

## An Archaeological Evaluation of land at Wash Green, Wirksworth, Derbyshire.



Post Medieval Culvert in Trench 5

**ARS Ltd Report 2010-38**  
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# An Archaeological Evaluation at Wash Green, Wirksworth, Derbyshire

ARS Ltd Report 2010/38

June 2010

Archaeological Research Services Ltd

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## Contents

List of Figures.....	3
Executive Summary.....	4
1. Introduction.....	5
2. Location and Geology.....	5
3. Background.....	7
4. Aims and Objectives.....	7
5. Evaluation Methodology and Results.....	7
6. Discussion.....	16
7. Conclusion.....	16
8. Publicity, confidentiality and copyright.....	16
9. Statement of indemnity.....	17
10. Acknowledgements.....	17
11. References.....	18
12. Site Registers.....	18

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## List of Figures

1.	Site location.....	5
2.	Site plan.....	6
3.	1885 OS Map of Wash Green.....	7
4.	Trench Plan.....	9
5.	Photograph of Trench 1.....	10
6.	Photograph of Trench 2.....	11
7.	Photograph of Trench 3.....	12
8.	Photograph of Trench 4.....	13
9.	Photograph of service trench (403) in Trench 4 pre excavation.....	14
10.	Photograph of service trench (403) in Trench 4 post excavation.....	14
11.	Photograph of Culvert (503) in Trench 5.....	15
12.	Photograph of Culvert (503) in Trench 5.....	15
13.	Trenches 1 and 2 plan and section drawings.....	21
14.	Trenches 3 and 4 plan and section drawings.....	22
15.	Trench 5 plan and section drawings.....	23

## **EXECUTIVE SUMMARY**

*In June 2010 Archaeological Research Services Ltd were commissioned by Connaught Partnership Ltd to undertake an archaeological evaluation of land at Wash Green, Wirksworth, Derbyshire prior to the construction of a number of dwellings on the site.*

*The evaluation took the form of a programme of trial trenching that had been informed by an earlier geophysical survey. The geophysical survey identified a number of features of a possible archaeological origin. The evaluation therefore aimed to assess the level of preservation, nature and distribution of the possible archaeological anomalies identified in the geophysical survey data.*

*No features of an archaeological origin were evident in Trenches 1-4. A Post-Medieval culvert was identified in Trench 5.*

## 1. INTRODUCTION

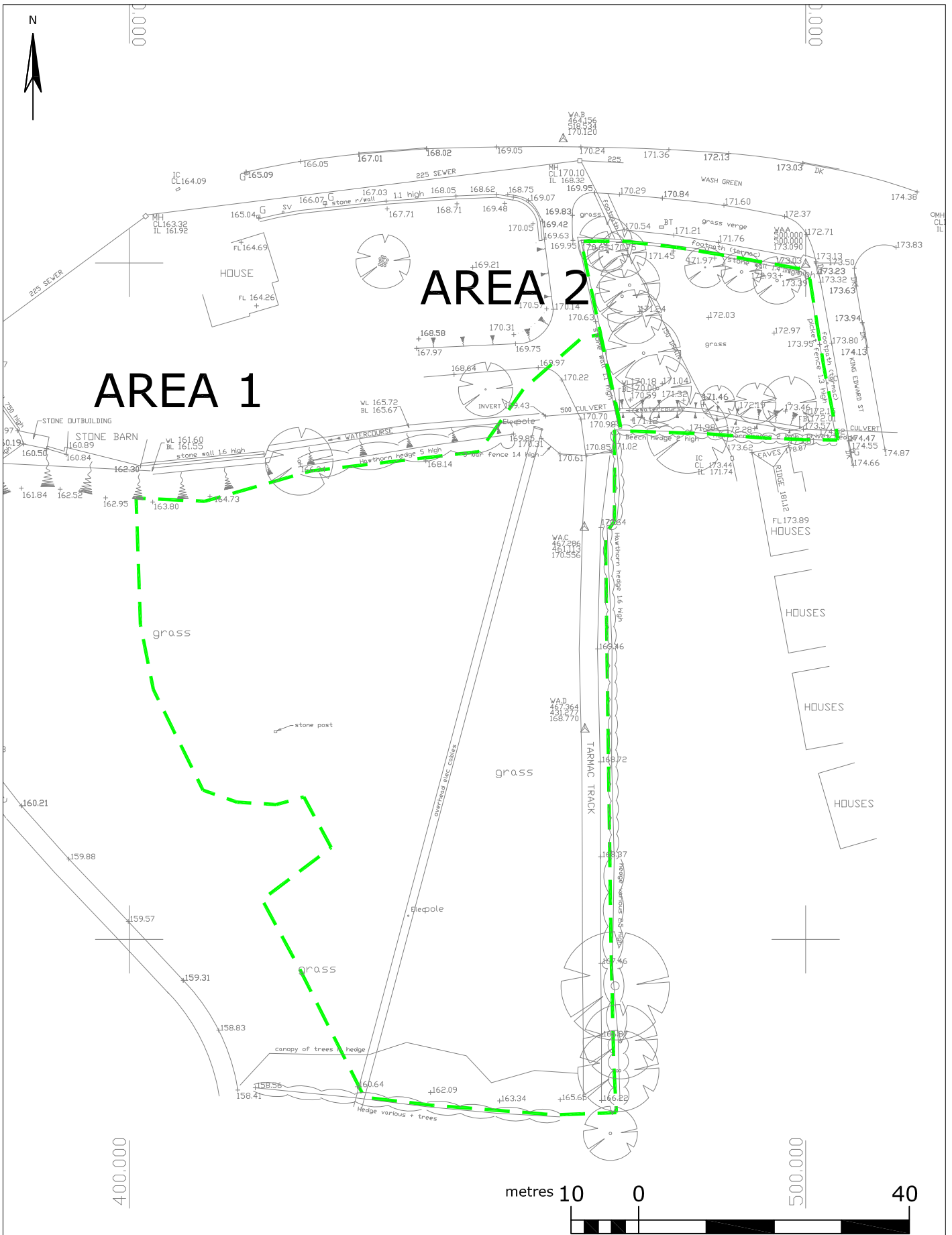
- 1.1 In June 2010 Archaeological Research Services Ltd were commissioned by Connaught Partnerships Ltd to undertake an archaeological evaluation of land at Wash Green, Wirksworth which is proposed for housing development. The evaluation followed a geophysical survey that had been undertaken by Archaeological Research Services Ltd in June 2010. The geophysical survey identified a number of anomalies of a possible archaeological origin including a number of pits and ditches (Smalley 2010). The location of the site can be seen in Figure 1.



Fig. 1 Site location Ordnance Survey data copyright OS, reproduced by permission, Licence no. 100045420


## 2. LOCATION AND GEOLOGY

- 2.1 The survey area is centred at NGR SK 292 539 and is approximately 0.6ha in extent. The study site comprises two fields, the smaller of which was recently cleared of overgrown vegetation. The larger field is an area of meadow. Overall the study site slopes downhill to the south and west. The site is bounded to the north by the B5035 and to the east by a track and field boundary.
- 2.2 The solid geology of the site is Carboniferous Mudstone, Siltstone and sandstone. No superficial geology is recorded for the site (British Geological Survey 1:625000, V5 Bedrock and V4 Superficial).



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Figure 2:  
 Site Plan

Key:  
 Study Area

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Site Code: Wash 10  
 Date: June 2010  
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 Scale: 1:750 at A4

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### 3. BACKGROUND

- 3.1 Documentary sources make reference to Wash Green as early as 1415. An historic map regression of the site indicates that the original green at Wash Green was triangular in shape and is likely to have been an area of common land which was eventually enclosed into smaller plots. It is likely that settlement activity will have taken place adjacent to the green. Therefore there is potential for Medieval settlement activity to be present along the northern extent of the study site.
- 3.2 The Ordnance Survey map of 1885 shows the study site as an area of undeveloped agricultural land with Wash Green's village centre located to the northwest. The route of the track shown to the western limits of the study site is still used as an access route today.



Fig. 3. Study site positioned over 1885 OS mapping.

### 4. AIMS AND OBJECTIVES

- 4.1 The objective of the evaluation trenching was to establish the presence or absence, character, preservation, date and significance of archaeological deposits within the site and to provide an assessment of their importance against criteria in PPS 5 (Planning for the Historical Environment).

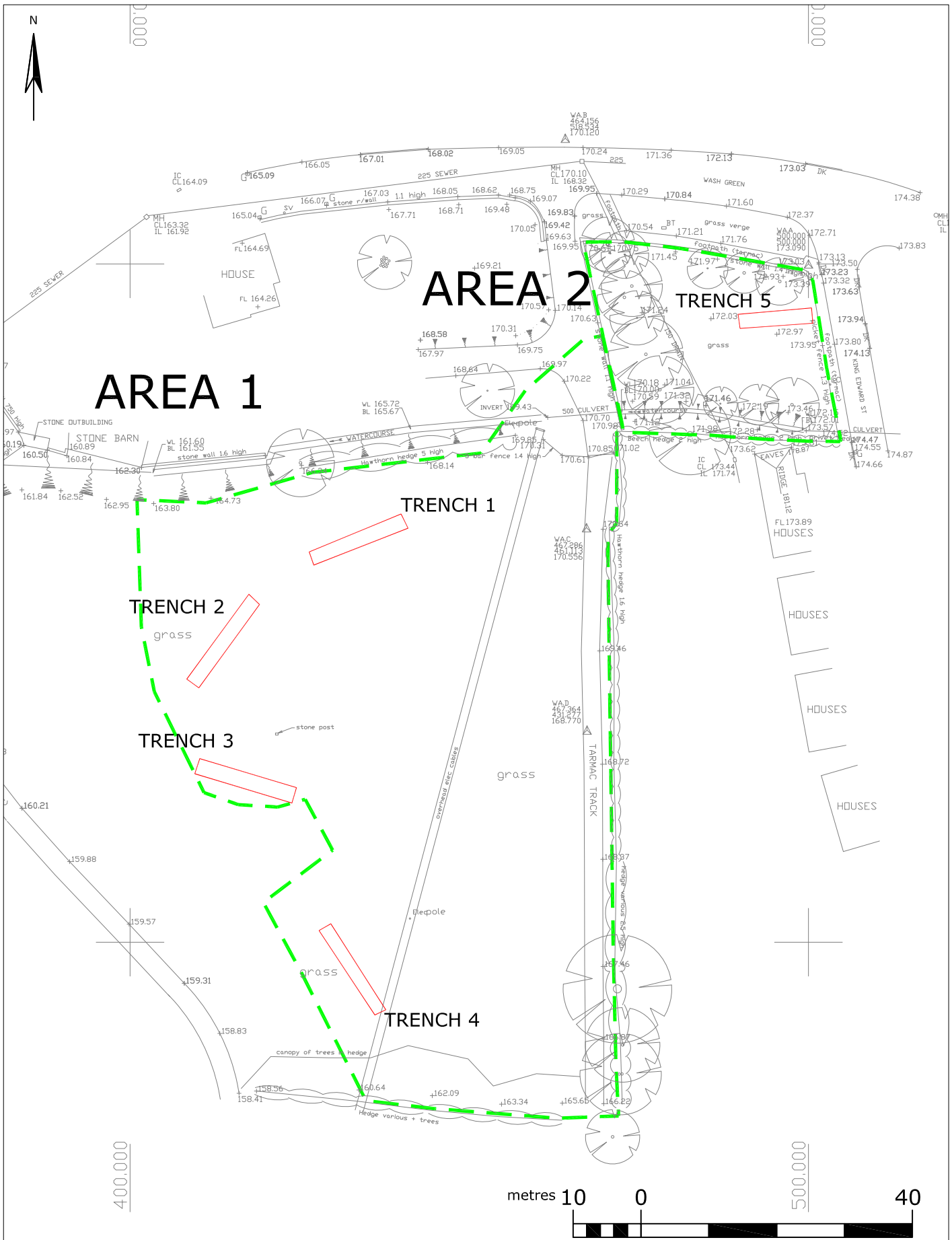


## **5. TRENCHING EVALUATION**

### **5.1 Methodology**

- 5.1.1 A total of five evaluation trenches were excavated in locations agreed with the Development Control Archaeologist for Derbyshire County Council. Trenches 1-4 measured 15m x 2m; Trench 5 measured 10m x 2m. The trenches were positioned based on the results of a detailed gradiometer survey undertaken by Archaeological Research Services Ltd. The position of Trench 5 was moved slightly to the northeast due to the presence of a service running through its original location. Trench locations can be seen in Figure 4.
- 5.1.2 The initial surface strip was undertaken by machine under the direct supervision of a representative from Archaeological Research Services Ltd. The person responsible for the supervision was conversant with machine excavation in order to ensure that the topsoil was removed in level spits down to any *in situ* archaeological horizons and thereafter cleaning/excavation by hand was employed. Archaeological Research Services Ltd ensured that a toothless ditching bucket was employed at all times.
- 5.1.3 A written, drawn and photographic record was maintained during the evaluation plus all significant archaeological remains were recorded and/or retrieved. The onsite drawings followed the archaeological drawing conventions in MoLAS' *Archaeological Site Manual* (2002). All excavations were recorded in accordance with normal principles of archaeological evaluation upon pro forma context sheets. All significant architectural features were photographed (with scale) *in situ* and their location recorded on a plan of the site.





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**Figure 4:**  
 Trench Location Plan

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- 5.1.4 Where archaeological features and/or deposits were identified during the evaluation, a sufficient quantity of the said features were investigated by hand to allow their date, nature and degree of survival to be ascribed. All features thus investigated were recorded in plan and section and significant archaeological finds recovered and retained for analysis. Any archaeological features identified were photographed and drawn in plan at a scale of 1:20 and in section at a scale of 1:10. The stratigraphy, where relevant and apparent, was recorded within the area of the excavation. Locations and height Above Ordnance Datum (AOD) of the features were accurately fixed, surveying in either the planning baselines or the features themselves.
- 5.1.6 The evaluation was undertaken in accordance with the Institute for Archaeologists *Standards and Guidelines for Archaeological Field Evaluation* (2008).

## 5.2 TRENCH ONE

- 5.2.1 Trench One was located on the northern side of the study area running on a northeast-southwest alignment. The trench targeted a discrete positive anomaly and a bipolar anomaly identified in the geophysical survey data. A layer of dark brown topsoil (**101**) was identified with an average depth of around 250mm. Beneath this layer the natural sub stratum of yellowish brown sandy clay (**102**) was encountered.



Fig. 5 View of Trench One, looking southwest. (Scale: 2m x 1m)

- 5.2.2 At the eastern end of the trench a boulder was uncovered below the topsoil (**101**). This boulder was located in the area of the trench where the gradiometer survey identified a bipolar anomaly interpreted as a possible ferrous object (Smalley 2010). The boulder may account for the geophysical anomaly, particularly if it had some detectable magnetic properties. The hollow caused by the removal of the boulder can be seen in Fig. 5.
- 5.2.3 No features of an archaeological origin were identified within Trench One. Anomalies seen within the gradiometer data may relate to discrete changes in the natural geology/pedology.

### **5.3. TRENCH TWO**

- 5.3.1 Trench Two was located towards the west side of study area on a northeast to southwest alignment. The trench was positioned to target a possible pit and a discrete area of magnetic disturbance in the gradiometer data. The topsoil evident in Trench One was also present in this trench (**201**) with an average depth of around 200mm. The topsoil directly overlaid the natural sub stratum of yellowish brown sandy clay (**201**).



Fig. 6 View of Trench Two, looking southwest. (Scale: 2m x 1m)

- 5.3.2 A boulder was uncovered in the natural sub stratum beneath the topsoil towards the northwestern end of Trench Two. As in Trench One, the position of this boulder correlates with the position of the discrete area of magnetic disturbance identified in the gradiometer data.
- 5.3.3 The natural sub stratum (202) contained a greater quantity of large pebble-sized stones in the southern end of Trench Two. This may account for the discrete positive anomaly identified by the geophysical survey in this part of the trench. No features of an archaeological origin were evident within Trench Two.

#### 5.4. TRENCH THREE

- 5.4.1 Trench Three was located at the western limits of the study area and had an approximate east-west orientation. The trench targeted features identified in the geophysical survey including two possible pits and a cut feature. The dark brown topsoil deposit (301) in this trench had an average depth of 200mm. The natural sub stratum of yellowish brown sandy clay (302) was encountered directly beneath the topsoil layer.



Fig. 7 View of Trench Three, looking east. (Scale: 2m x 1m)

- 5.4.2 Approximately half way along the trench a land drain (303) was encountered cutting the natural sub stratum (302). The land drain measured 1.85m long and 0.25m wide and consisted of a rectangular cut filled with angular cobbles and red brick.



- 5.4.3 A pocket of wetter clay was evident in the western limit of Trench Three. This subtle change in geology may account for the discrete positive anomaly identified in this area of the trench in the geophysical data.
- 5.4.4 One of the possible pit features in Trench Three identified by the geophysical survey may have been caused by an area of redeposited topsoil related to the backfilling of a recent geotechnical investigation of the site.

## 5.5. TRENCH FOUR

- 5.5.1 Trench Four was located at the southern limits of the study area and had an approximate northeast-southwest orientation. The trench targeted two cut features and a possible former earthwork identified in the geophysical survey. The dark brown topsoil deposit (401) in this trench had a maximum depth of 250mm. The natural sub stratum of yellowish brown sandy clay (402) was encountered directly beneath the topsoil layer.



Fig. 8 View of Trench Four, looking south. (Scale: 2m x 1m)

- 5.5.2 A rectilinear feature (403) was evident cut into the natural sub stratum approximately half way along the trench and was related to a modern service trench. The feature measured 3m x 0.7m x 0.6m and cut diagonally across the trench with a northeast – southwest orientation. The service trench had a sharp cut top with near vertical, even sides and a flat bottom. The trench was backfilled with a mixture of the natural substratum and dark brown topsoil (404). Beneath the backfill was a layer of angular gravel (405), further investigation of this layer showed that it covered a plastic pipe.



Figs. 9 and 10 View of 405 before and after excavation (Scale: 1m)

## 5.6. TRENCH FIVE

- 5.6.1 Trench Five was located within the central region of Area 2 and had an east to west orientation. The trench targeted an area of magnetic disturbance identified by the gradiometer survey. The surface layer was a deposit of modern overburden/made ground (501) consisting of 550mm of general refuse and debris. This layer of disturbed ground correlated well with the geophysical survey results from this area which indicated the presence of ground disturbance or made ground (Smalley 2010). The natural sub stratum of yellowish brown sandy clay (502) was encountered directly beneath this layer.
- 5.6.2 A stone culvert (503) was cut into the natural sub stratum. The culvert measured 8m long x 0.65m wide x 0.20m high and was constructed by layering parallel sets of roughly rectangular stones into the cut and capping the trench with larger stones. The culvert was filled with a dark brown silty/sandy fill (504) with a maximum depth of around 300mm. Sections of clay pipe stems found in close proximity to the culvert suggest a Post-Medieval date for this feature.



Fig. 11 View of Culvert (503) in Trench 5. Looking west. (Scale: 2m)



Fig. 12 View of Culvert (503) in Trench 5. Looking north. (Scale: 0.25m)



## **6. DISCUSSION**

- 6.1 The evaluation trenches did not identify any features relating to Medieval Wash Green. This would suggest that this particular part of the village may have been common land set aside for agricultural activity.
- 6.2 The only feature of archaeological interest identified during the evaluation was the Post-Medieval culvert located in Trench Five. The alignment of the culvert would suggest that it is not related to the Old Mill adjacent to the site, although other industries, including a bleach works, did exist around Wash Green. However, the relatively small size of the culvert may indicate that it did not have an industrial function; therefore the culvert may have been simply used for drainage purposes.
- 6.3 The features identified in the geophysical survey seemed to be mainly represented on site by changes in geology or pedology. Excavation of the bipolar anomalies revealed them to be related to rocks or boulders. The discrete positive anomalies, interpreted as possible pits, were shown to relate to discrete changes in local geology/pedology.

## **7. CONCLUSION AND RECOMMENDATION**

- 7.1 In conclusion, the geophysical survey and archaeological evaluation trenches indicate that there is little to no potential for the disturbance of archaeological deposits by the proposed development in Area 1. No features of an archaeological origin were identified in the four trenches excavated in this area and the geophysical anomalies identified through gradiometer survey were shown to be of a geological/pedological origin when investigated.
- 7.2 The Post-Medieval culvert identified in Trench Five in Area 2 is of local importance only. This feature has been photographed and recorded and is not of sufficient importance to prevent the proposed development from proceeding.

## **8. PUBLICITY, CONFIDENTIALITY AND COPYRIGHT**

- 8.1 Any publicity will be handled by the client.
- 8.2 Archaeological Research Services Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

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- 9.1 All statements and opinions contained within this report arising from the works undertaken are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

**10. ACKNOWLEDGEMENTS**

- 10.1. Archaeological Research Services Ltd would like to thank all those involved in this project, in particular Dean Graham from Connaught Partnerships Ltd, the site contractors and Steve Baker of Derbyshire County Council.

## 11. REFERENCES

Smalley, R. 2010. *A Geophysical Survey of Wash Green, Wirksworth, Derbyshire*, Archaeological Research Services Ltd.

## 12. REGISTERS

<b>Finds Register</b>			
Area	Context	Description	Total
T1	101	Clay pipe stem fragments	2
		Post medieval pottery sherds	8
		Window glass sherds	2
		Complete bottle 'MORSES INDIAN ROOT PILLS'	1
T2	201	Clay pipe stem fragments	10
		Clay pipe bowl	1
		Post-medieval pottery sherds	17
		Brick tile fragment	1
		Window glass sherd	1
		Glass bottle sherd	1
T3	301	Clay pipe stem fragments	3
		Post medieval pottery sherds	8
		Glass bottle sherd	1
T4	401	Post-medieval pottery sherds	4
	404	Clay pipe bowl	1
		Post medieval pottery sherds	4
T5	501	Clay pipe stem fragments	16
		Clay pipe bowl fragment	1
		Clay pipe stem & heel fragment	1
		Clay pipe close to heel fragment	1
		Post-medieval pottery sherds	6
		Glass bottle sherd	1
		Brick tile	1
	504	Clay pipe stem fragment	1
	Post-medieval pottery sherds	2	

<b>Drawing Register</b>				
Drawing Number	Description	Scale	By	Date
1	Trench 5 Plan	1;20	RAJS	6/11/2010
2	Trench 5 North Facing Section	1;20	RAJS	6/11/2010
3	Trench 5 Culvert Section	1;10	RAJS	6/11/2010
4	Trench 1 Plan	1;100	HGMS	6/14/2010
5	Trench 1 North Facing Section	1;100	HGMS	6/14/2010
6	Trench 2 Plan	1;100	RAJS	6/14/2010
7	Trench 3 Plan	1;100	HGMS	6/14/2010
8	Trench 4 Plan	1;100	RAJS	6/14/2010
9	Trench 2 East Facing Section	1;100	HGMS	6/14/2010
10	Trench 3 North Facing Section	1;100	HGMS	6/14/2010
11	Trench 4 West Facing Section	1;100	HGMS	6/14/2010

<b>Photograph Register (Colour Slide and Black and White)</b>						
Shot Number (Film 1)	Direction	Scale	Context No.	Description	By	Date
1	-	-	-	Film ID	BM	6/10/2010
2	-	-	-	Trench 5 Pre Ex	BM	6/10/2010
3	E	2+1m	-	Trench 5 Post Ex	RAJS	6/10/2010
4	W	2+1m	-	Trench 5 Post Ex	RAJS	6/10/2010
5	E	2m	503	Culvert	RAJS	6/10/2010
6	W	2m	503	Culvert	RAJS	6/10/2010
7	S	0.25m	503	Culvert	RAJS	6/10/2010
8	N	0.25m	503	Culvert	RAJS	6/10/2010
Shot Number (Film 2)						
1	E	2+1m	503	Culvert Post Ex	RAJS	6/11/2010
2	W	2+1m	-	Trench 1 Fully Ex	RAJS	6/11/2010
3	E	2+1m	-	Trench 1 Fully Ex	RAJS	6/11/2010
4	S	2+1m	-	Trench 2 Fully Ex	RAJS	6/11/2010
5	N	2+1m	-	Trench 2 Fully Ex	RAJS	6/11/2010
6	E	2+1m	-	Trench 3 Fully Ex	RAJS	6/11/2010
7	W	2+1m	-	Trench 3 Fully Ex	RAJS	6/11/2010
8	S	2+1m	-	Trench 4	RAJS	6/14/2010
9	N	2+1m	-	Trench 4	HGMS	6/14/2010
10	NE	1m	403	Service Trench in Trench 4	HGMS	6/14/2010
11	NE	1m	404	Service Trench in Trench 4	RAJS	6/15/2010

<b>Context Register</b>						
Context Number	Description	Max Dimensions	Max Depth	Colour	Texture	Small Finds
101	Topsoil in Trench 1	Across T1	250mm	Dark Brown	Fine	
102	Natural Sub Stratum Trench 1	Across Site	-	Yellowish Brown	Fine	
201	Topsoil in Trench 2	Across T2	200mm	Dark Brown	Fine	
202	Natural Sub Stratum Trench 2	Across Site	-	Yellowish Brown	Fine	
301	Topsoil in Trench 3	Across T3	200mm	Dark Brown	Fine	
302	Natural Sub Stratum Trench 3	Across Site	-	Yellowish Brown	Fine	
303	Land Drain in Trench 3	1.85m x 0.25m	-	-	-	
401	Topsoil in Trench 4	Across T4	250mm	Dark Brown	Fine	Clay Pipe/Fragments of Post Med Pottery
402	Natural Sub Stratum Trench 4	Across Site	-	Yellowish Brown	Fine	
403	Service Trench in Trench 4	3m x 0.7m x 0.6m	-	-	-	
404	Fill of 403	3m x 0.7m x 0.6m	-	Yellowish Brown	Fine	
405	Gravel Deposit Base of 403	Across Base of 403	-	Grey	Coarse	Fragments of clay pipe- probably redeposited with backfilling of trench
501	Made Ground in Trench 5	Across T5	550mm	Black	Coarse	Waste and Debris
502	Natural Sub Stratum Trench 5	Across Site	-	Yellowish Brown	Fine	
503	Stone Culvert in Trench 5	8000mmx650mmx200mm	-	-	-	Clay Pipe/Fragments of Post Med Pottery
504	Fill of 503	Within Culvert 503	-	Dark Brown	Fine	Clay Pipe/Fragments of Post Med Pottery

# TRENCH 1

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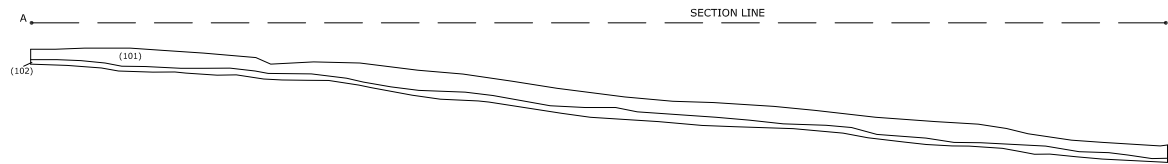
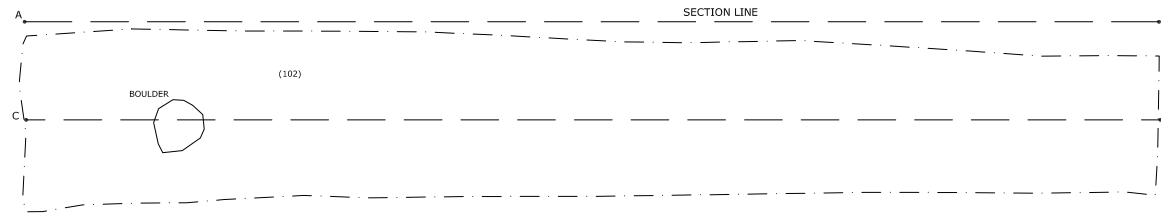
Site Code: Wash 10  
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 Figure 13: Plan and Section Drawings- Trenches 1 and 2

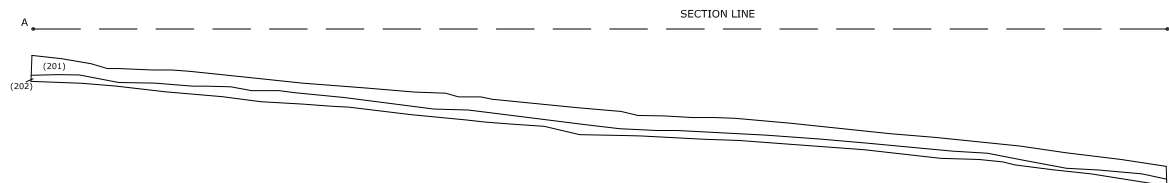
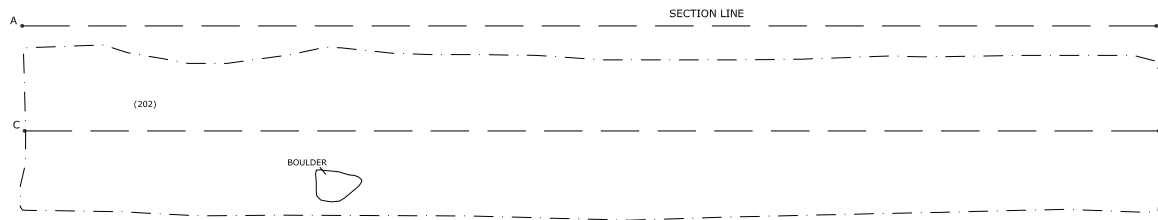
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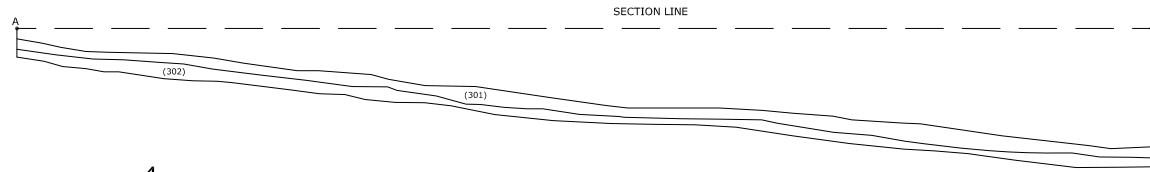
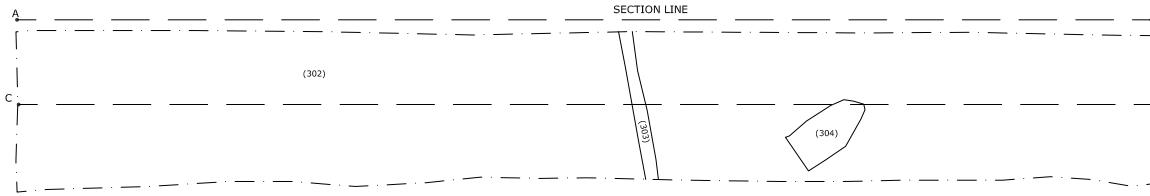
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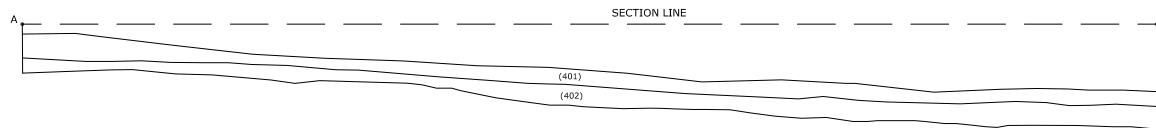
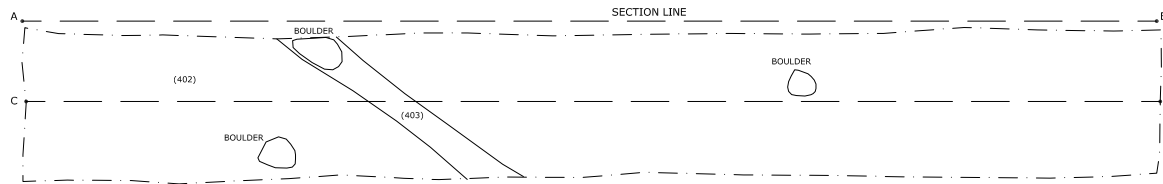
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Title:  
Figure 14: Plan and Section Drawings- Trenches 3 and 4

Key:



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Title:  
Figure 15: Plan and Section Drawings- Trench 5

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