

1-3 Friars Lane, City of Lincoln

Report on an Archaeological investigation in mitigation of the construction of a lift pit

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Vertical shot of excavation area in the area of the lift pit at Friars Lane, Lincoln

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1. INTRODUCTION.

1.1 Trent & Peak archaeology was contracted by Framework Housing Association to carry out archaeological mitigation on a lift pit on the corner of Friars Lane and St Rumbold Street (1-3 Friars Lane) in the centre of Lincoln, grid reference 497860E, 371251N, map square SK97.

1.2 Construction of 15 flats on Friars Lane will require a lift pit. The programme of archaeological mitigation will identify any archaeological features or deposits and excavate and record them in advance of the development.

1.3 An evaluation intended to assess the survival and situation of archaeological deposits, which was conducted in May 2013, revealed a post-medieval demolition layer at 1.5m depth. A 3.5m x 3.5m lift pit, which is to be installed as part of the development, was therefore considered to be a risk to the archaeological remains by John Herridge, Heritage Officer at City of Lincoln, as it impacts vertically 1.5m. Subsequently a strategy was agreed between all parties for the investigation of the archaeological deposits to be affected by the lift pit construction in advance of the main construction groundworks (see WSI Appendix 4).

2. PROJECT BACKGROUND.

2.1 Located to the east of Lincoln city centre, the 1-3 Friars Lane site is on the southeast corner of a built-up block presently containing a Premier Inn hotel and an NCP multi-storey carpark bounded by Broadgate (to the west), Unity Square (north), Friars Lane (east) and St Rumbolds Street (south). The site is a small and broadly rectangular, flat parcel of land which measures roughly 15m (north to south) by 20m (east to west). A car showroom has recently been demolished on the plot, which resulted in the presence of dismantled building materials becoming distributed across the site.

2.2 The 1: 50,000 British Geological Mapping shows that site is situated on a superficial geology of Scunthorpe Mudstone Formation and Charmouth Mudstone Formation (Undifferentiated). This is a sedimentary Bedrock formed approximately 190 to 210 million years ago in the Jurassic and Triassic Periods. Local environment was previously dominated by shallow lime-mud seas (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>).

2.3 Topographically, the site is roughly flat and located at a height of c. 8.5m AoD. Further north (by the junction of Friars Lane and Unity Square) the natural topography rises towards the elevated portion of Lincoln and is at a height of c.11m AOD, whilst to the southwest, towards the St. Swithin's Church, the land falls towards the Brayford Pool and lies at a height of 7.7m AOD.

2.4 The River Witham is located approximately 100m to the south of the proposed development. The course of the river has been altered, both naturally and at the hands of the occupants of Lincoln since the city has become densely populated.

2.5 An archaeological evaluation was conducted prior to the mitigation in May 2013 by Trent & Peak Archaeology. The investigation compromised a single 5m x 5m square trench which was stepped from a depth of 1m due to health and safety reasons. The trench was placed close to the corner of Friar Lane and St Rumbold Street. The first sensitive archaeological horizon was observed at a depth of 1.3m, it is thought that this represents a post medieval demolition deposits (Flintoft 2013). The probable remains of early post-conquest buildings were observed at a depth of 2m (ibid.).

3. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND.

3.1 The pertinent entries from the Lincoln Archaeological Research Assessment (LARA) have been included (Appendix 3). A more cursory overview has been incorporated immediately below.

3.2 Early human activity within the city of Lincoln is scant until the later prehistoric periods. Archaeological investigations have discovered Iron Age settlement remains which suggest that a modest settlement developed in Lincoln during this period (Jones 2002, 25).

3.3 After the Roman conquest, a legionary fortress was constructed to the north of what is now the modern city. As well as the military installation a flourishing major urban walled settlement to the south

was established and continued to flourish until the 4th century when the town population declined. Domestic buildings extraneous to the main city were constructed from the 1st century until the 4th (Steane K & Jones M J, forthcoming). Evidence of such suburban developments has been discovered to the east of the walled city, very close to 1-3 Friars Lane. These include a high status stone building, which appears to have had iron smelting associated with it, dating to the 2nd century. Additional Romano-British remains have also been discovered under the Premier Inn which is only 60m to the west of Friar Lane (Hobson & Savage 2012).

3.4 Evidence of early medieval activity in Lincoln remains enigmatic. Little evidence of any activity around the site of the proposed development occurs between the 4th century and 10th centuries. It is widely believed that Lincoln became repopulated on a large scale in the 9th and 10th centuries. During the repopulation, the Roman wall, which was aligned north-south along Broadgate, was re-enforced.

3.5 In the high medieval period a suburb known as Butwerk was established outside the fortified medieval wall, demarcated by Friars Lane, the city wall and the River Witham. Excavations in 1973 along Friars Lane revealed a series of superimposed stone buildings fronting onto Friars Lane which dated to the 12-13th and the 13-14th/15th centuries. It is during this period that Friars Lane, Broadgate and Unity Square are formalised as streets. The previous archaeological evaluation found remains of post conquest buildings on Friars Lane.

3.6 Evidence of Post Medieval archaeology appears to suggest a decline in the suburb settlement of Butwerk. Although there is little evidence for continuing settlement on Friars Lane, early maps demonstrate that buildings along Broadgate and Unity Square continue to be occupied. Post medieval industrial activities evidenced by malt and lime kilns have been discovered in the vicinity of the proposed development. The previous archaeological evaluation found evidence of post medieval demolition.

3.7 Numerous buildings were constructed at 1-3 Friars Lane in the modern period. These include a row of cottages, believed to date to 1887, and later commercial buildings such as a car dealerships and workshops with open spaces for car parks and access to garages.

3.8 A more detailed account of the archaeological and historical background with an accompanying map regression which comprehensively demonstrates how the proposed development area has changed from 1610 onwards is included in the Desk Based Assessment which was produced as part of this project (Davies, G. 2012).

4. OBJECTIVES.

4.1 The objective of the trench was to identify and characterise (date, extent), any archaeological features and deposits that may be impacted upon by the development (as set out in the approved Written Scheme of Investigation, Appendix 2). The results of the mitigation will inform the decision making process of the planning authority concerning the need for further archaeological investigation prior to or during the proposed development.

5. METHODOLOGY.

5.1 The trench measured 4.5m x 4.5m in extent and was excavated by a wheeled JCB 3CX in order to expose the first significant archaeological horizon. The edges of the trench were stepped at 0.5m depth for health and safety reasons, making a 3.5m x 3.5m square 1m deep pit. The first significant archaeological horizon was reached at 1.5m below ground level at which point the trench was excavated and cleaned by hand.

5.2 Trench sections and plans were recorded by scale drawing at a scale of 1:20 and by digital and black and white (35mm) photographic images.

5.3 All recorded layers and archaeological features were given a unique context number, e.g.001.

6. RESULTS.

6.1 During the machine excavation of the upper layers, the foundation wall remains of an earlier building were discovered, (047) and (054). Context (047) was a north to south orientated brick wall with a course of stretchers overlying a course of headers with limestone blocks as a foundation course (Figure 2). Context (054) is similar to (047) except it was east to west aligned (figure 9). Located beneath the foundation walls was layer (034), which contained a large amount of CBM with inclusions of silt. It seems likely that this layer represents the grubbed-up foundations of the previous building. Also within these upper layers were a deposit of black indurated tarmac (048) and loose sandy silt (047), probably associated with the most recent building.



Figure 1. General view of trench

6.3 Several layers of very silty material were encountered within the first 0.5m. These layers: (030), (050), (052) and (053), were a dark to mid brown silt with occasional inclusions of charcoal, oyster shell and ceramic building material (CBM). It is important to note that layer (030) extended across the entirety of the excavated trench and is the same material identified in the evaluation as (002). This layer contained three fragments of clay pipe, AAA, AAB and AAC. A particularly interesting clay tobacco pipe bowl (AAA) which dates to the 1820s or 30 was recovered which was made by James Storr Pipe Makers of Gainsborough. This collection of clay tobacco pipes ranged in date from 1650 to 1830 and bear testament to the mixed and re-worked nature of the deposit. This assemblage of ceramic pipes are been detailed in Appendix 2.

Sandwiched in-between these layers were relatively thin layers of dull white, loose sandy mortar (049) and (051); this material is similar to contexts (020) and (022) identified in the evaluation (Figure 3).

6.4 The proximity to the River Witham may explain the presence of the silty layers. Successive events of manipulation of the riparian environment may have resulted in an abundance of silty soils. A convenient use of this may have been to 'level off' the ground for river side developments.



Figure 2. South facing photograph of trench section



Figure 3. North facing photograph of trench section

6.5 At a depth of 0.5m the trench was stepped in. At this point fill (036), a mid to dark brown compact fine silt containing inclusions of CBM, oyster shell and frequent charcoal flecking was observed (figure 2 and 3). Fill (036) was contained within cut [037], a presumed post-medieval to modern truncation event (with a sharp break of slope and vertical edges) that truncated layer (030) not observed in plan. Fill (036) was very similar in character to layer (030), but with increased charcoal inclusions.



Figure 4. West facing photograph of trench section

6.6 Also truncating layer (030) was a broadly square structure (040), potentially a chimney, was identified within the west facing section (figure 4). It was constructed using red bricks, with dimensions of 20cm (length) x 5cm (depth). The structure cut [038] contained two fills. Fill (039) was dark brown mixed silt with inclusions of CBM, this fill could be the result of the material being used to 'level out' the cut before construction of the structure. Overlying (039), the second fill (041) was a loose deposit of CBM and mortar with frequent inclusions of black compact silt which was presumably formed during the demolition of the previous building. The structure cut into the silty layers (030), (053) and fill (036); so must have been constructed at a later date to these. A tarmac layer (048) respected brick structure (040).

6.6 Extending from the top of the trench to a depth of 0.49m, was a modern drain, [031]. The form of the drain cut displayed a sharp break of slope at the top and bottom with steep edges and a flat base. There were two brown glazed ceramic drains, (033) and (045), within the cut as well as the backfill of the drain (032), which was a compact dark brown silt with inclusions of CBM. The drain seemingly respected the wall (042) but cut through (030) and (036).



Figure 5. East facing photograph of trench section

6.7 Upon removal of the above discussed deposits, the first sensitive archaeological horizon, layer (056), was discovered at a depth of 1.5 metres below ground level (the maximum depth of the lift pit). Layer (056) was a post medieval demolition layer consisting of compact mixed clayey silt. This layer is the same as context (001) identified in the evaluation.

6.8 With the exception of the clay pipe bowls (reported upon in appendix 2) and particularly modern ceramics which were not collected, no other finds were recovered.

8. DISCUSSION.

8.1 The mitigation appeared to confirm that cellars are absent on this part of the site.

8.2 The foundation walls, (042) and (054), encountered during the mitigation must relate to one of the numerous phases of activity during the 19th century. The relatively 'clean' in-filling within the backfill of the construction cut hints at a probable earlier modern building (in contrast to later modern buildings such as the 1966 garages observed during the evaluation, which had construction cuts infilled with brick and broken drains). It is not implausible that both walls relate to the same building. This suggestion is based on the bricks which are of the same form and size and the presence of the same 'grubbed up' foundation fill (034) identified beneath both wall sections. It is likely that both foundation walls relate to an outbuilding associated with the cottages identified in the 1887 OS town plan.

8.3 The brick structure (040) found within the West facing section, appears to be a chimney. It seems plausible to suggest that this structure relates to the 19th century foundation walls: (042) and (054), however the modern tarmac seems to respect the chimney, suggesting it was still extant upon the construction of the 1966 garages.

8.4 Layer (056) (1.5m BGL) was the first significant archaeological horizon. The layer was only encountered at the bottom of the trench and so the full depth and character of the material was not apparent. The layer is the same as (001) in the evaluation, which was interpreted as representative of detritus relating to a post medieval demolition event which ceased in the 15th century.

8.5 The mitigation has demonstrated that there is an abundance of silty soils across the site. The build up of silt and the proximity of the River Witham is probably no coincidence. Programmes of remodelling, slight re-routing and canalisation of the River would have resulted in a profusion of works potentially requiring the raising of the ground level to the same height as newly instated river banks. The silt may have been used for this purpose. The silty soils are deposited on top of the post medieval layer, which was formed in the 15th century, and below the 19th century building developments. On this basis the 'reworked silts' must have been laid down at some point between the 15th and 19th centuries.

9. CONCLUSION.

9.1 In the western part of the proposed development where the trench was located, the first sensitive archaeological horizon, (056), was observed at 1.5metres. Although this is certainly true for this part of the site, the layer must undulate across the site as it was observed to be 1.3m within the evaluation trench.

9.2 It is widely believed that much of the suburb of Butwerk was abandoned in the 15th century and results from the archaeological mitigation and the evaluation appear to confirm this. Cartographic evidence suggests that part of the suburb up the hill to the north continued to flourish. Perhaps buildings in this part of Lincoln were demolished at this time for the re-organisation of the River Witham.

Acknowledgments

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Appendix 1. Summary context list.

Context	Area	Description	Thickness
030	01	Layer: Mid brown, compact mixed clayey silt	1.10m
031	01	Cut: Drain	1.02m
032	01	Fill: Dark brown with black laminations, compact silt	1.02m
033	01	Fill: Drain	0.22m
034	01	Fill. CBM with inclusions of silt	0.54m
035	01	Cut: Sharp break of slope with a gradual break of base, convex edges.	0.54m
036	01	Fill: Mid to dark brown, compact fine silt	0.80m
037	01	Cut: Sharp break of slope at top and base, vertical edges.	0.60m
038	01	Cut: Sharp break of slope and gradual break of base. Rounded base with convex edges.	1.06m
039	01	Fill: Dark brown mixed silt	1.12m
040	01	Brick structure.	1.18m
041	01	Fill: Loose CBM and mortar, inclusions of black compact silt.	1.08m
042	01	Northerly oriented wall.	0.40m
043	01	Cut: Foundation cut for 042	0.40m
044	01	VOID	n/a
045	01	Fill: Ceramic drain	0.30m
046	01	VOID	n/a
047	01	Wall	0.08m
048	01	Layer: Tarmac	0.30m
049	01	Layer. Dull white, loose sandy mortar.	0.06m
050	01	Layer: Soft brown sandy silt	1.05m
051	01	Layer: Dull white, loose sandy mortar	0.06m
052	01	Layer: Dark brown soft silt.	0.30m
053	01	Layer: Compact dark brown mixed silt with CBM	0.46m
054	01	Easterly orientated wall	0.20m
055	01	Cut: Foundation cut for 054	0.20m
056	01	Layer: Compact mixed clayey silt.	Unknown

Appendix 2: Report on clay tobacco pipes from Friars Lane, Lincoln.

By Peter Hammond

Three clay pipe bowls were recovered which are discussed below.

Pipe AAA context (030)

Spurred bowl with part stem decorated with open book (perhaps the Bible) on one side with sun above, and compass and dividers on the other with the sun and crescent moon above – all of them Masonic symbols. Has the mould imparted relief wording 'STORRS/GAINSBRO' around the rim. This will be of the pipe maker James Storr, who moved from Lincoln to Gainsborough during the first half of the 1820s, after which he is recorded working in Lea Road and Bridge Street. He had died by 1849 when his widow Sarah is listed in Directories instead (Wells, 1979).

Stylistically the pipe dates to the 1820s or 30s so fit in well with the known working dates of James Storr. Examples are known from sites in both Gainsborough and Lincoln (Mann, 1974), while identically decorated pipes are also known that are marked 'SHERREY/GAINSBORO' (Walker and Wells, 1979) and 'PAGE/GAINSBORO' (Hammond, 1982). As Edward Sherrey died in 1822 this suggests that this style was in production by this date, unless his widow continued making them, and Page is so far an unidentified maker who presumably was only based in Gainsborough for a short time.

James Storr also produced a pipe decorated instead with crowns on each side and marked again with his name and town around the top of the bowl and also towards the base of each side with 'W IV' (Walker and Wells, 1979 and Hammond collection). This was therefore likely to be made for the accession of King William IV that took place in June 1830, and/or his Coronation in September of the following year. Again this period fits in well with both stylistically and with the known working dates of James Storr in Gainsborough.

Pipe AAB (context 030)

A plain heeled bowl with milling around bowl rim, unmarked, and dates stylistically to c.1660 – 80.

Pipe AAC (context 030)

A plain heeled bowl with milling around bowl rim, unmarked, and dates stylistically to c.1650 – 70.

Conclusion

The Masonic bowl made by James Storr is a splendid example of this type and adds to the known examples that have been recovered in Lincoln. It is a type of bowl style that was produced during the 1820s and 30s, and thus fits in well with the known working dates of Storr within Gainsborough. A number of other makers from this town also marked their pipes in the so-called Lincolnshire style of marking i.e. with the maker's name and town in relief around the bowl rim.

The two 17th century bowls are typical examples of the period, and as neither of them are marked with a maker's name or initials no further provenance can be given except to say that they are likely to be relatively locally made.

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Appendix 3: Lincoln Archaeological Research Assessment (LARA) *Lincoln Research Agenda Zones (RAZs) for Friars' Lane/St Rumbold's Street site 2013*

Prehistoric Era (-10000 – 60);

RAZ 5.4

Hill side springs, streams and pools

No evidence has come to light for any Prehistoric activity on the hill sides north and south of the gap. In the Roman era, however, a case can be made that the zone of springs, and the streams and pools that developed from them along the northern cliff face, were regarded, at least initially, as foci of ritual interest (RAZ 6.13). It is perhaps somewhat unlikely that such rituals will have been initiated by the Roman incomers and, as we have good evidence that the pools and/or the river channels along the Witham itself were regarded as 'special' from the late Bronze Age (RAZ 5.2), we should be alert to signs of earlier ritual activity at the pools and springs in the northern cliff face. The presence of pools on the first terrace above the river itself has been hypothesised on the basis of results from LIN73a-c and LIN73f, but it is possible that at least some of these pools were themselves parts of the river channel itself. We have no indications at all that any springs in the cliffs to the south of the river gap were treated in a special way at any period, but this should not mean that the possibility is not considered here also.

RAZ 5.9.1

Limestone uplands

Areas of limestone heath north of the crossing will have presented dry land and relatively easily worked soils. If there were organised Iron Age field systems of the type commonly seen in air photographs on the Lincoln Edge further north, this is where they will have been. A study of the air-photographic archive prior to 1950 might produce some evidence for such field systems. Archaeological work in these areas might expect to find occasional field ditches which are the principal source of information about this agricultural economy.

The land below the cliff face to the west of the 'Jurassic Way' both north and south of the river crossing is likely to have been favourable for settlement, above the 5m contour, and otherwise will have provided good summer pasture for livestock. The find of an undated field boundary ditch below alluvium, presumed to be Iron Age or Romano-British, at CFC94, near the modern football ground, may well have been a component of such a pastoral landscape which succumbed to encroaching fen in the Roman era (Trimble 1994a). We should note that it seemed to be aligned on the proposed line of the Stamp End causeway and the Fosse Way. The fen edge itself (along the 5m contour) will have been an important zone for economic exploitation, with fishing and fowling being undertaken as well as the collection of eggs and reeds. Enough work has been done nationally to suggest that, by the late Pre-Roman Iron Age, this part of the territory of the Corieltavi was 'a country of villages and open settlements' (Millet 1990, fig.4; Winton 1998, 51-2). Any such 'open settlements' within the city limits ought to be located either on the limestone plateau north of the modern city centre, or in the meadow land at the foot of the cliff, north and south of the gap.

Roman Military Era (60-90);

RAZ 6.10

Waterside installations

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Mr Jones points out that re-supply of an installation of the size of the Lincoln Fortress could only have been achieved by water, and he draws attention to the presence of riverside installations of Military date, located to the east of the point at which the new 'Wigford' causeway made landfall on the northern bank of the pool (chapter 6a). Military wharves and other facilities in these locations would suggest that the forward army positions such as Lincoln were indeed being supplied via the Fenland waterway system, and from an early date. Any details of the materials supplied, which might be especially gathered from sampling the waterlogged deposits along the waterside itself, as well as the minutiae of the riverside installations will be of great value.

Roman colonia Era (90-410);

RAZ 7.24

Cemeteries

The Roman colonia was, typically, ringed with cemeteries. They appear to have been most extensive along the five main roads leading east, north-east and north from the upper city. The cemeteries alongside Greetwell Road, Wragby Road, Nettleham Road and Newport might have joined up to form a single area, beyond the extramural settlements, through which the roads passed. There were further burial grounds east of the lower city, occupying both the flatter land behind the quayside installations, and the hill-slope above. To the west of the city, cemeteries were laid out both on the brow of the hill west of the upper city wall and occupying the sloping ground along the line of the modern West Parade. In all these cases, but especially to the south of the Witham, the 'public' space of the cemetery was 'privatised' by the encroachment of strip buildings in the later Roman period. In these cases the care and ceremony with which this transition was managed will reveal a great deal about the Roman attitudes to their own past in Lindum and to their own dead. Similar transformations from 'public' to 'private' space might have taken place in the suburbs outside the east and west gates of the upper city.

As the record of the people of Lindum, the cemetery archaeology represents one of the most important sectors of Lincoln's archaeological resource. Whenever work is undertaken within RAZ 7.24 paleo-osteology will be necessary, with the aim of eventually building up a detailed picture of the physical characteristics of the population. In particular we should aim at understanding whether or not the large populations of the colonia burial grounds represent a large internal population within the colonia itself, or was it more the case that the population of the surrounding countryside was brought to the urban cemeteries for burial. We believe we can demonstrate that the town was a focus for regional administrative and economic activity, and we have already stressed the close connections between 'public' and 'ritual' gestures in the Roman city. This might lead us to expect that the cemeteries of the Roman city were regarded with favour, not just as a necessary amenity by the resident population, but as a desirable funeral location by the population of the surrounding countryside. Here, we might think, the dead were thought to receive the physical protection of the gods of the city, both traditional (in the shape of the Celtic water spirits) and imperial.

It may also be possible, eventually, to assess not just the local domicile of the burial population, but its racial background, through the study of minute skeletal differences, but this will mean detailed work being undertaken on every find over a long period of time. The infant discipline of Archaeogenetics is rapidly developing towards a state where it can be used to assess, not just family kinship, but also the geographical ranges of populations. Although the judgements involved are more complex than might at first appear (Millett 1999, 196-7), such studies should eventually contribute to an understanding the likely percentage of Roman citizens in the population, and consequently some understanding of how closely a colonia's population was tied to army service.

Given that it is thought that Lindum was the seat of one of the early British bishoprics, it would be a matter of very great interest to identify specific Christian burials. Was the Christian community of Lindum buried in separate enclaves within the larger cemeteries or did it open up its own exclusive burial grounds. So far no Roman Christian burial has been identified, although there might be some room for debate about the affiliations of some of the earliest burials at SP72. The search for the

distinctiveness of Christian burials should not blind us to the interest of the distinctiveness of burials made under the influence of different belief systems. We have evidence for the cult of Mercury in the south part of the city (RAZ 7.20) and Mercury is the most important of the Roman psychopomps. Consequently burial rituals in the city as a whole (but perhaps especially in the south part of the city) might show some distinctive ritual of passage. Similarly the slight evidence for the Mithraeum in this part of the city should prompt us to search for rites of burial which might be characterised as Mithraic, although we currently have little understanding of the burial rites which were specific to Mithras. Many of these ideological research questions might be addressed in a basic way through a better understanding of the part played by planning in the graveyards. Were any of them planned? And if so in what ways?

Cemeteries also offer one of the best opportunities to study gender relationships within the community. The patterning of burials within graveyards by gender and differences between individual male and female burials are likely to provide information about contemporary gender relationships, and might reflect any changes in such relationships over time.

Early Medieval Era (410-850);

RAZ 8.3.1

Central elements of former Roman city and Roman network

Across the remainder of the area formerly occupied by the Roman city, research has not yet provided any clues which can break this RAZ into meaningful smaller units. The research agenda for the future is clear, however. We wish to know what the Anglo-Saxons did with the massive remains of Roman infrastructure be that the demolition of stone buildings, the construction of timber structures in amongst them (which has been observed, for example, at Canterbury), the reuse or digging up of roads, or the maintenance or abandonment of bridges like those that at High Bridge or at Bracebridge. The RAZ includes the areas of the Roman burial grounds as these extensive remains must have posed problems for the Anglo-Saxons. Evidence that monuments were left untouched, and that the land which they occupied went uncultivated, will be almost as valuable as evidence that monuments were deliberately removed or that the graveyards were reused.

High Medieval Era (850-1350);

RAZ 9.29

Housing in Butwerk suburb

A single excavation in Butwerk (BE73), right on the western boundary of the suburb, investigated the sequence and character of domestic occupation here. Occupation began early, probably in the late 10th century and, therefore, earlier than in any of the other city suburbs apart from Wigford. Far from being a sign that the walled city was already full by this date, however, domestic and commercial occupation here in the 10th century is probably a reflection of the pivotal role the Butwerk suburb played in the city's commercial trade by water. Consequently, evidence for the combination of domestic and commercial activity should be looked for in future work on these sites (cf. RAZ 9.40). The suburb also has slightly more complete documentation than many of the other suburbs and, consequently, we can gain important insights into its chronological development. This is the only suburb in Lincoln (and one of very few in England) where Domesday Book records its development - Dr Vince has shown that Colswain's land, on which he built 36 houses and two churches between 1066 and 1086, is likely to be a strip of newly occupied land along the eastern side of the suburb, in the area between Montague Street and John Street (chapter 9a). This single item of documentation makes this area a priority for archaeological investigation, because of the prospect offered of precision dating of stratigraphy and finds. Excavation here would also enable us, for the first time perhaps, to see a post-Conquest landlord maximise his income from his holdings - how large were the newly built tenements to be? How many people did Colswain envisage bringing in from the surrounding countryside? What types of people?

An additional level of importance in Butwerk is the presence of the extramural estate given to St Mary's Abbey of York by Romfar prior to 1115-19. The Monks' Abbey estate itself forms separate RAZs (RAZ 9.8.5, RAZ 9.55), but here we should note that this estate probably had a distinct centre, presumably somewhere in the vicinity of the later Cell buildings. An estate centre here would have been in a very similar location to the Bishop's estate centre at Willingthorpe in Newland (RAZ 9.32.1) and they may have been quite similar institutions. Comparisons between the domestic and agricultural arrangements in both estate centres would be highly instructive. The Benedictines made the Black Monks estate an important source of income, and fought to keep it distinct from the city to the west, whereas the Bishop's estate at Willingthorpe seems to have become engulfed within the city, and did not keep its separate identity. These different trajectories probably have their origin in the different agricultural and commercial uses to which the estate centres were put, and those differences should be visible archaeologically.

At later dates, it is clear that the eastern part of Butwerk, like most other parts of the city, became depopulated. The timing and detail of the decline and retrenchment are of great interest. Dr Bischoff (1975) has shown that the collapse in the cloth trade occurred in the second half of the 13th century and, as the fortunes of Butwerk were closely related to the city's commercial prosperity, we might expect the whole suburb simply to return to pasture. In the western part of the suburb, however, the house on Friar's Lane (BE73) was greatly extended at this date, for example, whilst to the north, on the corner of modern Broadgate and Monks Road, a major house with a ground floor hall and cross-wing, was extensively rebuilt in the 14th century and survived until 1828 (Jones et. al, 1990, 141-2). Clearly then Butwerk was able to cope with economic fluctuation after a fashion (RAZ 10. 29). The 1½ burials found at BE73 are no longer thought to represent a churchyard.

RAZ 9.18

Beggarsholme market in Butwerk

Dr Vince has explained that, before housing covered the area during the 11th and 12th centuries, it is likely that the western part of Butwerk was a large, open, fairground named 'the water meadow of the Hawkers', the Beggarsholme (Cameron 1985, 13) (chapter 9a). This is a point of very great importance to our understanding of the development of the city. This fairground, Dr Vince demonstrates, was not immediately outside the Clasketgate gate, which would put it into the same category as the market places at Newport, Eastgate and St Botoph's Green, but instead it was on open land, in the meadows north of the Stamp End causeway. Of course, this is precisely the area, in later periods, where the city's dock, the Blackdyke is known to have been located (RAZ 9.1, 9.2), and it is very tempting to suggest that the Beggarsholme fair was located here to take advantage of an earlier period of dock than those for which we have documentation. Beggarsholme fair, then, could have developed as a dock-side market for early Lincoln dealing in material brought in by water from the east. It is possible that, by the 14th century, however, the city's interest in the fair here had become re-located downstream to Short Ferry or Dogdyke. A list of tolls claimed by the city on the sale of goods in 1316 shows that the city's income from Dogdyke was exceeded only by the fair at Newport (Hill 1948, 215). As such the markets or fairs at Dogdyke or Shortferry might be considered the 14th-century counterpart of the dock-side markets which we suggest may have existed at Beggarsholme at earlier dates in the High Medieval Era, which dealt with goods arriving by water from the west and south. The question to be addressed by archaeological study, especially perhaps through pottery studies at both sites, is whether the commercial activity moved from Butwerk to Dogdyke and Short Ferry (perhaps in the 11th century), or whether the two commercial centres operated independently and were unrelated.

The close proximity of the proposed early fair at Beggarsholme to the possible early church site at Monks' Abbey (RAZ 9.55) is also of very great interest. The association between early monastic sites and the establishment of early markets has often been remarked upon (eg, Sawyer 1981; Ulmschneider 2000, chapter 6) and, on the face of it, this would seem to be another example of a major pre-Conquest fair held at the gates of a suspected monastic site.

Early Modern Era (1350-1750);

RAZ 10.29

Housing in Butwerk suburb

Compared with most of the city's suburbs north of the river, Butwerk seems to have had a more favourable location for continued prosperity but, even so, by 1428 five of the six parishes were reported as having fewer than 10 inhabitants. The exception was St Augustine, the parish which included the waterfront, which seems to have made a living providing warehousing to service the wool trade in the 14th century, when the cloth industry collapsed. Although at a less intensive scale, then, the suburb continued to combine domestic and commercial activity and this combination should be looked for in future archaeological work on the housing stock here. Even so, we must be aware that most of Butwerk, like the city as a whole, was also in serious decline throughout the Early Modern Era. The timing and detail of the decline and retrenchment is of great interest. The fortunes of Butwerk were closely related to the city's commercial prosperity, and consequently we might expect the whole suburb simply to return to pasture in the Early Modern Era. In the western part of the suburb, however, the house on Friar's Lane (BE73) was greatly extended at this date, whilst to the north, on the corner of modern Broadgate and Monks Road, a major house with a ground floor hall and cross-wing was extensively rebuilt in the 14th century and survived until 1828 (Jones et.al, 1990, 141-2). No doubt some buoyancy was lent to the Butwerk economy by the grant of the new fair at St Hugh's Croft in 1409 (RAZ 10.18), and, towards the end of the Early Modern Era, the beast market was certainly an important factor. It would be very helpful to find some evidence for the accommodation in the eastern part of the suburb, which relates to such deliberate attempts to stimulate the suburb. If carefully investigated, it may be possible to show whether such buildings were established by institutional or private initiative.

The St. Hugh's fairs site notwithstanding, considerable areas of the eastern parts of the suburb must have been depopulated by the 16th century, and Speed's map of 1611 shows only Broadgate and the waterfront with built-up street fronts. By the time of Stukeley's map (1722) the situation is even more extreme - the only street fronts outside the eastern walls are shown in the triangle between Monks Road, Holgate and Pottergate. The areas abandoned will have been used for something and the manner in which they were reused for agricultural activity may tell us something about the forces which lead to the depopulation. It seems that most of the land in this area remained as closes, presumably for fattening stock. The question we need to approach from the archaeological data is whether or not the enclosures were used by the citizens as a whole or whether they became the private property of individuals.

Industrial Era (1750-1945);

RAZ 11.25

Working class housing of the late 18th and early 19th centuries in Newport, the Bail, the lower city and Wigford.

The housing conditions for the working classes in the Industrial Era seem to have shown a continuous improvement. At the start of the great growth of population in the 1750s working class families, presumably mostly immigrants into the city, were housed in poor-quality accommodation squeezed into gaps between, and closes behind, the existing street-fronts. This made many existing property-owners or tenants minor landlords. These properties became increasingly scandalous and it was not until the second half of the 19th century that serious steps were taken to remedy the situation through the construction of terraces of brick-built houses on new land (RAZ 11.26). This RAZ, however, deals with the intermediate working-class housing of the century or so between 1750 and 1850.

We are very fortunate in the upper city both to have such relatively complete survival of domestic building of this date, along with their associated documents, and to have this resource so comprehensively and usefully studied (Jones et al. 1984 -1996). These documents apply mostly to the Close houses themselves (RAZ 11.27 below) but the more modest, commercial, buildings along Bailgate and their documentation have also been studied. The buildings along and behind Bailgate saw dramatic changes in their function and status in the Industrial Era. Like all of the areas of the city

retained as housing since the Early Modern Era, they saw a dramatic increase in the density of occupation from 1750-1850. Many of the shops along Bailgate itself remained the family lodgings of the trading classes, but increasingly gaps in the street fronts were filled with new building and, especially, behind the street front, on Chapel Lane, Westgate and St Paul's Lane, small terraces, rows and yards were built to accommodate poor tenants.

There was also infilling in Newport. The 1819 Padley map shows little change from the previous Era, but by the time of the 1842 map, the margins of the old market street itself had become colonised by small buildings. Being quite closely dated, these structures are of considerable interest. These encroachments on to what had once been market place might have their origins in market stall holders, whose stalls eventually became permanent, but given the apparent failure of the market, it is perhaps more likely that they represent 'squatter' occupation on the public road - an example of the privatisation of public assets by the lower orders of society.

This trend towards 'infilling' the yards and orchards behind the main street-fronts with yards and rows with houses of inferior quality can be seen right across the city, in all those areas which had remained in occupation at the end of the Early Modern Era. Conditions in these yards were poor, but they probably varied across the city, and a comparison between such yards in one area of the city and another will be of considerable archaeological interest. The most notorious of these areas of cheap 'infill' accommodation were Gadsby's Court and the area around it in St Swithin's parish, where it was said in 1847 that 2 rooms were occupied by 20 people (Hill 1974, 156-9). Holland's Row and Gourley's Row were also infilling, in what we think was the Newland market place (Cameron 1985, 74 - RAZ 9.19; 10.19), though it is less clear that it was particularly insalubrious (pace Hill 1974, 179-9). In 1865 Sincil Street was said to be particularly densely occupied as it had 'courts within courts' and the area behind the street front around High Bridge and Waterside South was said to be 'a conglomerate mass of ill-built dwellings stables and slaughter houses' (Hill 1974, 165). At this date, however, there were also black-spots on the marginal land on the hill slope in St Martin's parish, at Ashton's Court in St Peter-at-Gowts parish, and St Botolph's parish contained the notorious Abraham's Passage and Gadsby's Row as well as Watson's Court (Hill 1974, 127-8). These yards and rows have not been thoroughly studied in Lincoln, but a detailed contemporary account exists of similar housing in Gainsborough (Miller 1857) and a recent archaeological study of such yards at Brigg has shown what can be achieved merely by pulling together documentary sources (Lyons ed. 1983). A more generalised study, relating housing to broader trends in society, is in Caffyn 1986. We need to understand both how the back yards of the older properties were subdivided and used to pack in families, presumably paying rent to the owner of the street front property. What was the relationship between landlord and tenant in these situations? Did the landlord feel any sense of responsibility for his tenants or did he/she simply move their family away, leaving, in effect, a 'lock-up shop'? Some of the new building may have been of decent quality but in 1849 an estate agent reported that such 'infill' cottages could be built for £20.00 and would have mud walls (Hill 1974, 156-9). Were such newly built 'rows' or yards preferable to the cottages in the countryside or were they aiming at a similarly low standard of accommodation? Furthermore we might usefully compare the standard of accommodation for the lower classes in the Early Modern city with those of the Industrial Era; it is always presumed that there was decline in standards but this has yet to be demonstrated archaeologically. The effect of the advocates of reform in working class housing can be judged in the quality of these new buildings. We need to know whether sanitation was introduced at these 'infill' properties from the start or whether this came only as a result of the public health scares of the 19th and early 20th centuries. Similarly the advent of running water may have a marked improvement in life style and the date and context for its introduction will be visible in the archaeological record. In 1848 the chief complaint of the City's Council's commissioners was that the houses in the yards were alongside buildings and spaces used for 'candling houses, skin yards, places for boiling dead horses, pigsties and stables' (Hill 1974, 156-9). Unfortunately hardly any buildings of the late 18th or early 19th-century 'infill' type survive in the city, even of the purpose-built rows, although there are some fragmentary remains behind Bigger's of Bailgate, off St Martin's Lane and behind the Blue Anchor in Wigford. On the whole, therefore, their architectural history can only be studied in old photographs, although a number of surviving buildings, such as the Witch and the Wardrobe on Waterside North went through a phase of use as part of a densely occupied slum and these phases of such buildings should be recognised in recording projects.

Reference should be made to details relating to these research agendas in Jones *et al* 2003.

Heritage Team DDES, CoLC, August 2013

Appendix 4: Written Scheme of Investigation.

1-3 FRIARS LANE, LINCOLN

Planning Application:

2013/0019/F

Written Scheme of Investigation

045/2013

Project Code FLL3



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1-3 Friars Lane, Lincoln

CITY OF LINCOLN

Archaeological Evaluation

Written Scheme of Investigation (WSI)

1. BACKGROUND

Site Name: *Friars Lane Lincoln*

Client/Agent: Framework Housing Association

Planning Application No.:

Proposed Development: Construction of Flats.

Framework Housing wishes to redevelop a presently flat, built-up plot of land, some 300m² in size, at 1-3 Friars Lane, to the centre-east of Lincoln city centre. In line with the National Planning Policy Framework (NPPF), where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, an appropriate desk-based assessment describing the significance of any heritage assets affected (this report) is required and this was undertaken by Trent & Peak Archaeology.

The DBA demonstrated that the site has been the site of a number of buildings from at least 1817. These buildings are described as stables in the 1870's (LHD6745), but a number of structural changes clearly occurred on the site during the Nineteenth century. A number of the buildings at times may have been cellared, but this is unknown.

However, the results of previous excavations demonstrate that site lies within an area of high archaeological interest outside the Roman and Medieval walled city and but within an area of both Roman and Medieval buildings and medieval street frontages. Friar's lane is a street of medieval origin, and we might expect structures to be located beneath the proposed redevelopment area if later cellars have not truncated them away. There is also a possibility that medieval burials relating to the now demolished St. Augustine's church (beneath the Lincolnshire Archives building) may have extended as far west as 1-3 Friars Lane.

At present it is unknown if archaeological deposits survive beneath the proposed redevelopment site, however, there is an extremely high potential for archaeological remains. Any buried archaeological remains would represent a resource of at least regional significance and offer an opportunity to address research priorities highlighted in the Lincoln's archaeological assessment (Jones, Stocker and Vince 2003) and the recent East Midlands Updated Research Agenda and Strategy (Knight, Vyner and Allen 2012).

The Trent & Peak Archaeology DBA concluded with a recommendation that:

6.4.4 A small trial trench evaluation within the footprint of the proposed redevelopment would be able to rapidly establish the depth at which the sensitive archaeological horizon lies (likely between 1m or 2.5m below ground surface). The proposed redevelopment area is 300m² in size. To provide a 3% sample of the redevelopment area, 9m² of evaluation trench (3 x 3m) would be required. Given the potential depth of overburden, an evaluation trench would need to be a minimum of c.5 x 5m at ground surface level to provide a safe 3 x 3m window onto deposits at 2.5m below ground level using 1m steps (or a brace-shored trench 4 x 4m could be used).

6.4.5 If an archaeological evaluation can establish that the sensitive archaeological horizon lies at a
Trent & Peak Archaeology©

depth of 2.5m or over below ground surface, and Lincoln City Council deem that some form of piling is an appropriate construction method at 1-3 Friars Lane, then no further archaeological work would be required in relation to the proposed development. If the evaluation established that the sensitive archaeological horizon lies at a depth of 1m below ground surface, and piling caps and wall beams would impact to a depth of 2.5m in places, then further mitigation of buried archaeological deposits might be required.

As a result a condition has been placed upon the Grant of Planning Permission that:

'4. No development shall take place within the application area until the applicant has secured the implementation of an appropriate programme of archaeological work in accordance with a Written Scheme of Investigation (WSI) which has been submitted to and approved by the City of Lincoln Council as Local Planning Authority. The development shall be undertaken only in full accordance with the approved WSI. No variation shall take place without the prior written consent of the Local Planning Authority.

Reason: To ensure the preparation and implementation of an appropriate scheme of archaeological mitigation.

Conditions to be discharged before use is implemented'

This document is that Written Scheme of Investigation and is for Archaeological Evaluation in the first instance.

The requirement for archaeological work is in accordance with the NPPF (National Planning Policy Framework), paras 128 and 141. The purpose of the work is to gather sufficient evidence to provide for the archaeological investigation of effected remains within the footprint of the proposed development.

The results of the trial trenching, where positive, may lead to further archaeological requirements including targeted archaeological excavation and/or a programme of monitoring and supervision of groundworks if there is to be further impact upon deposits of archaeological interest. This will be dealt with by a subsequent WSI

2. OBJECTIVES

2.1. The objective of the archaeological evaluation can be stated as:

- 2.1.1 To characterise the archaeological potential of the site of the proposed development and to establish the depth, preservation and character of any archaeological features present. This will provide the basis for an assessment of the impact of the proposed development on the cultural heritage resource.
- 2.1.2 All excavations potentially provide an opportunity to recover palaeoenvironmental samples which contribute to an understanding of the nature of the landscape and the uses to which it was put. A representative proportion of and excavated features will be sampled in line with the methodology set out in Appendix 1. The results of processing and analysis will be assessed in the light of the research objectives set out above.

2.2. The proposed archaeological fieldwork can be summarised as:

- 2.2.1 **Trenching. A single evaluation trench measuring 5m x 5m at surface level, and 3m x 3m at up to 2.5m below ground level will be excavated. As agreed with the City of Lincoln Heritage Officer, the trench will be located following TPA observations of geotechnical cores at the site; this will allow for the trench to be located in an optimum position to characterise the buried archaeology.** Trenches will be located in the field by GPS/Total Station prior to machining and their final positioning will take account of surface topography, services/safety requirements and all existing site features including buried fuel tanks.
- 2.2.2 The client has been notified that a contingency sufficient to cover any specialist costs or additional staffing in the event of unexpected discoveries adjudged to be of significance should be set aside.

No expenditure will occur without the prior recommendation of the City of Lincoln Heritage Officer and the approval of the client.
- 2.2.3 All recording will result in 'the preparation of a report and ordered archive', in line with the guidelines of the IfA Institute for Field Archaeologists, (*Standard and Guidance: for archaeological field evaluation*, published October 1994, revised September 2001 and October 2008)
- 2.2.4 The fieldwork and the report will aim to establish the presence or absence of any archaeological deposits and their significance, value and extent as set out in English Heritage, MoRPHE, 2008
- 2.2.5 Where archaeological deposits are present the report will aim to inform on the need for, scope and resourcing of future investigation as set out in English Heritage, MoRPHE 2008.
- 2.2.6 During the course of the trial trenching there may be a site visit by the City of Lincoln Heritage Officer, who will assess the need for any further archaeological investigation arising from the trial trenching. Should significant archaeology be present then another WSI will need to be written in order to comply with the planning consent.

3. PROJECT TIMETABLE

- 3.1.1 The machining, recording and backfilling of the trenches will occur over a period of 2/3 days at times to be agreed with the client. Currently it is envisaged that the evaluation will take place in after the open area excavations on Tuesday the 2nd of April. Timescales will vary relative to the depth and complexity of any archaeological deposits.
- 3.1.2 **Reporting**
Report to be supplied within 20 working days after completion of the fieldwork, dependent on the need for specialist contributions.

4. GENERAL PROVISIONS

- 4.1 *Notice.* Trent & Peak Archaeology will liaise with the clients to ensure access to the site. T&PA will give at least one week's notice of the commencement of works to both the client and the Heritage Officer at Lincoln City Council.
- 4.1.2 *Services.* The client will provide plans of all services within the study area and/or confirm appropriate checks have been completed.
- 4.1.3 *Environmental Impact Statement.* The client will provide a copy of their Environmental Impact Statement in order that T&PA can take appropriate notice of it in the project design
- 4.1.4 *Base maps.* The client is requested to supply copies (preferably digital) of base maps for Trent and Peak Archaeology to use in the report and for locating the trenches during fieldwork.
- 4.1.5 *Fencing* At the close of any period of work trenches that have not been backfilled will be fenced off using netlon fencing to prevent access either by members of the public. The site is to be made secure by the client**

5. DETAILS OF SPECIFICATION FOR ARCHAEOLOGICAL EVALUATION

5.1 Trench Excavation

- 5.1.1 All machining will be done with a toothless ditching bucket under archaeological supervision. Prior to excavation the area of the trench will be scanned with a CAT Scan to locate any services that are not shown on the services plan supplied by the client.
- 5.1.2 The trenches and any archaeological features will be located by GPS, Leica CS15/GS15 RTK Differential GNSS prior to excavation. If it is impractical to use GPS the Total Station will be used as an alternative.
- 5.1.3 Trenches will be excavated to a level at which archaeological or natural deposits are present, or if not present, to a maximum (unsecured) depth of 1.m (see below), to comply with H&S restrictions (or to a perceived safe depth if the sides are unstable). Subsoil will be machined in spits no greater than 250mm. If it is necessary within the aims of the evaluation to look at deposits deeper than 1m then stepping/shoring of trenches will be carried out as appropriate.
- 5.1.5. The location of any artefacts recovered in the topsoil/subsoil will be recorded three-dimensionally or by context/spit if appropriate.
- 5.1.6 Trenches will be hand cleaned where appropriate and a minimum of one long section of each trench will be photographed, and drawn at 1:50/1:20 (recording will correspondingly increase with the presence of archaeological deposits). The position of each trench will be located with reference to the OS grid.

5.1.7 Where appropriate the depth of potential geological deposits may be determined by a combination of machine excavation and use of a 2m hand auger.

5.1.8 On completion of the fieldwork the trenches will be backfilled by machine; **this will not include full reinstatement.**

5.2 Cleaning/Hand Excavation

5.2.1 All fieldwork will be carried out in accordance with the code of conduct of The Institute for Archaeologists.

5.2.2 Features will be hand-cleaned and planned. Following scanning by a metal detector features will be sample excavated sufficient to determine their plan and form, and to recover any datable artefacts.

5.2.3 Feature fills will be removed by contextual change (the smallest usefully definable unit of stratification) and/or in spits no greater than 100mm. Substantial features will be hand excavated to a maximum depth of 1.m, or a perceived safe depth if the sides are unstable.

5.2.4. All finds of medieval date or earlier will be recorded three dimensionally. Post-medieval finds or abundant redeposited structural material will be recorded by context/spit.

5.2.5 Spoil will be searched for artefacts, including the use of a metal detector.

5.2.6 In the event of the discovery of human remains disturbance will wherever possible be avoided. Where removal is deemed necessary following discussion with, and the approval of, the client and the Development Control Archaeologist for Derbyshire County Council the necessary burial license will be obtained in line with the Ministry of Justice circular dated April 2008.

5.2.7 The sampling of features will follow procedures set out within the English Heritage Centre of Archaeology Guidelines, *Environmental Archaeology* 2002. Samples will be processed within the TPA Environmental Lab, under the supervision of TPA Environmental Officer Alison Wilson.

5.3 Recording

5.3.1 Plans of all contexts including features will be drawn on drafting film in pencil at a scale of 1:20/1:50, and will show at least:
context numbers,
all colour and textural changes,
principal slopes represented as hachures,
levels expressed as O.D. values, or levelled to permanent features if a benchmark is absent,
sufficient details to locate the subject in relation to OS 1:2500 mapping.

5.3.2 Sections will show the same information, but levelling information will be given in the form of a datum line with O.D/arbitrary value; the locations of all sections will be shown on plan.

5.3.3 Digital images and B&W photos of each context will be taken (as per Brown 2007) together with general views illustrating the principal features of the excavations.

5.3.4 Written records will be maintained as laid down in TPA recording manual.

5.4 Post-excavation Processing

5.4.1 All finds will be cleaned and stored as recommended in "First aid for finds" (by the Archaeology section of the United Kingdom Institute for Conservation, 2nd edition

1987), and marked with the site and find codes, and relevant accession numbers. These will be deposited with the appropriate museum on completion of the report, subject to the provisions of the brief and the agreement of the client.

- 5.4.2 Depending on availability any Prehistoric pottery will be submitted for assessment to Dr .D. Knight (TPA), Romano-British pottery to (J Young), Anglo-Saxon/Medieval pottery/tile to (V.Nailor), Flint to Peter Makey (Independent). Other specialists recommended by Lincoln City Council will be used upon request.

5.5 Archive

- 5.5.1 The archive will be fully indexed and contain where relevant:
- copies of correspondence relating to fieldwork
 - site notebooks/diaries
 - original photographic records
 - site drawings (plans, sections, elevations)
 - original context records,
 - matrix diagrams showing stratigraphic sequence of all contexts.
 - artefacts
 - original finds records
 - original sample records
 - original skeleton records
 - computer discs and printout

5.6. Archive and Finds Deposition

- 5.6.1 Initial contact with Lincoln Museum via the Heritage Officer at Lincoln City Council will be made before the commencement of fieldwork.

Where necessary the documentary archive will be sent to the NMR for copying.

Finds will remain the property of the client with deposition to the relevant regional museum subject to their approval.

The paper and digital archive generated by TPA will remain the property of the Unit until deposited within the appropriate public archive/museum. An accession number will be obtained from Leicestershire Museums.

The Heritage Officer at Lincoln City Council and the museum curator will be notified in writing on completion of fieldwork, with a proposed timetable for deposition of the archive. This should be confirmed in the project report.

The Heritage Officer at Lincoln City Council will be informed in writing on final deposition of archive.

- 5.6.3. Finds will remain the property of the client with deposition to the relevant regional museum subject to their approval.
- 5.6.4 The paper and digital archive generated by TPA will remain the property of the Unit until deposited within the appropriate public archive

5.7 Report

- 5.7.1. A report will be provided to the client 20 working days after the completion of fieldwork, unless delayed by the supply of specialist contributions.
- 5.7.2. The report will include:
background information, a summary of works carried out, a description and interpretation of the findings, and an assessment of the importance of the archaeology found with an appropriate location plan and illustrations.
- 5.7.4 Trent & Peak Archaeology shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved excepting that it hereby provides exclusive licence to the client and their appointed agent/consultant for the use of such documents in all matters directly relating to the project, with no limitation on the number of times that the client/consultant may reproduce any report.

5.8 Monitoring

- 5.8.1. Where possible a minimum 5 working days prior notice of the commencement of the development is to be given to the Heritage Officer at Lincoln City Council.
- 5.8.2 The Heritage Officer at Lincoln City Council may make monitoring visits throughout the duration of the evaluation and will be kept informed of all material facts relating to the excavation.
- 5.8.3. All phases of the investigation will be undertaken in line with the relevant 'Standard and Guidance' documents prepared by the IFA.**

5.9 Access, Health & Safety, Insurances.

- 5.9.1. The client will arrange safe access to the land.
- 5.9.2. The client will provide plans showing all services/service routes within the development area.
- 5.9.3. Any compensation claims for disruption to the land should be directly between the client and landowner.**
- 5.9.4 All health and safety requirements will be adhered to. The procedures outlined in TPA's manual will be followed, a copy of which is available for inspection if required.**
- 5.9.5. TPA will prepare and regularly update risk assessments of archaeological fieldwork and recording tasks for each stage of the archaeological project. Copies of all health and safety documentation prepared for the scheme by TPA will be made available to the client.**
- 5.9.6 TPA carries the appropriate insurances, copies of which are available for inspection if required.**

5.10 Staffing

Provisional list of staffing. CVs can be supplied on request.

Project Manager

Dr Gareth Davies, Project Manager, TPA

Project Team,:

Paul Flintoft, Project Officer, TPA
Matt Hobson, Site Assistant, TPA.

Key Project Contacts

Gareth Davies.....0115 896 7408

6. References

Brown, D. 2007 *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation*, Archaeological Archives Forum.

English Heritage Centre of Archaeology Guidelines 2002 *Environmental Archaeology*.

English Heritage 2008 *Management of Research Projects in the Historic Environment, PPN3 Archaeological Excavation*.

Institute for Archaeologists (IfA) 2008 *Standard and Guidance: for archaeological field evaluation*, (published October 1994, revised September 2001 and October 2008).

Knight, Vyner and Allen 2012 *East Midlands Heritage An Updated Research Agenda for the Historic Environment in the East Midlands*, Buxton Press.

Appendix 1 1 – Preliminary Site Sampling Strategy*

feature type	Sediment	Overall scope of sampling	MM	C14	Po/Dm	Ch	BP/BS	Bo	Wd
Sampling method:				A4x1cm (seal)	Film caps or column in gutter + Clingfilm	Min.30L+ Tubs (specialists to advise as to appropriate level of sub sampling of deposit)			wrap each bit sep.
Man-made feature	Waterlogged organic (looks 'peaty')	each occurrence series of samples if thick (>150mm)			*	*	*	*	*
buried soil	Dry visible charred material	each occurrence (C14 selected: best is twigs then layer then flecks)		*		*		*	
	Waterlogged organic	each occurrence, at thickest point	*	*	*	*	*	*	*
	Dry visible charred material	each occurrence, at thickest point, series of samples if thick (>150mm)	*	*	*	*		*	
Any	Wood structure	retain all, keep damp, bag each		*					*
Industrial residues / debris etc.		All process stages to be represented					*		
<p>Abbreviations MM Micromorphology C14 Radiocarbon Po/Dm Pollen/diatoms Ch Charred material BP Waterlogged Beetles/Plant remains Bo small bone Wd wood. BS –Bulk Sample (industrial waste/residues/processing debris)</p>									

*Adjustments to be made following specialist advice and liaison with Lincoln City where appropriate.