

Paper Mill Yard King Street Norwich



Archaeological Evaluation Report



Oxford Archaeology

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(Norwich) Ltd**

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Paper Mill Yard, King Street Norwich

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ARCHAEOLOGICAL EVALUATION REPORT

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Summary

In April 2005, Oxford Archaeology (OA) carried out an evaluation on land at Paper Mill Yard, King Street, Norwich (centred on NGR TG 239 076) on behalf of City Living Developments (Norwich) Ltd.

Five trenches were excavated revealing post-medieval made ground associated with a terrace created for the construction of the paper mill. The made ground had a clear cut interface with the natural chalk bedrock. No river gravels or alluvial deposits remained, and no archaeological features were present within the evaluation trenches.

1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 In April 2005 OA carried out a field evaluation at Paper Mill Yard, King Street, Norwich (centred on NGR TG 2394 0767) on behalf of City Living Developments (Norwich) Ltd.
- 1.1.2 Mills Whipp Projects Ltd produced a Written Scheme of Investigation (WSI) outlining a methodology for investigation of potential for archaeological remains (Mills Whipp, 2005).
- 1.1.3 The WSI specified that five evaluation trenches were to be excavated providing a 5% sample of the total impact area.

1.2 Geology and topography

- 1.2.1 The area of the proposed development is bounded to the south by King Street, and to the north by the River Wensum. To the north-west are the remains of the city wall, and to the east extant industrial and office facilities. Ground levels vary between c. 8.5m OD to the west; c. 4m OD centrally, sloping to c. 2.5m OD to the north, nearest the river.
- 1.2.2 The geology of the site is natural structured chalk overlain by River Terrace Deposits and alluvium.
- 1.2.3 Current land use comprises derelict Victorian paper mill buildings, some of which were demolished prior to the evaluation.

1.3 Archaeological and historical background

- 1.3.1 A full description of the archaeological and historical background is presented in an *Archaeological Desktop Assessment* (Mills Whipp, 2004), and is briefly summarised below.

- 1.3.2 Prehistoric activity is indicated by sporadic finds dating from the Palaeolithic, Mesolithic, Neolithic and Bronze Age. However the relative scarcity and sparse distribution patterns of the finds do not appear to attest to prehistoric occupation in the vicinity of the development area.
- 1.3.3 There is no SMR entry relating to the Roman period within the study area.
- 1.3.4 Evidence for the early Saxon period within Norwich is scarce, although settlement of this period is thought to have been established considerably to the north of the site.
- 1.3.5 Finds of Middle Saxon and pre-Conquest dates suggest that settlement did not extend as far south as the subject site.
- 1.3.6 During the medieval period the main settlement of Norwich appears to have lain to the north of the site, within the city wall that bounds the site to the north-west.
- 1.3.7 By 1789 the first recorded buildings were present on the site. In the 19th century the site was subject to terracing prior to the construction of the remaining and recently demolished buildings.

2 EVALUATION AIMS

- 2.1.1 To define the extent, date, depth, character, quantity and quality of any archaeological remains within the development area.
- 2.1.2 To assess whether any ancient riverside activity has survived into the modern era.

3 EVALUATION METHODOLOGY

3.1 Scope of fieldwork

- 3.1.1 The five trenches were located on the ground (as shown in Fig. 1), and excavated under close archaeological supervision. Trench 1 measured 4 m by 5m; Trench 2 measured 8 m by 4m; Trench 3 measured 8 m by 4m; Trench 4 measured 8 m by 4 m and Trench 5 measured 5 m by 4 m.
- 3.1.2 Trench 5 was moved from its original position by *c.* 3 m, to the south due to Environment Agency concerns over its proximity to the River Wensum.

3.2 Fieldwork methods and recording

- 3.2.1 The evaluation trenches were C.A.T. scanned, prior to breaking out with a tracked excavator fitted with a breaker tool. The trenches were machined under close archaeological supervision using a 13 tonne tracked excavator with a toothless ditching bucket. Trenches were machined to the top of the natural geology, or to the impact level of the development (2m OD). Trench 5 was machined to the level of the river bank located to the north of the development area. Trench 5 was machined from the southern side to keep the excavated material as far as possible from the river.

3.2.2 A portable gas meter was employed to check levels of dangerous gases that may have been present within the machined deposits.

3.2.4 All deposits were issued with unique context numbers, and context recording was in line with the established OA *Field Manual* (OAU, 1992). Colour transparency and black and white negative photographs were taken of all trenches and deposits encountered. Trench locations were added to the overall site plan (1:200). Sample sections of the trenches were drawn at a scale of 1:20.

3.3 **Finds**

3.3.1 No finds were recovered during the course of the evaluation.

3.4 **Palaeo-environmental evidence**

3.4.1 No deposits suitable for palaeo-environmental sampling were identified during the course of the evaluation.

3.5 **Project records**

3.5.1 The site archive, including all project records and cultural material produced by the project, was prepared in accordance with the guidelines for the preparation of excavation archives for long-term storage (UKIC 1990). On completion of the project the archive is to be deposited in a suitable museum or similar repository agreed with the County Archaeologist.

4 **RESULTS: GENERAL**

4.1.1 No archaeological deposits or features, prior to the Victorian period were encountered in any of the trenches.

4.1.2 All trenches contained made-ground or wall footings of the Victorian period.

4.1.3 No dangerous gas levels were observed in any trench.

4.1.4 Trenches 2, 3 and 4 were machined onto chalk bedrock. Trench 1 was machined onto a solid layer of concrete and associated steel and brick stanchions. Trench 5 was machined onto the top of Victorian brick revetment anchors. These were left intact so as not to destabilise the revetment.

RESULTS: DESCRIPTIONS

4.2 Description of deposits

Trench 1

4.2.1 Trench 1 measured 5 m by 4 m and was orientated north-east to south-west along the 5 m axis. A layer of tarmac (100), 150 mm thick, overlay a make-up layer (101) 200 mm thick. This in turn overlay 1.05 m of brick rubble (102). Below layer (102) was a layer of solid concrete with associated stanchions (103). This layer was encountered at a depth of 2.93 m OD and was, after consultation with the County Archaeologist (Andy Hutcheson), not removed. Trench 1 was machined to a total depth of 1.4 m from ground level.

Trench 2

4.2.2 Trench 2 measured 8 m by 4 m with the 8 m axis orientated north-east to south-west. The trench was not fully opened, as the sequence and truncation of chalk bedrock, was clearly visible from a central transect along the 8 m axis. A layer of tarmac and concrete (200) was 560 mm thick. This overlay a make-up layer (201) 260 mm thick, which in turn overlay a mixed layer of ash and clinker (202) up to 540 mm thick. Below (202) was a layer of orange-brown sandy rubble (203) 400 mm thick which sealed (204) a layer of re-deposited dirty chalk 250 mm thick. The trench was excavated onto chalk natural which was encountered at 2.58 m OD. The interface between basal layer (204) and the chalk bedrock was given the cut number [205] to illustrate the Victorian truncation. Trench 2 was machined to a total depth of 1.8 m.

Trench 3

4.2.3 Trench 3 measured 8 m by 4 m with the 8 m axis orientated north-west to south-east. A Victorian brick wall (301) bisected the trench running north-east to south-west. The wall had a spread footing foundation with a basal width of 1.04 m, and was built on top of the chalk bedrock. The interface between the footing and the natural chalk was given the number [307] to illustrate the Victorian truncation. Butting up against the wall footing, and visible on both sides, was a thick layer (up to 640 mm) of re-deposited chalk (302) containing occasional brick and coal fragments. Overlying (302), and to the south-east of the wall, was a sequence of dump deposits (305) 620 mm thick and capped by a series of brick and concrete surfaces (306). To the north-west the wall (302) was overlain by rubble layer (303), which acted as a make-up layer for a 340 mm thick layer of re-enforced concrete (assumed to be the internal flooring of the building represented by footing (301)). Chalk bedrock was encountered at a maximum depth of 2.71 m OD. The trench was machined to a depth of 1.6 m.

4.2.4 The level of the natural chalk varied on either side of the wall footing (being deeper to the south-east, and less truncated within the building to the NW). This would suggest that the truncation of the chalk through terracing relates directly to the construction of the paper mill.

Trench 4

- 4.2.5 Trench 4 measured 8 m by 4 m with the 8 m axis orientated north-east to south-west. The trench was sealed by 200 mm of tarmac (400), which overlay 130 mm of rubble make-up layer (401). This in turn overlay a possible levelling layer of crushed mixed grey chalk (402) 120 mm thick. Below (402), and probably related, was 340 mm of a mixed brick rubble rich deposit (403). Finally a 980 mm thick layer (404) containing many individual dumping episodes with visible tip lines of coal, tar, brick and chalk. There was a clear interface [406] between these dumping episodes and the chalk bedrock, again seen as evidence of Victorian terracing. The chalk natural was encountered at 1.99 m OD and sloped slightly down towards the NE. The trench depth was 1.8 m below current ground level.

Trench 5

- 5.1.6 Trench 5 measured 5 m by 4 m with the 5 m axis orientated NW-SE. The trench was sealed by 160 mm of concrete (500) - presumably the floor of the demolished building shown on the engineering plan. Sealed by this was a small stub of brick wall (501), possibly not *in situ*, and sat within a 600 mm layer (502) of chalk fragments and brick rubble. Beneath (502) were four undulating layers of Victorian made ground, slightly different from each other in appearance, but almost certainly part of the same process of backfill post revetment of the river channel. These layers (503 to 506) have a total thickness of up to 2 m and were sat above rectangular brick chambers, presumed to be anchors for the steel supports of the river revetment. These anchor structures were not disturbed and their upper courses were noted at 1.75 m OD, equivalent in height to the current southern bank of the River Wensum. Trench 5 was machined to a depth of 2.7 m below current ground level.

5 DISCUSSION AND INTERPRETATION

6.1 Reliability of field evaluation

- 5.1.1 Weather and light conditions were generally good. There was no ground water within the trenches and although the trenches were too deep for the sections to be comprehensively cleaned the sequences of deposits were clear. It is felt, therefore, that the investigation was reliable.

6 CONCLUSIONS

- 6.1.1 It was clear from almost all of the trenches that the chalk bedrock (and hence any overlying fluvial and alluvial deposits) had suffered a great degree of truncation in the Victorian period. This is evidenced by the relative difference in levels between King Street and the development area (in places *c.* 8 m). In the area of the site evaluated there seems little chance of any pre-Victorian archaeological features or deposits surviving.

APPENDICES

APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

Ctx No.	Type	Thick. (m)	Width (m)	Length (m)	Comment	Finds
Trench 1						
100	Deposit	0.15	4	5	Tarmac	
101	Deposit	0.2	4	5	Make up for 100	
102	Deposit	1.05	4	5	Brick Rubble	
103	Deposit	N/A	4	5	Concrete Base	
Trench 2						
200	Deposit	0.55	4	8	Hardstanding	
201	Deposit	0.25	4	8	Make up for 200	
202	Deposit	0.55	4	8	Victorian Made Ground	
203	Deposit	0.4	4	8	Victorian Made Ground	
204	Deposit	0.25	4	8	Redeposited chalk	
205	Cut	?	?	?	Victorian Landscaping	
206	Deposit				Natural Chalk	
Trench 3						
300	Deposit				Natural Chalk	
301	Structure	1.6	0.75	4	Brick Wall	
302	Deposit	0.6	4	8	Redeposited chalk	
303	Deposit	0.65	4	2	Make up Layer	
304	Deposit	0.35	4	2.1	Concrete Floor	
305	Deposit	0.65	4	8	Victorian Made Ground	
306	Deposit	0.35	4	8	Concrete and Brick Floor	
307	Cut	?	4	8	Victorian Landscaping	
Trench 4						
400	Deposit	0.2	4	8	Tarmac	
401	Deposit	0.15	4	8	Make Up for 400	
402	Deposit	0.1	4	8	Levelling Horizon	
403	Deposit	0.35	4	8	Levelling Horizon	
404	Deposit	1.05	4	8	Mixed Dump	
405	Deposit				Chalk Natural	
406	Cut	?	?	?	Victorian Landscaping	
Trench 5						
500	Deposit	0.1	4	5	Hardstanding	
501	Structure	0.4	0.6	?	E-W Brick Wall	
502	Deposit	0.7	4	5	Victorian Make Up	
503	Deposit	0.4	4	5	Victorian Make Up	
504	Deposit	0.7	4	5	Victorian Make Up	
505	Deposit	1.3	4	5	Victorian Make Up	
506	Deposit	0.7	4	5	Victorian Make Up	

APPENDIX 2 BIBLIOGRAPHY AND REFERENCES

- IFA 2001 *Standard and Guidance for Archaeological Evaluation*
- Mills Whipp 2004 *Paper Mill Yard, King Street, Norwich: Desktop Assessment*
- Mills Whipp 2005 *Paper Mill Yard, King Street, Norwich: Written Scheme of Investigation for Archaeological Field Evaluation*
- OA 2005 *Paper Mill Yard, Norwich, Norfolk: Method Statement for an Archaeological Field Evaluation*
- OAU 1992 *OAU Fieldwork Manual* (first edition ed. D Wilkinson, 1992).
- UKIC, 1990 *Guidelines for the Preparation of Excavation Archives for Long-Term Storage, United Kingdom Institute for Conservation*

APPENDIX 3 SUMMARY OF SITE DETAILS

Site name: Paper Mill Yard, Norwich

Site code: 41287N

Grid reference: TG 2394 0767

Type of evaluation: Trench evaluation (5% sample of site)

Date and duration of project: April 2005. 2 days

Area of site: 0.272 ha.

Summary of results: The evaluation confirmed the presence of widespread truncation relating to the construction of the Paper Mill in the Victorian period. No evidence was recovered pre-dating the construction of the Paper Mill.

Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with the Norfolk County Museum Service in due course.



Scale 1:25,000

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Figure 1: Site location



Figure 2: Trench location

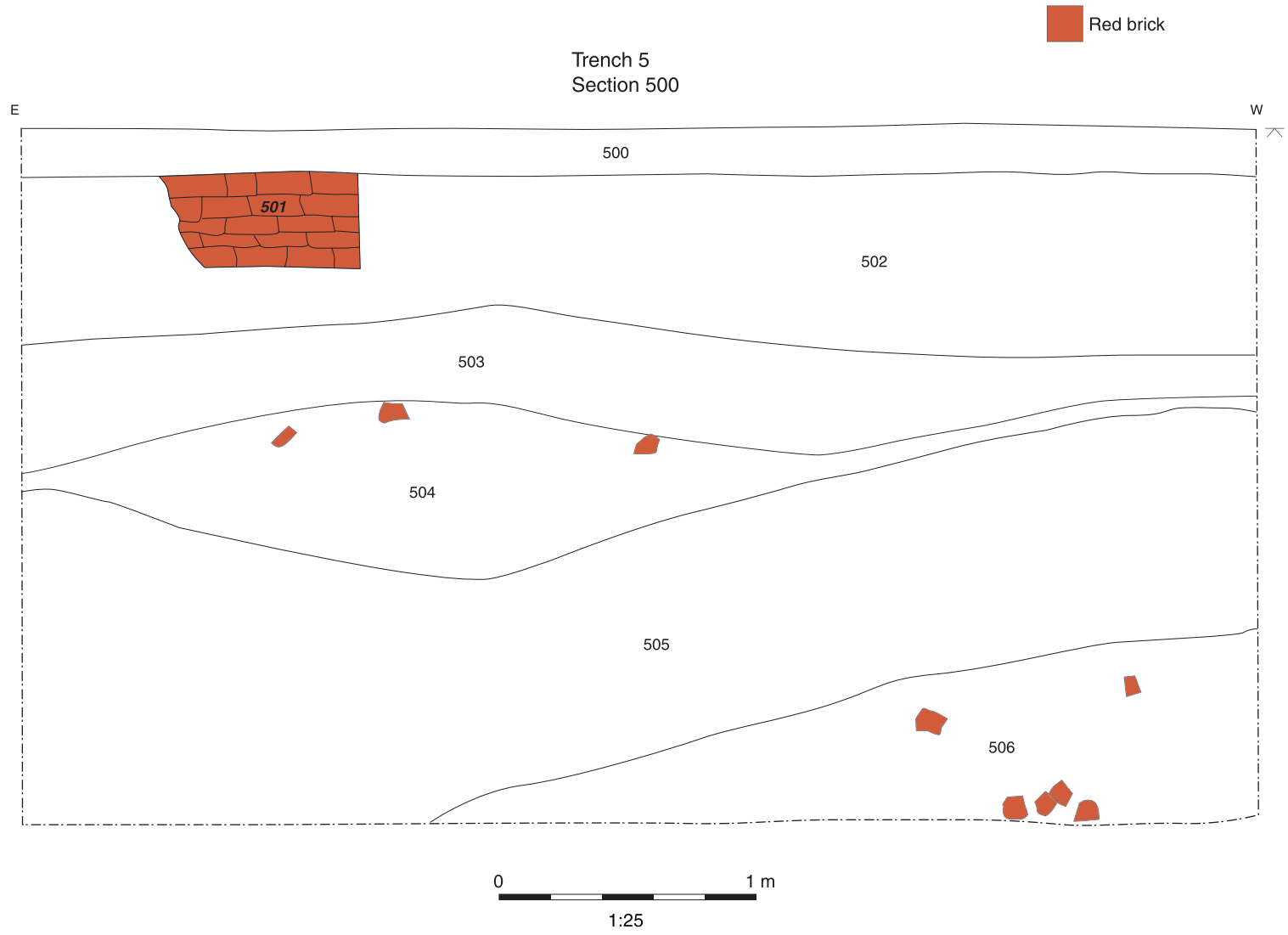
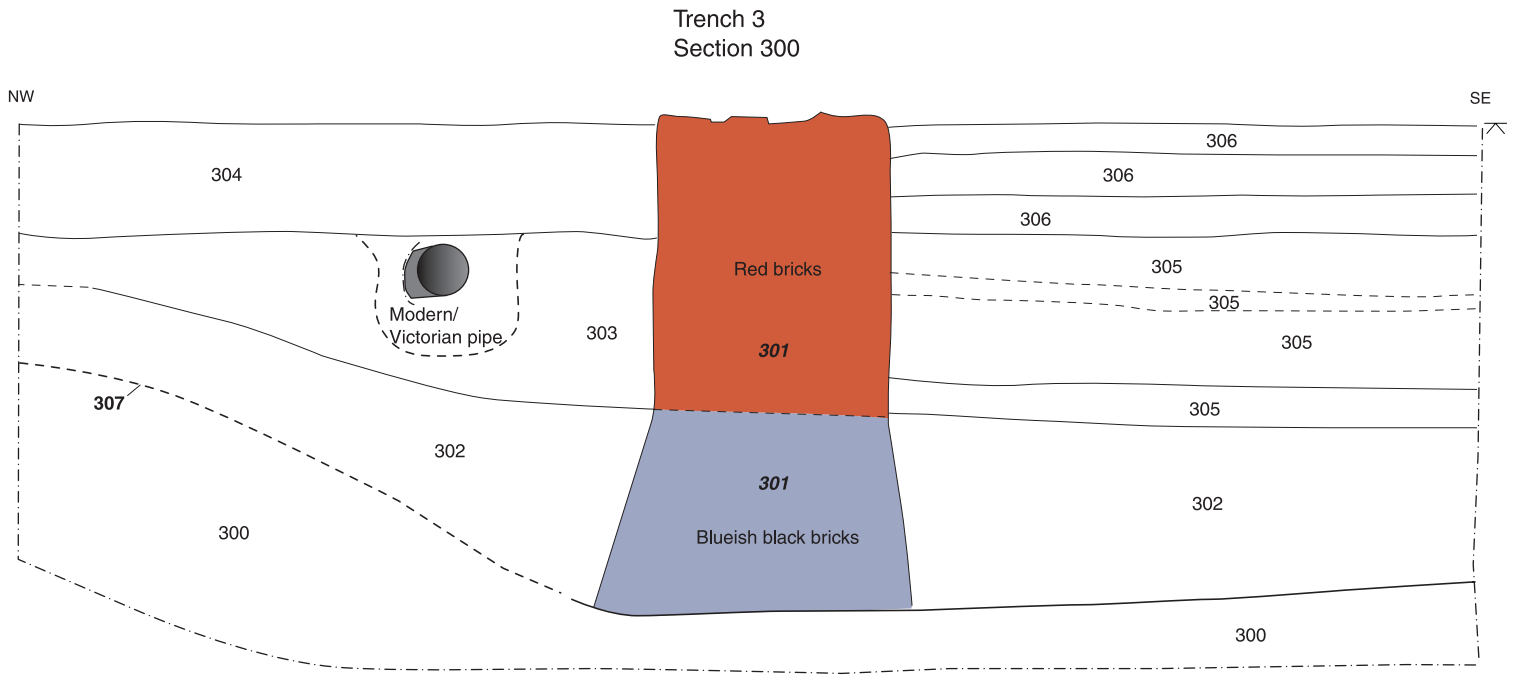


Figure 3: Sections 300 and 500 showing extent of Victorian truncation