



Highland Archaeology Services Ltd

Bringing the past and future together

Mosstown Water Main Elgin, Moray



Watching Brief

May 2007

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Mosstowie Water Main

Elgin, Moray

Watching Brief

May 2007

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Summary

An archaeological watching brief was carried out at Mosstowie, Elgin by Highland Archaeology Services Ltd in May 2007 during the construction of a water main in response to a request from Aberdeenshire Archaeology Service, which advises Moray Council.

A number of apparent features appearing in the gravel subsoil were investigated and found to be of natural origin. Some iron slag was found at the base of the topsoil.

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Acknowledgements

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Introduction

An archaeological watching brief was carried out at Mosstowie, Elgin by Highland Archaeology Services Ltd in May 2007 during the construction of a water main in response to a request from Aberdeenshire Archaeology Service, which advises Moray Council. The purpose of this work was to identify and record any archaeological features revealed by the construction works.

Location

The watching brief was located approximately at Ordnance Survey National Grid Reference NJ 182 616 at a height of approx. 27m above sea level, approximately 4 km to the west of Elgin town centre.

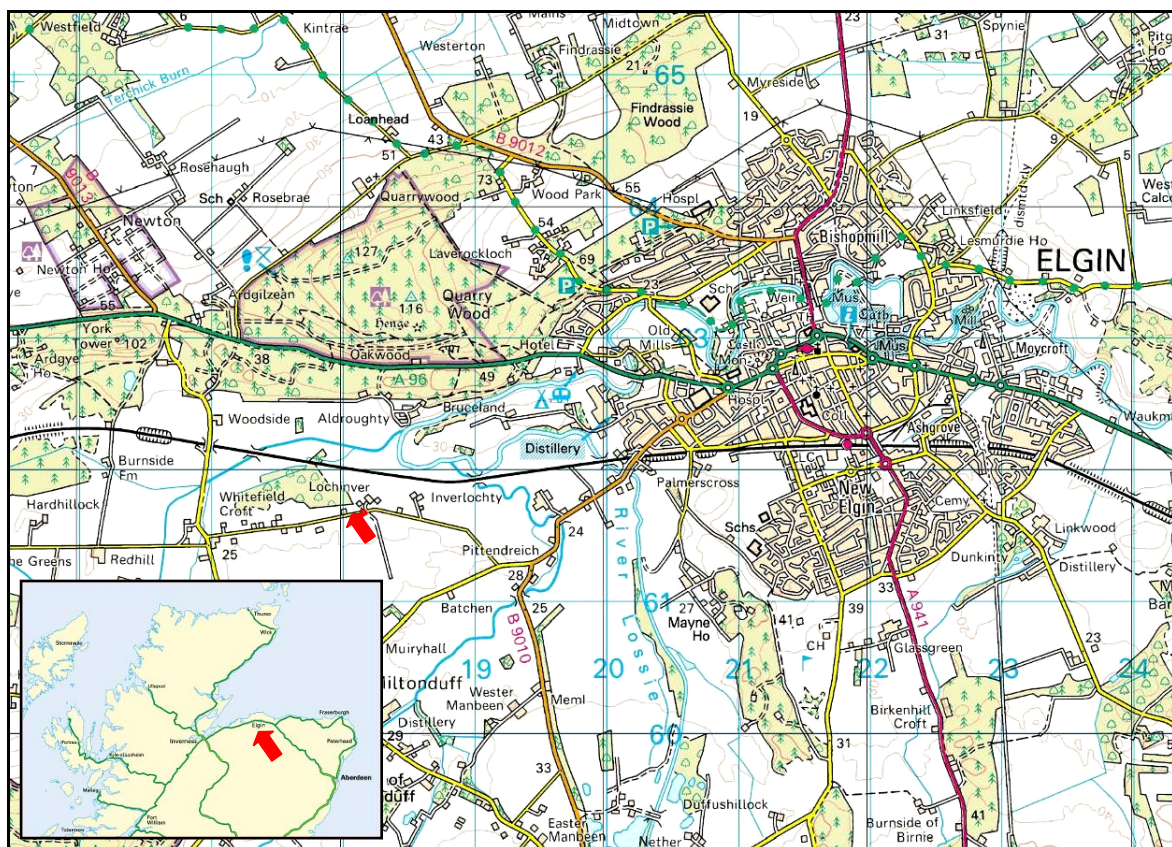


Figure 1 Project location

Not to scale



Figure 2 Watching brief location - detail

Site details, archaeology and policy background

The planning and policy framework includes the Scottish Executive's *National Planning Policy Guidance Notes* 5 (NPPG5)¹ and 18 (NPPG18)², and *Planning Advice Note* 42 (PAN42)³ (SOEND 1994). The fundamental principles underpinning the above policies are set out in *Passed to the Future: Historic Scotland's Policy for the Sustainable Management of the Historic Environment* (2002)⁴ and the *Burra Charter* (Australia ICOMOS 1999).⁵

¹ <http://www.scotland.gov.uk/Publications/1998/10/nppg5>

² <http://www.scotland.gov.uk/Publications/1999/04/nppg18>

³ <http://www.scotland.gov.uk/Publications/1994/01/17081/21711>

⁴ www.historic-scotland.gov.uk/pasttofuture.pdf

⁵ <http://www.icomos.org/australia/burra.html>

The water main was constructed roughly from east to west adjacent to a minor road. Two sites have been recorded in the area, both of them cropmarks noted on vertical aerial photographs taken in 1976 and 1977.

Moray SMR NJ16SE0011 (NMRS NJ16SE 14)

According to the NMRS, 'Two timber huts at Lochinver' were noted from aerial reconnaissance in 1977. Ten years later, A F Harding and G E Lee observed 'traces of two partially-visible sub-circular enclosures with medium- narrow ditches' on aerial photographs; while R Feilden discovered (1991) 'On lower slopes of a ridge the cropmarks of a timber house superimposed on the cropmarks of a circle of post pits. Cropmark of a ring ditch, penannular and discontinuous'.

According to the Moray SMR, at least four ring-ditches were noted here in a tight group, with one slightly overlying another. North of these was part of a larger sub-circular enclosure with possible pits within it. Cropmarks of ridge and furrow cultivation could be seen overlying these prehistoric features.

Moray SMR NJ16SE0035 (No corresponding NMRS record)

A circle of post-pits of a timber house was recorded as part of a complex of features which included ring-ditches and an oval enclosure.



Figure 3 View E on arrival along the northern edge of the recorded sites from limit of excavation.

Method

Desk Based Assessment

The desk based assessment was carried out in May 2007 by John Wood. This was greatly assisted by Aberdeenshire Council who provided details from the Moray Sites and Monuments Record.



Figure 4 View E on arrival from W edge of field, showing open trench

Watching Brief

On 15 May Gemma Shannahan arrived at the site for a preliminary meeting to find that work had already started in the area. Some of the line which required to be watched had already been dug and of this, half had already been backfilled. Also, although the watching brief specification had required the use of a straight-edged ditching bucket, excavations so far had not used one. Work had however stopped for the day.

The following day (16 May) she attended again, and noted that the trench already opened but not yet backfilled was 1.0m wide at the top; 0.45m wide at the bottom; with a maximum depth of 1.15m (See Fig 4). This was inspected but no archaeological features could be seen.

A back-acting digger fitted with a straight-edged ditching bucket was then used to continue the open trench under archaeological supervision, with 1 archaeologist watching one excavating machine. This section of trench measured 1.4m wide x 0.9m deep, and cut through clean plough-soil onto pale sand. Unfortunately, the contractor accidentally cut two existing water mains, flooding part of the trench (See Fig 5 below).



Figure 5 Excavation of watching brief trench - repairing water main

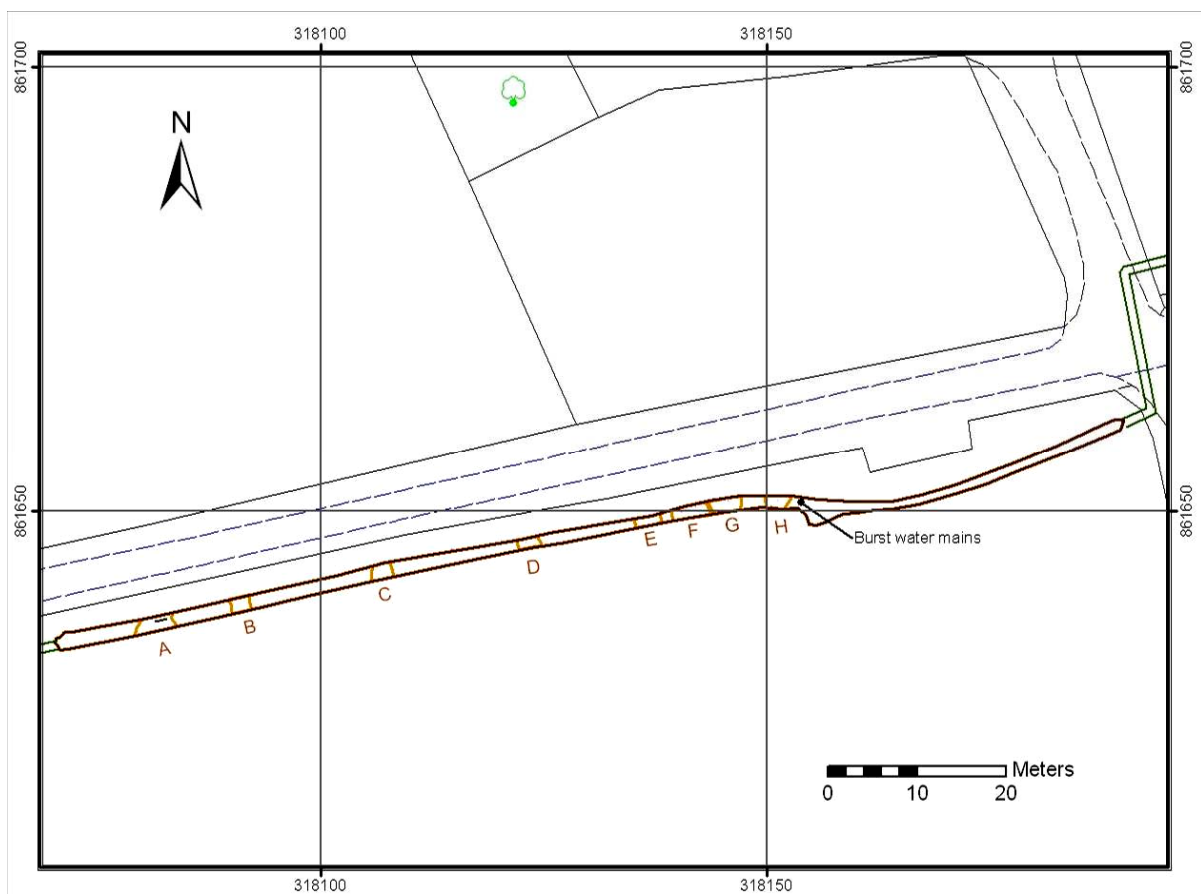


Figure 6 Watching brief trench showing cleaned areas A-H

The pipeline then crossed the road to continue eastwards to the north of the road. A narrow, toothed bucket had to be used here to fit between the gas mains and the water pipe. This was checked at regular intervals, but the same natural soil profiles were noted here as elsewhere and no finds or features were seen.



Figure 7 Crossing road at E end of watching brief trench

John Wood attended on Thursday 17 May. He hand-cleaned selected areas of the trench (labelled A – H), then photographed, investigated, plotted in and interpreted all the features noted. Site mapping was undertaken with survey-grade Thales (Magellan) Promark 3 DGPS equipment using real-time SBAS correction in mapping mode. This typically provides 0.3 – 0.9m horizontal accuracy overall with considerably better relative accuracy. The results were then processed and adjusted to the Ordnance Survey mapping.

No human remains were encountered. All work was carried out to the standards usually required by the Institute of Field Archaeologists. The company's Risk Assessment and Health and Safety Procedures were followed throughout.

Results

F1 (Area A)

A linear feature, crossing the trench. This was the most clearly defined feature recorded. A section was therefore cut, set out 53cm from N side of the trench (see Fig 5). The feature was found to be 24cm deep x 130cm wide. Its water staining, pebbles, and irregularity strongly suggest a natural watercourse. No dating evidence was found. The fill was of mixed silt with topsoil and much water staining.

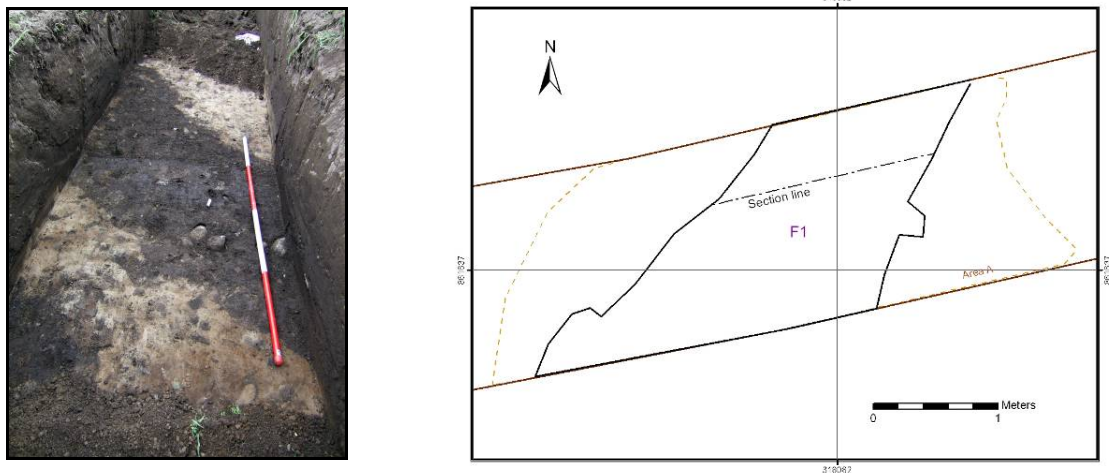


Figure 8 Feature 1: sketch plan and photo before excavation



Figure 9 Feature 1, section (along ranging pole)
Scale in 0.5m divisions

F2 (Area B)

An ill-defined area of dark staining with indications of possible burning. This had a maximum depth of 2cm. No finds or other diagnostic evidence.

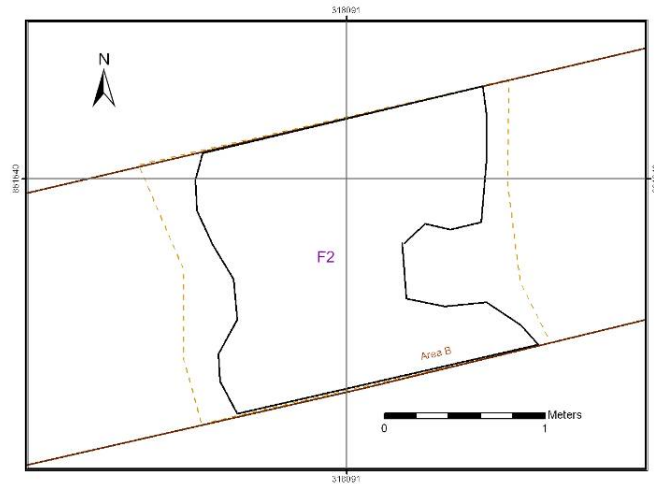


Figure 10 Feature 2

F3 (Area C)

A roughly oval burnt area in the surface of the subsoil. The maximum depth was 3-5 cm. No finds or other diagnostic evidence.

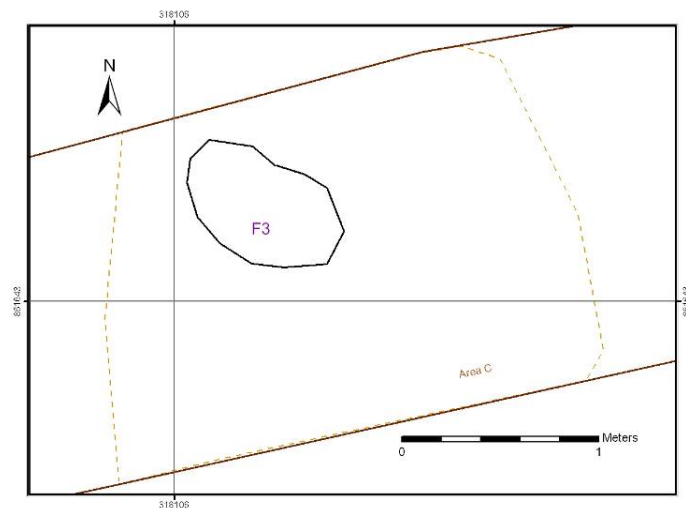


Figure 11 Feature 3

F4 (Area D)

An ill-defined and irregular linear feature, crossing the trench. (see Fig 8). This feature was found to be only about 10cm deep x up to 130cm wide. No dating evidence was found and with its shallow profile it appears to be a natural hollow or former watercourse. The fill was of topsoil.

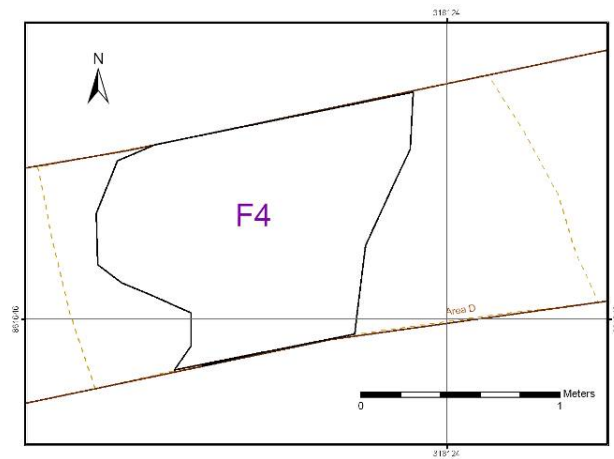


Figure 12 Feature 4

F5 (Area E)

A feature showing as a cut filled with darker topsoil, well-defined to W, shallow to E. This was investigated and interpreted as the result of deep ploughing for drainage.

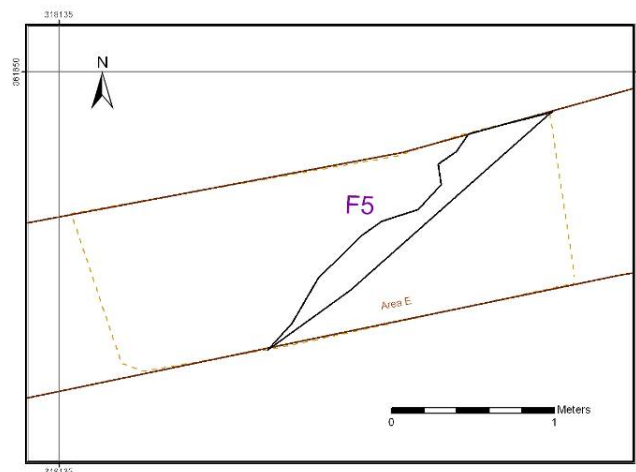


Figure 13 Feature 5

F6 and F7 (Area F)

F6 was a spread of topsoil, containing some small fragments of charcoal and wood, as well as corroded iron and slag in the surface, in addition to burnt, crumbling sandstone fragments and very small fragments of charcoal. However it appeared on further investigation to be a remnant of topsoil, and the material in it appeared to be related to steam ploughing. See Fig 11 below.

F7 was an ill-defined, dark red and black burned patch (see Fig 11, arrow).

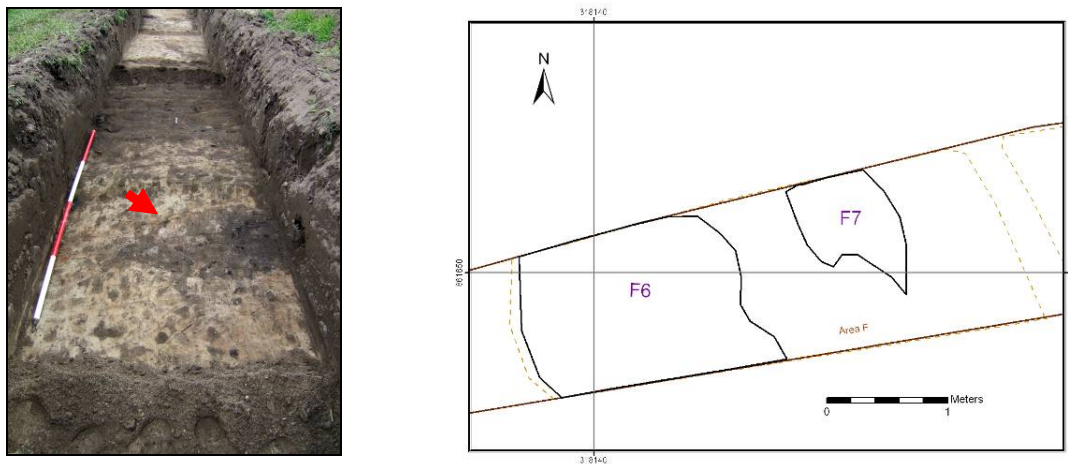


Figure 14 Features 6 and 7 (arrow)

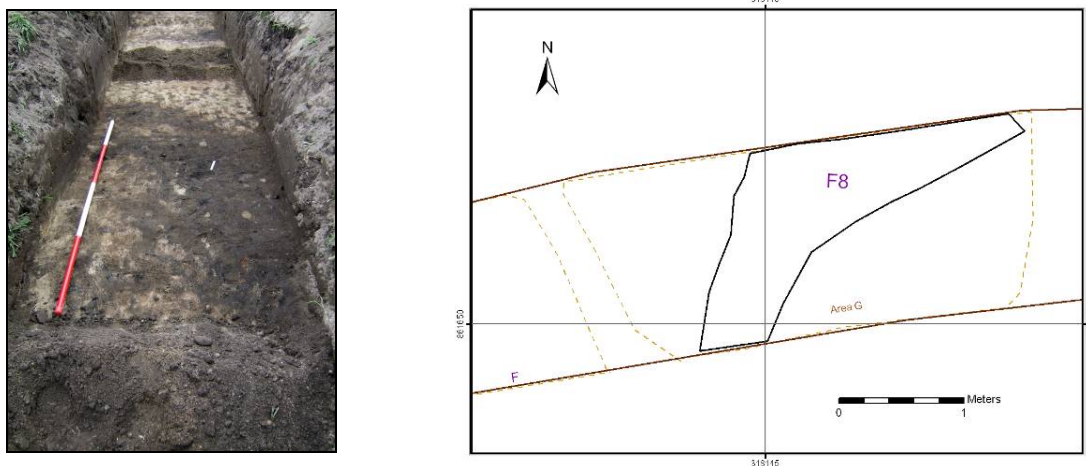


Figure 15 Feature 8

F8 (Area G)

An ill-defined, dark red and black patchy area, containing some small fragments of charcoal and wood. This was cleaned and investigated and found to have a maximum depth of 2-3cm representing an area of burned subsoil. The interpretation was unclear but it did not represent a cut or structural feature.

F9 (Area H)

An ill-defined, dark red and black patchy area, containing some small fragments of charcoal and wood. This was cleaned and investigated and found to have a maximum depth of 2-3cm representing an area of burned subsoil. The interpretation was unclear but it did not represent a cut or structural feature.

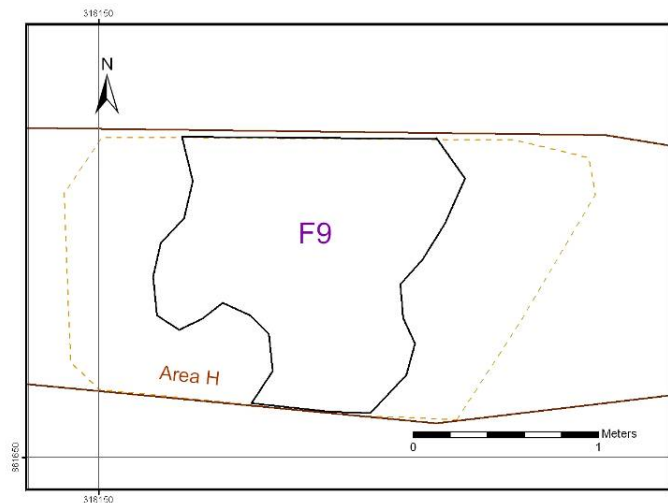
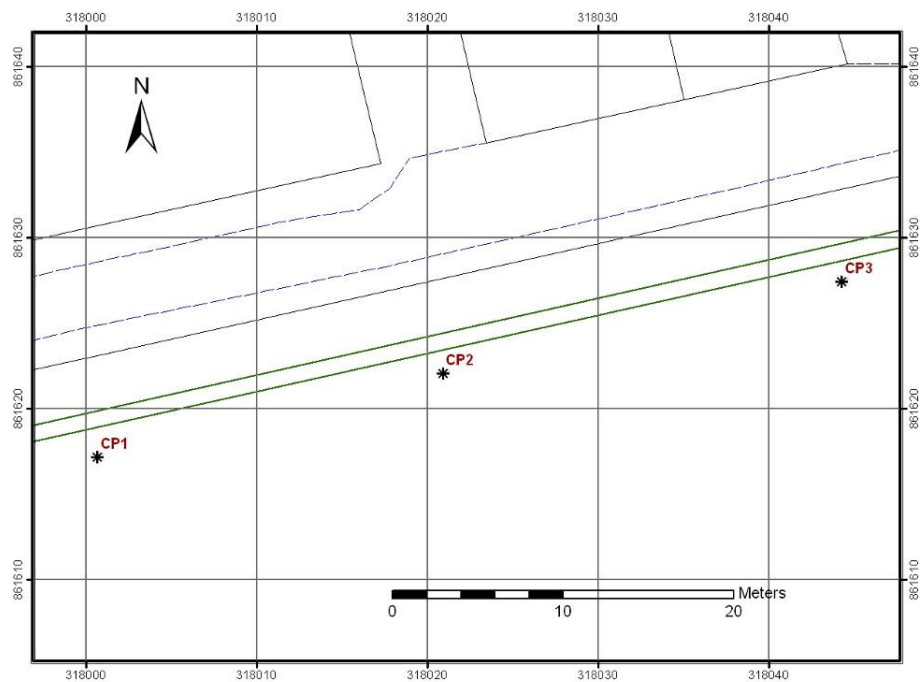
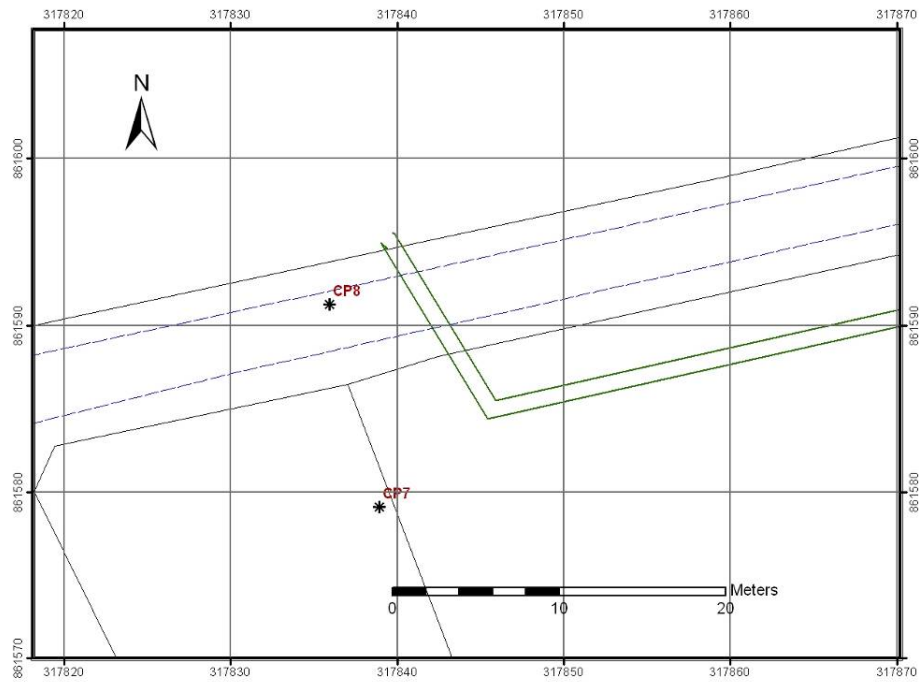


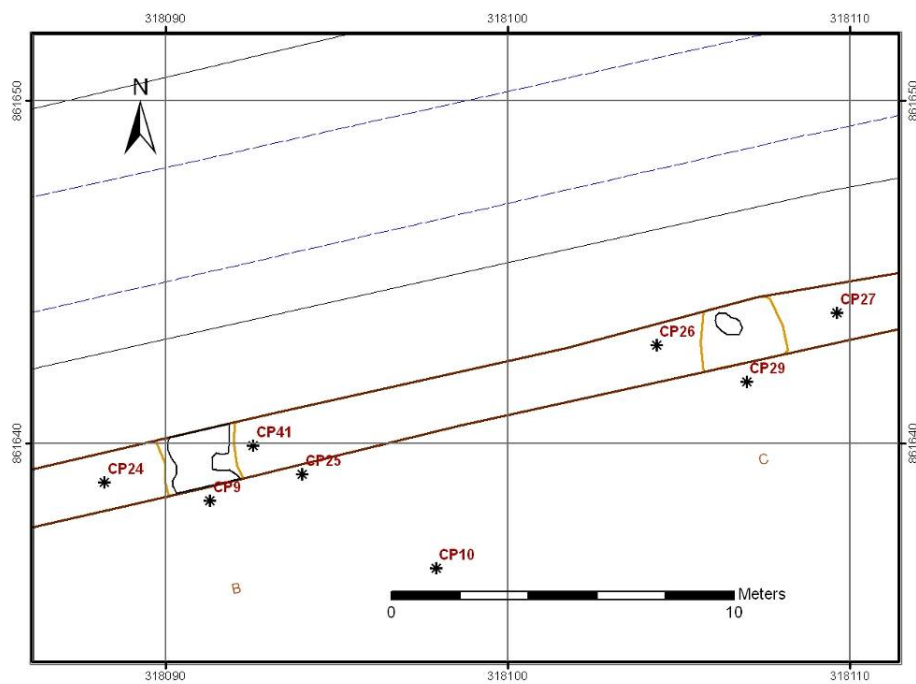
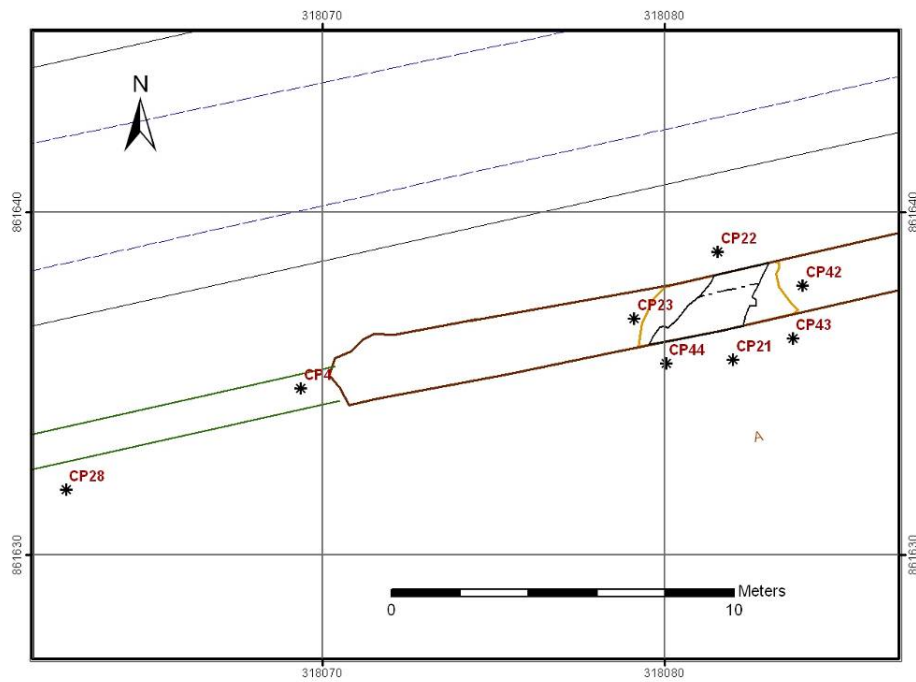
Figure 16 Feature 9

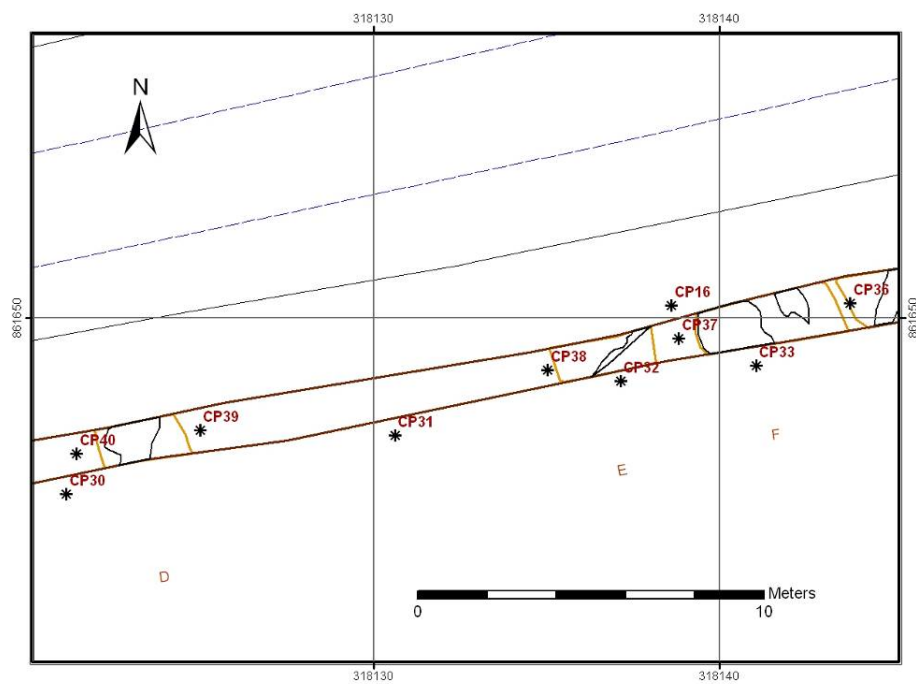
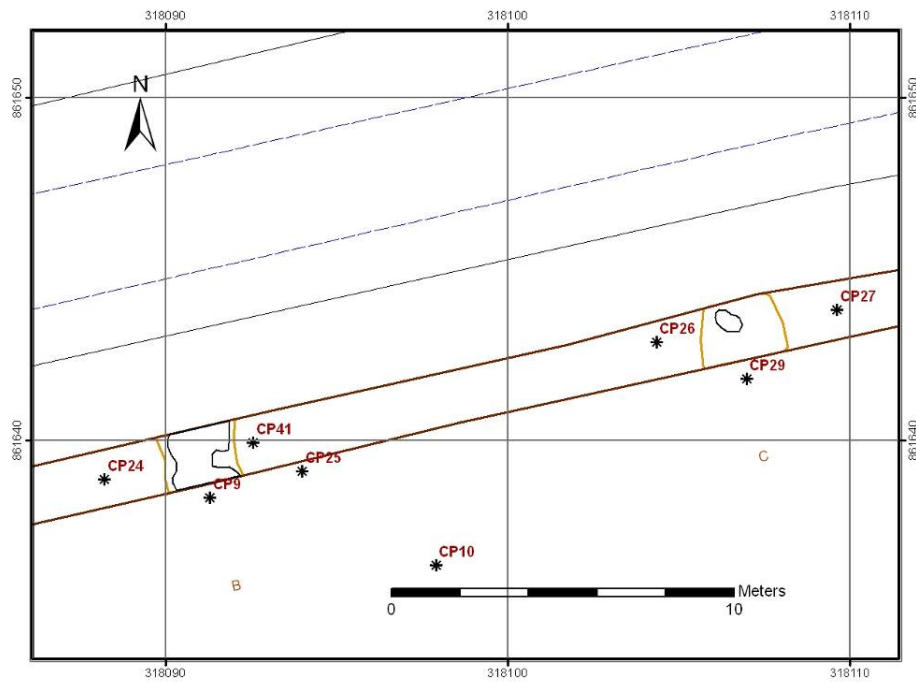
Recommendations

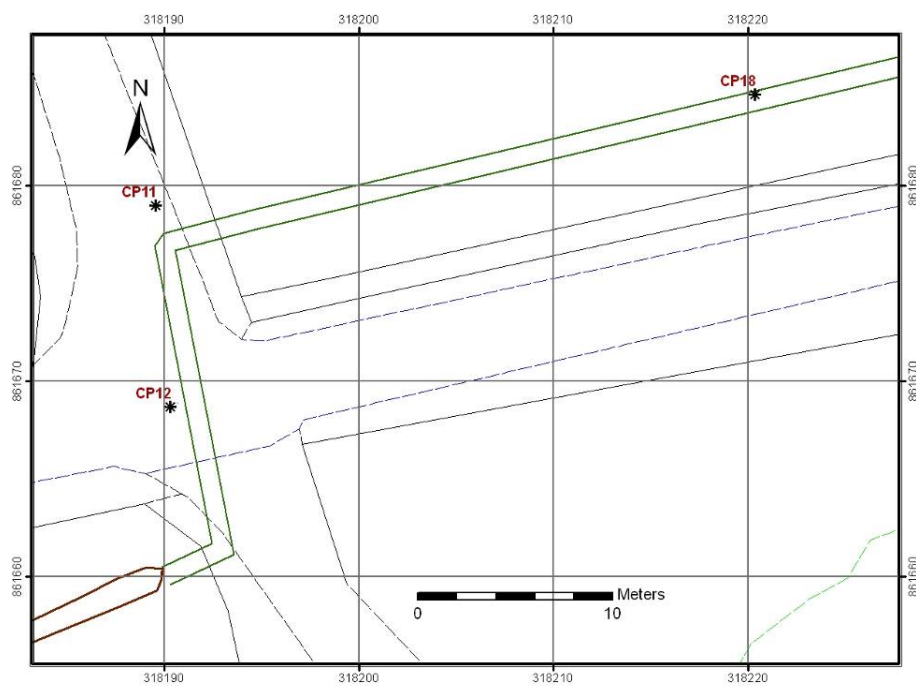
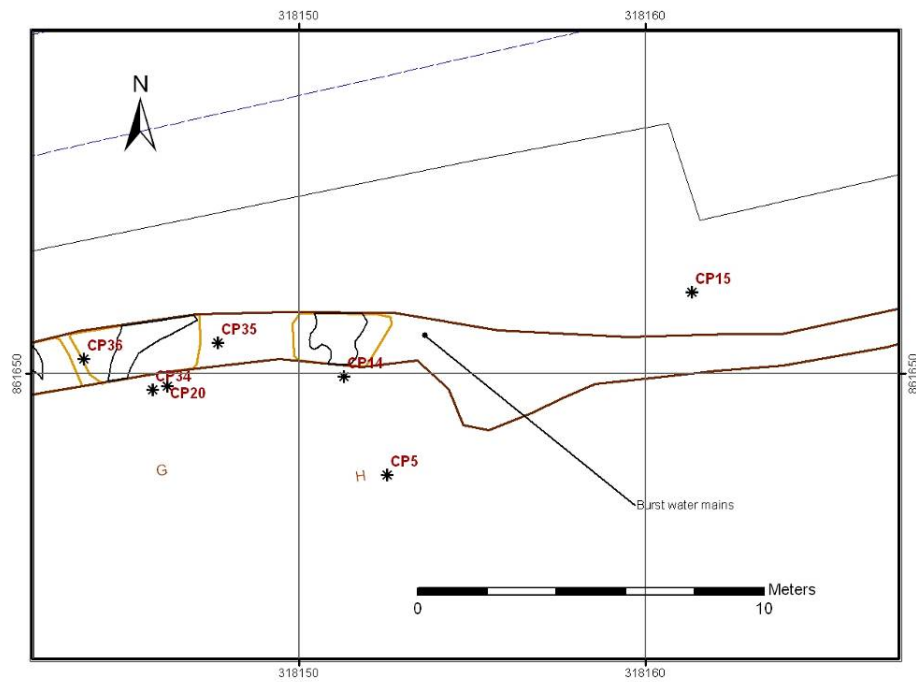
The features all appear to be either natural or the result of 19th or 20th century steam ploughing. No features were noted likely to be associated with the recorded cropmarks nearby. There are no recommendations for any further work.

Appendix 1: Index to Photographs









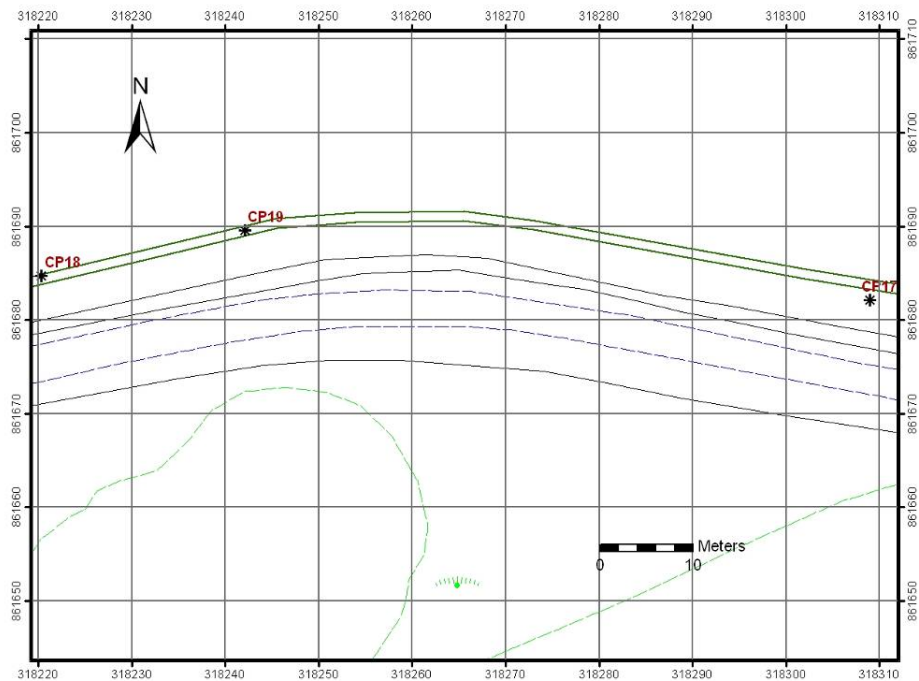


Photo Number	Date Taken	Taken by	Camera Point (CP)	Direction Facing	Description
730	15/05/2007	GS	1	W	Backfilled section of trench on arrival to site.
733	15/05/2007	GS	2	E	Section of trench, with pipe inserted, on arrival to site.
736	15/05/2007	GS	2	W	Section of trench, with pipe inserted, on arrival to site.
740	15/05/2007	GS	3	E	Section of trench, with pipe inserted, on arrival to site.
742	15/05/2007	GS	3	E	Section of trench, with pipe inserted, on arrival to site.
748	15/05/2007	GS	4	E	Area of field prior to excavation of remainder of trench.
757	15/05/2007	GS	5	E	Area of field prior to excavation of remainder of trench 1.
758	15/05/2007	GS	5	SE	View over the field.
759	15/05/2007	GS	5	S	View over the field.
760	15/05/2007	GS	5	SW	View over the field.

Photo Number	Date Taken	Taken by	Camera Point (CP)	Direction Facing	Description
761	15/05/2007	GS	5	W	Looking along route of pipeline, prior to excavation.
762	15/05/2007	GS	5	NW	View over road to nearby fields.
763	15/05/2007	GS	5	N	View over road to nearby fields.
764	15/05/2007	GS	5	NE	View over road to nearby fields.
765	15/05/2007	GS	6	NW	View over field towards pipeline route.
766	15/05/2007	GS	6	NNW	View over field towards pipeline route.
770	15/05/2007	GS	6	N	View over field towards pipeline route.
771	15/05/2007	GS	6	N	View over field towards pipeline route and road.
779	15/05/2007	GS	7	E	Area of trench already backfilled.
782	15/05/2007	GS	8	W	View along road, showing backfilled trench down the verge.
787	16/05/2007	GS	8	E	End of excavated and backfilled section of trench
790	16/05/2007	GS	9	W	Looking along area excavated under supervision.
792	16/05/2007	GS	9	E	Trench being excavated.
794	16/05/2007	GS	10	E	Route to be excavated.
795	16/05/2007	GS	11	W	Small section dug to lay pipe across road.
796	16/05/2007	GS	11	E	Small section dug to lay pipe across road.
801	16/05/2007	GS	12	N	Pipe crossing road
802	16/05/2007	GS	11	N	Pipe crossing road
803	16/05/2007	GS	11	E	Narrow trench dug for pipe in field N of road.
804	16/05/2007	GS	11	E	Narrow trench dug for pipe in field N of road.
806	16/05/2007	GS	11	W	Narrow trench dug for pipe in field N of road.
812	16/05/2007	GS	13	E	Narrow trench dug for pipe in field N of road.
813	16/05/2007	GS	13	E	Narrow trench dug for pipe in field N of road.
817	16/05/2007	GS	13	W	Narrow trench dug for pipe in field N of road.
819	16/05/2007	GS	12	SW	Working on road where pipe crosses
822	16/05/2007	GS	14	W	Looking along excavated watching brief trench
824	16/05/2007	GS	14	W	Excavating watching brief trench- burst pipe

Photo Number	Date Taken	Taken by	Camera Point (CP)	Direction Facing	Description
825	16/05/2007	GS	15	W	Excavating watching brief trench- burst pipe
826	16/05/2007	GS	16	W	Looking along excavated watching brief trench
827	16/05/2007	GS	16	E	Looking along excavated watching brief trench
828	16/05/2007	GS	16	E	Looking along excavated watching brief trench
854	16/05/2007	GS	17	E	Backfilling trench N of road
855	16/05/2007	GS	17	N	Backfilled area over road.
857	16/05/2007	GS	18	E	Laying pipe N of road
858	16/05/2007	GS	19	E	Excavating N of road
895	16/05/2007	GS	20	W	Looking along open trench
896	16/05/2007	GS	20	E	Looking along open trench
Fuji 080	17/05/2007	JW	21	N	Area A; Feature 1
Fuji 081	17/05/2007	JW	22	S	Area A; Feature 1
Fuji 082	17/05/2007	JW	23	E	Area A; Feature 1
Fuji 083	17/05/2007	JW	24	W	Area A; Feature 1
Fuji 084	17/05/2007	JW	9	N	Area B; Feature 2
Fuji 085	17/05/2007	JW	25	W	Areas B and A
Fuji 086	17/05/2007	JW	26	E	Area H; Feature 9
Fuji 087	17/05/2007	JW	27	W	Area H; Feature 9
Fuji 088	17/05/2007	JW	35	W	Area G; Feature 8
Fuji 089	17/05/2007	JW	36	E	Area G; Feature 8
Fuji 090	17/05/2007	JW	36	W	Area F; Features 6 and 7
Fuji 091	17/05/2007	JW	37	E	Area F; Features 6 and 7
Fuji 092	17/05/2007	JW	37	W	Area E; Feature 5
Fuji 093	17/05/2007	JW	38	E	Area E; Feature 5
Fuji 094	17/05/2007	JW	39	W	Area D; Feature 4
Fuji 095	17/05/2007	JW	40	E	Area D; Feature 4
Fuji 096	17/05/2007	JW	27	W	Area C; Feature 3
Fuji 097	17/05/2007	JW	26	E	Area C; Feature 3
Fuji 098	17/05/2007	JW	41	W	Area B; Feature 2
Fuji 099	17/05/2007	JW	24	E	Area B; Feature 2
Fuji 100	17/05/2007	JW	42	W	Area A; Feature 1
Fuji 101	17/05/2007	JW	23	E	Area A; Feature 1
Fuji 102	17/05/2007	JW	21	N	Area A; Feature 1

Photo Number	Date Taken	Taken by	Camera Point (CP)	Direction Facing	Description
Fuji 103	17/05/2007	JW	21 (approx)	NW	Area A; Feature 1
Fuji 104	17/05/2007	JW	23 (approx)	NE	Area A; Feature 1
Fuji 105	17/05/2007	JW	23	E	Area A; Feature 1
Pentax 38	17/05/2007	JW	3	E	Trench end at cotts
Pentax 39	17/05/2007	JW	28	E	View along trench
Pentax 40	17/05/2007	JW	28	W	View along trench
Pentax 41	17/05/2007	JW	4	E	View along trench
Pentax 42	17/05/2007	JW	4	E	View along trench
Pentax 45	17/05/2007	JW	29	W	View along trench
Pentax 46	17/05/2007	JW	29	E	View along trench
Pentax 48	17/05/2007	JW	30	W	View along trench
Pentax 49	17/05/2007	JW	30	E	View along trench
Pentax 51	17/05/2007	JW	30	W	View along trench
Pentax 52	17/05/2007	JW	30	E	View along trench
Pentax 54	17/05/2007	JW	31	W	View along trench
Pentax 55	17/05/2007	JW	31	E	View along trench
Pentax 56	17/05/2007	JW	32	N	View along trench
Pentax 57	17/05/2007	JW	32	W	View along trench

Photo Number	Date Taken	Taken by	Camera Point (CP)	Direction Facing	Description
Pentax 58	17/05/2007	JW	32	E	View along trench
Pentax 60	17/05/2007	JW	33	W	View along trench
Pentax 61	17/05/2007	JW	33	E	View along trench
Pentax 63	17/05/2007	JW	33	W	View along trench
Pentax 64	17/05/2007	JW	33	E	View along trench
Pentax 69	17/05/2007	JW	14	W	View along trench
Pentax 70	17/05/2007	JW	14	E	View along trench
Pentax 79	17/05/2007	JW	22	S	Area A, Feature 1 section
Pentax 80	17/05/2007	JW	23	E	Area A, Feature 1 section
Pentax 81	17/05/2007	JW	21	N	Area A, Feature 1 section
Pentax 82	17/05/2007	JW	42	W	Area A, Feature 1 section