

Archaeological Salvage Recording at Wellington Quarry, Herefordshire 2012-14.

Moreton South Extension: Phase 1 Interim Report



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Status: Draft for submission to client and curator
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Project reference: P3979
Report reference: 2028
HER reference: EHE 2057

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Graham Arnold and Robin Jackson

With contributions by Rob Hedge and Liz Pearson

Summary

A programme of archaeological works was undertaken within the Moreton South Extension of Wellington Quarry, Herefordshire (NGR SO 5030 4730; Figure 1) during the period 2012-2014. The work was completed on behalf of Lafarge Tarmac Limited in advance of the extension of quarrying into Phase 1 of this recently permitted area.

A series of Neolithic pits were discovered and occurred both in isolation and in small clusters (Figure 2). Neolithic pottery and flint were recovered in small but significant quantities from many of these features. Further undated but probably Bronze Age activity was represented by several waterholes associated with pits filled with fire-cracked stones. One group was associated with a sub-rectangular feature (possibly a trough) the fill of which included a large volume of fire-cracked stone. These groups of features appear to relate to activities of the type associated with burnt mounds, although no evidence for any mound structures was revealed.

A shallow, peat-filled palaeochannel first identified at evaluation was recorded running across the south-west corner of the investigated area and was cut along its length by a drainage ditch of probable late Roman to early post-Roman date.

The associated alluvial sequence comprised a strong reddish-brown silty clay underlying the modern turfline, with a grey clay beneath this. These sealed the Neolithic and Bronze Age features which were cut into a yellowish-brown deposit of prehistoric origin and lastly a strong reddish silty clay horizon directly overlying natural sand and gravel.

Later features comprised a series of ditches and drains associated with a water-meadow system which has previously been mapped through aerial photography and LiDAR. Medieval and later field boundaries and land-drains were also recorded.

Report

1 Background

A programme of archaeological works was undertaken within the Moreton South Extension of Wellington Quarry, Herefordshire (NGR SO 5030 4730; Figure 1) during the period 2012-2014. The work was completed on behalf of Lafarge Tarmac Limited in advance of the first phase (Phase 1) of the extension of quarrying into this newly permitted area, for which planning permission has been granted.

The permitted extension is considered by the Archaeological Advisor to Herefordshire Council (the Curator) to have the potential to affect a known archaeological site (HSM 32268).

The project conforms to a brief prepared by Herefordshire Council (2012) and for which a project proposal (including detailed specification) was produced (WA 2012a) and approved by the Curator.

The project also conforms to the *Standard and guidance for archaeological excavation* (IfA 2008) *Standard and guidance for an archaeological watching brief* (IfA 2008), and the *Standards for archaeological projects in Herefordshire: issue 1* (Herefordshire Archaeology 2004).

The event reference for this project, given by the HER, is EHE 2057.

2 Aims

It was anticipated that the permitted area (including Phase 1) had the potential to contain both prehistoric and Romano-British remains but that these were unlikely to be especially complex in nature. Their survival was expected for the most part to be poor, except potentially in the lowest lying areas and/or areas of deeper alluviation where preservation of remains was anticipated to be better. In such locations well-preserved palaeoenvironmental deposits associated with former watercourses were liable to be encountered.

The overall aims of the project are therefore as follows:

- A1. To identify all archaeological remains present within the site and secure an accurate survey of them thus recording the scale and extent of archaeological remains present;
- A2. To undertake carefully targeted investigation and recording of any landscape features (field boundaries, fence lines, etc) revealed to recover evidence for dating in order to support understanding of their chronological sequence and development;
- A3. To undertake a sufficient level of investigation and recording of any occupation, activity focus and/or funerary deposits revealed to establish dating and character.

More specifically, the project is anticipated to address the following research themes:

- Neolithic and earlier prehistoric seasonal occupation;
- Bronze Age and Iron Age activity within the landscape (funerary monuments, burnt mounds, settlement and landuse);
- Romano-British water management features and field systems;
- Post-Roman environment and landscape;
- Medieval cultivation; and

- Long-term patterns of environmental change and human impact on the landscape (as reflected in the palaeoenvironmental and geoarchaeological record).

These will be considered within the context of both regional and national research frameworks and in particular the West Midlands Regional Research Framework (Watt 2011) as well as within the specific research frameworks developed through the ALSF for the Lower Lugg (Bapty 2007, 2008).

3 Methods

3.1 Personnel

The project was undertaken by Graham Arnold (BA MSc); who joined Worcestershire Archaeology in 2009 and has been practicing archaeology since 2002. Andrew Mann (BA, MSc) also assisted with the project.

The Project Manager responsible for the quality of the project was Robin Jackson (BA). Comment on finds and environmental material was provided by Robin Jackson and Rob Hedge (flint and Neolithic pottery) and Liz Pearson (environment). Illustrations were prepared by Carolyn Hunt.

3.2 Archaeological background

The archaeological background to the southern extension area at Wellington derives from extensive programmes of investigation undertaken at the quarry since 1986. These include two phases of evaluation within the area covered by the newly permitted Moreton South extension.

In summary, these indicate that the site lies within a broad area of high archaeological potential as has been demonstrated by a range of significant discoveries made in advance of previous stages of quarrying, through:

1. Programmes of salvage recording and excavation undertaken prior to quarrying between 1986-2005 in the original quarry area and the north and south extensions of that area (Jackson and Miller 2011; Jackson and Mann forthcoming);
2. A programme of evaluation undertaken at Morton Camp (which extended the quarry to the west) in 2003 and affecting the northern part of the Wellington South extension (Griffin and Jackson 2003);
3. Programmes of salvage recording and excavation undertaken at Moreton Camp between 2005-9 (Mann 2007a and b, 2010; Potten 2008); and
4. A programme of evaluation undertaken to the south of Moreton Camp in 2007-8 and covering the central and southern parts of the Wellington South extension (Sworn and Jackson 2008).

These have revealed well-preserved archaeological, palaeoenvironmental and geoarchaeological deposits reflecting a long period of human exploitation of the floodplain and terraces of the River Lugg from the Mesolithic onwards and including significant Neolithic, Bronze Age, Iron Age, Roman and early medieval remains.

All of the areas affected by the Wellington South workings can be deemed to be of high potential since archaeological deposits relating to earlier and later prehistoric, Romano-British, post-Roman and medieval activity have been identified through the two programmes of evaluation across the area (Griffin and Jackson 2003; Sworn and Jackson 2008). These have provided evidence of significant prehistoric remains focussed alongside, and on gravel islands between, former watercourses (palaeochannels). Evidence of Roman and early medieval activity has also been identified and the whole area can be determined as of high archaeological potential and further remains may be anticipated to be present.

3.3 Fieldwork strategy

A detailed specification was prepared by Worcestershire Archaeology (WA 2012a).

Fieldwork was undertaken in a number of separate blocks spanning the period 12th October 2012 to 17 July 2014. These were partially dictated by operational requirements but also by ground conditions which deteriorated as a result of several spells of wet weather which resulted in flooding of the areas involved.

The WA project number is P3979 and the site code is HER EHE 2057.

Phase 1 of the quarry extension amounted to just over 5.8 hectares including 0.2 hectares for an area for spoil, as indicated in Figure 2. Landuse prior to commencement was as rough pasture.

Topsoil stripping and overburden removal followed the routines that have been established during earlier phases of work at Wellington. These allow for the on-site archaeologist to determine the levels to which overburden can be removed in order to target archaeological or palaeoenvironmental horizons as required. They also vary according to the nature of the overburden and, in particular, according to the presence or absence of clearly defined alluvial units. Three such units have been identified across wide areas of the quarry: Unit 1, a reddish brown alluvium (uppermost), Unit 2, a yellowish brown alluvium (middle) and Unit 3, a red alluvial clay, often mixed with gravel (lowest). This sequence has been shown to be deepest and best defined within topographically low lying areas of the quarry, whilst higher areas have often been proven to lack certain elements of the sequence (notably Unit 2).

In this instance, due to the very high water table it was necessary to excavate a series of grip trenches to help drain the area prior to removal of overburden. Topsoil, subsoil and alluvial deposits (overburden) were then stripped from the area. Excavation of the grip trenches and subsequent overburden stripping was undertaken using a 360° tracked excavator, employing a toothless bucket operating under archaeological supervision.

The stripping operation was undertaken in several stages. Topsoil, subsoil and any modern material were initially stripped to the top of the first alluvial horizon (Unit 1). This interface has been shown to be that at which medieval and later deposits are revealed. Following recording (see below), further excavation was undertaken to remove the alluvial overburden overlying the mineral. The latter was removed in two blocks, initially the reddish brown alluvial unit (Unit 1; which survived to a depth of 0.10 – 0.60m across this area) was removed to the interface with the underlying alluvium (Unit 2). This has been shown to be the interface at which palaeochannels and early medieval, Roman and earlier deposits are present and this was the case again here. Lastly the remaining alluvium (Unit 2 and 3) and organic fills of the palaeochannels were removed to expose mineral deposits ready for extraction.

Clean surfaces were inspected at each interface and archaeological deposits revealed were mapped using a Leica NetRover. Selected deposits were then hand-excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. All investigation and recording was undertaken according to standard Worcestershire Archaeology practice (WA 2012b).

As in previous years, the communication and good working relationship between the archaeologists, Lafarge Tarmac staff and the plant contractors was crucial to the success of the work. The co-operation and skill of the plant operators remained and, as in previous years, was an essential element in the successful machining of selected areas, allowing targeted sampling and recording.

3.4 Artefact methodology, by Rob Hedge and Robin Jackson

3.4.1 Artefact recovery policy

The artefact recovery policy conformed to standard Worcestershire Archaeology practice (WA 2012).

3.4.1 Method of analysis

All hand-retrieved finds have been washed, marked and appropriately packaged. All have been examined for preliminary identification purposes and all have been quantified (by weight and count) and broadly dated to period. Information was recorded on a project database.

3.4.2 Discard policy

The following categories/types of material will be discarded after a period of 6 months following the submission of this report, unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):

- unstratified material (except early prehistoric);
- post-medieval pottery, and;
- generally where material has been assessed as having no obvious grounds for retention.

3.4.3 Environmental archaeology methodology, by Liz Pearson

3.4.4 Sampling policy

Sampling was undertaken according to standard Worcestershire Archaeology practice (WA 2012). Samples were taken by the excavator from deposits considered to be of high potential for the recovery of environmental remains. A total of 68 samples (of between 10 and 40 litres) were taken during this phase of investigation (Table 1).

3.4.5 Processing and analysis

Work completed to date has focussed on the processing of a sub-sample of each of the samples taken from the site (see Table 1) in order to inform this interim statement and support determination at a later stage (assessment) of the project which samples will warrant further processing prior to assessment and where appropriate analysis and reporting.

For each of the bulk samples, a minimum of 10 litres was processed by flotation using a Siraf tank. The flots were collected on a 300mm sieve and the residue retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds.

The residues were scanned by eye and the abundance of each category of environmental remains estimated. A magnet was also used to test for the presence of hammscale. The flots were scanned using a low power MEIJI stereo light microscope and plant remains identified using modern reference collections maintained by Worcestershire Archaeology, and a seed identification manual (Cappers *et al* 2012). Nomenclature for the plant remains follows the New Flora of the British Isles, 3rd edition (Stace 2010).

For each of the waterlogged samples a sub-sample of 1 litre was processed by the wash-over technique as follows. The sub-sample was broken up in a bowl of water to separate the light organic remains from the mineral fraction and heavier residue. The water, with the light organic fraction was decanted onto a 300mm sieve and the residue washed through a 1mm sieve. The remainder of the bulk sample was retained for further analysis.

3.4.6 Discard policy

Samples will be retained for up to 6 months following the completion of the assessment report when decisions on further processing and radiocarbon dating will be made. Samples can be retained for a longer period of time in consultation with Worcestershire Archaeology

Wellington Quarry, Moreton South Extension, Herefordshire – Phase I

Sample number	Volume	Volume processed/action	Reason for sample/comment
1	20	10	Bulk sample for plant macrofossils, dating and finds
2	40	10	Bulk sample for plant macrofossils, dating and finds
3	20	10	Bulk sample for plant macrofossils, dating and finds
4	40	10	Bulk sample for plant macrofossils, dating and finds
5	40	10	Bulk sample for plant macrofossils, dating and finds
6	10	10	Bulk sample for plant macrofossils, dating and finds
7	20	10	Bulk sample for plant macrofossils, dating and finds
8	10	10	Bulk sample for plant macrofossils, dating and finds
9	20	10	Bulk sample for plant macrofossils, dating and finds
10	20	10	Bulk sample for plant macrofossils, dating and finds
11	10	10	Bulk sample for plant macrofossils, dating and finds
12	20	10	Bulk sample for plant macrofossils, dating and finds
13	10	10	Bulk sample for plant macrofossils, dating and finds
14	10	10	Bulk sample for plant macrofossils, dating and finds
15	10	10	Bulk sample for plant macrofossils, dating and finds
16	10	10	Bulk sample for plant macrofossils, dating and finds
17	40	10	Bulk sample for plant macrofossils, dating and finds
18	40	10	Bulk sample for plant macrofossils, dating and finds
19	10	10	Bulk sample for plant macrofossils, dating and finds
20	40	10	Bulk sample for plant macrofossils, dating and finds
21	40	10	Bulk sample for plant macrofossils, dating and finds
22	40	10	Bulk sample for plant macrofossils, dating and finds
23	20	10	Bulk sample for plant macrofossils, dating and finds
24	20	10	Bulk sample for plant macrofossils, dating and finds
25	20	10	Bulk sample for plant macrofossils, dating and finds
26	10	10	Bulk sample for plant macrofossils, dating and finds
27	20	10	Bulk sample for plant macrofossils, dating and finds
28	40	10	Bulk sample for plant macrofossils, dating and finds
29	40	10	Bulk sample for plant macrofossils, dating and finds
30	N/A	Stored for assessment	Monolith – pollen.
31	20	10	Bulk sample for plant macrofossils, dating and finds
32	40	10	Bulk sample for plant macrofossils, dating and finds
33	40	10	Bulk sample for plant macrofossils, dating and finds
34	1 bag	All	Bulk sample for plant macrofossils, dating and finds
35	1 bag	All	Bulk sample for plant macrofossils, dating and finds
36	1 bag	All	Bulk sample for plant macrofossils, dating and finds
37	1 bag	All	Bulk sample for plant macrofossils, dating and finds
38	4 bags	All	Waterlogged sample - Plant macros, dating and finds
39	10	10	Bulk sample for plant macrofossils, dating and finds
40	10	10	Bulk sample for plant macrofossils, dating and finds
41	10	10	Bulk sample for plant macrofossils, dating and finds
42	20	10	Bulk sample for plant macrofossils, dating and finds
43	40	10	Bulk sample for plant macrofossils, dating and finds
44	40	10	Bulk sample for plant macrofossils, dating and finds
45	20	10	Bulk sample for plant macrofossils, dating and finds
46	40	10	Bulk sample for plant macrofossils, dating and finds
47	40	10	Bulk sample for plant macrofossils, dating and finds
48	40	10	Bulk sample for plant macrofossils, dating and finds
49	1 bag	1 litre wash-over	10 cm spit sample within waterlogged sequence
50	1 bag	1 litre wash-over	10 cm spit sample within waterlogged sequence
51	20	1 litre wash-over	Waterlogged sample - organics
52	40	1 litre wash-over	Waterlogged sample - organics
53	30	1 litre wash-over	Waterlogged sample - organics
54	40	1 litre wash-over	Waterlogged sample - organics
55	40	1 litre wash-over	Waterlogged sample - organics
56	40	10	Plant macros, dating and finds (organics)
57	40	10	Plant macros, dating and finds (organics)
58	40	10	Plant macros, dating and finds (organics)
59	10	10	Bulk sample for plant macrofossils, dating and finds
60	40	10	Bulk sample for plant macrofossils, dating and finds
61	5	4	Plant macros, dating and finds, keep back 1 litre
62	40	10	Bulk sample for plant macrofossils, dating and finds
63	20	10	Bulk sample for plant macrofossils, dating and finds
64	10	10	Bulk sample for plant macrofossils, dating and finds
65	40	10	Bulk sample for plant macrofossils, dating and finds
66	10	10	Bulk sample for plant macrofossils, dating and finds
67	10	10	Bulk sample for plant macrofossils, dating and finds
68	2 bags	Washed and stored in fridge	Worked wood

Table 1: Environmental samples

4 Summary of results

All records have been checked and cross-referenced. Phasing at this stage is preliminary and is based upon a combination of ecofactual and artefactual evidence, allied to stratigraphic information. A database containing all site data, finds and environmental information to date has also been established.

The following summary description of the site sequence is structured around type and broad period of activity. A summary plan of key features and deposits is presented as Figure 2. Five phases of activity were identified.

4.1 Phase 1: Natural deposits

Natural deposits comprised sand and gravel, overlain by a series of alluvial horizons. Across this area the alluvial sequence was (from the base) as follows:

A strong red alluvial unit (Unit 3) directly overlaid the sand and gravel and is understood to have been deposited in the late glacial to early post-glacial period. Overlying this was a yellow-buff coloured alluvium (Unit 2) which is known to have been deposited from the early post-glacial period through to at least the later prehistoric. The uppermost part of the sequence is formed by a strong reddish brown alluvial deposit (Unit 1) which is understood to have been deposited from the early medieval period onwards. In places a grey alluvial deposit was identified separating Units 1 and 2. The entire sequence was overlaid by a thin modern topsoil and turf.

A shallow, peat-filled palaeochannel ran in a curve across the south-west corner of the Phase 1 area and clearly extends to the south. This had been recorded and extensively sampled during the evaluation stage (Griffin and Jackson 2003); work which demonstrated that the channel had silted up by the later Roman period (3rd to 4th century AD). The channel was incised into the Unit 2 alluvium and the infilled channel was cut along its length by a drainage ditch of late Roman to early post Roman date (a radiocarbon date secured at evaluation indicated that this had silted up by the 5th to 6th century AD).

4.2 Phase 2: Neolithic Deposits

A number of pits and post-holes were uncovered sealed beneath the upper alluvium (Unit 1) and cut into the yellow coloured alluvium (Unit 2). These contained single fills and many included small but significant assemblages of Neolithic pottery, flint and other material.

These were recorded both in small clusters and as isolated features. They were widely scattered across the northern and eastern parts of the investigated area away from wetter and lower-lying ground around the palaeochannel.

4.3 Phase 3: Bronze Age deposits

Two areas were recorded which were characterised by the presence of waterholes and associated clusters of pits. These features produced no datable artefacts but were characterised by the presence of considerable quantities of fire-cracked stones in their fills. In one instance a possible trough was associated with one of the waterholes whilst one of the waterholes was associated with a square pit which contained wooden posts preserved in waterlogged deposits at its base.

These features are believed on morphological grounds to be potentially related with the type of activities associated with burnt mound sites, although no evidence of mound structures was recorded. Although no dating evidence was recovered, on typological grounds they are considered most likely to be of Bronze Age date. Radiocarbon dating of charcoal associated with these features should enable dating to be confirmed.

4.4 Phase 4: Roman deposits

A number of drainage ditches and field boundaries crossing the site related to Roman activity and cut the yellow alluvial deposits site. These were mostly sterile in nature and were filled with a

gleyed blue-grey silty clay. Only one fragment of pot was retrieved from one of the slots excavated across these and dating largely rests on their stratigraphic relationship with the alluvial deposits and comparison with Roman dated field boundaries and drainage ditches recorded in previously investigated areas of the quarry. The exception is a drainage ditch which follows the course of the palaeochannel; radiocarbon dates secured during the evaluation stage of the project established that the channel had become silted up and the ditch had been excavated sometime during the 3rd to 4th century AD and that the ditch had fallen into disuse by the 5th to 6th century AD.

4.5 Phase 5: Post-medieval / modern deposits

An extensive network of ditches backfilled with Unit 3 alluvium, glass bottles, metalwork and animal bone ran across the site on north to south and east to west alignments. These formed part of an extensive post-medieval water-meadow system and occasionally truncated earlier deposits.

4.6 Artefacts, by Rob Hedge and Robin Jackson

The artefactual assemblage recovered is summarised in Table 2.

period	material class	material subtype	object specific type	count	weight (g)
Neolithic	bone	animal bone		1	1
Neolithic	ceramic		Pot	431	2330
Neolithic	stone			5	32
Neolithic	stone	flint		117	412
prehistoric	ceramic		Pot	19	26
prehistoric	stone			1	1
prehistoric	stone	flint		18	65
Roman	ceramic		Pot	9	42
medieval	ceramic		Pot	1	6
post-medieval	glass		Vessel	3	512
undated	bone	animal bone		10	588
undated	ceramic		fired clay	7	12
undated	organic	charcoal		3	3
undated	stone			6	684
			TOTALS	636	5396

Table 2: Summary of finds assemblage from Phase 1 investigations

A rapid scan of the assemblage undertaken during quantification reveals this to be dominated by Neolithic pottery and flint. The majority of this material was recovered from the fills of pits occurring within clusters and in isolation.

Preliminary observations suggest that the majority of the pottery is of an angular quartz tempered fabric. This is associated with diagnostic forms indicative of Early Neolithic plain bowl tradition featuring simple rim forms, slack carinated profiles and occasional applied lugs or cordons. A small but significant group of Grooved Ware in a more soapy textured and apparently grog tempered fabric was also recorded from a pit (context 1083) and this represents the first pottery of this tradition recovered from Wellington and only the second known occurrence in Herefordshire.

The lithic assemblage appears to be of comparable date to the pottery with diagnostic forms including a leaf-shaped arrowhead, a large D-shaped scraper and a number of flakes from polished axes. A single flake of rock crystal was also present and is thought to be only the second occurrence of flaked material of this type recorded in Herefordshire (the other example being from the recently identified monumental complex on Dorstone Hill); this is a very rare find nationally.

Small quantities of later material including 9 sherds of Roman pottery attest to later phases of activity; the Roman material almost certainly deriving from one of two Roman settlements known to be present in the area, one to the north-east underlying the current quarry plant and stockpiles and one to the west near to the main road and occupying part of the former Moreton Camp site.

4.7 Environment, by Elizabeth Pearson

A rapid scan of the processed samples reveals that charred plant macrofossils are only sparsely present as has typically been the case from earlier prehistoric pits across the quarry and indeed in the wider region.

Occasional hazelnut shell fragments were recovered from Early Neolithic pit/posthole fills (contexts 1039, 1049, 1051, 1056, 1064, 1069, 1075 and 1080) and from an undated but probably Bronze Age waterhole (1117). These remains provide limited indication of food processing and consumption, but are of potential for providing material for radiocarbon dating of the waterhole (1117) and to refine artefactual dating.

Charcoal quantities are estimated as moderate to abundant in many samples from pits associated with fire cracked stone and other features but generally present as small fragments, so not suitable for charcoal analysis to provide information on the fuel economy. However, some contexts contain small quantities of charcoal where the fragments may be sufficiently large to be suitable for radiocarbon dating (contexts 1008, 1031 1035, 1039, 1051, 1056, 1064, 1094, 1101, 1117 and 1145). No species analysis has been carried out to date, so it is uncertain how much of this material contains non-oak species needed for radiocarbon dating.

Waterlogged material from the waterholes and the monolith taken for pollen sampling from one of these features are liable to provide information on the nature of the surrounding environment and potentially provide evidence of domestic and food waste.

Small quantities of burnt bone were also found in some samples, for example, (1051) a large Neolithic pit containing fire-cracked stones.

Organic deposits from the palaeochannel were extensively sampled and examined during the evaluation stage with associated radiocarbon dating indicating that the accumulation of organic silts and peat in the palaeochannel had ceased by the late Roman period (3rd to 4th century AD) and that the peat rich fills of the ditch cut along the length of the silted up channel had choked the ditch by the start of the 7th century AD.

5 Discussion

The salvage recording undertaken in 2012-14 has again demonstrated the potential of this area to produce evidence for human exploitation of the Lugg terraces and floodplain since at least the Neolithic period. This is accompanied by evidence for environmental and landscape change provided by sequences of alluvium and well-preserved organic deposits occupying palaeochannels and surviving within deeper archaeological features such as waterholes.

The Neolithic pits recorded in Phase 1 are understood to reflect sporadic and probably seasonal use of this low-lying landscape by local communities and extend an already well-established archaeological record at the quarry for such activities. Pottery and flint from these indicate that this activity probably occurred primarily during the Early Neolithic, although one pit was associated with Grooved Ware and provides a rare and important example of activity of later Neolithic date in the county. Dating of both earlier and later Neolithic phases of activity will be confirmed by analysis of the assemblages and carefully targeted radiocarbon dating.

An increasingly more constant human presence is indicated across the Lugg Valley at Wellington from the Bronze Age onwards. This has been evidenced during previous stages of fieldwork by the construction of small structures, burial monuments and burnt mound activities and, by the Iron Age, the establishment of field systems. In the Phase 1 area, the waterholes and associated features characterised by fire-cracked stone rich fills provide further evidence of burnt mound type activities and, although currently undated, radiocarbon dating is liable to show these to be of Bronze Age date.

The area was a floodplain during the Roman period and evidence of its use for agricultural purposes is seen from a number of drainage ditches running across site. These were mostly sterile

in nature as they lie in field systems at some distance from settlements known in the immediate area.

These phases of earlier activity are all cut through an alluvial horizon (Unit 2) which itself is sealed a further alluvial deposit (Unit 1) which is understood to have been deposited from the 9th-10th century AD onwards.

Later careful management of the landscape is evidenced by the extensive water meadow system established in the late 18th or early 19th century, seen by wide ditches backfilled with Unit 1.

6 The archive

The fieldwork archive (Appendix 2) has been collated, checked and cross-referenced.

Preliminary processing of artefacts and environmental samples has been undertaken and material is now packaged appropriately for storage prior to assessment and analysis.

A project database has been established and preliminary structural, artefactual and environmental data has been entered.

The resultant fieldwork archive has been placed into temporary storage at WA's offices with assessment and analysis of deposits within the Moreton South extension proposed following completion of further phases, leading eventually to production of a further publication on this highly important site.

Following the completion of the project, it is intended that the archive will be deposited with the Herefordshire Heritage Service.

7 Acknowledgements

Worcestershire Archaeology would like to thank the following for their kind assistance in the successful conclusion of this project, the Lafarge Tarmac Ltd staff at Wellington Quarry and especially Colin Stratford and John Sparrow (Quarry Managers) and Nick Atkins (Estates Manager); and Julian Cotton Herefordshire Archaeology Planning Advisor.

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Appendix: Technical information

The archive (site code: EHE 2057 – Phase 1)

The archive consists of:

254	Context records AS1
34	Field progress reports AS2
8	Photographic records AS3
700	Digital photographs
3	Drawing number catalogues AS4
145	Scale drawings
4	Context number catalogues AS5
2	Sample number catalogues AS18
2	Boxes of finds

The project archive is intended to be placed at:

Hereford City Museum and Art Gallery
Broad Street
Hereford
HR4 9RU

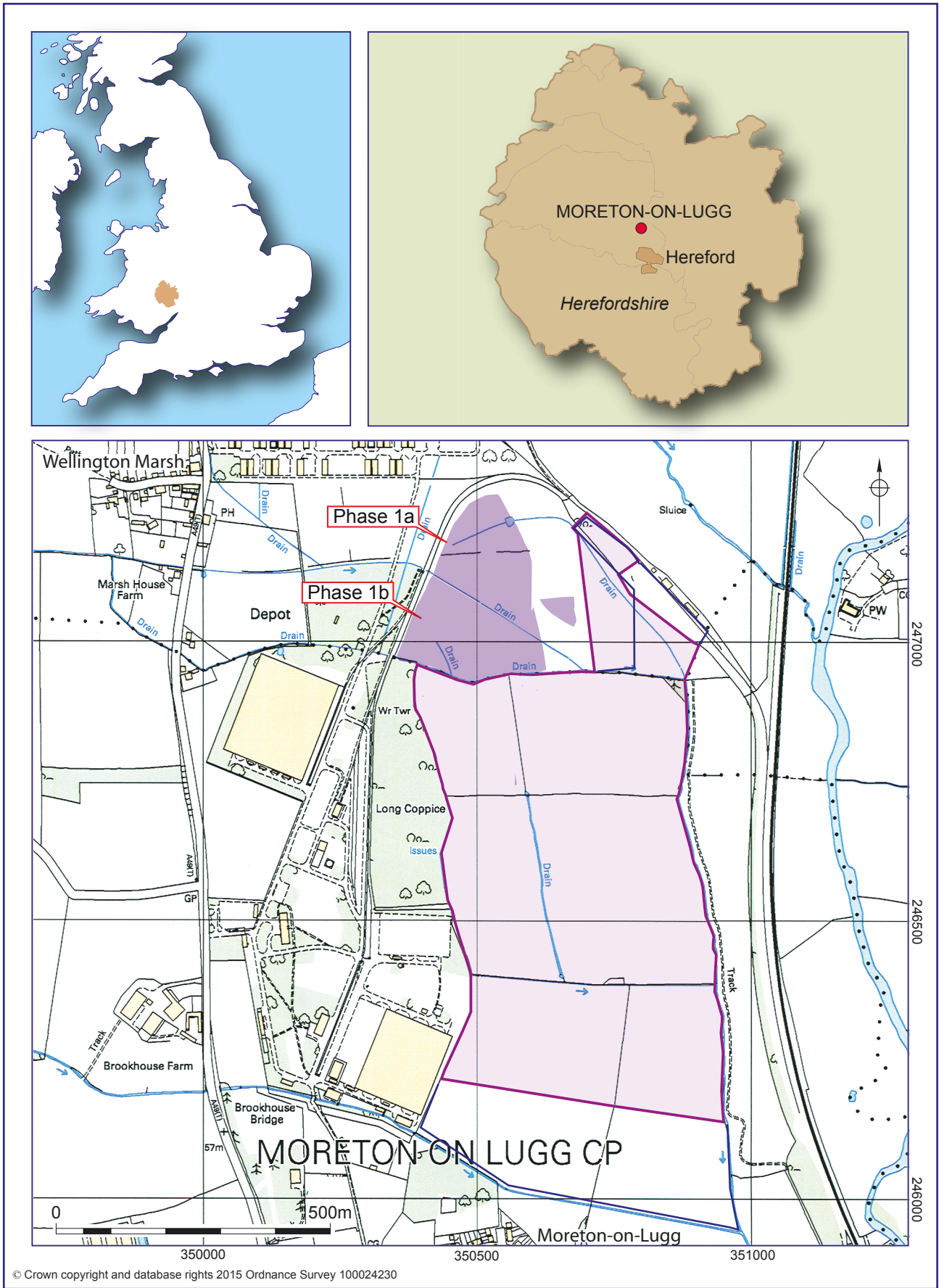
Tel. Hereford (01432) 268121 extension 207/334

Summary of data for Herefordshire SMR

Report name and title	Arnold, G and Jackson, R, 2015 <i>Archaeological Salvage Recording at Wellington Quarry, Herefordshire 2012-14. Moreton South Extension: Phase 1 Interim Report</i> Worcestershire Archaeology internal report 2028	
Contractor's name and address	Lafarge Tarmac Limited, Central and Wales, Croxden Common, Freehay, Cheadle, Stoke-on-Trent, Staffordshire ST10 1RH	
Site name	Wellington Quarry: Moreton South Extension	
Grid Reference (8 fig)	NGR SO 5030 4730	Planning Application Number
SMR number/s of site	EHE 2057	
Date of fieldwork	2012-2014	
Date of report	27-02-2015	
Number and type of finds		
Pottery	Period Not formally dated – interim only Assessment and analysis to follow	Number of sherds 460 (mostly Neolithic)
Other finds	Flint, stone, vessel glass, fired clay, charcoal	
	Period Mostly Neolithic -interim only Assessment and analysis to follow	Quantity 166
Number and type of samples collected		
Sieving for charred plant remains	Number of features sampled: 68 samples taken from a variety of features. These have been partially processed to support production of this interim report. Further processing and formal quantification will occur during assessment and analysis stages Number of buckets: 153 x 10litre	
C14/scientific dates	Number and type: To be determined Result:	
Pollen	No of columns/spot samples: N/A at interim stage – in storage awaiting assessment and analysis Name of pollen specialist:	
Bone	Number of buckets sieved for bone: N/A at interim stage <i>Quantity recovered</i> To be determined	
		<i>Period</i>

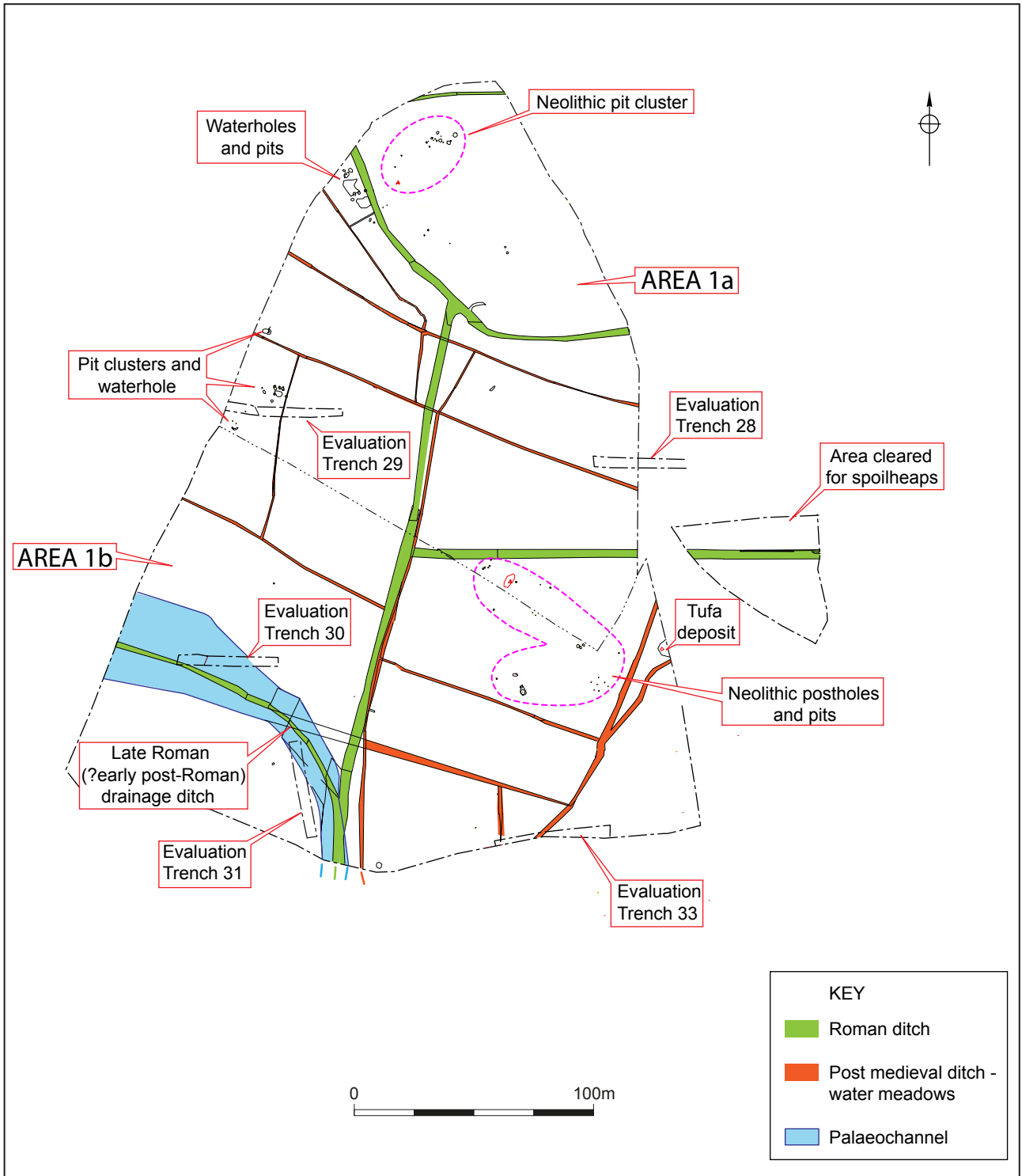
Insect	<p>No of columns/spot samples: Nil</p> <p>Name of pollen specialist</p>
Other	<p>Type and specialist</p>
Summary of the report	<p>A series of Neolithic pits were discovered and occurred both in isolation and in small clusters. Neolithic pottery and flint were recovered in small but significant quantities from many of these features. Further undated but probably Bronze Age activity was represented by several waterholes associated with pits filled with fire-cracked stones. One group was associated with a sub-rectangular feature (possibly a trough) the fill of which included a large volume of fire-cracked stone. These groups of features appear to relate to activities of the type associated with burnt mounds, although no evidence for any mound structures was revealed.</p> <p>A shallow, peat-filled palaeochannel first identified at evaluation was recorded running across the south-west corner of the investigated area and was cut along its length by a drainage ditch of probable late Roman to early post-Roman date.</p> <p>The associated alluvial sequence comprised a strong reddish-brown silty clay underlying the modern turfline, with a grey clay beneath this. These sealed the Neolithic and Bronze Age features which were cut into a yellowish-brown deposit of prehistoric origin and lastly a strong reddish silty clay horizon directly overlying natural sand and gravel.</p> <p>Later features comprised a series of ditches and drains associated with a water-meadow system which has previously been mapped through aerial photography and LiDAR. Medieval and later field boundaries and land-drains were also recorded.</p>

Figures



Location of the site

Figure 1



Phase 1

Figure 2

Plates



Plate 1: Watering hole 1016 half sectioned



Plate 2: Watering hole 1078 half sectioned and partially excavated with preserved wood in section



Plate 3: Watering hole 1159 and associated fire-cracked stone filled troughs/pits. View West.



Plate 4: Pit 1106 with 4 postholes at base, fully excavated. View north-east.



Plate 5: Pits and postholes in the north of the site (1054 and 1055)



Plate 6: A collection of pits in the south of the site



Plate 7: An example of a charcoal rich trough [1010] with abundant fire-cracked stones in the west site of the site



Plate 8: A section of the peat filled ditch / palaeochannel running east-west across the site and Unit 2 yellow alluvial clay



Plate 9: A section of the peat filled ditch / palaeochannel running east-west across the site and Unit 2 yellow alluvial clay



Plate 10: An example of a slot through the blue-grey clay filled Roman ditches. View north-west.



Plate 11: An example of the post-medieval drainage ditch running north to south through the Phase 1 area. View north towards Dinmore Hill.



Plate 12: Excavations in progress along the hedgerow dividing Phase 1A and 1B
