SLR

Marfield Quarry Southern Extension
North Yorkshire

Phase 1 Archaeological Site Investigations: Written Scheme of Investigation

DRAFT

LAFARGE

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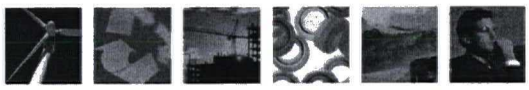

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1.0 INTRODUCTION

1.1 The proposed development

Lafarge Aggregates intends to extend its existing permitted Marfield Quarry which lies east of Leyburn Road. The minerals from the new extraction area (to be located west of the road), would be processed at the existing plant, carried there on a conveyor routed north-west then north-east, around Mile House Farm. Underpasses to carry the conveyor would be formed beneath the public right of way to Mile House Farm and beneath Leyburn Road, and it is possible that there would be topsoil stripping along the line of the conveyor. The archaeological background and the site investigations proposed in this document cover that part of the application site which lies west of Leyburn Road, i.e. the extension to the extraction area and the land around its margin which would be affected by landscaping or planting: an area totalling about 54ha. This is referred to in this document as 'the application site'.

The reinstatement would include some re-contouring of the extraction area and instatement as wetland, with extensive planting around the margins of the extraction area, and partial reinstatement of existing boundaries.

SLR Consulting has been commissioned by Lafarge Aggregates to prepare this Written Scheme of Investigation (WSI) for pre-construction archaeological site investigation of the application site. SLR is a Registered Organisation with the Institute for Archaeologists (IfA): this WSI has been prepared according to IfA *Standard and Guidance for Archaeological Field Evaluation* (2008).

The proposed extension is the subject of an Environmental Impact Assessment including an Environmental Statement, presented by SLR Consulting: Archaeology. Cultural Heritage is dealt with there in Chapter 14.

The application site is located within the County of North Yorkshire, the district of Harrogate, and the civil parishes of Masham and Fearby, centred approximately on National Grid Reference 421400 481700. The small town of Masham lies about 1km to the southeast, and nearby villages include Fearby 1.2km to the west, High Ellington 2km to the northwest, and the Swintons 1.5km to the south. Earlier and currently-active phases of the quarry lie adjacent to the northeast, between Leyburn Road and the river Ure.

The immediate sub-surface geology is glacial till (diamicton) comprising poorly-sorted sand, gravel, cobbles and boulders.

1.2 Archaeology and history of the application site and environs

1.2.1 Sources

The archaeological context of the application site will be set out in detail in the ES and has been established from a number of sources, chief of which are:

- North Yorkshire County Council Heritage Environment Record (HER): digital data in GIS format and paper records inspected at source
- reports by MAP Archaeological Consultancy loaned by client
- site inspections by G Kinsley of SLR Consulting

- historic mapping available on-line
- historic mapping at North Yorkshire County Record Office
- air photographs at the National Monuments Record
- published sources on archaeology and history.

1.2.2 HER sites

Archaeological sites recorded in the North Yorkshire County Council Historic Environment Record, lying within 2km of the application site comprise records relating to Masham and neighbouring settlements (including some buildings), and lynchets and ridge-and-furrow. None are located within or directly adjacent to the application site. The nearest is MNY15888, the findspot of stone coffins, 0.3km east of the application site. The remainder are all located approximately 1km or further from the application site.

The two stone coffins were found in Mar Field in 1835-6, one containing an inhumation. The coffins were relocated in Swinton Park where they gave their name to *Coffin Lake*; they are now listed structure 325105. The details in the listing states that they are Roman monolithic sarcophagi carved out with curved sides, one with flat bevelled lid, the other having triangular-sectioned lid hipped at one end. Such finds are not characteristic of peasant settlement, and they may indicate a Romanised settlement in the vicinity, though it is not impossible that when found in 1835 they were not in their original position. The significance of Nunnery Nook place name is unclear but it was already in place in 1856 (Ordnance Survey map of 1:10560).

The presence of lime kilns at a number of locations including within the existing quarry area, shows the importance of this industry in the area.

1.3 Previous archaeological work in Marfield Quarry

Extensive archaeological assessment, survey and excavation has been carried out in the existing quarry, chiefly by MAP Archaeological Consultancy but also by West Yorkshire Archaeological Services.

Investigative techniques have included watching-brief, scanning and detailed magnetometry, fieldwalking, excavation and field survey. Fieldwalking produced generally few finds with only one significant concentration being noted: a small area of flint artefacts, but no related features were found during subsequent excavation. Geophysical survey has been effective in identifying burnt features which later proved by excavation to be lime kilns of 16th to 18th century date. Little further of archaeological significance has been found in watching-brief and excavation. A watching-brief identified a dried-up natural pond containing a humic peaty deposit up to 1m deep of which no environmental sampling appears to have been carried out.

1.4 Air photographs

The Cambridge University Collection of air photos (CUCAP) on-line database of air-photographs at was searched on 10th April 2008. The nearest photographs in the obliques collection are located more than 1.5km from the application site and this resource has not been further consulted. National Monuments Record photographs include five (SE2281/1 – SE2281/5) which are of two places close to the southeast corner of the application site: these show a large cropmark feature east of the Leyburn road, outside the application site, and probably of geological origin.

Vertical satellite photography of the application site (date unknown) shows a field south-east of S3 and S4, containing two clearly-demarcated colour zones reflecting waterlogged and drier ground (Figure 1/1; P1 on Drawing MSI2). Parallel linear low-relief earthworks lying to the southwest (noted in the site inspection below) are also clearly visible, being straight and parallel and terminating at the rectilinear dyke which runs through the field; similar but less clearly demarcated earthworks lie to the north of the dyke. These spatial relationships show that the earthworks are later than the current course of the dyke, and historic mapping shows that the current rectilinear course of the dyke was established after 1798.

Figure 1-1
Vertical photograph showing waterlogged area P1

1.5 Historic mapping

Historic mapping at North Yorkshire County Council Record Office was identified initially through the on line catalogue and subsequently checked by catalogue search at the Record Office. Searches were based on 'Masham' and 'Fearby' in which two townships / modern civil parishes the application site lies. Listings were checked and maps inspected on microfilm and traced at the North Yorkshire Record Office on July 28th 2008. Features of significance are shown superimposed on modern topographical survey in Drawing MSI 2.

Manuscript maps of Mashamshire 1798 (ref ZS) cover the whole of the application site and beyond, and show roads, field boundaries and the Swinney Brook. Three rectangular structures are also shown on these maps (Figure S1, S2, S4); of these two (S1, S4) are not recorded on later mapping and no longer survive. Structure S2 is still standing and is labelled 'High Barn' on the Ordnance Survey map of 1856. A considerable number of field boundaries are shown, additional to those surviving now. This is particularly true in the area northwest of the Stony Bottoms plantation: sinuous curves can be seen in some field boundaries, which together with the long narrow shapes show that the boundaries reflect enclosure from open fields. Two further structures (S3, S5) are mapped from 1856, of which S3 is still standing and S5 exists as a foundation.

A sinuous curve to a field boundary east of S3 (subsequently modified), compares closely with the northeast edge of an area differential crop growth shown in a recent air-photograph. As the latter is thought to indicate waterlogged ground (P1; see below), the 1798 field boundary probably followed the limit of viable ground for cultivation; its subsequent alteration may therefore be connected with later drainage of the land indicated by the cutting of the existing dyke and the probably-associated drainage earthworks to the west and north, by 1856.

The field shapes, both existing and recorded in historic mapping suggest that much or all of the application site has been subjected to ploughing in medieval times if not earlier, and will therefore have been entirely covered by ridge-and-furrow ploughing. The fact that ridge-and-furrow now survives only in restricted areas shows that extensive areas elsewhere within the application site have been ploughed using a post-medieval ploughing technique causing the flattening of the ridges. This likely to have taken a considerable time, so the application site including the current grassland areas has probably been subjected to ploughing over many centuries.

The full range of historic mapping and field inspection together suggest that all the land within the application site took the form of open field cultivation in strips, presumably dating from the late-Saxon to medieval periods. There was subsequent enclosure with drystone walls on selected boundaries. Enclosure in the region came early: from the 14th century when there was a shift from arable to sheep-rearing due to the scarcity of labour in the wake of depopulation from the Black Death. This led to the early small-scale and piecemeal enclosure of open fields, as seen within the application site.

The curvilinear and elongated plans of the new fields strongly suggest that they follow elements of the medieval system, suggesting that the enclosure was carried out piecemeal rather than as a single episode of comprehensive reorganisation. Subsequent alterations have generally consisted of removal of selected boundaries to amalgamate fields into more convenient shapes, and the formation of the Stony Bottoms Plantation. With the benefit of field inspection and scrutiny of historic mapping carried out for this project, there is little to support the HLC division into three distinct areas, though the approximate dating can be agreed with.

1.6 Site inspection

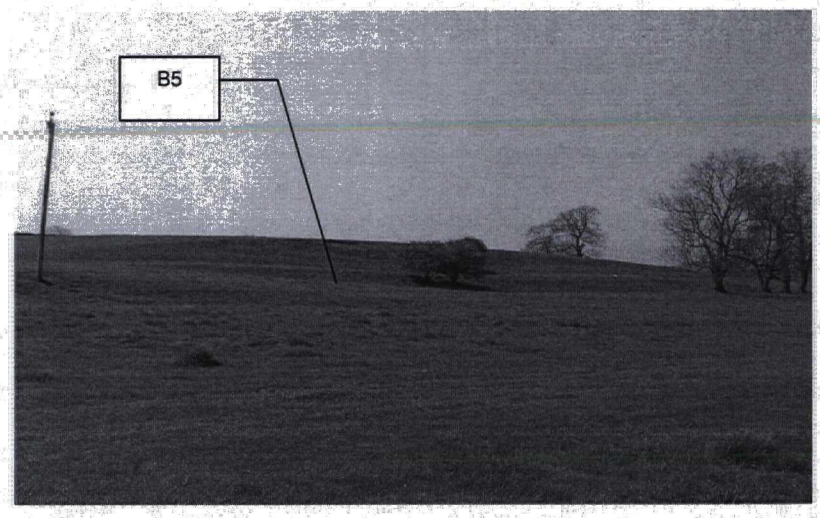
The geological deposit underlying the topsoil within the application site is of glacial origin, resulting in sloping and flat-topped areas bounded by abrupt and steeply-sloping changes in level. The resulting sub-topsoil deposits are very poorly sorted and diverse stone types are present. Rounded boulders can be seen on the surface and these have presumably resulted in the 19th-century name 'Stony Bottoms Plantation' in the centre of the extraction area. These stones appear to have been used in the drystone walls and barns of the area, though within the application site the walls and some of the buildings have been levelled and become overgrown with grass or planted with hawthorn hedges.

The land is very variable in level, generally sloping down from west to east, from about 106m OD in the west corner to 90m OD on the east side adjacent to Leyburn Road.

The higher ground around the edges of the application site is generally relatively flat, but drops over steep localised slopes of the order of 5m in height to a hollow which runs southeast from the north corner of the application site, widening to a waterlogged area east of Stony Bottoms Plantation. The field boundaries are generally hawthorn hedges patched with wooden fences. Occasionally boundaries are drystone walls but these have all been levelled and scattered. Some of these walls have hedges on top, and a number of boundaries, now removed are represented by low but sometimes well-defined banks, with occasional stone outcrops indicating their origin also as overgrown drystone walls.

In two places (B5, B9) on the steep slopes, 'benches' exist halfway down the slopes. The slopes have gradients in the order of 1in 2.5 (Figure 1/2). It is possible that these 'benches' are *lynchets* (i.e. banks of soil accumulated against boundaries due to erosion by ploughing and soil creep) but their limited area and the steepness of the slopes would have made ploughing difficult or even impossible, and the benches are more likely to be of glacial origin.

Figure 1-2
Bench or lynchet B5



Barn (S2) appears on the 1798 map and is labelled *High Barn* on the Ordnance Survey 6in map of 1856. It is built in rounded boulders with squared quoins similar to barn 01 but has been significantly modified subsequently, producing an open side to the south supported by columns, possibly of cast iron. The roof, which overhangs on the open side, is covered with slates.