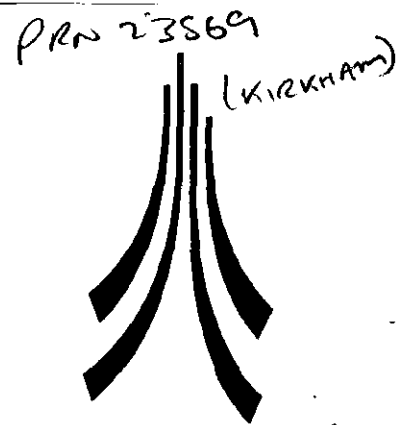


LANCASTER
UNIVERSITY
ARCHAEOLOGICAL
UNIT



July 1998

14 MYRTLE DRIVE, KIRKHAM
LANCASHIRE

Archaeological Evaluation

commissioned by:

Mr R Benson and English Heritage

14 Myrtle Drive, Kirkham
Lancashire

Archaeological Evaluation

Report no 1997-8/(095)/7815

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July 1998

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SUMMARY

The Lancaster University Archaeological Unit (LUAU) was commissioned by Mr R Benson to undertake an archaeological evaluation within the garden of 14 Myrtle Drive, Kirkham (NGR SD433319) where it was proposed to erect a new dwelling. The evaluation involved the excavation of four small (3m x 1m) trenches within the garden and was funded by English Heritage. The work commenced in the week beginning 29th June 1998 and continued into the following week.

Documentary research combined with recent archaeological excavation has suggested that the north-east corner of a second century Roman fort probably lies some 50-80m to the west of the study area. If this hypothesis is correct, and the fort is of the traditional playing card shape, then the eastern gate of the fort and its associated road linking the fort with Ribchester should lie just to the south of 14 Myrtle Drive. Several Roman artefacts including pottery, metalwork and leather have been recovered in recent years from the area around Myrtle Drive.

The evaluation demonstrated that significant Roman stratigraphy survived within the study area. All of the Roman features were cut into the subsoil and were sealed by a disturbed layer of probable plough soil. Preliminary indications suggest that many of the features were second century in date and probably relate to the construction of timber buildings as part of an extramural settlement, which probably developed alongside the road which extended out of the east gate of the fort linking it with Ribchester.

Archaeologically, the preferred option would be to preserve the identified Roman stratigraphy *in-situ*, although it is recognised that such action will probably not be possible within the constraints of the development. In our view, the deposits are not significant enough to require statutory scheduling of the site. However, it is considered that they are of sufficient quality to require adequate recording prior to their destruction, especially in view of the fact that the entire area around the site has already been developed, almost certainly damaging the surrounding stratigraphy, therefore limiting the recovery of further archaeological information in this area. Such recording could only be achieved through a structured programme of controlled archaeological excavation.

Such a programme of work need not be a complex operation. It is recommended that the footprint of the proposed dwelling and associated service trenches should be stripped mechanically under controlled archaeological supervision down to the natural subsoil surface, as no archaeological features appear to survive above this level. Such an operation would be relatively rapid, and would almost certainly need to be undertaken within the building programme as a matter of course. The evaluation programme suggests that a depth of between 0.30m and 0.60m of material would need to be removed by such an operation. Archaeological work would then be relatively uncomplicated and would concentrate on cleaning manually the natural subsoil surface and excavating and recording all archaeological features cut into it.

Any further programme of archaeological work undertaken on the site should be undertaken in full consultation with both LCAS and English Heritage.

ACKNOWLEDGEMENTS

Thanks go to Mr and Mrs Benson for allowing us to use their on-site facilities. Special thanks are given to Louise Connell (Archaeological Curator, Harris Museum, Preston), Ben Edwards (retired County Archaeologist) and Stephen Ball (Lancashire Museum) for providing much useful information relating to the project. Thanks also are offered to Peter Iles (Lancashire Sites and Monuments Officer) and Peter McCrone (Lancashire Archaeological Development and Control Officer).

The excavation was undertaken by Nick Hair, Andrea Scott, Graham Suggett, Rachel Knoblett, and Chris Bambury. On-site surveying was undertaken by Andrea Scott. The finds were processed on site by Andrea Scott and assessed by Christine Howard-Davis. This report was compiled by Nick Hair and was edited by Alan Lupton, who also acted as project manager. Illustrations are by Nick Hair.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 Lancaster University Archaeological Unit (LUAU) was commissioned by Mr R Benson to undertake an archaeological evaluation in the garden of 14 Myrtle Drive, Kirkham (NGR SD433319).
- 1.1.2 An application for planning permission to erect a new dwelling at 14 Myrtle Drive, Kirkham, was submitted to Fylde Borough Council in March 1997. Following discussions with the Lancashire County Archaeological Service (LCAS), permission was granted conditional on "the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the Planning Authority" (PPG 16 para. 30) being carried out at the site in advance of the development. The evaluation was funded by English Heritage.
- 1.1.3 LCAS provided a brief for an archaeological evaluation on the development site (*Appendix 1*). LUAU produced a project design detailing the methodology and aims and objectives of the evaluation programme, which was submitted to English Heritage for approval in February 1998. Following comments, the design was amended slightly and re-submitted in May 1998, acceptance being given in June 1998 (*Appendix 2*). The evaluation was undertaken in the week beginning 29th June 1998 and continued into the following week. The work proceeded in accordance with LUAU's project design and was monitored by Mr Peter McCrone of LCAS.
- 1.1.4 It should be noted that this report is not an assessment report in the terms defined by English Heritage in *Management of Archaeological Projects*, 2nd Edition (English Heritage 1991), but has been compiled in accordance with Section 7.5 of the LCAS brief. It is formatted in LUAU's in-house style for a standard commercial archaeological project.
- 1.1.5 This report sets out the results of the evaluation. A description of the findings is followed by a discussion, setting the results in their wider context. Details of the contexts assigned and the finds recovered are presented in Appendices 3 and 4.

2. METHODOLOGY

2.1 DESK-BASED METHODOLOGY

- 2.1.1 The project design (*Appendix 2*) provided for a rapid desk-based assessment utilising known sources of information. A visit was made to the Harris Museum, Preston and the Lancashire Museum, Preston, and a rapid assessment was made of the material within their Kirkham archives. In addition, a visit was also made to the Lancashire County Record Office, Preston, where cartographic material relating to the study area was reviewed, and information was obtained from the Lancashire Sites and Monuments Officer. These sources were complemented by reference to members of LUAU's staff who had worked in the Dowbridge area of Kirkham, and to LUAU's existing and forthcoming publications on the recent archaeological work undertaken in the area (Buxton and Shotter 1996; Buxton and Howard-Davis forthcoming).

2.2 FIELDWORK METHODOLOGY

- 2.2.1 The fieldwork was carried out in accordance with the agreed method statement detailed in the project design and recorded in the prescribed manner. The evaluation involved the excavation of four 3m x 1m trenches within the garden of 14 Myrtle Drive.
- 2.2.2 All of the trenches were excavated manually and the deposits removed in the correct stratigraphic sequence. Selected features were sample excavated, and extensive layers, where possible, were sampled by partial rather than complete removal. In terms of the vertical stratigraphy, maximum information retrieval was achieved through the examination of sections of cut features. The results of the evaluation were recorded using a system adapted from that used by the Central Archaeology Service of English Heritage. All artefacts and ecofacts were recorded using the same system of *pro forma* record sheets, and will continue to be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.
- 2.2.3 Finds material was recovered for assessment and dating. Several contexts (mainly Roman slots cut into the subsoil) were deemed suitable for palaeoenvironmental assessment, and 30 litre bulk samples were taken. These have been processed, but as yet have not been assessed.
- 2.2.4 In accordance with the project design the fieldwork was closely monitored by Mr P McCrone (LCAS).

2.3 ARCHIVE

- 2.3.1 An archive has been compiled in accordance with the project design. The archive includes *pro-forma* field recording sheets, a photographic archive, a digital trench plan of the site tied into the surrounding topography, and hand drawn large scale plans and sections (1:20, and 1:10 scale) of all significant features.
- 2.3.2 The paper archive will be deposited with the Lancashire Record Office and the material archive with the Museum of Lancashire, both in Preston. A copy of the report, together with an index to the archive, will be deposited with LCAS for inclusion in the Lancashire SMR.

3. BACKGROUND

3.1 SITE LOCATION, GEOLOGY AND TOPOGRAPHY

- 3.1.1 The proposed development lies within the modern town of Kirkham at NGR SD433319 and covers an area of approximately 350 square metres. The proposed development area is currently under grass and is part of the garden of 14 Myrtle Drive, which lies in the Dowbridge area of town, formerly a hamlet to the east of medieval Kirkham.
- 3.1.2 Kirkham lies on a low glacial moraine which runs through the Fylde westwards from Preston to terminate at Blackpool. The recently excavated stone Roman Fort at Dowbridge lies less than 100m to the south-west of the study area and straddles one of the highest points of this moraine.
- 3.1.3 14 Myrtle Drive is situated on the northern slope of the moraine and the garden slopes downwards from south-west to north-east towards the Dow Brook. This stream, which flows from north to south, breaches the glacial moraine to the east of the site before flowing into the river Ribble.

3.2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.2.1 The North West Wetlands Survey, undertaken by LUAU and funded by English Heritage, has resulted in a detailed study of the prehistoric and later archaeology and environment of the Fylde (Middleton *et al* 1995). This area saw relatively intensive activity from the Mesolithic to the Bronze Age, with a number of find spots and larger sites recorded frequently on sand ridges. Palaeoenvironmental evidence from the survey has shown that there is some evidence for clearance during the Bronze Age, although cereal cultivation does not appear on any great scale until the late Iron Age/Roman period. The lack of cereal cultivation during the later prehistoric period perhaps suggests a reliance on a shifting pastoralist regime (Middleton *et al* 1995).
- 3.2.2 Climatic deterioration towards the end of the Bronze Age appears to have led to an apparent reduction in the density of settlement in the area. Iron Age sites and even chance finds in North Lancashire are very rare, although palaeoenvironmental investigations indicate continued land clearance and the beginnings of cereal cultivation during this period. Few permanent Iron Age settlements probably existed within the Kirkham area when the Romans arrived (Middleton *et al* 1995).
- 3.2.3 Recent excavations undertaken by LUAU at Dowbridge Close, now Roman Way, just to the south of the study area, suggest that the earliest Roman activity at Kirkham is represented by a series of temporary camps defined by relatively insubstantial, successive and re-cut military ditches (Buxton and Howard-Davis forthcoming). None of these camps seems to have been in use

for a long period of time, although the presence of some internal features suggests that some periods of occupation were long enough to warrant semi-permanent structures (Buxton and Shotter 1996). The southern limits of these marching camps lie to the south of the study area, but at present their northern extent is unknown. The construction of a small ditched and defended fortlet on the top of the hill enclosing what might be a tower may be associated with these temporary camps. This fortlet lies to the south and west of the study area.

- 3.2.4 Artefactual evidence suggests that the earliest Roman activity at Kirkham was Agricolan in date (cAD78). Environmental research and sea level studies (Middleton *et al* 1995; Tooley 1980) suggest that the Fylde was inhospitable during the Roman period, much of it probably covered in raised bogs, with the Fylde coastline lying much closer to Kirkham than it does today. The tower within the fortlet may have functioned as a beacon or lighthouse, and it is possible that the first forts or marching camps were used to accommodate troops landed from the sea en-route to the main armies of Agricola's northern campaigns (Buxton and Shotter 1996). Small Roman vessels could have easily been beached on the shoreline around Kirkham without the need for complex handling facilities, thus explaining Roman interest in this otherwise inhospitable location. Kirkham would be about a day's sail from the Dee at Chester, and the Lune at Lancaster, making it an excellent staging point for coast hopping.
- 3.2.5 A conventional stone fort was constructed at Kirkham in the early second century AD. The recent excavations at Dowbridge Close revealed the south-eastern defences of this structure, which seems to have had a relatively short period of occupation (Buxton and Howard-Davis forthcoming). By extending the line of these defences it is possible to predict that the north-eastern corner of the fort lay close to the western end of Myrtle Drive. If this were the case, 14 Myrtle Drive is probably located some 50m-80m east of the north-eastern corner of the fort. The excavations at Dowbridge Close suggested that the areas immediately beyond the fort were cobbled, perhaps creating an effective *cordon sanitaire* (Buxton and Shotter 1996, 88).
- 3.2.6 Kirkham was linked with the other forts in the Ribble valley (Walton-le-Dale and Ribchester) by a road running along the north bank of the river. Indeed a comparison between second century activity at Kirkham and Ribchester suggests that their fates were closely linked (Buxton and Shotter 1996). During the second century the pacification and stabilisation of the northern frontier led to a reduction in military activity in the area, and the evidence from Kirkham suggests that the fort was abandoned in cAD160, and, unlike others in the hinterland of Hadrian's Wall, was never reoccupied.

3.3 SITES AND MONUMENTS RECORD

- 3.3.1 The Lancashire Sites and Monuments Record provided a list of sites in close proximity to the study area, which are given below in SMR order; their locations are illustrated on Figure 2.

SMR No.	NGR	Site Name	Site Type	Period
73	SD43743191	Dowbridge	Roman fort	Roman
129	SD43383195	New England Spring	Roman coins and footings	Roman
130	SD43303182	Dowbridge Road	Roman and medieval pot sherds	Roman/Medieval
271	SD43333202	New England Spring	Roman shield boss	Roman
1371	SD42903209	Preston Street	Site of horse corn mil	Medieval
1372	SD43133199	Carr Hill	Site of medieval windmill	Medieval
1374	SD43603179	Dowbridge	Site of medieval bridge	Medieval
1356	SD43103190	Dowbridge	Roman fort	Roman
1375	SD43703180	Dowbridge Cross	Site of medieval cross	Medieval
1380	SD43603180	Dow Bridge	Roman pottery	Roman
1381	SD43183195	Myrtle Drive	Samian cup	Roman
2049	SD43363189	Myrtle Drive	Roman samian ware and amphora	Roman
2050	SD43103200	Carr Hill	Roman pottery	Roman
2051	SD43203210	Carr Hill	Roman leather shoes and waste	Roman
2052	SD43263203	Pennine View	Roman ceramic lamp	Roman
16930	SD43053207	Carr Lane	Roman copper alloy bracelet	Roman

3.3.2 Figure 2 clearly illustrates that several Roman artefacts have been recovered from in and around the Myrtle Drive area. These comprise pottery, including coarse wares, mortaria, samian, and amphora, together with fragments of a lamp. A Roman shield boss, coins, and possible footings of a building were identified close to the New England Spring, just to the north and east of the study area.

3.4 PREVIOUS ARCHAEOLOGICAL RESEARCH

3.4.1 Ben Edwards (retired County Archaeologist) provided LUAU with a detailed summary of previous archaeological work undertaken in and around Kirkham, for an earlier evaluation in the area (in Hodgkinson 1993). This can be summarised as follows:

3.4.2 Casual finds include: the shield boss, found in c1800, near the Dow Brook, east of the study area, and other finds made at about the same time; evidence of Roman burials found on the opposite bank of the Dow Brook; what was

almost certainly a tombstone of the 'cavalryman and barbarian' type, similar to one at Ribchester, seen and destroyed when the parish church was rebuilt in 1844; a coin hoard in a small samian jar found during the construction of Kirkgate in 1853; much pottery, leather and other material observed by local enthusiasts in the late 1950s and early 1960s in the area of Pennine View and Myrtle Drive; indications of a rampart seen about the same time, when the RAF married quarters were built (formerly Dowbridge Close now Roman Way); a complete jar in orange fabric recovered from the Dow Brook to the west of Carr Lane in 1971.

- 3.4.3 Several excavations have been undertaken in Kirkham. In the 1930s Mr Burrows of Poulton-le-Fylde excavated west of the Dow Brook and found Roman material. He was, however, at the time much more concerned to discredit the existence of the Roman road from Ribchester into the Fylde via Kirkham than to prove the existence of a fort. The evidence of a rampart seen during the building of the RAF houses, stimulated local interest, and a society was formed which excavated under the direction of a local amateur (Mr E Pickering), approximately from 1957 to 1964. Sadly, although drawings, pottery reports and some of the pottery survive, the work was never published, the excavator is now dead, and his notes do not survive.
- 3.4.4 Apart from this, a major opportunity was missed when the Carr Hill Hotel, in the grounds of which much of the society's excavations took place, was demolished and its site was redeveloped as housing. Finally, a tiny excavation in the corner of 33 Myrtle Drive in 1985 (by Mr Edwards) demonstrated that Roman stratigraphy exists to a considerable depth in this area in the form of a deep depression which may well have been a defensive ditch.
- 3.4.5 The owner of 16 Myrtle Drive (the house to the immediate west of the study area) recovered several large sherds of Roman pottery (including mortaria and amphora) and a fragment of a quern stone from a foundation trench, whilst constructing an extension to his house in 1997 (pers comm Peter McCrone).

3.5 LOCAL MUSEUM ARCHIVES

- 3.5.1 The archives of the Harris Museum in Preston produced some significant material relating to Kirkham. Several Roman ceramic fragments, including tile, samian, amphora, mortaria and coarse ware, were donated to the museum by four individuals: Mr E Sergeant, Mr Cunliffe-Shaw, Mr Pedley, and Mr Benson. The majority of these finds appear to have been recovered from the Dowbridge area of the town. The Harris Museum also possesses an extract of the Archaeological Survey of Amounderness, The Roman Period (Taylor 1965). This catalogues many of the Roman finds made in the town, including Myrtle Drive, and also includes brief summary reports and plans of the excavations undertaken by Mr E Pickering in 1959 and 1960 in the Dowbridge area. A copy of this article has been forwarded to the County Sites and Monuments Officer.

- 3.5.2 The archives of the Lancashire Museum in Preston contained four small boxes of Roman pottery from Kirkham. Each box contained a different type of material, one samian, one black burnished ware, one mortaria, and one Roman coarse wares. All of the pottery was marked K site 1, although there was no associated documentation to enable a precise find spot to be established.
- 3.5.3 The Ribchester Roman Museum, Ribchester, and the County Records Office, Preston, were also consulted. However, their archives produced no archaeological material relating to Kirkham.

3.6 CARTOGRAPHIC EVIDENCE

- 3.6.1 Relevant Ordnance Survey maps were examined at the Lancashire County Records Office, Bow Lane, Preston. The tithe map for the area was not available for examination. No estate maps exist for the area.
- 3.6.2 The 1848 6" first edition Ordnance Survey map demonstrates that the area around present day Myrtle Drive was then part of an open field system. It depicts the site of a windmill (now incorporated into a dwelling) and also illustrates the supposed site of the Roman road just to the north of New England Spring. The 1893 25" first edition Ordnance Survey map shows a similar landscape to that of the 1848 map. It does not depict the Roman road, but indicates that the windmill had become disused by this date. The 1911 25" Ordnance Survey map was almost identical to the 1893 map. The 1932 25" Ordnance Survey map still depicts the area around Myrtle Drive as countryside, although it records 'Roman pottery, shield and cheek bone found AD 1929' in the field to the immediate west of the Dow Bridge, bordered by the Dow Brook to the north and Blackpool Road to the south. The 1938 25" Ordnance Survey map depicts for the first time housing beginning to extend along Blackpool Road. The 1972 1:2500 Ordnance Survey map illustrates housing all the way along Blackpool Road and shows Myrtle Drive. The houses in Myrtle Drive, judging by their style of architecture, were probably constructed around the middle of this century.

4. FIELDWORK RESULTS

4.1 FIELDWORK LOCATION

- 4.1.1 The evaluation was undertaken in the garden of 14 Myrtle Drive. All four trenches were positioned to the west of the house, within the footprint of the proposed new dwelling (Figure 3); each measured 3m x 1m. Trenches 1 and 4 were aligned north-east to south-west and their long axis followed the line of the slope. Trenches 2 and 3 were aligned north-west to south-east and were aligned with the contours of the slope.

4.2 THE TRENCHES

- 4.2.1 **Trench 1** - was positioned near to the south-west corner of the proposed building footprint. Turf and topsoil [101] was on average 0.25m deep, and comprised a dark greyish brown clay silt. It produced several post-medieval artefacts, including pottery, glass, and plastic. It sealed a layer of dark yellowish brown sandy clay [102], which was on average 0.30m deep. This horizon contained two grey ware Roman pottery sherds, as well as post-medieval pottery, clay-pipe, and brick and tile fragments. It was very homogeneous and had clearly been disturbed, probably by ploughing. Natural subsoil [105] comprised sterile orange brown sandy clay and was sealed by layer [102].
- 4.2.2 Three features were identified within the base of the trench, cut into subsoil [105], below layer [102]. Linear feature [107] was in the south-west of the trench and extended beyond the western trench section. It measured 1m in length and was at least 0.15m wide. It had gradually sloping sides and a rounded base. It was filled with [106], a light greyish brown sandy loam which contained a small number of small and medium rounded stones and charcoal flecks. This is probably a slot, although only a small portion of it lay within the evaluation trench, so its actual shape was not determined. It produced no artefacts.
- 4.2.3 Slot [109] was identified in the south of the trench and was aligned parallel with its long axis. It varied in width from between 0.30m and 0.42m, was over 2m in length, and its southern end continued beyond the southern trench section, whilst its northern end curved sharply to the east (almost a right angle) and continued beyond the eastern trench section. Slot [109] was 0.22m deep and had steeply sloping, almost vertical sides, and a flat base. Its fill [104] comprised a light grey brown silty sand which contained a small number of small subrounded pebbles and charcoal flecks. It produced six sherds of Roman pottery, most of which can be dated to the second century, as well as a single fragment of burnt bone, and eleven fragments of brick and tile. Samples of the fill of this slot were recovered for palaeoenvironmental analysis.

- 4.2.4 Slot [108] was identified in the north of the trench. It was on average 0.60m wide and gently curved into the north and west trench sections. It was up to 0.35m deep, and had gradually sloping sides and a relatively flat base. It was filled with [103], which comprised a light grey brown silty sand containing charcoal and occasional small rounded stones. It produced four fragments of Roman pottery, three of which were grey wares of cAD70-130. It also produced a fragment of brick or tile and two pieces of burnt bone. A sample of fill [103] was recovered from this feature for palaeoenvironmental analysis.
- 4.2.5 **Trench 2** - was situated in the area of the north-west corner of the footprint of the proposed building. It was aligned north-west to south-east and was downslope from Trenches 1 and 3.
- 4.2.6 Turf and topsoil [201] was 0.19m deep and contained several sherds of post-medieval pottery, as well as several iron nails and three sherds of Roman pottery; it also contained fragments of clay pipe. It sealed layer [202] which comprised light brown sandy silt, on average 0.20m deep, and containing a small number of small- and medium-sized subrounded stones. It was fairly homogeneous and had almost certainly been disturbed by ploughing. It produced post-medieval pottery, clay pipe, two iron nails, and one sherd of Roman pottery. In the west of the trench, layer [202] sealed a small, roughly linear deposit of dark brown clay silt [203] which was aligned roughly north-south and measured 1m x 0.30m x 0.10m. This produced small quantities of post-medieval glass and pottery, as well as a small fragment of iron and a tiny fragment of burnt bone.
- 4.2.7 In the east of the trench, layer [202] sealed a large, roughly circular depression within the subsoil which measured at least 1.30m in width, and was over 0.50m deep. This depression had gradually sloping sides and a gently rounded base, and extended beyond the northern trench edge. It produced no artefacts other than a fragment of unworked flint. The natural subsoil [204] in the area of the depression, and also to its west, below [202] and [203], was overlain by a thin deposit of compact sandy silt [206] which contained 5% small subrounded stones. This also produced a fragment of unworked flint. Natural subsoil [204] comprised compact orange sandy clay and produced no artefacts. A small sondage was excavated into this horizon which revealed that the subsoil was at least 0.50m deep and incorporated bands of sterile sand within its base.
- 4.2.8 Trench 2 contained no significant Roman features although Roman pottery was found mixed with later artefacts within the disturbed layers above the subsoil. The depression within the east of the trench contained no artefacts other than a fragment of unworked flint and was probably of natural origin.
- 4.2.9 **Trench 3** - was sited close to the south-western corner of the proposed building and was aligned north-west to south-east. Turf and topsoil [301] was between 0.20m and 0.25m deep and comprised a dark grey friable silty loam which contained a few small rounded stones. It produced several sherds of

post-medieval pottery, as well as clay pipe, and a single sherd of Roman pottery and fragments of tile and brick, which were probably also of Roman origin. It sealed [302], which consisted of a homogeneous layer of dark orangey grey sandy clay loam between 0.10m and 0.20m thick. This produced several sherds of post-medieval pottery, as well as two sherds of a sand cast fabric dating to between the early and mid second century AD. Layer [302] sealed the natural subsoil [303] which comprised orange compact sandy clay. A sondage was cut through this layer which revealed that it was over 0.60m thick and contained substantial bands of sterile sand within it.

- 4.2.10 Slot [304] was identified cut into subsoil [303], below [302], along the entire northern side of the trench. Only the southern side of the slot was visible within the trench and it was therefore decided to extend the western end of the trench northwards by 1m in order to define the northern side of the slot. The slot measured greater than 3m in length, between 0.30m and 0.40m wide, and was 0.25m deep, with steeply sloping sides and a flat base. It continued beyond both the east and west trench edges and was filled with [305], which comprised a mottled dull orange grey friable sandy clay with a few small rounded stones. This produced a very tiny sherd of samian, thought to be second century Central Gaulish ware, and a small fragment of bluish glass dating to the first or second centuries AD. A sample of [305] was recovered for palaeoenvironmental analysis.

- 4.2.11 **Trench 4** - was positioned close to the north-eastern corner of the proposed dwelling and was orientated with its long axis aligned north-east to south-west. Turf and topsoil [401] was 0.17m deep and comprised a dark grey silty loam. This produced several sherds of post-medieval pottery as well as glass, clay-pipe, a sherd of medieval pottery, brick and tile and a single sherd of Roman mortaria. It sealed [402], which was up to 0.20m deep and comprised dark grey slightly orange sandy clay loam. This horizon was very homogeneous and had clearly been disturbed. Layer [402] produced fragments of post-medieval pottery and clay pipe as well as several fragments of Roman tile and brick, one sherd of Roman pottery, and three pieces of burnt bone. Layer [402] sealed the natural subsoil [406] which comprised orange brown sandy clay.

- 4.2.12 Two slots, [404] and [409], were identified cut into subsoil [406] in the south of the trench. Slot [409], the more northerly, measured 0.30m wide, at maximum was 0.20m deep, and had a relatively steeply sloping southern side cut into the upslope of the hill, a gently rounded base, and a more gently sloping northern side. It was filled with a medium orange brown friable sandy clay [405], which contained occasional small stones, and charcoal flecks. This produced Roman tile and brick, and a fragment of clay pipe stem. Slot [404] was first thought to represent a separate slot some 0.40m to the south and slightly upslope of [409]. However, upon excavation, it appeared to connect with slot [409], and [409] may actually represent a later re-cut of this feature on its northern side. A linear spread of redeposited natural subsoil, probably upcast from slot [409], sealed the southern portion of the fill of slot [404],

giving the impression of two distinct features separated by subsoil. Slot [404], which measured at least 1m in width, also had a gently sloping southern side cut into the slope, but its northern side had been affected by [409]. It was filled with [403], a medium orange brown sandy clay, which contained a few small rounded stones and produced a sherd of Central Gaulish samian and a fragment of tile and brick.

- 4.2.13 A large negative feature [408], probably a pit, was cut into the subsoil at the northern end of the trench. It measured at least 1m by 0.50m and was up to 0.50m deep. It had a curved southern side and extended beyond both the northern and western trench sections. It had a gradually sloping southern side and a relatively flat base, and was filled with light grey brown silty sand [407] which contained some small rounded stones and charcoal flecks. This produced two sherds of Roman pottery and another sherd of medieval date was recovered from the surface of the deposit, most likely contamination from [402].
- 4.2.14 Slots [404] and [409] may be associated with Roman structures, the presence of fragments of tile and brick within them supports this view. They were, however, aligned at a slightly different angle to the slots identified in Trenches 1 and 3, perhaps implying another phase of activity. Slot [409] appeared to be later than slot [404], again implying multiple phases of construction activity. Feature [408], which was probably a pit, may have been cut in the Roman period.

4.3 THE FINDS

- 4.3.1 A total of 295 fragments of artefacts and ecofacts was recovered from the four trenches excavated. All fragments were small and abraded to some extent; a considerable proportion of the post-medieval material was also burnt and/or frost spalled. The few fragments of medieval and Roman material were small and highly abraded, and in general few fragments exceeded c30mm in maximum dimension. The amount of damage strongly suggests considerable disturbance of the site, and the burning and weather damage shown by most of the later material suggests that it probably derived from domestic middens and night soil used as manure.
- 4.3.2 Eighteen fragments of Roman pottery were found, all of them small and abraded. Where a date could be assigned they appeared to centre on the second and third quarters of the second century, perhaps towards the beginning of that period, as there were several fragments of rusticated vessels, a form of decoration regarded as reaching the end of its popularity cAD130. A sand-cast cornice-rim beaker would appear to be of similar date, and the presence of what is likely to be an early rim form in Black Burnished ware I again suggests the first half of the second century. The very small and extremely poorly-preserved fragments of samian seem to be Central Gaulish in origin, confirming the likely date. A small fragment of thin natural bluish glass would also seem most likely to be of second century date. This is thought to be the

period during which the Roman fort at Dowbridge flourished (Buxton and Howard-Davis forthcoming) and was almost certainly the point at which any Roman extramural settlement around the fort reached its maximum extent. Although it must be stressed that the quantities are very small, the fills of slot [108] (fill [103]), slot [109] (fill [104]), slot [304] (fill [305]), and slot [404] (fill [403]) produced exclusively Roman material and might, therefore, be regarded as contemporary Roman features dated to the second century AD.

- 4.3.3 There was also a small amount of what appeared to be Roman tile and brick, again very small and abraded fragments. This adds little information except to suggest reasonably substantial buildings in the vicinity.
- 4.3.4 There were only two fragments of medieval pottery, one from topsoil [401], the other from pit [408] (fill [407]). Both are small and abraded and no precise date can be offered.
- 4.3.5 The presence in topsoil [401] of a clay pipe of early type (1660-80 if not earlier) is of interest in view of the presence of a few fragments of early post-medieval vessels (layers [102] and [302]), suggesting some late seventeenth century activity on or near the site before the bulk of the material was deposited in the later eighteenth and nineteenth centuries. Although, as might be expected, the bulk of the ceramics is black- and brown-glazed redwares, which are difficult to date with precision, there is also an appreciable element of later eighteenth century table wares, with white salt-glazed plates and several fragments of Chinese-style tea wares. There are also small fragments of several dark olive green glass wine bottles, a common eighteenth century type. Both suggest a domestic context of reasonable affluence, and, as the area under investigation appears to have been under cultivation at the time, it can only be suggested that the material derived from closer to the centre of Kirkham and was spread in the course of agriculture.
- 4.3.6 Apart from ceramics and glass there was little other material, a few fragments of iron nails and two fragments of unworked flint from layers [205] and [206] respectively.

5. DISCUSSION/CONCLUSIONS

- 5.1.1 The excavation has demonstrated that significant Roman features exist within the area of the proposed new development. The general stratigraphy within all trenches was very similar with topsoil ([101], [201], [301], [401]) sealing a slightly lighter layer of homogeneous sandy clay loam ([102], [202], [302], [402]), which was almost certainly plough soil. This layer contained a mixture of both abraded Roman and post-medieval artefacts and almost certainly contained material derived from the uppermost Roman deposits. The plough soil sealed natural orange sandy clay subsoil ([105], [204], [303], [406]), which was on average between 0.30m and 0.60m below present ground level.
- 5.1.2 All of the Roman features were sealed by the plough soil horizon and were cut into the subsoil. The upper portions of many of these features had been truncated by post-Roman agricultural activity as some were very shallow. The slots identified in Trenches 1 and 3 ([108], [109], [304]) probably represent the foundations of Roman timber buildings, although given the constraints of the evaluation trenches no full plans were recovered to confirm this hypothesis. All of these slots had relatively steeply sloping sides and flat bases and were aligned either north-west to south-east or north-east to south-west. Slot [108] in Trench 1 underwent a slightly curved right angle return supporting the view that it was for a structure, and it is possible that it may have been an eastern continuation of slot [304] in Trench 3. The slots identified in Trench 4 ([404], [409]) were slightly more ephemeral, and were orientated on a slightly different, east-west, axis. This perhaps implies a further phase of Roman activity.
- 5.1.3 Such slots were commonly used for foundations in Roman timber buildings dating to the later first and early second centuries AD, as evidenced at Lancaster and Walton-le-Dale. Given the lack of evidence for any postholes or stone fragments from any of the slots it is unlikely that were excavated for post-in-trench type constructions or as foundation trenches for stone wall structures. Most probably they were excavated as foundation slots for sill beams which would support either a wholly timber, or a mixed timber and brick, superstructure. Many slots incorporated small fragments of tile and brick within their fills suggesting that the latter may have been the case.
- 5.1.4 Feature [408] which cut the subsoil in Trench 4 also contained Roman material (and a single medieval sherd) and probably represents a Roman pit, although little of the feature was visible. Similarly, the fill of feature [107] in Trench 1 was almost identical to the other Roman feature fills, and was probably also of this date, although this cannot be confirmed as it produced no dating material.
- 5.1.5 All of the pottery within these Roman deposits was heavily abraded, suggesting that it had been lying on the ground surface for some time prior to being incorporated into these features following the collapse/demolition/destruction of the buildings whose foundations they

represent. The possibility that they reflect post-Roman activity on the site which incorporated residual Roman material seems unlikely given that no later artefacts were recovered from any of the slot fills other than a small piece of clay pipe stem from the fill of slot [404]. Interestingly, the Roman pottery fragments recently recovered from 16 Myrtle Drive (to the immediate east of the site) were much larger and were not abraded, suggesting that either different types of features were preserved in this area, or that perhaps it had not undergone the same level of later truncation.

- 5.1.6 Most of the Roman material produced by the site appears to date to the second century AD. Previous archaeological work in the Dowbridge area of Kirkham suggests that the north-east corner of the second century stone fort lies some 50m to 80m to the west of the study area. If this hypothesis is correct and the fort is of the traditional playing card shape, the eastern gate of the fort and its associated road linking the fort with Ribchester should lie somewhere between the south side of 14 Myrtle Drive and Blackpool Road. A cobbled surface was encountered during the excavations at 33 Myrtle Drive (B Edwards pers. comm.) which may perhaps relate to this road. The 1848 First Edition 6" Ordnance Survey map depicts the supposed site of the Roman road aligned north-east to south-west just to the north of the New England Spring, suggesting, if this map is to be believed, that the road turns to the north and east shortly after leaving the fort. Several artefacts, including a Roman lamp, fragments of mortaria, amphora, samian, metalwork, and leather, have been identified close to the site, and it would seem logical that the most likely explanation for these is the presence of an extramural settlement which developed along the line of the Roman road extending out of the east gate of the fort. The presence of probable structural slots in this area of Kirkham is slightly surprising given that the ground surface presently slopes quite steeply from south-west to north-east. However, one must bear in mind that significant changes to the topography may have occurred in the immediate vicinity since the Roman period. At this stage, given the key-hole nature of the work, it is very difficult to state with certainty that the structures identified within the evaluation relate to such a settlement, although this would seem the most likely explanation.

6. RECOMMENDATIONS

- 6.1 LUAU conducts evaluations in accordance with the Institute of Field Archaeologists' Code of Conduct and best practices, and also in the light of *Management of Archaeological Projects*, 2nd Edition (English Heritage 1991). Our concern must be to protect and preserve archaeological sites wherever possible, and only where this is not feasible are destructive techniques advocated. Our aim is to recommend the appropriate action which will achieve the recording objective, without any waste of resources.
- 6.2 The evaluation has demonstrated that significant Roman stratigraphy survives within the footprint of the proposed dwelling. All of the Roman features encountered during the evaluation were cut into the subsoil and were sealed by a disturbed layer of probable plough soil. Preliminary indications suggest that many of the features encountered within the evaluation relate to the construction of second century timber buildings on the site, which may have been part of an extramural settlement. This settlement probably developed alongside the road which extended out of the eastern fort gate.
- 6.3 From an archaeological point of view the most suitable course of action would be to preserve these archaeological deposits *in-situ*, although it is recognised that such action will probably not be possible within the constraints of the proposed development. In our view the deposits are not significant enough to require statutory protection of the site. However, it is considered that the archaeological deposits affected by the development are of sufficient quality to require adequate recording prior to their destruction, especially in view of the fact that the entire area around the study area has already been developed, almost certainly damaging the surrounding stratigraphy and therefore limiting the recovery of further information from this part of Kirkham. Such recording could only be achieved through a structured programme of controlled archaeological excavation.
- 6.4 Such a programme of work need not be a complex operation. It is recommended that the footprint of the proposed dwelling and associated service trenches should be stripped mechanically under controlled archaeological supervision down on to the natural subsoil surface, as no archaeological features appear to survive above this level. Such an operation would be relatively rapid, and would almost certainly need to be undertaken within the building programme as a matter of course. The evaluation suggests that a depth of between 0.30m and 0.60m of material would need to be removed by such an operation. Archaeological work would then be relatively uncomplicated and would concentrate on cleaning the natural subsoil surface manually and excavating and recording all archaeological features cut into it.

7. BIBLIOGRAPHY

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Maps Consulted

- 1848 6" First Edition Ordnance Survey (Sheet 60)
- 1893 25" First Edition Ordnance Survey (Sheet LX.5)
- 1911 25" Ordnance Survey (Sheet LX.5)
- 1932 25" Ordnance Survey (Sheet LX.5)
- 1938 25" Ordnance Survey (Sheet LX.5)
- 1972 1:2500 Ordnance Survey (Plan SD4231 4331)

APPENDIX 1: PROJECT BRIEF

Land at 14 Myrtle Drive, Kirkham, Lancashire Brief for an Archaeological Evaluation

1. Summary

- 1.1 This brief has been prepared by Lancashire County Archaeology Service (LCAS) after planning permission was granted for the construction of a dwelling, the permission having an archaeological condition attached to it. The development site lies in the village of Kirkham, in an area which is within the ramparts of the 2nd Century Roman fort, discovered during excavations to the south west of this site in 1994. The brief has been prepared for Mr. and Mrs. Benson, the owners of the site.

There is reason to believe that archaeological remains may exist on the site but little is known of their extent or of their state of preservation. Lancashire Archaeology Service has advised that the archaeological implications of the proposal cannot be adequately assessed on the basis of currently available information. It has, therefore, been recommended that an archaeological field evaluation should be carried out before any decision on the planning application is taken in order to obtain, and supply to the planning authority, further information.

This recommendation follows the advice given by central government as set out in *Planning Policy Guidance on Archaeology and Planning* (PPG 16) issued by the DoE.

2. Site Location and Description

- 2.2 The site lies at NGR. SD 433 319 and covers an area of approximately 350 square metres
- 2.3 It comprises a rectangle of land bounded by Myrtle Drive on the south, No 14 Myrtle Drive to the east, No 16 Myrtle Drive on the west and a garden on the north. The site slopes down from south to north.
- 2.4 The geology is Bunter sandstone, with a drift cover of sand and gravel.
- 2.5 The site is currently under grass and is part of the garden of No 14 Myrtle Drive

3. Planning Background

- 3.1 An application was submitted to Fylde Borough Council in 1990 for the erection of a new dwelling (Planning Application No 5/90/0327). Permission was granted with the condition that the applicant should contact the Lancaster University Archaeology Unit to allow a watching brief to be carried out as the site was believed at that time to lie in the area of the extramural settlement of the fort. Application to renew the permission was made in 1996 (Planning Application No 5/96/0260). This was granted with a 'Grampian' condition based on PPG 16, para. 30. This application was resubmitted in March 1997, in an amended form (Planning Application No. 5/97/0191) and permission for the amended development was granted with the PPG 16 para. 30 condition attached.

4. Archaeological Background

- 4.1 The presence of a Roman fort at Kirkham has long been suspected, on the basis of numerous casual finds and reports, dating back to the 19th century (PRN 0073). These included elements of military equipment, notably a shield boss and possibly fragments of *lorica squamata* or scale armour. A cavalryman's tombstone was found last century but is now lost. A series of amateur excavations in the 1950s and 1960s identified ditches and a possible rampart, although the precise size and date was unknown. Finds of pottery and other features from the area led to the suggestion that there was an extensive area of extramural occupation (a *vicus*) but again its extent and date were uncertain (PRN 0129, 0130, 2052). Desktop assessment and an evaluation of a substantial development site south west of Myrtle Drive identified substantial Roman remains and the development was preceded by extensive archaeological excavations. These identified several main phases of Roman military activity, comprising, briefly, several temporary camps, dating to the latter part of the first century AD, a signal station or fortlet, and a stone built fort which was probably built in the late first or early second century and abandoned in the mid second century AD and which was on a substantially different alignment to the early fort. The later fort is likely to extend across the area of the proposed development which is thought to lie in the north east quarter of the fort. Several finds of Roman pottery have been made in Myrtle Drive (PRN 1381, 2049). The finds of military equipment, the tombstone and environmental evidence from the 1994 excavations suggest that the fort at Kirkham had a cavalry garrison for at least some of the time it was in occupation.
- 4.2 Further details of these sites can be obtained from the Lancashire Sites and Monuments Record, quoting the PRNs.

5. Requirement for an Evaluation

- 5.1 The proposed development, in its current form, would severely damage or destroy any archaeological remains which may be present on the site. It has therefore been recommended that an archaeological evaluation should take

place to obtain further information on the presence and preservation of any archaeological deposits before any decision is reached as to whether planning consent should be granted on this or any modified proposal.

6. Objectives

6.1 The objectives of the evaluation are to gain information about the archaeological resource within a given area or site, including its presence or absence, character and extent, integrity, state of preservation and relative quality, in order to make an assessment of its worth in the appropriate context.

6.2 The results of the evaluation may be used to:

- formulate a strategy for the preservation or management of any archaeological remains; and/or
- formulate an appropriate response or mitigation strategy to planning applications or other proposals which may affect adversely any such archaeological remains, or enhance them; and/or
- formulate a proposal for further archaeological investigation within a programme of research.

6.3 The evaluation will consider the whole of the area to be disturbed by the development and also those areas which are to remain undisturbed to allow for possible modifications to the proposal.

7. The Brief

7.1 An archaeological evaluation of the area of the proposed development in the garden of No 14 Myrtle Drive shall be carried out. The work is intended to assess the archaeological potential of the site for the planning purposes specified in PPG 16 and should not be seen as pure research. It is to be undertaken by the most appropriate methods which comply with the Code of Conduct, Standards and Guidance of the Institute of Field Archaeologists.

7.2 A rapid desk based assessment of the site, utilising known sources of information, as set out in the appropriate IFA standard should be undertaken.

7.3 Appropriate museum archives should be consulted for further details of the finds in the vicinity.

7.4 Using the information obtained in sections 7.2-7.3 above, a scheme of trial trenching should be prepared and executed. This scheme should address the investigation of the archaeological potential of the site. The archaeological

contractor should discuss this scheme of investigation with the LCAS before it is finalised.

- 7.5 A report should be produced, describing the work undertaken. (sections 7.1-7.4 above), the results achieved and the conclusions drawn from those works. It should include the proposals for the scheme of trial trenching as a separate section. It should include the plans of the area of interest and other illustrative material indicated in sections 7.2-7.4 above. A copy of this brief and the approved project design should be included as appendices.

8 General

- 8.1 A written project design, detailing how the assessment is to be undertaken, the name of the project director, the proposed staffing levels and the proposed programme of work shall be produced prior to the commencement of the project. This design should be to the appropriate IFA standard. The archaeological contractor may wish to refer to sections of this brief in the project design, rather than transcribe them. Costings shall be submitted under a separate cover to the project design.
- 8.2 The document entitled "General Conditions for Appropriate Archaeological Contractors in Lancashire" is in use as a model of expected practices and procedures.
- 8.3 The archaeological work shall be monitored by the LCAS. The archaeological contractor should contact the LCAS to discuss and arrange this monitoring.
- 8.4 Access to the land will be arranged by the client and the successful contractor will need to liaise to ensure that suitable arrangements are established
- 8.5 This brief shall not be altered without the express consent of the LCAS. It allows some flexibility of approach but deviations from the agreed project design shall be discussed and agreed in advance with LCAS. A copy of the brief on computer disc can be supplied upon request.

9 Further information

- 9.1 Further queries regarding this brief or the general conditions can be addressed to the LCAS, Tel. 01772 261734. Fax 01772 264201. Further information and details of the proposed development can be obtained from Mr and Mrs Benson, 14 Myrtle Drive, Kirkham, Preston, Lancs.

APPENDIX 2: PROJECT DESIGN

May 1998

Lancaster
University
Archaeological
Unit

14 MYRTLE DRIVE, KIRKHAM
LANCASHIRE

ARCHAEOLOGICAL EVALUATION

Proposals

The following project design is offered in response to a request received from Mr R Benson for an archaeological evaluation in advance of the development of a plot of land at 14 Myrtle Drive, Kirkham, Lancashire. It is submitted to English Heritage as funders of the project.

1. INTRODUCTION

- 1.1 An application for planning permission to erect a new dwelling at 14 Myrtle Drive was submitted to Fylde Borough Council in March 1997. Following discussion with The Lancashire County Archaeology Service (LCAS), permission was granted conditional to a programme of archaeological work being carried out at the site in advance of the development.
- 1.2 LCAS provided a brief for an archaeological evaluation of the development site (appendix 1). The Lancaster University Archaeological Unit (LUAU) was invited to provide a costing for the work by the owner of the land, Mr R Benson. This project design is a response to that request.
- 1.3 LUAU has considerable experience of the assessment, evaluation and excavation of sites of all periods, having undertaken a great number of small- and large-scale projects during the past 15 years. In recent years, LUAU has undertaken evaluations throughout the north of England with a particular emphasis on the North-West. LUAU undertook the evaluation and major excavations in advance of development in Dowbridge Close, Kirkham (Buxton and Howard-Davis forthcoming) and has excavated on most of the fort sites in Lancashire.
- 1.4 LUAU has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. The organisation operates subject to the Institute of Field Archaeologists (IFA) Code of Conduct.

1.4 SITE LOCATION

- 1.4.1 The proposed development lies within the town of Kirkham at NGR SD 433 319 and covers an area of approximately 350 square metres.
- 1.4.2 The proposed development area is currently under grass and is part of the garden of No 14 Myrtle Drive.

1.5 HISTORICAL BACKGROUND

- 1.5.1 A short historical description is contained in the LCAS brief for archaeological recording and will not be repeated here (cf appendix 1). The area clearly has considerable archaeological potential. However, contra the brief, the area of the development is thought to lie outside the area of the stone-built second century fort, but could potentially lie within earlier timber temporary camps, which are in part overlain by the later stone fort. In addition, the area may have formed part of the *cordon sanitaire* identified outside the stone fort during the earlier work at Dowbridge Close. Alternatively, finds of Roman pottery in the vicinity of Myrtle Drive raise the possibility that the area may have formed part of a *vicus* which developed outside the stone fort.

2. AIMS AND OBJECTIVES

- 2.1 The purpose of the evaluation will be to establish the existence, location, and character of archaeological remains within the development area. The aim will be to quantify and qualify the archaeological potential of the site.
- 2.2 More specifically, if archaeological features are identified, the aim will be to determine, as far as possible, if these are related to internal features within the earlier phase of first century timber camps, and/or external features outside the later early second century stone fort. If the latter is the case, then the aim will be to determine the nature of these external features, whether civilian or military.

3. METHODOLOGY

3.1 Assessment

- 3.1.1 A rapid desk-based assessment, utilising known sources of information, will be carried out to place the site in its context: this will consist of a consultation of the Sites and Monuments record and a review of cartographic sources contained in the Lancashire Records Office.
- 3.1.2 Appropriate museum's archives will be consulted for further details of finds in the vicinity.

3.2 Evaluation Trenches

- 3.2.1 Four trenches, each measuring approximately 3m x 1m, will be excavated over the area of the proposed development.
- 3.2.2 Any investigation of intact archaeological deposits will be exclusively manual. Selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features. Any finds recovered will be retained for assessment and spot dating.
- 3.2.3 All information identified in the course of the site works will be recorded stratigraphically, with sufficient pictorial record (plans, sections and both black and white and colour photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times.
- 3.2.4 Results of all field investigations will be recorded using a system, adapted from that used by Central Archaeology Service of English Heritage, based on *pro forma* contexts, object records, and survey sheets. The archive will include

both a photographic record and accurate large scale plans and sections at an appropriate scale (1:50, 1:20, and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

- 3.2.5 Samples will be collected for technological, pedological, palaeoenvironmental and chronological analysis as appropriate. Samples will be 30 litres in volume. All samples will be wet sieved at LUAU's offices in Lancaster and the residues subject to a rapid preliminary analysis by LUAU's paleoenvironmentalist in order to allow an assessment of their potential.
- 3.2.6 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.
- 3.2.7 The evaluation trenches will be backfilled upon completion for safety.

4. HEALTH AND SAFETY

- 4.1 LUAU considers health and safety to be of paramount importance on all their projects. LUAU have considerable experience in applying modern health and safety practices in large and small-scale archaeological projects.
- 4.2 LUAU provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. 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 (1996 rev.). A written risk assessment will be undertaken in advance of project commencement and copies will be made available on request to all interested parties.
- 4.3 Where it appears that trenches, or parts of, will exceed a depth of 1.2m, excavation will cease.
- 4.4 The client is requested to provide information relating to services, though LUAU will undertake a Cat scan in advance of site commencement.

5. ATTENDANCES

- 5.1 The client is requested to arrange all site access.

6. ARCHIVE

- 6.1 The results of the evaluation will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*The 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. It will include summary processing and analysis of any features and finds recovered during fieldwork, in accordance with UKIC guidelines. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA.
- 6.2 The paper archive will be deposited with the Lancashire Record Office and the material archive with the Museum of Lancashire, both in Preston. A copy of the report will be deposited with LCAS for inclusion in the Lancashire SMR.
- 6.3 All finds will be treated in accordance with LUAU standard practice which follows current IFA guidelines.
- 6.4 Except for items subject to the Treasure Act, the client has agreed that all artefacts found during the course of the project will be donated to the receiving museum.

7. ASSESSMENT REPORT

- 7.1 A report of the findings will be compiled following completion of the fieldwork. This report will examine and describe the archaeology and, if appropriate, the palaeoenvironment of the site. The report will also seek to establish the significance of the results.
- 7.2 The report will consist of a typescript illustrated with line drawings, including of finds if necessary, and, if suitable, black and white photographs.
- 7.3 This report will be submitted to English Heritage for consideration. A copy of the report will be submitted to Mrs Benson for presentation to LCAS. Any subsequent work arising from this evaluation will be subject to separate consideration in liaison with English Heritage, LCAS, and Mrs Benson.

7.4 Confidentiality

- 7.4.1 The assessment report is designed as a document for the specific use of the client, for the particular purpose as defined in the project brief and this project design, and should be treated as such; it is not suitable for publication, save as a note, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

8. PROJECT MONITORING

- 8.1 Any proposed variations to the project design will be agreed with LCAS in co-ordination with the client. LUAU will arrange a preliminary meeting, if required, and the Planning Authority will be informed of the commencement of the project in writing.

9. WORK TIMETABLE

- 9.1 LUAU would commence the excavation within one week of receipt of written notification from English Heritage. It is estimated that the evaluation will take a maximum of eight days to complete on-site, inclusive of backfilling. LUAU would be able to submit the report on the evaluation to the client within three weeks of the completion of the fieldwork.

10. PROJECT TEAM

10.1	Team member	Project role	Day rate
	Rachel Newman	Internal monitor	173
	Alan Lupton	Project manager	134
	Nick Hair	Evaluation fieldwork director	122
	Chris Howard Davis	Assessment of finds	122
	Project supervisor (tba)	Survey and illustration	70
	Project supervisor (tba)	Desk-top assessment	70
	Assistants x 2 (tba)	Fieldwork assistants	50
	Marie Brydon	Organisation of archive	50

Rachel Newman BA (Deputy Director)

Rachel is an expert in the archaeology of the Roman and early medieval periods in Northern England, and has fifteen years professional experience in the excavation and management of archaeological projects. As Deputy Director she acts as project monitor for all evaluation and excavation projects undertaken by Lancaster University Archaeological Unit.

Rachel has directed numerous excavations, pertaining to the Roman period, including Mitchell's Brewery site. In addition, she acted as internal monitor for the previous work carried out by LUAU in Kirkham at the Wimpey site at Dowbridge Close (Buxton and Howard-Davis forthcoming).

Alan Lupton BA, MA, PhD (Project Manager)

Alan has twelve years professional experience in the excavation and management of archaeological projects, and has worked for numerous archaeological organisations, including Department of Greater London Archaeology (now MOLAS), Oxford Archaeological Unit, Cotswold Archaeological Trust, Tempus Reparatum, and the

Sussex Field Unit (now South-Eastern Archaeological Services), before joining LUAU in 1997. He acts as Project Manager for the majority of the below ground (evaluation and excavation) projects currently undertaken by the unit.

Nicholas Hair BA, Dipl (Project Officer)

Nick has 13 years experience as a full-time professional archaeologist, and has worked for numerous archaeological organisations including; Trent and Peak Archaeological Trust, Canterbury Archaeological Trust, English Heritage, and from 1988 onwards Lancaster University Archaeological Unit.

Nick has largely been involved with evaluation and excavation work, on both rural and urban sites, acting as Site Supervisor for the North Wall excavation at Birdoswald Roman Fort, the Ribchester Graveyard Roman site, and the Walton-le-Dale Roman Settlement, Preston. He has also acted as Site Director for the excavation at Low Borrowbridge Roman cemetery, Tebay, and the Mitchell's Brewery Roman and medieval settlement, Lancaster.

Christine Howard-Davis BA, MIFA (Project Officer)

Christine has 22 years experience as full-time professional archaeologist, and has worked for North Derbyshire Archaeological Committee and West Yorkshire County Council (Archaeology), before joining LUAU in 1980.

Christine acts as LUAU's in-house finds specialist and has extensive knowledge of all finds of all periods from archaeological sites in northern England. However, she has specialist knowledge regarding Roman glass, metalwork, and leather, the recording and management of waterlogged wood, and most aspects of wetland and environmental archaeology.

11. INSURANCE

- 11.1 LUAU has both professional indemnity and public liability insurance. Details will be sent if required.

12. REFERENCES

Buxton, KM, and Howard-Davis, C, forthcoming *Excavations at Dowbridge Close, Kirkham*

APPENDIX 3: CONTEXT LIST

Context No.	Trench No.	Description
[101]	1	Turf and topsoil, dark yellowish brown clay silt
[102]	1	Plough soil, dark yellowish brown sandy clay
[103]	1	Fill of slot [108], light grey brown silty sand
[104]	1	Fill of slot [109], light grey brown silty sand
[105]	1	Natural subsoil, dark orange brown sandy clay
[106]	1	Fill of feature [107], light grey brown sandy loam
[107]	1	Feature, filled by [106]
[108]	1	Slot, filled by [103]
[109]	1	Slot, filled by [104]
[201]	2	Turf and topsoil, dark brown silty loam
[202]	2	Plough soil, light brown sandy silt
[203]	2	Layer, dark brown clay silt
[204]	2	Natural subsoil, orange brown sandy clay
[205]	2	Layer, clean grey sandy clay
[206]	2	Layer, pink/dark orange sandy silt
[207]	2	Layer, brown clay sand
[301]	3	Turf and topsoil, dark grey silty loam
[302]	3	Plough soil, dark orangy grey sandy clay loam
[303]	3	Natural subsoil, orange and mottled yellow sandy clay
[304]	3	Slot, filled by [305]
[305]	3	Fill of slot [304], orange grey sandy clay
[401]	4	Turf and topsoil, dark grey silty loam
[402]	4	Plough soil, dark grey and orangy sandy clay loam
[403]	4	Fill of ditch/slot [404]

[404]	4	Slot, filled by [403]
[405]	4	Fill of slot [409], orange brown sandy clay
[406]	4	Natural subsoil, orange brown sandy clay
[407]	4	Fill of feature [408], light grey brown silty sand
[408]	4	Feature, filled by [407]
[409]	4	Slot, filled by [405]

APPENDIX 4: FINDS CATALOGUE

Context	OR no	Description	Date
Trench 1			
101	1000	Two fragments stoneware quarry tile	Modern
101	1001	Plastic clip	1998
101	1002	Fragment dark olive green ?case bottle	18th C
101	1003	Two fragments unglazed garden ware	-
		Ten fragment redware, black glaze	18th C/ 19th C
		Two fragments cream fabric, black metallic glaze	"
		Two fragments redware, dark brown glaze	"
		Fragment unglazed redware	"
		Fragment redware, brown self glaze	"
		Fragment purple fabric, black glaze, second or waster, glazed over crack	Late 17th C/ 18th C
		Two fragments Chinese-style ceramic (one re-fired black), jar and teaware	"
		Fragment whiteware plate with blue feathered edge	"
101	1004	Two fragments ?cement with leaf impressions	Modern
102	1005	Two fragments clay pipe stem	Post-medieval
102	1006	Two fragments greyware	Romano-British
102	1007	Fragment cream fabric, yellowish glaze	18th C
		Fragment cream fabric, three colour slip decoration - white slip, brownish glaze and dark brown slip. Sooted	Late 17th C/ 18th C
102	1008	Two fragments tile or brick fabric	-
102	1009	Fragment brown stoneware	18th C/ 19th C
		Three fragment redware, black glaze	"
		Fragment redware, brown self glaze	"
		Two fragments white ware	"
		Fragment cream fabric, black glaze	"
		Fragment tile or brick fabric	"
103	1032	Three fragments greywares, representing two+ vessels. Two have rustication.	70-130 AD
103	1033	Fragment tile or brick fabric	-
103	1040	Fragment white fabric	Romano-British
103	1041	Two fragments burnt bone	-
104	1029	Eleven fragments tile and brick	Romano-British
104	1030	Three fragments very gritty burnished fabric, possibly Black Burnished I but may be local hand made.	Early-mid 2nd C
		Fragment hard-fired very gritty fabric	Romano-British
		Two fragments greywares	2nd C?
104	1031	Fragment burnt bone	-
Trench 2			
201	1023	Six fragments iron (?five nails?)	-
201	1024	Nine fragments redware, black glaze	18th C/-19th C
		Thirteen fragments redware, brown self glaze	"
		Three fragments redware, brown self glaze, white sprigged decoration	"
		Three fragments cream body, black glaze	"
		Seven fragments creamwares	"
		Four fragments white ware, one re-fired	"

		Two fragments late brown stoneware	"
		Fragment white salt-glazed stoneware	18th C
		Two fragments Chinese-style vessels, polychrome	"
201	1026	Three fragments clay pipe stem	Post-medieval
201	1027	Fragment redware, black glaze	18th C/ 19th C
		Two fragments amphora fabric	Romano-British
		Fragment white vessel fabric	Romano-British
201	1028	Fragment dark olive green glass	18th C
202	1020	Four fragments unglazed redwares	18th C/ 19th C
		Fragment redware, green internal glaze with slip-trailed decoration	"
		Fragment redware, black glaze	"
		Three fragments redware, brown self glaze	"
		Three fragments cream body, metallic black glaze	"
		Fragment brown salt-glazed stoneware flattened rod handle	"
		Fragment modern slip decorated ware	Modern
		Fragment under-glaze blue and white transfer- printed ware	18th C/ 19th C
		Five fragments creamwares	"
		Fragment white ware, re-fired	"
		Two fragments Chinese-style vessels, probably re-fired, possibly tin-glazed	"
		Fragment dark olive green glass wine bottle	18th C
202	1021	Fragment oxidised beige fabric	Romano-British
202	1022	Seven fragments clay pipe stem	Post-medieval
202	1023	Two fragments iron ?nails	-
203	1015	Fragment late white ware	19th C
		Fragment redware, black glaze	"
203	1016	Fragment dark olive green glass wine bottle	18th C
203	1017	Small fragment iron	-
203	1018	Fragment burnt bone	-
205	1043	Fragment unworked grey flint	-
206	1042	Fragment unworked flint	-

Trench 3

301	1010	Eight fragments redware, black glaze	18th C/ 19th C
		Two fragments redware brown self glaze	"
		Fragment cream fabric, brown glaze	"
		Two fragments creamware	"
		Fragment re-fired white ware	"
		Five fragments under-glaze transfer-printed blue and white ware	"
		Fragment white salt-glaze stoneware	18th C
		Fragments tile or brick fabric	Romano-British?
301	1011	Two fragments cannel coal	-
301	1012	Two fragments clay pipe stem	Post-medieval
301	1013	Two fragments tile or brick fabric	-
301	1014	Fragment greyware	Romano-British
301	1056	Three fragments redware, black glaze	18th C/ 19th C
		Two fragments redware brown self glaze	"
		Four fragments creamware	"
		Two fragments re-fired white ware	"
		Fragment under-glaze transfer-printed blue and white ware	"
		Fragment white salt-glaze stoneware	18th C
		Two fragments tile or brick fabric	Romano-British

301	1057	Fragment clay pipe stem	Post-medieval
302	1034	Four fragments unglazed garden wares	18th C/ 19th C
		Two fragments redware, black glaze	"
		Two fragments white salt glazed stoneware	18th C
		Fragment purple ware, black glaze	Late 17th C/18th C
		Two fragments cream body, black slip, sand cast, cornice rim	?Early to mid-2nd C
		Two fragments daub	-
305	1019	Fragment bluish glass	1st C/ 2nd C
305	1050	Fragment very abraded samian, Central Gaulish fabric	2nd C

Trench 4

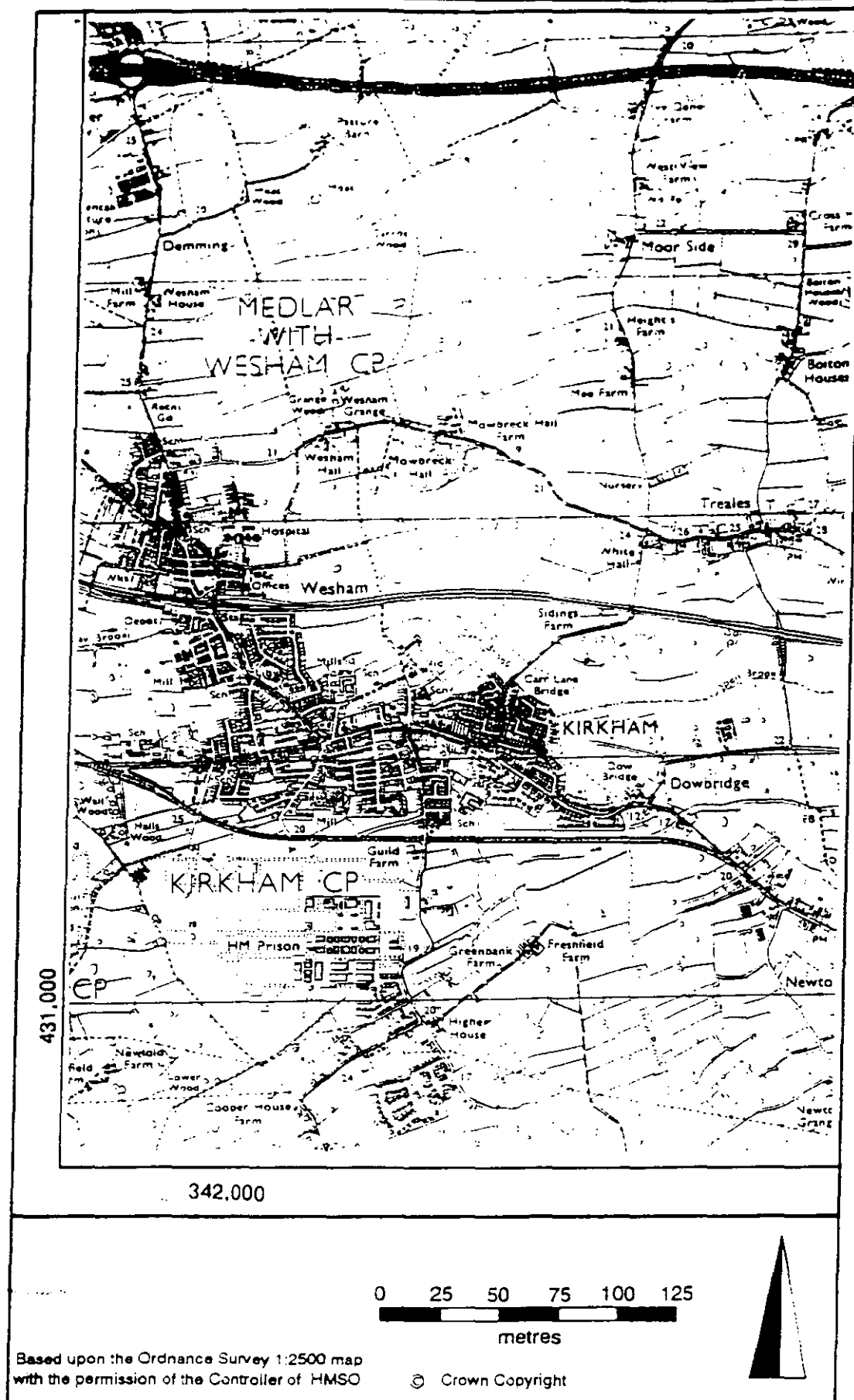
401	-	Fragment thick redware, black glaze	19th C
401	1035	Four fragments tile and brick fabric	Romano-British
401	1035	19 fragments redware, black glaze	18th C/ 19th C
		Two fragments redware brown self glaze	"
		Fragment cream fabric black glaze	"
		Eleven fragments creamware	"
		Fragment late brown stone ware	"
		Two fragments white ware (one re-fired)	"
		Fragment late pinkish fabric	"
		Fragment oxidised gritty fabric	Medieval
401	1036	Fragment dark olive green glass	19th C
		Fragment rim colourless glass	"
401	1037	Fragment coarse cream fabric - mortarium	RB
401	1038	Four fragments clay pipe stem, one stamped T: ATHERTON LONGTON	Mid 19th C
		Clay pipe bowl, coarse fabric with red inclusions, heel stamped ?HJ or ?IJ	c 1660-1680 or earlier
402	1054	Fragment redware, black glaze	18th C
		Fragment red fabric	Romano-British
402	1055	Three fragments burnt bone	-
403	1053	Fragment tile or brick fabric	Romano-British
403	1058	Fragment very abraded samian, Central Gaulish fabric	2nd C
		Three fragments tile and brick fabric	Romano-British
		Fragment industrial residue	"
403/405	1059	Two fragments tile and brick fabric	Romano-British
405	1052	Fragment clay pipe stem	Post-medieval
407	1049	Two fragments orange fabric	Romano-British
407	1051	Fragment base in very hard -fired grey fabric, very gritty. Possibly spotted with glaze	Medieval?

Samples

1025
1039
1044
1045
1046
1047
1048
1060

ILLUSTRATIONS

- Figure 1 Location Map
- Figure 2 Lancashire SMR Map showing sites and finds spots in the vicinity of the study area
- Figure 3 Trench Location Plan
- Figure 4 Trench Detail Plan (showing context numbers). NB Not all the context numbers referred to in the text appear on this drawing, as their inclusion would make the drawing unintelligible



14 MYRTLE DRIVE
KIRKHAM
EVALUATION

Site Name

LOCATION

TRENCH LOCATION
PLAN

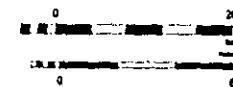
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DATE

07/98

KEY



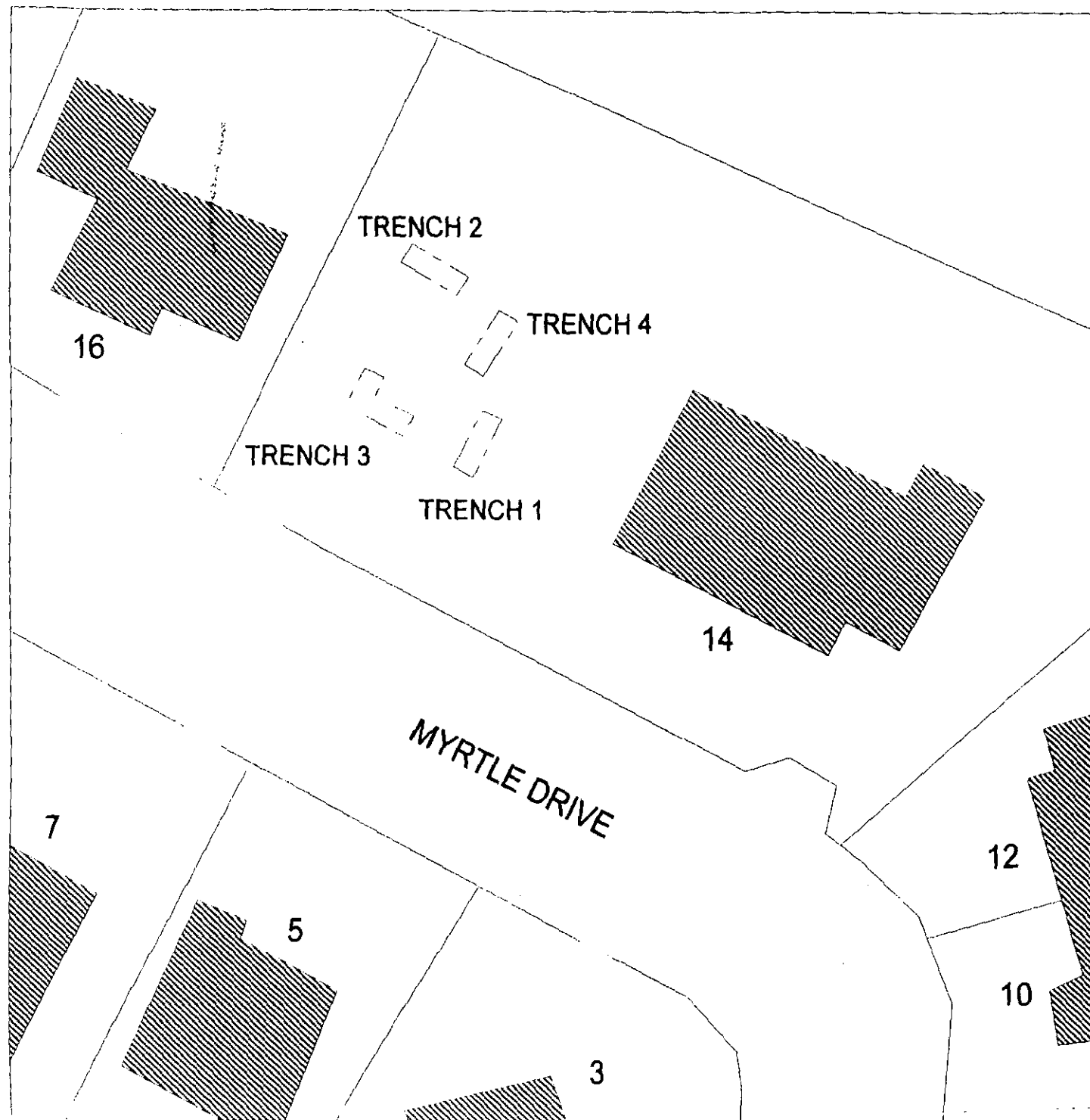
HOUSES



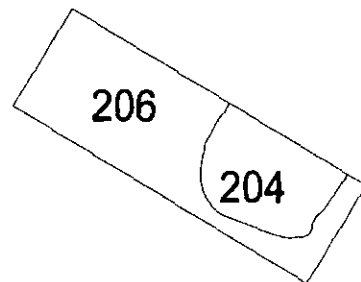
TRENCH EDGES



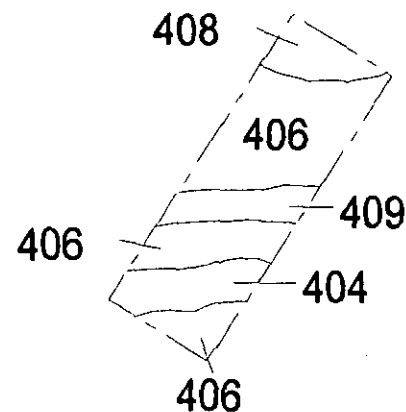
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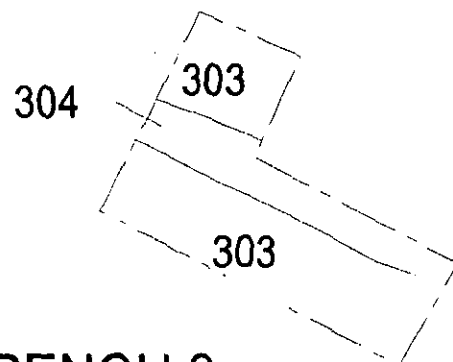
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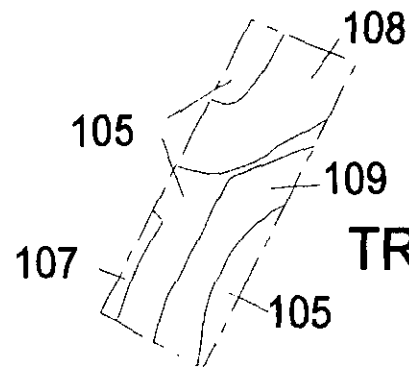
TRENCH 4



TRENCH 3



TRENCH 1



14 MYRTLE DRIVE KIRKHAM EVALUATION

Site Name

LOCATION

TRENCH PLAN SHOWING
FEATURES CUT INTO
THE NATURAL SUBSOIL

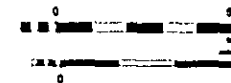
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FEATURE EXTENTS

TRENCH EDGES

56

FEATURE NUMBERS



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