

Assessment of the Fired Clay from Land off Falkland Way, Barton-upon-Humber (BNAF)

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A small quantity of fired clay and ceramic building material from an archaeological evaluation carried out by Pre-Construct Archaeology Lincoln was submitted for identification and assessment. The total collection consisted of 12 fragments, from no more than 10 objects and has a total weight of 124.5 gm. The material consists of one piece of possible Romano-British tile, one medieval or post-medieval brick and a small collection of probable daub fragments, of two distinctly different fabrics.

Description

All of the material was examined at x20 magnification using a binocular microscope and the range of inclusions present was noted. The material was then recorded in an access database (Appendix 1).

Roman Ceramic Building Material

A very small fragment of tile or brick, weighing less than 1gm, was recovered from context 111. Its fabric is tempered with abundant rounded quartz sand up to 0.5mm across and has a micaceous, silty matrix. It may be a piece of Roman tile but given its small size and lack of distinctive features this identification is very tentative.

Medieval or post-medieval Ceramic Building Material

A fragment of brick from context 600 has no original faces remaining, but its fabric is typical of bricks and tiles found on either side of the Humber estuary in the later medieval and post-medieval periods. The fabric contains sparse unidentified organic material, perhaps detrital organics or possibly deliberately added, and has a groundmass consisting of poorly mixed lenses of clay, some of which are heavily calcareous and all of which contain some fine-grained calcareous silt. The clay lenses also differ in iron content but all have red colour.

Fabrics of this type were produced at Beverley and were produced at Barton-upon-Humber using traditional methods until recent times.

Fired Clay

All of the fired clay fragments could be divided into two fabric groups, of which Fabric 1 could be subdivided into two sub-fabrics (Table 1).

Table 1

Context	Fabric 1a	Fabric 1b	Fabric 2	Grand Total
103	1	1		2

107	2		1	3
111			1	1
112		1		1
303			1	1
Grand Total	3	2	3	8

Fabric 1

This fabric contains abundant rounded quartz sand up to 1.0mm across and sparse to moderate larger rounded inclusions. Visual examination identified rounded chalk, fine-grained basic igneous rock, fine-grained sandstones, rounded quartz grains with a matt surface and rounded quartz grains with a water-polished surface, all ranging up to 3.0mm across. The samples were subdivided into those where chalk was present (Fabric 1a) and those where it was not (Fabric 1b).

Some of these fragments had one flat surface but no wattle impressions were noted. Nevertheless, the clay was probably used on a wattle and daub structure.

Clay samples of similar appearance to Fabric 1b have been examined from another site at Barton-upon-Humber and from a site in Grimsby whilst the latter site also produced samples similar to fabric 1a. These clays were boulder clays which outcrop around the foot of the Lincolnshire Wolds on the north and east sides. It is likely that originally all of this clay contained chalk but that some of it has been decalcified after deposition. Both sub-fabrics could therefore have been found in a single clay pit and may have been in used at exactly the same time.

Fabric 2

This fabric contains abundant organic material, some of which was extremely narrow strands, presumably roots, and some of which was coarser. The fine-grained organic matter may have decayed and been replaced by salts and iron-rich compounds before firing whereas the coarser organic material was still present in the clay when it was burnt, giving a black colour to the core of all the fragments. The groundmass is micaceous and silty.

The fragments are smaller than those of Fabric 1 and there is even less evidence for their original form. However, one piece has a curved, convex surface, suggesting that this clay was used for smaller objects, such as loom weights.

This clay was probable obtained from an exposure of Humber estuarine mud and the roots were probably the remains of vegetation colonising that mud. The coarser organics, however, are likely to have been added deliberately, perhaps as straw, in the form of animal dung, or a mixture of the two (e.g. from farmyard manure composed of a mixture of straw from stabling and dung).

Assessment

All the fired clay could have been made with materials found locally to Barton-upon-Humber. There was clearly a deliberate choice to use these two rather different materials and it is likely that Fabric 2 was used for smaller, portable objects whereas Fabric 1 was used in much larger quantities for structures.

None of the material requires further study but should further archaeological work take place in the area a larger assemblage of fired clay would probably allow the function of the material to be determined with more certainty and might also reveal whether or not the two Fabric 1 subfabrics were indeed in use simultaneously.

Appendix One

Context	Description	Cname	Form	Nosh	NoV	Weight	Subfabric	Part	Sitecode	Condition
103	CF CHALKY BOULDER CLAY;OXID	FCLAY	DAUB? 1	1	14	A RQ <1.0MM;S R BASIC <3.0MM;S R FINE-GRAINED SST <3.0MM;S GSQ <3.MM;S R CHALK	BS	BNAF	VABR	
103	CF NON-CALCAREOUS BOULDER CLAY;OXID;ONE FLAT FACE	FCLAY	DAUB? 1	1	8	A RQ <1.0MM;S R BASIC <3.0MM;S R FINE-GRAINED SST <3.0MM;S GSQ <3.MM;S MILLET SEED QUARTZ	BS	BNAF		
112	CF NON-CALCAREOUS BOULDER CLAY;OXID;ONE FLAT FACE	FCLAY	DAUB? 1	1	12	A RQ <1.0MM;S R BASIC <3.0MM;S R FINE-GRAINED SST <3.0MM;S GSQ <3.MM	BS	BNAF		
107	CF CHALKY BOULDER CLAY;OXID	FCLAY	DAUB? 2	2	18	A RQ <1.0MM;S R BASIC <3.0MM;S R FINE-GRAINED SST <3.0MM;S GSQ <3.MM;S R CHALK	BS	BNAF		
303	BLACK CORE	FCLAY	DAUB? 1	1	5	ABUNDANT ORGANICS, VERY FINE ?ROOTS;SILTY MICACEOUS GROUNDMASS	BS	BNAF		
600	COULD BE FCLAY DAUB	MTIL	BRICK 2	1	57	CALCAREOUS GROUNDMASS;VARIGATED IN COLOUR AND CALC CONTENT;S ORGANIC	BS	BNAF		
111	BLACK CORE WITH CHARRED ORGANICS	FCLAY	DAUB? 1	1	3	ABUNDANT ORGANICS, VERY FINE ?ROOTS;SILTY MICACEOUS GROUNDMASS	BS	BNAF		
111		RTIL?		1	1	0.5 A RQ <0.5MM;MICACEOUS SILTY MATRIX	BS	BNAF		
107	CURVED OUTER SURFACE;BLACK CORE OXID MARGINS	FCLAY	DAUB? 2	1	7	ABUNDANT ORGANICS, VERY FINE ?ROOTS;SILTY MICACEOUS GROUNDMASS	BS	BNAF		