ARCHAEOLOGICAL EVALUATION REPORT:

Little Ponton Quarry, Whalebone Lane, Little Ponton, South Kesteven, Lincolnshire

NGR: SK 93571 33364

LCC Planning Ref.: PL/0214/12 (S53/0255/13)

PCAS job No.: 1410 Site code: LPQE 15 Archive acc. no.: 2015.55

Report prepared for

Hughes Craven Ltd.

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April 2015



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Summary

A programme of archaeological evaluation trenching was undertaken in advance of mineral extraction at Little Ponton Quarry, in the parish of Little Ponton and Stroxton in the South Kesteven district of Lincolnshire.

An archaeological desk-based assessment focusing on the site indicated that it had a moderate potential to contain later prehistoric to Romano-British remains, possibly deriving from agricultural and/or industrial settlements supplying a nearby Roman town.

A geophysical survey indicated that much of the proposed mineral extraction site appeared to be archaeologically sterile, but it recorded a possible pit cluster at the north-eastern corner and two anomalies that may have represented quarry pits.

This document describes the results of a ten trench evaluation that took place to further inform a planning application for mineral extraction. Nine of the trenches were archaeologically negative, and one contained a single quarry pit which yielded post-medieval pottery.

It is concluded that the site does not contain archaeologically significant remains.

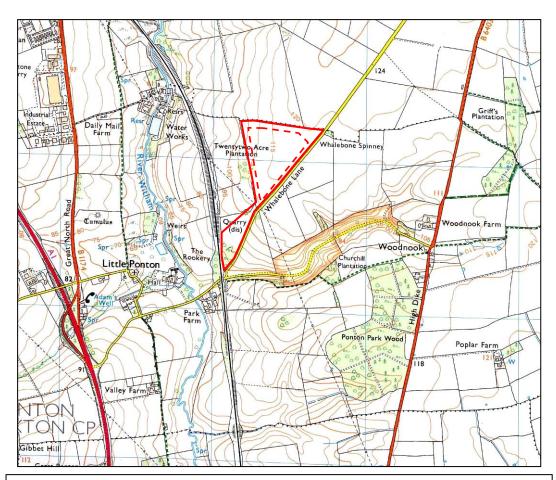


Figure 1: Location plan of the site at scale 1:25,000. The quarry application area is outlined in red, and the present proposed mineral extraction area is shown with a broken red line. OS mapping © Crown copyright. All rights reserved. PCAS licence no. 100049278.

1.0 Introduction

Pre-Construct Archaeological Services Ltd (PCAS) were commissioned by Hughes Craven Ltd. to undertake a scheme of archaeological evaluation trenching to inform the proposed extension of a limestone quarry on land off Whalebone Lane in the parish of Little Ponton and Stroxton, in the district of South Kesteven in Lincolnshire.

2.0 Site location and description

The hamlet of Little Ponton is within the district of South Kesteven: it lies on the west bank of the River Witham, some 3km south-east of Grantham and a short distance to the east of the B1174, which follows the former course of the Great North Road.

The site is situated to the north-east of the village, on the far side of the railway line running southwards out of Grantham. It is a roughly triangular area of arable land measuring c.15ha, bounded on its south-east side by Whalebone Lane and on its north side by the parish boundary. Two small plantations lie along the edges of the site: Twentytwo Acre Plantation is situated along the western edge, with the north-western extent of Whalebone Spinney in the north-eastern corner. The southern angle of the field is connected to a former mineral extraction site, currently disused, which forms part of the application area but is not presently scheduled for any works (Bunn, 2012).

Central National Grid Reference: SK 93571 33364

3.0 Topography and geology

The site occupies a generally west-facing slope that descends from the highest ground in the north-east corner (c. 120m OD) to c155m OD in the mid-western region, falling more steeply to c100m OD at the western boundary (Bunn, 2012).

No drift geology is recorded in the vicinity of the proposed extraction area. The exposed solid geology is Upper Lincolnshire Limestone.

4.0 Planning background

Planning permission was originally granted for mineral extraction at Little Ponton Quarry in 1961 (ref. WK2610), when such permissions were subject to minimal conditions. By the late 1980s the requirement for more effective controls on the environmental impacts relating to old permissions was recognised: a situation that culminated in several pieces of legislation designed to protect amenity and the environment and to ensure equal treatment of different sites and mineral operators.

An integral part of the new controls was the requirement that all older consents should be subject to an Initial Review followed by Periodic Reviews every 15 years thereafter. The Initial Review at Little Ponton was undertaken in 1997 (planning ref. S53/0226/97). The site has remained inactive since the determination of its Initial Review (Parker, 2012). The planning application for its first Periodic Review is now under consideration; this includes the commencement of mineral extraction (application no. PL/0214/12 (S53/0255/13)).

5.0 Archaeological and historical background

A detailed desk-based assessment featured as part of an Environmental Statement, presented in support of the planning application (Parker, 2012). The DBA found no records of archaeological sites, monuments or findspots within the proposed mineral extraction area. Its findings are summarised as follows:

- Limited prehistoric activity was indicated by finds consisting of a Neolithic axe and a Bronze Age rapier fragment, both discovered to the west of the site. In addition a possible later prehistoric cropmark enclosure to the south-east of the site had been identified based on its morphology.
- The quarry lies to the west of the Roman settlement of Saltersford. The extent of the settlement has not been established, but it appears to have been large enough that the site may well have lain within its agricultural hinterland. Furthermore, two cropmark ditches to the north-east of the site have been identified as a Roman road
- Potential for post-Roman, medieval and post-medieval activity within the study area was characterised as low.
- A geophysical survey recorded that most of the site appeared to be archaeologically sterile, although anomalies suggesting the presence of pits and possible enclosure ditches were observed in the southern portion of the surveyed area, with potential back-filled quarry pits in the northern portion. A scatter of possible pits was also observed near the north-eastern angle of the proposed extraction area (Bunn, 2012).

6.0 Aims and methodology

The evaluation consisted of ten trenches, each measuring 40m x 2m. Trenches 1, 2, 5 and 7-10 were positioned to investigate areas where the geophysical survey suggested the presence of potential archaeological features, while the other trenches were positioned to give a significant sample of the remainder of the site.

The broad aim of the evaluation was:

- To determine the presence/absence, nature, date, depth, quality of survival, importance, extent, form and function of archaeological features;
- To recover stratified artefactual evidence;
- To establish the sequence of archaeological remains on the site;
- To interpret archaeology in the context of the known archaeological landscape.

All trenches were accurately fixed into the National Grid using a Leica GS50, Topcom GRS1 global positioning system (GPS). Trench positions are shown overlain on geophysical survey imagery on Figure 2.

The excavation of all trial trenches took place initially using a mechanical excavator fitted with a smooth ditching bucket under archaeological supervision. Machine excavation progressed in spits no greater than 200mm and ceased either at the first significant archaeological horizon, or the natural substrate.

All archaeological features were examined sufficiently to determine their date, character, state of preservation and extent, as well as to recover artefactual / ecofactual remains for further study. Features were recorded by measured plan and section drawings at appropriate scales (1:20 and 1:10 respectively). A written record for each stratigraphic horizon and archaeological feature was made on standard PCAS recording forms. A photographic archive and a narrative account in the form of a site diary supplements these records.

The results of the evaluation presented here will be used to provide site-specific archaeological information that will allow the Local Planning Authority to make an informed judgement on any appropriate archaeological mitigation for the proposed development.

7.0 Results

A full descriptive context summary list appears as Appendix 2, whilst selected photographs can be seen in Appendix 1. A Trench location plan is included as Figure 2; see Figure 3 for trench plans and sections.

7.1 Trenches containing archaeological features

Trench 5

Trench 5 was positioned towards the western edge of the site and orientated approximately E-W. It was located in order to explore a potential former quarry that had been highlighted on the geophysical survey.

Excavations exposed a basic stratigraphy of topsoil (501) overlying natural limestone brash (502). Cut into the natural at the western end of the trench was a large quarry pit.

The quarry pit, [503], displayed fairly diffuse edges, and the majority of it lay outside of the excavation area. A sondaged was placed through it in order ascertain depths, however it's base was not reached at 1.2m below original ground level. It contained a single sand silt deposit, which contained late post-medieval pottery.

7.2 Trenches containing no archaeological remains

Of the 10 trenches excavated, nine were archaeologically negative: Trenches 1, 2, 3, 4, 6, 7, 8, 9 and 10. The depths of these trenches varied between 0.3m and 0.7m, with most containing a stratigraphy of topsoil overlying natural limestone brash.

8.0 Discussion and conclusion

The evaluation revealed that Trenches 1, 2, 3, 4, 6, 7, 8, 9 and 10 were devoid of archaeological remains: only natural substrate and topsoil were exposed in these areas.

Trench 5 exposed a single quarry pit at its western end. This was sealed by an overlying subsoil and was cut into the natural substrate, with sherds of late post-medieval pottery being recovered from its associated fill.

It is concluded that the site has low archaeological potential.

9.0 Effectiveness of methodology

The methodology employed during this project achieved its primary objective, ensuring that the proposed development area was explored in order to confirm the presence/absence and to characterise any archaeology present.

10.0 Acknowledgements

Pre-Construct Archaeological Services Ltd. is grateful to Hughes Craven Ltd. for this commission.

11.0 References

Bunn, D., 2014, *Archaeological Geophysical Survey: Proposed Limestone Quarry, Little Ponton, Lincolnshire*. Unpublished client report for Pre-Construct Geophysics.

Ordnance Survey, 2006, *Grantham, Bottesford & Colsterworth: 1:25 000 scale Explorer Series sheet 247.* The Ordnance Survey, Southampton.

Parker, N., 2012, *Minerals Permission Review, Little Ponton Quarry, Lincolnshire: Archaeological Desk-Based Assessment.* Unpublished client report for Pre-Construct Archaeological Services.

Planning documentation consulted online at http://eplanning.lincolnshire.gov.uk/ePlanning/ and http://www.southkesteven.gov.uk/index.aspx?articleid=1640

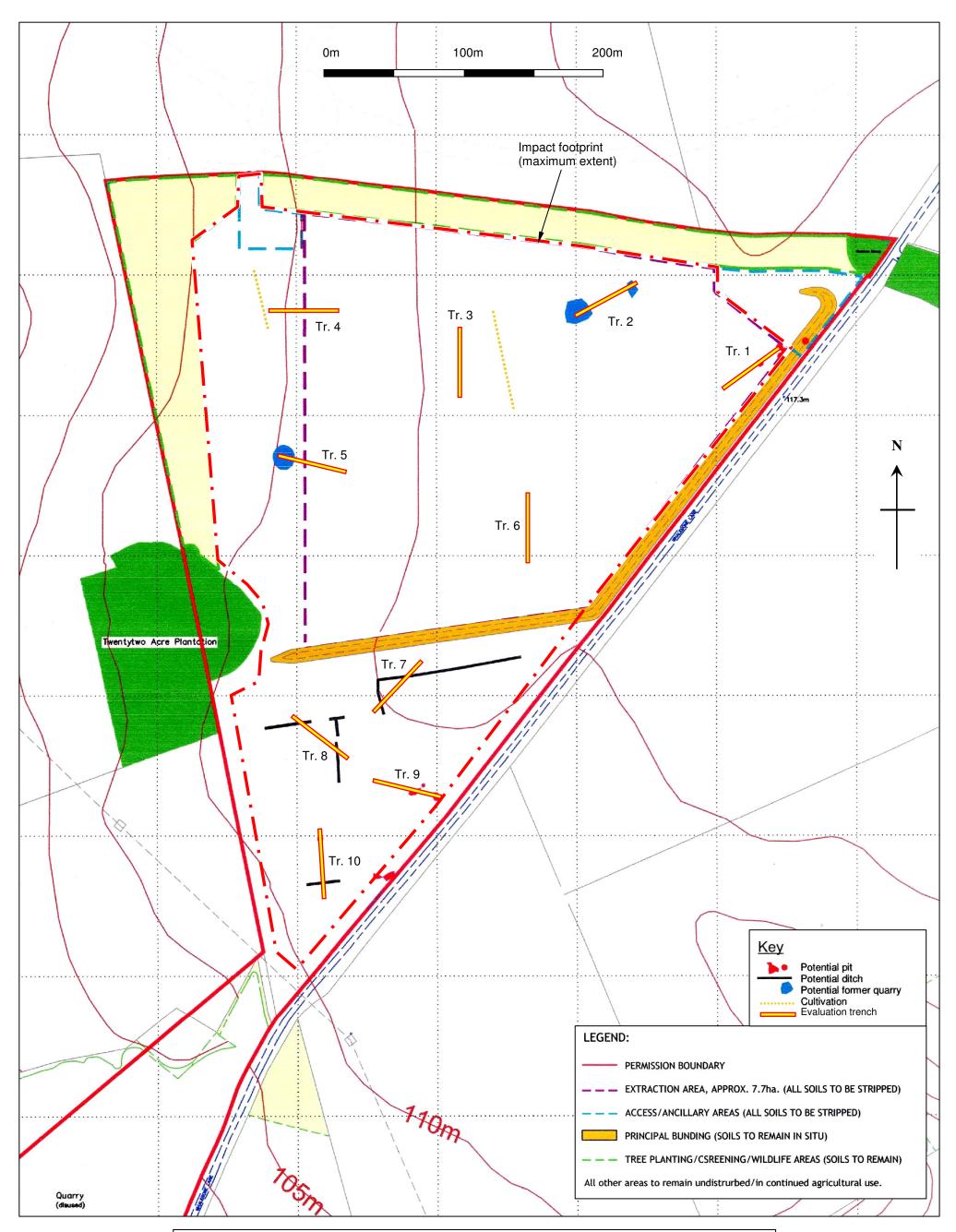
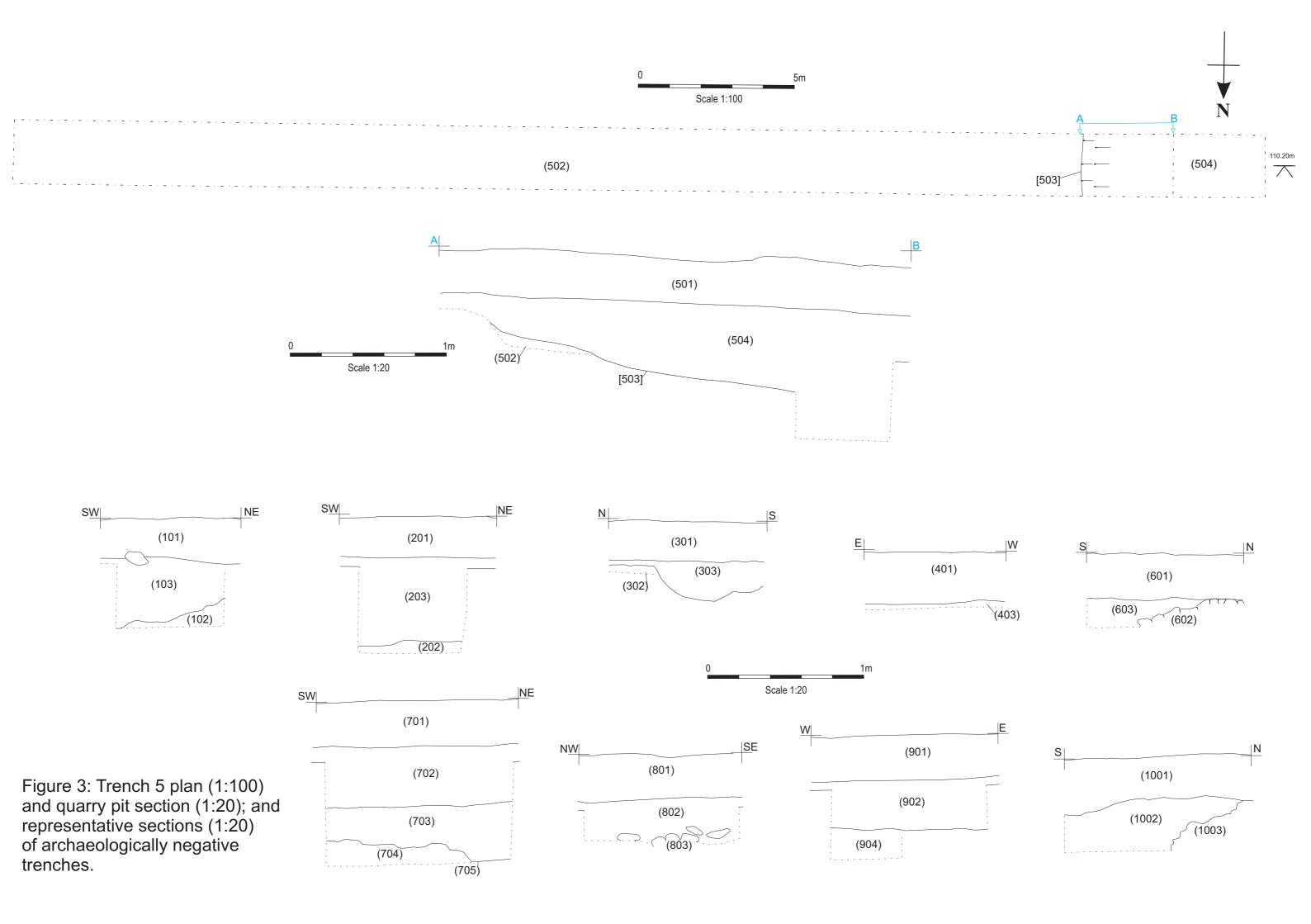


Figure 2: Plan of the proposed mineral extraction site at scale 1:2500, showing the proposed positions of the evaluation trenches and the results of the geophysical survey (after Bunn, 2014). The impact footprint indicated by the client is shown with a red dot-dashed line.



Appendix 1 – Context Summary



Plate 1: Trench 1 (looking north-east).



Plate 3: Trench 3 (looking north).

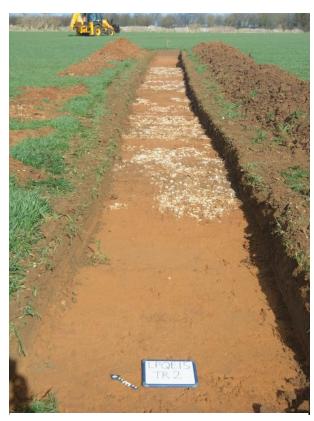


Plate 2: Trench 2 (looking north-east).



Plate 4: Trench 4 (looking east).



Plate 5: Trench 5 (looking east).



Plate 7: Trench 7 (looking north-east).



Plate 6: Trench 6 (looking south).



Plate 8: Trench 8 (looking north-west).



Plate 9: Trench 9 (looking east).



Plate 11: Trench 1 representative section (looking north-west).



Plate 13: Trench 3 representative section (looking east).



Plate 10: Trench 10 (looking north).



Plate 12: Trench 2 representative section (looking north-west).



Plate 14: Trench 4 representative section (looking south).



Plate 15: Trench 5 representative section and quarry pit (looking north).



Plate 16: Trench 6 representative section (looking west).



Plate 17: Trench 7 representative section (looking north-west).



Plate 18: Trench 8 representative section (looking north-east).



Plate 19: Trench 9 representative section (looking north).



Plate 20: Trench 10 representative section (looking west).

Appendix 2 – Context Summary

Context	Туре	Description	Finds
No.			
Trench 1		T	I
101	Layer	Topsoil. Dark brown clay silt. 0.26m deep.	
102	Layer	Limestone brash natural substrate.	
103	Layer	Orange brown sandy silt natural. Mixed with the limestone brash.	
104	Spread	Matrix of (103) with rare to occasional inclusions of charcoal. Does	
		not fill of cut feature and charcoal is located towards the top of deposit. Most likely trampled or ploughed in to (103) from above.	
		No evidence of in-situ burning.	
Trench 2		No evidence of inf-situ burning.	
201	Layer	Topsoil. Same as (101). 0.3m deep.	
202	Layer	Limestone brash. Same as (102).	
203	Layer	Glacial till. Same as (103).	
Trench 3	1 -0.70.	(200)	
301	Layer	Topsoil. Same as (101). 0.3m deep.	
302	Layer	Limestone brash. Same as (102).	
303	Layer	Glacial till. Same as (103).	
Trench 4			II.
401	Layer	Topsoil. Same as (101). 0.32m deep.	
402	Layer	Limestone brash. Same as (102).	
403	Layer	Glacial till. Same as (103).	
Trench 5			
501	Layer	Topsoil. Same as (101). 0.34m deep.	
502	Layer	Limestone brash. Same as (102).	
503	Cut	Quarry pit. Edge of feature is fairly diffuse and unclear, with most	
		of the feature located outside of the excavation area. Base of the	
		feature is not seen as it is beyond the limit of safe excavation.	
504	Fill	Fill of [503]. Mid brown sandy silt with very frequent inclusions of	
T l . C		limestone. Compact but friable. Contained modern pottery.	
Trench 6	Lavan	Tanasil Carra as (101), 0, 2m dasin	
601 602	Layer	Topsoil. Same as (101). 0.3m deep.	
603	Layer Layer	Limestone brash. Same as (102). Glacial till. Same as (103).	
Trench 7	Layer	Glacial till. Sallie as (103).	
701	Layer	Topsoil. Same as (101). 0.3m deep.	
702	Layer	Mid orange brown sandy silt, frequent limestone, upper glacial till	
702	Layer	deposit. 0.36m deep.	
703	Layer	Mid orange brown sandy silt, glacial till. 0.3m thick.	
704	Layer	Limestone brash. Same as (102).	
705	Layer	Pale yellow brown compact silt sand under (703). Natural.	
Trench 8	, , , ,	, , , , , , , , , , , , , , , , , , , ,	I
801	Layer	Topsoil. Same as (101). 0.3m deep.	
802	Layer	Glacial till. Same as (103).	
803	Layer	Limestone brash. Same as (102).	
Trench 9	-		•
901		Topsoil. Same as (101). 0.3m deep.	

902		Glacial till. Same as (103).					
903		Limestone brash. Same as (102).					
904		Compact natural sand. Pale yellow brown located under glacial till (902).					
Trench 10							
1001		Topsoil. Same as (101). 0.3m deep.					
1002		Glacial till. Same as (103).					
1003		Limestone brash. Same as (102).					