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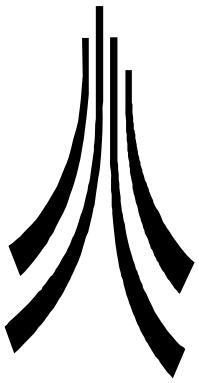

November 2000

STREAMLINE GARAGE
LANCASTER
Lancashire

Archaeological Evaluation Report

Commissioned by: Fairclough Homes

Streamline Garage, King Street, Lancaster
Lancashire

Archaeological Evaluation Report

Report no 2000-2001/030/AUA8067

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The fieldwork was undertaken by Andy Bates and Vix Hughes. The drawings were produced by Neil Wearing, the finds work was undertaken by Andy Bates and Christine Howard-Davis. The report was written by Vix Hughes and was edited by Jamie Quartermaine and Rachel Newman. The project was managed by Jamie Quartermaine.

SUMMARY

An archaeological evaluation has been carried out on the former Streamline Garage site, King Street, Lancaster (SD 4765 6135). The work was undertaken by Lancaster University Archaeological Unit for Fairclough Homes and consisted of two phases of trench excavation, comprising a total of six trenches, excavated between 10th and 24th October 2000. The trenches were mechanically excavated down to the level of the highest significant archaeological horizon and were then excavated manually.

Initially three trenches were excavated, one adjacent to King Street (Trench 1), one in the southernmost part of the study area (Trench 3) and a further trench in between (Trench 2). As the area has been densely built on since the second half of the eighteenth century, there was an anticipation of considerable post-medieval disturbance to any underlying archaeological deposits, and this was confirmed, particularly in the western and southernmost trenches. However, in addition to the post-medieval features and modern makeup layers, present in all trenches, five features of interest were revealed in Trench 1.

Two areas of dense charcoal and burnt bone concentrations were uncovered and the full excavation of one of these established that it was a cremation of probable Roman date. Although 416 fragments of bone were recovered, there were only five diagnostic fragments, comprising one human, one pig and three goat/sheep fragments. Also in Trench 1 was a linear ditch orientated approximately east/west, at the east end of the trench and immediately to the south of this ditch was the truncated remains of a posthole, with a further posthole seen only in the north-facing section of the trench. No finds were recovered from these features to help date them, but the stratigraphical relationships make it evident that they were medieval or earlier.

Following the discovery of significant archaeological remains within Trench 1, a further three trenches (Trenches 4-6) were excavated in order to determine the extent and survival of archaeological deposits across the northern part of the site. This trenching revealed considerable evidence of eighteenth / nineteenth century activity, but did not reveal any more cremations or early features. There were large numbers of service pipes encountered in Trench 4, which was parallel to Trench 1. Trench 5, in the western part of the study area, was mostly cellared, although a large wall and sandstone flagged flooring were uncovered, which probably related to the saw mill known to occupy the site in the mid-nineteenth century. The work also confirmed that the land to the north-west has been levelled, with the deposition of large amounts of overburden.

The evaluation has shown that in favourable conditions deposits and features from the Roman period onwards do survive and show good preservation but, due to modern intrusions, there may not be a coherent area of significant archaeology surviving. In order to deal with any remains, it is recommended that a large area adjacent to the road be investigated to examine the potential for the survival for further cremations prior to development.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 The area of land formerly occupied by Streamline Garage, King Street, Lancaster, (centred on SD 4765 6135 (Fig 1)) is to be developed for residential and retail use by Fairclough Homes.

1.1.2 In 1997 Lancaster University Archaeological Unit (LUAU) conducted a desk based assessment on the development area (LUAU 1997), which highlighted the discovery of isolated prehistoric and Roman burials in close proximity to the site, but none within the boundary of the site. The probable location of medieval field boundaries and the fact that the land remained in agricultural use until the late eighteenth century was established. This activity was followed by industrial development, including the establishment of a saw mill in the nineteenth century.

1.1.3 In September 2000 a project design was formulated by LUAU (*Appendix 1*), in response to a verbal brief by Lancashire County Archaeological Service (LCAS), to provide a pre-planning evaluation of the site. LUAU was then commissioned by Fairclough Homes to undertake the evaluation, which was implemented between 10th and 24th October 2000. The aim of the evaluation was to identify the presence or absence of buried deposits of archaeological significance. As there was initial concern that the nineteenth century development may have truncated all earlier deposits the evaluation was undertaken in two stages (each involving the excavation of three trenches). There was an understanding that the evaluation would be stopped if no significant resource was identified following the first stage but, in the event, early activity associated with two cremations was identified in Trench 1 and it was agreed, in conjunction with LCAS, to proceed with the second phase of trenching.

1.2 LOCATION AND TOPOGRAPHY

1.2.1 The site (Fig 2, SD 4765 6135) is situated at the extreme southern end of the historic medieval core of the town of Lancaster and lies approximately 100m north of the Lancaster Canal. It forms an irregular wedge-shaped plot on the western side of the junction of King Street and Penny Street; it includes the north end of Henry Street and continues as far north as the east end of Queen Street. The site occupies a gently sloping plot of land, approximately 4336m^2 in area, with the highest point being at *c*23 m OD at the south end and *c*19m OD at the north end.

1.2.2 The solid geology of Lancaster consists predominantly of Silesian (Upper Carboniferous) grey-brown or reddened, medium to coarse grained sandstones of the Pendle Grit Formation, which is part of the Millstone Grit Group (British Geological Survey 1992). These sandstones are thickly bedded with thin siltstone partings, but with mixed sandstone/siltstone units near the top. The drift geology for the site has been mapped as glaciofluvial sheet deposits of clayey sands and gravels.

1.2.3 The Soil Survey (1983) does not classify soils within urban areas, but the results of test pits excavated in the adjacent MFI site, on Aldcliffe Road (LUAU 1995),

provide a guide to soil and drift geology present in the near vicinity of the current site. The MFI site showed a sequence of soils from a dark brown clay loam, probable plough soil, encountered *c*0.5m from the surface and with a depth of 0.45-0.7m, overlying a possible old ground surface layer, of lighter brown sandy loam 0.2-0.5m in depth. At the base of the sequence was a yellow–brown sandy clay overlain by a red-brown sandy gravel; both of these deposits were interpreted as natural drift geology.

1.3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

1.3.1 There is scarce prehistoric evidence for activity in and around Lancaster but the Sites and Monuments Record (SMR) does show three find spots of Bronze Age burials in the immediate vicinity of the site (Fig 2: Sites 01, 04 and 05 (LUAU 1997)). This constitutes some of the best evidence for this period but only reflects the funerary aspect of the area and gives little indication of settlement or other activities.

1.3.2 The town of Lancaster developed from the Roman period onwards. The site of Lancaster was initially used as a strategic military location, towards the end of the first century AD. A sequence of forts was established on Castle Hill, which afforded a commanding position over a crossing of the River Lune (Shotter 1993, 92-92). The fourth century fort seems to have been realigned parallel to the Lune and it has been suggested that this form was similar to the Saxon Shore forts of southern Britain; this would potentially have served as a fleet supply base and ensured the security of the harbour (*ibid*). Excavations have shown that the main area of extramural development extended along Church Street (LUAU 2000), within the Market (Drury forthcoming), with some activity along Penny Street (LUAU 1996). While the evidence from the Church Street area shows significant settlement and small-scale industrial activity, the work at Penny Street suggested a Romano-British cremation cemetery, with a possible discrete family plot, in use from the second to the fourth century AD. Second century AD Roman cremations with urns have been recorded elsewhere, one between King Street and Penny Street (Site 03 (LUAU 1997; SD 4769 6144)) and the other at St Thomas's Church (Site 02 (LUAU 1997; SD 4776 6142)).

1.3.3 The early medieval period is only represented archaeologically by a hoard of ninth century coins (Northumbrian stycas), found at Vicarage fields, near the church (Newman 1996, 102; Penney 1981, 13). The remainder of the evidence for activity during this period is in the form of sculpted fragments of crosses from the area of the Priory Church, indicating the presence of an earlier church, which was probably the same as that listed in Domesday Book (Faull and Stinson 1986).

1.3.4 By the Medieval period, place names and documentary sources become the main source of evidence although excavations have indicated the physical form of the settlement at Lancaster (Howard-Davis *et al* forthcoming; White 1988; Penney 1982). The Domesday reference to a church suggests that this formed the centre of a vill ('*Chercaloncastre*', Church Lancaster; Newman 1996, 98) which was dependent on the manor of Halton (Penney 1981, 13-14). In addition, another vill existed (*Loncastre*) although its precise location is uncertain (White 1993, 11). The centre of Lordship was moved to Lancaster shortly after 1086 and Lancaster

Castle, on the site of the earlier Roman forts, was founded by 1094 (*op cit*, 19). A borough was created in 1193, with Church Street, Market Street and Penny Street being the main thoroughfares (*op cit*, 11-14; 26-29). This may imply a continuation of settlement pattern, surviving from the Roman period, when activity was concentrated in these same areas.

1.3.5 For the Post-Medieval period there is more extensive evidence from cartographic, documentary and excavation sources. The earliest map record is that produced by John Speed in 1610. Although rather stylistic in character, this shows both King Street (then known as Chennel Lane), and Penny Street and the study area is shown as a vacant plot at this time. Lancaster is fortunate that a large-scale map of the town was located in the Towneley family papers, allowing a reconstruction of the town as it was in 1684, by Docton (Docton 1957). This map shows no settlement on the site but does illustrate a field boundary aligned north/south, dividing two arable fields. From this time until the first edition Ordnance Survey (OS) map of 1848, King Street is known as Back Lane. Mackreth's map of 1778 shows the site as having remained unchanged since 1684, apart from the addition of a field boundary, parallel to the first and in the same location as the present study area's western boundary (Fig 2, Site 06 (LUAU 1997)). The boundaries have a slightly sinuous line and may potentially be part of an enclosed medieval open field system. The map also indicates some small areas in use as gardens or orchards, mainly between the eastern field boundary, King Street / Back Lane, and the two boundaries at the very north end of the site. Clarke's map of 1807 shows a similar situation, with housing now evident on the frontage of King Street and the addition of Henry Street and housing along the western and northern sides. Binn's survey and map of 1821 indicates further building development within the study area. The area between the two boundaries is by now shown as completely occupied by garden plots, with what appears to be a narrow passageway running alongside the eastern field boundary (north/south).

1.3.6 The large scale OS map of 1892 shows each of the buildings, covered passageways and property boundaries. Amongst this dense area of buildings was a small yard called 'Railway Yard' which was shown as providing access to some of the buildings to the rear of the King Street frontage. By this date the area of land between the two field boundaries had also been built on and it seemed to form part of a steam-powered saw mill complex. The northern end of the study area is shown lined with buildings, with a carriageway leading into the former site of the garden plots. This area was called 'Queen's Place' and comprised open yards and several rectilinear buildings, all of which presumably formed part of the saw mill complex. The southern end of the area remained an open plot with two areas described as a 'Timber Yard'. Two large buildings on the western and northern sides of Henry Street lay within the study area and were also part of the saw mill complex. Two of the saw mill buildings were shown as having chimneys, which suggests the location of the steam engine(s). The saw mill complex expanded so that by 1933 all but the northern end of the area between the two field boundaries was occupied. During the eighteenth and nineteenth centuries, the trade directories note the names and occupations of many of the inhabitants of King Street, and in general most seem to be working class and labourers. The 1938 OS map shows that the buildings in the triangular plot north of the Albert public house

had been cleared; much of the area has subsequently been used as a garage and car showroom, with the insertion of tanks for diesel and petrol.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design (*Appendix 1*) was submitted by LUAU in response to a verbal brief from Lancashire County Archaeological Service (LCAS), for an archaeological evaluation of the study area. Following formal acceptance of the project design, LUAU undertook the project and the work was carried out in accordance with the practices of the Institute of Field Archaeologists (IFA).

2.1.2 The only deviation from the brief was in the area excavated, the brief specifying 5% of the area to be trenched, a total length of 85m of trench at 2m wide (170m^2). However, due to the position of several walls, services and concrete stanchions, only 70m could be excavated, although a number of the trenches were wider than the defined 2m and resulted in the overall excavation of 160m^2.

2.2 EVALUATION TRENCHING

2.2.1 ***Stage 1:*** in accordance with the project design, initially three trenches were excavated to confirm the presence or absence of buried deposits of archaeological significance (Fig 2). The trenches were located away from any services identified and were targeted to examine the range of archaeological potential across the site. The extreme southern end was avoided, since excessive amounts of demolition rubble were present on this part of the site which precluded any below ground work. Trench 1 was positioned parallel to the north wall of the Albert public house, at an approximate right angle to the line of King Street, and was aligned north-east/south-west. Trench 2 was placed parallel to and behind the west wall of the Albert public house and was orientated north/south. Trench 3 was situated approximately opposite the north end of Henry Street, but towards the western boundary, and was orientated north-east/south-west. This trench encountered a concreted pipe which was left *in situ*.

2.2.2 The concrete surface was broken using a toothed bucket on a JCB excavator. The broken concrete was placed away from the trenches and was excluded from the backfill in order to prevent damage to any unexcavated archaeological remains. The trenches were excavated by a JCB excavator using a 1.6m wide toothless ditching bucket, working under archaeological supervision. Mechanical excavation progressed down to the level of potentially significant archaeological deposit in each trench. The trenches were then all hand cleaned and manual excavation was undertaken of the identified features. Cut features were half sectioned, linear features were also sectioned, with 10% examined. Excavation of a cremation (*Section 3.2.5*) was undertaken in accordance with the requirements of a burial licence granted by the Home Office. Bulk samples were taken for the recovery of ecofactual evidence.

2.2.3 ***Stage 2*****:** on the basis of the preliminary results from Trenches 1, 2 and 3, it was decided, in consultation with the County Archaeologist, to proceed with the second stage of the evaluation, with trenches concentrated in the northern part of the study area. The work was carried out in a similar manner but although a large JCB was used to break out the concrete, a mini-digger with a 1.2m toothless

bucket was used to excavate the trenches. Trench 4 was positioned parallel to, but further north from, Trench 1 (Fig 2). Trench 5 was situated at an approximate right angle from the western site boundary, opposite Trenches 1 and 4, and was orientated east/west. Trench 6 was aligned north-west/south-east and located towards the north-east corner of the area, adjacent to the temporary carpark. Again during this phase, mechanical excavation progressed down to the level of potentially significant archaeological deposit in each trench. The trenches were then all hand cleaned and excavation was undertaken by hand.

2.2.5 ***Recording:*** recording was by means of LUAU's standard context recording system (compatible with that used by English Heritage's Centre for Archaeology), with trench records, supporting registers and indices. A full photographic record in colour slide and monochrome formats was compiled and section drawings of relevant areas of the trenches and features were created at appropriate scales. Full hand-drawn plans were produced of each trench, levels were recorded, and the trenches were located using a total station and datalogger.

2.2.6 All trenches were backfilled on completion, although the broken concrete was left in piles adjacent to the trench and will be crushed as part of the development.

2.3 HUMAN REMAINS

2.3.1 In accordance with normal practice, a burial licence for the removal of human remains was obtained from the Home Office as soon as they were recognised and prior to the excavation of suspected human remains.

2.4 ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the project design and in accordance with current IFA and EH guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). The paper, finds and digital archive will be deposited, as appropriate, with Lancaster City Museums Service and the Lancashire Record Office, in agreement with the Client.

3. EXCAVATION RESULTS

3.1 INTRODUCTION

3.1.1 In total, six trenches were opened covering an approximate area of 160m^2. The first three (Stage 1) found significant results and, on the basis of this, a further three trenches were opened (Stage 2) (Fig 2). The following provides a brief narrative of the excavated deposits, context numbers being given in square parentheses.

3.2 TRENCH 1

3.2.1 The first trench was machine-excavated from east to west, taking deposits down in level spits, until significant archaeological deposits were encountered. The trench was 12m by 2m and excavated to a maximum depth of 0.7m. The machining removed the modern concrete surface [100] and modern rubble/make-up overburden deposits [101] from the length of the trench, as well as the backfill of a recent geotechnical pit at the extreme east end of the trench [103]. At the west end, a wall [110] was encountered, cutting deeply into the subsoil, and this formed the end of the trench. At the east end, machine excavation was undertaken to a depth of only 0.3m, at which point several features were revealed and work was continued by manual excavation.

3.2.2 The lowest archaeological deposit in this trench [121] was a mid yellow sandy clay seen at the east end and in a small patch against the south side of the trench approximately 7m from the east end (Fig 3). It had a depth of over 0.2m and several features were cut into this deposit [105, 107, 112, and 114]. It was, however, sterile of finds and there appeared to be discolorations from iron staining at the extreme east end, suggestive of water action. In addition, the boundary between this horizon [121] and [104] above it was irregular and diffuse, possibly as a result of biological or mechanical disturbance. This deposit was interpreted as part of the underlying natural subsoil, although it was not directly comparable with the natural subsoils seen in other trenches [134, 135 and 151].

3.2.3 Of the features cut into deposit [121], two were clearly the truncated remains of postholes ([105] and [114]), one was a ditch, [107], and the last, [112], was a cremation (Fig 7; Plate 2). Linear feature [107] (Figs 3 and 7) was aligned east/west and appeared to continue beyond the excavated limits to the east; it was recorded as being over 3m in length, 0.7m in width and 0.35m in depth. At the extreme east end it was truncated by the geotechnical pit [102], and, where it continued beyond the northern trench limit, it was overlain by a large intrusive block of concrete. The mid brown, clayey silt fill [108] contained a low proportion of unsorted, small, rounded stones and a very low concentration of charcoal flecks. This clearly was a ditch, which had a broad 'V'-shape with moderately sloping sides, the northern side being slightly stepped, while the south side was smoothly sloping. No finds were recovered from the feature.

3.2.4 To the immediate south of the ditch was a small round feature [105], which was 0.3m in diameter and 0.08m in depth (Fig 3), filled with a light brown silty clay [106]. The fill was contained in cut [105], with gently sloped sides and a shallow

concave base. The feature was interpreted, through its form, as a truncated posthole. There were no finds from this feature to provide dating evidence.

3.2.5 A second probable posthole [114] was seen in the north-facing section of Trench 1 (Fig 6) and was 1.3m to the south-east of posthole [105]; the full extent of the feature could not be established as it continued south beyond the excavation limits. Mid brown, clayey silt [115] filled cut [114], which had moderately sloping sides, a round pointed base, and a vertical inclination. The one medium-sized cobble in the fill could have been packing for the post. The posthole had a width of 0.3m and a surviving depth of 0.22m, the fill and width being comparable to posthole [105].

3.2.6 Located at approximately 5m from the eastern end of the trench was a deposit [116] of mixed mid brownish grey loam, with a moderate distribution of charcoal and burnt bone flecks. Upon excavation this was revealed to be a disturbed interface layer between deposit [104] above (*Section 3.2.9*) and the cremated fill of a cut feature. The deposit continued south, beyond the limit of excavation, and the spread of material was thought to be a product of plough disturbance. Deposit [116] contained one small fragment of pottery of Roman date (*Section 3.8*). Below this was a pit, [112], containing burnt material; this was oval in plan, orientated north-west/south-east, and had a broad 'U'-shaped profile, with near vertical sides and an uneven base. The fill [111] was similar in texture and colour to [116], but contained a much higher concentration of charcoal flecks and burnt bone, particularly at the base of the cut where the majority of the bone was located (Fig 7). The bone fragments were a pale greyish white in colour, clearly having been burnt, and were very fragile. In the course of the excavation it was thought that a small area of jaw was discernible but it was not possible to preserve this during the lifting of the remains. The fill also contained an iron nail, the corrosive products of which had expanded around fragments of cremated bone, thereby demonstrating a clear relationship between the nail and the burning. It is likely that this was a cremation, probably forming part of the extensive Roman burial activity in South Lancaster.

3.2.7 A small discrete feature, with a diameter of 0.13m and a depth of 0.25m, cut through deposits [111] and [116]; it had a symmetrical profile with very steep sides and had a blunt narrow base. It was circular in plan and had a mid grey, loamy fill [117]. The feature was interpreted as a stakehole, the regular-sided shape of which suggests that it may have decayed *in situ* rather than having been removed. No finds were recovered.

3.2.8 To the east of the excavated cremated remains was another distinct area of mixed mid brownish grey loam, with a moderate distribution of charcoal and burnt bone flecks [113], which covered an area of 1.3m by 1.2m. The deposit was left *in situ* as it was probably the top of another cremation and it was beyond the remit of the present evaluation to undertake full mitigative recording of all features identified.

3.2.9 Both these deposits ([113 and 116]) and the stakehole [118] were overlain by a deposit of a mid brown sandy silt [104]. This was seen to extend the length of Trench 1 but became increasingly deep towards the west end of the trench, varying from 0.1m in depth at the east end to 0.6m at the west end. The material was similar in texture and colour to the fills of the postholes and ditch, and the interfaces between the posthole fills and this deposit [104] were gradual. The deposit was interpreted as a garden soil, which had been subjected to ploughing /

mechanical disturbance, as evidenced from the irregular interface with [121], below.

3.2.10 Truncating the soil layer [104], at the west end of the trench, was a square-cut trench for the foundation of a stone wall [110]. This wall comprised roughly squared stones which were not faced. The structure was on the same north/south alignment as the property wall at the rear of the Albert public house, 6.8m to the south.

3.3 TRENCH 2

3.3.1 The second trench was machine-excavated from north to south; it measured 14m by 2m and was excavated to a maximum depth of 0.7m, with deposits taken down in level spits. The machining removed the modern concrete surface [122], tarmac [123], and overburden [124] from the length of the trench. No significant archaeological deposits were encountered and all those revealed were of certain post-medieval date. At the north end was a deeply intruding rubble-filled cellar [131], and a linear cut [129], which was probably structural; both of these continued beyond the western limit of excavation. There were three linear features in Trench 2, the northern being an east/west orientated pipe trench truncating both the cellar [131] and feature [129]. The second was the foundation trench [136] for an east/west-aligned brick wall [137], which was to the south of the cellar [131]; the lower courses of this wall were seen in the west-facing section, but no standing structure survived. The third was a wall [126], located along the east trench edge at the northern end of the trench, built of regular, unfaced, sandstone blocks, but again there were no upstanding remains above ground level.

3.3.2 The rest of Trench 2 was excavated by machine, to reveal a dark orangey pink, silty sand deposit [135], overlain by a mid brownish orange, loose, gritty sand, [134]; both these deposits were sterile and were interpreted as natural subsoils. Deposit [134] was in turn overlain by a layer of mid brownish grey, silty sand deposit, [125], distinct from the browner, more loamy soil [104], seen in Trench 1. This was interpreted as a possible garden soil but did not have any obvious indications of having been ploughed and was thus thought to be of relatively recent date.

3.4 TRENCH 3

3.4.1 Trench 3 was machine-excavated from south-west to north-east; it was 10m by 2m, and was excavated down in level spits to a maximum depth of 1.6m. The machining removed the modern concrete surface, and overburden, from the length of the trench until features cutting the natural subsoil were visible. No significant archaeological deposits were encountered and all those revealed were of certain post-medieval date. At the extreme north end of the trench, an intrusive cellar wall [154] was encountered, but no excavation was undertaken to the north of this wall within the cellar. Associated with this wall was what appeared to be a linear foundation [143], immediately to the south of the wall; its mid greyish brown, silty fill contained fragments of post-medieval pottery. This feature was cut to the west by a dark grey, sandy-filled pit [141], which again was of post-medieval date. A

concreted service pipe, aligned east/west, in the southern half of the trench, was left *in situ* as it was unclear whether it was still active.

3.4.2 The earliest feature of note in Trench 3 was a linear feature [139], orientated north/south and cutting the natural subsoil [151]. A slot was hand-excavated through the feature and the dark grey brown, loamy fill [138] was found to contain post-medieval ceramics. The cut [139] had a broad 'U'- shaped profile, with vertical sides and a concave base. The feature could be interpreted either as a drainage gully or boundary feature.

3.4.3 A further feature [146], seen in the south-west corner of Trench 3, had a length of over 2.1m, a width of over 1.3m, and a total depth of 0.7m. The eastern side was shown to have near vertical sides and a flat base with sharp breaks of slope at top and bottom. Since the full extent of the feature was not revealed it was difficult to suggest an interpretation based purely on form, but the slightly curved eastern edge of the feature suggests that it was a pit rather than a ditch. The feature contained three distinct fills [145, 152 and 153]. Fill [153] was the lowest, and consisted of a 0.3m deep dark brown sandy silt, with occasional flecks of charcoal and small stones. This was overlain by a 0.04m thick band of pinkish brown, silty sand [152]. The uppermost fill was a 0.3m deposit of mid brown, sandy silt, with occasional charcoal flecks and a few small stones [145]. Initial investigation of the upper fill uncovered a sherd of medieval pottery and a sherd of Roman pottery, but this was mixed with a much greater quantity of post-medieval ceramics and clay pipe fragments from both fills [145] and [153], proving that the Roman and medieval sherds were residual.

3.4.4 The upper fill [145] of feature [146] was truncated by a modern posthole [147], located at the southern end of the trench. This was filled with a dark grey silty material, containing clinker inclusions, and the remains of an *in situ* timber post [148], seen to be positioned vertically in the north-facing section of the trench. Located half way along the trench was another irregular, modern pit [156], which was filled with a similar silty material, again containing clinker inclusions, and the remains of an *in situ* timber post [155]. These were overlain by modern deposit [119], which covered the whole of the trench.

3.5 TRENCH 4

3.5.1 Trench 4 was machine-excavated from east to west, in an area 13m by 3m and dug to a maximum depth of 0.7m. At the east end, below the concrete surface, a series of ceramic drainage pipes was revealed, and overlying these were concreted-in pipes [194]. Although they were not live it was decided to leave them in place because of the logistical difficulty of removing them in the confined area at this end of the trench (Fig 4).

3.5.2 The west end of Trench 4 revealed a mid brownish pink clayey sand which was interpreted as the natural subsoil as it was similar in colour and texture to the natural subsoil seen previously in other trenches ([135] and [151]). This was cut by a number of other post-medieval features ([162], [164], [166] and [179]; Fig 4). Features [162] and [166] had dark grey clayey fills ([160] and [165]) and were very shallow; they may simply represent the infilling of uneven ground surfaces, resulting from mechanical truncation rather than intrusive features. The larger

feature was truncated by a linear feature [164], which was aligned north/south and approximately parallel to the sandstone foundation [158] to the east (*Section 3.5.3*). Feature [164] had a similar but darker fill to the other features at this end of the trench and was only 0.08m deep and 0.4m wide, but extended beyond the 1.8m of the trench. It contained post-medieval ceramics and was interpreted as a probable boundary feature. Feature [179] was the cut for a modern concrete stanchion which intruded beyond the depth of the natural deposits; it truncated the linear boundary feature [164] and is therefore more recent.

3.5.3 Located half way along the length of the trench was a mid brown, clayey sand deposit [193], which contained rare charcoal flecks and occasional small stones. This was only seen in the eastern part of Trench 4; the area covered by this deposit being approximately 5m by 2m, with a depth of 0.3m. It was similar to [104], seen in Trench 1 and could also be interpreted as an old ground surface. No finds were recovered, however, and thus no confident date could be attributed to it. The foundation cut for a sandstone feature [159] truncated this deposit, forming its western boundary. This cut was filled by a mid brownish grey, sandy, silty clay fill [157], which in turn was overlain by sandstone structure [158]. The structure was composed of roughly hewn sandstone blocks, orientated north/south, on the same alignment as the rear property boundary of the Albert public house and the wall seen in Trench 1 [110]. The fill [157] contained post-medieval ceramics and the structure was interpreted as the wall foundation of a post-medieval building.

3.5.4 A structure [195] was located at the east end of the trench, and consisted of an area of sandstone flags, irregularly fitted and abutting a north/south wall, which had later been covered with one of the concreted pipes. The largest stone was 0.4m x 0.3m and the area covered was approximately 2m by 1m. The surface was probably the floor of a post-medieval building.

3.6 TRENCH 5

3.6.1 Trench 5 was machine-excavated from west to east in level spits to a maximum depth of 1.5m; it measured 12m by 2.5m. No significant archaeological deposits were encountered and all those revealed were of certain post-medieval date. The entire trench was machine excavated and only the east end was manually cleaned. The west half of the trench was excavated to a depth of 1.5m and removed only modern material, the east half of the trench was excavated only to the top of a structure ([186] and [187]; see *Section 3.6.4*), a depth of approximately 0.2m.

3.6.2 The earliest deposit in Trench 5 would appear to be orange sand, at a depth of 1.5m below the present ground surface, through which later features were cut. It is, however, possible that the sand was anthropogenic in origin rather than being the natural sediment of the area.

3.6.3 At the extreme west end was a cellar wall of rough blocks and backfilled rubble [191]. The wall was aligned north/south and continued beyond the trench limits; the rest of the cellar lay to the west of the present trench, with the whole feature being deeper than 1.5m.

3.6.4 Half way along the trench was another north/south aligned wall [187], which comprised regular sandstone blocks and was visible to a depth of 1.5m. The wall

abutted an area of large sandstone flags [186], clearly a floor, covering an area of 3.4m by 1.6m (Fig 5). The flags were at least 0.10m deep and were fitted flush against each other, and the size varied from 0.6m x 0.5m to 1m x 0.8m. The size of the structures and the location of the remains suggested that they were probably part of the saw mill known to occupy the site from the mid-nineteenth century.

3.7 TRENCH 6

3.7.1 Trench 6 was 9m by 2m and reached a maximum depth of 1.3m. It was machine-excavated from north-west to south-east with modern overburden removed [167] until a sterile deposit, similar to the natural subsoil, was reached. At the southern end of the trench it was discovered, however, that in fact this sterile deposit was an imported mid pinkish orange, silty sand deposit, used to reduce the natural slope of the area [170]. When compared to the underlying natural subsoil [180] it was similar in texture and colour, the subsoil being only slightly more pink and containing fewer small rounded stones. Consequently, it proved necessary to excavate manually a wide slot along the eastern edge of the trench to determine the underlying deposits. The deposits revealed that the original ground surface was more steeply down-sloping and towards the north the natural subsoil was at a greater depth, having since been covered with material to level the area.

3.7.2 At the base of the excavated sequence was a sterile, mid-orangey pink, silty sand with 5% small stones which was similar to [135], [151] and [161], seen in previous trenches; presumably this was the natural subsoil. It was encountered at a depth of approximately 1m at the south end of the trench but was found to slope northwards becoming progressively deeper, to a depth of 1.3m at least.

3.7.3 Above this layer was a mid brown, loamy layer [185], which was observed in the manually-excavated slot, and did not extend into the southern half of Trench 6; it too became deeper towards the north end but appeared to have been truncated in the southern half. The deposit was similar to [193], seen in Trench 4 and could also be interpreted as an accumulation as a result of horticultural activity.

3.7.4 This layer was overlain by layer [173], a dark grey, firm, sandy silt with occasional inclusions of charcoal and mortar flecks and about 10% small stones. Layer [173] was present throughout the trench and had an average depth of 0.3m; it contained numerous sherds of post-medieval ceramics. The fine texture of the deposit combined with the ceramic material suggests that the layer accumulated, rather than being deliberately deposited, and may represent an area of open / waste ground.

3.7.5 Layer [173] was cut by a linear feature [177], encountered while excavating the sondage. This could not be fully excavated for health and safety reasons; however, sufficient was revealed to establish the stratigraphical relationships. It was 1m wide and over 0.5m deep, orientated north-east/south-west, and it continued lengthwise beyond the limits of excavation. It appeared to have steeply sloping sides but the base remained unexcavated. The fill [176] consisted of a mid pinkish grey, sandy gritty matrix and about 30% small-medium rounded cobbles. There was strong evidence of sorting by size within the material, with smaller stones at the top of the fill and the larger cobbles towards the bottom. The feature was interpreted as a possible wall foundation or stone boundary feature. The cut appeared partly to

truncate the lower levels of layer [173], implying that it may have occurred after the initial deposition of layer [173] but may have been demolished or gone out of use while the later episode of [173] was accumulating.

3.7.6 A further feature encountered was a north-east/south-west aligned linear feature [175]. This was filled by a mid brownish grey, clayey silt [174], which contained approximately 20% small-medium rounded stones. The feature itself had a broad 'U'-shape, with gently sloping upper sides which became much steeper towards the base. The base was highly uneven and the section through it revealed smaller sub-circular depressions, which suggest that the feature may have been a fence, with posts set within the trench. Overlying these features was sterile deposit [170].

3.7.7 At the north end of the trench was a modern rubble/make-up layer [167], which was overlain by two small deposits of rubble ([181] and [182]) and cut by a small circular feature [183], which was possibly a borehole. All were clearly of post-medieval date, since they were later than sterile make-up layer [170].

3.7.8 The most recent features in Trench 6 were two pipe trenches, one of which was only partially within the trench, located at its very southern end. It was aligned north/south and contained two iron pipes. The second pipe trench was located half way along the trench and was aligned north-east/south-west. It was over 2.6m long, 0.6m wide, and went deeper than the level of the observed natural subsoil. Both features truncated the modern rubble/make-up deposit [167] and clearly were very recent.

3.8 THE FINDS

3.8.1 With the exclusion of fragments of bone, a total of 96 fragments of artefacts was recovered during the assessment. Most were fragments of ceramic vessels and tobacco pipes, mainly of eighteenth century date or later. All fragments were relatively small, seldom over 50mm in maximum dimension, and slight abrasion was evident on most, implying an element of disturbance throughout the stratigraphic sequence.

3.8.2 Most of the ceramic assemblage was late, but small fragments of Roman pottery were recovered from [116] and [111] (from the cremation), and from fill [145] (residual in later material), leading to the inference that the cremated bone from the site might derive from a disturbed Roman cremation. The fragments cannot be closely dated, but the presence of Central Gaulish (Lezoux?) samian ware, and probably Black Burnished Ware 1, suggests a date in the second quarter of the second century at the earliest. Fragments of charcoal recovered from cremation [111] were identified as oak.

3.8.3 Only one very small and abraded fragment of medieval pottery was recovered, probably of twelfth to fourteenth century date (this must remain tentative due to the size of the fragment), from layer [173], where it was clearly residual in a late seventeenth to mid-eighteenth century context. Silverdale ware, a locally produced transitional green-glazed fabric usually seen as persisting into the seventeenth century if not later, was recovered from pit fills [145] and [153]. A small fragment of rim from a black-glazed cup of possibly late seventeenth century date was

recovered from ditch fill [138], and probably represented a *terminus ante quem* for the context, which also contained earlier eighteenth century material.

3.8.4 Fragments of dark green glass wine bottles, typical of the eighteenth century, were recovered from ditch fill [138], pit fill [145], and layer [173]. Iron nails, all probably hand-forged, were recovered from modern pit fill [165], from modern make-up layer [101] and, most significantly, from the cremation [111].

3.8.5 ***Bone Fragments:*** in total, 423 bone fragments were recorded from a 100% sample taken from [111](cremation) and [116]; this represents a total number of 416 bones (*Appendix 3*). The entire assemblage was in a very poor state of preservation, due to the high degree of fragmentation and surface erosion. All of the bone had been highly burnt to a white colour. The majority of the assemblage was recovered from [111], although the presence of some bone in [116] does suggest a loss of some of the material as a result of truncation.

3.8.6 The small sample size, and the very low number of bones identified to a species level, means that the figures in the table cannot be considered to give a reliable representation of the proportion of species. Pre- and post-taphonomic processes (Lyman 1994, 246-247; Binford and Bertram 1977, 77 - 153), and the effects of fragmentation of bones on total fragment counts (Maltby 1996), will bias the results. However, while there was a clearly identifiable representation of human bone, there was significantly alongside a presence of animal bone.

4. DISCUSSION

4.1 ROMAN CREMATIONS

4.1.1 The most significant discovery of the evaluation was the presence of cremated remains in Trench 1. There was always a potential for uncovering human remains within the study area, since other finds of burial activity had been recorded within this general area (LUAU 1997). The excavated cremation comprised dense concentrations of charcoal and burnt bone, contained within a purposely dug pit, and associated with this was a sherd of Roman pottery and two iron nails. The form of the fill and the cut and size were similar to other known Roman cremations in the region, such as those from the Low Borrowbridge cemetery, near Tebay (Hair and Howard-Davis 1996, 105).

4.1.2 Cremation was the main Roman rite of burial, particularly in military contexts, as evidenced by excavations at Brough-under-Stainmore (Jones 1977), Carlisle (Zant and Giecco 1999), Birdoswald (Wilmott 1997), and also from sites within Lancaster itself. Second century Roman cremations, with associated urns, have been recorded from between King Street and Penny Street (Site 03 (LUAU 1997); SD 4769 6144) and from St Thomas's Church (Site 02 (LUAU 1997); SD 4776 6142). A further two cremations from the area have been attributed to the Bronze Age (Site 01, SD 4763 6146; Site 04, SD 4774 6130 (LUAU 1997)) but, as the records are from nineteenth work, there is a strong possibility that they were actually Roman in date (Shotter and White 1990, 34). An evaluation of 60m^2, carried out in 1996, at 77-79 Penny Street ((Site 11) SD 4773 6158), suggested a Romano-British cremation cemetery in the area, since at least two cremated burials were identified, perhaps from a discrete family plot, in use from the second to the fourth century AD (LUAU 1996). The combined evidence suggests the presence of an organised cemetery, rather than a scatter of burials, apparently covering an area on either side of both Penny Street and King Street.

4.1.3 Roman law did not permit burial within settlements, through fear of pollution, and during the Roman occupation of Britain the practice of burying at the edge of settlements can be frequently observed (Wacher 1974). Burials tended to be concentrated along the principal roads leading into settlements, as was the practice in Italy itself, which probably originated from a desire not to be forgotten after death; the expectation was that travellers and relatives would pass by the remains and remember the dead (Guhl and Koner 1989; Salway 1981). The location of cemeteries therefore plays a vital role in establishing the limits of settlements and can help in determining road alignments, where there are no surviving traces of the road itself.

4.1.4 It is possible to gain insight into the population of an area by studying the cemeteries associated with settlements. The archaeological evidence from cemeteries can illustrate the duration of a settlement as different areas may be datable to differing periods. A common pattern is for earlier remains to be buried closer to the edge of the settlement, while later remains are found further away (Salway 1981) and in some cases, through expansion, the settlement encroached on the earlier remains. This can be demonstrated at places such as Carlisle and Leicester (Zant and Giecco 1999; Wacher 1974). However, date is not the only

factor which determines the distribution of burials within cemeteries; at York, for example, evidence from tombstones shows that the higher status burials were located near to the town but those of the poor were located further away (Wacher 1974, 172).

4.1.5 There is a broad trend for early Roman burials to be cremations, the rite changing to inhumation in the later Roman period. However, this was not a consistent process and there is evidence from both classical sources (Reece 1977, 44-45) and excavated cemeteries, such as that at Low Borrowbridge (Hair and Howard-Davis 1996), demonstrating that the cremation rite continued into the fourth century AD, and similarly inhumations are known from earlier periods (Hair and Howard-Davis 1996; Wacher 1974). Cremations can be found in ceramic vessels / urns, but many are unurned, whilst other receptacles, such as glass jars, reused amphorae or wooden boxes, have also been found (McKinley 1996, 120). Urned cremations have a tendency to be more readily identifiable as a feature, and hence were more likely have been found casually by workmen in antiquity. Cremations without containers or placed within wooden boxes that have decayed appear only as concentrations of ash and are rarely, if ever, identified except during archaeological excavation. The cremation recovered during the evaluation had obviously been disturbed, but seems to have been unurned. The concentration of burnt remains at the bottom of the feature is an exact parallel to that identified in unurned cremations excavated at Low Borrowbridge (*ibid*). Such unurned cremations may have been buried in cloth or leather pouches which would not have been preserved on site (LUAU 1996, 10). Several inhumations were discovered at what is now Westfield Village, off West Road in 1934-1935 which were thought to date to the Roman period (Shotter and White 1990, 40; Penne 1981, 13). It is suggested that the inhumations may be part of another cemetery or perhaps burials on an outlying farmstead.

4.1.6 The recovered bone was pale greyish white in colour, having been effectively incinerated, with full oxidation occurring. There was some indication of *in situ* scorching, since one piece of sandstone in the fill was discoloured, although whether this was due to placing hot remains into the feature, which may suggest that the burial was only a short distance from the site of the funeral pyre or some other cause is unknown.

4.1.7 The cremation contained 119g of burnt bone, of which only one fragment was identified as human, while the remainder of the identifiable fragments were from probable sheep/goat species. The recovery of animal bone from Roman cremations is not exceptional and has been recorded from several graves at Low Borrowbridge (McKinley 1996, 120), and elsewhere in Britain there is evidence from St Stephen's cemetery at St Albans, where 48% of the Romano-British cremations contained animal bone, mostly fowl or pig (*ibid*). The presence of animal bone in cremations probably relates to either the remains of a last ritual meal or other token food offering (Salway 1981), although there may be some potential for an animal sacrifice.

4.1.8 The cremations were effectively below what appeared to be a loamy soil horizon [104], that showed indications of having been subject to agricultural activity, since there was considerable disturbance and spreading of the upper levels of cremated material. It should be noted that on average an adult would contain up to 2kg of

burnt bone when cremated (McKinley 1989), and the small amount recovered (119g) here would add weight to the suggestion that the burial had been disturbed in antiquity. Many Roman burials, however, did not include the entire remains of the pyre, and were merely a token (McKinley 1996, 120).

4.1.9 Also underlying the agricultural horizon were three features of unknown date: an east/west linear ditch and two postholes. It was not, however, possible to relate the postholes to each other or to suggest whether they were contemporary, perhaps part of the same structure. The ditch was in close proximity to one of the postholes but again could not be directly associated. The alignment of the ditch, at an angle to King Street, suggested that it might be a small boundary ditch, but the lack of stratified deposits as a result of truncation, and the dearth of finds meant that these three features could not clearly be associated with each other or the cremations. It is significant, however, that none of the features or the agricultural horizon contained finds, whereas all the layers and features above had numerous finds and were clearly post-medieval in date.

4.2 POST-MEDIEVAL ACTIVITY

4.2.1 From cartographic research it has been shown that the study area was mostly open and in use as agricultural and horticultural land until the later eighteenth century. Up until then the only features seen on maps were the two north/south aligned field boundaries, one in line with the western edge of the current study area and the other, further east, coinciding with the rear property boundary of buildings in line with the Albert public house. No clear evidence of the eastern boundary was obtained since a sandstone wall foundation [110] was identified on the same alignment, which almost certainly has removed any earlier remains.

4.2.2 The other major result from the evaluation was the discovery of substantial structural remains in Trench 5. These took the form of a neatly flagged sandstone floor and deep wall foundations. The size of the materials used and their position suggest that this was part of a steam-powered saw mill known to have stood within the study area from the mid nineteenth century onwards. The mill almost certainly dealt with timber, as a William Huntington is listed as a timber merchant with properties on King Street, Nelson Street and Glasson Dock. A Thomas Huntington (possibly a relation?) owned an electric saw mill on Quarry Road at the same time (Kelly 1898). In addition, cartographic evidence from the 1892-1931 OS maps show timber yards and another saw mill located in nearby areas.

5. IMPACT AND RECOMMENDATIONS

5.1 IMPACT

5.1.1 The evaluation has demonstrated the survival of significant buried archaeological deposits adjacent to King Street. The presence of probable cremated Roman remains is of great importance, since these will certainly be affected by any below ground work, and will therefore require a Burial Licence for their removal. They also demonstrate that in some areas there is the potential for gaining more insight into the inhabitants of the Lancaster area during the Roman period. Previous discoveries have been highlighted by the presence of pottery vessels, but the results of the evaluation suggest that more cremations may survive without such obvious indicators. Other features and deposits of uncertain, but probably early, were also identified and could indicate activity in the area other than has been demonstrated by documentary and cartographic evidence.

5.1.3 The location of the remains of the steam-powered saw mill also has importance in revealing the industrial nature of this part of Lancaster in the nineteenth century, when cartographic evidence is plentiful but physical details of specific structures and accompanying activities is lacking.

5.1.4 The proposed development will involve the construction of buildings with piled foundations adjacent to King Street and the western part of the study area will be impacted by the establishment of a car park. The construction of the buildings will involve the excavation of shallow trenches for ground beams, and therefore only archaeological features that are less than 0.5m below ground surface are likely to be affected. Trench 1 demonstrated that the cremation and associated features were less than 0.5m below ground surface and it is therefore likely that significant deposits near the King Street will be adversely impacted by the development. In the western part of the study area a substantial depth of made-up ground has been identified and thus any significant eighteenth / nineteenth century features are likely to be deeper than 0.5m and will not be affected by the proposed car park.

5.2 RECOMMENDATIONS

5.2.1 The construction of residential and retail units in the study area is likely to involve disturbance of below ground remains and although the areas exposed may not be great the surviving Roman remains are fragile and could easily be disturbed. The Roman cremations and associated features have been identified relatively close to the ground surface along the north-eastern part of the site and there is also the potential for deposits to survive in the area further north, which is presently in use as a temporary car park.

5.2.2 Preservation *in situ* is not a viable option as the remains of greatest importance are located close to the surface, and the potential for destruction, through the laying of ground beam foundations and the use of heavy plant machinery on site, is also great. In order therefore to mitigate any adverse impact it is suggested that an area alongside the eastern site boundary of King Street be stripped of concrete and any overburden, and then should be subject to mitigation excavation to investigate and record any surviving archaeological deposits and features; this will include the

complete removal of the second suspected cremation and any further burial evidence, under burial licence obtained from the Home Office. The extreme north end of the site is currently unavailable for evaluation, but there is every possibility that early activity extends into this area, and it should therefore be included in the proposed programme of works.

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APPENDIX 1
PROJECT DESIGN

Lancaster
University
Archaeological
Unit

September 2000

STREAMLINE GARAGE,KING STREET,LANCASTER
ARCHAEOLOGICAL EVALUATION

Proposals

The following project design is offered in response to a verbal brief provided by Lancashire County Council, on behalf of Fairclough Homes, requesting an archaeological evaluation in advance of a planning application for a proposed development at the former Streamline Garage site, King Street.

1. INTRODUCTION

1.1 The proposed development area at Streamline Garage site, King Street, Lancaster, occupies a location bounded by King Street to the east (SD 4765 6135 centred), immediately to the south of Lancaster city centre.

1.2 The site has been the subject of a desk-based archaeological assessment (LUAU 1997), which has outlined the nature of the finds from the area around the garage, the archaeological potential of the site itself, and the post-medieval history of the area since it was built up in the late eighteenth century.

1.3 The main interest of the site lies in the discovery of a number of isolated prehistoric and Roman burials from around the site (LUAU 1997, 14-16). None is known from within the development area but, given the size of the site, there is every chance of such evidence being located within the area of the former garage.

1.4 It appears that the site remained undeveloped in the historical period until the end of the eighteenth century (LUAU 1997, 8) and the only other evidence likely to pre-date this development will take the form of medieval and earlier post-medieval field boundaries. An opportunity may arise to examine such a feature at the north-east of the site (*Section 2.5*). The main development of the site seems to have occurred in the mid nineteenth century, when a steam-powered saw mill was built. This covered much of the development area and traces of the structure may survive behind the later walls of the garage. The proposed photographic survey, as well as recording the present structure, should seek to photograph any such traces.

1.5 The Lancaster University Archaeological Unit (LUAU) has considerable experience of the assessment, evaluation, and excavation of sites of all periods, having undertaken a great number of small and large projects during the past 15 years. Evaluations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. LUAU has considerable knowledge of the archaeology of Lancaster, having undertaken many excavations and evaluations over the years in areas such as Church Street, Penny Street, Damside Street, Pye's Warehouse, Market Hall, Brock Street and also within and around Lancaster Castle.

1.6 LUAU has the professional expertise and resource to undertake the project detailed below to a high level of quality and efficiency. LUAU and all its members of staff operate subject to the Institute of Field Archaeology (IFA) Code of Conduct.

2. METHODS STATEMENT (see also Appendix)

2.1 The aim of the below-ground evaluation is to confirm the presence or absence of buried deposits of archaeological significance. This aim will be achieved by means of the excavation of a number of machine dug trenches, which will be cut through the overlying concrete (see *Appendix* 1 for methodology). The precise location of the trenches will be discussed at the start of the evaluation with the County Archaeologist, in the light of the services map and information on the extent and condition of below ground petrol storage tanks (to be supplied by the client). It is a requirement of the brief that 5% of the area be subject to trenching, which would involve the excavation of up to 85m of trench, which would effectively be six 15m x 2m trenches. This figure may be reduced if the southern part of the site proves to be particularly truncated (Section 2.2 below). It is proposed to excavate initially three trenches (Stage 1 trenching) and then assess with the County Archaeologist if there is a requirement to excavate the remaining three trenches (Stage 2 trenching). The costs are consequently defined (Section 9) to anticipate the two possible stages of the evaluation.

2.2 The degree of disturbance beneath the concrete floor of the existing structure is, at present, unknown. It may be that across the southern part of the site levelling down has removed any archaeological deposits (the entrance ramp at the south-eastern entrance drops over 1m from the modern surface of Henry Street). Early on in the evaluation, trenches will be cut in this area to answer this question. If truncation proves to be especially severe, trenching may, on the instruction of the County Archaeologist, be curtailed in this area.

2.3 Modern surfaces and obvious nineteenth to twentieth century deposits, of little or no archaeological significance, will be removed by machine. A 1.5m wide toothless ditching bucket will be used during excavation.

2.4 Excavation will be continued by machine to the top of archaeological deposits. Excavation by hand will be undertaken in order to investigate any features or deposits of archaeological interest. Cut features, such as pits and postholes, will normally be half-sectioned, linear features will be sectioned as appropriate to at least a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. No deposits of archaeological significance will be completely removed unless this proves unavoidable, and only following agreement with the County Archaeologist.

2.5 It is intended that one of the east/west trenches should be aligned to establish the presence, nature and current status of the putative medieval field or property boundary (LUAU 1997, Fig 1 *locus* 8).

2.6 Any non-modern artefacts encountered will be recovered, recorded, and spot-dated by LUAU's finds specialist.

2.7 Selective bulk samples will be taken from any deposits which may have potential for the recovery of ecofactual evidence and palaeoenvironmental remains. Any materials recovered will be rapidly examined by the Environmental Archaeology Unit, York University, in order to determine the importance of the deposits for preservation or further work during mitigation.

2.8 Results of the evaluation will be recorded using a system, based on that used by Central Archaeology Service of English Heritage. The archive will include both a photographic record and accurate large scale plans and section drawings of any meaningful features, surfaces, and sections. All artefacts and ecofacts will be recorded using the system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration. Samples will be collected for technological, pedological, palaeoenvironmental and chronological analysis, if appropriate. If necessary, access to conservation advice and facilities can be made available. LUAU maintains close relationships with Ancient Monuments Laboratory staff at the Universities of Durham and York and, in addition, employs artefact and palaeoecology specialists with considerable expertise in the investigation, excavation and finds management of sites of all periods and types, who are readily available for consultation. Any conservation advice is costed in as an additional contingency.

2.9 In addition to the archaeological evaluation, a photographic record of the standing structure will be made during the evaluation. This will involve the production of a general oblique and semi-oblique photographic record of the elevations and roof structure. It will include detail shots of relevant and significant features. This will provide a general perspective record of the elevations, but will not be used to generate the drawings.

2.10 An evaluation report will collate and analyse the data generated by 2.1 - 2.9 above, to provide an assessment of the location, depth, chronology and importance of the archaeological deposits, in a regional and local context.

3. HEALTH AND SAFETY AND INSURANCE

3.1 LUAU provides a Health and Safety Statement for all projects and maintains a Unit safety policy. As Principal Contractor on site LUAU would provide a written Health and Safety Plan. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1991). A written risk assessment will be undertaken in advance of project commencement and copies will be made available on request to all interested parties.

3.2 Full regard will be given to all constraints (services, proximity to standing buildings, etc) during the excavation of the trenches. As a matter of course, a U-Scan device is used prior to the commencement of excavation. Those areas of the site which are at present accessible to the public will be suitably fenced.

3.3 Security fencing will be erected around the excavation area to prevent access from the general public during the excavations.

3.4 No excavation will be undertaken below a depth of 1.25m without adequate shoring. However, if it proves necessary to excavate below these depths then there will be a requirement to draw upon contingency funding to cover shoring costs. Any excavation to these depths will be subject to agreement with the client and the County Archaeologist.

3.5 LUAU holds Professional Indemnity insurance to a limit of £2 million in any one claim (£1 million for pollution claims).

3.6 All other terms and conditions will be in accordance with LUAU's standard legal agreement, unless otherwise agreed by both parties.

4. ARCHIVE

4.1 The results of the evaluation will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly quantified, ordered, and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the Institute of Field Archaeologists in that organisation's Code of Conduct. The expense of preparing such an archive is part of the project's cost, but only represents a very small proportion of the total. The project archive would be deposited, as appropriate, with Lancaster Museum and Lancashire Record Office, in agreement with the Client and the relevant bodies.

4.1.2 The textual archive will be provided both as a printed document and on computer disks as ASCii files. Any drawings will be provided as originals; copies of drawings from other sources will be provided as photocopies.

5. REPORT

5.1 One bound copy of a written synthetic report will be submitted to the Client, and a further copy will be submitted to the County Archaeologist. The report will be produced in a format similar to this Project Design, subject to any comments from the Client. It will include:

- details of any agreed variations on the project design
- a method statement
- an analysis of the data generated by 2.1 to 2.10 above, to assess the location, depth, quality, and importance of the archaeological remains or deposits
- illustrative material will include a site plan locating the trenches, at a suitable scale, indicating National Grid, feature plans and sections, as appropriate, including illustration of at least one representative trench profile. Heights above OD will be given related to plans and sections
- bibliography of all sources used
- recommendations on the need or otherwise for any mitigation measures to offset the impact of the development on archaeological deposits.

In addition to the report, a short note would be prepared for publication in an appropriate local or national archaeological journal.

5.2 CONFIDENTIALITY

5.2.1 The report is designed as a document for the specific use of the Client, for the particular purpose as defined in this project design, and should be treated as such; it is not suitable for publication as an academic report, or otherwise without amendment or revision. Any

requirement to revise or reorder the material for submission or presentation to third parties or for any other explicit purpose can be fulfilled, but will require separate discussion and funding.

6. PROJECT MONITORING

6.1 Any proposed changes to this project design will be agreed with the Client and the Lancaster County Archaeologist. LUAU will arrange a preliminary meeting if required, and will inform the Lancaster County Archaeologist of the commencement of the project, by telephone, during the preceding week.

7. WORK TIMETABLE

The phases of work would comprise:

7.1 ***Stage 1 Evaluation trial trenching***

Four days would be required to undertake this element.

7.2 ***Stage 2 Evaluation trial trenching***

Four days would be required to undertake this element.

7.2 ***Post-excavation***

One day would be necessary to undertake the finds and excavation assessment.

7.3 ***Preparation of archive and report***

To be completed and submitted within four weeks following completion of all fieldwork

7.4 Site work could commence within two weeks of approval being given and access assured, and can be completed within two weeks, subject to no further constraints on access and working methods being imposed beyond the control of LUAU.

7.5 The final report will be completed within five weeks of completion of fieldwork. If required, an interim report can be submitted within one week of completion of fieldwork, providing sufficient information for planning purposes.

8. OUTLINE RESOURCES

8.1 **STAFFING**

8.1.1 The project will be under the management of **Jamie Quartermaine, BA, Surv Dip MIFA** (LUAU Project Manager), to whom all correspondence should be addressed.

8.1.2 The field director will be **Richard Heawood, BA, MIFA** (LUAU Project Officer). Mark Leah has carried out archaeological evaluations and excavations for LUAU at various locations across the North West, in both rural and urban locations. He has recently completed excavations on the site of the medieval leper hospital at St Nicholas Yard, Carlisle. Prior to his employment by LUAU, he was employed by the Norfolk Archaeological Unit and carried out excavation work across the county.

APPENDIX 2
SUMMARY CONTEXT LIST

Context	**Site sub-division**	**Category**	**Form**
100	Trench 1	Deposit	Concrete Surface
101	Trench 1	Deposit	Rubble/Make-up
102	Trench 1	Cut	Geotechnical Pit
103	Trench 1	Fill	Geotechnical Pit [102]
104	Trench 1	Deposit	Layer
105	Trench 1	Cut	Posthole
106	Trench 1	Fill	Posthole [105]
107	Trench 1	Cut	Ditch
108	Trench 1	Fill	Ditch [107]
109	Trench 1	Cut	for Wall [110]
110	Trench 1	Structure	north-south Wall
111	Trench 1	Fill	Cremation [112]
112	Trench 1	Cut	Cremation
113	Trench 1	Deposit	Burnt Material
114	Trench 1	Cut	Posthole
115	Trench 1	Fill	Posthole [114]
116	Trench 1	Fill	Cremation [112]
117	Trench 1	Fill	Stakehole [118]
118	Trench 1	Cut	Stakehole
119	Trench 3	Deposit	Layer
120	Not used		
121	Trench 1	Deposit	Geological
122	Trench 2	Deposit	Concrete
123	Trench 2	Deposit	Tarmac/clinker
124	Trench 2	Deposit	Rubble/Make-up
125	Trench 2	Deposit	Layer
126	Trench 2	Structure	north-south Wall
127	Trench 2	Fill	Drain [128]

128	Trench 2	Cut	Drain
129	Trench 2	Cut	Cellar/support?
130	Trench 2	Fill	Cellar/support? [129]
131	Trench 2	Cut	Cellar
132	Trench 2	Fill	Cellar [131]
133	Trench 2	Cut	for Wall [126]
134	Trench 2	Deposit	Geological
135	Trench 2	Deposit	Geological
136	Trench 2	Cut	for Wall [137]
137	Trench 2	Structure	east-west Wall
138	Trench 3	Fill	Linear Feature [139]
139	Trench 3	Cut	Linear
140	Trench 3	Fill	Pit [141]
141	Trench 3	Cut	Pit
142	Trench 3	Fill	Linear Feature [143]
143	Trench 3	Cut	Linear Feature
144	Not used		
145	Trench 3	Fill	Pit [146]
146	Trench 3	Cut	Pit
147	Trench 3	Cut	Structural support
148	Trench 3	Fill	Structural support [147]
149	Trench 3	Fill	Pipe Trench [150]
150	Trench 3	Cut	Pipe Trench
151	Trench 3	Deposit	Geological
152	Trench 3	Fill	Pit [146]
153	Trench 3	Fill	Pit [146]
154	Trench 3	Structure	Wall
155	Trench 3	Fill	Pit [156]
156	Trench 3	Cut	Pit
157	Trench 4	Fill	Foundation [159]

158	Trench 4	Structure	Foundation
159	Trench 4	Cut	Foundation for [158]
160	Trench 4	Fill	Pit [162]
161	Trench 4	Fill	Pit [162]
162	Trench 4	Cut	Pit
163	Trench 4	Fill	Linear Feature [164]
164	Trench 4	Cut	Linear Feature
165	Trench 4	Fill	Linear Feature [166]
166	Trench 4	Cut	Linear Feature
167	Trench 6	Deposit	Rubble/Make up
168	Trench 6	Fill	Pipe Trench [169]
169	Trench 6	Cut	Pipe Trench
170	Trench 6	Deposit	Sterile Makeup
171	Trench 6	Fill	Pipe Trench [172]
172	Trench 6	Cut	Pipe Trench
173	Trench 6	Deposit	Layer
174	Trench 6	Fill	Linear [175]
175	Trench 6	Cut	Linear
176	Trench 6	Fill	Foundation [177]
177	Trench 6	Cut	Foundation
178	Trench 4	Fill	Stanchion base [179]
179	Trench 4	Cut	Stanchion base
180	Trench 6	Deposit	Geological
181	Trench 6	Deposit	Rubble
182	Trench 6	Deposit	Rubble
183	Trench 6	Cut	Borehole ?
184	Trench 6	Fill	Borehole ? [183]
185	Trench 6	Deposit	Layer
186	Trench 5	Structure	Floor
187	Trench 5	Structure	north-south Wall

188	Trench 5	Cut	for Wall [188]
189	Trench 5	Fill	Cellar Backfill [191]
190	Trench 5	Fill	Clinker
191	Trench 5	Structure	Cellar Wall
192	Trench 5	Fill	Cellar Backfill [191]
193	Trench 4	Deposit	Layer
194	Trench 4	Structure	Modern Services
195	Trench 4	Structure	Floor/Wall
196	Trench 5	Deposit	Sand / Geological ?

APPENDIX 3
FINDS LIST

Object No.	**Context No.**	**Quantity**	**Material**	**Description**
1	111	1	Iron	Nail
2	111	40 litres	Sample	Soil and Cremated Bone
3	116	10 litres	Sample	Soil and Cremated Bone
4	104	5	Ceramics	Romano-British
5	not used			
6	104	1	Leather ?	
7	138	7	Iron	Object
8	116	4	Bone	Cremated
9	138	2	Clay Pipe	Post-Med
10	111	16	Bone	Cremated
11	138	1	Iron	Object
12	138	2	Bone	Animal
13	138	1	Clay Pipe	Post-Med
14	138	4	Ceramics	Post-Med
15	111	170+	Bone	Cremated
16	153	4	Clay Pipe	Post-Med
17	153	3	Ceramics	Post-Med
18	142	5	Fired Clay	Tile/Brick
19	145	3	Bone	Animal
20	145	3	Glass	Post-Med
21	145	10	Clay Pipe	Post-Med
22	145	6	Ceramics	Romano-British, Post-Med
23	111	3	Bone	Cremated
24	111	1	Iron	Nail
25	111	1	Ceramics	Romano-British
26	101	1	Iron	Nail

27	157	4	Ceramics	Post-Med
28	163	4	Ceramics	Post-Med
29	Unstrat	10	Ceramics	Post-Med
30	Unstrat	1	Clay Pipe	Post-Med
31	Unstrat	1	Glass	Post-Med
32	165	1	Iron	Nail
33	165	3	Ceramics	Post-Med
34	173	8	Ceramics	Medieval, Post-Med
35	173	1	Clay Pipe	Post-Med
36	160	7	Ceramics	Post-Med

APPENDIX 4
CREMATED BONE - CONTEXTS [111] AND [116]

Element / Species	Human	Pig	Sheep/ Goat/Roe Deer	Large Mammal	Medium Mammal	Unidentified
[111]						
Skull fragments					7	
Mandible					3	
Vertebra				1		
Rib					4	
Femur					1	
Tibia		1	1			
Astragalus			1			
Metacarpal			1			
Phalanx	1					
Unidentified				3	40	338
[116]						
Unidentified					1	11
Total	**1**	**1**	**3**	**4**	**56**	**351**

ILLUSTRATIONS

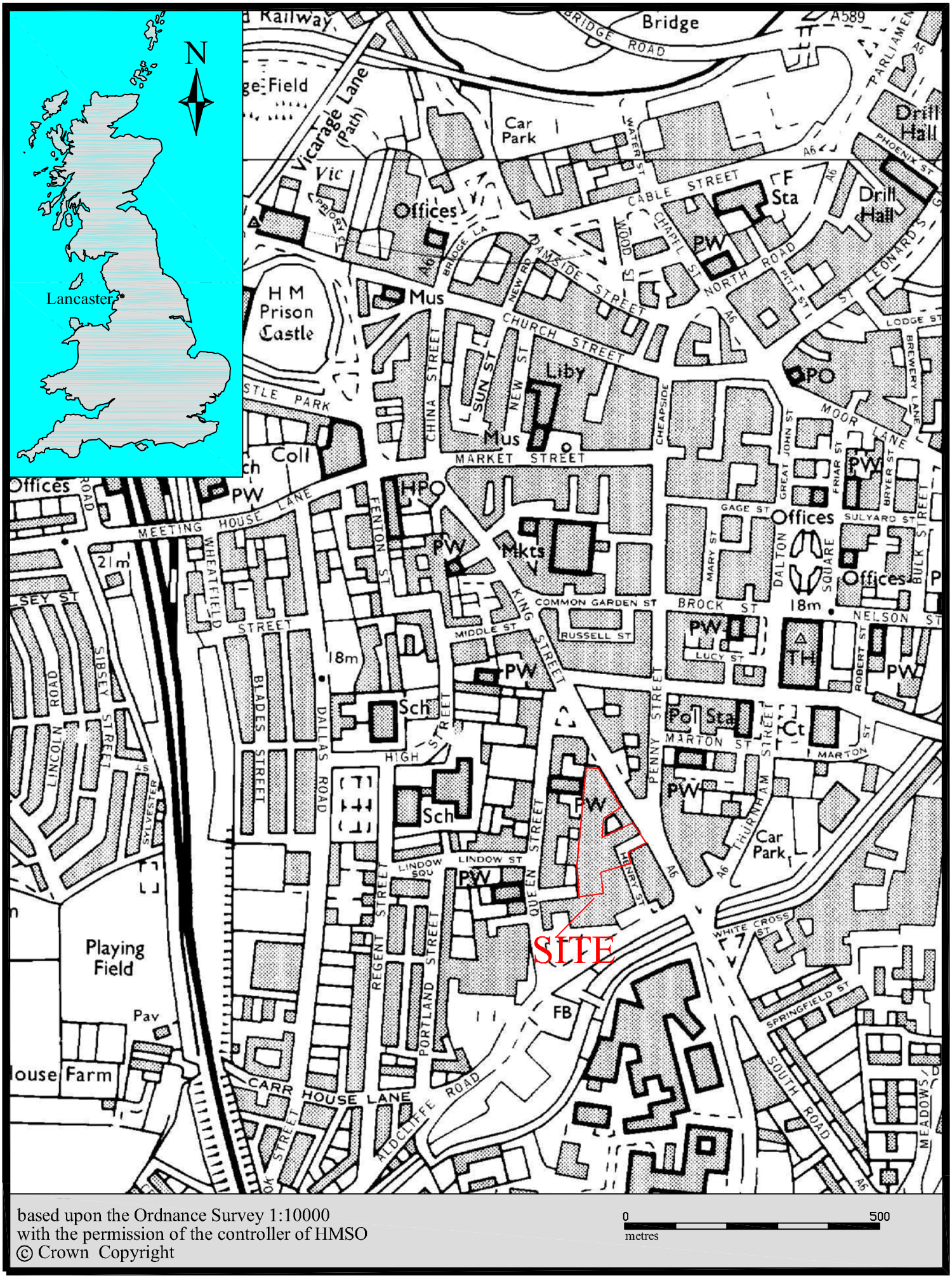


Fig 1: Streamline Garage Location Map

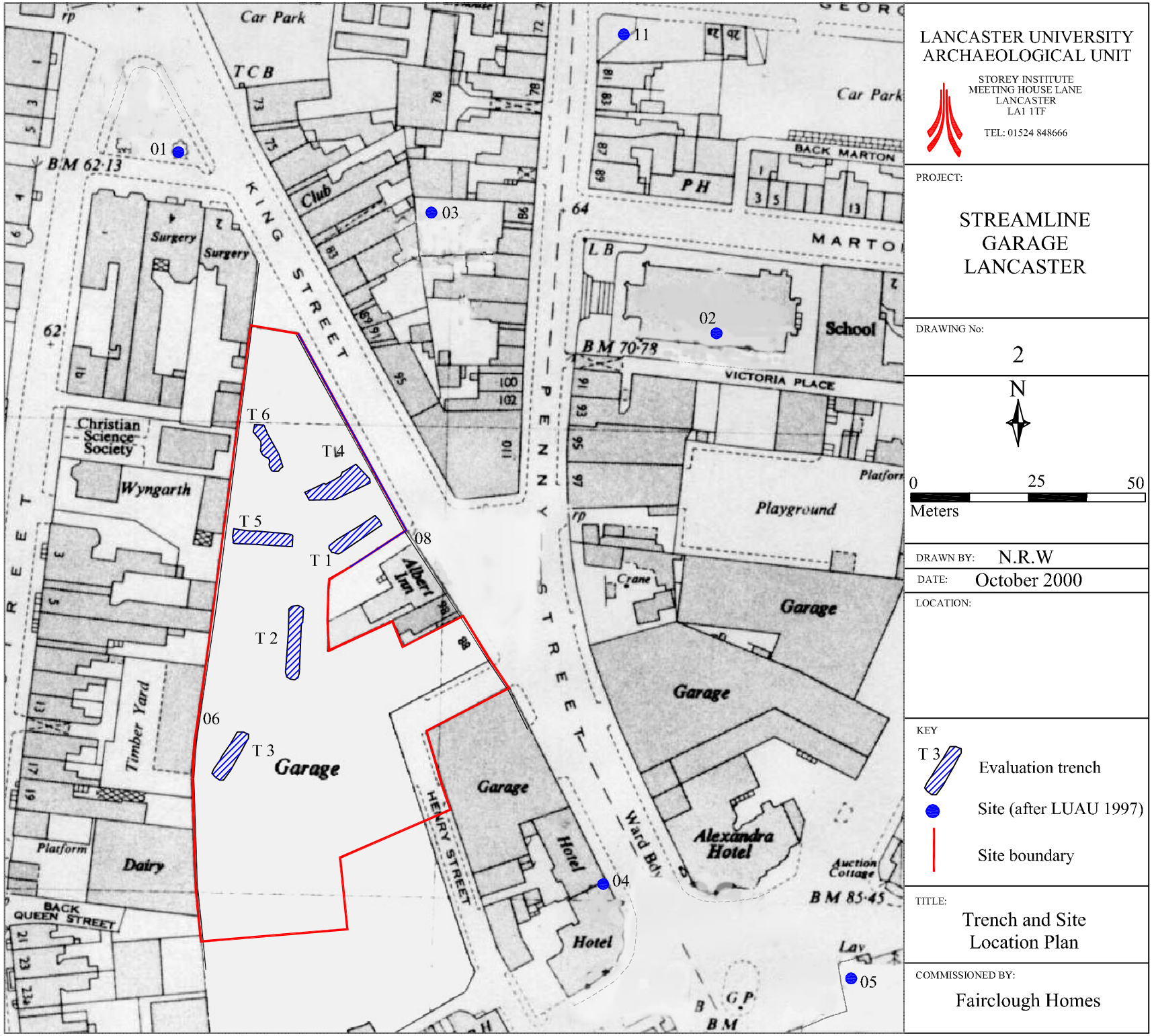
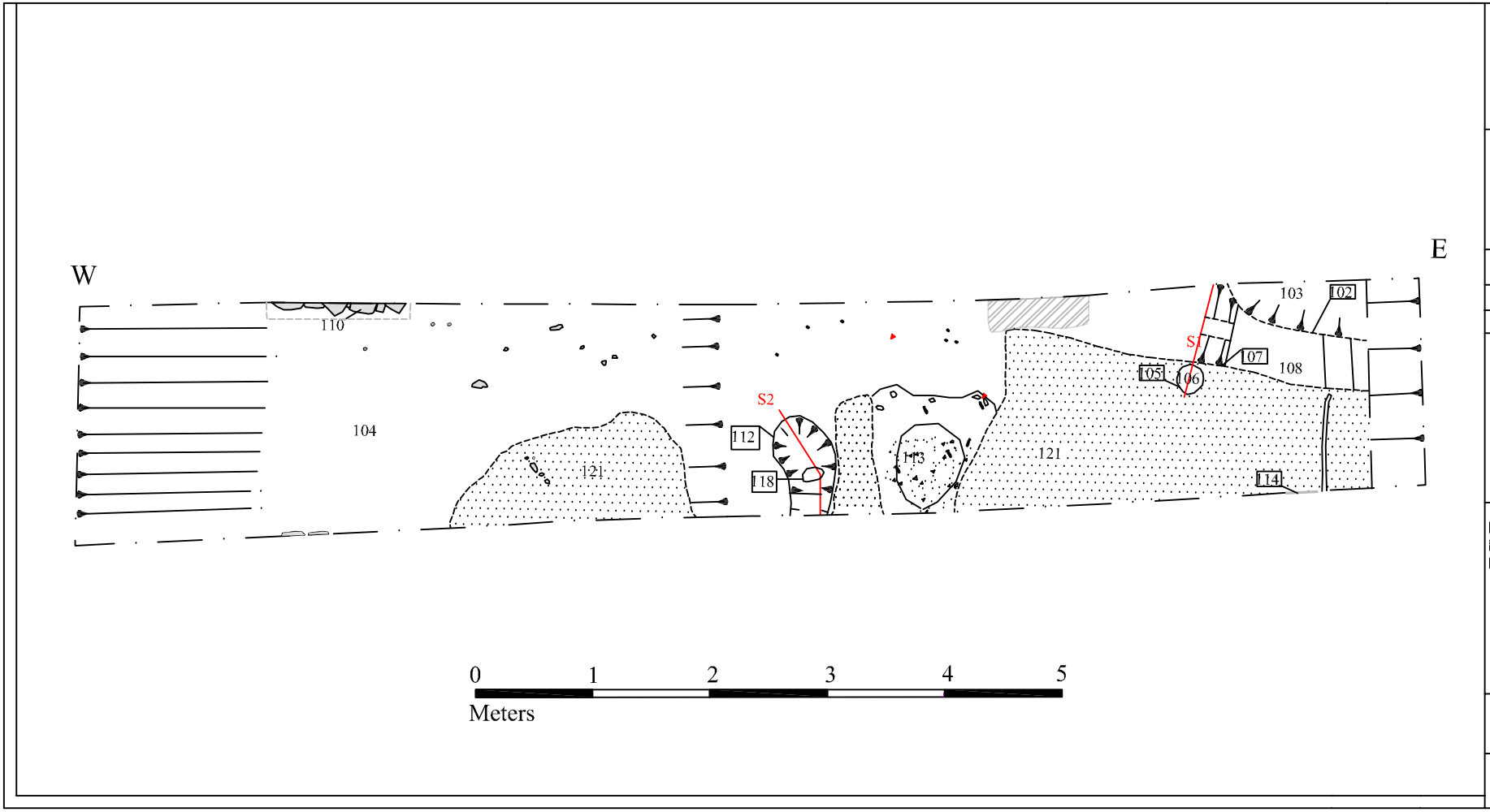


Fig 2: Trench and Site Location Plan



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LANCASTER
LA1 1TF

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PROJECT:

STREAMLINE GARAGE, LANCASTER

DRAWING No: Fig 3

DRAWN BY: V.H / N.R.W

DATE: October 2000

LOCATION:

N

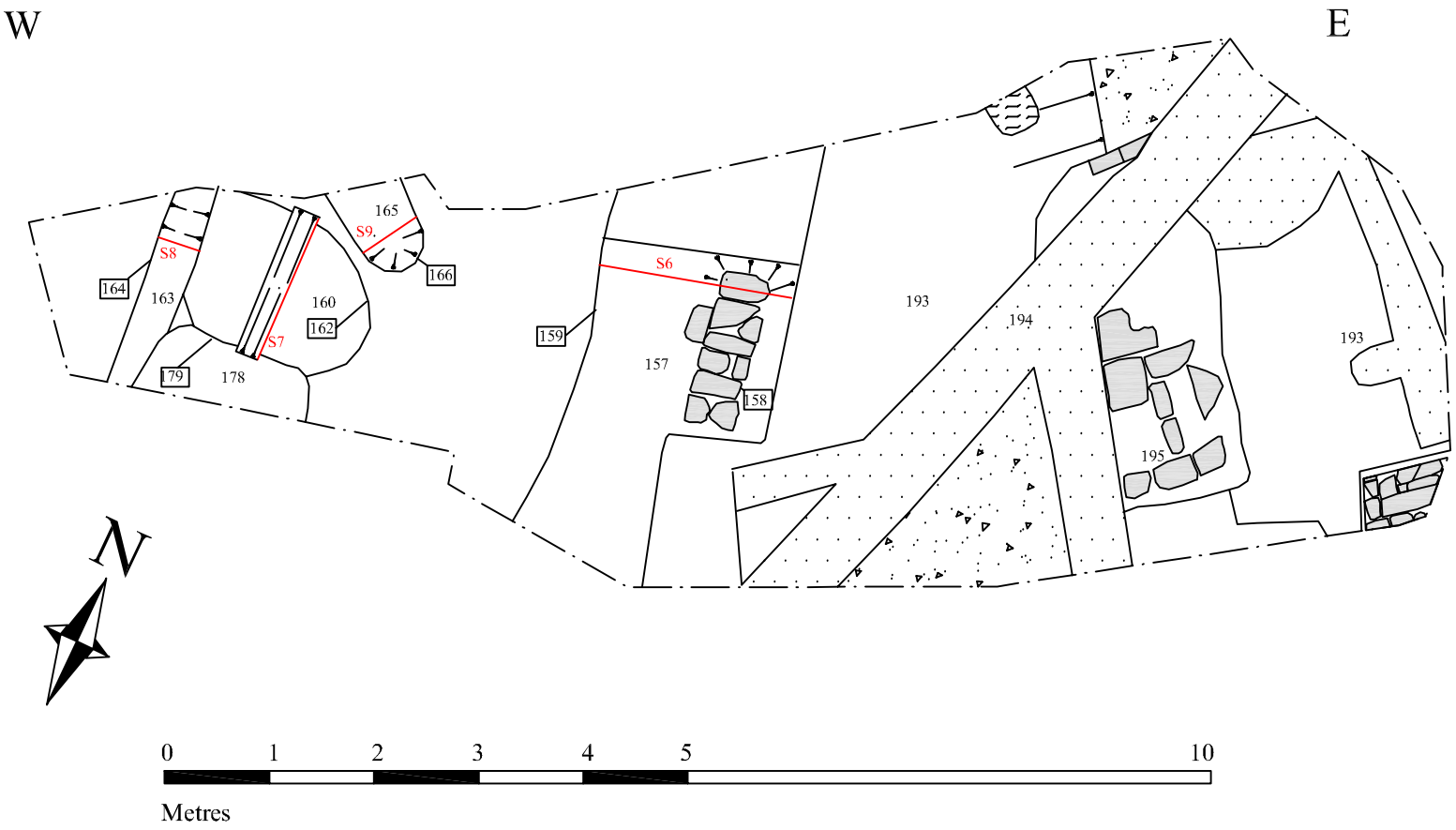
KEY

- Sand
- Concrete
- Charcoal flecks
- Burnt bone
- Stone
- Limit of excavation
- Section

TITLE: Trench 1 Plan

COMMISSIONED BY: Fairclough Homes

Fig 3: Trench 1 Plan



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PROJECT:
STREAMLINE GARAGE, LANCASTER

DRAWING No:
Fig 4

DRAWN BY: A.G.B / N.W

DATE: October 2000

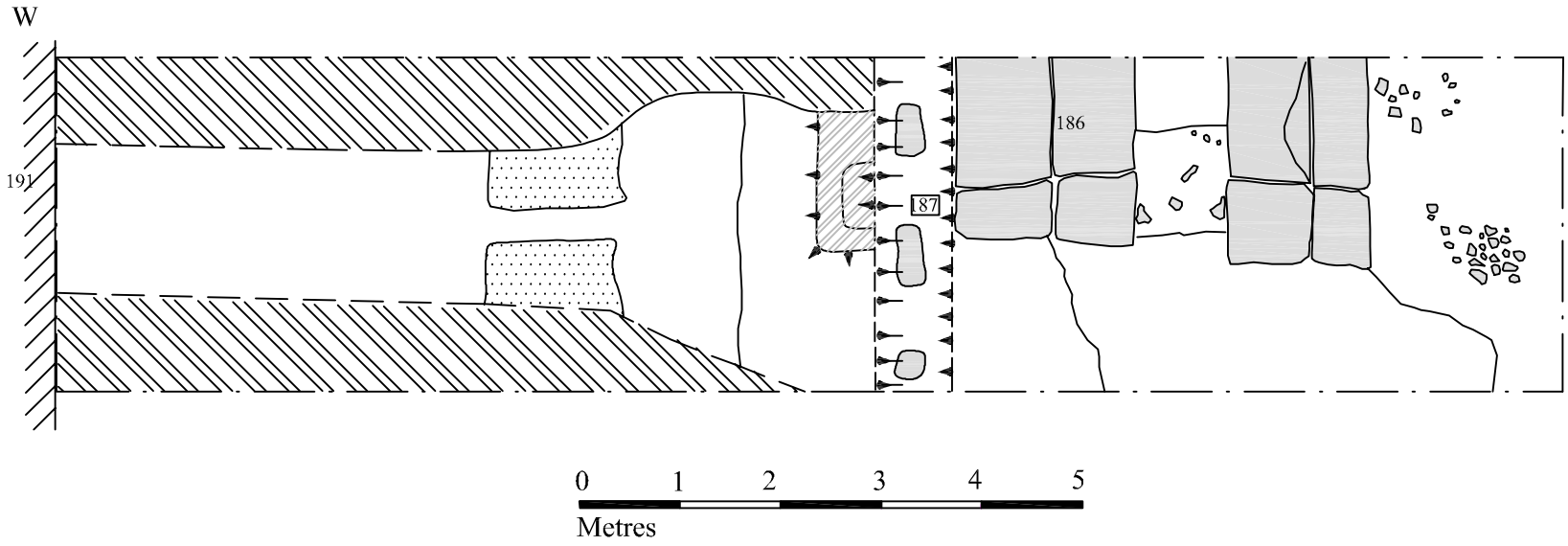
LOCATION:

KEY
- Unexcavated
- Modern pipe trench
- Sandstone slab
- Modern intrusion
- Limit of excavation
- Section

TITLE:
Trench 4 plan

COMMISSIONED BY:
Fairclough Homes

Fig 4: Trench 4 Plan



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PROJECT:

STREAMLINE GARAGE LANCASTER

DRAWING No: 5

DRAWN BY: V.H / N.R.W

DATE: October 2000

LOCATION:

N

KEY

- Sand
- Concrete
- Limit of excavation
- Sandstone
- Stepped in

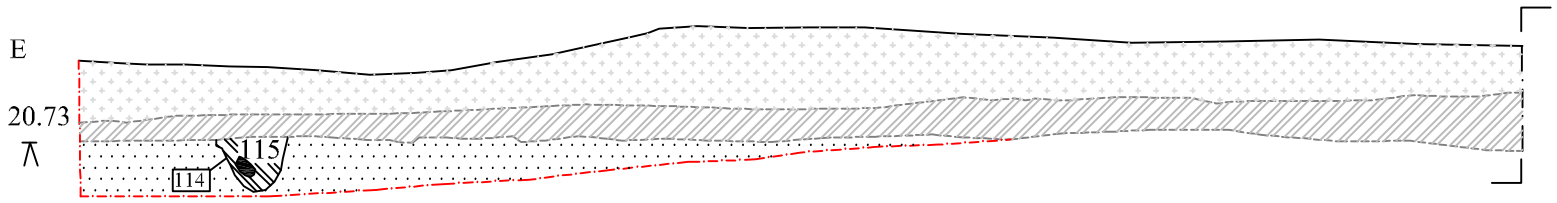
TITLE:

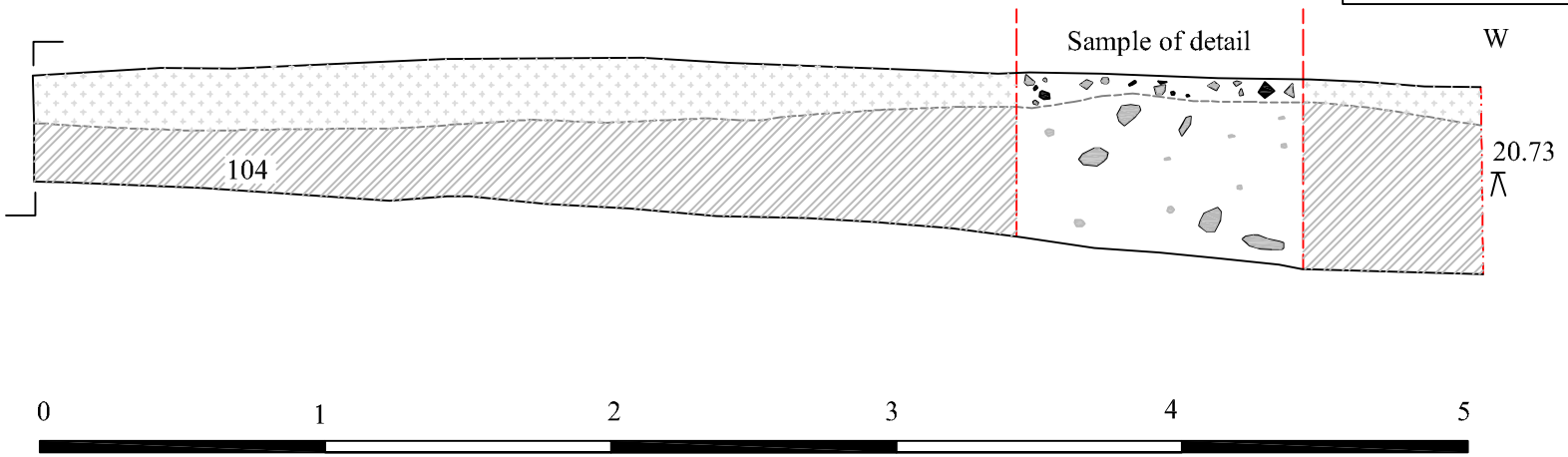
Trench 5 Plan

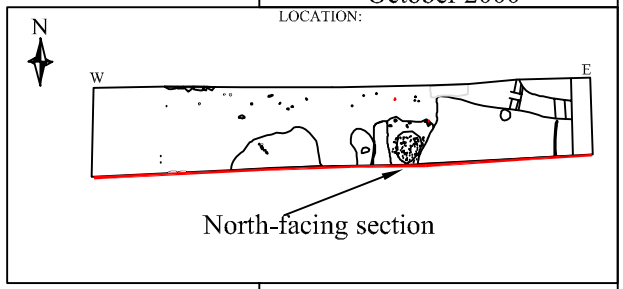
COMMISSIONED BY:

Fairclough Homes

Fig 5: Trench 5 Plan







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PROJECT:

STREAMLINE GARAGE, LANCASTER

DRAWING No: 6

DRAWN BY: A.G.B / N.W

DATE: October 2000

LOCATION:

KEY

- Limit of excavation
- Sandstone
- Mortar fragments
- Overburden
- Sandy silt
- Natural sand

TITLE:

North-facing section
Trench 1

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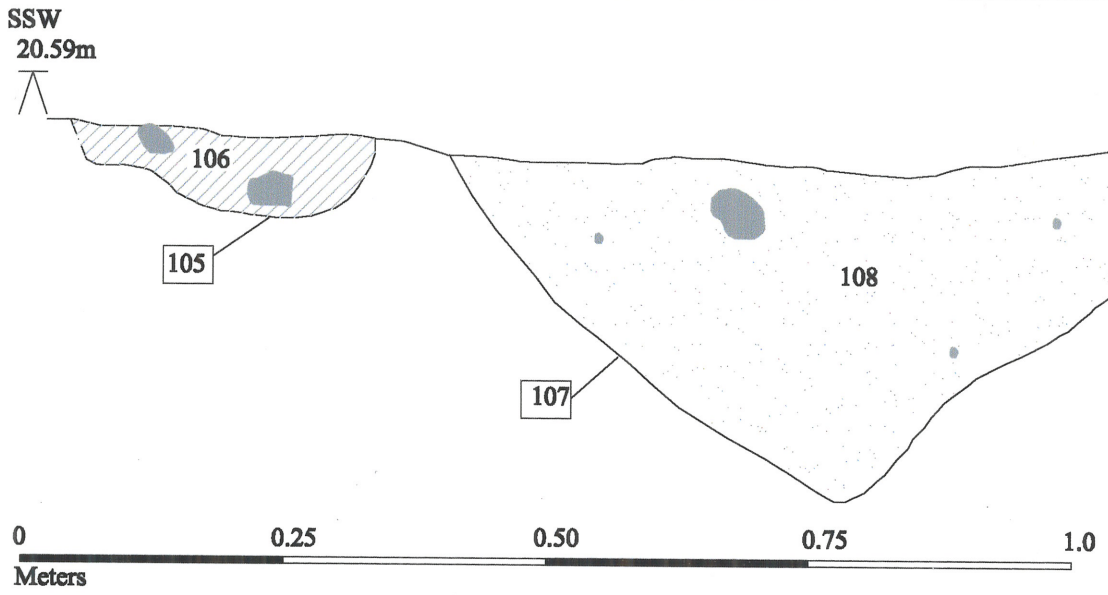
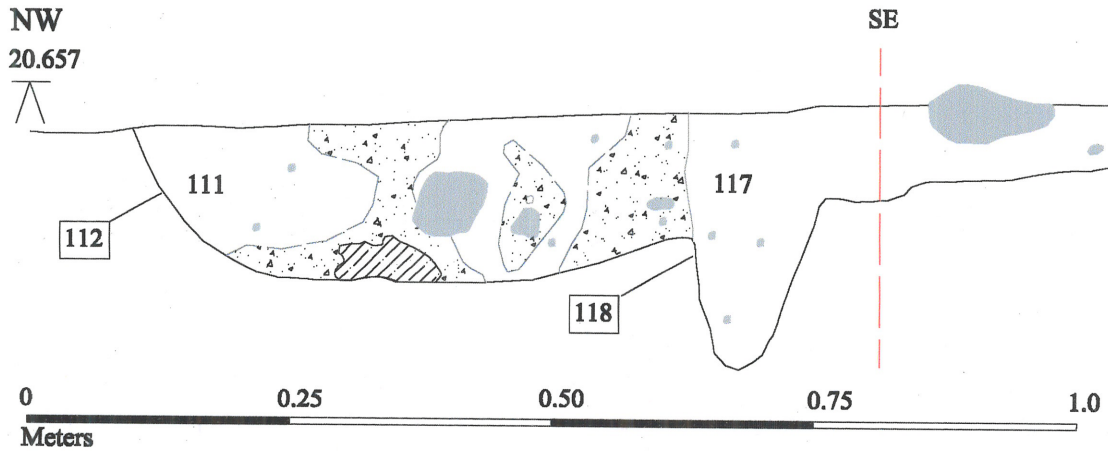
Fig 6: North-facing Section Trench 1



East-facing section of ditch [107] and posthole [105]



South-west-facing section through cremation [112] and stake hole [118]

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PROJECT:

STREAMLINE GARAGE
LANCASTER

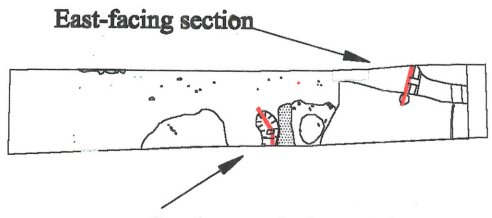
DRAWING No:

7

DRAWN BY: V.H/ A.G.B/N.W

DATE: October 2000

LOCATION:



KEY

- Sandstone
- Posthole fill
- Pit fill
- Burnt debris/charcoal
- Burnt bone
- Limit of excavation

TITLE:

Sections: Trench 1

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Fig 7: East- and South-west-facing sections of Trench 1

PLATES

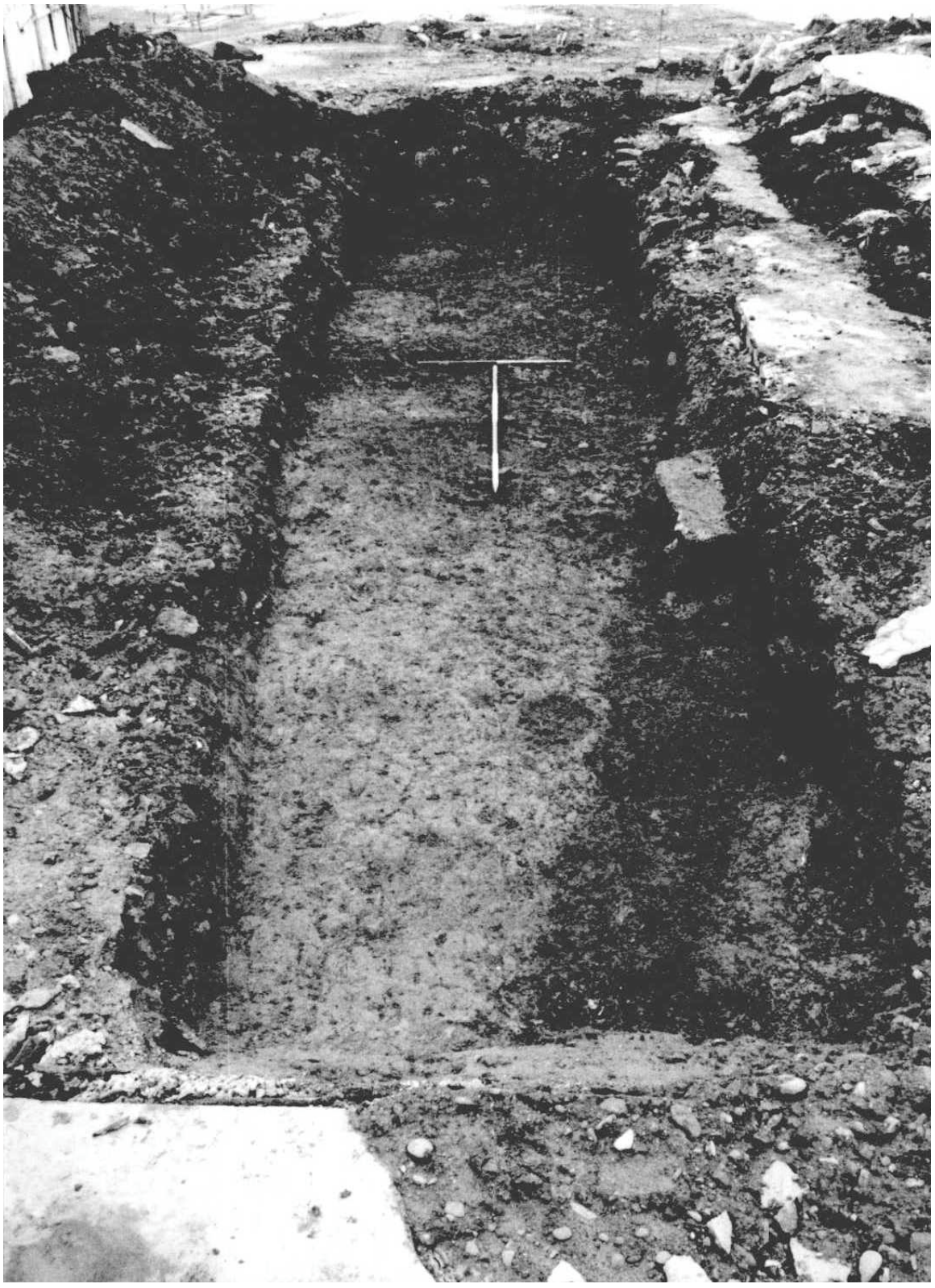

Plate 1: Trench 1 pre-excavation, facing west

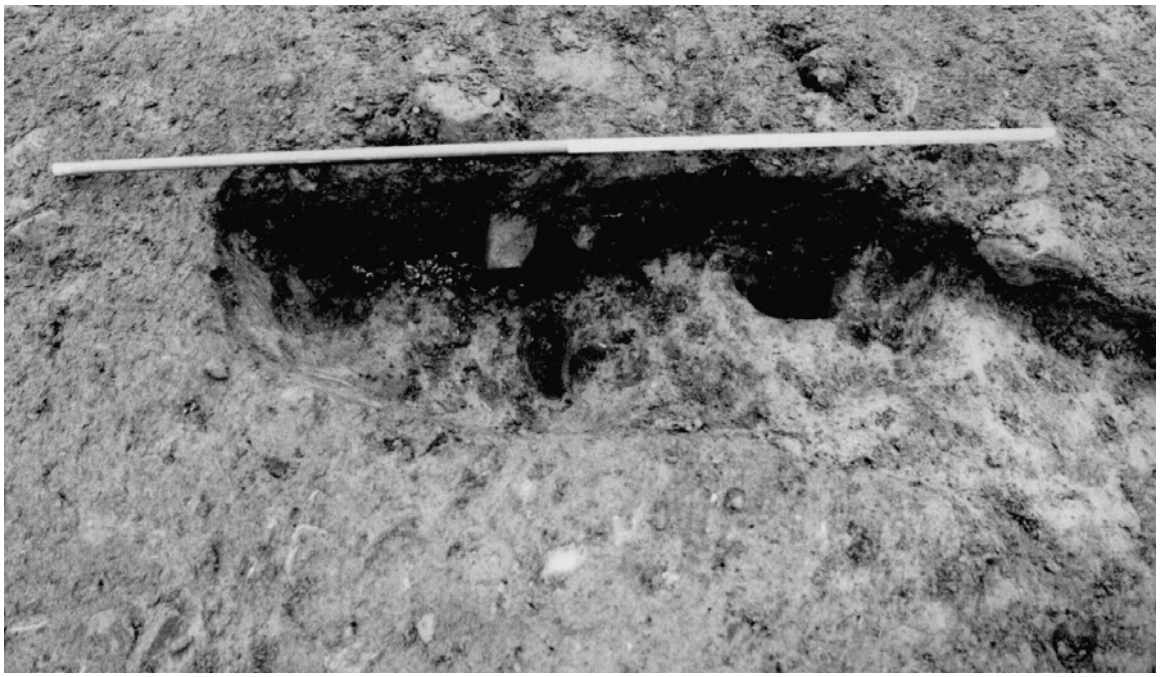

Plate 2: West-facing section through cremation and stakehole

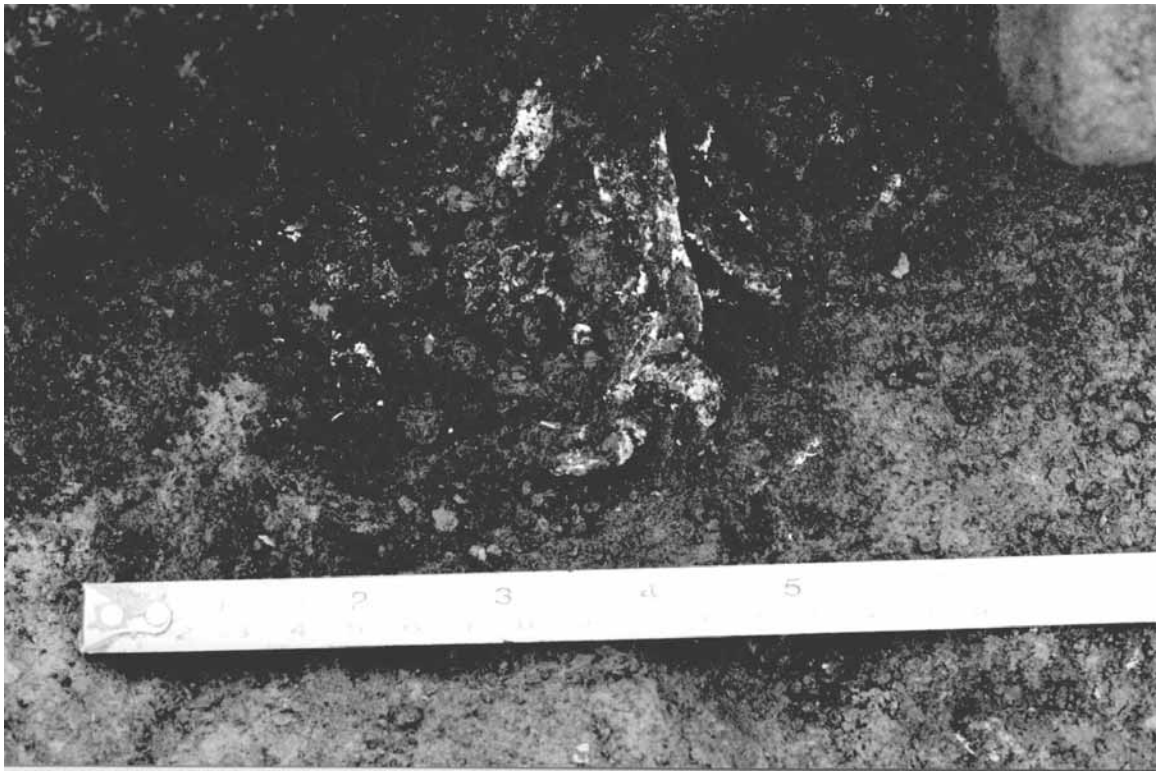

Plate 3: Detail of in situ burnt bone in cremation

Plate 4: General area view, looking south