ARCHAEOLOGICAL EVALUATION ON LAND AT STAMFORD, GWASH VALLEY BUSINESS PARK (PROPOSED) (SGVB06)

Work Undertaken For
F H Gilman and Co.

March 2007

Report Compiled by
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Planning Application No.: **S00/1124/69**
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ARCHAEOLOGICAL PROJECT SERVICES

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1. SUMMARY

An archaeological evaluation was carried out on land at Gwash Valley, Stamford. The land is subject to an outline planning application for the construction of a business park.

The site lies in an area of archaeological potential, with an early medieval cemetery lying in close proximity. A geophysical survey revealed potential archaeological remains within the proposed area of development.

During the course of this evaluation, a number of archaeological features were identified. The majority were concentrated in the south east of the area, close to the present course of the River Gwash. These were predominantly of Romano-British date and were associated with a levelled area and bank, possibly forming a focus of agricultural activity.

2. INTRODUCTION

2.1 Definition of an Evaluation

An archaeological evaluation is defined as, *'a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site. If such archaeological remains are present Field Evaluation defines their character and extent, quality and preservation, and it enables an assessment of their worth in a local, regional, national or international context as appropriate'* (IFA 1999).

2.2 Planning Background

An outline planning application was submitted for the development of a business park on land at Gwash Valley, Stamford, Planning Application No. S00/1124/69. An Environmental Impact Assessment and geophysical survey had been completed prior to the commissioning of this evaluation, both of which identified the area as being of potential archaeological significance. The archaeological evaluation was required as the next stage in the determination of the planning application.

The fieldwork was undertaken between the 15th January and the 2nd February 2007.

2.3 Topography and Geology

Stamford is situated 63km south of Lincoln and 23km southwest of Spalding, in the administrative district of South Kesteven, Lincolnshire (Fig.1). The town lies on the banks of the River Welland, close to its confluence with the Gwash, which provides the eastern boundary of the town.

Stamford sits in a narrow valley cut into the Lower Lincolnshire Limestone. Upper Lincolnshire Limestone and the overlying Great Oolite form the northern valley sides. In contrast, the southern part of the town is located on a solid geology of Northampton Sand and Lower Lincolnshire Limestone (Inferior Oolite). Remains of a river terrace and recent alluvium fill the valley bottom (Anderson 1982, 1).

The proposed development area lies on pastureland characterised by a fairly steep slope rising in the north to a height of 34mOD and falling to both the west and south, with the lowest height recorded as being 21mOD. The site is centred on National Grid Reference TF 04259 08037 (Fig. 2).

Towards the southern extent of the investigation area, the land is characterised by a levelled area, parallel to the water course 'Mill Lade'. This area appears to show remains of earthworks in the form of

terracing and banks, as well as the possible marks of ridge and furrow (Fig. 8, Plates 7 and 8)

2.4 Archaeological Setting

Prehistoric activity in the environs of the investigation area is fairly limited. A causewayed enclosure has been identified, but this is over a kilometre away.

No Roman settlement activity has been identified in the locality of the investigation area, The nearest focus is to the west at Great Casterton, situated on Ermine Street at a ford over the River Gwash.

An early medieval cemetery was identified immediately adjacent to the site, in the village of Uffington.

Stamford was an important town in the 9th century, when the Danes made it one of the five boroughs of the Danelaw. It grew throughout the medieval period, having a mint in the 10th century and developing a regionally important pottery industry.

3. AIMS

The aim of the evaluation was to gather information to establish the presence or absence, extent, condition, character, quality and date of any archaeological deposits in order to enable the Archaeological Advisor to South Kesteven District Authority to formulate a policy for the management of archaeological resources present on the site.

4. METHODS

4.1 Trial Trenching

Seventeen trenches were opened across the area. Of these, sixteen were 50m long x 1.8m wide, whilst one, Trench 14, was 100m long x 1.8m wide (Appendix 2). A number of the trenches targeted anomalies identified during the geophysical survey, whilst others were located in order to provide a general coverage of the sampled area (Fig. 3).

Removal of topsoil and other overburden was undertaken by mechanical excavator using a toothless ditching bucket. The exposed surfaces of the trenches were then inspected for archaeological remains.

Each deposit exposed during the evaluation was allocated a unique reference number (context number) with an individual written description. A photographic record was compiled. Sections and plans were drawn at scales of 1:10 or 1:20, as appropriate. Recording of deposits encountered was undertaken according to standard Archaeological Project Services practice.

The location of the excavated trenches was surveyed using a differential GPS system.

4.2 Post-excavation

Following excavation, all records were checked and ordered to ensure that they constituted a complete Level II archive and a stratigraphic matrix of all identified deposits was produced. A list of all contexts and interpretations appears as Appendix 2. Context numbers are identified in the text by brackets.

5. RESULTS

Of the seventeen trenches excavated, eight contained no evidence of archaeological remains.

5.1 The Empty Trenches

The general characteristics of the empty trenches are set out in Table 1, below. The geology, or natural horizon, encountered within these trenches was predominantly composed of compact, light yellow, limestone brash interspersed with pockets of red clay silt, probably a colluvial deposit. This, designated the 'natural' in the table below, was the level at which archaeological remains survived elsewhere on site.

A layer of colluvium, consisting of moderate-loose, mid red-brown, clay silt was encountered in a number of the empty trenches. This was largely confined to the downslope areas, where it was up to 1m thick, and was not present within those trenches excavated towards the crest of the slope (Plate 5). This deposit sealed the natural horizon.

The majority of trenches revealed a subsoil layer which sealed the colluvium or, where this was not present, the natural horizon. This was composed of a loose, mid grey-brown, clay silt with moderate to frequent inclusions of small stones. This ranged from 0.04m to 0.25m in thickness.

A layer of modern topsoil extended across the excavated area, sealing the subsoil deposit. This was a loose, mid-dark brown-grey, clay silt with moderate to frequent inclusions of small stones and roots, and a high organic content. This was the latest deposit encountered during the course of the evaluation.

Trench	Depth of topsoil	Depth of subsoil	Depth of collu-vium	Depth of Trench	Height of natural horizon (range)
2	0.25m	0.15m	-	0.46m	23.70 - 24.7mOD
4	0.25m	0.21m	-	0.5m	28.46-28.76mOD
5	0.2m	0.05m	-	0.3m	28.91-30.32mOD
6	0.18m	0.04m	0.3m	0.55m	27.26-29.61mOD
7	0.25m	0.15m	-	0.5m	31.81-33.83mOD
8	0.2m	-	0.4m	0.6m	31.47-33.6mOD
9	0.1m	0.25m	1m	1.3m	31.09-34.33mOD
13	0.16m	0.14m	-	0.4m	36.56-34.62mOD

Table 1 General characteristics of the empty trenches.

5.2 Trench 1 (Figs. 4 and 6)

The earliest deposit encountered within Trench 1 was (1005), a soft mid red clay silt with patches of limestone brash. This was the natural horizon and was cut by [1004], a northwest southeast aligned linear, 2.1m wide x 0.5m deep. A soft, mid grey-brown, clay silt (1003) was the single fill of this feature, from which no dateable artefacts were recovered.

This was sealed by a layer of mid red-brown clay silt (1006), which was identified as a layer of colluvium. A thin layer, 0.1m thick, of soft, mid red-brown, clay silt (1002) overlay (1006). This was identified as a subsoil deposit and was itself sealed by (1001), a layer of topsoil 0.25m thick.

5.3 Trench 3 (Figs. 4 and 6, Section 3 Plate 4)

A hard, light grey-yellow, limestone brash, (3006), was identified as constituting the natural horizon within Trench 3. This was sealed by (3002), a loose, mid yellow-brown, clay silt with frequent gravel inclusions. This formed the subsoil layer, which was cut by [3005], a north south linear 1.95m wide x 0.65m deep. This feature was identified during the course of the geophysical investigation and was seen to extend beyond the limits of the survey to both the north and south, making it likely to be in excess of 140m long.

[3005] was filled by (3004), a mix of red-brown silt and fragmented limestone 0.2m thick, forming the primary fill, and (3003), a moderate-loose, red-brown, clay silt with frequent gravel inclusions. Neither of these deposits yielded evidence for the dating of this feature, but the fact that it was cut through the subsoil (3002) possibly indicates that this was a post-medieval field boundary ditch.

A layer of soft mid grey-brown clay silt with moderate inclusions of small stones and limestone fragments, (3001), sealed the above deposits. This was a layer of topsoil, 0.25m thick.

5.4 Trench 10 (Figs. 4 and 6, Section 4)

The earliest deposit uncovered within Trench 10 was (10007), a hard, light yellow-grey, limestone brash. This was overlain to the northeast by (10006), a layer of soft, mid brown-red, clay silt. These deposits formed the natural horizon.

A northwest southeast linear, [10005], cut (10006). This was 0.5m wide x 0.4m deep and contained only one deposit, (10004), a hard, mid grey silt with frequent limestone fragments. This was sealed by (10003), a thick layer of colluvium, composed of a mid brown-red clay silt with frequent inclusions of limestone fragments and gravel. This was 0.4m thick and was, itself, sealed by (10002), a layer of mid red-brown silt, 0.2m thick, forming the subsoil deposit. A layer of topsoil, (10001), 0.25m thick constituted the latest deposit within Trench 10.

5.5 Trench 11 (Figs. 4 and 6, Sections 7 and 8)

The natural deposit encountered within Trench 11 was (11001), a moderate red-brown clay silt with inclusions of limestone fragments. Overlying this was (11002), a colluvial deposit composed of light red-brown clay silt, 0.5m thick.

A flat bottomed linear, [11008], was observed at the western end of Trench 11. As this feature was only partially exposed the full dimensions are unknown, however, it was observed to be greater than 0.9m wide x 0.68m deep. [11008] was aligned northeast southwest and appeared to be cut through the colluvial layer (11002). [11008] was filled by a firm, light red-brown, clayey silt, (11009). No dateable artefacts were recovered from this deposit.

Deposit (11009) was truncated to the east by [11005]. This was a northwest southeast aligned linear, 2.3m wide x 0.6m deep with a slightly concave profile. Two deposits filled [11005]. The lower fill, (11006), was composed of a firm, light red-brown, silty clay with moderate inclusions of limestone fragments. This was 0.25m thick and included animal bone, a Roman box tile and an undiagnostic Roman tile within its matrix (Appendices 4 and 6). The upper fill, (11007), was a moderate-firm, light red-brown, clay silt with occasional limestone fragments. This was 0.35m thick and yielded no dateable artefacts.

A layer of subsoil, (11003), sealed the above deposit. This was a firm, yellow-brown silty clay 0.25m thick, which was in turn sealed by a layer of topsoil, (11004), a firm, grey-brown, silty clay with frequent small sub angular stones. This was 0.35m thick.

5.6 Trench 12 (Figs. 5 and 6)

Within Trench 12, the earliest deposit uncovered was (12001). This was a moderate-soft, light yellow-brown clay silt with pockets of sand. This formed the natural horizon, which was cut to the east by [12004].

This, [12004], was a northwest southeast aligned linear 1.6m wide x 0.28m deep, with an irregular shape in profile. It was unclear whether this was an archaeological feature or of natural derivation. The filling deposit, (12005), was a red-brown clay silt, virtually indistinguishable from the overlying layer of colluvium, (12006). This may support the interpretation of [12004] as being a natural linear hollow or depression.

A layer of colluvium, (12006), overlay (12005). This was a firm, light red-brown, clay silt deposit with occasional inclusions of small sub angular stones, 0.4m thick. This was sealed by (12003), a loose, light yellow-brown, clay silt 0.21m thick, identified as a subsoil layer.

Topsoil layer (12002), a loose, grey-brown, clay silt 0.17m thick, sealed all of the above deposits.

5.7 Trench 14 (Figs. 7 and 8, Plates 7-11)

Located towards the southeastern extent of the investigation area, Trench 14 uncovered the greatest concentration of archaeological remains.

The earliest deposit identified within this trench was (14023), a hard, light grey-yellow limestone brash. This formed the natural horizon. Towards the south of the trench, the overlying deposits were of such a depth that this horizon was not attained. The trench was excavated to a depth of 1.45m (20.77mOD) at its southern extent. This was then further investigated by augur, which located the natural horizon at a depth of 2.32m from ground level (Fig. 7).

The earliest deposit encountered in the southern section of Trench 14 was (14042). This was a moderately compacted, mid-light orange, silt 0.2m thick. This was only partially exposed due to the depth of overlying deposits at this point.

Overlying (14042) was (14041), a moderately compacted, mid red-brown silt with fairly frequent inclusions of gravel. This was over 0.4m thick and contained a number of Romano-British tiles, sherds of pottery dated to the later 2nd century, and more fragmentary CBM (Appendices 3 and 4).

Above (14041) was (14043), a moderate-loose, mid grey gravel and silt deposit, up to 0.1m thick. This was sealed by (14044), a moderate orange-red silt with fairly frequent gravel inclusions, 0.3m thick.

Deposits (14042), (14041), (14043) and (14044) may have formed the fills of a former river channel, assigned the number [14051]. The proximity of these deposits to the River Gwash may reinforce this interpretation, possibly being evidence of a prior course of the Gwash, or for significant narrowing of the River consequent on the channelling evident in the current landscape.

Approximately 30m from the southern end of Trench 14, an east-west aligned linear,

[14030], was identified. This feature, 2m wide x 0.55m deep, was associated with a bank visible as a positive earthwork running east west across a portion of the investigation area and into the adjacent field to the east (Fig. 8, Plates 7, 8 and 10).

Two distinct stages of deposition were contained within [14030]. The first, (14028), was a friable, dark grey-brown silty clay and gravel mix, 0.18m thick. This deposit was confined to the northern edge of the ditch and was interpreted as a slump of natural material, probably resulting from edge collapse soon after the excavation of the feature. Fragments of CBM, probably of Romano-British date, were recovered from this deposit (Appendix 4).

The upper fill of [14030] was (14029). This was a friable, dark grey-brown, silty clay with occasional inclusions of small stones and flecks of limestone, 0.48m thick. Romano-British pottery, dating to the 3rd-4th century (Appendix 3), was recovered from this deposit, along with Roman tile fragments (Appendix 4).

Stratigraphically intervening between these deposits, however, was deposit (14048). This was confined to the northern edge of [14030] and formed part of a series of deposits tentatively identified as being a constructed bank.

Deposit (14047) was the earliest of these and was composed of loose, mid-dark grey-brown silty gravel, 0.3m thick. This was sealed by (14048), a moderately compacted, brown-red silt with occasional small stones and gravel inclusions. This deposit was 0.2m thick and, alongside (14047), appeared to be the remains of the constructed bank visible at surface level. No dateable artefacts were recovered from these deposits.

The fact that (14048) partially overlay (14028), but was overlain by (14029), may indicate that [14030] remained largely open during the construction of the bank and suggested that the bank and ditch were contemporary.

Approximately 6m to the north-west of [14030], another linear feature was identified. This ditch, [14033], was aligned roughly north-south and was 1.4m wide x 0.6m deep, with smooth sides and a concave base. This feature cut bank deposit (14048) (Plates 9-10).

The primary fill of [14033] was (14034), a moderate-loose, mid-dark grey, silty gravel, 0.34m thick. This may have resulted from edge collapse, causing natural material to slump into the base of this feature. Fragments of CBM and animal bone were recovered from this deposit.

The upper fill, (14035), was 0.3m thick and consisted of grey-red silt with frequent gravel inclusions. A number of sherds of 3rd-4th century Romano-British pottery were recovered from this deposit (Appendix 3), alongside Romano-British tile (Appendix 4).

A modern intrusion, [14036], truncated (14035). This was a sub-rectangular cut, c1.4m wide and greater than 2m long, extending beyond the confines of the trench to the west. Metal straps and debris were observed in the upper fill (14037) of this feature,.

A feature similar in alignment and dimensions to [14033] was located 5m to the northwest. This was [14039], a north-south aligned ditch, 1.75m wide x 0.57m deep. The earliest fill of this feature was (14038), a friable, dark grey-brown silty clay and gravel mix, 0.29m thick. This was a possible slumping episode, which contained CBM and late 3rd-4th century

Romano-British pottery (Appendix 3). Sealing this deposit was (14040), a soft, dark grey-brown silty clay with occasional fragments of limestone and small sub angular stones. Romano-British CBM and late Romano-British pottery (Appendices 3 and 4) were recovered from this deposit.

Just north of the centre of Trench 14, a series of inter-cutting features were identified (Plate 11). These consisted of a minimum of six ditches cut along a northeast southwest axis. As a result of the intensity of features present in this localised area, a number of these features were heavily truncated, making interpretation of dimensions and stratigraphic relationships problematic.

The earliest features present were [14001] and [14008]. The original dimensions of these features were lost to truncation.

Feature [14001] was filled by (14002), a soft mid-red-brown sandy silt with occasional small stones. This survived to a thickness of 0.25m.

Feature [14008] was filled by (14009), a soft, mid red-brown silt with occasional gravel inclusions. This deposit was cut by [14010], the largest feature surviving at this point. This was 1.3m deep x 4.3m wide and was filled by a series of silty deposits with lenses of gravel. (14011), (14012), (14014) and (14015) sequentially. Deposit (14015), the latest extant fill of [14010] was cut by [14003], which also truncated (14002).

The full dimensions of [14003] were lost to later truncation, but it was at least 1m deep x 1.65m wide. This was also filled by a series of silts with differing intensities of gravel inclusions, along with sporadic lenses of almost pure gravel. Sequentially these deposits were (14004), (14005), (14006) and (14007).

The upper deposit, (14007), was cut by two further ditches; [14019] and [14016]. [14016] was 1.68m wide x 0.48m deep with concave base and sides. This was filled by (14017), a hard, mid brown-grey gravel and sandy silt, 0.14m thick, and (14018), a soft, mid red-brown sandy silt, 0.4m thick.

Ditch [14019], which lay to the north of [14003], was 2.2m wide x 0.3m deep. Deposit (14020) formed the primary fill and was composed of a soft light red-brown sandy silt, 0.3m thick. Romano-British CBM was recovered from this deposit (Appendix 4). The upper fill, (14027), was a soft mid-dark red-brown sandy silt with occasional small stones. This was 0.2m thick.

It is likely that all of these filling deposits formed through association with the River Gwash, the current course of which is located less than 70m to the south (Plate 8). The lenses of gravel are testament to a series of flooding events, whilst the sandy silt composition of the fills is consistent with alluvial deposition. This relationship could also provide a reason as to why this series of re-cuts was necessary, as relatively rapid silting of ditches, or any cut feature, is a likely result of proximity to a river course, thus necessitating constant reinstatement.

At the northern extent of Trench 14, another linear feature was identified. This was [14025], a northwest southeast ditch 1.4m wide x 0.27m deep, filled by (14026), a soft, light red-brown silt. Animal bone, including a partially articulated cow skeleton, was recovered from this deposit, along with a single sherd of Iron Age / transitional pottery (Appendices 3 and 6).

All of the above deposits were sealed by (14021), a subsoil layer consisting of soft mid red-brown sandy silt with frequent

inclusions of fragmented limestone, 0.2m thick. Topsoil layer (14022) extended across the excavated area and was composed of soft, mid-dark grey-brown silt, approximately 0.2m thick.

5.8 Trench 15 (Fig. 7)

The earliest deposit uncovered within Trench 15 was (15004), a light grey-yellow gravel and limestone brash. This was the natural horizon. Patches of colluvium, (15003), were noted intermittently throughout this trench. These had settled in natural hollows.

Ditch [14019] was seen to extend through the north eastern part of this trench. No further archaeological features were present.

A layer of subsoil, (15002), sealed the natural horizon. This was a soft, light red-brown sandy silt with moderately frequent inclusions of small stones, 0.15m thick. Overlying (15002) was (15001). This was a topsoil layer composed of soft, mid grey-brown sandy silt, 0.2m thick.

5.9 Trench 16

The natural horizon within Trench 16 was composed of a hard limestone brash, (16002). This was, however, only exposed in the north-eastern end of Trench 16.

Deposit (16001), a friable dark red-brown silty clay with occasional limestone fragments, was encountered along the length of this trench. This deposit was the same as (14041), contained Romano-British CBM and was interpreted as the fill of a river channel, possibly an earlier course of the adjacent River Gwash. A sondage was excavated through this deposit towards the south western extent of the trench. This was excavated to a depth of 1.6m, at which point an augur survey was conducted. This located the natural brash horizon, (16002), at a depth of 2m from ground level.

5.10 Trench 17 (Figs. 5 and 6, Sections 9 and 10, Plate 6)

The earliest deposit exposed in Trench 17 was (17001). This was a firm, red-brown clay silt, with frequent limestone fragments and gravel inclusions, identified as the natural horizon. Three linear features were identified within this trench.

Ditch [17005] was located towards the north of the trench and was aligned northeast southwest. [17005] was 1.14m wide x 0.48m deep and greater than 2.2m long. This contained two light grey-brown silt deposits, (17007) and (17008), from which no dateable evidence was recovered and was probably a drainage ditch.

A little to the south, another northeast-southwest linear, [17008], was identified. This was similar in size and profile to [17005], being 1.35m wide x 0.48m deep and greater than 2m long. This feature was filled by two deposits composed of firm, light yellow-brown clay silts, (17009) and (17010). The upper fill, (17010), was truncated by another northeast southwest linear, [17011], along its southern edge.

[17011] was of a smaller scale than both [17005] and [17008], being 0.5m wide x 0.12m deep x >2m long, and was probably a shallow drainage ditch. This was filled by (17012), a firm, light grey-brown, silty clay with occasional small sub angular stones. A number of fragments of CBM of Romano-British date were recovered from this deposit (Appendix 4).

A layer of colluvium, (17002), sealed the above deposits. This was 0.45m thick and was composed of a firm, light red-brown, clay silt, with frequent inclusions of sub angular stones. Overlying (17002) was subsoil layer (17003), a loose, light

yellow-brown, clay silt with frequent inclusions of fragmented limestone, 0.3m thick. Sealing this was (17004), a loose grey-brown clay silt, 0.35m thick. This constituted the topsoil deposit.

6. DISCUSSION

The natural horizon encountered across the site was composed of limestone brash with fairly frequent pockets of colluvium and isolated patches of gravel.

Seventeen trenches were excavated, of which eight revealed no evidence of archaeological remains. The empty trenches were largely confined to the higher part of the site, whilst the most intense evidence of archaeological activity was focused towards the southeast, specifically in Trench 14.

The absence of archaeological features towards the highest part of the site may indicate that human activity in the past was limited in this area. Alternatively, the absence of archaeological remains may be a result of the degree to which colluvial processes have affected the natural horizon towards the summit of the slope. There was a relative lack of colluvial build-up within the trenches in the higher part of site, in contrast to the deep colluvial layers present within the lower trenches (Plate 5).

Isolated linear features were identified in Trenches 1, 3, 10 and 12. At least one of these, that in Trench 3, was likely to be a post-Medieval field boundary ditch. The remainder are likely to be related to the drainage of land at Gwash Valley or defunct boundary markers. None of these features yielded dateable artefacts.

Two further ditches, located to the west of Trench 11, are also likely to serve either boundary marking or drainage purposes. The later of the two is probably of Romano-British date.

The isolated nature of these remains indicates that the majority of the site is of low archaeological potential. The ditches which do exist are likely to be of a rural nature, possibly relating to agricultural utilisation of the land in the archaeological past.

The concentration of remains within Trench 14, towards the south-east of the investigation area, is indicative of a more intense focus of activity. A number of ditches were identified in this area. The majority were orientated north south or northeast southwest, although two were cut along an east-west axis. It is likely that all of these features are of Romano-British origin.

The majority of these features are likely to be drainage ditches located at the base of a hill. The series of re-cut ditches towards the centre of the trench may, however, be a regularly re-instated boundary. These ditches were of greater scale than the single ditches elsewhere within the trench, and the effort invested in keeping this feature open indicates a continuity of purpose.

The southern part of the investigation area contained a number of earthworks. The most clearly visible were two levelled areas, possibly formed through terracing, separated by a bank (Fig. 8, Plates 7 and 8)

A tentative conclusion (see above) that the bank is contemporary with ditch [14030] indicates that the earthworks visible on site are of Romano-British date. It seems that the bank were cut by another ditch containing Romano British material, [14033] (Plate10).

These factors combine to suggest that the area around Trench 14 was more

intensively utilised that the rest of the investigation area, especially in regard to the Romano-British period. The relative abundance of artefacts from the features within Trench 14, as opposed to features elsewhere on site, also indicates a greater emphasis of human activity in this area. Analysis of the CBM present on site (Appendix 4) suggests the presence of a Roman building somewhere in the vicinity of Trench 14, possibly possessing a tiled roof and a hypocaust.

The archaeological features uncovered are suggestive of an agricultural focus somewhere in the vicinity of Trench 14. However, environmental analysis of a number of the deposits contained within features in Trench 14, revealed an exceptionally low density of material. This may indicate that the excavated ditches were removed from any centre of habitation or agricultural activity (Appendix 5).

7. CONCLUSIONS

An archaeological evaluation was undertaken on land at Gwash Valley, Stamford in order to help determine planning permission for the construction of a business park. The site lies in close proximity to an early medieval cemetery, whilst geophysical survey identified the potential for archaeological remains to survive within the proposed development area.

The majority of the site revealed sparse evidence of archaeological activity, with only isolated ditches, probably related to drainage, scattered through a number of the trenches.

Any development in this area is unlikely to have a significant impact on archaeological remains.

The southeast corner of the site, however, revealed a more concentrated spread of archaeological features.

These were all ditches of Romano-British date, probably performing a drainage or boundary marking role. Sherds of pottery and CBM were recovered from the deposits filling these features, possibly indicating some degree of association with a focus of agriculture and possibly a Roman building in the vicinity.

Earthworks visible on the surface of the investigation area also appeared to date from the Romano-British period, taking the form of an area of terracing with an associated bank, possibly serving as a flood defence from the nearby River Gwash.

The limitations of the trenching method means that conclusions remain speculative, but further investigation would have the potential to provide greater understanding of the purpose and form of these archaeological remains.

Any development in this area, especially in the form of intrusive groundworks, is likely to have a negative impact on these remains.

8. ACKNOWLEDGEMENTS

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9. PERSONNEL

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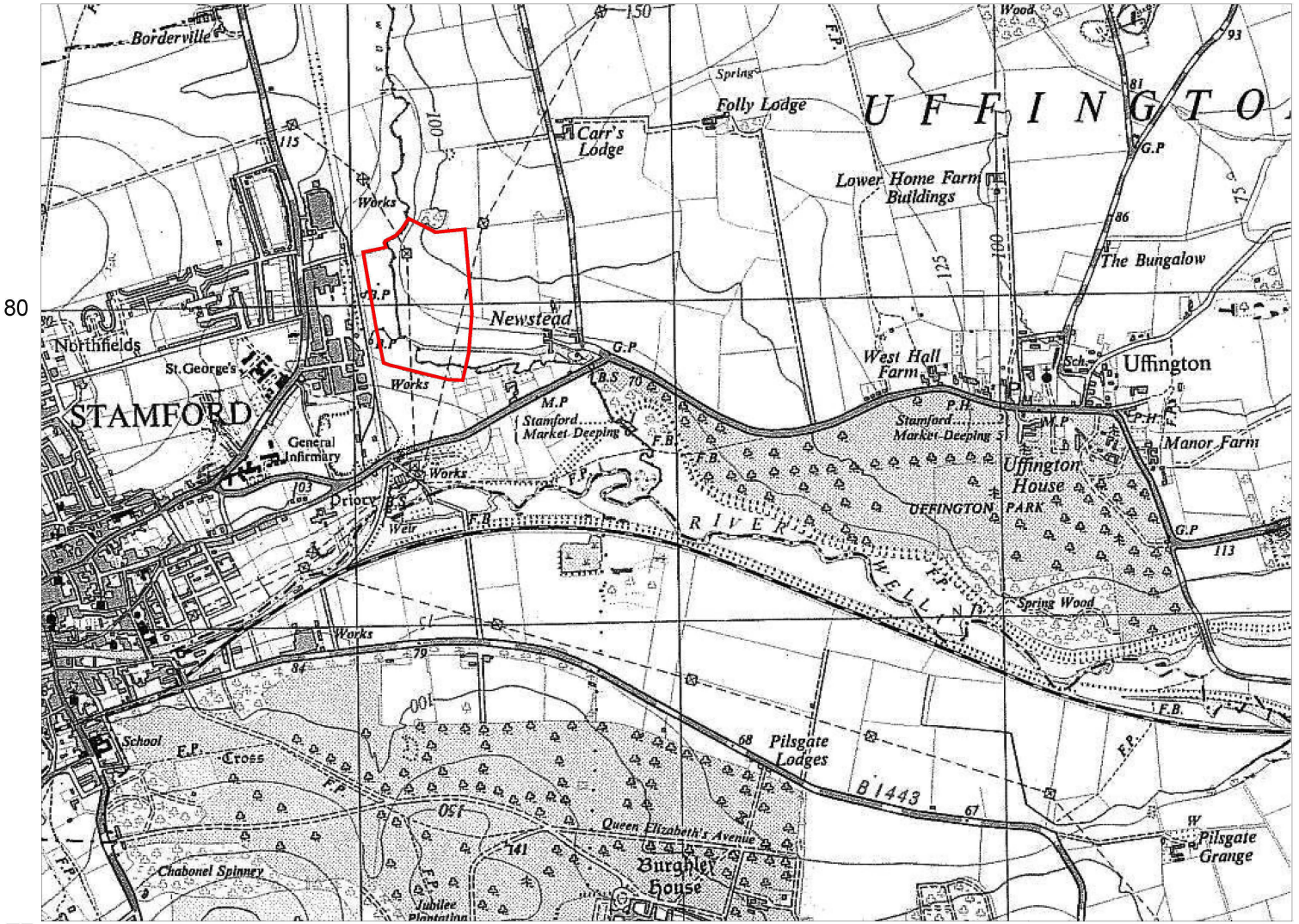
11. ABBREVIATIONS

APS Archaeological Project Services

CBM Ceramic Building Material

IFA Institute of Field Archaeologists

Figure 1: General location plan



Archaeological Project Services		
Project Name: Stamford, Gwash Valley (SGVB06)		
Scale 1:20000	Drawn by: KM	Report No: 23/07

Figure 2 Site location plan

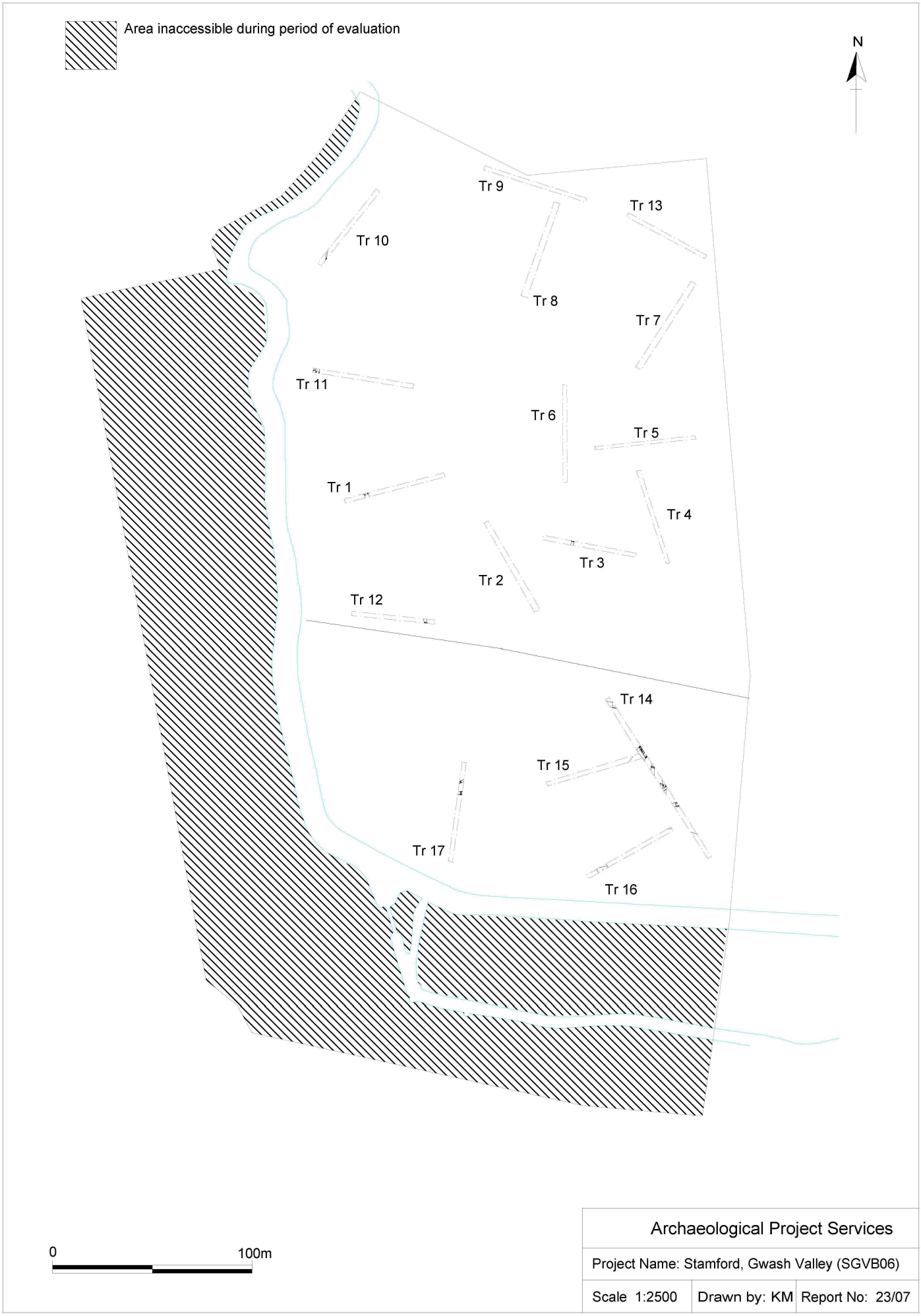
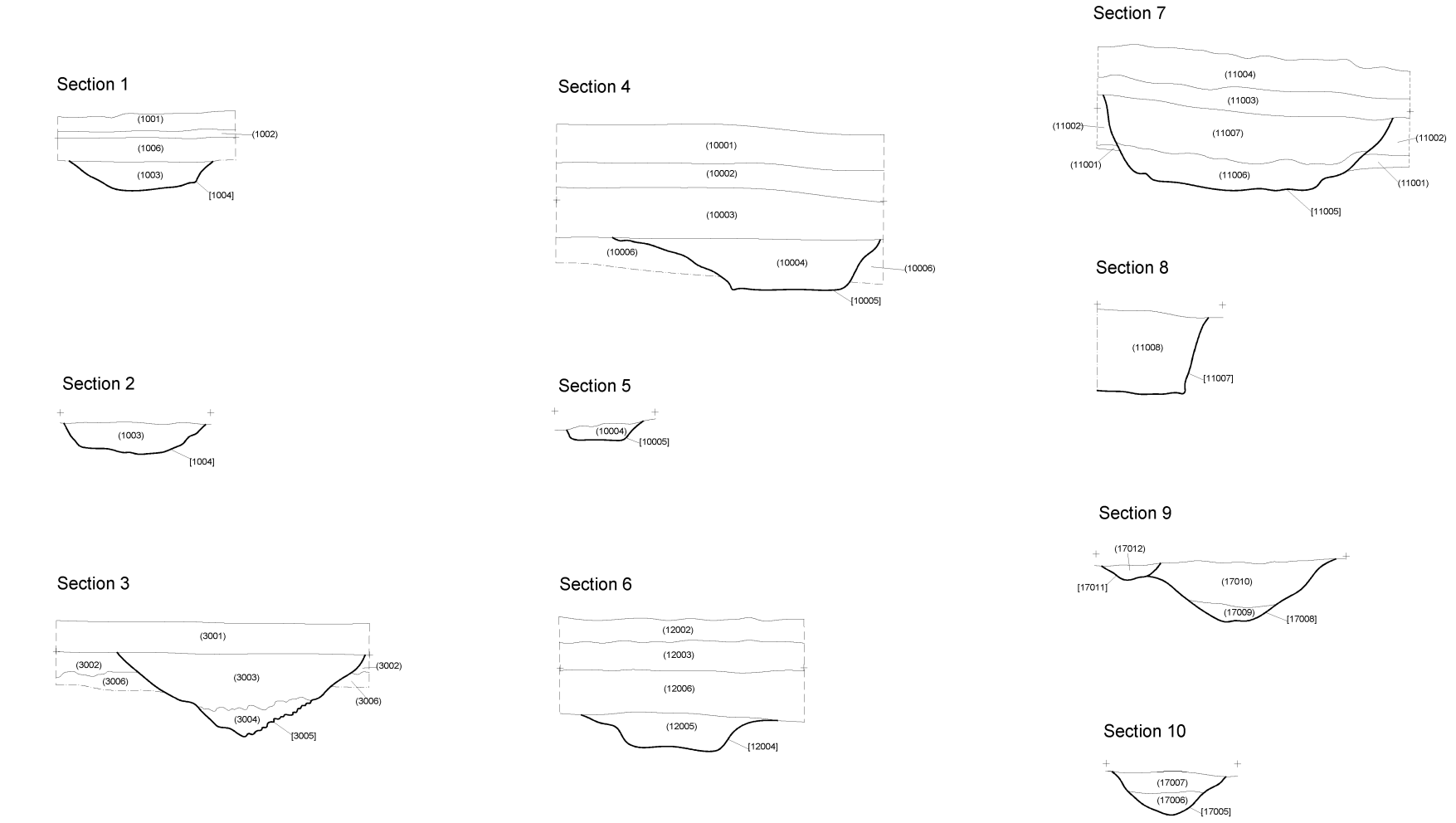


Figure 3 Layout of trenches

Figure 4 Plans; Trenches 1, 3, 10 and 11

Archaeological Project Services		
Project Name: Stamford, Gwash Valley (SGVB06)		
Scale 1:200	Drawn by: KM	Report No:23/07

Figure 5 Plans; Trenches 12, 16 and 17



Archaeological Project Services		
Project Name: Stamford, Gwash Valley (SGVB06)		
Scale 1:50	Drawn by: KM	Report No: 23/07

Figure 6 Sections 1-11

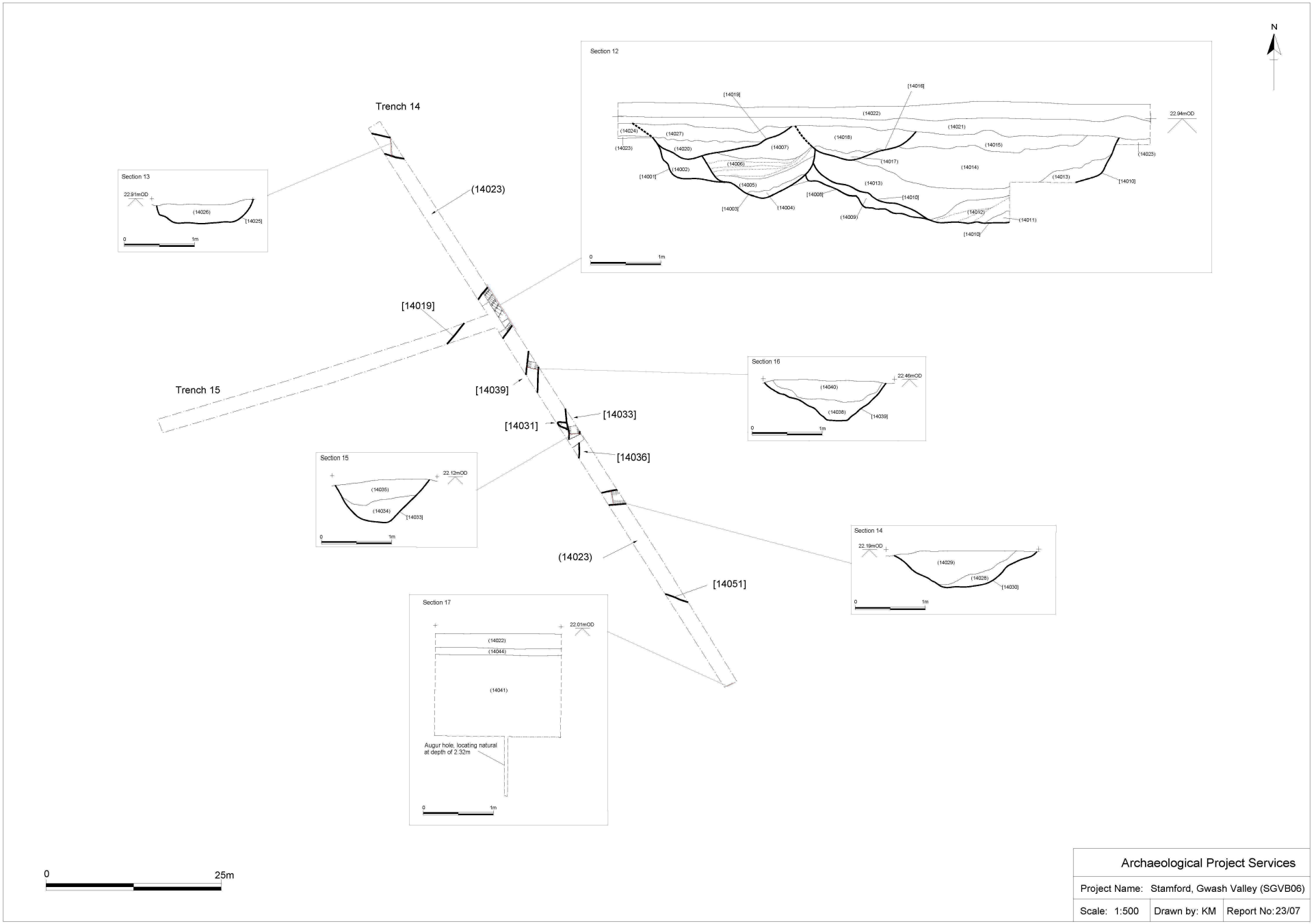
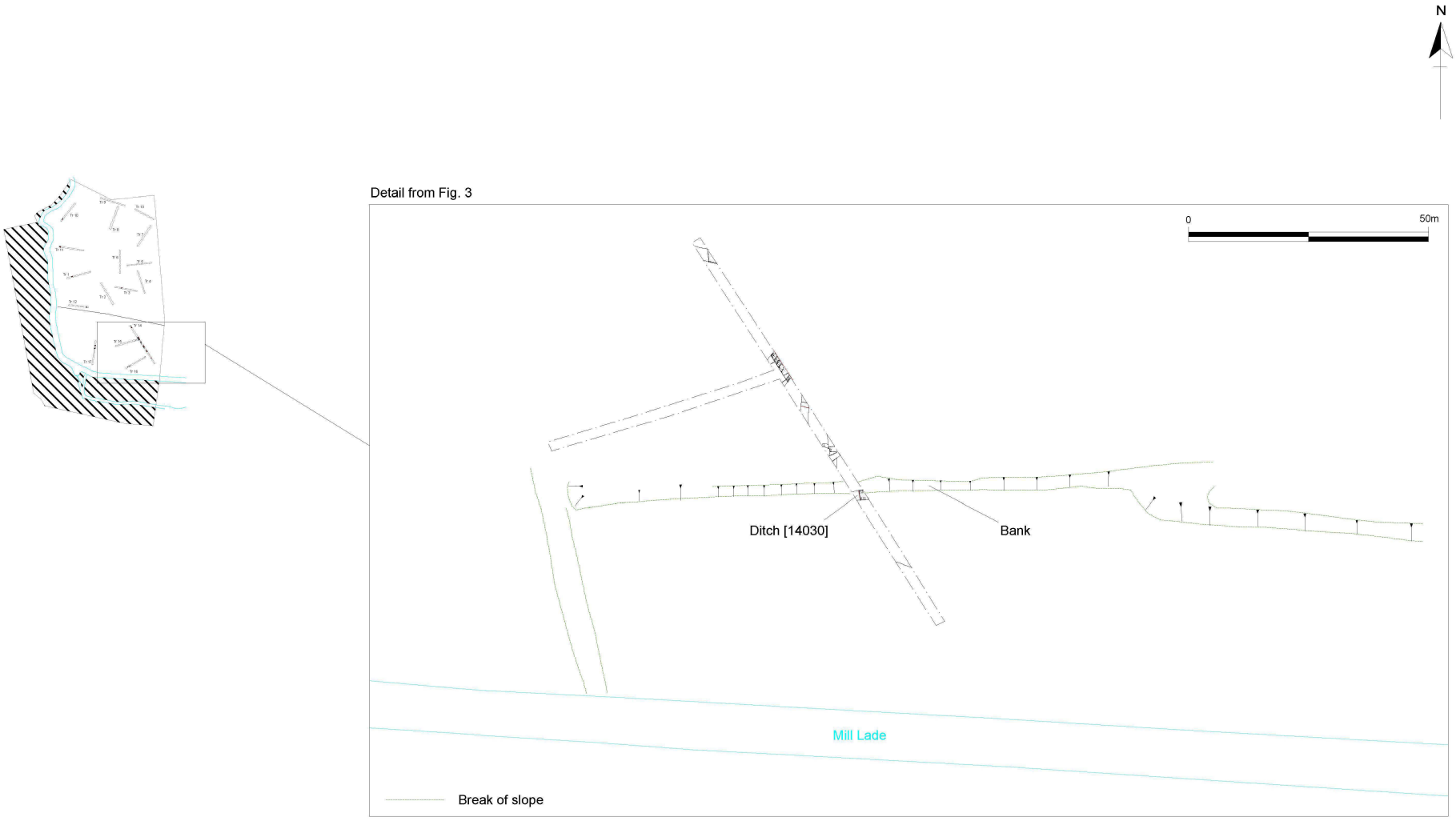


Figure 7 Trench 14, plan and sections



Archaeological Project Services		
Project Name: Stamford, Gwash Valley (SGVB06)		
Scale 1:1250	Drawn by: KM	Report No: 23/07

Figure 8 Showing earthworks visible in environs of Trench 14

Plate 1 General view of site, looking NE

Plate 2 General view of site, looking SW

Plate 3 General view of site, looking SE

Plate 4 Trench 3, general view, looking NW

Plate 5 Trench 9, showing build up of colluvium down slope, looking WNW

Plate 6 Ditch [17005], looking W

Plate 7 Looking west towards Tr. 14, showing slope and levelled area.

Plate 8 Looking west towards Tr. 14, showing levelled area and Mill Lade

Plate 9 Features [14031], [14033] and [14036], looking NE

Plate 10 Trench 14, showing [14033] cutting bank deposits, looking E

Plate 11 Trench 14, inter-cutting ditches, looking SE

Appendix 1

PROPOSED GWASH VALLEY
BUISSINESS PARK,
STAMFORD
LINCOLNSHIRE
(NGR 504230 308040)
(Pl. No S00/1124/69)

SPECIFICATION FOR
ARCHAEOLOGICAL EVALUATION

PREPARED FOR
F H GILMAN AND CO.

BY
ARCHAEOLOGICAL PROJECT SERVICES
Institute of Field Archaeologists'
Registered Organisation No. 21

NOVEMBER 2006

TABLE OF CONTENTS

1 SUMMARY

1.1 *An archaeological evaluation is required at Land at Gwash Valley Business Park, Stamford, Lincolnshire.*

1.2 *The site lies in an area of archaeological potential, an early medieval cemetery is located close by and geophysical survey has revealed potential archaeological remains.*

1.3 *The archaeological work will consist of an evaluation consisting of archaeological trial trenches comprising twenty 50m by 1.8m trenches.*

1.4 *On completion of the fieldwork a report will be prepared detailing the results of the evaluation. The report will consist of a narrative supported by illustrations and photographs.*

2 INTRODUCTION

2.1 This document comprises a specification for an archaeological evaluation at the proposed Gwash Business Park, Stamford, Lincolnshire (NGR 504230 308040).

2.2 This document contains the following parts:

2.2.1 Overview.

2.2.2 Stages of work and methodologies.

2.2.3 List of specialists.

2.2.4 Programme of works and staffing structure of the project

3 SITE LOCATION

3.1 The site comprises 13.36ha located on the North East edge of Stamford, Lincolnshire. Agricultural land exists to the north, to the south and west the land is under industrial use.

3.2 The western part of the site is covered by sands derived from the foundry to the west. It is intended that this material remain and be built upon and therefore is not subject to evaluation in this phase of work.

4 PLANNING BACKGROUND

4.1 An outline planning application was made to South Kesteven District Council for a business park. An Environmental Impact Assessment was requested and undertaken by Wardell Armstrong. Predetermination evaluation was requested, the first stage comprised a geophysical survey which highlighted potential archaeological remains. As a result a program of evaluation has been requested.

5 SOILS AND TOPOGRAPHY

5.1 The soils of the area comprise those derived from the alluvial material from the River Gwash

overlying oolitic limestones and calcareous mudstones.

6 ARCHAEOLOGICAL OVERVIEW

6.1 There is limited evidence of prehistoric occupation in the vicinity of the site, a causewayed enclosure is located over a kilometre from the application site.

6.2 There is no known Roman settlement located in the region, the nearest focus of settlement is to the west at Great Casterton, situated on Ermine Street at a ford over the River Gwash.

6.3 Stamford's early medieval origins are inferred by its topographic position which mirrored similar sites in the Gwash Valley. Also an early medieval cemetery was located immediately adjacent to the site in Uffington.

6.4 It seems that Stamford was an important town in the 9th century when the Danes made it one of the 5 boroughs of the Danelaw. It grew through the medieval period having a mint in the 10th century and a regionally important pottery industry.

7 AIMS AND OBJECTIVES

7.1 The aim of the work will be to gather sufficient information for the archaeological curator to be able to formulate a policy for the management of the archaeological resources present on the site.

7.2 The objectives of the work will be to:

7.2.1 Establish the type of archaeological activity that may be present within the site.

7.2.2 Determine the likely extent of archaeological activity present within the site.

7.2.3 Determine the date and function of the archaeological features present on the site.

2.1.1 Determine the state of preservation of the archaeological features present on the site.

2.1.2 Determine the spatial arrangement of the archaeological features present within the site.

2.1.3 Determine the extent to which the surrounding archaeological features extend into the application area.

2.1.4 Establish the way in which the archaeological features identified fit into the pattern of occupation and land-use in the surrounding landscape.

3 TRIAL TRENCHING

3.1 Reasoning for this technique

3.1.1 Trial trenching enables the *in situ* determination of the sequence, date, nature, depth, environmental potential and density of archaeological features present on the site.

3.1.2 This phase will comprise twenty trenches will be excavated each of these will be 50 x 1.8m, shown on the attached plan.

‘

3.2 General Considerations

3.2.1 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the investigation.

3.2.2 The work will be undertaken according to the relevant codes of practice issued by the Institute of Field Archaeologists (IFA). *Archaeological Project Services* is an IFA Registered Archaeological Organisation (No. 21).

3.2.3 All artefacts and ecofacts found during the evaluation will be retrieved for processing unless the quantities and type warrant sampling, this will be agreed with the SKHER. Metal artefacts will be recovered and where not obviously modern will be retained for analysis. Allowance has been made for the preliminary conservation and stabilisation of all objects.

3.2.4 Any and all artefacts found during the investigation and thought to be 'treasure', as defined by the Treasure Act 1996, will be removed from site to a secure store and promptly reported to the appropriate coroner's office.

3.2.5 Excavation of the archaeological features exposed will be undertaken as far as is required to determine their date, sequence, density and nature. Not all archaeological features exposed will necessarily be excavated. However, the investigation will, as far as is reasonably practicable, determine the level of the natural deposits to ensure that the depth of the archaeological sequence present on the site is established.

3.2.6 Where necessary, appropriate fencing may be used as a barrier to the open trenches, although it is noted that this site is enclosed. Subject to the consent of the archaeological curator, and following the appropriate recording, the trenches, particularly those of excessive depth, will be backfilled as soon as possible to minimise any health and safety risks.

3.3 Methodology

3.3.1 Removal of the topsoil and any other overburden will be undertaken by mechanical excavator using a toothless ditching bucket. To ensure that the correct amount of material is removed and that no archaeological deposits are damaged, this work will be supervised by Archaeological Project Services. On completion of the removal of the overburden, the nature of the underlying deposits will be assessed by hand excavation before any further mechanical excavation that may be required. Further mechanical excavation may be undertaken if the potentially large feature is impractical to excavate by hand. Thereafter, the trenches will be cleaned by hand to enable the identification and analysis of the archaeological features exposed.

3.3.2 If necessary appropriate lighting will be used for the trenches inside the buildings.

3.3.3 It is noted that one of the trenches is located within a standing building. It will be necessary to use a concrete breaker and toothed bucket to remove the upper layers of overburden from these trenches. A suitable machine will be used to undertake this work and a suitable methodology will by formulated on site in consultation with representatives of the machine providers depending on specific on site considerations for example the presence of services, thickness of and reinforcing within the concrete.

3.3.4 Investigation of the features will be undertaken only as far as required to determine their date, form and function. The work will consist of half- or quarter-sectioning of features as

required and, where appropriate, the removal of layers. Should features be located which may be worthy of preservation *in situ*, excavation will be limited to the absolute minimum, (*ie* the minimum disturbance) necessary to interpret the form, function and date of the features.

3.3.5 The archaeological features encountered will be recorded on Archaeological Project Services pro-forma context record sheets. The system used is the single context method by which individual archaeological units of stratigraphy are assigned a unique record number and are individually described and drawn.

3.3.6 Plans of features will be drawn at a scale of 1:20 and sections at a scale of 1:10. Should individual features merit it, they will be drawn at a larger scale.

3.3.7 Throughout the duration of the trial trenching a photographic record consisting of black and white prints (reproduced as contact sheets) and colour slides will be compiled. The photographic record will consist of:

- the site before the commencement of field operations.
- the site during work to show specific stages of work, and the layout of the archaeology within individual trenches.
- individual features and, where appropriate, their sections.
- groups of features where their relationship is important.
- the site on completion of field work

3.3.8 Should human remains be encountered, they will be left *in situ* with excavation being limited to the identification and recording of such remains. If removal of the remains is necessary the appropriate Home Office licences will be obtained and the local environmental health department informed. If relevant, the coroner and the police will be notified.

3.3.9 Finds collected during the fieldwork will be bagged and labelled according to the individual deposit from which they were recovered ready for later washing and analysis.

3.3.10 The spoil generated during the investigation will be mounded along the edges of the trial trenches with the topsoil being kept separate from the other material excavated for subsequent backfilling. There will be no specific reinstatement of the trenches, which will be undertaken by the client, any specific questions about this should be directed here.

3.3.11 The precise location of the trenches within the site and the location of site recording grid will be established by an appropriate method

4 ENVIRONMENTAL ASSESSMENT

4.1 During the investigation specialist advice will be obtained from an environmental archaeologist. The specialist will visit the site if appropriate to consult on buried soils and sediment sequences as an aid to understanding site formation processes and to advise on the appropriate scale of sampling. It is envisaged that bulk samples will be collected from the majority of investigated contexts of medieval or earlier date. Samples for pollen and soil studies may also be appropriate.

4.2 Standard sampling methods will be employed for the environmental analyses. These are detailed in Murphy and Wiltshire (1994). Bulk samples from feature fills will be retrieved for plant macrofossils, molluscs, insects, bone and larger samples will be taken for sieving on an 8mm mesh, if appropriate, for the recovery of flintwork, bone, ceramics and small finds. The specialist will prepare a report detailing the nature of the environmental material present on the site and its potential for additional analysis should further stages of archaeological work be required. The results of the specialist's assessment will be incorporated into the final report.

5 POST-EXCAVATION AND REPORT

5.1 Stage 1

5.1.1 On completion of site operations, the records and schedules produced during the trial trenching will be checked and ordered to ensure that they form a uniform sequence constituting a level II archive. A stratigraphic matrix of the archaeological deposits and features present on the site will be prepared. All photographic material will be catalogued: the colour slides will be labelled and mounted on appropriate hangers and the black and white contact prints will be labelled, in both cases the labelling will refer to schedules identifying the subject/s photographed.

5.1.2 All finds recovered during the trial trenching will be washed, marked, bagged and labelled according to the individual deposit from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to the Conservation Laboratory at the City and County Museum, Lincoln.

5.2 Stage 2

5.2.1 Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.

5.2.2 Finds will be sent to specialists for identification and dating.

5.3 Stage 3

5.3.1 On completion of stage 2, a report detailing the findings of the investigation will be prepared. This will consist of:

- A non-technical summary of the results of the investigation.
- A description of the archaeological setting of the site.
- Description of the topography and geology of the investigation area.
- Description of the methodologies used during the investigation and discussion of their effectiveness in the light of the results
- A text describing the findings of the investigation.
- Plans of the trenches showing the archaeological features exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.
- Sections of the trenches and archaeological features.

- Interpretation of the archaeological features exposed and their context within the surrounding landscape.
- Discussion of the general mitigation options including post excavation works on the result of the evaluation.
- Specialist reports on the finds and environmental remains from the site, including a conservation assessment
- Appropriate photographs of the site and specific archaeological features or groups of features.
- A consideration of the significance of the remains found, in local, regional, national and international terms, using recognised evaluation criteria.

8 REPORT DEPOSITION

8.1 Copies of the report will be sent to the Client; the South Kesteven Planning Archaeologist; South Kesteven District Council Planning Department; and to the County Council Archaeological Sites and Monuments Record.

9 ARCHIVE

9.1 The documentation and records generated during the evaluation will be sorted and ordered into the format acceptable to the City and County Museum, Lincoln. This will be undertaken following the requirements of the document titled Conditions for the Acceptance of Project Archives for long-term storage and curation.

10 PUBLICATION

10.1 A report of the findings of the evaluation will be presented as a condensed article to the editor of the journal *Lincolnshire History and Archaeology*. If appropriate, notes on the findings will be submitted to the appropriate national journals: *Britannia* for discoveries of Roman date, and *Medieval Archaeology* and the *Journal of the Medieval Settlement Research Group* for findings of medieval or later date.

11 CURATORIAL RESPONSIBILITY

11.1 Curatorial responsibility for the archaeological work undertaken on the site lies with the South Kesteven Planning Archaeologist. They will be given written notice of the commencement of the project.

12 VARIATIONS AND CONTINGENCIES

12.1 Variations to the proposed scheme of works will only be made following written confirmation of acceptance from the archaeological curator.

12.2 In the event of the discovery of any unexpected remains of archaeological importance, or of any

changed circumstances, it is the responsibility of the archaeological contractor to inform the archaeological curator (*Lincolnshire Archaeological Handbook* 1998, Sections 5.7 and 18).

12.3 Where important archaeological remains are discovered and deemed to merit further investigation additional resources may be required to provide an appropriate level of investigation, recording and analysis.

12.4 Any contingency requirement for additional fieldwork or post-excavation analysis outside the scope of the proposed scheme of works will only be activated following full consultation with the archaeological curator and the client.

13 PROGRAMME OF WORKS AND STAFFING LEVELS

11.1.1 The precise staffing levels are difficult to define at this stage and will be determined by the nature and extent of the archaeological remains. Initially three experienced archaeologists will staff the site for three days. Provision will be for the extra staffing should the archaeological remains and depths of excavation warrant it.

11.1.2 Post-excavation analysis and report production will be undertaken by the archaeological supervisor, or a post-excavation analyst as appropriate, with assistance from a finds supervisor, CAD illustrator and external specialists. The precise timing of this phase will be dependant upon archaeological remains recovered and availability of suitable specialists. It is anticipated that a report will be prepared within one month of completion of site works and that archiving will be completed with one month of acceptance of the report

14 SPECIALISTS TO BE USED DURING THE PROJECT

14.1 The following organisations/persons will, in principle and if necessary, be used as subcontractors to provide the relevant specialist work and reports in respect of any objects or material recovered during the investigation that require their expert knowledge and input. Engagement of any particular specialist subcontractor is also dependent on their availability and ability to meet programming requirements.

Task	Body to be undertaking the work
Conservation	Conservation Laboratory, City and County Museum, Lincoln
Pottery Analysis	Prehistoric - Trent & Peak Archaeological Trust or Carol Allen, independent specialist. Roman - B Precious, Independent Specialist Anglo-Saxon - J Young, Independent Specialist Medieval and later - G Taylor, APS in consultation with H Healey, Independent Archaeologist
Non-pottery Artefacts	J Cowgill, Independent Specialist, or G Taylor, APS
Animal Bones	Environmental Archaeology Consultancy, or Jen Kitch, APS

Environmental Analysis	V Fryer, Independent Specialist
Human Remains Analysis	R Gowland, Independent Specialist

15 INSURANCES

15.1 Archaeological Project Services, as part of the Heritage Trust of Lincolnshire, maintains Employers Liability Insurance of £10,000,000, together with Public and Products Liability insurances, each with indemnity of £5,000,000. Copies of insurance documentation can be supplied on request.

16 COPYRIGHT

16.1 Archaeological Project Services shall retain full copyright of any commissioned reports under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.

16.2 Licence will also be given to the archaeological curators to use the documentary archive for educational, public and research purposes.

16.3 In the case of non-satisfactory settlement of account then copyright will remain fully and exclusively with Archaeological Project Services. In these circumstances it will be an infringement under the Copyright, Designs and Patents Act 1988 for the client to pass any report, partial report, or copy of same, to any third party. Reports submitted in good faith by Archaeological Project Services to any Planning Authority or archaeological curator will be removed from said planning Authority and/or archaeological curator. The Planning Authority and/or archaeological curator will be notified by Archaeological Project Services that the use of any such information previously supplied constitutes an infringement under the Copyright, Designs and Patents Act 1988 and may result in legal action.

16.4 The author of any report or specialist contribution to a report shall retain intellectual copyright of their work and may make use of their work for educational or research purposes or for further publication.

17 BIBLIOGRAPHY

Hodge, CAH, Burton, RGO, Corbett, WM, Evans, R, and Seale, RS, 1984 *Soils and their use in Eastern England*, Soil Survey of England and Wales **13**

Specification: Version 1, 28th November 2006

Appendix 2
CONTEXT SUMMARY

Context	Description	Interpretation
Tr. 1	50m length x 1.8m wide x 0.7m deep	Evaluation trench
1001	Soft, fairly plastic mid grey brown slightly clayey silt. 0.25m thick	Topsoil
1002	Soft, fairly plastic mid red brown slightly clayey silt, moderate-frequent inclusions of small stones, 0.1m thick	Subsoil
1003	Soft mid grey brown clay silt with very occasional small limestone fragments, 0.5m thick	Single fill of [1004]
1004	NW-SE linear, 2.1m wide x 0.5m deep	Cut of undated linear feature, possible field boundary
1005	Soft mid red clay silt with patches of pale limestone brash	Natural
1006	Soft, mid red brown clayey silt with very occasional small stones, 0.35m thick	Colluvium
Tr. 2	50m length x 1.8m wide x 0.46m deep (at representative section)	Evaluation trench
2001	Loose, soft mid grey brown clayey silt with moderate-frequent inclusions of small stones, 0.25m thick	topsoil
2002	Fairly loose mid red brown clay silt with moderate-frequent small stones, 0.17m thick	subsoil
2003	Mid brown red clay silt (colluvium) and limestone brash	Natural deposits
Tr. 3	50m length x 1.8m wide x 0.4m deep	Evaluation trench
3001	Soft and loose mid grey brown clayey silt with moderate-frequent inclusions of small stones and limestone fragments, 0.25m thick	Topsoil
3002	Loose mid yellow brown clay silt with frequent gravel inclusions, 0.15m thick	Subsoil
3003	Moderate-loose mid red brown clay silt with moderate inclusions of small stones and limestone fragments, 0.45m thick	Secondary fill of [3005]
3004	Firm, mid red brown clayey silt and fragmented limestone	Primary fill of [3005], probably resulting from edge collapse
3005	Cut of N-S linear, 1.95m w x 0.65m deep with slightly concave sides and an uneven base. Feature was seen to cut through subsoil, therefore probably of fairly recent origin, identified upon geophysics as being fairly extensive	Linear – probably post-Medieval boundary ditch
3006	Hard light grey yellow limestone brash	Natural
Tr. 4	50m length x 1.8m wide x 0.5m deep	Evaluation trench
4001	Soft, loose mid grey brown clay silt with moderate-frequent small stones, 0.25m thick	Topsoil

Context	Description	Interpretation
4002	Fairly loose mid red brown clay silt with moderate-frequent small stones, 0.21m thick	Subsoil
4003	Light grey yellow limestone brash, compact, with patches of mid brown red clay silt	Natural
Tr. 5	50m length x 1.8m wide x 0.3m deep	Evaluation trench
5001	Moderate-loose mid grey brown clay silt with moderate inclusions of small stones, 0.2m thick	Topsoil
5002	Moderate-loose mid-light grey brown clay silt with red tinge, moderate inclusions of small stones, 0.05m thick	Subsoil
5003	Mid red brown silt and limestone brash	Natural deposits
Tr. 6	50m length x 1.8m wide x 0.55m deep	Evaluation trench
6001	Moderate-loose mid grey brown clay silt with moderate-frequent small stones, 0.18m thick	Topsoil
6002	Moderate-loose light grey brown clay silt with frequent small stones, 0.04m thick	Subsoil
6003	Moderate-loose mid red-brown clay silt with moderate small stones and limestone fragments, formed thickly in hollow towards SSW end of trench, to a maximum of 0.3m thick	Colluvium
6004	Hard light grey yellow fragmented limestone brash mixed with mid brown red clay silt	Natural
Tr. 7	50m length x 1.8m wide x 0.5m deep	Evaluation trench
7001	Soft, loose mid grey brown clay silt with moderate-frequent small stones, 0.25m thick	Topsoil
7002	Fairly loose, mid red brown clay silt with moderate-frequent small stones, 0.15m thick	Subsoil
7003	Indurated light grey yellow limestone, fragmented brash, light yellow sand and occasional patches of mid brown red clayey silt	Natural
Tr. 8	50m length x 1.8m wide x 0.6m deep	Evaluation trench
8001	Moderate-loose mid grey brown clay silt with moderate small stones, 0.2m thick	Topsoil
8002	Moderate-loose mid red-brown clay silt with moderate inclusions of small stones, 0.4m thick	Colluvium
8003	Hard light grey yellow limestone brash with occasional patches of mid brown red clay silt	Natural
Tr. 9	50m length x 1.8m wide x 0.4m deep	Evaluation trench
9001	Soft, loose mid grey brown clay silt with moderate-frequent small stones, 0.1m thick	Topsoil
9002	Loose mid-light grey brown clay silt with moderate limestone fragments, 0.25m thick	Subsoil

Context	Description	Interpretation
9003	Mid red brown soft clay silt with moderate inclusions of limestone fragments – significantly deeper, up to c1m at WNW end of trench	Colluvium
9004	Light grey yellow fragmented limestone brash with patches of mid brown red clay silt	Natural
Tr. 10	50m length x 1.8m wide x 0.85m deep	Evaluation trench
10001	Moderate-loose mid grey brown clayey silt with moderate-frequent small stones, 0.25m thick	Topsoil
10002	Moderate-loose mid red brown clay silt with moderate-frequent inclusions of small stones, 0.2m thick	Subsoil
10003	Moderate-loose mid brown red clay silt with frequent inclusions of limestone fragments and gravel, 0.4m thick	Colluvium
10004	Hard mid grey limestone fragments and silt	Single fill of [10005]
10005	Cut of NW-SE linear, 0.5m wide x 0.4m deep	Undated linear – sealed by colluvium (10003)
10006	Soft mid brown red clay silt	Natural
10007	Hard light grey yellow limestone brash	Natural
Tr. 11	50m length x 1.8m wide x 1.05m deep	Evaluation trench
11001	Moderate red brown silty clay with moderate inclusions of limestone fragments and sand	Natural
11002	Firm light red brown silty clay, 0.5m thick	Colluvium
11003	Firm, slightly friable yellow brown silty clay, 0.25m thick	Subsoil
11004	Firm grey brown silty clay with moderate-frequent inclusions of sub-angular stones, 0.35m thick	Topsoil
11005	Cut of NW-SE linear, 2.3m w x 0.6m deep, >2m l	Probable RB ditch, truncates [11008]
11006	Firm, friable light red brown silty clay with moderate inclusions of limestone fragments, 0.25m thick	Primary fill of [11005], bone and CBM included within matrix
11007	Moderate-firm light red brown clay silt with occasional inclusions of limestone fragments, 0.35m thick	Secondary-upper fill of ditch [11005]
11008	Cut of NE-SW linear, >0.9m w x 0.68m d x >1m l, only a percentage of this feature was uncovered within trench 11 therefore full dimensions unclear	Flat based ditch with no dateable evidence – truncated by probable RB feature [11005]
11009	Firm, slightly friable light red brown clayey silt >0.68m thick	Single fill of ditch [11008]
Tr. 12	50m length x 1.8m wide x 0.78m deep	Evaluation trench
12001	Soft-moderate light yellow brown clay silt with sandy deposits	Natural
12002	Loose, friable grey brown clay silt with moderate-frequent inclusions of small sub-angular stones, 0.17m thick	Topsoil
12003	Loose, friable light yellow brown clay silt with moderate-frequent inclusions of small sub-angular stones, 0.21m thick	Subsoil

Context	Description	Interpretation
12004	Cut of NW-SE linear 1.6m w x 0.28m deep x >2m length, concave base	No dateable evidence retrieved from this feature – undated linear/ditch or possible natural hollow resembling a regular cut feature
12005	Moderate red brown clay silt with moderate inclusions of small sun-angular stones, 0.28m thick	Fill of [12004]
12006	Firm light red brown clay silt with occasional inclusions of small sub-angular stones, 0.4m thick	Colluvium
Tr. 13	50m length x 1.8m wide x 0.4m deep	Evaluation trench
13001	Soft, loose light grey brown silty clay with moderate-frequent inclusions of small sub-angular stones, 0.16m thick	Topsoil
13002	Moderate mid red brown silty clay with moderate-frequent inclusions of small sub-angular stones, 0.14m thick	Subsoil
13003	Loose light yellow limestone brash	Natural
Tr. 14	c.100m length x 1.8m wide x up to 1.45m deep (at southern extent)	Evaluation trench located towards base of slope just to the north of the River Gwash
14000	Machine finds from large ditch area	Machine finds
14001	Cut of NE-SW linear, original dimensions unknown due to heavy truncation by later features, fairly flattened base	Possible boundary ditch – may also be a flood defence – re-cut on a number of occasions
14002	Soft mid red brown fine sandy silt with occasional small stones, 0.25m thick	Only surviving fill of [14001]
14003	Cut of NE-SW ditch, approximately 1m deep, dimensions lost to later truncation	One of a number of re-instatements of a boundary/flood defence ditch cut in this area
14004	Loose mid brown grey gravel and silt mix, c0.08m thick	Probable initial silting/filling of open feature, [14003]
14005	Soft mid red brown fine sandy silt with occasional small stones, 0.2m thick	Fill of [14003] – possible silty in-wash from nearby river
14006	Moderate-hard light brown grey gravel, sand and silt mix, 0.4m thick	Fill of [14003] – various lenses of in-wash recorded as one deposit
14007	Soft mid red brown fine sandy silt, 0.3m thick	Uppermost fill of [14003] – possible in-wash from river
14008	Cut of NE-SW linear – heavily truncated by later features	Cut of ditch – part of a series of re-cut ditches in this area – probable reinstatement of a boundary or flood defence
14009	Soft mid brown red silt with occasional inclusions of gravel – surviving dimensions 0.1m thick	Primary fill of [14008]
14010	Cut of NE-SW linear, c1.3m deep x c4.3m wide, >2m length not fully excavated due to depth of feature	Very large re-instatement of boundary/flood defence
14011	Soft mid red-brown sandy silt with occasional gravel inclusions, not fully excavated due to depth of feature	Lowest excavated fill of [14010]
14012	Firm mid-light grey brown gravel, sand and silt, approx 0.32m thick	Fill of [14010] – series of in-washed deposits recorded as one context, probably formed

Context	Description	Interpretation
		through association with adjacent river channel
14013	Soft mid red brown sandy silt with occasional small stones, 0.4m thick	Fill of [14010]
14014	Loose mid grey (red) brown with frequent light flecks, sandy silt (75%) and gravel (25%)	Fill of [14010]
14015	Soft light red brown sandy silt, 0.2m thick	Uppermost fill of [14010]
14016	Cut of NE-SW linear, 1.68m w x 0.48m deep, >2m length, concave sides and base, shallow re-cut of boundary/flood defence	Shallow re-cut of boundary / flood defence
14017	Hard mid brown grey gravel and sandy silt with occasional inclusions of larger stones, 0.14m thick	Primary fill of [14016]
14018	Soft mid red brown sandy silt, 0.4m thick, very similar to (14007) therefore not possible to distinguish true boundary	Fill of [14016]
14019	Cut of linear, NE-SW, approximately 2.2m w x 0.3m deep, fairly uneven but generally concave cut	Shallow re-cut of boundary/flood defence
14020	Soft light red-brown sandy silt, 0.3m thick	Fill of [14019]
14021	Soft mid red brown sandy silt with frequent inclusions of limestone fragments, averages 0.2m thick	Subsoil
14022	Soft mid grey brown sandy silt with occasional stones, approx 0.2m thick	Topsoil
14023	Hard light grey yellow limestone brash	Natural
14024	Soft mid red brown sandy silt with occasional small stones, 0.18m thick	Colluvium
14025	Probable linear, NW-SE, 1.38m wide x 0.27m deep – possibly an elongated pit extending beyond either side of trench, containing possible horse burial	Shallow linear/elongated pit
14026	Moderate-soft light red brown (clayey) silt with frequent small sub-angular stones and fractured flint, 0.27m thick	Single fill of [14025] containing possible horse burial and sherds of Roman pot
14027	Soft mid-dark red brown sandy silt with occasional inclusions of small stones, 0.2m thick	Upper fill of [14019]
14028	Friable dark grey brown gravel and silty clay mix, 0.18m thick, concentrated towards northern side of feature, possible slumping episode	Primary fill of [14030], possible slump of natural
14029	Friable dark grey brown silty clay with occasional small stones and flecks of chalk/limestone, 0.48m thick	Upper fill of [14030], probable gradual silting of feature
14030	Cut of E-W linear, 2m w x 0.55m d x >2m l, concave sides and flattened base	Cut of ditch just to the south of bank associated with earthworks visible on the surface
14031	Cut of elongated oval hollow with rounded corners – c1.36m l x 0.81m w x 0.22m d, orientated E-W, truncated by [14033]	Probable natural hollow forming elongated oval 'pit', a number of similar features noted in environs all filled by orange red alluvial silts
14032	Moderate mid orange red silt, 0.22m thick	Alluvial/colluvial silting in natural hollow

Context	Description	Interpretation
14033	Cut of N-S linear, c1.4m w x 0.6m d x >5m l, smooth sided feature with concave base	Linear – probable boundary ditch
14034	Moderate-loose mid-dark grey silty gravel with occasional inclusions of animal bone and CBM, up to 0.34m thick across base of ditch	Primary fill of ditch, probably resulting from edge collapse during early phases of filling
14035	Moderate mid grey red silt with frequent gravel inclusions, 0.3m thick	Upper fill of RB boundary/drainage ditch
14036	Sub-rectangular cut of modern trench/pit with sharp corners, c 1.4m wide x >2m length, not excavated	Modern intrusion – not excavated
14037	Moderate-firm mid light yellow grey sandstone and gravel mix with inclusions of modern metal posts and straps	Unexcavated fill of modern feature [14036]
14038	Friable dark grey brown silty clay and gravel mix, 0.29m thick	Lower fill of [14039], possible slumping episode
14039	Cut of N-S linear approx 0.57m d x 1.75m w x >2m l . Dimensions and alignment similar to [14033]	Cut of boundary/drainage ditch
14040	Soft dark grey brown silty clay with occasional fragments of limestone and sub-angular small stones, 0.3m thick	Upper fill of ditch [14039]
14041	Moderate mid red brown silt with fairly frequent gravel inclusions, >0.4m thick	Deposit contained within river channel [14051]/build up of colluvium towards base of slope at southern extent of site, contained fairly frequent inclusions of RB pot and CBM
14042	Moderate mid-light orange silt, >0.2m thick – not fully excavated due to depth of trench at this point	Lowest exposed fill of possible river channel [14051]- probable alluvial deposit
14043	Moderate-loose mid grey gravel and silt, up to 0.1m thick	Gravel deposit contained within possible river channel [14051], possibly post-dating filling of channel
14044	Moderate orange red silt with fairly frequent gravel inclusions, 0.3m thick	Silty subsoil or upper fill of river channel [14051]
14045	Moderate-loose mid grey silt and gravel, up to 0.2m thick	Mixed horizon between natural and later silt deposits
14046	Loose mid-dark grey silt and gravel mix, 0.22m thick	Gravel and silt deposit, probably a mixed horizon of colluvium and natural deposits
14047	Loose mid-dark silty gravel, 0.3m thick	Silty gravel deposit possibly forming part of bank identified at this point
14048	Moderate brown red silt with occasional small stones and gravel inclusions, 0.2m thick	Red silt deposit, possibly forming part of bank identified at this point
14049	Loose mid-dark grey silty gravel, >0.1m thick, probably same as (14047)	Gravel deposit possibly forming part of bank
14050	Loose mid grey (silty) gravel, up to 0.1m thick	Deposit of gravel within cut [15030] – possible flooding episode
14051	Probable linear – roughly NW-SE, dimensions unknown	'cut' of in filled river channel or possible natural hollow, only partially excavated due to size of feature – located towards south of Trench 14

Context	Description	Interpretation
		and throughout Trench 16
Tr. 15	50m length x 1.8m deep x 0.6m deep	Evaluation trench
15001	Soft mid grey brown sandy silt with occasional small stones, 0.2m thick	Topsoil
15002	Soft light reddish grey brown sandy silt with moderate inclusions of small stones, 0.15m thick	Subsoil
15003	Soft mid red brown sandy silt with occasional small stones – intermittent throughout trench	Patches of colluvium collected in natural hollows
15004	Light grey yellow gravel and limestone brash	Natural
Tr. 16	50m length x 1.8m wide x 0.8m deep	Evaluation trench
16000	Dark brown grey silt with rare limestone fragments, 0.25m thick	Topsoil
16001	Friable dark red-brown silty clay with occasional limestone fragments – occasional RB CBM	Fill of river channel – probably same as (14041)
16002	Hard limestone brash	Natural horizon
Tr. 17	50m length x 1.8m wide x 1.1m deep	Evaluation trench
17001	Firm red brown clayey silt with frequent inclusions of limestone fragments and sandy gravel	Natural
17002	Firm, friable light red brown clayey silt with moderate-frequent inclusions of sub-angular stones, 0.45m thick	Colluvium
17003	Loose, friable light yellow brown clayey silt with frequent inclusions of limestone fragments, 0.3m thick	Subsoil
17004	Loose, friable light grey brown clayey silt, 0.35m thick	Topsoil
17005	Cut of NE-SW linear, 1.14m wide x 0.48m deep x >2.2m length, moderate sides and concave base	Cut of boundary/drainage ditch
17006	Firm, slightly friable clay silt with frequent inclusions of gravel and small stones, 0.2m thick	Primary fill of [17005]
17007	Hard light red brown clayey silt, 0.28m thick	Upper fill of ditch [17005]
17008	Cut of NE-SW linear, 1.35m w x 0.48m d x >2m l	Boundary/drainage ditch
17009	Firm light yellow brown clayey silt with moderate inclusions of gravel, 0.14m thick	Primary fill of ditch [17008]
17010	Firm, slightly friable light yellow brown clay silt with frequent inclusions of very small stones and naturally fractured flint, 0.35m thick	Upper fill of ditch [17008] – truncated by [17011]
17011	Cut of NE-SW linear, 0.5m wide x 0.12m deep, >2m long	Cut of shallow ditch, truncates fill of ditch [17008]
17012	Firm light grey brown silty clay with occasional small sub-angular stones, 0.12m thick	Single fill of [17011]

Appendix 3

SGVB06 Stamford Gwash Valley Business Park

The Roman pottery

By T.S. Martin (21st February 2007)

Introduction

The excavation produced 13 sherds of Iron Age and Roman pottery weighing 315g. This material was recovered from just 6 contexts and was primarily analysed to provide dating evidence for feature-fills. The pottery recording was carried out with reference to the Guidelines issued by the Study Group for Roman Pottery (Darling 1994). Fabrics were classified with reference, where possible, to the National Fabric Reference Collection (Tomber and Dore 1998), and forms where identifiable, to published corpora from the region. Quantification was by sherd count and weight.

Results

Although producing a very small assemblage, rough date-ranges can be provided for all the contexts that contained pottery. Leaving aside the Iron Age sherd in context 14026, the bulk of the pottery would fit into a later 2nd to 4th century date-range (Table 1). Identifiable forms were recovered from three contexts (14035, 14038 and 14041) and are thus the most reliably dated. All of these are relatively securely dated to the late Roman period. Notable vessels included a LNVCC, narrow-necked jar (cf. Perrin 1999, Fig. 68.378) in context 14035, which is dated to the 4th century at Water Newton, and a LNVWH reeded hammerhead mortarium (cf. Hartley and Perrin 1999, M48) in context 14038, which is typologically late 3rd to 4th century in date. In terms of the range of fabrics and forms present, there were no surprises, with all but one of the sherds being derived from sources in the Lower Nene Valley.

Recommendations

As it stands, little further work is required on this assemblage. The LNVCC narrow-necked jar in context 14035 and the LNV WH mortarium on context 14038 might be worth illustrating for the archive, otherwise only a brief summary would be required for inclusion in any publication report.

Table 1: List of spot-dates in contexts number order

Context No.	Sherds	Wt. (g)	Context type	Pottery	Date-range
14026	1	1	Fill of ditch	Fabric: IASH	Pre-Roman/transitional period
14029	2	16	Fill of ditch	Fabrics: LNVCC, OW	3rd to 4th cent.
14035	4	122	Fill of ditch	Forms: jar (cf. Howe *et al*. Fig. 1.4) NVG, rim of 'hunt cup' type beaker LNVCC, narrow-necked jar (cf. Perrin 1999, Fig. 68.378). Fabric: NVSH	3rd to ?4th cent.
14038	1	65	Primary fill of ditch	Form: mortarium (cf. Hartley and Perrin 1999, M48) LNV WH	Late 3rd to 4th cent.
14040	1	4	Upper fill of ditch	Fabric: LNVCC	Late Roman
14041	4	107	Fill of old river channel	Form: jar (cf. Perrin 1999, Fig. 70.442); fabrics: LNVCC, LNVG	Later 2nd cent+

Fabrics

IASH – Iron Age shell-tempered fabric
LNVCC - Lower Nene Valley colour-coats (cf. Tomber and Dore 1998, 118)
OW – Fine orange ware
LNV WH – Lower Nene Valley white ware (cf. Tomber and Dore 1998, 119)
NVSH – Nene Valley shell-tempered ware (cf. Perrin 1999, 119)
LNVG – Lower Nene Valley Grey ware (cf. Perrin 1999, 78)

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Appendix 4

THE CERAMIC BUILDING MATERIAL

Anne Boyle

2.1. INTRODUCTION

Thirty-eight fragments of ceramic building material and one fragment of fired clay, weighing ca. four thousand, three hundred and sixty-nine grams, were recovered from the site. All the material was recorded at archive level in accordance with Lincolnshire County Council's *Archaeological Handbook* (section 13.4.2) and with the guidelines laid out in the Archaeological Ceramic Building Materials Group's *Minimum Standards.*

2.2. METHODOLOGY

The material was laid out and viewed in context order. The number of fragments were counted and weighted. The chronology and coding system of the Lincoln Ceramic Type Series was used to assess the ceramic building material, which was examined visually and using x20 magnification. Unusual fabrics were noted, as were tegula flange types (using Bett's 1986 typology) and measurements where important. This data was then added to an Access database. An archive list of the ceramic building material is included in this report.

2.3. CONDITION

Overall, the material was in good condition with only thirteen abraded fragments. Generally the pieces are medium to large sized and relatively fresh (most falling between 49 and 188 grams in weight), as indicated by the average fragment weight of 115g. Four fragments have soot residues and three have mortar evident. One fragment (**14040**) has mortar over broken surfaces, suggesting reuse.

2.4. CHRONOLOGY AND SOURCE

A range of ceramic building material was found on the site. The total count of fragments and weight for each type is shown in Table 1.

Table 1. Ceramic building material codenames and total quantities by fragment count and weight

Code name	Full name	Total fragments	Total weight (g)
BOX	Roman box tile	4	481
FIRED CLAY	Fired clay	1	8
IMB	Imbrex	5	585
RBRK	Roman brick	4	440
RTIL	Roman tile	9	799
RTMISC	Roman or post-Roman tile	8	127
TEG	Tegula	8	1946
	TOTAL:	39	4386

2.5 DISCUSSION BY PERIOD

Six types of Roman ceramic building material were identified. Some of the tile could not be identified with certainty as being Roman, and was classified as RTMISC. The range of brick and tile types present in the assemblage suggest they come from a building with a tile roof (tegulae and imbrices) and a hypocaust (box tiles). Several miscellaneous types of Roman tile and a single example of a brick are also present.

The brick (**17012**) is 45mm thick and may be a bessalis, which were used to create pillars to support a hypocaust (Brodribb 1987: 34). Three tegulae had flanges that could be identified in accordance with the typology composed by Betts (1986). All three flanges are different, perhaps suggesting they come from different buildings or different construction episodes on the same roof. The fragments of box-flue tile all have combed outer faces, one in an apparent chevron design (**14041**).

The range of fabrics in the assemblage is quite limited, with oxidised fine to medium sandy fabrics being the most common. Some of the fragments have a fabric which contains shale/clay pellets. This type of inclusion is known to occur in tile from Lincoln, and the city is a possible source for these fragments. Further fabric work (e.g. comparison by x20 magnification and chemical analysis)

would help to confirm if these examples did originate from the Lincoln area.

A single fragment of fired clay was recovered from context (**14038**). The fragment has a reduced flat surface which may have the remains of a residue from heating or an industrial process. As only a single fragment was found it is not possible to say if this came from a mould or a surface such as a hearth.

2.6 DISCUSSION BY TRENCH

Three trenches produced ceramic building material (Table 2). From Trench 11 came a fragment of box flue and an undiagnostic tile. Both of these are abraded and it is likely this is not the primary site of their deposition.

The Roman tile mainly comes from Trench 14, which contained deposits thought to be of Romano-British date. Some of the material is abraded and may have undergone secondary deposition; the tile from (**14029**) and (**14040**) is particularly abraded and fragmentary.

The majority of the tile from Trench 14 consists of large, fresh fragments. These fragments show no signs of having been water lain despite several of them being associated with the in-filled river channel [**14051**].

Trench 17 produced four fragments of RBRK (from the same brick) and an undiagnostic tile. Again, these showed few signs of abrasion though the brick was poorly fired and has a laminated fabric.

Table 2. The range of ceramic building material by trench

Trench	BOX	IMB	RBRK	RTIL	RTMISC	TEG	TOTAL
11	1			1			2
14	3	5		7	8	8	30
17			4	1			5
TOTAL	4	5	4	9	8	8	38

2.7 Discussion

The assemblage consists of a small, but significant, group of Roman tile. The type and range of material suggests it originated from a Roman building in the vicinity, which may have been fairly substantial given the presence of box flue tile. The assemblage is significant, as little Roman material has been recovered from this area. This assemblage shows a range of fabric and forms that offers some insight into the types of ceramic building material present in this area during the Roman period.

2.8 RECOMMENDATIONS

The assemblage should be retained for further study. Those fragments with fabrics, which contain shale/clay pellets, would be suitable for incorporation into any future scheme of work to analyse its similarity to the Roman tile from Lincoln.

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SGVB06 CERAMIC BUILDING MATERIAL ARCHIVE

ANNE BOYLE

trench	context	cname	full name	fabric	sub type	frags	weight	decoration	description
11	11006	BOX	Roman box tile			1	63	cross combing	abraded; bedded on cloth; 17m thick
11	11006	RTIL	Roman tile			1	45		abraded
14	14000	RTIL	Roman tile			1	103		tegula ?; strike marks; mould overhang
14	14000	RTMISC	Roman or post-Roman tile	includes shale/clay pellets		1	9		corner; abraded
14	14000	TEG	Tegula			1	498		thin flange 15mm; possible cut-out; mould overhang; bedded on cloth ?; corner; two incised converging lines; sunken margin alongside flange
14	14014	TEG	Tegula		flange type 01	1	393		patchy soot; sunken margin alongside flange; flange 19mm thick
14	14020	IMB	imbrex			1	183		patchy soot
14	14028	IMB	imbrex			1	55		coarsely bedded; ? ID
14	14028	RTMISC	Roman or post-Roman tile			1	17		abraded
14	14029	RTMISC	Roman or post-Roman tile			1	8		flake
14	14029	RTMISC	Roman or post-Roman tile			1	2		very abraded
14	14029	RTMISC	Roman or post-Roman tile			1	6		very abraded
14	14029	TEG	Tegula			1	9		? ID
14	14035	BOX	Roman box tile			1	231	combed design	patchy soot and over break; bedded on cloth

trench	context	cname	full name	fabric	sub type	frags	weight	decoration	description
14	14035	TEG	Tegula			1	519		bedded on cloth; paw print on upper; trimmed/struck upper
14	14038	FIRED CLAY	fired clay	light firing; fine sandy		1	8		flat surface; reduced with possible (industrial ?) residue
14	14040	IMB	imbrex			1	49		mortar; bedded on cloth
14	14040	RTMISC	Roman or post-Roman tile			1	9		flake
14	14040	RTMISC	Roman or post-Roman tile			1	15		mortar over break; very abraded
14	14040	TEG	Tegula		flange type 39	1	76		sunken margin alongside flange; mortar; flange 20mm thick
14	14041	BOX	Roman box tile	includes shale/clay pellets		2	187	combed chevron design	same tile; end
14	14041	IMB	imbrex			1	117		very abraded
14	14041	IMB	imbrex			1	181		finger smoothed outer
14	14041	RTIL	Roman tile			1	148		coarsely bedded
14	14041	RTIL	Roman tile			1	75		
14	14041	RTIL	Roman tile			1	149		abraded
14	14041	RTIL	Roman tile			1	113		tegula ?; patchy soot; mould overhang
14	14041	RTIL	Roman tile			1	29		abraded
14	14041	RTIL	Roman tile			1	49		very abraded
14	14041	RTMISC	Roman or post-Roman tile			1	61		very thin 11mm; BOX ?
14	14041	TEG	Tegula	includes shale/clay pellets		1	54		very abraded

trench	context	cname	full name	fabric	sub type	frags	weight	decoration	description
14	14041	TEG	Tegula	includes shale/clay pellets		1	209		very abraded; flange 20mm+ thick
14	14041	TEG	Tegula		flange type 23	1	188		flange 16mm thick
17	17012	RBRK	Roman brick			4	440		kiss mark on upper; struck/trimmed upper; 45mm thick; same brick; laminated fabric
17	17012	RTIL	Roman tile	mixed light and red firing clays		1	88		coarsely bedded

Appendix 5

ENVIRONMENTAL REPORT

AN EVALUATION OF THE CHARRED PLANT MACROFOSSILS AND OTHER REMAINS FROM THE GWASH VALLEY BUSINESS PARK, STAMFORD, LINCOLNSHIRE (SGVB06)

Val Fryer, Church Farm, Sisland, Loddon, Norwich, Norfolk, NR14 6EF
February 2007

Introduction and method statement

Evaluation trenches, excavated at the Gwash Valley Business Park by Archaeological Project Services, revealed a series of ditches and gullies of probable Romano-British date. Samples for the evaluation of the content and preservation of the plant macrofossil assemblages were taken and five were submitted for assessment.

The samples (or 20 litre sub-samples thereof) were processed by manual water flotation/washover and the flots were collected in a 500 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16, and the plant macrofossils and other remains noted are listed on Table 1. Nomenclature within the table follows Stace (1997). All plant remains were charred. Modern contaminants including fibrous roots and seeds were present throughout.

Results

*Plant macrofossils, including charcoal/charred wood fragments, were exceedingly scarce, with most occurring as single specimens within an assemblage. Preservation was poor to moderate, with the two cereal grains both being severely puffed and distorted, possibly as a result of combustion at very high temperatures. A spelt wheat (*T. spelta*) glume base and bread wheat (*T. aestivum/compactum*) type rachis node were the only identifiable plant remains recorded.*

Individual shells of both terrestrial and freshwater molluscs were noted in four of the five assemblages, but it is not clear whether they are contemporary with the contexts or later contaminants. Other materials included fragments of black porous and tarry material, bone fragments and small pieces of coal.

Conclusions and recommendations for further work

The assemblages are all extremely small (considerably <0.1 litres in volume) and all contain an exceptionally low density of material. The few remains recorded are almost certainly derived from wind-blown detritus and, although largely inconclusive, may indicate that the excavated ditches were well removed from any centre of habitation or agricultural activity, and possibly acted as stock boundaries or field ditches.

If further excavations are planned for this area, the following recommendations for additional samples are made:

- *Additional samples should only be taken from ditches/gullies if the fills appear to contain charred material or if ditch termini or entranceways are located. In these instances, samples of approximately 20 – 40 litres in volume should be taken from all fills.*
- *Any pits or post-holes, which are well sealed and dated, should be sampled.*
- *Any waterlogged features should be sampled.*
- *All relevant specialists should be advised at the earliest opportunity if additional samples have been taken.*
- *All samples should, if possible, be stored in cool, dark conditions prior to processing, and should be submitted for processing at the earliest possible opportunity. All relevant paperwork should accompany the samples at all times.*

Reference

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Key to Table

x = 1 – 10 specimens xx = 10 – 50 specimens cf = compare ss = sub-sample

Appendix 6

Archaeological Evaluation at
Gwash Valley, Stamford (SGVB 06)
The Animal Bones
By Jennifer Kitch

Introduction
A total of 297 (3114g) refitted fragments of bone were recovered by hand from during trial trench excavations undertaken at Gwash Valley, Stamford, Lincolnshire. The remains were recovered from ditches from possible Roman and undated contexts.

Methodology
Identification of the bone was undertaken with access to a reference collection and published guides. All the animal remains were counted and weighed, and where possible identified to species, element, side and zone (Serjeantson 1996). Also fusion data, butchery marks (Binford 1981), gnawing, burning and pathological changes were noted when present. Ribs and vertebrae were only recorded to species when they were substantially complete and could accurately be identified. Undiagnostic bones were recorded as micro (mouse size), small (rabbit size), medium (sheep size) or large (cattle size). The separation of sheep and goat bones was done using the criteria of Boessneck (1969) and Prummel and Frisch (1986). Where distinctions could not be made, the bone was recorded as sheep/goat (s/g).

The condition of the bone was graded using the criteria stipulated by Lyman (1996). Grade 0 being the best preserved bone and grade 5 indicating that the bone had suffered such structural and attritional damage as to make it unrecognisable.

The quantification of species was carried out using the total fragment count, in which the total number of fragments of bone and teeth was calculated for each taxon. Where fresh breaks were noted, fragments were refitted and counted as one.

Tooth eruption and wear stages were measured using a combination of Halstead (1985), Grant (1982) and Levine (1982), and fusion data was analysed according to Silver (1969). Measurements of adult, that is, fully fused bones were taken according to the methods of von den Driesch (1976), with asterisked (*) measurements indicating bones that were reconstructed or had slight abrasion of the surface.

Results

Condition
The overall condition of the bone was quite uniform within the assemblage. The majority of the assemblage occurs within grade 3 (65%) and 4 (34%) of the Lyman Criteria (1996), which is generalised to a moderate to poor overall condition. Many of the bones displayed chemical etching from rootleting, which had severely affected the condition. Several bones recovered from [11005] have been heavily stained with a red rust colour and is probably resultant from natural iron pan.

The poor condition of the remains has limited the number of recordable traits, such as measurements, butchery, gnawing and pathology.

A single cattle humerus recovered from [14030] had been chopped through the midshaft as part of the jointing process. The same fragment displayed evidence of carnivore gnawing on the proximal end of the bone. No further evidence of butchery, gnawing, pathology or burning was noted amongst the remains.

Species Representation
Table 2 below summarises the identified taxa for the hand collected assemblage, by context.

Table 2, Hand Collected Assemblage by Context

Taxon	11006	14026	14029	14034	14035	14038	14040	14041	Total
Equid *(Horse Family)*		1					1		2
Cattle	1	27*	1			2	3		34
Sheep/Goat	2			2					4
Pig	6								6
Dog								1	1
Large Mammal		152			2	4			158
Medium Mammal	2		1						3
Unidentified	1	81				6	1		89
Total	12	261	2	2	2	12	5	1	297

Cattle are predominant within the assemblage, followed by pig, sheep/goat, equid and dog. The assemblage is too small to provide a true representation of animal husbandry and utilisation on site. The cattle remains may be slightly inflated due to presence of a possible partially articulated skeleton, and therefore cannot be taken as a true representation of abundance.

Discussion
The size of the assemblage is too limited to provide any further information, save the presence of the species on site. The remains probably represent butchery and food waste disposal. There is no evidence of craft working evidence and the lack of burnt bone suggests that hearth sweepings are not incorporated within the assemblage. This could be taken as an indication that settlement activity was not in the immediate vicinity of the ditch deposits.

Any further excavation is liable to yield more bone of a moderate condition, with good potential for establishing information on animal husbandry and utilisation on this site.

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Appendix 7

GLOSSARY

Alluvium	Deposits laid down by water. Marine alluvium is deposited by the sea, and fresh water alluvium is laid down by rivers and in lakes.
Anglo-Saxon	Pertaining to the period when Britain was occupied by peoples from northern Germany, Denmark and adjacent areas. The period dates from approximately AD 450-1066.
Bronze Age	A period characterised by the introduction of bronze into the country for tools, between 2250 and 800 BC.
Context	An archaeological context represents a distinct archaeological event or process. For example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretation of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, e.g. [004].
Cropmark	A mark that is produced by the effect of underlying archaeological or geological features influencing the growth of a particular crop.
Cut	A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, etc. Once the fills of these features are removed during an archaeological investigation the original 'cut' is therefore exposed and subsequently recorded.
Domesday Survey	A survey of property ownership in England compiled on the instruction of William I for taxation purposes in 1086 AD.
Fill	Once a feature has been dug it begins to silt up (either slowly or rapidly) or it can be back-filled manually. The soil(s) that become contained by the 'cut' are referred to as its fill(s).
Geophysical Survey	Essentially non-invasive methods of examining below the ground surface by measuring deviations in the physical properties and characteristics of the earth. Techniques include magnetometry and resistivity survey.
Headland	Strip of uncultivated land left between areas of ridge and furrow which was used for turning the plough. These strips provided access and often became lanes or roads.
Iron Age	A period characterised by the introduction of Iron into the country for tools, between 800 BC and AD 50.
Layer	A layer is a term used to describe an accumulation of soil or other material that is not contained within a cut.
Medieval	The Middle Ages, dating from approximately AD 1066-1500.

Mesolithic	The 'Middle Stone Age' period, part of the prehistoric era, dating from approximately 11000 - 4500 BC.
Natural	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity
Neolithic	The 'New Stone Age' period, part of the prehistoric era, dating from approximately 4500 - 2250 BC.
Palaeolithic	The 'Old Stone Age' period, part of the prehistoric era, dating from approximately 500000 - 11000 BC in Britain.
Post-medieval	The period following the Middle Ages, dating from approximately AD 1500-1800.
Prehistoric	The period of human history prior to the introduction of writing. In Britain the prehistoric period lasts from the first evidence of human occupation about 500,000 BC, until the Roman invasion in the middle of the 1st century AD.
Ridge and Furrow	The remains of arable cultivation consisting of raised rounded strips separated by furrows. It is characteristic of open field agriculture.
Romano-British	Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.
Saxon	Pertaining to the period dating from AD 410-1066 when England was largely settled by tribes from northern Germany
Till	A deposit formed after the retreat of a glacier. Also known as boulder clay, this material is generally unsorted and can comprise of rock flour to boulders to rocks of quite substantial size.
Transformed	Soil deposits that have been changed. The agencies of such changes include natural processes, such as fluctuating water tables, worm or root action, and human activities such as gardening or agriculture. This transformation process serves to homogenise soil, erasing evidence of layering or features.

Appendix 8 The Archive

The archive consists of:

107	Context records
4	Photographic record sheet
1	Section record sheet
1	Plan record sheet
15	Daily record sheet
23	Sheets of scale drawings
1	Stratigraphic matrix

All primary records are currently kept at:

Archaeological Project Services
The Old School
Cameron Street
Heckington
Sleaford
Lincolnshire
NG34 9RW

The ultimate destination of the project archive is:

The Collection
Art and Archaeology in Lincolnshire
Danes Terrace
Lincoln
LN2 1LP

Accession Number:	**2006.268**
Oasis Reference:	**archaeol1-25529**
Archaeological Project Services Site Code:	**SVGB06**

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology nor that any archaeology present there is of a similar character to that revealed during the current investigation.