

Hulands Quarry, Bowes, County Durham

Phase 2: Archaeological Watching Brief for Aggregate Industries







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CONTENTS

1.0			
	1.1 Planning Background	1	
	1.2 Site Location and Character	1	
	1.3 Archaeological Constraint	2	
2.0	BRIEF ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	3	
3.0	METHODOLOGY	6	
4.0	RESULTS	7	
	4.1 North Side Farmstead		
	4.2 Other Features		
	4.3 Discussion	15	
5.0	CONCLUSIONS		
6.0	CLOSURE	16	

FIGURES

2
atching
otland
atching cotland
rm 7
8
9
9
10
sion of
13

PLATES

Plate 1 North Side farmstead with exposed archaeological walls, looking eas	t11
Plate 2 Wall 103, looking south	12
Plate 3 Blocked threshold within wall 104, looking north	12
Plate 4 Junction of walls 104 and 105, looking north – east	13
Plate 5 Wall 107, looking west	14
Plate 6 Foundation 109, looking west	

APPENDICES

Appendix A Context Index

DRAWINGS

Drawing 1: Site Location

Drawing 2: Sequence of soil stripping for Phase 2, 2014 - 2015

Drawing 3: Eastern edge of Phase 2 area, showing features recorded

Drawing 4: Indicative locations of North Side West farmstead, as depicted upon historical OS maps

Drawing 5: Archaeological plan of the western end of North Side farmstead

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The fieldwork recording and interpretation was undertaken by Gerry Martin Associates, with the assistance of Ken Denham.

Standards

SLR is a Registered Organisation (RO) with the Chartered Institute for Archaeologists (CIfA). SLR undertakes work to the highest professional standards. This statement has been produced with reference to the CIfA's *Standard and Guidance for an Archaeological Watching Brief* (2014).

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1.0 INTRODUCTION

1.1 Planning Background

Aggregate Industries applied for planning permission (planning reference CMA/6/36) for mineral extraction at Hulands Quarry, Bowes, County Durham, in May of 2007. Paragraph 3i of the permission placed a condition upon the consent, requiring Aggregate Industries to submit an archaeological mitigation strategy for the development of the quarry. This condition was imposed to comply with County Durham Mineral Local Plan Policy M33: Archaeology. A mitigation strategy was submitted to, and approved by, Durham County Council in 2009¹. This presented a programme of archaeological watching brief, accompanied by excavation and recording of any significant features which may be identified. This work has been undertaken in two phases, with Phase 1 completed in 2009. This report is concerned with Phase 2 of development at Hulands Quarry.

A Written Scheme of Investigation was compiled by SLR Consulting in October 2014 for the continuation of the archaeological methodology at Hulands Quarry². The Phase 2 archaeological watching brief took place in October and December of 2014, and in June and September of 2015. This report details the results of the work, with a concluding chapter presenting a discussion of the results.

1.2 Site Location and Character

The development site is approximately 12ha in area and is located on the north side of the A66, which follows the line of a Roman road, and south of a disused railway line. It is 2.5km east of the settlement of Bowes, and 1km west of Boldron, in County Durham (Drawing 1; NGR NZ 019139). The general topography of the area is mostly falling northwards, into the valley of Thorsgill Beck. The Phase 2 area lies in the south eastern corner of the quarry (Figure 1), and measures 55,000m²

The development area historically was divided into a series of strip fields, used for grazing until handed over to the quarry for limestone extraction. The surrounding environs are characterised by pasture enclosed by drystone walls and mature hedges. The reverse S-shape of these boundaries may suggest these are relict boundaries of a medieval field system. Previous small scale quarrying is recorded along the southern edge of the development area. One farmstead, North Side West, is present within the area of Phase 2.

¹ Headland Archaeology (UK) Ltd March 2009 *Hulands Quarry, County Durham: Archaeological Mitigation Strategy*

² SLR Consulting 2014 Hulands Quarry, Bowes, Country Durham, DL12 9JW: Written Scheme of Investigation for Implementation of an Agreed Archaeological Mitigation Strategy



Figure 1: Phase 2 area monitored in June of 2015

1.3 Archaeological Constraint

A Cultural Heritage Assessment³ was undertaken as part of the Environmental Statement in 2007, which identified 31 heritage assets within 1km of the quarry. This study identified that the archaeological potential of the quarry was generally low, but that three known assets (limestone quarries) would be directly impacted upon, and that there remained the possibility for previously unknown heritage assets to be found during removal of the overburden.

A geophysical survey was undertaken as part of the environmental impact assessment process, which identified rig and furrow and two old field boundaries. It also concluded that the site had low archaeological potential⁴.

³ Kimber M. 2007 *Hulands Quarry, County Durham: Cultural Heritage Assessment* Headland Archaeology Ltd

⁴ ASWYAS 2007 Proposed Hulands Quarry Extention, County Durham: Geophysical report

2.0 BRIEF ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

There are no known prehistoric cultural heritage assets within the immediate environs of the development area. The site lies between the lines of two Roman roads, today occupied by the A67 and the A66. Part of the Bowes to Bishop Auckland Roman road is also visible to the south of the current A76. In addition, a possible Romano-British settlement near Jocks House has been identified from aerial photography, located c 1km to the south of the proposed development.

Medieval heritage assets within the immediate area are scarce. To the north-east of the site, north of the A67 and near Blades Farm, an earthwork has been interpreted as a medieval or post-medieval stack stand: identified from aerial photography. In addition, a silver half groat of Henry IV and a lead spindle-whorl were found by metal detectorists near High Broats approximately 6.5km to the east of the quarry extension.

Recorded post-medieval archaeological sites are largely associated with the agricultural landscape. These include Hulands Farm, a demolished farmhouse and outbuildings whose location lay within the existing quarry, and High Broats farmstead. Metal detectorists west of High Broats discovered Georgian and Victorian coins. An earthwork identified from aerial photography lies to the south of the A66, interpreted as a third post-medieval farm.

The quarrying of limestone probably has an extended history within the area, and infilled limestone quarries are noted along the southern edge of the Phase 2 area. Other heritage assets of the industrial era include a former railway which passed to the north of the quarry and south of the A67.

The land falls within the township of Bowes, and was formerly part of the Manor of Bowes. Bowes Cross is a farmstead to the south of the development area. The name of Bowes Cross is suggested to reference the location of a former medieval or post-medieval cross, although there is no physical evidence of such today. The land may have been enclosed by act of parliament prior to the mid-eighteenth century, with evidence that parliamentary enclosure was underway in the vicinity of Bowes as early as the mid-16th century.

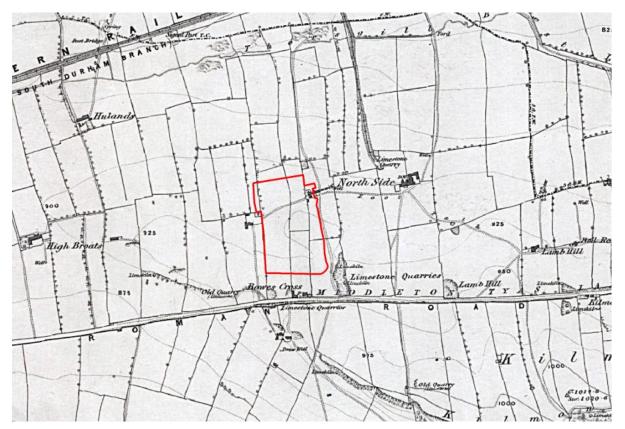
The Phase 1 work for monitoring removal of the overburden revealed a small square enclosure, approximately 12m by 12m in size, which post-dated the rig and furrow. It was, therefore, presumed to have been of post-medieval date⁵. No artefacts were recovered.

Historic Ordnance Survey maps of the area depict the Phase 2 development area as fields, with the post-medieval farmstead of North Side West partially within its north eastern corner (Figure 2 and 3). On the 1895 map, the title of North Side appears allocated to the farm to the west of the development, which is probably down to poor positioning of the labelling.

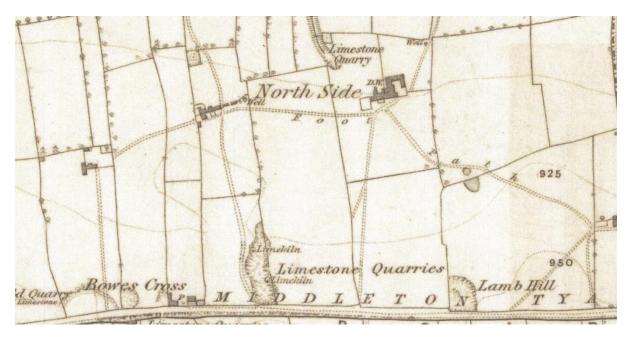
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⁵ Robertson A. June 2010 Archaeological Monitoring of an Extension to Hulands Quarry, County Durham Headland Archaeology (UK) Ltd

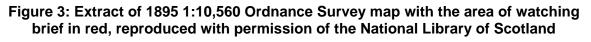
Figure 2: Extract of 1857 1:10,560 Ordnance Survey map with the area of watching brief in red, reproduced with permission of the National Library of Scotland

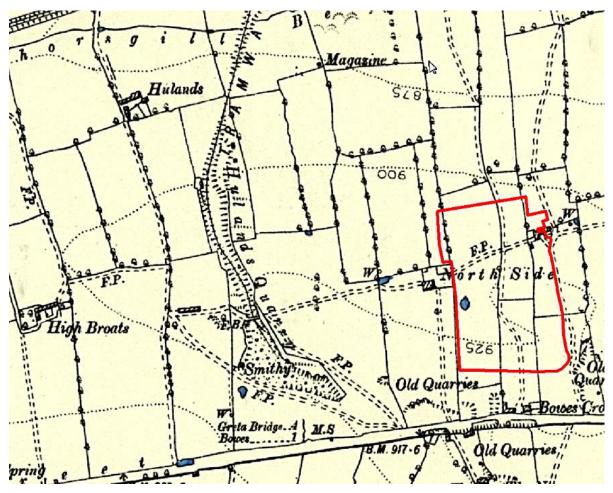


Detail of Phase 2 area and North Side West farm



4





3.0 METHODOLOGY

A permanent presence watching brief was maintained during all groundworks. Removal of topsoil and any overburden from the site was done under the direct supervision of the archaeologist utilising a 24 ton 360° mechanical excavator, with dumper trucks provided by the client for the removal of the material. Excavation proceeded to the top of any undisturbed archaeological remains, or natural drift geology which ever was encountered first.

The programme of field observations comprised the systematic examination, characterisation and recording of any structures exposed during the course of the works on pro-forma sheets. Any structures or deposits were located on hand drawn plans at scales between 1:20 and 1:500 as appropriate, or by a Global Navigation Satellite System (GNSS). An indexed high resolution digital photographic record was also maintained.

In accordance with CIfA guidelines, the aims of the watching brief were as follows:

- Discharge the condition of the planning consent for development at the site;
- To implement a programme of topsoil stripping, manual cleaning and planning, to identify archaeological features and deposits
- To assess the results in order to determine the extent of further mitigation that might be required, appropriate to the significance of the remains and to the expected degree of impact by the development.

Specific objectives of the work were:

- to remove the topsoil and expose archaeological remains or natural ground;
- to investigate and sample as appropriate;
- to make a detailed record of all deposits encountered;
- to strip the sub-soil as appropriate to reveal earlier archaeological features that might lie buried beneath post-medieval agricultural deposits;
- to investigate, sample and record earlier archaeological features cut into natural geology;
- to undertake a programme of post-excavation processing, assessment, and analysis appropriate to the heritage significance of the archaeological remains recorded; and
- to prepare a detailed report presenting the results of the investigation, and a discussion of the significance of any remains in light of the known archaeology of the immediate area.

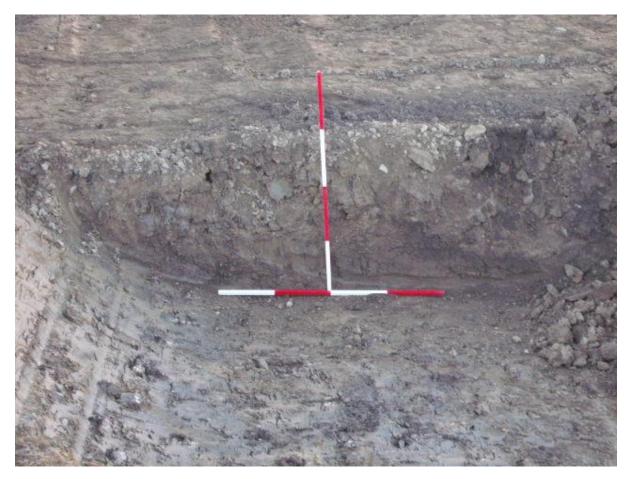
4.0 RESULTS

The work was undertaken in October and December of 2014, and June and September of 2015. The programme of works removed approximately 0.10 - 0.5m of soil (context 101) which lay above a subsoil (context 100) of blue boulder clay and orange-brown colluvial silts which were 0.1m deep on the higher (southern) part of the site, and up to 3m deep on the downslope side of the site to the north, to reveal the underlying carboniferous limestone. The operation was generally conducted as a series of strips across the Phase 2 area from north – south (Drawings 2 and 2a). The general appearance of the site during the soil stripping operation is shown in Figure 4, and an example of subsoil deposits are shown in Figure 5.

Figure 4 Completion of 4th strip 24/10/15 looking east toward North Side West farm



Figure 5 Subsoil Context 100 consisting of clay and silt above the limestone



No remains of archaeological interest were found within the first stages of soil stripping in October 2014, but during the 5th strip along the eastern boundary and in the general proximity of North Side West farmstead, a possible buried structure was investigated. The conclusion reached on excavation was that this was a dump of stone, rather than anything with a more definite form (Figures 6 and 7). During the final stage of stripping along the eastern boundary, however, archaeological deposits were found associated with North Side West farmstead and a former boundary wall. At the time of the watching brief the farmstead was largely still extant in its final configuration, but was scheduled for demolition. Detailed context descriptions are provided in Appendix 1 of this report. The stripping of this eastern part of Phase 2 was conducted during 2015, and was complicated by the existence of power lines running through the area (Figure 8).

Figure 6 View of earthwork mound before stripping, looking north-east



Figure 7 Mound of stones during excavation, looking south



Figure 8 Completion of 8th strip 5/12/14 looking north-east showing power lines

10



4.1 North Side Farmstead

The former western buildings of North Side farmstead were located by the watching brief (Drawings 2 and 3). Part of the structure was still extant, albeit much dilapidated, adjoining the western gable end of the existing building (Figure 6 and Plate 1). The watching brief exposed the extent of a northern and southern sides of single room, walls 103 and 104, and the western end of the building, wall 102 (Drawings 4 and 5).



Plate 1: North Side farmstead with exposed archaeological walls, looking east

11

The room exposed measured 11m in length, as measured from the gable end of the existing building, and aligns roughly with the indicative position of the western end of the building depicted in the 1895 OS map (Drawing 4). It is quite feasible that this is also the limit of a building depicted upon the earlier OS map (Figure 2), with the difference in size due to the nature of the symbols of the historic mapping as opposed to true difference in the building dimensions.

The walls measured 0.6m to 0.75m wide, one to four courses in height. Lime mortar bonding was only observed at the eastern end of wall 103, where the remains were four courses high (Plate 2). They comprised a randomly coursed construction of roughly squared and irregular limestone blocks, a maximum of 0.30m by 0.20m by 0.30m in size. The walls appear to have been built upon a clay platform, used to level the area, although this was not fully exposed. No construction cut was observed and the buildings appear to have been constructed directly upon this surface. Part of a modern interior concrete floor was located in largely the eastern half of the structure (Drawing 5).

Plate 2: Wall 103, looking south



Wall 111 and 110 (Drawing 5) were built upon 103 and 104 respectively, but a misalignment of wall 111 with that of the masonry of 103 was observed suggesting two phases to the building. In addition, the masonry of wall 104 narrowed to 0.4m in a location adjacent to wall 105 (Drawing 5; Plate 3). It is highly likely that this is a former threshold of the earlier phase of the building, subsequently blocked up when the doorway in wall 110 was utilised.



Plate 3: Blocked threshold within wall 104, looking north

Wall 105 butted against 104, and also comprised roughly hewn limestone and was of a drystone construction (Plate 4). As with wall 104, no construction cut was recorded. The wall aligns with a western boundary of a squared enclosed area to the south of the property, depicted upon the 1857 OS map of the area (Figure 9).

12



Figure 9: Extract of 1857 OS map showing North Side, reproduced with permission of the National Library of Scotland



In addition, the remains of a former barn to the southwest of the main farm buildings were observed by the watching brief (Drawing 4, Plate 5). Its western wall, 107, was of a dry stone construction comprising irregular and roughly shaped limestone blocks, in use as part of a current boundary wall. It measured 5m in length, shorter than the 9m to 10m indicated by historical mapping. The other walls of the structure had been demolished, with its northern and southern walls visibly keyed into wall 107.



Plate 5: Wall 107, looking west

4.2 Other Features

Foundation 109 comprised a line of roughly hewn limestone blocks. It was of drystone construction, built on an east - west orientation. It aligns with an east - west boundary wall depicted upon the 1857 OS map of the area, to the south of North Side West farmsetad (Figure 3; Plate 6).



Plate 6: Foundation 109, looking west

4.3 Discussion

The archaeological monitoring of the ground works for Phase 2 identified the remains of the western wing of North Side West farmstead and a former field boundary. The farmstead proved to have at least two phases of construction, as previously indicated by the historic maps. The original structure appears to have been constructed directly upon the ground, after levelling the area with clay.

In addition, the largely demolished walls of a former barn to the southwest of the main farm building and the foundation of a field boundary were recorded. No date was obtained for the construction of these structures, and no finds were recovered.

No sign of the former structure immediately to the south of the western end of the main farm building, as depicted upon historic mapping, were observed (Figure 2 detail, and Figure 9). Any foundations were presumably completely removed at the time of its demolition.

5.0 CONCLUSIONS

The Phase 2 archaeological watching brief has successfully implemented the agreed mitigation strategy required to discharge the archaeological condition of the planning consent.

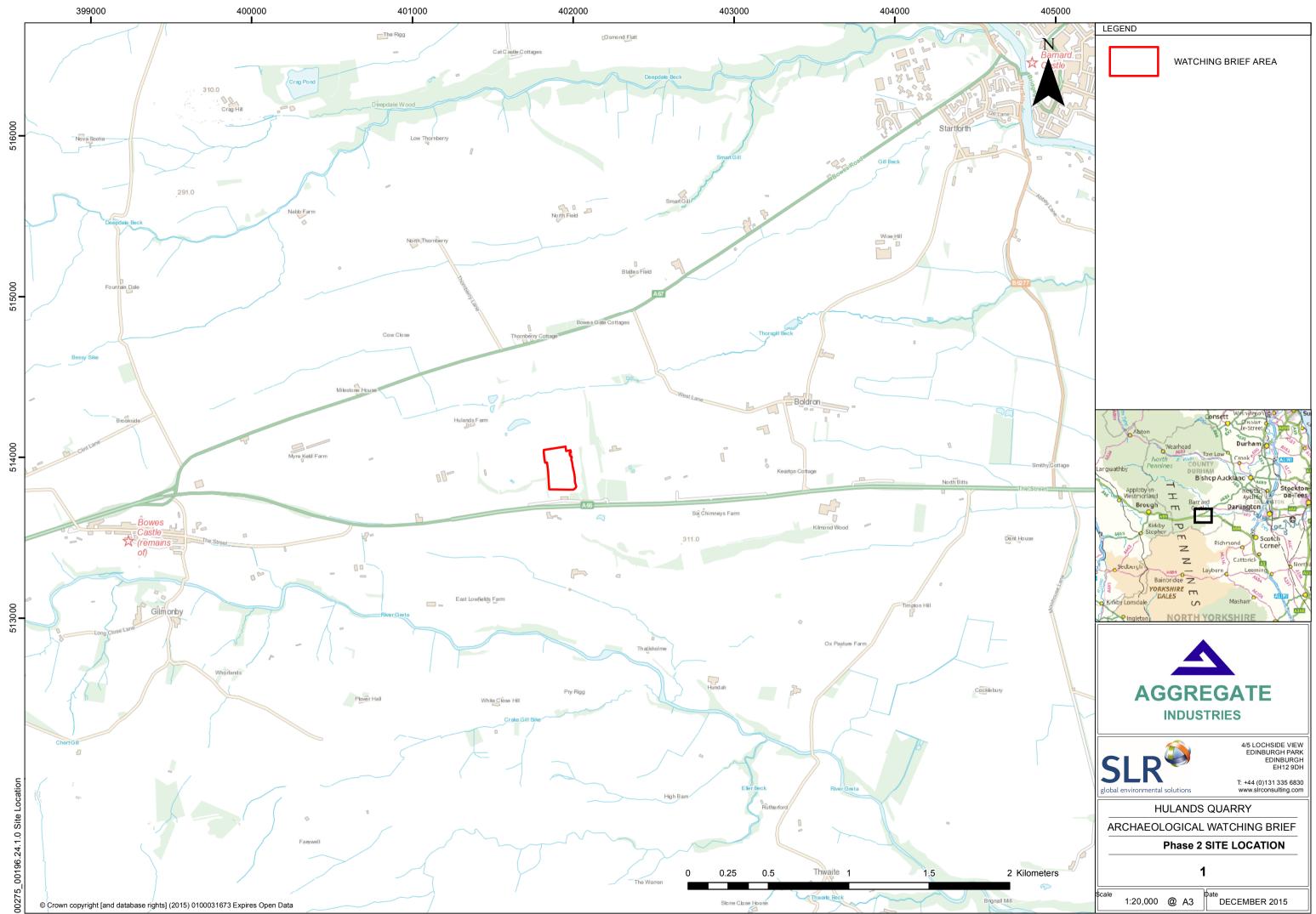
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6.0 CLOSURE

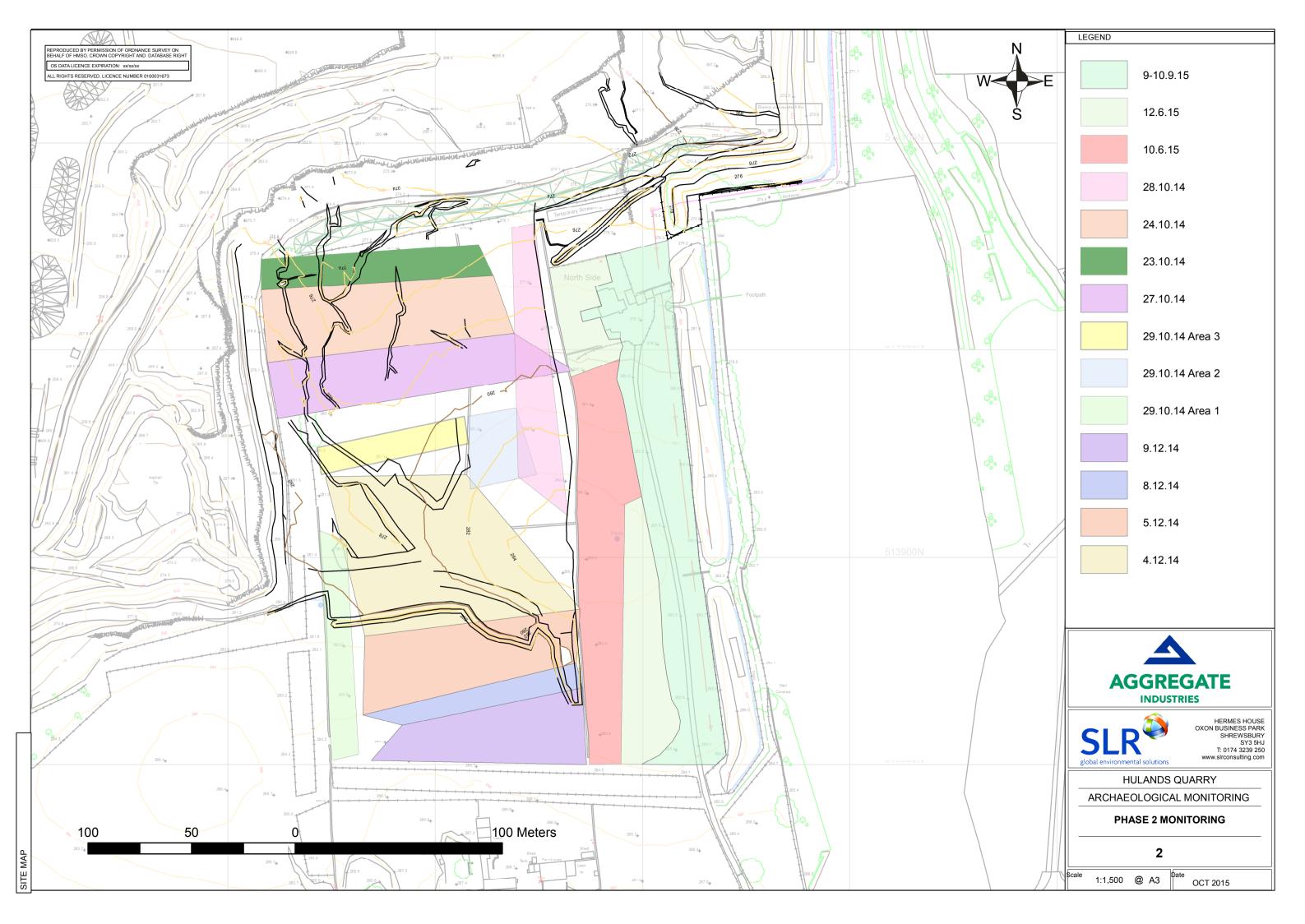
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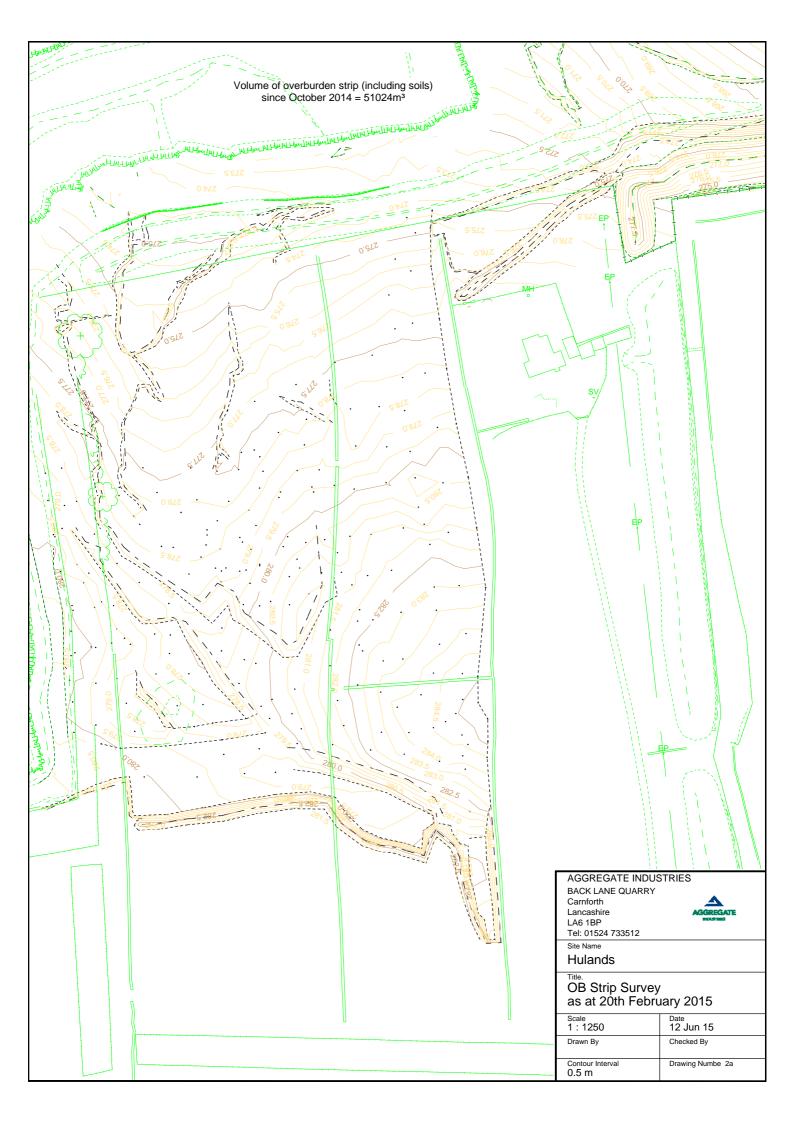
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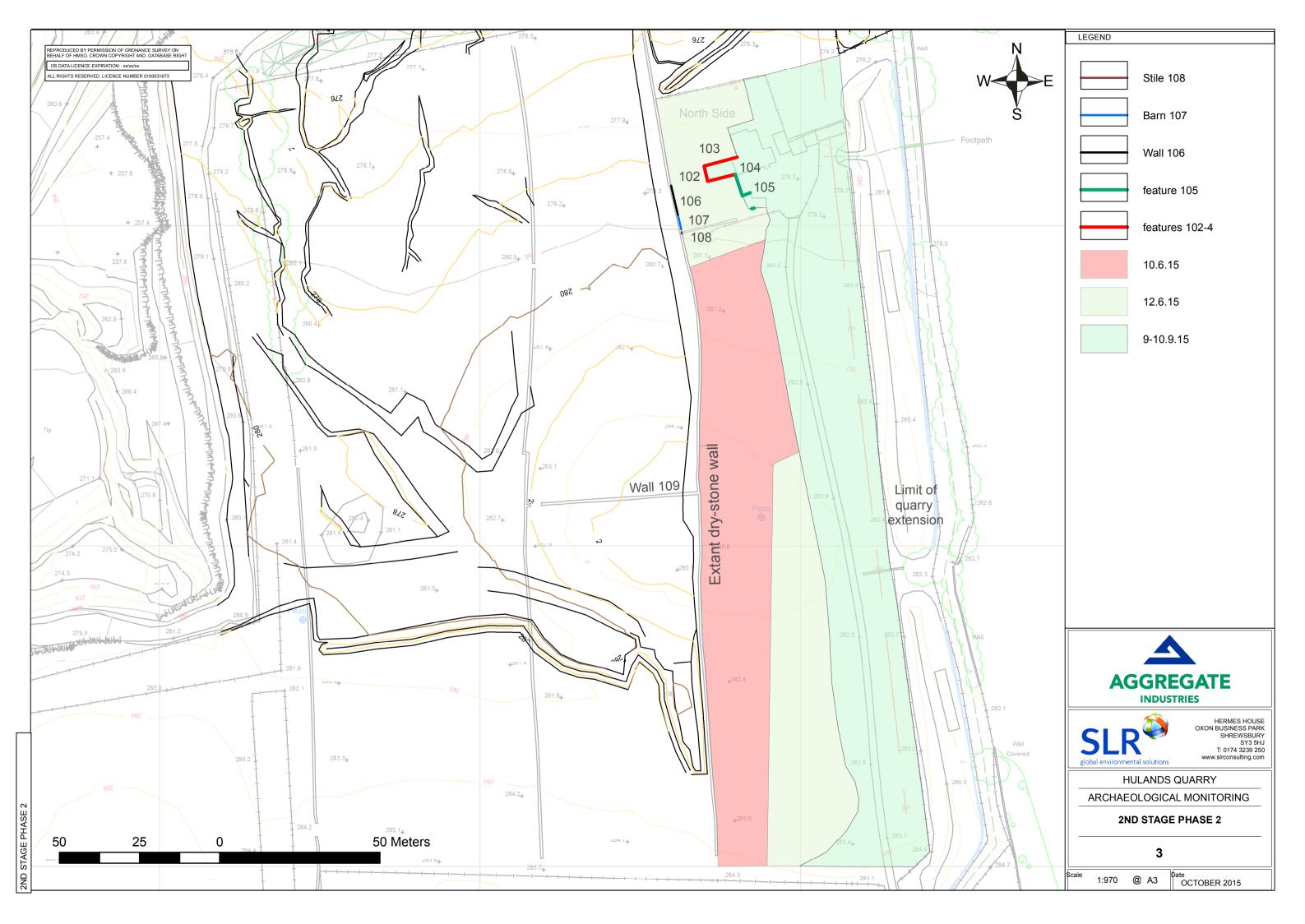
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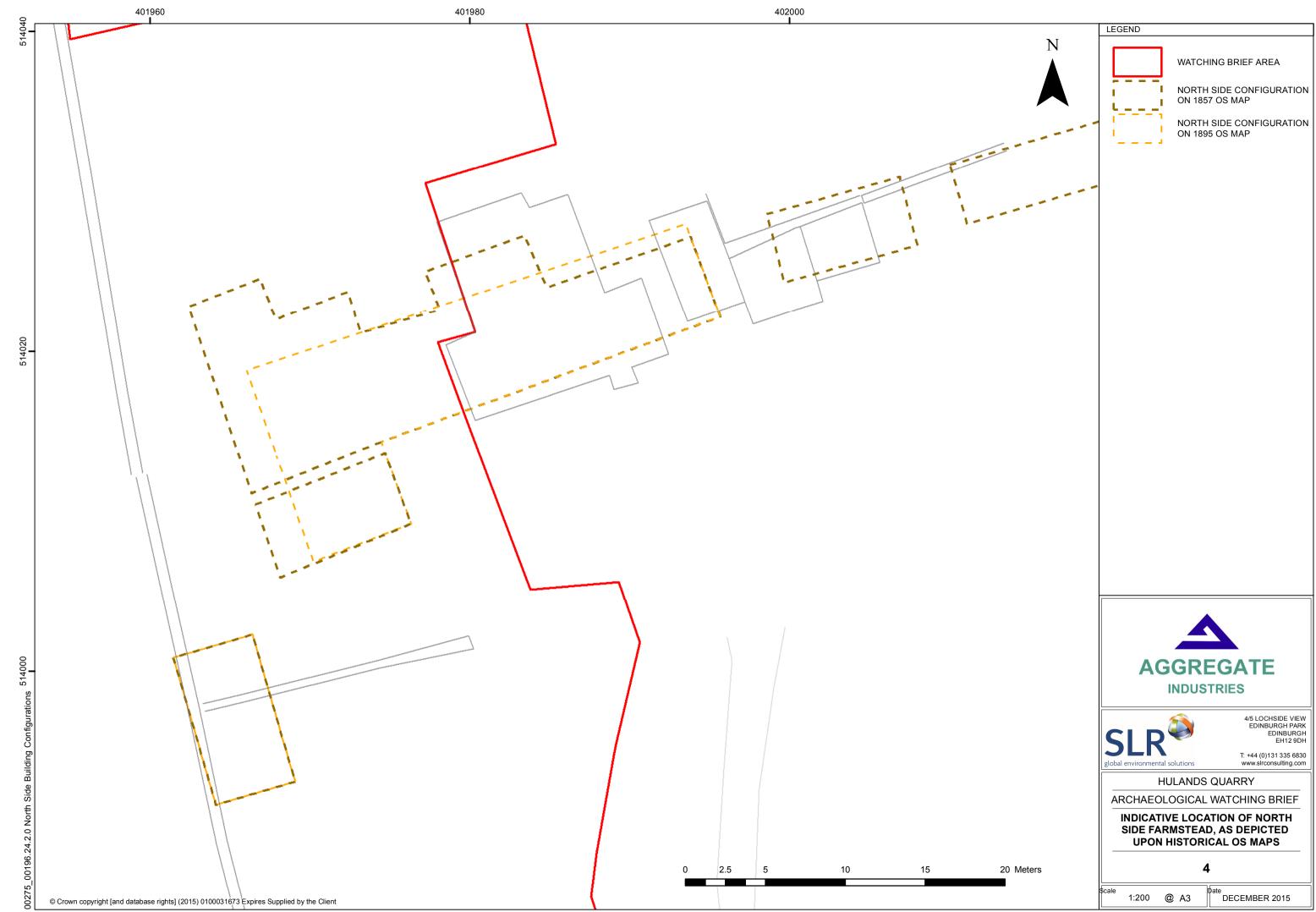


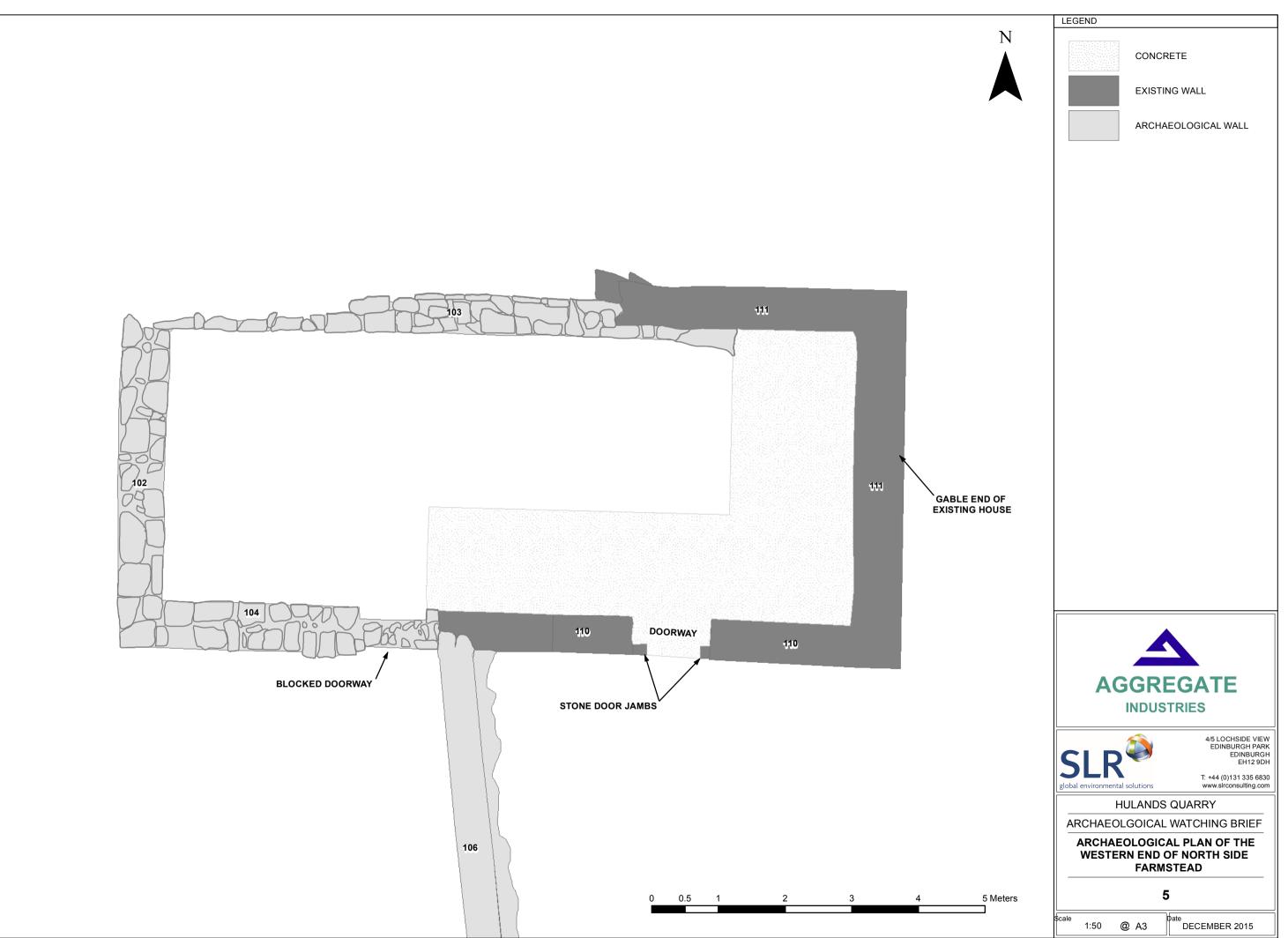
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APPENDIX 1: CONTEXT INDEX

Context Number	Category	Description
100	Layer	Post glacial till
101	Layer	Topsoil
102	Structure	A north – south aligned wall. It measured 5.0m in length, 0.70m wide and 0.2m high, comprising a single course of roughly hewn and roughly shaped limestone.
103	Structure	An east – west aligned wall. It measured 8.5m in length, 0.6m wide and 0.40m high. Comprised roughly hewn and roughly shaped limestone, a maximum of four courses high, with some lime mortar present between the stone in the higher parts of the structure.
104	Structure	An east – west aligned wall. It measured 4.5m in length and 0.75m wide, comprising roughly hewn limestone, approximately 2 courses high.
105	Structure	A north – south aligned wall. It measured 6.7m in length, 0.5m wide and 0.3m high. It comprised roughly hewn and roughly shaped limestone, and was of a drystone construction.
106	Structure	Modern rebuild of an historic wall, 15.0m in length, 0.6m wide and 2.5m high. Comprised roughly hewn limestone blocks, with a small number of re-used dressed limestone blocks from a former configuration of the steading.
107	Structure	Boundary wall, on a roughly north – south orientation. It measured 5.0m long, 0.5m wide and 2.0m high, comprising roughly hewn limestone. Of a drystone construction.
108	Structure	Stile. Comprised dressed limestone, and measured 1.0m in length, 0.5m wide and 1.2m high.
109	Foundation	Foundation. Comprised roughly hewn limestone within a construction cut 6.0m long and 0.6m wide. Unexcavated.
110	Structure	A wall measuring 4.5m in length, 0.6m wide and 0.3m high, on an east – west orientation. Comprised roughly hewn limestone. The wall has been repointed in places, and is bound by a lime mortar. It has been capped by limestone lintels.
111	Structure	A wall measuring 3.5m in length, 0.6m wide and 2.5m high. It comprised roughly hewn limestone, and was bound by a lime mortar. Part of the structure had been repointed.
112	Structure	A wall measuring 3.0m in length and 0.6m wide, forming an east – west orientated wall of the existing building. Part of the roof line of a former single storey structure, to the north of the building, was present within the wall. In addition, the lower part of the wall has been plastered showing it had

Context Number	Category	Description
		once been an internal wall.
113	Structure	The north – south oriented western gable end of the existing building. Comprised roughly hewn and roughly shaped limestone, bound by a lime mortar.

18

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