



YORK ARCHAEOLOGICAL TRUST REPORT

SITE ADDRESS	Flood Alleviation Scheme test pits, Parkgate, Pickering, North Yorkshire		
CLIENT NAME	Environment Agency		
YAT PROJECT #	5403	YAT REPORT #	2010/62
MUSEUM ACCESSION #	N/A	GRID REFERENCE	SE 8136 8572
PLANNING REFERENCE #	N/A	AAI OPS NOTICE #	N/A

INTRODUCTION

A watching brief was maintained from 12th-14th July 2010 during the excavation of 17 geo-technical test pits either side of the Pickering Beck 1.5km north of Pickering (Figure 1). The pits were excavated by machine to a maximum depth of 4m BGL (below ground level) and recorded by running section and photograph, and then immediately backfilled. The test pits were excavated to assess the ground for the suitability of siting bunds to hold flood water upstream from the nearby town of Pickering.

The drift geology of the area consists of glacial clayey tills with sands and gravels overlying Jurassic oolitic limestone (Gaunt and Buckland, 22). The area under investigation involved a 1.5km long stretch of a broadly east-west aligned section of the Pickering Beck valley, between the North York Moors Railway line and Featherhaugh Wood (Figure 2). This valley is the southern end of Newton Dale, a deep glacial-outwash incised valley which may have drained much of the glacial melt water, from the North York Moors into the Vale of Pickering, depositing the extensive sands and gravels that form the subsoil in this area (Watts, Jones and Rahtz, 34).

Archaeological interest in this area concerns the extensive prehistoric, Roman and medieval occupation recorded in the area of Blansby Park, immediately to the north of the study area. These remains include Bronze Age round barrows, later Bronze/iron Age enclosure dykes, a probable Roman villa and the remains of the 13th century medieval deer park (Watts, Jones and Rahtz, 15). Archaeological fieldwork has taken place within the study area, most recently in 2000, when two evaluation trenches were excavated to investigate geophysical anomalies. A significant Roman building was identified, forming part of a probable bath-house complex, very close to the position of test pit 4 in the current survey area (Watts, Jones and Rahtz 15-56; Figure 2). Local land-owners also report frequent discoveries of tesserae and other Roman artefacts in mole hills in this area (Nathan Orme pers. comm.).

Additionally, the presence of thick alluvial and colluvial deposits in the Pickering Beck Valley holds the potential for buried earlier landscapes in the valley bottom, sealed beneath these deposits, which could contain areas of waterlogged organic material with significant potential to understand the land-use and type in this area.

The recovery of waterlogged wood remains from three of the test pits necessitated the allocation of context numbers to all deposits. These have been applied by test pit number to distinguish deposits identified in different areas, starting with 1000 for test pit 1 and 17000 for test pit 17.

The wood was assessed by S.J. Allen, YAT Wood Technologist, and his comments have been incorporated into the text. Species identifications follow Shweingruber (1982) and all dimensions are given in millimetres.

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TEST PITS - RESULTS

TP1

TP1 measured 0.6m x 4.5m and was aligned south-west – north-east (Figure 2, Plates 1 and 2). The earliest identified deposit, 1004, observed at 2.4m BGL to the limit of excavation at 3m BGL, was a dense layer of compacted irregular Oolitic limestone fragments up to 0.40m across, which was interpreted as a possible colluvial deposit. Overlying this was 1003, a 0.90m thick layer of stiff, mid brown silty clay with moderate irregular limestone fragments that become more frequent towards the base of the deposit. This was sealed by 1002, a 0.5m thick deposit of soft slightly yellow mid brown clayey sand with occasional pebbles, which was overlain by 1001, a 0.75m thick layer of firm, yellow-brown, slightly clayey sand. This was sealed by the 0.25m thick topsoil (1000), a soft-friable mid grey-brown slightly silty sand.

TP1 lay on the rising ground to the south of the Pickering Beck (Plate 1), which may explain the stoney colluvial deposit at the base of the test pit. The overlying deposits were interpreted as being of probable glacial origin, giving way to probable alluvial deposits at 1.5m BGL. The archaeological implications of this interpretation are discussed further below.

TP2

TP2 measured 0.6m x 3.3m and was aligned north-west – south-east, perpendicularly to the line of the railway (Figure 2, Plate 3). The earliest observed deposit, 2006, was a soft grey sand with frequent limestone fragments, encountered at 3.5m BGL to the depth limit of 4m BGL. This was overlain by 2005, a 0.30m thick layer of loose gravel in a grey, silty clay matrix. The next deposit, 2004, was a 0.90m thick grey clayey sand which became increasingly gravelly with depth and also contained several large rounded limestone boulders measuring up to 0.35m across. These gravelly deposits were sealed by 2003, a 0.70m thick firm grey clay sand, which was overlain by 2002, a 0.40m thick firm, marled yellow and grey clay sand. Next in the sequence was 2001, a 0.90m thick firm-friable, yellow, very slightly silty sand which was overlain by the topsoil, 2000, a 0.30m thick friable mid grey-brown silty sand.

TP2 was close to the beck and is therefore thought to consist mainly of alluvial deposits, especially the later clay-silts, which were well-sorted and clean. Ground water was not observed here, unlike in most of the rest of the test pits, despite the considerable depth reached by the excavation.

TP3

TP3 measured 0.60m x 3.8m and was aligned approximately north-south (Figure 2, Plates 4 and 5). The earliest observed deposit was 3005, a soft, grey clay-sandy gravel with occasional large boulders, encountered at 2.7m BGL to the depth limit of excavation at approximately 4m BGL. Rapid ingress of ground water at this depth saturated the gravel deposit and precluded further excavation. The next deposit was 3004, a 1m thick layer of mixed grey and yellow clayey sands with gravel that was sealed by 3003, a 0.30m band of firm marled grey and yellow clayey sand. Overlying this was 3002, a 0.80m thick firm, clean, yellow clay sand with small stones that was sealed by 3001, a mixed deposit of topsoil with yellow clayey sand and stone fragments, interpreted as an interface between 3002 and the topsoil, 3000, which was a 0.35m thick friable mid grey/brown silty sand.

The earlier gravels may be glacial, and the later deposits in TP3 alluvial in origin, with the interface 3001 probably the result of cultivation. The current land-use is as pasture and hay-meadow, but small scale cultivation has been periodically practised in the study area (Nathan Orme pers. comm.).

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TP4

TP4 measured 1.5m x 3.6m and was aligned north-south (Figure 2, Plates 6 and 7). TP4 lay 70m west-north-west of the archaeological evaluation trench 'BP11' dug in 2000, where structural Roman remains were encountered at 0.40m BGL (Watts, Jones and Rahtz, 29). Accordingly, the first 1m of TP4 was excavated in shallow spits using a 1.5m wide toothless ditching bucket. After the first metre, the toothed 0.60m wide bucket was used to the depth limit at 4m BGL.

The earliest identified deposit, at 3.3m BGL to the depth limit, was 4004, a soft, pale grey sandy gravel that was saturated with groundwater. This was overlain by 4003, a 0.70m thick layer of soft grey sand with some gravel and occasional larger limestone fragments. This was sealed beneath 4002, a 1.2m thick deposit of firm, yellow and grey marled clayey silty sand which became progressively softer and much sandier towards the base of the deposit. Above this was 4001, a 1.15m thick firm yellow clay sand that was sealed beneath topsoil 4000, a 0.25m thick friable mid grey silty sand.

No definite archaeological features or deposits were identified in this test pit, which presumably lies outside the limit of the Roman building referred to above. The observed sequence reflects the general pattern of glacial and alluvial deposits seen throughout the study area.

TP5

TP5 measured 0.6m x 4m and was aligned north-east – south-west (Figure 2, Plate 8). The earliest observed deposit, from 3.5m BGL to the limit of excavation at 4m BGL, was 5005, a soft, slightly yellow grey-brown, slightly silty sand with clay lumps and gravel inclusions. Rapid ingress of ground water was observed at this level. Overlying 5005 was 5004, a 0.90m thick layer of soft, mid grey, mixed clay sand with gravel and small stones. This was sealed by 5003, a 0.70m thick firm, grey and yellow marled clay sand, and 5002, a 0.50m thick firm, yellow-grey, slightly clayey silty sand that became progressively softer towards the base. Overlying these was 5001, a 1.15m thick deposit of soft, dark brown-yellow, very silty sand. This was in turn sealed beneath the topsoil 5000, a 0.25m thick soft, mid-dark brown, slightly silty sand.

TP5 was very close to the Pickering Beck, which may account for the very thick alluvium represented by deposit 5001. Beneath this, as elsewhere, the deposits are interpreted as glacial in origin.

TP6

TP6 measured 0.6m x 4m and was aligned north-south (Figure 2, Plate 9). The earliest identified deposit, 6006, lay at 3m BGL to the depth limit of 4m BGL, and consisted of a fine, grey, sandy gravel in a matrix of grey sandy silt. The deposit was saturated by groundwater, encountered at 3.5m BGL. Overlying this was 6005, a 0.40m thick layer of firm, grey with yellow-brown sandy patches, very silty clay with stones and some gravel. This was sealed by 6004, a 0.70m thick mixed yellow and grey silty sand and gravel. The next deposit, 6003, was only 0.20m thick, and was a very soft grey silty sand that was sealed beneath 6002, a 0.60m thick soft-friable, mixed yellow and grey silty sand that became progressively softer and greyer. Overlying this was 6001, a 0.80m thick layer of soft, dark yellow, silty sand that lay beneath the topsoil, 6000, a 0.30m thick soft mid brown silty sand.

TP6, like TP5, lay very close to the beck. As with TP 5, the clean yellow silty sand 6001 is thought to

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result from alluvial action, along with the banded sands beneath it. Gravelly deposit 6004 and those below may reflect glacial deposition.

TP7

TP7 measured 0.6m x 3.9m and was aligned north-east – south-west (Figure 2, Plates 10 and 11). The earliest observed deposit was 7005, identified at 3.5m BGL, was a firm, yellow-brown clayey silt with occasional limestone fragments up to 0.15m across. These fragments became larger and more frequent, and the soil matrix more clayey, up to the depth limit of excavation at 3.8m BGL. Overlying this deposit was 7004, a 0.60m thick firm, yellow-brown clayey silt with gravel, which became progressively more gravelly with depth. This was sealed beneath 7003, a 0.90m thick layer of firm, yellow-brown sandy clay-silt with moderate pebble inclusions. This lay beneath 7002, a 0.80m thick stiff, slightly pink-brown, sandy clay. Overlying this was 7001, a 0.95m thick firm, dark yellow clay sand that became stiffer as it merged into the underlying sandy clay of 7002. Sealing 7001 was 7000, the 0.25m thick topsoil, which was a friable mid grey-brown sandy silt.

TP7 lay on the northern margin of Featherhaugh Wood, where the ground began to rise out of the valley floor, in a similar position to TP1 but much closer to the beck (Figure 2). As in TP1, the lowest stoney deposits may reflect this slope, with glacial and later colluvial and alluvial deposits forming above it. 7001 seems broadly to correspond with thick deposits interpreted as alluvial in origin in test pits closer to the beck; this is discussed further below.

TP8

TP8 measured 0.6m x 4m and was aligned north-south (Figure 2, Plate 12). The earliest identified deposit, 8004, was encountered at 2.5m BGL and extended beyond the depth limit of excavation at 3.8m BGL. 8004 consisted of a soft, slightly blue grey clayey silty gravel which became progressively wetter with depth and included large rounded boulders up to 0.45m across amid less gravel from around 3.5m BGL. Sealing this was 8003, a 1.10m thick layer of very clean, soft, grey with yellow streaks, slightly silty sand. This lay beneath 8002, a 0.50m thick soft, grey and yellow marled, slightly clayey silty sand that was in turn sealed by 8001, a 0.65, thick firm, slightly grey yellow, silty sand. This lay beneath the topsoil, 8000, a friable mid grey brown, silty sand.

TP8, like 5 and 6, lay immediately south of the Pickering Beck, which may account for the probable alluvial origin of 8003 and the subsequent banded silty sands.

TP9

TP9 measured 0.6m x 4m and was aligned north-west – south-east (Figure 2, Plates 13 and 14). The earliest observed deposit was 9004, a soft pale grey sandy gravel, identified at 3.5m BGL and extending beyond the depth limit of excavation at 3.8m BGL. 9004 was saturated by groundwater observed at 3.8m BGL. Overlying it was 9003, a 1.75m deep deposit of fairly firm, mixed dark yellow and grey sandy clayey silt and gravel. This extensive deposit was sealed by 9002, a 0.65m thick firm, marled orange and grey, sandy clay. Overlying this was 9001, a 0.90m thick firm, grey with orange streaks, silty sand with occasional small patches of dark red-brown sandy silt. This was sealed by the topsoil, 9000, a friable mid brown-grey silty sand.

TP9 lay close to the Pickering Beck, having been moved downslope to the north-west to avoid an area of rare grassland at the request of English Nature. The extensive gravel deposit 9003 is much thicker than similar deposits found elsewhere at this depth, and with the overlying clay of 9002, is

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thought to be glacial. Above this, as elsewhere, an extensive alluvial deposit was encountered.

TP10

TP10 measured 0.6m x 3.9m and was aligned north-west – south-east (Figure 2, Plate 15). The earliest identified deposit was 10007, a soft, yellow and grey mixed sandy gravel, observed at 3.6m BGL to the depth limit at 4m BGL. This deposit was saturated with ground water at 3.9m BGL. Overlying this was 10006, a 0.80m thick soft, dark grey clayey gravel. This was sealed by 10005, a 0.20m thick band of soft, dark red-brown sandy silt with organic material including plant fibres and small fragments of wood. This was overlain by 10004, a 0.20m deposit of soft, clean pale grey sand, which in turn was sealed by 10003, a 0.40m thick deposit of soft, dark red-brown sandy silt, again containing organic material, which was sampled. These deposits were sealed by 10002, a 0.90m thick layer of soft, friable, pale grey with orange streaks, slightly silty sand which became progressively softer and wetter as it neared the organic material below. Above this was 10001, a 0.70m thick deposit of soft, dark yellow-brown, very clean silty sand, which was in turn sealed by the topsoil, 10000, a 0.40m thick friable, mid grey-brown, silty sand.

TP10 was immediately south-west of a bridge over the Pickering Beck (Figure 2). Probable alluvial deposits were identified at greater depth than elsewhere, commencing with the banded organic silt and clean sand observed from 2.8m BGL upwards. The presence of preserved organic material may demonstrate the potential for this area to contain waterlogged deposits which could contribute to an understanding of earlier vegetation, land-use and land forms, perhaps even evidencing earlier buried surfaces. This is discussed further below.

Wood sample assessment by S.J. Allen:

Context 10003: Section of roundwood, partial bark present. Several broken away side shoots present, some surface damage. Both ends broken away and missing. 442 l, 57 dia. *Alnus spp.*

Context 10003: Section of small diameter roundwood, bark present. Both ends broken away and missing. 151 l, 17 dia. *Alnus spp.*

TP11

TP11 measured 0.6m x 3.9m and was aligned north-west – south-east (Figure 2, Plate 16). The earliest observed deposit was 11005, a soft yellow brown sandy silty gravel which became saturated with incoming groundwater at 3.8m BGL. 11005 was observed at 3.1m BGL to the depth limit at 4m BGL. Overlying it was 11004, a 0.20m thick band of firm, dark grey silty sand-clay with some organic material. This was sealed beneath 11003, an extensive deposit of very clean, very soft, dark blue-grey, sand 1.5m thick. Overlying this was 11002, a 0.4m thick layer of soft, pale grey with yellow streaks, silty sand, which in turn lay beneath 10001, a 0.70m thick soft, friable, mid yellow-brown silty sand. This was sealed by topsoil, 11000, a 0.30m thick friable mid grey-brown silty sand.

TP11 lay immediately north-east of a bridge over the Pickering Beck (Figure 2). Although less extensive than 10003 or 10005, the band of organic material 11004 was very similar, and probably marks the deepest alluvial deposit overlying glacial gravels. The extent of 11003 is probably explained by its proximity to the beck, and may represent several alluvial events over a considerable span of time.

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TP12

TP12 measured 0.6m x 3.9m and was aligned north-west – south-east (Figure 2, Plate 17). The earliest identified deposit was 12005, a soft, grey and yellow mixed silt and sandy gravel, observed at 2.3m BGL to the depth limit at 3m BGL. 12005 was saturated by groundwater, observed at 2.3m BGL. Overlying it was 12004, a 0.70m thick layer of soft, orange with grey patches, wet sandy gravel. This was sealed by 12003, a 0.50m thick, very soft, dark grey, slightly silty sand contain organic material including plant fibres and small wood fragments, which was sampled. This was overlain by 12002, a 0.30m thick deposit of very soft, clean pale grey slightly silty sand, which was in turn sealed by 12001, a 0.35m thick layer of firm, yellow, slightly sandy silty clay. This lay beneath the topsoil 12000, a 0.45m thick friable, slightly clayey silty sand.

TP12 was approximately 50m north-west of the beck, beside the railway line (Figure 2). In similar vein to TP10 and TP11, TP12 contained a band of organic alluvial material overlying probable glacial gravels, but considerably higher up, at 1.10-1.60m BGL. Above this were clean alluvial deposits similar to those observed elsewhere.

Wood sample assessment by S.J. Allen:

Context 12003: Section of roundwood, no bark present. In three refitting sections, some surface damage. Both ends broken away and missing. 138 l, 32 dia. *Corylus avellana* L.

TP13

TP13 measured 0.6m x 3.6m and was aligned south-west – north-east (Figure 2, Plates 18 and 19). The earliest identified deposit was 13004, a soft, dark yellow sandy gravel, observed at 2m BGL to the depth limit at 2.8m BGL. 13004 became rapidly saturated with ground water at 2.4m BGL, precluding further excavation. Overlying 13004 was 13003, a 0.60m thick layer of fairly soft, blue-grey clayey silty gravel with some organic material including root fibres. This was sealed by 13002, a 0.20m thick band of stiff, very clean, blue-grey silty clay. Overlying this was 13001, a 0.90m thick deposit of stiff, marled yellow and grey, slightly sandy silty clay. This lay beneath the topsoil, 13000, a 0.30m thick friable, mid brown, clayey sandy silt.

TP13 lay 100m north-east of TP12, beside the railway line (Figure 2). The sequence resembles that in TP12, with an organic deposit at 1.40 – 2m BGL separating gravel from probable alluvium higher up, except that the upper deposits contained much more clay than seen elsewhere.

TP14

TP14 measured 0.6m x 3.6m and was aligned north-west – south-east (Figure 2, Plate 21). The earliest identified deposit was 14004, soft grey, silty sandy gravel, observed at 2.3m BGL to the depth limit at 2.5m BGL. This was sealed by 14003, a 0.30m thick layer of fairly soft, blue-grey, clayey silty sand. Both 14003 and 14004 were saturated by rapidly flowing ground water, encountered at 2.2m BGL. Next in the sequence was 14002, a 0.80m thick deposit of soft, blue-grey, very silty clay with organic seams running through it which were interpreted as preserved root systems (Plate 20). Overlying this was 14001, a 0.90m thick very stiff, marled yellow and grey sandy clay that became softer and siltier towards the interface with 14002. Sealing 14001 was the topsoil, 14000, a 0.30m thick firm-friable mid grey-brown, slightly clayey silty sand.

TP14 lay 100m north-east of TP13 beside the railway line (Figure 2). The sequence was broadly

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similar to TP12 and TP13, with the exception of very stiff clay at the relatively shallow depth of 0.30m – 1.20m BGL. Some organic preservation was noted again at around 1.20m BGL, as before, but to a greater depth than previously observed.

TP15

TP15 measured 0.6m x 3.9m and was aligned south-west – north-east (Figure 2, Plates 22 and 23). The earliest observed deposit was 15004, a soft grey silty sandy gravel, encountered at 2.9m BGL to the depth limit of excavation at 3.5m BGL. Ground water was encountered at around 2.9m BGL on the interface of 15004 and 15003, which saturated 15004 and precluded further excavation. Overlying 15004 was 15003, a very extensive 1.5m thick deposit of soft, dark grey red-brown silty sand with a considerable amount of organic material, that became progressively sandier with larger fragments of preserved wood towards the base of the deposit at around 2.9m BGL. Wood samples were taken from 15003. Overlying this was 15002, a 0.4m thick layer of soft, clean, pale grey clayey sand, which was sealed by 15001, a 0.70m thick deposit of firm-friable, mixed light yellow and grey slightly clayey silty sand. This lay beneath the topsoil, 15000, a 0.30m thick firm-friable mid grey-brown, slightly clayey silty sand.

TP15 lay 1000m north-east of TP14 beside the railway line, fairly close to a meander of the Pickering Beck (Figure 2). As in the other test pits in this area, organic material was identified at around 1.4m BGL, but the extent of it was much greater than that seen elsewhere and then fragment size of preserved wood much larger. This may reflect the relative proximity of the beck, although with no ready date for 15003 it is not possible to securely relate it to the beck's current position. This is discussed further below.

Wood sample assessment by S.J. Allen:

Context 15003: Section of roundwood, bark present. Both ends broken away and missing. 270 l, 78 dia. *Fraxinus excelsior* L.

Context 15003: Section of roundwood, bark present. Both ends broken away and missing. 439 l, 55 dia. *Alnus* spp.

Context 15003: Section of roundwood, partial bark present. Both ends broken away and missing. 140 l, 34 dia. *Alnus* spp.

TP16

TP16 measured 0.6m x 3.7m and was aligned approximately north-south (Figure 2, Plates 24 and 25). The earliest identified deposit was 16005, a soft orange-grey silty clayey fine gravel with bands of dark grey sandy silt containing preserved organic material. 16005 was observed at 3.6m BGL to the depth limit at 3.9m BGL, where ground water was observed. Overlying this was 16004, a 0.90m thick layer of soft, orange-grey silty clayey gravel that was courser than 16005 and did not contain any organic silt. This lay beneath 16003, a 0.70m thick deposit of firm-friable, orange and grey marled sandy clay which in turn lay beneath 16002, a 1.5m thick layer of stiff, marled orange and grey, slightly silty sandy clay. This was sealed by 16001, a 0.20m thick firm, orangey grey-brown, sandy clay, which lay beneath the topsoil, 16000, a 0.30m thick friable, mid grey-brown silty sand.

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TP16 lay approximately 80m south of the Pickering Beck in the valley floor (Figure 2), which may account for the lack of clean alluvial deposits in the first 2m seen elsewhere during this survey, and may also explain the greater depth of possibly glacial clay observed here than elsewhere. The presence of a small amount of organic material near the water table at 4m BGL may, however, suggest otherwise, unless it relates to glacial activity rather than more recent alluvial events.

TP17

TP17 measured 0.6m x 3.4m and was aligned approximately north-south (Figure 2, Plate 26). The earliest identified deposit was 17006, a soft, mixed, dark brown silty sand and grey sand with gravel, observed at 3.45m BGL to the depth limit at 3.8m BGL. 17006 was saturated by ground water at 3.6m BGL. Overlying this was 17005, a 0.05m thick band of soft, dark red-brown clay silt with organic plant fibres, that was sealed by 17004, a 0.80m thick layer of mixed dark brown and grey sand with gravel very similar to 17006. Next in the sequence was 17003, a 1.10m thick deposit of firm, yellow and grey marled slightly silty clay-sand, which was sealed by 17002, a 0.70m thick firm-friable, pale grey silty sand which became softer and more yellow with depth. Overlying this was 17001, a 0.50m thick layer of soft, dark yellow, slightly clayey sand, which was sealed beneath the topsoil, 17000, a 0.30m thick friable mid grey-brown silty sand.

TP17 was located close to the beck, which may account for the alluvial nature of the upper 2.6m of deposits. Beneath these, the presence of organic silt in possible glacial gravels is of interest, and in marked contrast to the higher, thicker organic deposits identified in the north-eastern area of the survey.

WOOD SAMPLE ASSESSMENT

by S.J. Allen

All of this material has been cleaned, examined and sampled for species identification. There is no evidence of woodworking or any other human modification of these six pieces prior to excavation. There is no intrinsic dating or typological evidence to be recovered and the assemblage is recommended for disposal.

DISCUSSION

The majority of the test pits showed a consistent sequence of glacial gravels overlain by possible glacial clays and sands, with very clean, well-sorted sandy silts in the upper 2m probably representing alluvial activity, particularly near to the Pickering Beck. The two test pits dug into the southward rising slope beneath Featherhaugh Wood, TP1 and TP7, also contained limestone rubble deposits which may reflect colluvial action.

Of particular archaeological interest is the presence of preserved organic material in the eastern half of Bund 2 and the entirety of Bund 3 (see Figure 2). These fall into two broad groups. The first, in test pits 16 and 17, lay at around 3.5m BGL and were sealed beneath gravel deposits that were themselves sealed beneath stiff clay deposits interpreted as glacial in origin (Andrew Haigh, Environment Agency, pers comm.). If this interpretation is correct, then these may preserve very early material from the immediate post-glacial environment and may therefore represent Mesolithic land surfaces. This would be of significant interest in this area, given the relative proximity to Starr

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Carr and other Mesolithic areas of the Vale of Pickering.

The second group, encountered around 2.5m BGL in Test Pits 10 and 11 either side of the bridge and at around 1.4m BGL in Test pits 12-15 in the area of Bund 3, were all stratigraphically above the gravel deposits identified across the area, and were sealed beneath sands and silty clays thought to be alluvial in origin. These organic deposits, especially in TPs 10, 12 and 15 produced wood fragments large enough to sample, and were fairly extensive, becoming deeper to the north-east. Despite the undiagnostic nature of the recovered wood fragments, the presence of organic material may indicate buried ground surfaces from the prehistoric period onwards and as such hold potential for understanding the land-use of the area in greater detail if they can be systematically sampled over a larger area.

The size of the test pits reduced the likelihood of identifying features associated with these organic sits, and makes any assessment of possible earlier land surfaces impossible to model accurately. It is felt, however, that large-scale interventions such as those required to construct the flood bunds, have the potential to expose much larger areas at considerable depth. There would therefore be an opportunity to expose and record any earlier land surfaces and devise a sampling strategy that would better understand them.

The significant Roman remains and deposits previously identified in the area of TP4 were not encountered during this survey, but as discussed above, the limited size of the test pit reduced the likelihood that landscape features would be located and positively identified. There remains significant potential for further deposits and structures of Roman date to survive in this area in the upper 1m of the sequence, which could be adversely affected by any proposed ground disturbance.

REFERENCES

Gaunt, GD and Buckland, PC, 2003, 'The Geological Background to Yorkshire's Archaeology' in Manby, Moorhouse and Ottaway (eds), *The Archaeology of Yorkshire: An assessment at the beginning of the 21st century*, Yorkshire Archaeological Society, Leeds

Shweingruber, FW, 1982, *Microscopic Wood Anatomy*, Zurich

Watts, L, Jones, A and Rahtz, P, 2003, 'The Roman Villa at Blansby Park, Pickering: Excavations at the Park Gate Roman Site in 2000', pp15-56 of *Yorkshire Archaeological Journal*, Vol. 75.

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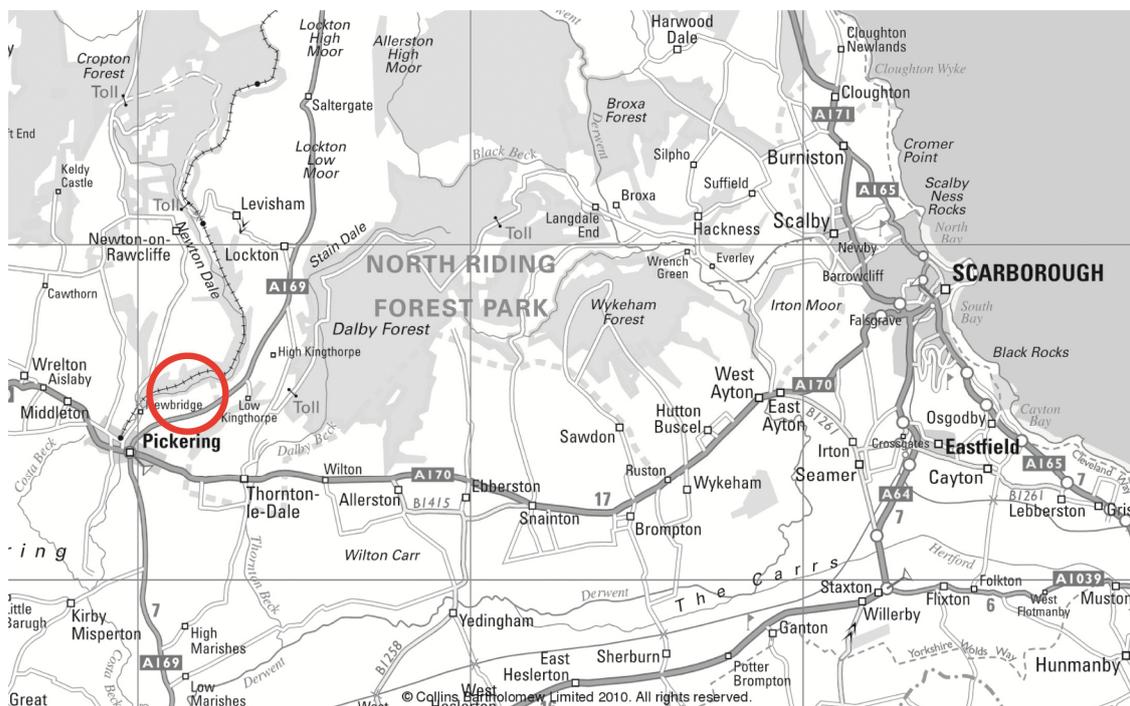


Figure 1 Site location

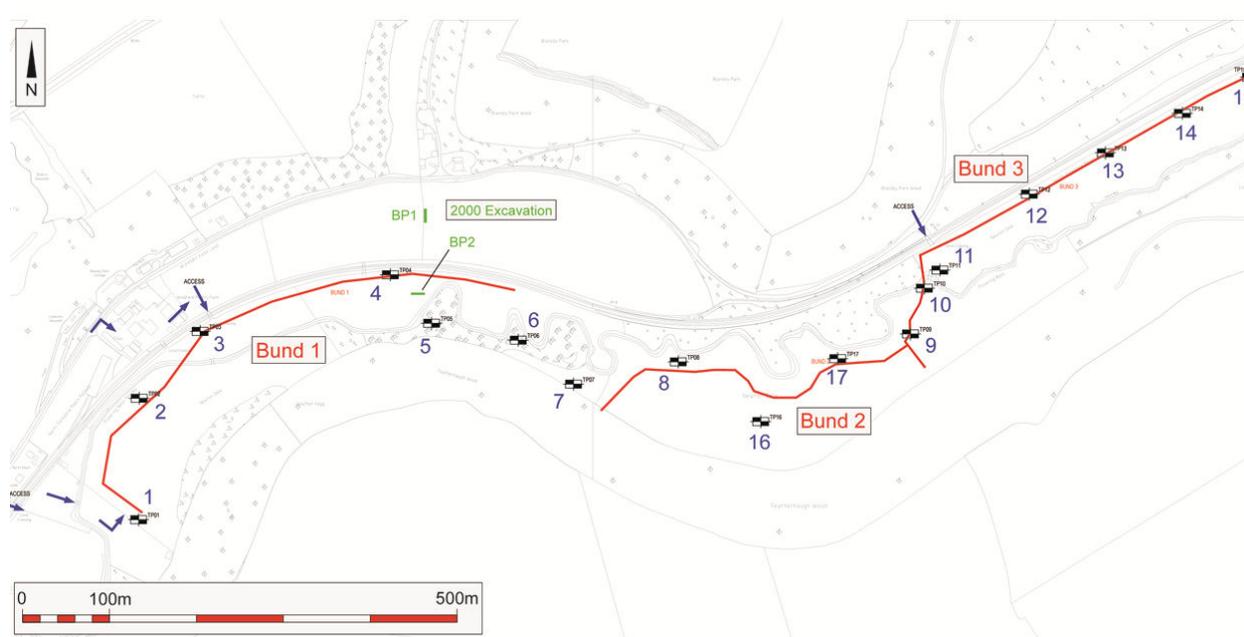


Figure 2 Test pit locations, derived from client's survey

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Plate 1 TP1 location (by tree on slope on left) in the Pickering Beck valley, with course of the river shown by the tree-line on the right. Looking south-west from TP2.



Plate 2 TP1 section

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Plate 3 TP2 section



Plate 4 TP3 location, looking south-west towards Pickering Beck with railway on the right.

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Plate 5 TP3 section



Plate 6 TP4 location looking east towards meander of beck, with area of 2000 excavation trench BP2 behind

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Plate 7 TP4 section



Plate 8 TP5 section

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Plate 9 TP6 section



Plate 10 TP7 location, looking south-east

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Plate 11 TP7 section



Plate 12 TP8 section

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Plate 13 TP 9 location, looking north-east



Plate 14 TP9 section

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Plate 15 TP10 section



Plate 16 TP11 section

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Plate 17 TP12 section



Plate 18 TP13 location, looking south-west, showing line of beck on left and line of railway on right

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Plate 19 TP13 section



Plate 20 Detail of organic material within context 14002

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Plate 21 TP14 section



Plate 22 TP15 location, looking south-east, showing tree-line along a loop of the Pickering Beck

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Plate 23 TP15 section



Plate 24 TP16 location, looking north-east

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Plate 25 TP16 section



Plate 26 TP17 section

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