13.00-13.40	44/335 mm(C)		
				D38	13.00-13.50			
				SD39	13.50			
				B41	14.00-14.30	50/300 mm(C)		
				D40	14.60			
				SD42	15.00-15.25			
From 16.00m bands of very weak mudstone within the clay.				D43	15.00-15.50	50/305 mm(C)		
				SD44	15.70			
				B45	16.10-16.40	50/310 mm(C)		
				D46	16.80			
				SD47	17.00-17.20	50/320 mm(C)		
				D48	17.00-17.50			
From 18.20m more frequent bands of weak mudstone.				SD49	17.90			
				B50	18.70	50/245 mm(C)		
				D51	19.00-19.50			
				SD52	19.50			
End of Borehole at 20.00 m	20.00			D53	20.00-20.50	(C)		
				B55				

Remarks:	<div style="font-size: small;">           Sample Type Key            D - Disturbed Representative            B - Bulk Representative            S - Spot Non-Representative            W - Water            U - Undisturbed Representative            J - Jar Sample            (C) - Cone SPT            (S) - Spoon SPT         </div> <div style="margin-top: 10px;">           Sheet:           <div style="float: right;">Sheet 1 of 1</div> </div>
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