



LCUK Cauldon Works, Staffordshire Proposed Extension to Shale Quarry: Phase 1

Archaeological Evaluation Report



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Proposed Extension to Shale Quarry:
Phase 1.**

Archaeological Evaluation Report

Prepared on behalf of:

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Contents

	<i>Summary</i>	<i>ii</i>
	<i>Acknowledgements</i>	<i>iii</i>
1	INTRODUCTION	1
	1.1 Project Background.....	1
	1.2 Site location and topography.....	1
2	ARCHAEOLOGICAL BACKGROUND	1
	2.1 Introduction	1
	2.2 Background	2
3	AIMS AND OBJECTIVES	2
	3.1 Introduction	2
4	METHODOLOGY	2
	4.1 Project Design.....	2
	4.2 Trench Excavation	2
	4.3 Survey	3
5	RESULTS	3
	5.1 Soils and Geology.....	3
	5.2 Field Drain	3
	5.3 Tree throws	3
	5.4 Reinstatement	3
6	FINDS AND ENVIRONMENTAL SAMPLING	4
	6.1 Finds	4
	6.2 Environmental Sampling.....	4
7	DISCUSSION	4
8	CONCLUSION	4
9	ARCHIVE	4
10	BIBLIOGRAPHY	4
11	APPENDIX 1	6

FIGURES

Figure 1	Site and trench location.
Figure 2	Trench 12. Photographs and representative section.

PLATES

Plate 1	Trench 12 viewed from the south west.
Plate 2	Representative section along Trench 12.
Plate 3	Victorian stone field drain.

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Archaeological Evaluation Report

Summary

Wessex Archaeology (WA) was commissioned by Lafarge Cement UK (the Client), to undertake an archaeological evaluation in advance of a proposed extension to a shale quarry at the Cauldon Works, located approximately 1.0km to the north-west of Cauldon in Staffordshire, centred on National Grid Reference 407200, 349910.

A total of 12 machine excavated trial trenches (50m x 1.8m) comprising a 2% sample of the available area were excavated between 9th and 13th of June 2008.

No significant archaeological features or finds were recorded during the evaluation and only relatively modern disturbance, in the form of agricultural field drainage systems, were observed and noted.

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Archaeological Evaluation Report

Acknowledgements

Wessex Archaeology was commissioned by Lafarge Cement UK (the Client), to undertake the archaeological evaluation. The co-operation and help given by Keith Rowland is gratefully acknowledged. Thanks are also due to Stephen Dean of Staffordshire County Council for his advice and assistance during the course of these investigations.

The fieldwork was supervised by Mike Dinwiddy (Project Officer), with the assistance of John Smith (Project Supervisor), Mark Stewart and Antonio Ramon. This report was prepared by Mike Dinwiddy, with illustrations completed by Liz James. The project was managed by Sue Farr on behalf of Wessex Archaeology.

LCUK Cauldon Works, Staffordshire Proposed Extension to Shale Quarry: Phase 1.

Archaeological Evaluation Report

1 INTRODUCTION

1.1 Project Background

1.1.1 Wessex Archaeology (WA) was commissioned by Lafarge Cement UK (the Client), to undertake an archaeological evaluation in advance of a proposed extension to a shale quarry at the Cauldon Works (hereafter the Site, see Figure 1).

1.1.2 This extension forms part of a wider programme of works undertaken for two quarries (one for limestone, the other for shale) at the Cauldon Works in Staffordshire.

1.1.3 Planning approval has been granted for the proposed extensions, and the earlier planning application was accompanied by a single detailed Environmental Statement.

1.1.4 As part of the Environmental Statement, a comprehensive review of the known and potential archaeological and cultural heritage remains within and immediately surrounding each of the proposed quarry extensions was undertaken (Wessex Archaeology 2004). This established the presence within both Sites of features of cultural heritage interest, and also assessed the potential for each Site to contain previously unidentified archaeological remains.

1.1.5 This Project Design was based on discussions held prior to planning permission being granted, between the Client and their agents, Wessex Archaeology and the Principal Historic Environment Officer of Staffordshire County Council (PHEO).

1.2 Site location and topography

1.2.1 The Site is located approximately 1.0km to the north-west of Cauldon in Staffordshire, centred on National Grid Reference 407200, 349910 (**Figure 1**).

1.2.2 The shale quarry extension Site is on an east facing slope that falls from c. 275m to c. 230m above Ordnance Datum (aOD).

2 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

2.1.1 As part of the Environmental Statement, a detailed review of the known and potential archaeological and cultural heritage remains within and immediately surrounding each of the proposed quarry extensions was undertaken (Wessex Archaeology 2004). This established the presence

within both sites of features of cultural heritage interest, and also assessed the potential for each site to contain previously unidentified archaeological remains.

2.2 Background

2.2.1 Two phases of archaeological evaluation (Wessex Archaeology 2006 & 2007) have been completed within the limestone quarry. Apart from the recently in-filled remains of a small, historically mapped quarry pit, no archaeological features or finds were identified during the evaluation. Indentations in the local surface topography were confirmed by the trial trenching as limestone fissures.

2.2.2 Previous archaeological fieldwork to the south of the proposed extension to the limestone quarry has led to the identification of several scatters of worked flint of Neolithic and Bronze Age date, along with some limited Mesolithic components. Funerary monuments of Bronze Age date (round barrows) are relatively common on upland areas within the local area, and several examples are known to have been present within the current main quarry area immediately to the west.

2.2.3 Within the proposed extension to the shale quarry is a small field barn, known from historic map sources to have been present from at least the end of the 19th century. A nearby farm (New House Farm) was constructed in the early part of the 20th century but subsequently demolished. Other documented outlying agricultural buildings within this Site are also no longer present.

3 AIMS AND OBJECTIVES

3.1 Introduction

3.1.1 The generic aim of the evaluation was to elucidate the character, distribution, extent, importance and state of preservation of any archaeological and historic remains within the Site.

4 METHODOLOGY

4.1 Project Design

4.1.1 The methodology was laid out in full in a Written Scheme of Investigation, (WSI, WA doc ref **63503.01**) produced by Wessex Archaeology. In format and content it conformed with current best practice and to the guidance outlined in *Management of Archaeological Projects* (English Heritage 1999) and the Institute of Field Archaeologists' *Standards and Guidance for Archaeological Field Evaluation* (as amended 1994). It was submitted to and approved by the Principal Historic Environment Officer of Staffordshire County Council (PHEO) prior to fieldwork commencing and will not be reiterated in detail here.

4.2 Trench Excavation

4.2.1 A total of 12 machine excavated trial trenches (50m x 1.8m) comprising a 2% sample of the available Site area were excavated between 9th and 13th of June 2008. (**Figure 1**). Each trial trench was excavated to the top of the

natural geological horizon. **Trenches 1 and 4** were relocated approximately 30m to the south due to topographic limitations. **Trenches 7, 9 and 10** were machined in two parts to avoid truncating active streams.

- 4.2.2 Topsoil was removed by a 21 ton tracked 360° mechanical excavator equipped with a toothless grading bucket and under the constant supervision of a qualified professional archaeologist.

4.3 Survey

- 4.3.1 The trenches were surveyed using a GPS 1200 series Leica and tied into the Ordnance Survey National Grid.

5 RESULTS

5.1 Soils and Geology

- 5.1.1 Overburden in all trenches consisted of a 0.19m to 0.22m thick topsoil, comprising a mid brown clay loam with shale fragments and occasional sub-rounded medium sized angular sandstone of between 0.10m to 0.20m in diameter. In each trench the topsoil was directly above the natural geology (**Figure 2**).

- 5.1.2 The natural geology was a pale yellowy grey clay, with frequent poorly sorted angular sandstone, varying in size between gravel to bolder; pockets of gray clay were common as were seams of shale.

- 5.1.3 In three trenches, **Trenches 2, 6 and 12**, field drains were recorded. In **Trenches 9 and 11** tree throws were excavated and recorded.

5.2 Field Drain

- 5.2.1 One example, a field drain in **Trench 12**, was recorded by notes and digital photography (**Figure 3**). Stone built, in a N-S orientation, the drain consisted largely of capping stones laid flat, occasionally sited upon upright stones to cover the feature and measured between 0.25m and 0.40m in width. Based on its morphology, the drain is likely to have been constructed within the last 100 years.

5.3 Tree throws

- 5.3.1 The tree throws were oval in plan with concave sides and a shallow irregular base. They all contained single fills, which comprised dark brown soft silty clay, derived from gradually silting subsoils. No archaeological components were recovered from within the fills.

5.4 Reinstatement

- 5.4.1 Following the completion of the investigation, all trial trenches were backfilled with excavated spoil, compacted down using the machine bucket and left level on completion.

6 FINDS AND ENVIRONMENTAL SAMPLING

6.1 Finds

6.1.1 No finds were recovered during the evaluation

6.2 Environmental Sampling

6.2.1 No material suitable for environmental analysis was present within the trenches.

7 DISCUSSION

7.1.1 Of the 12 trenches excavated, three contained field drains and two contained tree throws. All features or potential features were partially investigated and although no evidence was recovered to enable dating, it is most likely the drains are contemporary with the 20th century agricultural buildings within the loci.

7.1.2 The tree throws appear to be the result of natural events rather than deliberate clearance.

8 CONCLUSION

8.1.1 The evaluation has confirmed the presence of linear features in the form of field drains associated with relatively recent agricultural practice. The evaluation has also demonstrated there is very limited potential for archaeological remains to be present on the Site.

9 ARCHIVE

9.1.1 The project archive is fully cross-referenced and stable and currently held at the offices of Wessex Archaeology.

10 BIBLIOGRAPHY

Wessex Archaeology (2004a) *LCUK Cauldon Works, Staffordshire: Archaeological and Cultural Heritage Assessment*, **WA doc ref 53946.01**

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11 APPENDIX 1

Context Tables

Trench 1 Ground level 253.31m (W) 251.42m (E)

Length 33m	Width 2m	Depth 0.40m
Context	Description	Depth
101	Topsoil – mid brown clay loam with frequent rootlets and occasional shale fragments.	0-0.26m
102	Natural- firm yellow clay with frequent Fe staining and occasional sub-angular sandstone clasts. The central and southern part of the trench includes more brownish shale than seen elsewhere on site.	0.18-0.29m

Trench 2 Ground level 253.62m (N) 251.98m (S)

Length 49m	Width 1.90m	Depth 0.19m
Context	Description	Depth
201	Topsoil- dark brown clay loam	0-0.19m
202	Natural- Pale reddish brown clay with grey patches, occasional shale lenses. Field drain.	0.19 +

Trench 3 Ground level 250.88m (N) 248.89m (S)

Length 50m	Width 2m	Depth 0.20m
Context	Description	Depth
301	Topsoil- dark brown clay loam, frequent rooting.	0-0.20m
302	Natural- pale grey clay, orange streaking derived from iron panning. Sandstone clasts	0.20m +

Trench 4 Ground level 248.44m (W) 245.72m (E)

Length 40m	Width 20m	Depth 0.19m
Context	Description	Depth
401	Topsoil- a mid brown clay-loam with occasional sandstone clasts and shale fragments.	0-0.19m
402	Natural- pale yellow-grey clay with frequent sandstone clasts and frequent Fe staining. Also present were several dark patches of dark clay with abundant shale as course components.	0.19m+

Trench 5 Ground level 249.72m (NW) 244.82m (SE)

Length 50m	Width 2m	Depth 0.20m
Context	Description	Depth
501	Topsoil- dark brown clayish loam.	0-0.18m
502	Natural- pale orangey grey clay, with occasional sandstone clasts, frequent iron panning.	0.18-0.29m

Trench 6 Ground level 242.92m (N) 242.38m (S)

Length 50m	Width 2m	Depth 0.45m
Context	Description	Depth
601	Topsoil- dark grey brown clay loam	0-0.22m
602	Natural- yellow clay with frequent sandstone clasts and iron panning. Field drains.	0.22m+

Trench 7 Ground level 241.02m (W) 238.56m (E)

Length 50m	Width 2m	Depth 0.68m
Context	Description	Depth
701	Topsoil- dark brown clay loam	0-0.22m
702/703	Natural- dark grey clay with shale fragments east end of trench, pale grey yellow clay with iron panning and sand stone clasts at west of trench	0.22-0.68m+

Trench 8 Ground level 239.94m (W) 235.72m (E)

Length 33m	Width 2m	Depth 0.40m
Context	Description	Depth
801	Topsoil- dark brown clay loam with occasional sub-angular sandstone clasts	0-0.17m
802	Natural- Pale greyish yellow clay with frequent iron panning and occasional sub-angular clasts. At the centre of the trench a 'solution hollow' was investigated sub-circular in plan concave in section which contained concentrations of shale.	0.17m+

Trench 9 Ground level 241.20m (N) 239.73m (W)

Length 36.5m	Width 2m	Depth 0.35m
Context	Description	Depth
901	Topsoil- dark grey loam	0-0.26m
902	Natural- Pale grey clay with frequent iron panning and sub-angular sandstone clasts	0.26m+
903	Cut of tree throw, circular in plan with irregular sides and base	1.24m dia
904	Fill of tree throw, dark brown silty clay rare sub-angular sand-stone. Gradual; silting.	0.12m depth

Trench 10 Ground level 233.67m (N) 234.43m (S)

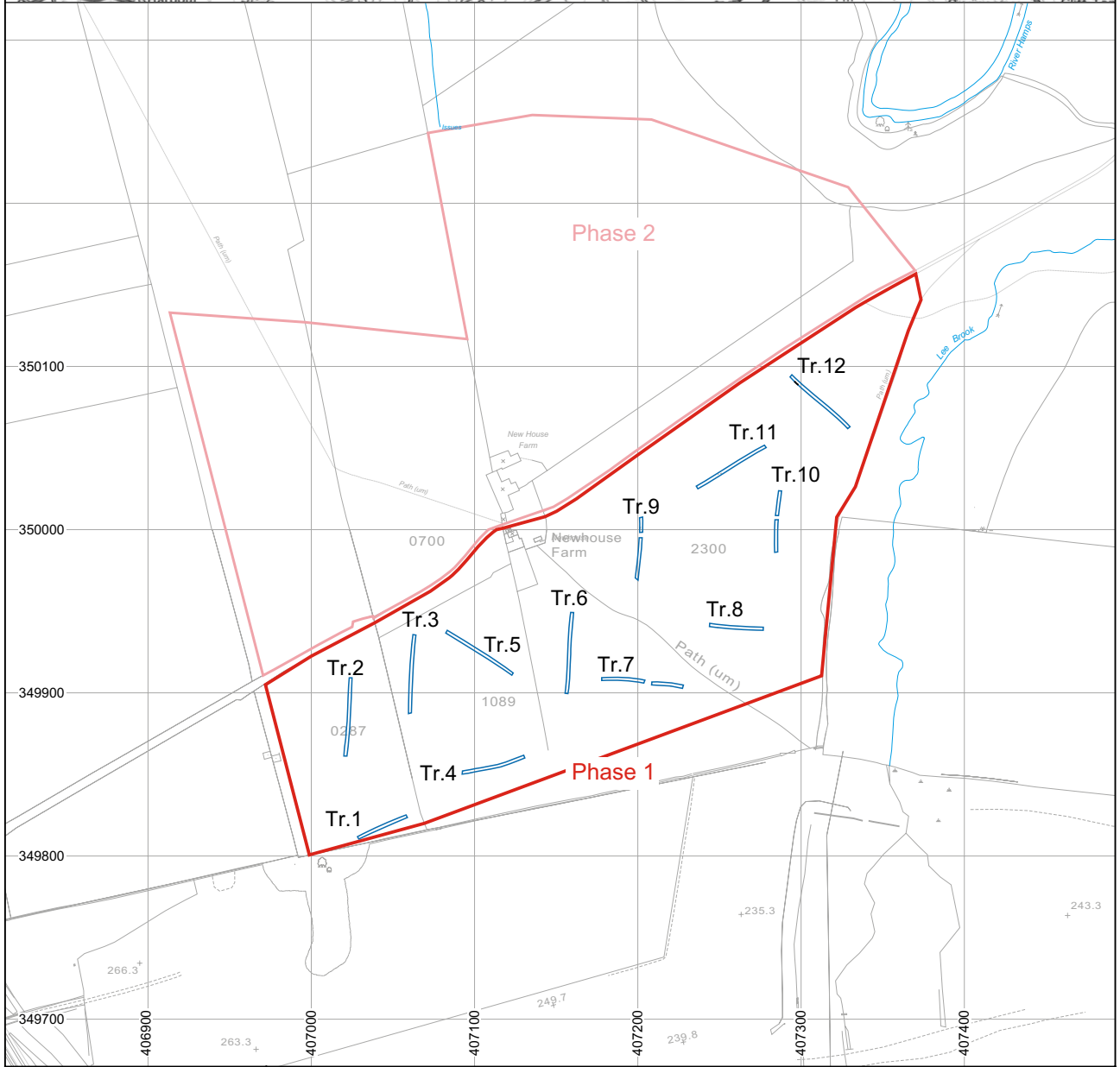
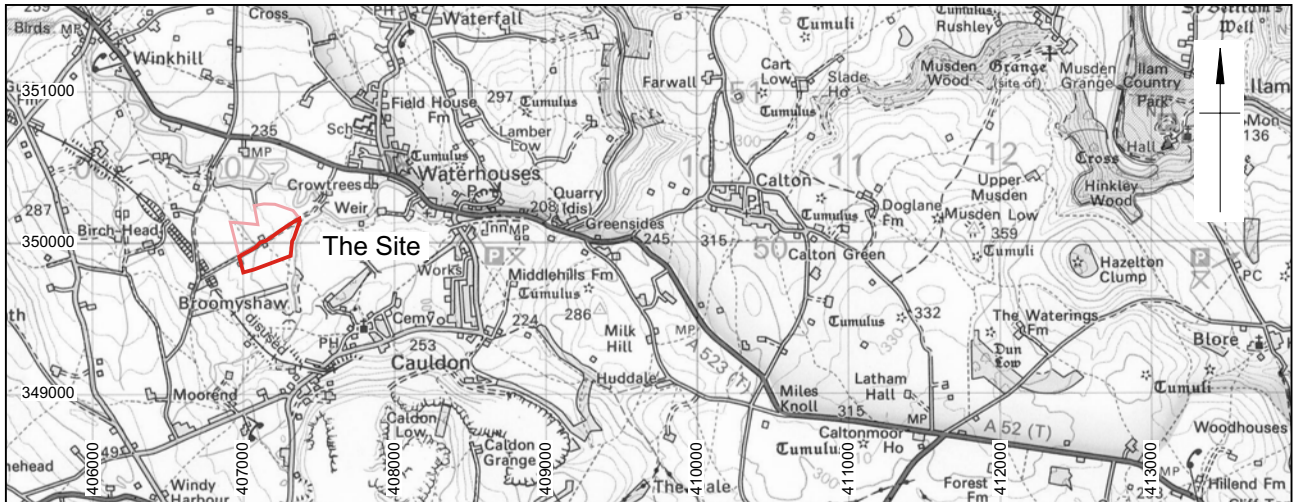
Length	Width	Depth
38m	2m	0.22m
Context	Description	Depth
1001	Topsoil- dark brown clay loam	0-0.22m
1002	Natural- pale greyish yellow clay with iron panning frequent sand stone clasts.	0.22m+


Trench 11 Ground level 238.91 (W) 235.80(E)

Length	Width	Depth
50m	2m	0.20m
Context	Description	Depth
1101	Topsoil- dark brown loam	0-0.20m
1102	Natural- Mid reddish brown silty clay with dark brown lenses.	0.20m+
1103	Cut of tree throw, irregular in plan concave sides and an irregular base	0.88m dia
1104	Fill of 1103. dark brown silty clay	0.19 deep
1105	Cut of thee throw, oval in plan concave sides and irregular base	1.05m dia
1106	Fill of 1105. dark brown silty clay.	0.6m deep

Trench 12 Ground level 234.25m (NW) 231.47m (SE)

Length	Width	Depth
50m	2m	0.35m
Context	Description	Depth
1201	Topsoil- dark brown clay loam with occasional sand-stone clasts.	0-0.20m
1202	Natural- pale greyish yellow clay with frequent iron panning and frequent sub angular sand-stone clasts. Stone field drain N-S orientation northern end or trench, largely consists of capping stone on ledges of natural clay	0.20m+



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Site and trench location

Figure 1



Plate 1: Trench 12 viewed from the south west

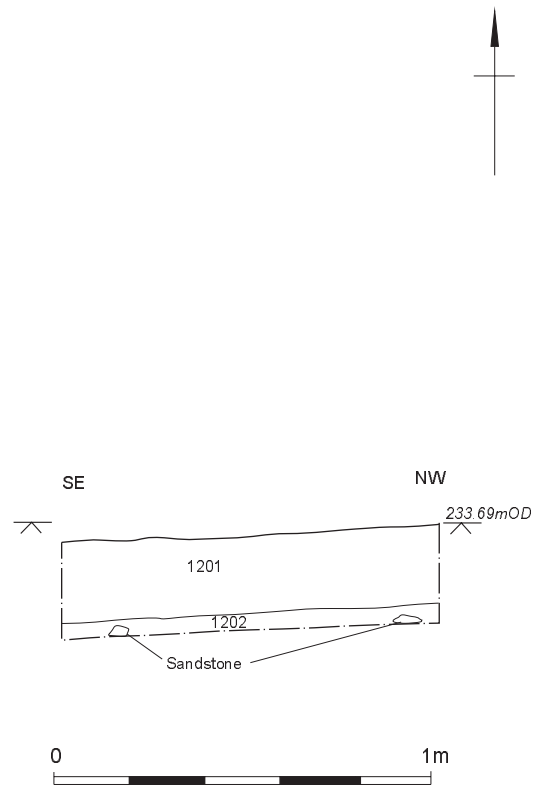


Plate 2: Representative section along Trench 12

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Plate 3: Victorian stone field drain

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