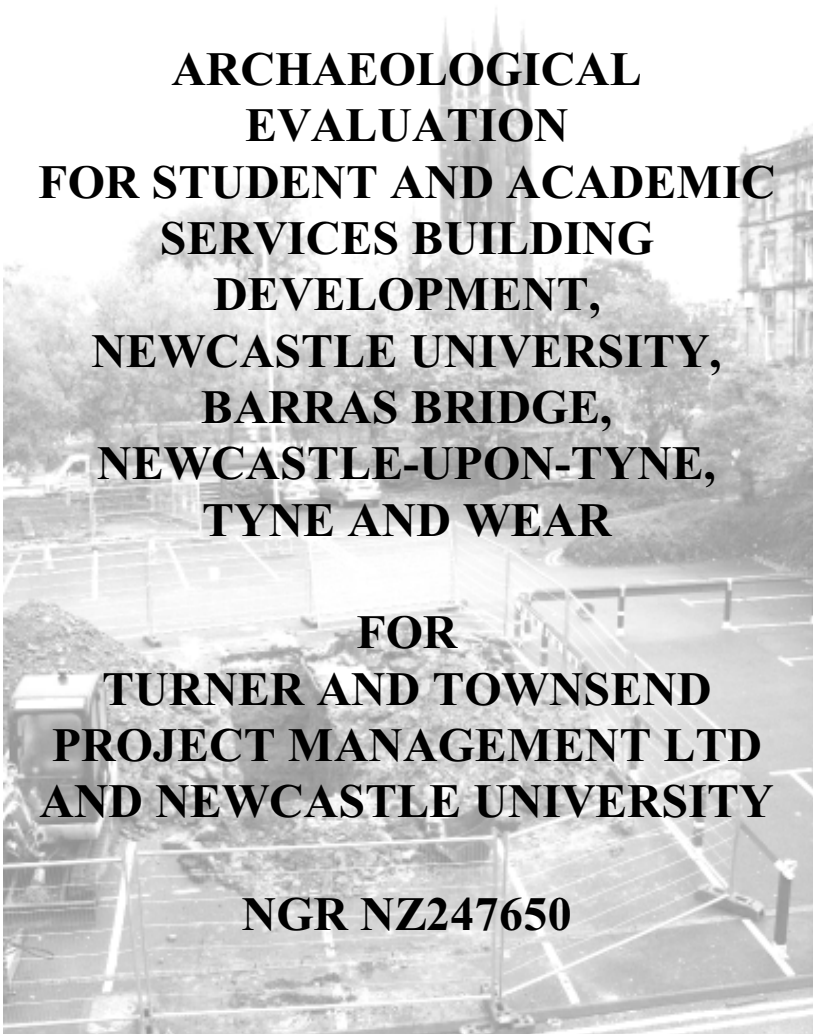

NORTH PENNINES ARCHAEOLOGY LTD

Client Report No. CP/550/07



**ARCHAEOLOGICAL
EVALUATION
FOR STUDENT AND ACADEMIC
SERVICES BUILDING
DEVELOPMENT,
NEWCASTLE UNIVERSITY,
BARRAS BRIDGE,
NEWCASTLE-UPON-TYNE,
TYNE AND WEAR**

**FOR
TURNER AND TOWNSEND
PROJECT MANAGEMENT LTD
AND NEWCASTLE UNIVERSITY**

NGR NZ247650

OASIS ID: northpen3-33174

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29 October 2007



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EXECUTIVE SUMMARY

In October 2007, North Pennines Archaeology Ltd was commissioned by Turner and Townsend on behalf of their clients Newcastle University to undertake an archaeological evaluation in advance of proposed development of land on the university campus at Barras Bridge, Newcastle upon Tyne (NGR NZ 247 650).

The evaluation consisted of the excavation of three trenches measuring 7m in length and 1.5m in width, by machine down to natural subsoil. These were then hand-cleaned and recorded.

The proposed development lies within an area of high archaeological potential with a significant number of important archaeological remains within the vicinity of the site. The site lies outside the medieval town walls, but Percy Street and Haymarket (which originated as Sidgate) was a medieval (twelfth century) street, which ran from the New Gate in the town walls to Barras Bridge over the Pandon Burn. The medieval bridge survives in part in the sewer system under the road. There was also a water corn mill at the corner of what became Eldon Place and Percy Street. Buildings and garden plots are shown on this site on Hutton's map of 1770. The First Edition Ordnance Survey also shows a dense arrangement of buildings on the site with gardens or yards to the rear. As a result, the Tyne and Wear Archaeology Officer for Newcastle City Council requested an archaeological evaluation be undertaken in order to inform the planning process.

Two of the trenches, Trenches 1 and 2, produced no structural, environmental or archaeological remains, uncovering only natural deposits masked by modern overburden. The remaining trench, Trench 3, discovered the remains of a cellar of former housing which existed on the site which had destroyed any potential archaeological remains. As a result, no further work should be required on the site of the present development.



Plate 1. Trench 1 in the foreground after excavation.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to offer thanks to Gemma Dickinson, Assistant Project Manager, Turner and Townsend for commissioning the project, and for her assistance throughout the work. Luke Gardner of Newcastle University is also thanked for all his assistance.

North Pennines Archaeology Ltd would also like to extend their thanks to Jennifer Morrison, Tyne and Wear Archaeology Officer, Newcastle City Council, as well as to the University Security team for their help throughout the evaluation process.

The archaeological evaluation was undertaken by Tony Liddell, Project Supervisor, assisted by Cat Peters, Kevin Mounsey and Frances Wood. The report was written by Tony Liddell. The illustrations were produced by Tony Liddell and Matt Town. The project was managed by Matt Town, Senior Project Officer for NPA Ltd, and Frank Giocco, Technical Director for NPA Ltd. The report was edited by Matt Town.

1. INTRODUCTION AND LOCATION

1.1 LOCATION AND GEOLOGY

1.1.1 The development area lies within the campus of Newcastle University, to the north-west of Barras Bridge, Newcastle Upon Tyne (NGR NZ 247 650). The site is currently used as a car park for the university, comprising a tarmac surface edged by drains and shrubs. The car park is defined on its south-west side by Kings Walk, on its north-west side by the Northern Stage Theatre and on its north-east side by the Claremont Buildings. Barras Bridge main dual carriageway forms its south-eastern extent.

1.1.2 The development area lies on Quaternary deposits of the Devensian (Upper Pleistocene) beneath which lie the Middle Coal Measures belonging to the Carboniferous. Lodgement Till also covers the area up to 30m outside buried channels, but averaging only 10m. Spreads of boulder clay, and sand or clay with gravel deposits also cover the area. Post-glacial streams flowing into the Tyne cut deep gorges through the clay and bedrock, and over time these have been filled with made-ground, with burns such as the Ouse, Swirle, Pandon Dene and Skinner sometimes having as much as 20m of such made ground (Peters 2005).

1.2 CIRCUMSTANCES OF THE PROJECT

1.2.1 Newcastle City Council were consulted regarding a planning application submitted for a proposed redevelopment located at Barras Bridge, Newcastle University, Newcastle upon Tyne. The proposed development is for a scheme of both student and academic service buildings to be built on the site of the current car park.

1.2.2 The site is of high archaeological potential as there is a significant number of important archaeological remains within the vicinity of the site. The site lies outside the medieval town walls, but Percy Street and Haymarket (which originated as Sidgate) was a medieval (twelfth century) street, which ran from the New Gate in the town walls to Barras Bridge over the Pandon Burn. The medieval bridge survives in part in the sewer system under the road. There was also a water corn mill at the corner of what became Eldon Place and Percy Street. Newcastle outgrew the town walls and the development of the suburbs had occurred by the 16th century. Buildings and garden plots are shown on this site on Hutton's map of 1770. First edition Ordnance Survey shows a dense arrangement of buildings on the site with gardens or yards to the rear. The site was built up until some point between 1952 and 1970 when it became an open space/car park. The Newcastle Urban Record database shows this plot as being of medium archaeological potential because it is thought to be largely un-cellared.

1.2.3 As a result the Tyne and Wear Archaeology Officer for Newcastle City Council issued a brief requesting three evaluation trenches be excavated within the development area, as located on the trench location plan, *Figure 2*. These trenches were located to avoid known services and potential cellaring where possible.

1.2.4 This report sets out the results of the fieldwork in the form of a short document outlining the findings of the evaluation, followed by a statement of the archaeological potential and recommendations for the area.



Plate 2. Trench 3 looking north-east through the car park.

2. METHODOLOGY

2.1 SPECIFICATION

- 2.1.1 All fieldwork methodology was consistent with the relevant standards and procedures of the Institute of Field Archaeologists (IFA), and generally accepted best practice.
- 2.1.2 All fieldwork was undertaken in accordance with the Project Specification produced by Jennifer Morrison, Tyne and Wear Archaeology Officer, and the document "*Invitation to Tender for Archaeological Evaluation in respect of the Student and Academic Services Building Development*" prepared by Turner and Townsend.
- 2.1.3 All fieldwork was undertaken in accordance to the Project Design, prepared by Matthew Town, Senior Project Officer for North Pennines Archaeology Limited, and approved by Jennifer Morrison, Tyne and Wear Assistant County Archaeologist.

2.2 ARCHAEOLOGICAL EVALUATION

- 2.2.1 The evaluation consisted of the excavation of three evaluation trenches, measuring 7m in length by 1.5m in width, located and aligned as illustrated in *Figure 2*, and excavated to depth of natural subsoil where possible. The evaluation took place between the 8th and the 11th October 2007.
- 2.2.2 All trenches were located to avoid known services (sewers running along north-eastern section of the site, mains electric and gas cables, and fibre-optic cabling) as well as the metro tunnel known to pass under the eastern extent of the site and associated ventilation shaft on the south east boundary of the site. The trenches were also located to avoid, where possible, known cellaring associated with Eldon Place on the north-east boundary of the site, previously cut geotechnical test pits and boreholes, and also the known 2m retaining structure on the south west boundary of the site (Burro Happold 2005).
- 2.2.3 The trenches were marked out prior to work commencing, via Total Station Theodolite, using digital map data provided by the client.
- 2.2.4 The trenches were cut by a pecker fitted onto a mini tracked excavator, after the area of excavation was subjected to a digital CAT scan to look for unidentified services. A JCB 3CX wheeled excavator was then fitted with a toothless bucket and all tarmacadam, concrete and modern overburden was then removed. When suspected natural substrate was revealed, the strata was tested by the excavator and then cleaned by hand where Health and Safety regulations permitted. All relevant COSHH regulations regarding the filling and running of all the machinery were followed.
- 2.2.5 All areas of trenches were fenced by a compound of Heras Fencing to allow for spoil and plant access where necessary.
- 2.2.6 All written records utilised the NPA pro-forma record sheets. Plans and sections were drawn on water resistant permatrace and to a given scale. A full photographic record in monochrome, colour slide, and digital formats was maintained. All electronic survey work was undertaken using a TST and was transferred into a CAD environment. The

site was levelled with respect to the Ordnance Datum, and the trenches tied into the National Grid.

2.2.7 In summary, the main objectives of the evaluation were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they were observed;
- to establish the character of those features in terms of cuts, soil matrices and interfaces;
- to recover artefactual material, especially that useful for dating purposes;
- to recover palaeoenvironmental material where it survived in order to understand site and landscape formation processes.

2.2.8 Trench specific objectives of the evaluation were as follows:

- Trench 1 was located in what was thought to be an open area to the rear of the housing thought to potentially have undisturbed archaeological deposits remaining;
- Trench 2 was located within an area of gardens to the rear of housing, again to explore the possibilities of undisturbed archaeological deposits;
- Trench 3 was located to test the areas of housing off Barras Bridge in an attempt to date them.

2.3 ARCHIVE

2.3.1 The full archive has been produced to a professional standard in accordance with the current English Heritage guidelines set out in the *Management of Archaeological Projects* (English Heritage, 2nd Ed. 1991). The archive will be deposited within an appropriate repository, and a copy of the report given to the County Historic Environment Record, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA 07 NUN-A.

2.3.2 North Pennines Archaeology support the Online Access to the Index of Archaeological Investigations (OASIS) project. This project aims to provide an online index and access to the extensive and expanding body of grey literature created as a result of developer-funded archaeological fieldwork. As a result, details of the results of this assessment will be made available by North Pennines Archaeology, as a part of this national project.

3. HISTORICAL BACKGROUND

3.1 HISTORICAL BACKGROUND

- 3.1.1 The earliest known evidence for human activity within the area is a perforated axe hammer dating to the Neolithic or Bronze Age (4,000BC –600BC), found to the north of St. Thomas’s Church (NGR NZ 2497 6506) in 1893. The name Barras is thought to be derived from *barrow*, indicating that at one point burial mounds may have been present in the area (Morgan 2004).
- 3.1.2 The site lies within close proximity of a 12th century street area, as well as the site of Barras Bridge, which crossed the Pandon Burn during this era. Barras Bridge carried the Great North Road across the Pandon Burn just north of Northumberland and Percy Streets. The remains of the medieval bridge are known to survive in the Pandon Sewer, running just south of the pedestrian crossing south of Claremont Road. The remains are thought to be just over 3m below the existing road surface.
- 3.1.3 Charles Hutton’s map of 1770 shows buildings and garden plots covering the development area, with the Ordnance Survey Maps of 1872 and 1898 showing a dense arrangement of buildings with gardens and/or yards to their rear.
- 3.1.4 Maps of 1951 show standing buildings over much of the site, with demolition occurring between 1952 and 1970 when the development area became an open space/car park. The development site is currently used for staff and student parking for the University of Newcastle.



Plate 3. Extract from 1872 Ordnance Survey showing the development area with buildings, gardens and yards.

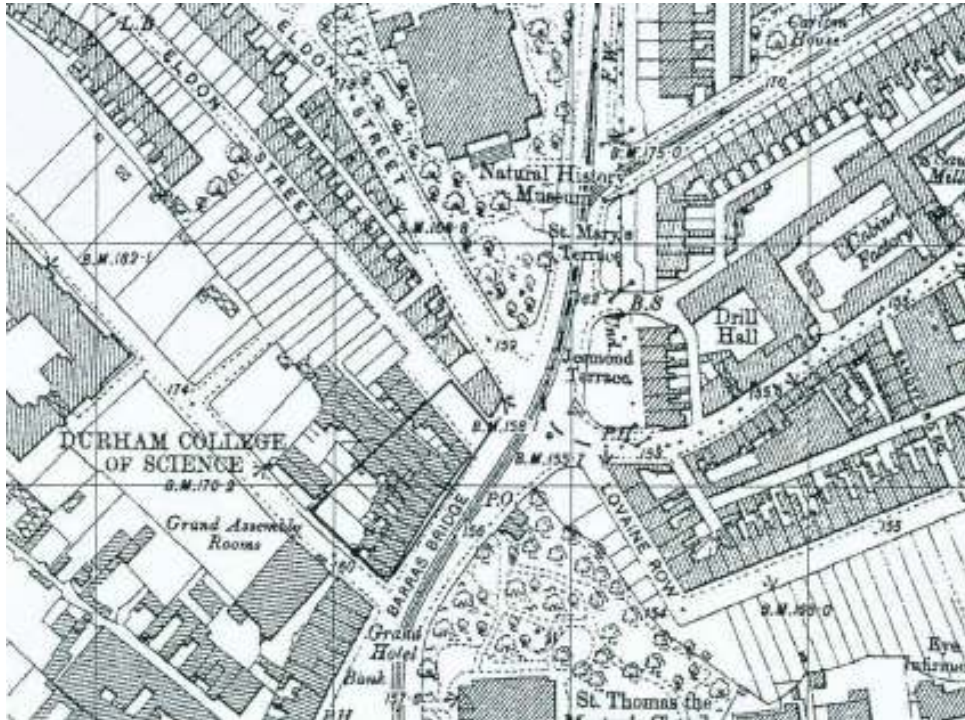


Plate 4. Extract from 1898 Ordnance Survey showing the development area with a high concentration of buildings.

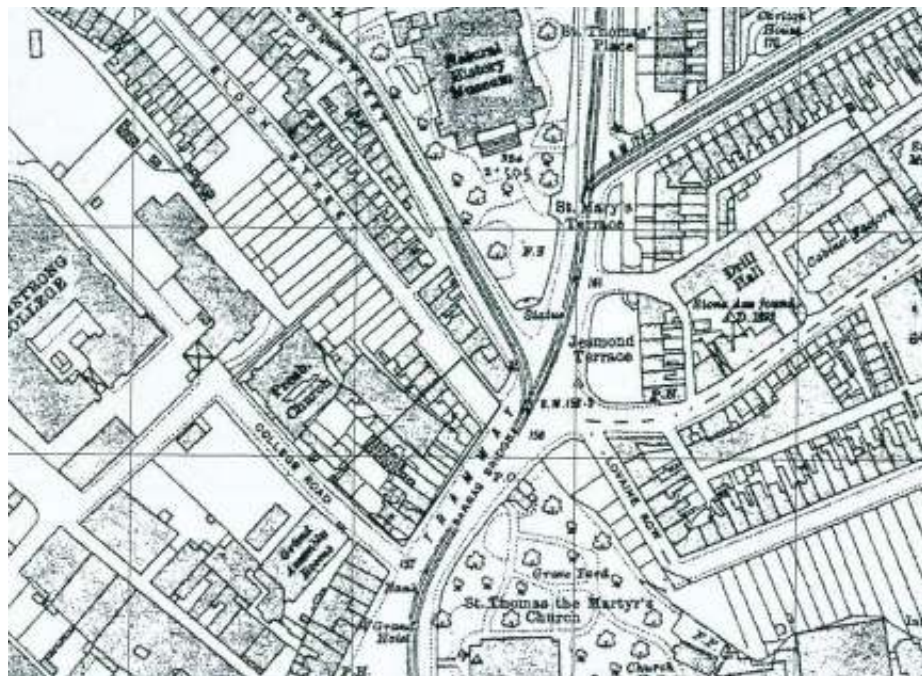


Plate 5. Extract from 1919 Ordnance Survey.

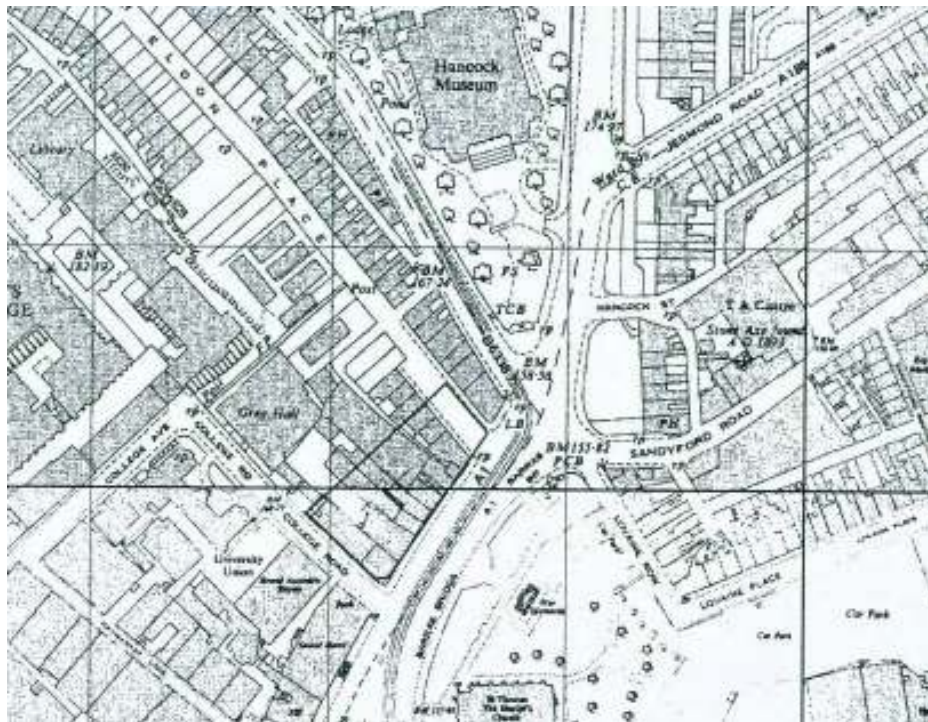


Plate 6. Extract from 1951 Ordnance Survey.

4. EVALUATION RESULTS

4.1 TRENCH 1



Plate 7. Trench 1, looking south. The ranging pole is graded every 0.5m.

- 4.1.1 The trench was excavated by machine to a total length of 7m and a width of 1.5m and to a maximum depth of 4m. The trench was orientated north-south (see *Figure 2* for location).
- 4.1.2 The stratigraphy encountered was recorded and tied into the Ordnance Survey datum height (surface of the tarmac at highest point 157.69m OD). The tarmac (**100**) was found to be c.0.12m deep under which was a layered deposit of (**102**), a pale yellow hardcore sub-base averaging a further 0.14m deep. Beneath the sub-base was a 0.30 thick deposit of (**103**) and (**104**), compact rolled grit and crushed tarmac and a crushed brick and dark brown clay soil respectively, representing the levelling layer for the car park and perhaps the material remnants of the housing previously on site. Beneath this levelling strata was a 0.25m to 0.79m deposit of (**111**), a moderately compact yellowish grey sandy clay with occasional stones, and beneath this was (**112**), a dirty compact grey clay with frequent inclusions of shale, coal and glacial boulders. This was observed to a depth of 4m below the level of the present car park surface, and could be

seen as evidence of the deep made-ground deposits around the area of the Pandon Burn.

4.1.3 Natural substrate was not observed within this evaluation trench and due to Health and Safety considerations no further excavation was possible.

4.1.4 No structures or deposits of archaeological interest or value were discovered during the excavation of this evaluation trench.

4.2 TRENCH 2



Plate 8. Trench 2, looking north and showing the remains of cellaring.

4.2.1 The trench was excavated by machine to a total length of 7m and a width of 1.5m, orientated north-east, south-west and excavated to a maximum depth of 3m (see *Figure 2* for location).

4.2.2 The stratigraphy encountered was recorded and tied into the Ordnance Survey datum height (surface of tarmac at 157.73m OD). Tarmac (**100**) lay to a depth of c.0.11m, over a layered deposit of (**102**), a pale yellow hardcore sub-base averaging a further 0.22m depth. Beneath this was a deposit of (**103**), compact rolled grit and crushed tarmac which measured c. 0.24m depth. Deposit (**104**), a strata of crushed brick and dark brown clay soil lay below that to a further 0.15m depth, under which was (**113**), a 0.59m deep deposit of mixed yellow and grey clay. Under (**113**) lay the remains of the 19th century cellars which filled the whole trench. The main cellar in the trench comprised a brick wall (**115**) which was built on top of sandstone rubble (**116**). The

top of the cellar lay at 156.24m OD and was filled with brick and stone rubble (**117**) to the depth excavated (3m below ground surface) and below. The outer south-eastern wall of another cellar (**114**), lying in ground to the north-west of the trench was also seen abutting (**115**).

4.2.3 Natural subsoil was not encountered in this trench and due to Health and Safety considerations no further excavation was possible.

4.2.4 The extensive cellaring in this area means that all previous archaeological remains and structures will have been removed by the 19th century additions. It must be noted that beneath clay strata (**113**), the cellar structures and interiors are extremely unstable.

4.3 TRENCH 3



Plate 9. Section of Trench 3, looking south.

4.3.1 The trench was excavated by machine to a total length of 7m, a width of 1.5m and down to natural clay subsoil at a depth of c.1.5m. The trench was orientated north-east to south-west (see *Figure 2* for location).

4.3.2 The tarmac (**100**) in this trench lay to a depth of 0.05m, with a further 0.16m of (**102**), the pale yellow sub-base below it. Beneath this was a deposit of (**103**), compact rolled grit and crushed tarmac which measured c. 0.15m depth. Deposit (**104**), a strata of crushed brick and dark brown clay soil lay below that to a further 0.16m deep. Deposit (**105**), a dark brown/grey gritty sandy clay with small brick inclusions, probably

evidence of the demolition on the site, lay below this to a further 0.13m deep, beneath which was a series of natural horizon strata **(106)** and **(107)**, compact clay and compact sand respectively, into which had been cut an irregular rubble pit **[109]**. The pit was 0.89m deep and 2.5m long in the south western extent of the trench, and was filled with **(110)**, a dump of broken brick, sandstone and iron fragments as well as a gritty sandy soil similar to **(105)**. Natural **(101)** was found below this at 156.40m OD, consisting of yellow brown clay and sands.

- 4.3.3 The excavation of this trench did not find any evidence of the survival of any structural archaeology, and indicated that at some point the area had been excavated to natural subsoil and then redeposited with modern dumps of brick and tarmac to make up the level in order to lay the modern car park surface.
- 4.3.4 No structures or deposits of archaeological interest or value were discovered during the excavation of this evaluation trench.

4.4 BACKFILLING

- 4.4.1 Once the trenches were excavated and recorded, the site was visited by the Tyne and Wear Archaeology Officer for Newcastle City Council and the trenches were then backfilled. The Heras Fencing was left in place and not removed until contractors, under the instruction of Turner and Townsend, had reinstated the tarmac car park surface.



Plate 10. Trench 1 after backfilling.



Plate 11. Trench 2 after backfilling.



Plate 12. Trench 3 after backfilling.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

- 5.1.1 Although the evaluation trenches produced no archaeological structural remains of any kind, the potential for medieval and post medieval archaeology in the surrounding area remains high due to its proximity to Barras Bridge and associated roads.
- 5.1.2 Trench 1 revealed no archaeological deposits barring a demolition layer of brick and what seemed to be a dirty natural brown clay, potentially contaminated with water from marshy ground the would once have been in the area surrounding the Pandon Burn. Trench 2, located initially to locate any archaeology in that area thought not to have been destroyed by housing, instead located a cellar indicating that all archaeological deposits would have been destroyed during the building of said structure. Trench 3, positioned to test the housing along Barras Bridge, found only a thin demolition layer, a shallow disturbance of a post-medieval/modern nature overlying natural sand and clay substrate. No finds or deposits of an archaeological nature were discovered during this evaluation.

5.2 RECOMMENDATIONS

- 5.2.1 Due to the lack of an archaeological presence within Trenches 1 and 3, and the cellar in Trench 2 meaning that earlier archaeological evidence has been destroyed in the area, it is recommended that no further work is required on this development site.
- 5.2.2 However, due to the continued potential for medieval and post-medieval activity in the surrounding area, it is recommended that further evaluation takes place on any other groundworks outside the current area where further archaeological remains may survive.

BIBLIOGRAPHY

6.1 SOURCES

Buro Happold 2005, "Barras Bridge Newcastle upon Tyne. Factual Report on Ground Investigation" unpublished report.

Dickinson, G. 2007, "Invitation to Tender for Archaeological Evaluation in respect of the Student and Academic Services Building Development" Turner and Townsend.

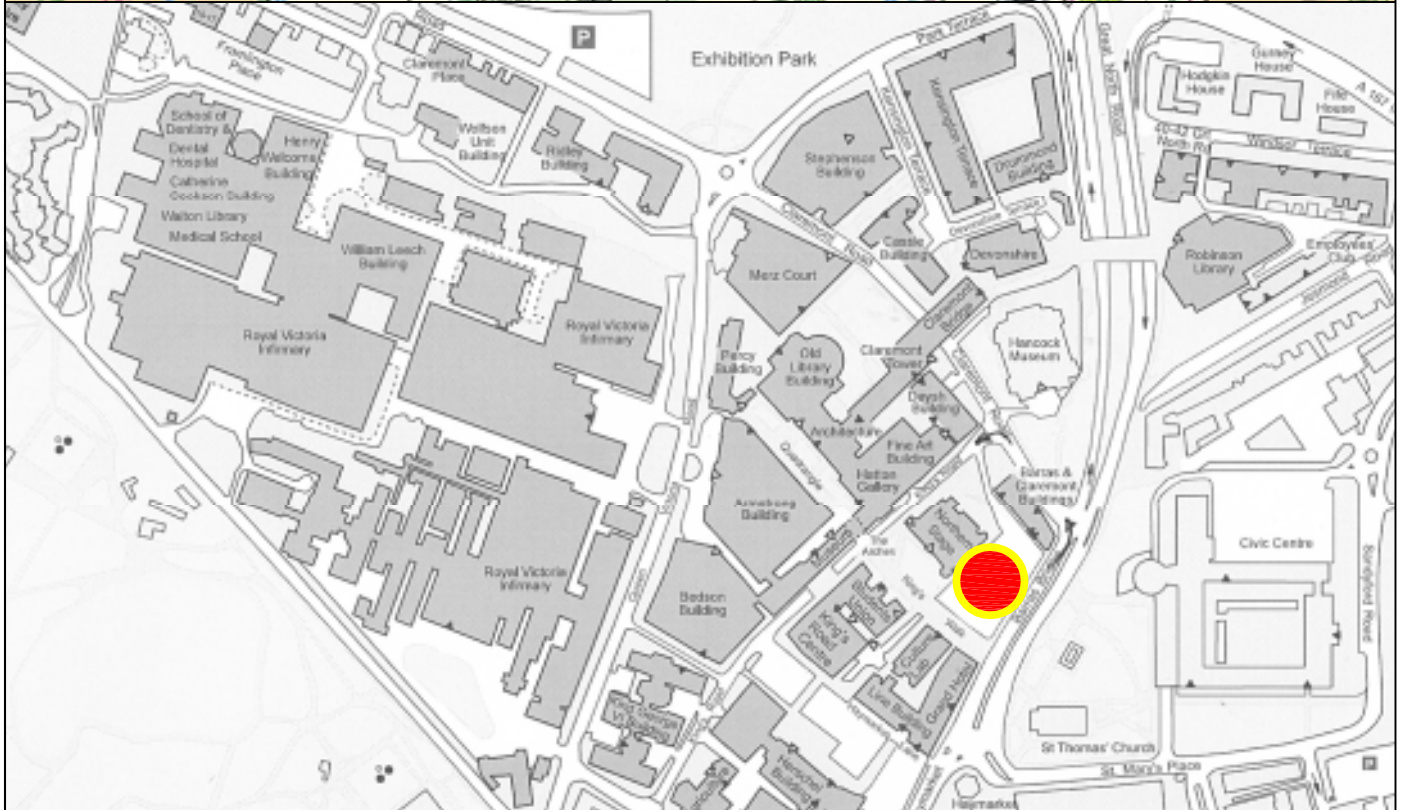
Peters, C.G. 2005, "Hancock Museum, Barras Bridge; Archaeological and Cultural Heritage Assessment" Tyne and Wear Museums unpublished report.

Scott Wilson, 2007, INTO University of Newcastle upon Tyne "Land to the west of Percy Street; Archaeological Desk Based Assessment" unpublished report.

APPENDIX 1: CONTEXT LIST

Context	Type	Description	Trench
100	Deposit	Modern tarmac car park surface	1, 2, 3
101	Natural	Natural substrate. Orange/brown clays and sands.	3
102	Deposit	Modern pale yellow sub-base.	1, 2, 3
103	Deposit	compact rolled grit and crushed tarmac	1, 2, 3
104	Deposit	a strata of crushed brick and dark brown clay soil	1, 2, 3
105	Deposit	dark brown/grey gritty sandy clay with small brick inclusions	3
106	Natural/Deposit	Orange-brown compact clay. Natural horizon.	2
107	Natural/Deposit	Orange-brown compact sand. Natural horizon.	3
108	Natural	Same as (101)	
109	Cut	Cut for rubble pit.	3
110	Fill	Fill of rubble pit, containing broken sandstone, brick, wood and metal.	3
111	Deposit	moderately compact yellowish grey sandy clay with occasional stones	1
112	Deposit	dirty compact grey clay with frequent inclusions of shale, coal and glacial boulders	1
113	Deposit	Mixed yellow and grey clay	2
114	Structure	Brick wall for cellar stretching north-west under car park.	2
115	Structure	Brick cellar wall orientated northeast, southwest.	2
116	Structure	Sandstone rubble under brick wall (115).	2
117	Deposit	Rubble infill of cellar, consisting of broken stone, brick, old services, metal and wood.	2

Table 1. List of Contexts.

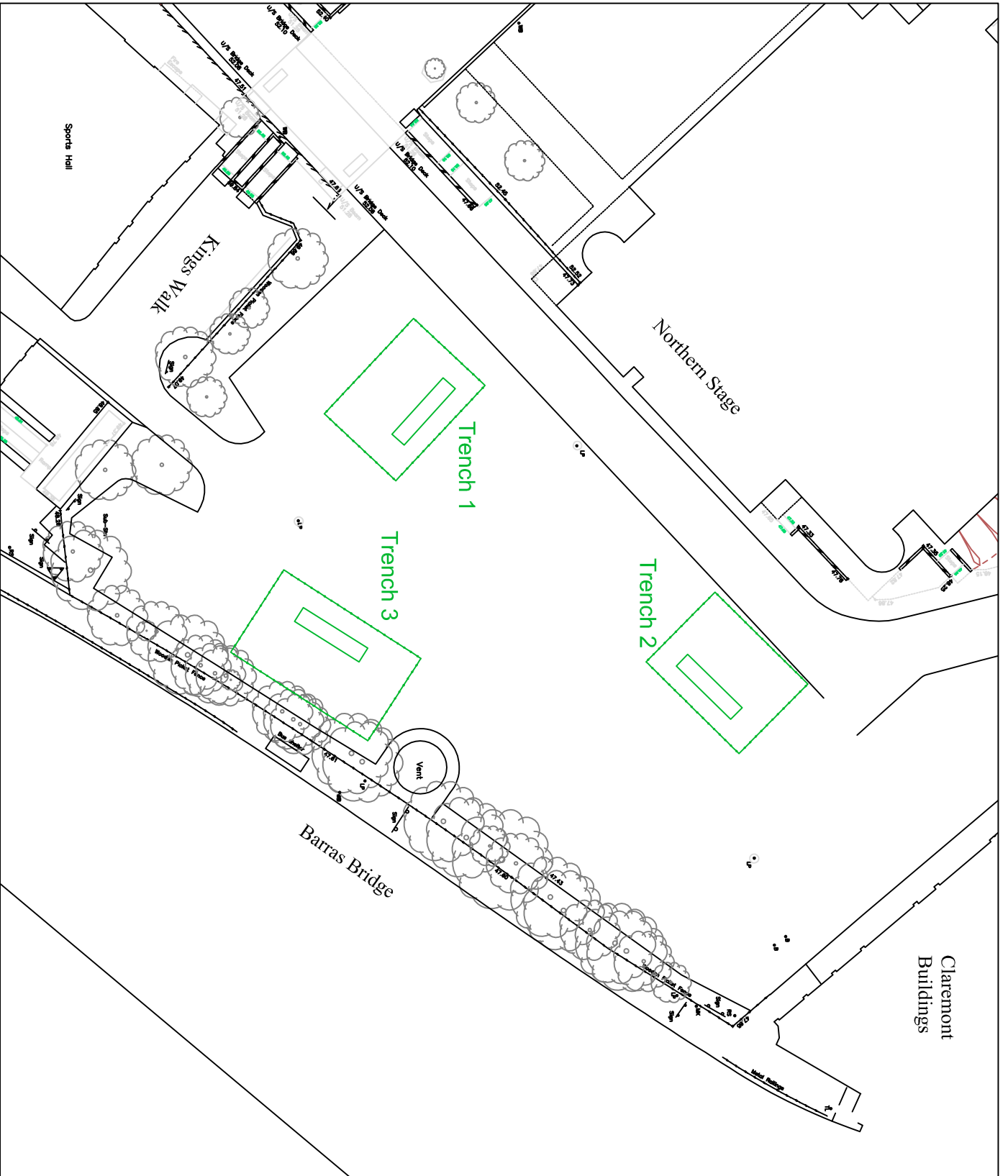


North Pennines Archaeology Ltd
2007

PROJECT: Newcastle University Barras Bridge
 SCALE: varies
 REPORT No: CP 550/07
 CLIENT: Turner and Townsend and Newcastle University
 DRAWN BY: TL
 DATE: October 2007
 FIGURE No: 1

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Figure 1 : Location of development area



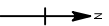
North Pennines Archaeology Ltd
2007
Newcastle University

COMMISSIONED BY:
Turner and Townsend and Newcastle University


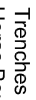
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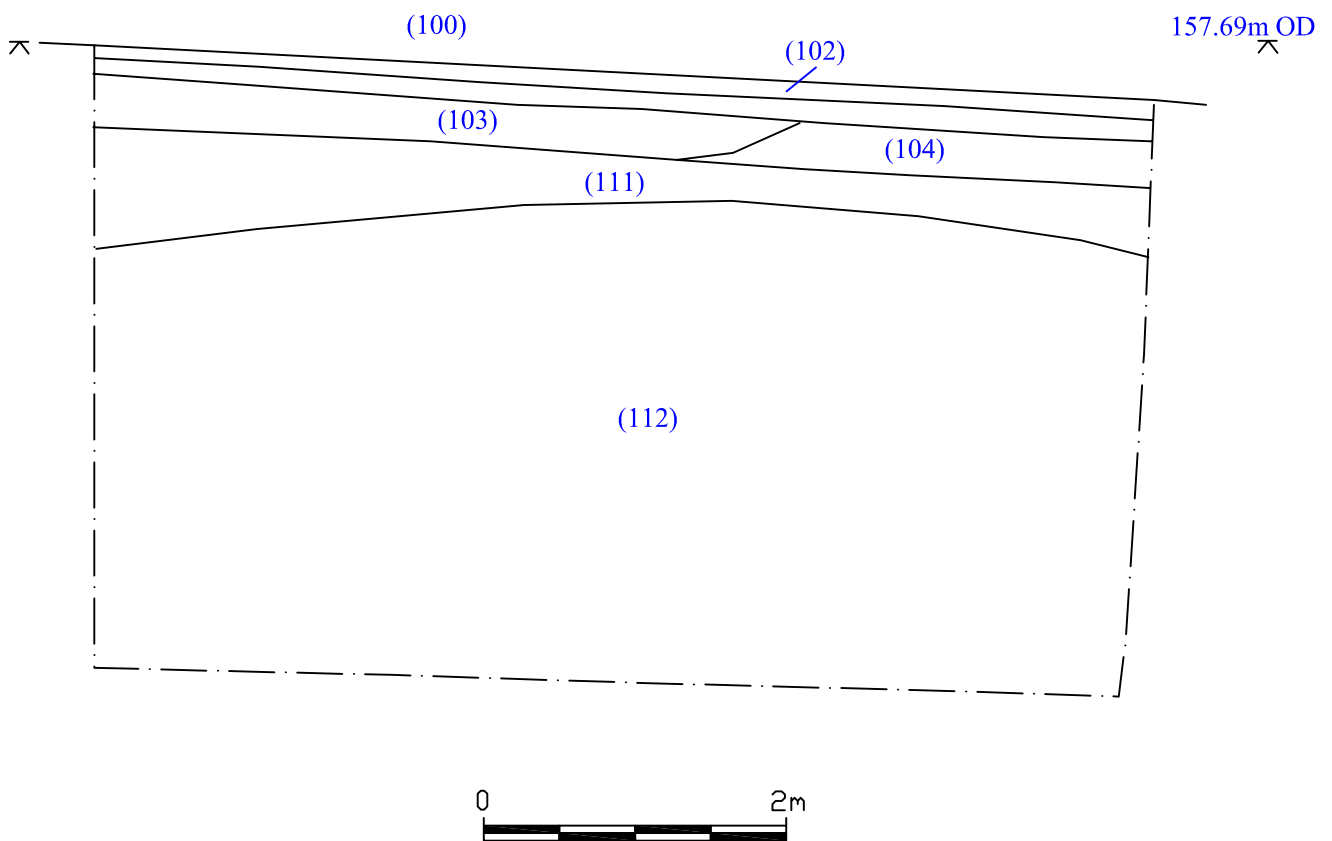
 Trenches and
 Heras Boundary

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FIGURE No: 2

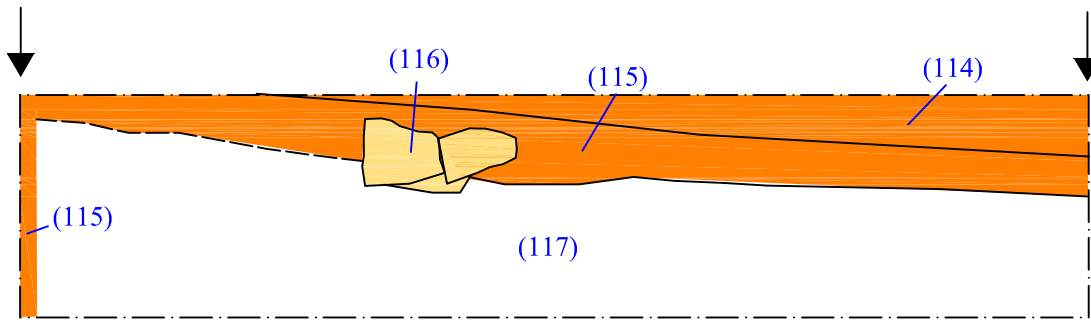
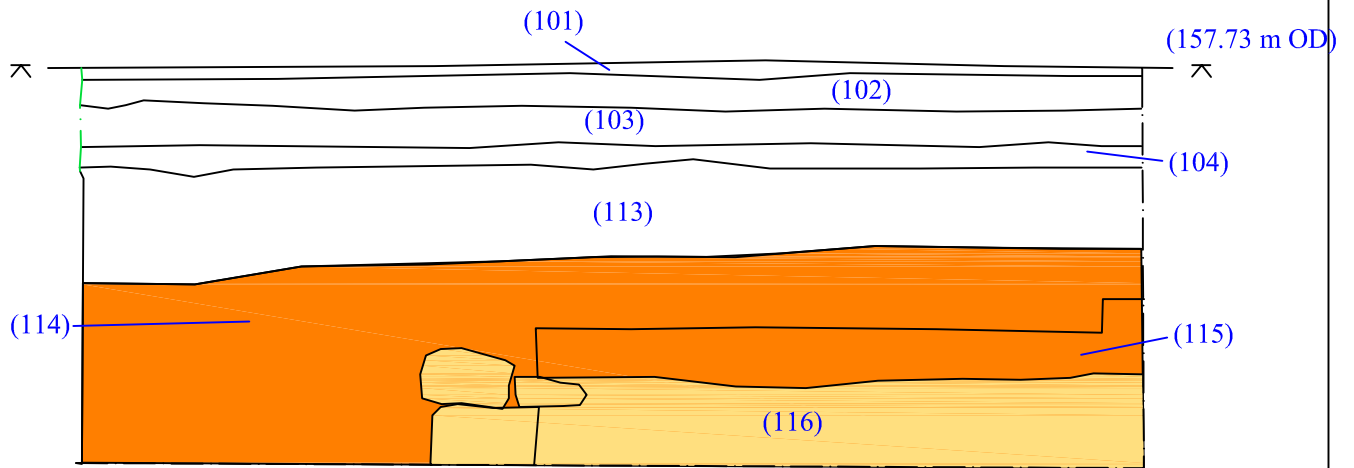
Figure 2 : Trench Location



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2007

PROJECT: Newcastle University Barras Bridge
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 FIGURE No: 3

Figure 3 : North-facing section of Trench 1



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2007

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 REPORT No: CP 550/07
 CLIENT: Turner and Townsend
 DRAWN BY: TL
 DATE: October 2007
 FIGURE No: 4

KEY:

- Brick
- Sandstone

Figure 4: Plan and South-East Facing Section of Trench 2



North Pennines Archaeology Ltd
 2007
 Newcastle University Barras Bridge

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Turner and Townsend and Newcastle University

SCALE: 1:40

DRAWN BY: TL

DATE: October 2007

KEY:

-  Brick
-  Sandstone

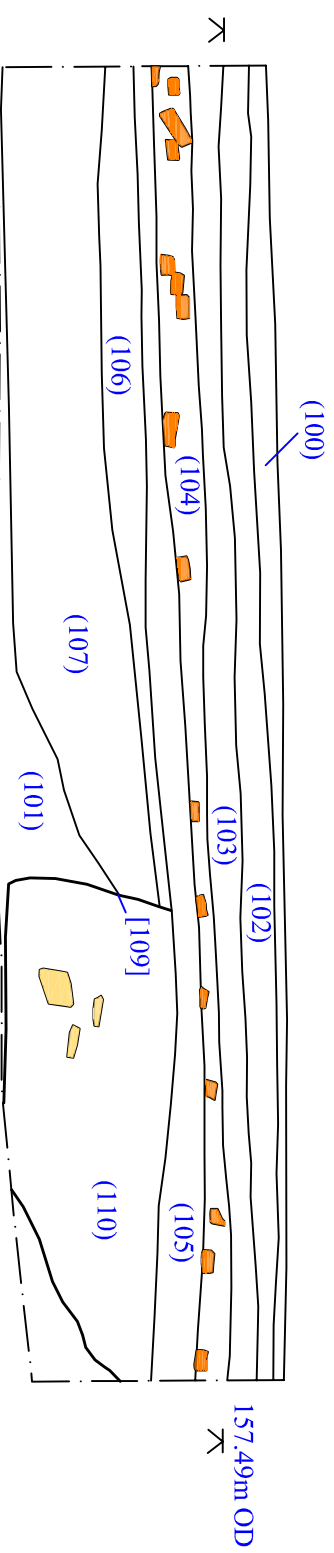


Figure 5 : North-West Facing Section of Trench 3

REPORT No: CP 550/07

FIGURE No: 5