Willow Walk, North Hinksey, Oxford

Archaeological Watching Brief Report

ARCHAEOLOGICAL WATCHING BRIEF REPORT

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Willow Walk, North Hinksey, Oxford

Archaeological Watching Brief Report

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Summary

Between May and June 2011 Oxford Archaeology (OA) carried out an archaeological watching brief on an elevated causeway called Willow Walk through the pastureland of Hinksey Meadows, North Hinksey, Oxford (NGR: SP 4955 0544). The work was commissioned by the Environment Agency to take place during the installation of two new culverts within Willow Walk to allow drainage between pasture land either side of the causeway as part of general flood alleviation works to the east of Oxford.

The watching brief revealed a natural floodplain sequence comprised of multiple bands of gravel overlain by a thick layer of redeposited clay that formed the the linear embankment or causeway along which Willow Walk runs. Set into this was the current stone surface, dating from the Victorian period, which where not still visible was overlain by modern soil encroachment and a very recent tarmac footpath. No evidence for any former phases of routeway were encountered.

1 Introduction

1.1 Scope of work

1.1.1 Oxford Archaeology (OA) carried out a watching brief during the installation of two culverts under Willow Walk footpath, a postulated Victorian causeway between Bulstake Stream and Seacourt Stream within Hinksey Meadows, North Hinksey to the west of Oxford (Fig. 1). The work was part of a flood relief scheme by the Environment Agency (EA) called Short Term Measures 2: IMTH001624. The watching brief was commissioned by Harry Parker of the EA and took place during the ground works phase of the works and was carried out on 16th May and 14th June 2011.

1.1.2 The flood prevention measures were carried out under Part 15B of the the General Permitted Development Order 1995 and as such did not pass through the Local Planning Authority and therefore was not subject to an archaeological brief. However, the work was carried out carried out in accordance with best practice and OA and the Institute for Archaeologists (IfA) guidelines (OAU 1992, IfA 2008).

1.2 Location, geology and topography

1.2.1 Willow Walk is located 3km to the west of central Oxford. The City of Oxford is situated on the floodplains of the Rivers Thames and Cherwell, which has lead to flooding of low-lying areas, with the most recent event in 2007.

1.2.2 Willow Walk, centred on SP 4955 0544, is a linear tree-lined embankment or causeway aligned north-east to south-west with ditches running parallel either side. The footpath is over 0.5km long and includes two bridges a stone crossing Seacourt Stream, and an iron one that crosses Bulstake Stream. The embankment effectively divides the open pastureland to each side. The route is a Public Right of Way utilised by walkers, cyclists and horse riders, linking North Hinksey with Osney.

1.2.3 The City Council currently has ownership of King George's Field, Willow Walk and the western half of Oatlands Road recreation ground; the eastern half of the recreation ground is part of West Oxford School's playing field and belongs to Oxfordshire County Council LEA. West of King George's Field, Hinksey Meadow and two further meadows

south of Willow Walk have been acquired by the Oxford Preservation Trust to secure the future of these green spaces between Osney, and North Hinksey.

1.2.4 The underlying solid geology is mapped as Oxford Clay dating from the Jurassic period. The overlying drift geology consists of Pleistocene floodplain sands and gravels overlain by more recent Holocene alluvium. The top of the embankment/causeway lies at 56.6m AOD and the surrounding fields are at approximately a metere lower at 55.6m AOD.

1.3 Archaeological and historical background

1.3.1 The city of Oxford lies in good agricultural land of the Thames valley and had early origins but became an important town in the Anglo-Saxon and Medieval periods. The settlement was well established by the time of the Domesday Survey of 1086. There were a number of outlying villages in the landscape, including North Hinksey, Osney and Botley. The university began as a teaching establishment sometime in the late 11th to 12th century and by the mid 14th century its influence had extended to such matters as the regulation of trade and the policing of the streets. With the creation of the see of Oxford, first at Osney in 1542 and then at Christ Church in 1546, Oxford became a city. It was granted a royal charter in 1605 and subjected to two major sieges during the Civil War. It was subject to municipal reform at around 1835 and from 1889 it was a county borough, later becoming a district in 1974, retaining its lord mayor and the title of a city. Much of the urban development and encroachment on the open spaces by housing, commerce and industry took place in the 19th century.

1.3.2 The following outline history of the area in which Willow Walk is located, is taken from the West Oxford Community Nature Plan of 1999. The earlier history of North Hinksey is most evident in the Church of St. Lawrence. A small Saxon building was replaced by a Norman Church about 1100 AD; the nave and the south door are fine examples of Norman building.

1.3.3 In Anglo-Saxon times, the first settlers in West Oxford looked for slightly higher ground in the watery landscape and the suffix *–ey* in the place names Binsey, Hinksey, Medley and Osney is derived from the Old English word for an island. Osney Abbey, one of the architectural glories of medieval Oxford, was founded in the West Oxford water meadows in 1129 and difficulties with drainage probably led to an extensive re-shaping of the site in the 13th century. The last but one abbot, John Burton complained in 1537 that “if he was to remain in such a damp place as Oseney his life would be shortened.” The dissolution of the abbey in 1539, saw the church briefly become the cathedral for the new Oxford Diocese in 1542, before being transferred to Christ Church in 1545.

1.3.4 Although the West Oxford area was so flood-prone it would seem probable that a trackway crossed the Thames at North Hinksey potentially as early as the Prehistoric era, with the route continuing north along the ridge towards Banbury. This route seems to have been followed by secondary Roman roads and would have involved fording a much broader river channel between the modern Hinksey and Bulstake streams. This crossing was called Oxenforde in 1352 and is one of many fords from which Oxford might have taken its name. There was a ferry at North Hinksey by 1370 and in 1467 John Heyns, the ferryman, obtained permission from Osney Abbey to build a causeway from Botley Road to the ferry, which would have made the route passable for most of the year. The causeway evolved to become the present day Botley Road, north of willow Walk.

1.3.5 The Thames and its side streams have played an important part in the history of West Oxford. There was a mill on the Seacourt Stream at Botley by the 12th century, and the

monks of Osney Abbey are thought to have defined the present main stream of the Thames south of Medley as a stream to power the mill in the 13th century. Waterways were a practical alternative for moving materials around the low-lying areas of Oxford.

1.3.6 Much former agricultural land has, since the late 19th century, been converted to allotments or to recreation use, usually preserving old field boundaries as well as giving public access to a generous network of green spaces. Parks such as Botley Park, Oatlands Road recreation ground and King George's Field form an important transition between urban and rural West Oxford.

1.3.7 The path between Oxford and North Hinksey is a metalled bridleway and cycle track variously known as Willow Walk and Ruskin's Ride. This

1.3.8 Little is confirmed about the origin of Willow Walk itself, there are suggestions that path was built in 1876-77 by Aubrey Harcourt (1852-1904), a major local landowner, but that it was not open to the public until 1922, (Hanson 1996). The potential for archaeological features to be found associated with Willow Walk was deemed by Oxford Flood Risk Management Strategy (OFRMS) to be of low risk. The location of the works and the history of the area meant that the potential for remains of an early routeway pre-dating Willow Walk was possible.

2 Project Aims and Methodology

2.1 Aims

2.1.1 To identify and record the presence/absence, extent, condition, quality and date of archaeological remains in the areas affected by the development.

2.1.2 To preserve by record any archaeological features or deposits that may be disturbed or destroyed during the course of the groundworks.

2.1.3 To make available the results of the archaeological investigation.

2.2 Methodology

2.2.1 A supervising archaeologist monitored the below ground works on an intermittent basis and was present for the disturbance of the postulated Victorian pathway.

2.2.2 The works were all carried out by either a 30 tonne excavator using a toothed and toothless bucket or by smaller machines, as appropriate. The groundworks were done by Birse Civils with plant supplied by Flannery. The works allowed sufficient time for examination of all exposed deposits and remains.

2.2.3 Three main trenches were excavated by Birse of which two were recorded archaeologically; one ran parallel to the footpath and was excavated to facilitate movement of a service run (Archaeological Trench 1), and two others traversed the footpath, for the installation of Culverts 1 and 2 (Archaeological Trench 2) to allow for drainage between the meadow pastureland to either side.

2.2.4 The trench locations were planned on a scaled base drawing provided by the client, with more detailed archaeological plans of the trenches at 1:20 or as sketched plans with dimensions annotated. Sample sections of the trenches of pertinent or typical areas were drawn at a scale of 1:20. A photographic record using digital format were used. All Records made, followed procedures detailed in the *OAU Fieldwork Manual* (ed. D Wilkinson, 1992).

3 Results

3.1 Description of deposits

Trench 1:

3.1.1 The trench was located parallel to Willow Walk along its southern side, (Figure 1 and Plate 1). The trench was observed for a 12m stretch to define the nature of the works and to characterise the sequence of deposits, (Plate 2). The trench was 12m long by 1.3 m wide and dug to an overall depth of 3.1m below ground level (bgl), which was at 53.57 m AOD.

3.1.2 The sequence of deposits revealed that at the base of the trench were natural gravels. The gravels were seen at a depth of 1.5 m BGL (55.17 m AOD), and continued for a further depth of 1.6m to the lowest extent of excavation. At the time of excavation the water table was reached at 2.0 m bgl. Above the gravels was a 1 m thick layer of sterile grey clay with reddish brown mottling.

3.1.3 Above this was a 0.25 m thick layer of yellowish brown sandy gravel which was unsorted and was interpreted as being makeup or bedding material associated with the adjacent pathway. At the top of the sequence was 0.32 m of topsoil and turf.

Trench 2, Culvert 2:

3.1.4 This trench crossed the footpath at right angles, partway along its length, (Figure 1). The trench was for the installation of below ground culverts, allowing drainage from the field to the north-west of Willow Walk through to those on the south-east. There were two such culverts but only one was observed during excavation. A visual inspection of the initial Culvert 1, showed that it had the same sequence of deposits as Culvert 2 which lay north-east of Culvert 1.

3.1.5 The trench for Culvert 2 measured 20 m by 9 m and was dug to a maximum depth of 2.6 m, (54 m AOD). The sequence of deposits was compatible with that of Trench 1, with approximately 1.6m of gravels at the base of the area. The gravels varied in colouration and showed slight variations in the size sorting of the inclusions. Most were greyish or orange in hue and contained nearly 100% small rounded pebbles. The gravels were laid in horizontal bands indicative of deposition in a high energy fluvial environment. One band in particular, towards the base of the visible sequence, had a dark brownish colouration and this may have resulted from iron staining from water.

3.1.6 Above the gravels was a deposit of sterile mid greyish brown silty clay with some brown mottling throughout. This layer was thickest towards the centre of the area below the present footpath. Here it reached approximately 1.1 m thick and it thinned to the south-east and north-west.

3.1.7 Several areas of pale greyish yellow gravel overlay the clay across the area. This gravel was more angular than the lower, natural gravels and was probably imported to the site. This layer was truncated by a probable linear feature, which was partly obscured by the installed culvert pipes. The cut was probably for a service or drainage.

3.1.8 Above the pale gravel layer was a layer of stones. These stones were laid as a single course with their long axis set vertically. The layer was approximately 0.3 m thick and, although they varied, the stones were on average 0.3 x 0.25 x 0.1 m in size. The stones were pale yellow in colour and were probably the Corallian limestone of the Headington Quarries. The excavation showed that the stones formed a very rough surface aligned

parallel to the current footpath. The surface extended over 9 m in length and was approximately 2 m wide. The surface was identified as an earlier footpath. The stones were partly overgrown by turf and encroaching vegetation.

3.1.9 The north-western edge of the stone surface was slightly truncated by the construction cut for the present footpath. The footpath was laid on crushed concrete aggregate, deliberately imported to provide a foundation for the present tarmac surface of the footpath.

3.1.10 The existing topsoil and turf of the surrounding ground surfaces probably have an origin earlier than the current footpath but obviously represent an ongoing formation.

3.2 Finds

3.2.1 No finds were found within the areas of ground disturbed under archaeological observation.

3.3 Environmental remains

3.3.1 No deposits observed in the watching brief were suitable for environmental sampling.

4 Discussion and conclusions

4.1.1 The two trenches where observations were recorded during the watching brief both identified similar sequences of deposits. The lowest layers were the banded natural gravels deposited as part of the floodplain. The coarse sediments were laid down under the high energy environment of post-glacial fluvial activity. There was an expectation that these would be overlain by alluvial silts and clays, deposited during lower energy fluvial periods of the Holocene but these were not identified, and may have been removed during the construction of the embankment/causeway.

4.1.2 The mid-greyish brown mottled clay layer seen was probably part of the alluvial sequence but was not *in situ*. It may have been gathered from the immediate area.

4.1.3 The clay material appears to have been used to form an embankment/causeway between the adjacent pastureland meadows, with ditches either side. Since there were no artefactual remains from this layer the date of its origin remains unknown, but a postulated Victorian date, based on historic sources is likely. The embankment forms a higher bund between the two adjacent fields, the embankment is approximately 1 m higher than the fields and the shallow ditches either side accentuate the difference.

4.1.4 The stone footpath surface seen along the south-eastern side of the present tarmac path, was built with some degree of effort and was the earliest visible formal route along the top of the embankment. The stone footpath could not be confirmed as Victorian since there were no finds present within its construction in the areas investigated, but it probably dates to this period, rather than earlier. The stone remains are still visible at the surface in stretches leading up to the stone 'Toll Bridge'.

Appendix A. Bibliography and references

Author	Date	Reference
British Geological Survey	2011	Geology of Britain http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html
Crossley, A and Elrington, CR, (eds)	1979	A History of the County of Oxford: Vol 4: the City of Oxford, (Victoria County History Series) http://www.british-history.ac.uk/report.aspx?compid=22802
Hanson, WJ, and Dix, N,	1996	A Thousand Years: a study of the interaction between people and environment in the Cumnor, Wytham and North Hinksey Area, Wytham Publications
IFA (Institute for Archaeologists)	2001	Standard and Guidance for Archaeological Watching Briefs
West Oxford Community Nature Plan	1999 (2011-accessed)	http://www.oxfordsoftwaredocumentation.com/wowg/Nature_Plan/NP_2_West_Oxford_Landscape_history.pdf
Wilkinson, D,	1992	OA Field Manual

Appendix B. Summary of Site Details

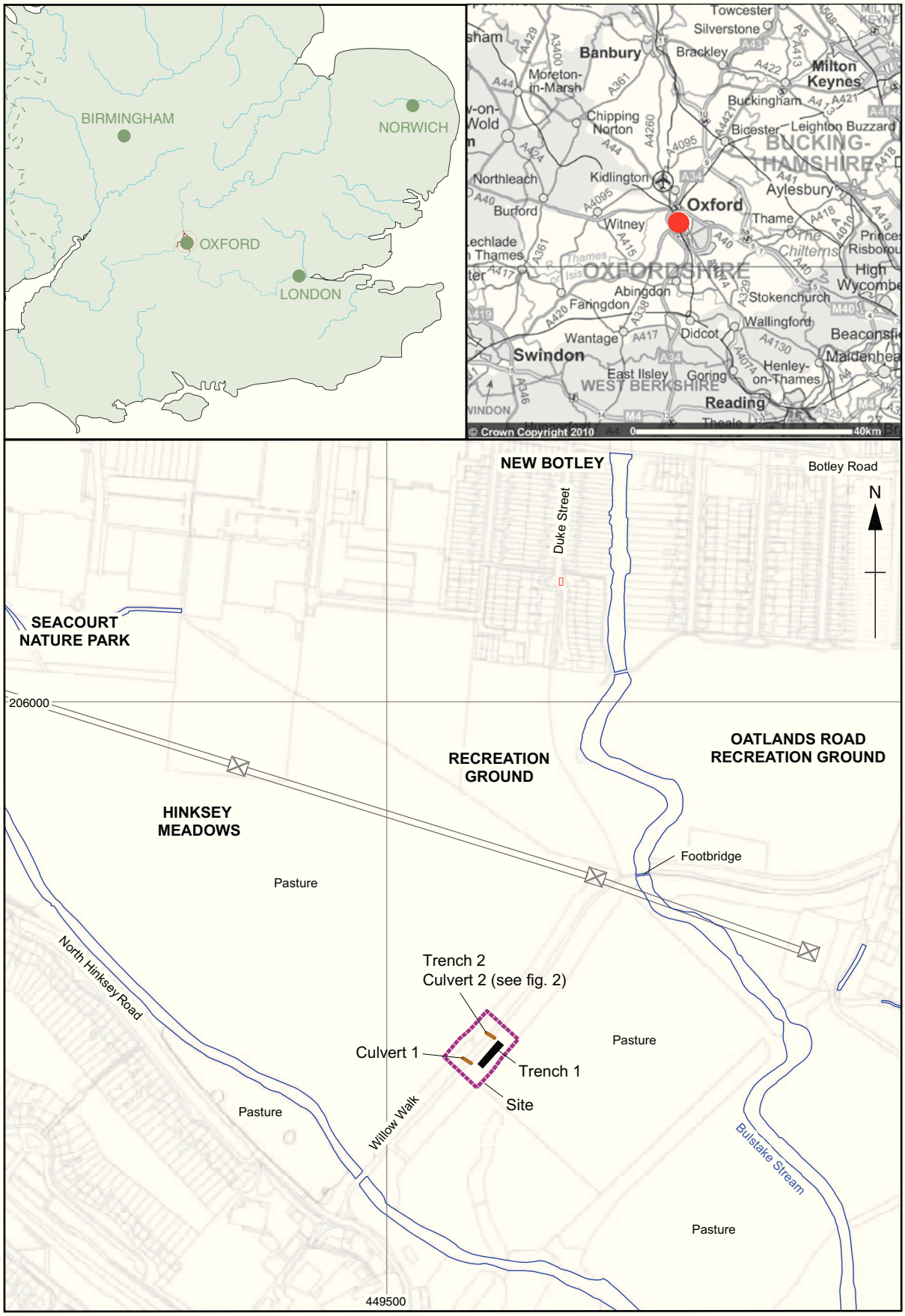
Site name:	Willow Walk, Oxford
Site code:	OXWILW 11
Grid reference:	Centred at NGR: SP 4955 0544
Type of watching brief:	Monitoring of excavations for culvert installations below an existing footpath.
Date and duration of project:	2 days: 16/0511 and 14/06/11
Area of site:	0.5km length by 4m wide; maximum area seen 12m x1.3m trench and 20m x 9m area.
Summary of results:	The watching brief revealed a sequence of deposits with natural gravel bands being overlain by redeposited clay used to create the linear embankment along which Willow Walk runs. The present stone surface of, probable Victorian origin, was seen just below the surface and to the south of the present tarmac footpath. No evidence for earlier phases of routeway were encountered.
Location of archive:	The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Oxfordshire County Museums Service in due course, under the following accession number: OXCMS: 2011.92

Appendix C. Acknowledgements

Oxford Archaeology South, wish to thank of the Environment Agency for commissioning the project.

At Birse Civils Ltd thanks are due to Steve and Neal Gale for their help while working alongside the archaeologists. The plant operators of Flannery Plant Hire are also to be thanked for their careful and co-operative work.

The watching brief work was undertaken by Chris Richardson and Vix Hughes. The report was compiled by Vix Hughes and the drawings produced by Markus Dylewski. The report was edited by Ben Ford who was also responsible for the overall project management.



Scale 1:5000

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Figure 1: Site location

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SW facing section of culvert 2

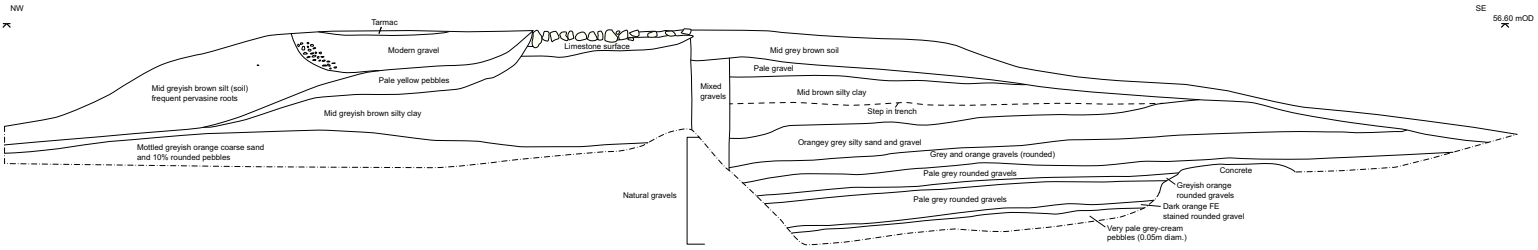

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Figure 2: South-east facing section through willow walk, showing natural gravels the causeway and surface revealed during construction of culvert 2

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Plate 1: Area of pipe trench pre-excavation, showing stones of footpath, looking north-east

Plate 2: Area of pipe trench observed, section view, looking north-west

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Plate 3: Culvert 2: north part of section, looking east

Plate 4: Culvert 2: south part of section, looking north-east

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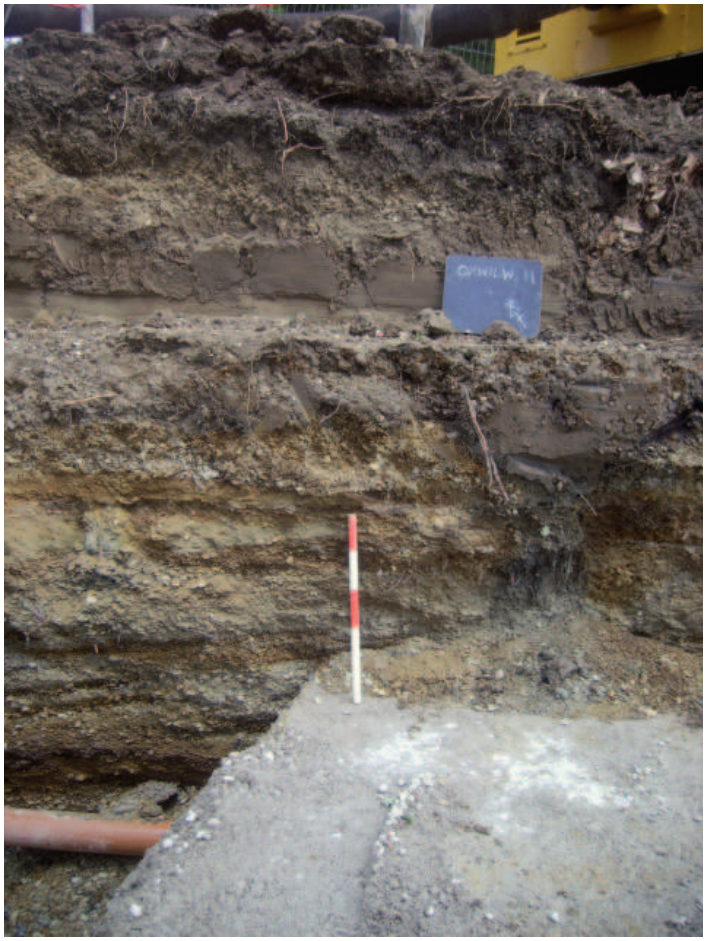

Plate 5: Culvert 2: south part of section, close up of gravel layers, looking north-east

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