

ASSESSMENT OF THE REMAINS OF THE EXMOOR
AND PORLOCK RAILWAY AND THE SOUTHERN
BRANCH OF THE WARREN CANAL, EXMOOR:
LARKBARROW CORNER TO WARREN FARM
PROJECT REPORT

By Hazel Riley



ASSESSMENT OF THE REMAINS OF THE EXMOOR
AND PORLOCK RAILWAY AND THE SOUTHERN
BRANCH OF THE WARREN CANAL, EXMOOR:
LARKBARROW CORNER TO WARREN FARM

PROJECT REPORT

By Hazel Riley

Date of report: July 2018
Copyright: © The author

Hazel Riley BA (Hons), ACIFA, FSA
Consultant in Landscape History, Management and Conservation Grazing
The Furley Herd of Dexter Cattle
New House Cottage
Furley
Axminster
Devon
EX13 7TR
01404 881330
hazelfurleydexter@btinternet.com

CONTENTS

ABBREVIATIONS

ACKNOWLEDGEMENTS

LIST OF FIGURES AND IMAGE ACKNOWLEDGEMENTS

1.0 EXECUTIVE SUMMARY

2.0 INTRODUCTION

3.0 HISTORY AND ARCHAEOLOGY

4.0 OBJECTIVES

5.0 METHODOLOGY

6.0 RESULTS

7.0 DISCUSSION AND RECOMMENDATIONS

8.0 REFERENCES

OASIS PROJECT NO 322765

ABBREVIATIONS

EH English Heritage

EMP Exmoor Mires Partnership

ENPA Exmoor National Park Authority

HECO Historic Environment Conservation Officer

HER Historic Environment Record

LiDAR Light Detection and Ranging

NMP National Mapping Programme

ACKNOWLEDGEMENTS

Shirley Blaylock (ENPA) commented on the draft report and provided background material for the survey work.

LIST OF FIGURES AND IMAGE ACKNOWLEDGEMENTS

Front cover: The railway track bed between Ram's Combe and Larkbarrow Corner (Hazel Riley)

Figure 1 Location map (Contains OS data © Crown copyright and database rights 2018 Ordnance Survey)

Figure 2 Survey location and topography (© Crown copyright and database rights 2018 Ordnance Survey 0100031673)

Figure 3 Extract from Ordnance Survey 1st edition map showing track on course of railway track bed between Warren Farm and Ram's Combe (OS 1888) (© Crown copyright and database rights 2018 Ordnance Survey 100024878)

Figure 4 The railway track bed with the LiDAR images as base map (© Geomatics)

Figure 5 Profiles across the railway track bed 1:100 scale

Figure 6 The railway track bed east of Ram's Combe (1m scale) (Hazel Riley)

Figure 7 A drainage channel cutting the railway track bed (1m scale) (Hazel Riley)

Figure 8 The surfaced track on the railway track bed to the east of Ram's Combe (1m scale) (Hazel Riley)

Figure 9 The railway track bed east of Warren Farm (1m scale) (Hazel Riley)

Figure 10 Dumps of hardcore on the railway track bed east of Warren Farm (1m scale) (Hazel Riley)

Figure 11 The railway track bed west of Ram's Combe (1m scale) (Hazel Riley)

Figure 12 Erosion of the earthworks west of Ram's Combe (1m scale) (Hazel Riley)

Figure 13 Ironstone prospection trench at the head of Sparcombe Water (1m scale) (Hazel Riley)

1.0 EXECUTIVE SUMMARY

An archaeological assessment of the earthwork remains of the Exmoor and Porlock Railway, between Larkbarrow Corner and Warren Farm, Exmoor, was carried out in advance of proposed works on a bridleway which runs along its course.

2.0 INTRODUCTION

2.1 This report sets out the results of an archaeological assessment of the remains of the Exmoor and Porlock Railway (also known as the Simonsbath to Porlock railway) and the southern branch of the Warren Canal between Larkbarrow Corner and Warren Farm. The work was commissioned by the Historic Environment Conservation Officer (HECO) of the Exmoor National Park Authority (ENPA) in advance of proposed works on the Warren to Larkbarrow Bridleway, part of the Macmillan Way West, which uses the course of the railway. The works include drainage across the path and regrading and resurfacing stretches of the path (ENPA 2018).

2.2 The railway track bed between Larkbarrow Corner and Warren Farm lies on the southern slopes of Elsworthy, on the SE side of Exmoor Forest, at an altitude of c 430m OD, between SS 822 416 and SS 799 409 (Fig 1). Elsworthy forms a ridge of open moorland separating the headwaters of the River Exe to the south and the tributary streams of Badgeworthy Water to the north. Several tributary streams of the River Exe, including Ram's Combe and Sparcombe Water, form small combes on the south side of Elsworthy and this topography is evident in the layout of the railway (Fig 2). Elsworthy supports rough grazing with a dominant vegetation of purple moor grass.

2.3 The geology of the survey area comprises Devonian sandstones of the Hangman Sandstone Formation (bgs.ac.uk).



Fig 1 Location map

3.0 HISTORY AND ARCHAEOLOGY

3.1 John Knight purchased the Exmoor Allotment from the Crown in 1818, following the Inclosure Act for parts of the Forest of Exmoor granted in 1815 (Orwin 1929, 19). John Knight's scheme for enclosing and improving his Exmoor estate included the provision of a railway from Simonsbath to Porlock Weir and canals from Pinkery to Warren Farm and from Exe Head to Swap Hill and Ram's Combe, all concerned with the agricultural development of Exmoor (Burton 1989, 62-5). John Knight's son, Frederic, took over the estate from his father in 1841. Frederic carried out prospecting work for ironstone on Exmoor and began negotiations with the Blathway Estate for the construction of a railway from Simonsbath to Porlock Weir, known as the Exmoor and Porlock Railway, which was necessary for the successful and profitable exploitation of the mineral deposits on Exmoor. The track bed of the railway was constructed from Warren Farm, across Elsworthy, Larkbarrow and Porlock Allotment to the Whit Stones, SW of Porlock Weir in the period between December 1860 and October 1861. However, production and therefore revenue from the Exmoor mines was disappointing and the negotiations with the Blathway Estate were terminated in 1865 (Orwin 1929, 144-151; Orwin *et al* 1997, 237). The Exmoor and Porlock Railway was never completed but the earthworks of the track bed can still be traced between Warren Farm and the Whit Stones (Exmoor HER MSO 7906).

3.2 The Ordnance Survey 1st edition 6" map depicts a track on the course of the railway track bed between Larkbarrow Corner and Warren Farm (OS 1888) (Fig 3).

3.3 The railway track bed was recorded from aerial photographs as part of the English Heritage (EH) Exmoor National Mapping Programme (NMP) project (Hegarty and Toms 2009; Hegarty and Wilson-North 2014). Detailed metric and geophysical surveys of sections of the track bed were undertaken as part of the Dig Porlock project (Riley 2013; Carey 2013; Gillings and Taylor 2013).

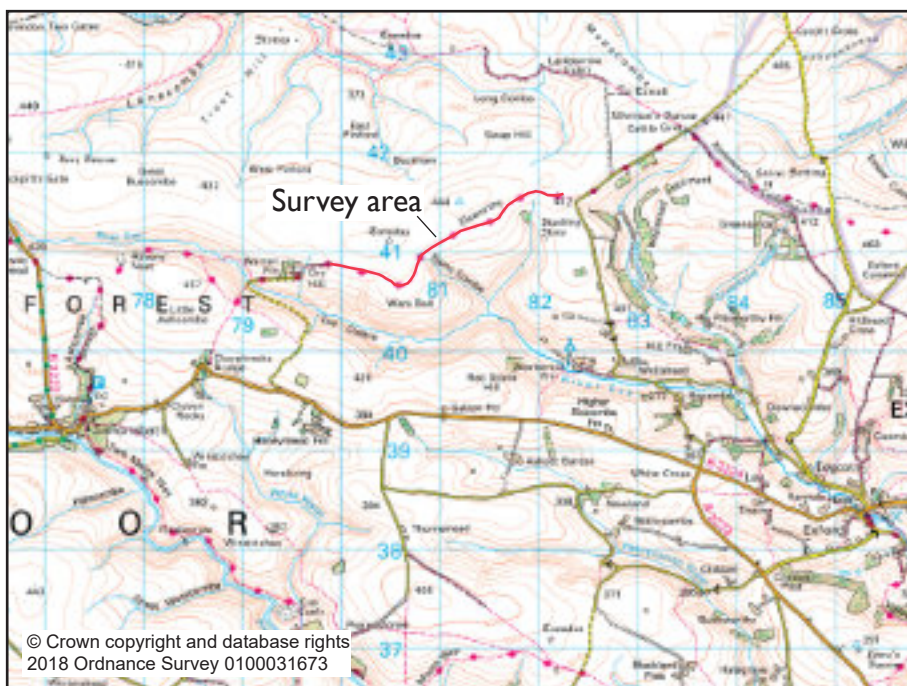


Fig 2 Survey location and topography



© Crown copyright and database rights
2018 Ordnance Survey 100024878

Fig 3 Extract from Ordnance Survey 1st edition map showing track on course of railway track bed between Warren Farm and Ram's Combe (OS 1880)

4.0 OBJECTIVES

4.1 The main objectives of the survey were to assess the extant remains of the railway track bed in the survey area, and to inform its future management.

5.0 METHODOLOGY

5.1 The desk-based assessment located records relevant to the survey in the following: Exmoor Historic Environment Record (HER) (www.exmoorher.co.uk) MSO7906

5.2 The following historic maps and air photographs were consulted

Ordnance Survey 1st edition 6" map Somerset 65 NW & 65 NE surveyed 1887, published 1888

Ordnance Survey 2nd edition 6" map Somerset 65 NW & 65 NE (revised 1902, published 1903)

RAF vertical air photographs (1946-48)

5.3 The Light Detection and Ranging (LiDAR) datasets in the form of geo-referenced raster images, collected by Geomatics with a spatial resolution of 50cm, for the Exmoor Mires Partnership (EMP), held at the ENPA, were consulted for the survey area. These images were used as the basis for the rapid field assessment.

5.4 A rapid assessment of the railway track bed between Larkbarrow Corner (SS 822 416) and Warren Farm (SS 799 409) was undertaken by the author in July 2018. A description of the railway track bed was made. A large mineral prospecting trench close to the railway track bed was also investigated.

5.4.1 Profiles across the railway track bed were surveyed at a scale of 1: 100 to illustrate its morphology.

5.4.2 Photographs of the track bed and its landscape setting were taken and form part of the project archive.

5.4.3 The survey archive has been deposited with the Exmoor HER, ENPA.

6.0 RESULTS

6.1 The railway track bed is clearly shown as an earthwork on the LiDAR images. These are used as the base map for the following description (Fig 4).

6.2 Between Larkbarrow Corner and Ram's Combe the railway track bed comprises a level track, 4-4.5m wide, flanked by an upper and lower bank. The railway track bed is a substantial feature in the landscape (Front cover). The upper bank is 1.5m wide and 1.2m high; a drainage channel 1m wide, 0.7m deep, runs along its northern side. The lower bank is generally smaller in size, 1.1m wide, 0.9m high, and is absent in places (Fig 5, profiles 2 & 3). To the east of Ram's Combe, at SS 81216 41219, the track bed

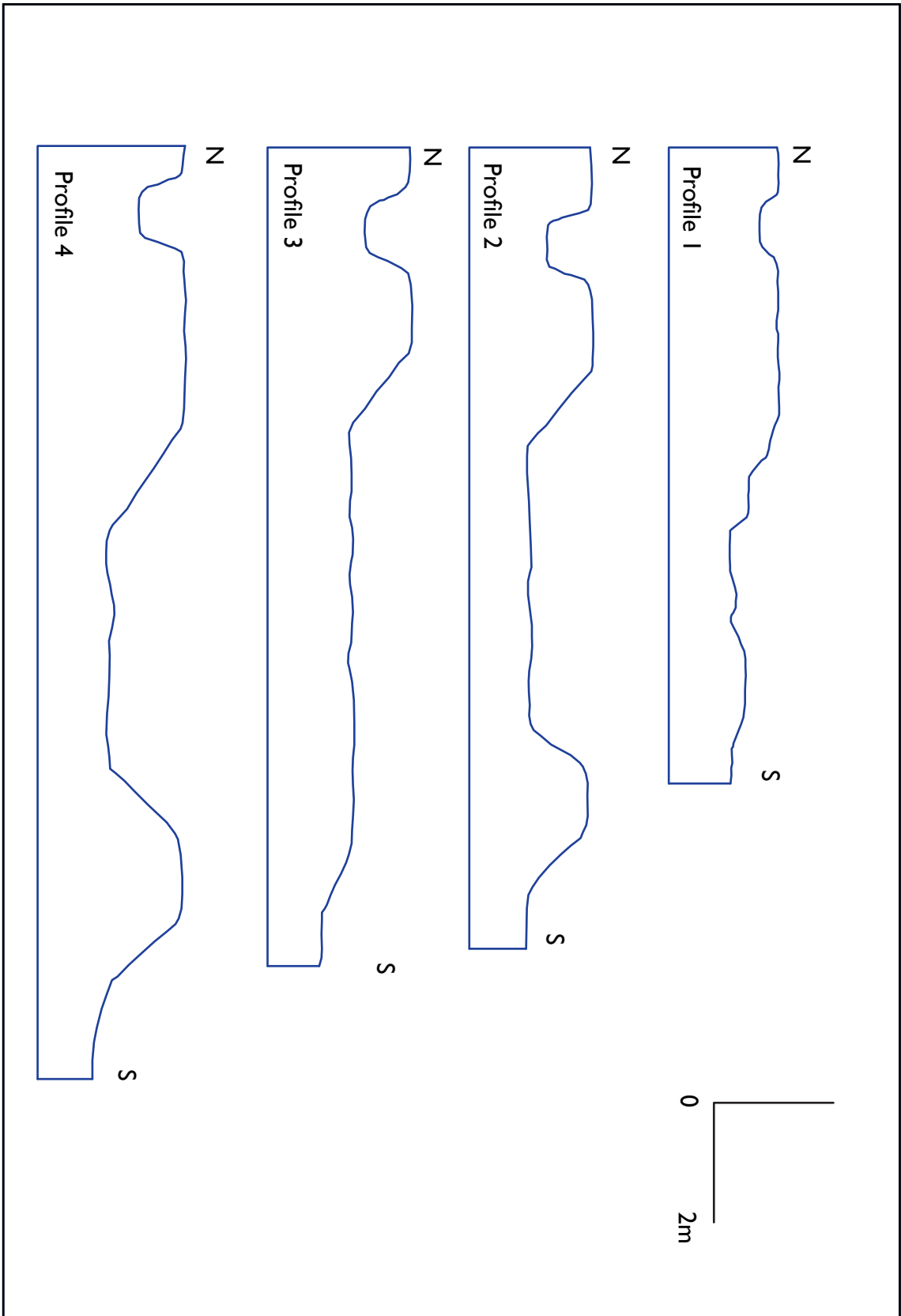


Fig 5 Profiles across the railway track bed 1: 100 scale

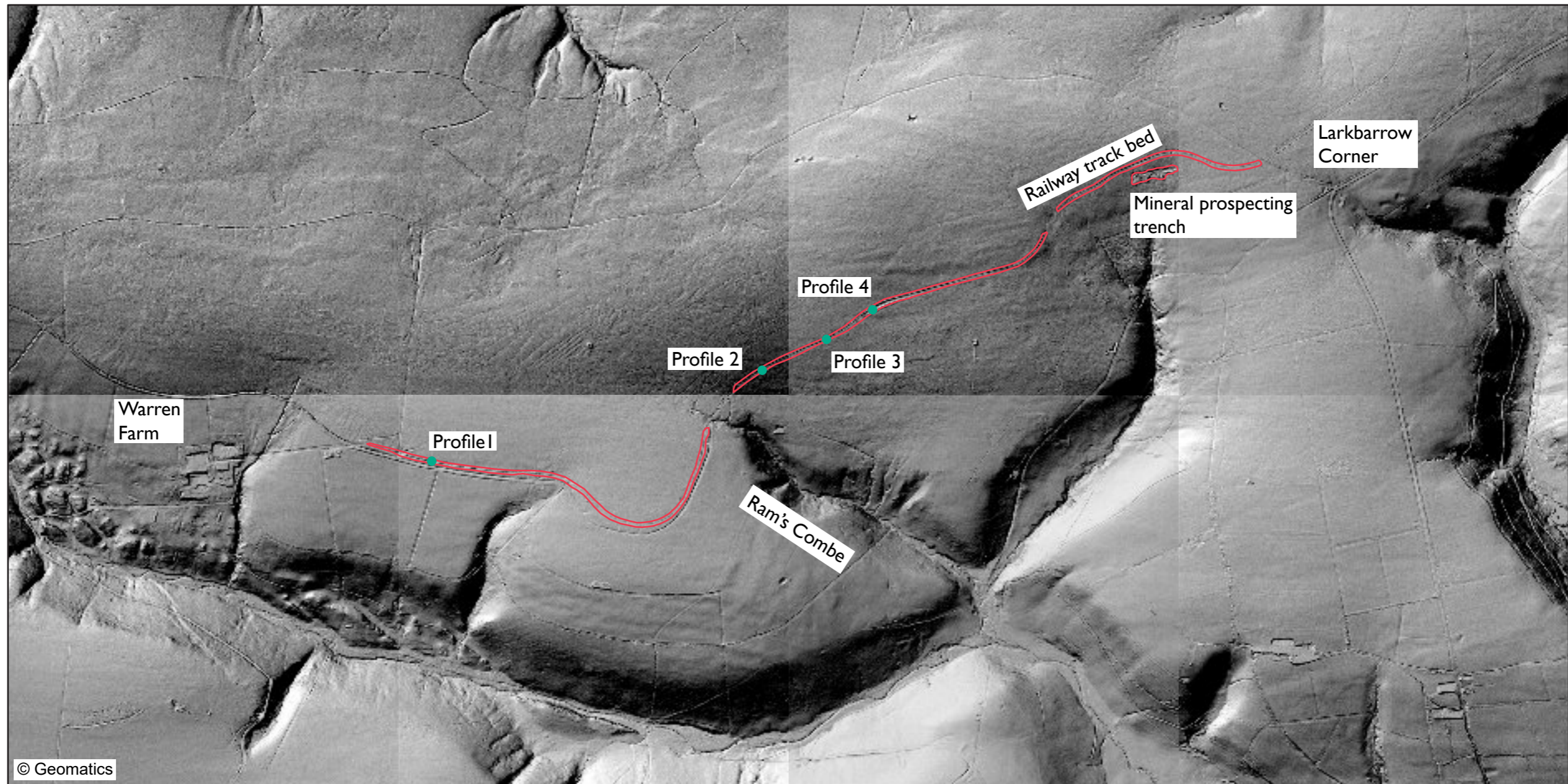


Fig 4 The railway track bed between Warren Farm and Larkbarrow Corner with LiDAR images as base map

is flanked by larger banks for about 100m: the upper bank is 3m wide, 1.2 m high, the lower bank is 1.5m wide, 1.2m high (Fig 5, profile 4; Fig 6). The railway track bed is cut through by several drainage channels between Larkbarrow Corner and Ram's Combe (Fig 7).

6.3 Between Ram's Combe and SS 80881 41025 the railway track bed has been graded and surfaced with hardcore to form a track (Fig 8).

6.4 Between Ram's Combe and the track to Warren Farm the railway track bed is different in character. The upper bank is broad and flat-topped, 3m wide, 0.5m high, the lower bank is low and flat-topped, 1m wide, 0.3m high. The upper bank is flanked by a drainage channel, 1m wide, 0.3m deep (Fig 5, profile 4; Fig 9). To the east of Warren Farm the railway track bed is used as a track for agricultural vehicles and hardcore has been dumped across the earthworks (Fig 10). West of Ram's Combe, the lower bank is intermittent; the upper bank is a low, flat-topped earthwork, used as a path, which is badly eroded in places by this path (Figs 11, 12).

6.5 To the south of the railway track bed, at the head of Sparcombe Water (SS 8195 4157) a large trench, 120m E/W, 10m N/S and 1-2m deep, with spoil dumps on its south edge is probably the remains of an ironstone prospecting trench, dating from the mid-19th century (MSO10390) (Fig 13).



Fig 6 (top left) The railway track bed east of Ram's Combe (1 m scale) (Hazel Riley)

Fig 7 (above) A drainage channel cutting the railway track bed (1 m scale) (Hazel Riley)



Fig 8 (left) The surfaced track on the railway track bed east of Ram's Combe (1 m scale) (Hazel Riley)

7.0 DISCUSSION AND RECOMMENDATIONS

7.1 The railway track bed of the Exmoor and Porlock Railway survives in good condition for much of its course between Larkbarrow Corner and Warren Farm.

7.2 Howell Jones, an employee of the Dowlais Iron Company, attended the letting of the work for the railway's construction at Warren Gate in December 1860. He noted that the work involved taking the turf off so that it could be properly levelled, and that this was done by local labourers (Orwin *et al* 1997, 236-7). William Dunstan visited the railway in October 1861 on behalf of the Dowlais Iron Company. He noted that:

The formation of so much of proposed Railroad as extends from Boundary Fence of Exmoor to Warren Farm has been completed so far as the removal of the sod or turf and the levelling of the loose earth and stones beneath are concerned but no low places are filled up nor fences crossed.
(Orwin *et al* 1997, 238)

7.3 The difference in morphology of the earthworks east and west of Ram's Combe is significant. John Knight's Warren Canal, begun in 1819, runs from Exe Plain, along the northern boundaries of Prayway Meads and Elsworthy and stops NW of Larkbarrow Corner (Fig 4). Burton maps an arm of this canal to the south, which runs along the northern side of the Warren Farm enclosures from Prayway Meads to Ram's Combe



Fig 9 (top right) The railway track bed east of Warren Farm (1m scale) (Hazel Riley)



Fig 10 (above) Dumps of hardcore on the railway track bed east of Warren Farm (1m scale) (Hazel Riley)



Fig 11 (right) The railway track bed west of Ram's Combe (1m scale) (Hazel Riley)

and suggests that John Knight planned to run his railway along the lower bank while Frederic planned to use the upper bank for his railway, thus explaining the wide, flat banks (Burton 1989, 65-6; map).

7.3.1 The field evidence is equivocal. The Warren Canal pre-dates the enclosures and has clearly been used to lay out enclosure banks on Prayway Meads, Elsworthy and Warren. It may have been obliterated by the construction of the Warren Farm enclosures and the extant earthworks are part of Frederic Knight's Exmoor to Porlock Railway. The banks may have been levelled to help with farm access.

7.4 The regrading and resurfacing of the railway earthworks, and any drainage operations, will have a detrimental effect on the archaeology.

7.4.1 The extent and chronology of John Knight's improvement on Exmoor is only now being recognised (Wilson-North 2017, 19-20). The course of the railway track bed between Ram's Combe and Warren Farm clearly contains information about works carried out by both John Knight and Frederic Knight and any proposals to modify these remains should be carefully considered.

7.5 A well used path on the north side of the railway track bed runs from Larkbarrow Corner to the surfaced track east of Ram's Combe at SS 80881 41025 and it is recommended that traffic is diverted from the railway track bed to this path.



7.6 Similar measures could be put in place to divert traffic away from the railway track bed between Ram's Combe and Warren Farm to avoid further damage to the archaeology.

7.7 Dumping of hardcore across the earthworks at Warren Farm should be stopped.



Fig 12 (above left) Erosion of the earthworks west of Ram's Combe (1m scale) (Hazel Riley)

Fig 13 (left) Ironstone prospection trench at the head of Sparcombe Water (1m scale) (Hazel Riley)

8.0 REFERENCES

- Burton, R A 1989 *The Heritage of Exmoor*
- Exmoor National Park Authority 2018 *Warren to Larkbarrow Bridleway DU 5/6*
- Carey, C 2013 *Lucott Gate, Exmoor: Geophysical Survey*
- Gillings, M and Taylor, J 2013 *Porlock Allotment, Exmoor: Geophysical Survey*
- Hegarty, C and Toms, K 2009 *Exmoor National Park NMP Management and Survey Report*
- Hegarty, C and Wilson-North, R 2014 *The Archaeology of Hill Farming on Exmoor*
- Ordnance Survey 1888 1st edition 6" map Somerset 65.NW & 65NE surveyed 1887, published 1888
- Orwin, C S 1929 *The Reclamation of Exmoor Forest*
- Orwin, C S, Sellick, R and Bonham-Carter, V 1997 *The Reclamation of Exmoor Forest* 3rd edn
- Riley, H 2013 *Dig Porlock: Earthwork Surveys on Porlock Allotment*
- Wilson-North, R 2017 *John Knight of Wolverley and Simonsbath: An Outline Biography*

