

Land to the Rear of Long Mynd & Min Y Don Ynyslas Borth Ceredigion

Archaeological Strip, Map & Sample and Watching Brief



for
Arup Ltd

on behalf of
Dwr Cymru Welsh Water

CA Project: 6184
CA Report: 17262

June 2017



Land to the Rear of Long Mynd & Myn Y Don
Ynyslas
Borth
Ceredigion

Archaeological Strip, Map & Sample and Watching
Brief

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SUMMARY

Project Name:	Land to the Rear of Long Mynd & Myn Y Don
Location:	Ynyslas, Borth, Ceredigion
NGR:	260801 292911
Type:	Strip, Map & Sample and Watching Brief
Date:	21 February to 13 April 2017
Planning Reference:	Ceredigion County Council Planning Ref: A160835
Location of Archive:	To be deposited with the Ceredigion Museum, Aberystwyth and the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW)
Site Code:	LMY 17

A programme of archaeological Strip, Map and Sample (SMS) and watching brief were undertaken by Cotswold Archaeology between February and April 2017 on land to the rear of Long Mynd and Myn Y Don, Ynyslas, Borth, Ceredigion.

The remains of four former military huts and a road, corresponding to structures visible on an aerial photograph of 1946 and forming part of the Second World War military research camp at Ynyslas, were identified. A lack of domestic artefacts associated with the huts, coupled with the presence of a large quantity of ordnance in their vicinity, suggests that the huts most probably functioned as workshops or buildings for munitions storage.

No further features or deposits of archaeological interest were observed during groundworks, and no artefactual material was recovered.



1. INTRODUCTION

- 1.1 Between February and April 2017 Cotswold Archaeology (CA) carried out a programme of archaeological recording comprising, Strip, Map and Sample (SMS) and watching brief, for Arup Ltd, on behalf of Dwr Cymru Welsh Water, on land to the rear of Long Mynd and Min Y Don, Ynyslas, Borth, Ceredigion (centred at 260801 292911; Fig. 1).
- 1.2 Planning permission for the construction of two pumping stations, associated apparatus, enclosures and access tracks was granted by Ceredigion County Council (CCC; Planning Ref: A160835, condition 5), conditional on a programme of archaeological work being undertaken prior to development. The scope of the archaeological work required, comprising a programme of archaeological SMS across Site A (see Fig. 2 for location and extent), was confirmed by Zoe Bevans-Rice, Development Management Archaeologist, Dyfed Archaeological Trust – Development Management (DAT DM), the archaeological advisors to CCC, during discussions with CA. Following subsequent discussions between Arup Ltd and DAT DM it was agreed that an archaeological watching brief would also be maintained during further groundworks to be undertaken as Permitted Development immediately to the south and west of Site A (see Fig. 2 for location and extent).
- 1.3 The fieldwork was undertaken in accordance with a detailed *Written Scheme of Investigation* (WSI) produced by CA (2017) and approved by Mike Ings, Senior Planning Archaeologist, DAT DM. The fieldwork also followed *Standard and Guidance: Archaeological Excavation* (CIfA 2014), *Standard and Guidance: Archaeological watching brief* (CIfA 2014), the *Management of Research Projects in the Historic Environment (MORPHE): Project Manager's Guide* and accompanying *PPN3: Archaeological Excavation* (Historic England 2015).

The site

- 1.4 The area of archaeological recording is located to the east of properties fronting the B4353, within an area of broadly level agricultural land which lies at approximately 4.5m AOD. The site is bounded to the north by a tarmac track and to the south and east by further agricultural land.

- 1.4 The underlying bedrock geology of the area is mapped as Borth Mudstones Formation - Mudstone of the Silurian era (BGS 2017). Superficial deposits of Blown Sand formed in the Quaternary Period are also recorded (*ibid.*). The natural substrate, comprising light grey-yellow wind-blown sand, was identified throughout the areas subject to archaeological SMS and watching brief.

2. ARCHAEOLOGICAL BACKGROUND

- 2.1 Examination of Dyfed Historic Environment Records (HER) indicates the presence of prehistoric and modern archaeological remains within the current site and its immediate vicinity.
- 2.2 The site of a prehistoric burnt mound (PRN 30903) is recorded approximately 440m south-west of the site on the peat on Borth beach. The peat has been radiocarbon dated to c. 4,000 BP.
- 2.3 Both the SMS and the additional watching brief areas are located within an area of cropmarks associated with the Second World War military research site at Ynyslas (PRN 109285). This was established in the 1940's for the testing of anti-aircraft missiles. Both sites lie within a hutted camp, shown on an aerial photograph dated May 1946, associated with the main research site. The camp comprised workshops, assembly shops, accommodation huts and ancillary buildings. A post-medieval farmhouse, Moel Ynys, (PRN 94920), located c. 120m to the south-west of the current site, is known to have been requisitioned as sergeants' accommodation.
- 2.4 Previous fieldwork undertaken by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) has established that two BCF (British Concrete Foundation) huts survive to the north of the current site and that other structures associated with the research camp survive either as buried archaeology or as ruinous structures in the vicinity.
- 2.5 Further Second World War features in the vicinity of the current site include; an observation post (PRN 31450) recorded c. 170m to the south-west of Site A, a prefabricated concrete hut (PRN 30798), the fragmentary remains of a military structure (PRN 31449) and a further observation post (PRN 31465), all located c. 250m to the west of Site A.

3. AIMS AND OBJECTIVES

3.1 The objectives of the archaeological works, as set out in the WSI (CA 2017) were to:

- record the nature of the main stratigraphic units encountered
- assess the overall presence, survival and potential of structural and industrial remains
- assess the overall presence, survival, condition, and potential of artefactual and ecofactual remains

3.2 The specific aims of the work are to:

- record any evidence of past settlement or other land use
- recover artefactual evidence to date any evidence of past settlement that may be identified
- sample and analyse environmental remains to create a better understanding of past land use and economy

4. METHODOLOGY

4.1 The fieldwork followed the methodology set out within the WSI (CA 2017). An archaeologist was present during the programme of archaeological mitigation work comprising:

- A programme of archaeological SMS undertaken throughout Site A.
- An archaeological watching brief undertaken during ground reduction in the area of Permitted Development.

4.2 All machine excavation was undertaken under constant archaeological supervision to the top of the first significant archaeological horizon or the natural substrate, whichever was encountered first. Where archaeological deposits were encountered they were excavated by hand in accordance with CA Technical Manual 1: *Fieldwork Recording Manual*.

4.3 Deposits were assessed for their palaeoenvironmental potential in accordance with CA Technical Manual 2: *The Taking and Processing of Environmental and Other*

Samples from Archaeological Sites. No deposits were identified that required sampling. All artefacts recovered were processed in accordance with Technical Manual 3: *Treatment of Finds Immediately after Excavation*.

- 4.4 The archive from both the SMS and watching brief is currently held by CA at their offices in Kemble and will be deposited with the Ceredigion Museum, Aberystwyth. A digital copy of the archive will also be deposited with the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW).

5. RESULTS (FIGS 2-5)

- 5.1 This section provides an overview of the SMS and watching brief results; detailed summaries of the recorded contexts can be found in Appendix A.
- 5.2 The earliest deposit encountered during the archaeological works was sterile wind-blown sand 136. Where investigated (e.g. within machine excavated Test Pit (TP) 1, Fig. 2) this deposit was found to measure at least 3m in thickness. No finds, features or deposits of archaeological interest were identified within this deposit. Sands 136 were directly overlain by topsoil 123 which measured an average of 0.12m in thickness.
- 5.3 Towards the western, southern and northern limits of the stripped area the topsoil was overlain by compact stony sub-base 135 for crushed concrete and stone road surface 131, which measured up to 4.2m in width and 0.4m in thickness.
- 5.4 To the east of road 131 the remains of four structures (Huts 1-4, Fig. 2) were identified. All were of identical construction, were regularly spaced, c. 12m apart, and measured c. 12.5m in length and c. 6.5m in width. The identified structures correlate closely with buildings depicted on an aerial photograph taken in 1946 (see Fig. 2 for correlation). Following discussions between CA and DAT DM it was agreed that the southern half of Hut 2 (Figs 2 & 3) would be cleaned and recorded in detail. It was further agreed that a machine excavated slot would be excavated and recorded through Hut 1 and road 131 (Fig. 2, section AA).
- 5.4 The construction cuts (132, 113, 109 and 110 respectively) for concrete strip foundations 130 (Hut 1), 121 (Hut 2), 133 (Hut 3) and 134 (Hut 4) cut through topsoil

123. Impressions noted within the surviving mortar on top of concrete foundation 121 suggest that a single-skin brick wall had been constructed around its outer edge. On the interior of this postulated brick wall, within Hut 2, five post sockets, constructed from red brick and measuring c. 0.25m in length and c. 0.2m in width, were identified at 1m intervals. The remains of concrete posts were visible within two of these sockets.

5.5 Internally the concrete foundations for Huts 1-4 were butted by compact beach cobble deposits (129, 120, 108 and 105 respectively). These deposits appear to represent the deliberate import of sub-base material for more formal internal surfaces, the latter presumably being removed following the abandonment and subsequent demolition of the huts.

5.6 Externally, the concrete strip foundations for Huts 1-4 were butted by compacted beach cobble and sand paths 126, 117, 107 and 103 respectively. These paths measured up to 3.6m in length, 3.3m in width and 0.14m in thickness and also butted road 131 to the west.

5.7 The aforementioned structural features and deposits were sealed by a thin layer of silty clay, 137, which contained abundant mortar, red brick and concrete fragments and, as such, may represent a layer of demolition material or make-up. This was in turn sealed by modern topsoil 101.

6. THE FINDS

6.1 No artefactual material was observed or recovered during the course of the archaeological works; however a quantity of potential ordnance identified in the vicinity of Huts 1-4 was removed by specialist contractors prior to archaeological excavation/recording taking place.

7 DISCUSSION

7.1 Despite the close proximity of a prehistoric burnt mound recorded to the south-west of the current site (see *archaeological background* above), no evidence of further prehistoric activity was exposed by the current works.

- 7.2 Remains associated with the Second World War military research camp at Ynyslas, comprising four structures (Huts 1-4) and a road were identified during the current works. All correlated closely with structures depicted by an aerial photograph dated 1946 (see *archaeological background* above).
- 7.3 The exact function of Huts 1-4 remains unclear. However, the lack of domestic artefacts identified in association with these structures, coupled with the presence of ordnance noted in their immediate vicinity, suggests that they may have functioned as workshops or buildings for munitions storage rather than accommodation. Whatever their function, given their wartime construction date, Huts 1-4 would certainly have used 'utility' construction methods, featuring prefabricated sections (Lowry 1995, 110). This assertion is supported by the excavated evidence from the current works and by the presence of an extant structure of similar dimensions built using these techniques, located in the sand dunes immediately to the west of the current site (see Fig. 5 for photograph).

8. CA PROJECT TEAM

Fieldwork was undertaken by Peter Busby, assisted by Gary Baddeley and Tom Weavill. The report was written by Tim Havard. The illustrations were prepared by Aleksandra Osinska. The archive has been compiled and prepared for deposition by Hazel O'Neill. The project was managed for CA by Steven Sheldon.

9. REFERENCES

- BGS (British Geological Survey) 2017 *Geology of Britain Viewer* <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> Accessed 10 May 2017
- CA (Cotswold Archaeology) 2017 *Land to the Rear of Long Mynd & Myn Y Don, Ynyslas, Borth, Ceredigion: Written Scheme of Investigation for a Programme of Archaeological Works*
- Lowry, B. (ed.) 1995 *20th Century Defences in Britain. An introductory Guide* York, CBA

APPENDIX A: CONTEXT DESCRIPTIONS

Context No.	Type	Fill of	Context interpretation	Description	L (m)	W (m)	Depth/thickness (m)
101	Layer		Topsoil	Dark grey-brown silt sand	>128	>18	0.17
102	Void		Void	Void			
103	Deposit		Path between Hut 4 and road 131	Compacted beach cobbles, pebbles and sand	3.5	3.15	0.09
104	Void		Void	Void	-	-	-
105	Deposit		Internal sub-base for floor of Hut 4	Compacted beach cobbles mixed with dark brown sand	>4.95	5.5	>0.1
106	Void		Void	Void	-	-	-
107	Deposit		Path between hut 3 and road 131	Compacted beach cobbles, pebbles and sand	3.3	3.2	0.1
108	Deposit		Internal sub-base for floor of Hut 3	Compacted beach cobbles mixed with dark brown sand	>4.8	5.5	>0.1
109	Cut		Construction cut for concrete foundation 133	Vertical sides, flat base. Not fully exposed	>10.5	0.65	>0.05
110	Cut		Construction cut for concrete foundation 134	Vertical sides, flat base. Not fully exposed	>11	0.65	>0.09
111	Fill	109	Fill	Backfill of construction cut 109. Mid-dark grey silt clay with occasional mortar fragments.	>10.5	0.65	>0.05
112	Fill	110	Fill	Backfill of construction cut 110. Mid-dark grey silt clay with occasional mortar fragments.	>11	0.65	>0.09
113	Cut		Construction cut for concrete foundation 121	Vertical sides, flat base. Not fully exposed	>7.9	0.59	0.32
114	Fill	113	Fill	Backfill of construction cut 113. Mid-dark grey silt clay with occasional mortar fragments.	>7.9	0.59	0.32
115	Void		Void	Void	-	-	-
116	Void		Void	Void	-	-	-
117	Deposit		Path between Hut 2 and road 131	Compacted beach cobbles, pebbles and sand	3.6	3.3	0.14
118	Void		Void	Void	-	-	-
119	Void		Void	Void	-	-	-
120	Deposit		Internal sub-base for floor of Hut 2	Compacted beach cobbles mixed with dark brown sand	>4.2	5.4	0.29
121	Deposit	113	Concrete strip foundation of Hut 2	Concrete	>7.7	0.59	0.32
122	Void		Void	Void	-	-	-
123	Layer		Buried topsoil	Mid-dark grey-brown silt sand	>128	>18	0.12
124	Void		Void	Void	-	-	-
125	Void		Void	Void	-	-	-
126	Deposit		Path between Hut 1 and road 131	Compacted beach cobbles, pebbles and sand	3.3	2.15	0.16
127	Void		Void	Void	-	-	-
128	Void		Void	Void	-	-	-
129	Deposit		Internal sub-base for floor of Hut 1	Compacted beach cobbles mixed with dark brown sand	9.4	5.6	0.28
130	Deposit	132	Concrete strip foundation of Hut 1	Concrete	12.5	0.59	>0.26
131	Deposit		Perimeter access road	Finely crushed concrete and stone	>135	4.35	0.14

132	Cut		Construction cut for concrete foundation 130	Vertical sides, flat base.	>9.7	0.68	0.26
133	Deposit		Concrete strip foundation of Hut 3	Concrete	>5.2	6.5	>0.1
134	Deposit	110	Concrete foundation of Hut 4	Concrete	>4.95	6.5	>0.1
135	Deposit		Sub-base for perimeter road 131	Compact roughly crushed stone and concrete	>135	3.45	0.14
136	Layer		Wind-blown sand	Sterile light grey-yellow wind-blown sand	>118	>18	>3m
137	Layer		Demolition /make-up layer	Dark grey silt clay with abundant mortar, red brick and concrete fragments	>118	>18	0.09
138	Fill	132	Fill	Backfill of construction cut 132. Mid-dark grey silt clay with occasional mortar fragments.	>9.7	0.68	0.26



Site A
 WB Area



0 1km

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PROJECT TITLE

Land to the Rear of Long Mynd and Min Y Don, Ynyslas, Borth

FIGURE TITLE

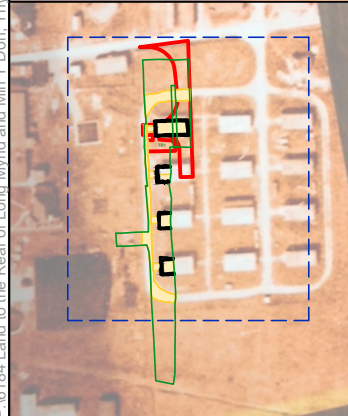
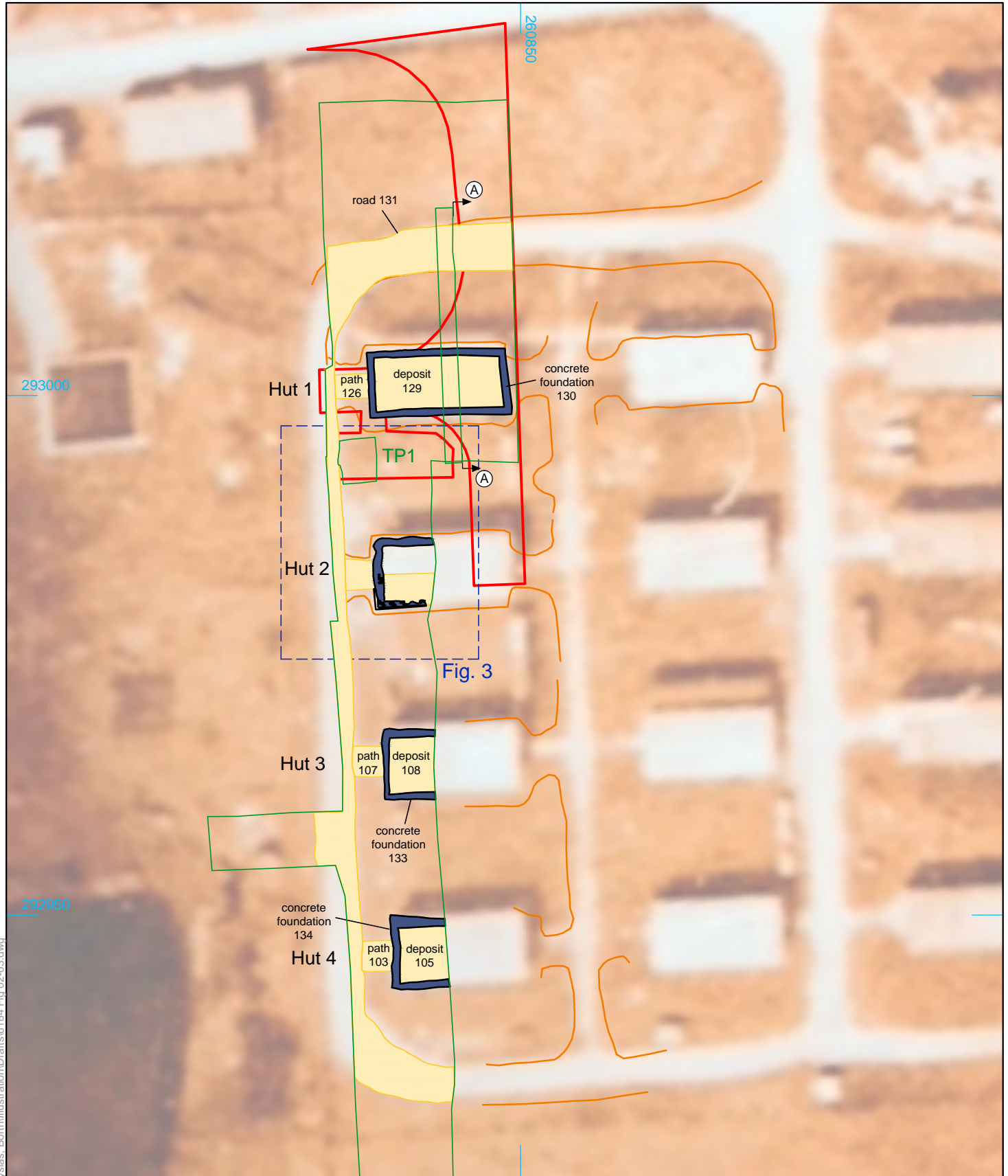
Site location plan, showing Site A and watching brief area

DRAWN BY AO
 CHECKED BY DJB
 APPROVED BY SS

PROJECT NO. 6184
 DATE 15/05/2017
 SCALE @A4 1:25,000

FIGURE NO.

1



- Site A
- limit of excavation
- deposit
- structural feature
- observed earthworks

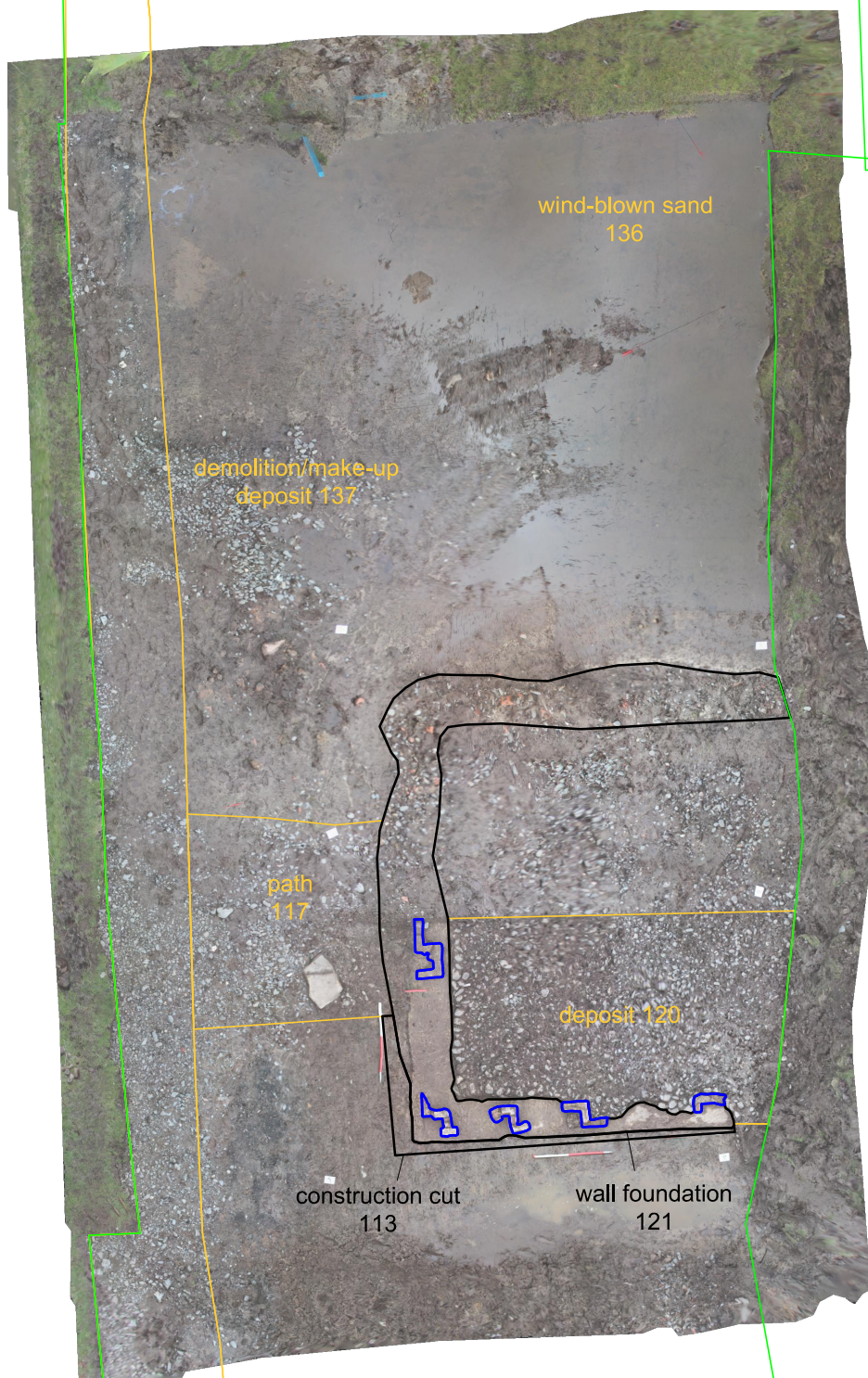


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Land to the Rear of Long Mynd and Min Y Don, Ynyslas, Borth

FIGURE TITLE
The site showing location of SMS and WB areas, 1946 aerial photograph, observed earthworks and identified archaeological structures/deposits

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- limit of excavation
- deposit
- structural feature
- brick post socket



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FIGURE TITLE
Hut 2: plan

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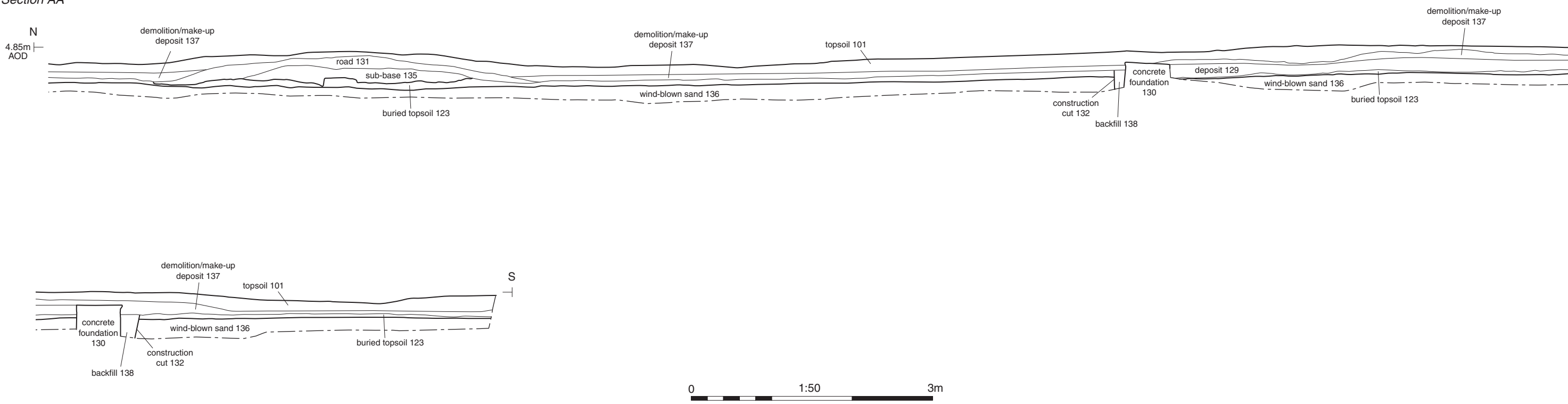
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FIGURE NO.

3



Section AA





View of Hut 2 looking north (1m scales)



Extant concrete hut in dunes to west of site, looking north



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PROJECT TITLE

Land to the Rear of Long Mynd and Min Y Don, Ynyslas, Borth

FIGURE TITLE

Photographs

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 SCALE@A4 N/A

FIGURE NO.

5

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