

CLOUGHTON CROSS DYKE,
CLOUGHTON WOODS, CLOUGHTON,
NORTH YORKSHIRE

ARCHAEOLOGICAL RECORDING



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On behalf of

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EXECUTIVE SUMMARY

In January 2019, Ed Dennison Archaeological Services (EDAS) Ltd were commissioned by the North York Moors National Park Authority (NYMNPA) to undertake a limited programme of archaeological work to record recent damage to the Cloughton Cross Dyke Scheduled Monument, in Cloughton Woods, Cloughton, North Yorkshire (NGR SE 99543 96070 centred). The project involved surveying the damage using traditional tape-and-offset techniques, and the production of drawn and photographic records, augmented by a descriptive report. This report could then be used to inform potential repairs.

The damage to the dyke had involved the excavation of an L-shaped trench from which the spoil was then used to construct two bicycle jump and ramp features in the central ditch. The two arms of the trench both measured c.2.50m long, with a maximum width of 1.00m and a maximum depth of 0.50m. Cleaning the exposed sides and base of the trench revealed no archaeological features. The western ramp was sub-rectangular in plan, measuring 2.90m long by 1.70m wide, and up to 0.30m high. The eastern ramp lay c.5.0m to the east, and measured 3.50m long by 1.80m wide by 0.80m high. Both ramps appear to have been created by infilling the ditch, rather than cutting into it.

No significant new archaeological information was recovered from the limited programme of recording, although a c.15m length of the cross dyke was surveyed, and so provides a detailed record of this section. In particular, the profile across this section of the dyke will allow comparisons to be made with other recorded dykes in the area. It was also noted that some of the trees of the surrounding plantation lie very close to the outer edges of the monument, and it would be appropriate to fell these to ground level (but not remove the stumps), to ensure the continued preservation of adjacent archaeological deposits.

1 INTRODUCTION

Reasons and Circumstances of the Project

- 1.1 In January 2019, Ed Dennison Archaeological Services (EDAS) Ltd were commissioned by the North York Moors National Park Authority (NYMNP), through their Head of Historic Environment (Mags Waughman), to undertake a limited programme of archaeological work to record recent damage to the Cloughton Cross Dyke Scheduled Monument, in Cloughton Woods, Cloughton, North Yorkshire (NGR SE 99543 96070 centred) (see figures 1 and 2). The recording was funded by the NYMNP.
- 1.2 The project involved surveying the damage using traditional tape-and-offset techniques, and the production of drawn and photographic records, augmented by a descriptive report. This report could then be used to inform potential repairs.

2 ARCHAEOLOGICAL BACKGROUND

- 2.1 The Cloughton Cross Dyke Scheduled Monument was first designated on 9th March 2001 (National Heritage List for England (NHLE) 1019772). The following information is taken from the Scheduled Monument description.
- 2.2 Cross dykes are substantial linear earthworks typically between 0.2km and 1km long and comprising one or more ditches arranged beside and parallel to one or more banks. They generally occur in upland situations, running across ridges and spurs. They are recognised as earthworks or as cropmarks on aerial photographs, or as a combination of both. The evidence of excavation and analogy with associated monuments suggests that their construction spans the millennium from the Middle Bronze Age, although they may have been re-used at a later date. Current information indicates that they were used as territorial boundary markers, probably demarcating land allotment within communities, although they may also have been used as trackways, cattle droveways or defensive earthworks. Cross dykes are one of the few monument types which illustrate how land was divided up in the prehistoric period. They are of considerable importance for any analysis of settlement and land use in the Bronze Age, and very few have survived to the present day and hence all well-preserved examples are considered to be of national importance.
- 2.3 The Cloughton Cross Dyke runs across a ridge of sandstone and Moor Grit at the eastern edge of the North York Moors. The A171 road runs NNW to SSE across the monument and has destroyed this section of the dyke; the monument therefore is split into two separate areas of protection (see figure 1). The cross dyke starts at a stream head at the western end and runs on a north-east alignment across Harmer Brow into a shallow stream valley, then continues across a second spur of high ground and down into Morfar Dale at the eastern end. The monument is represented by a steep-sided ditch which runs between two parallel earthen banks.
- 2.4 To the west of the central stream valley, the ditch is up to 3.0m wide and 1.2m deep below the tops of the banks. At the south-western end, the banks are up to 3.0m wide and stand 0.5m high. Further to the east, within the plantation, the banks are up to 3.5m wide but only 0.3m high; the north-west bank has been largely levelled by forestry operations so that it is now no more than 0.2m high. For the last 50m down the steeper slope into the central stream valley, the earthworks have also been levelled and are no longer visible, although their line is followed by a modern forestry drain. To the east of the central stream valley most of the

earthworks have been almost levelled by forestry operations; only slight traces are visible on the level ground on the top of the ridge and on the lower part of the western slope into the stream valley. However, on the upper part of the western slope and on the eastern slope into Morfar Dale the ditch is visible up to 4.0m wide and 1.0m deep below the tops of the banks, which have a maximum width of 3.5m. The north-western bank is poorly defined and shallow on the western slope, but the south eastern bank stands up to 0.5m high.

- 2.5 In addition to the sections which have been levelled by forestry operations, there are a number of modern breaks in the cross dyke. A bridleway runs across at the top of the slope into Morfar Dale, a second bridleway which follows a forestry track snakes up the slope on the west side of the central stream valley, crossing the monument several times (see figure 2), a forestry track runs along the east side of the central stream, and there are two further breaks towards the western end, one 20m wide and one 7m wide. The cross dyke lies in an area where there are many other prehistoric monuments, including ritual and funerary monuments as well as a settlement, field systems and clearance cairns. Field boundary walls cross the monument alongside the A171 road and at the edge of the plantation towards the western end.
- 2.6 Despite some disturbance, such as 550m and 890m north-east of Gowland Farm, the cross dyke in Cloughton Plantation has survived well. Important environmental evidence which can be used to date the cross dyke and determine contemporary land use will be preserved within the lowest ditch fills. At the south-west end, the ditch is waterlogged and will preserve organic remains, which will yield a wider range of environmental evidence. Evidence for earlier land use will also be preserved in the old ground surface beneath the banks. The lowest ditch fills of the levelled sections will also preserve valuable environmental evidence.
- 2.7 The cross dyke is an unusual example of its type because it crosses two spurs of higher ground separated by a small valley. It is associated with other prehistoric monuments including a settlement, field systems and barrows, and it is thought to represent a territorial boundary. Similar monument groups are known on the Tabular Hills to the south-west and in the west and northern areas of the North York Moors. Such groupings offer important scope for the study of land division for social, ritual and agricultural purposes during the prehistoric period.

3 SURVEY DESCRIPTION

Survey Methodology

- 3.1 A survey baseline was established along the centre of the ditch of that section of the dyke that had been affected by the recent disturbance. This baseline measured 27.20m long and was set on a north-east/south-west alignment, on a bearing of 60° magnetic; using a hand-held GPS with an accuracy of +/- 7m (due to the overhanging tree cover), the south-west end of the baseline lay at NGR SE 99536 96063 and the north-east end at NGR SE 99536 96063. The baseline was also located with reference to the nearest field boundary, an angled partially collapsed drystone wall to the south-west.
- 3.2 An area extending to c.5m to either side of the baseline was surveyed at a scale of 1:50, using traditional hand-held tape and offset methods. The resulting survey shows the overall form of this section of the dyke, together with the areas of disturbance. A profile across a typical section of the dyke was also constructed at a scale of 1:50, again using traditional hand-held tape and offset methods.

- 3.3 A colour photographic record was also produced using an SLR digital camera with 12 mega-pixel resolution. All photographs have been clearly numbered and labelled with the subject, orientation, date taken and photographer's name, and are cross-referenced to digital files etc in a photographic catalogue (see Appendix 1). The photographs are referenced in the following text using square brackets and italic type, the number before the stroke representing the film number and the number after indicating the frame e.g. [1/2].
- 3.4 The survey work was undertaken on 6th February 2019.

Setting and Location

- 3.5 The section of the Cloughton Cross Dyke forming the subject of the survey is located within a coniferous plantation (Cloughton Plantation) some 2.08km north-west of the village of Cloughton and some 310m south-west of the A171 Scarborough to Whitby road, at an elevation of c.197m. The dyke is accessed by foot along a forestry track leaving the west side of the A171, and then through the plantation itself (see figure 1). Within the plantation area, the preservation of the dyke is intermittent, with numerous gaps (see figure 2) and also plantation reaching to within several metres of the earthwork itself; at the time of the survey, tree-felling operations were in progress, resulting in heavily rutted tracks passing through this area [1/116, 1/117]. However, to the south-west of the survey area, within an area of rough pasture, the earthwork is much better preserved [1/120, 1/121, 1/124] (see plate 1).

The Survey Area (see figure 3)

- 3.6 At the south-west end of the survey area, there was a gap in the line of the dyke measuring c.20m long before the earthwork becomes more apparent approaching the boundary of the plantation [1/980, 1/123] (see plate 2). Within this gap, an L-shaped trench had been excavated to supply the soil to create the jumps and ramps further to the north-east [1/977-1/979, 1/991] (see plate 4). The eastern and southern arms of the trench both measured c.2.50m long, and they had a maximum width of 1.00m and a maximum depth of 0.50m. The sides and base of the trench were cleaned (but not cut back) and inspected for any exposed archaeological deposits or features of significance. Three deposits or contexts were noted. The uppermost deposit, and ground surface, was formed by a black silty soil (001), containing a high proportion of decaying organic matter, principally pine needles and leaves; this had an average depth of 0.10m. This soil overlay a 0.14m deep layer of clean mid-brown sandy clay (002), which in turn overlay a clean mottled greyish-brown/orange sand (003); the latter continued below the base of the trench. No possible cuts or deposits associated with either the ditch or bank of the dyke were observed [1/981-1/988] (see plate 3).
- 3.7 Moving north-east, shortly beyond the recently excavated trench, the line of the dyke is crossed by a very spread, south-west facing, scarp, and is flanked to the north and south by disturbance associated with the former plantation; there is a single small birch tree, and numerous rotten coniferous stumps.
- 3.8 The first modern ramp is located immediately south-west of where the dyke recommences as a standing earthwork. The ramp is sub-rectangular in plan, measuring 2.90m long by 1.70m wide, and stands up to 0.30m high [1/998, 1/999] (see plate 5); it appears to have been created by dumping spoil, rather than cutting into the ditch of the dyke. Beyond this ramp, the dyke is formed by a prominent linear depression or ditch, 3.00m wide across the top and up to 1.10m deep; the

flat bottom of the ditch is, on average, 1.00m wide (see plate 4). The northern scarp is both wider and taller than the southern scarp, which is near vertical but stands only 0.60m high. To the northern side of the ditch, there is a parallel flat-topped bank, averaging 2.50m wide by 0.40m high. To the southern side of the ditch, there is a relatively level strip averaging 0.60m wide, and then another parallel flat-topped bank, 2.50m wide and 0.30m high. Although the Scheduled Monument description notes that a bank is present to this side of the ditch for much of the dyke's length, it is possible that, in this section at least, it has been partly modified by forestry activity.

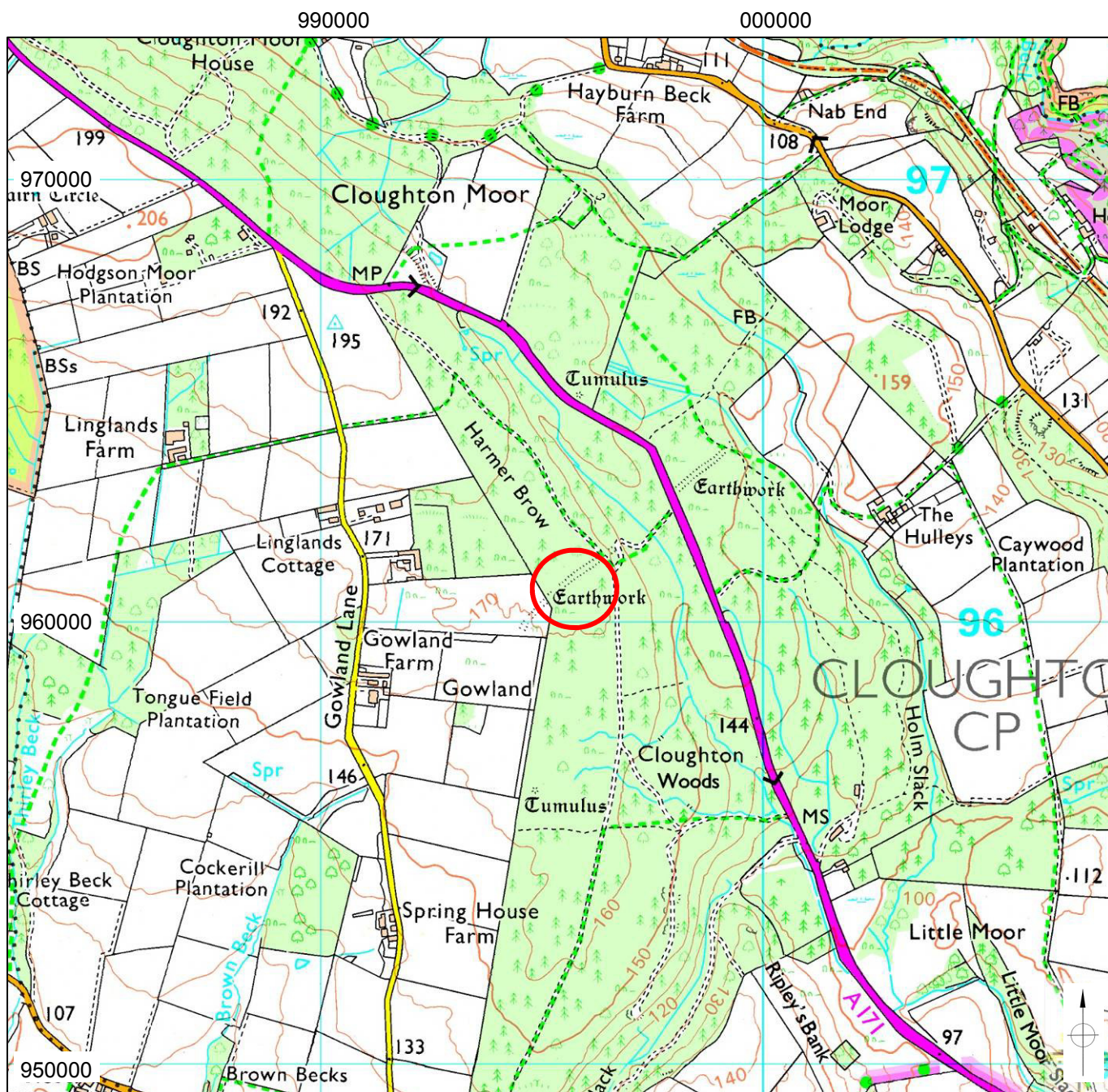
- 3.9 The dyke continues in this form for a total of c.17.50m before another gap is reached. The second modern ramp is positioned approximately half way along the ditch of this section of the dyke. This ramp measures 3.50m long by 1.80m wide by 0.80m high [1/989-1/995] (see plate 6). There is also a low bank running across the top of the eastern edge. As with the previous ramp, it appears to have been created wholly by infilling the ditch, rather than cutting into it. Beyond the ramp, a birch tree stands in the centre of the ditch. Some 4m to the north-east of the birch tree, there is another gap in the line of the dyke, before it resumes again [1/996, 1/997, 1/118] (see plates 7 and 8).

4 DISCUSSION AND CONCLUSIONS

- 4.1 No significant new archaeological information was recovered from the limited programme of recording, although a c.15m length of the cross dyke was surveyed, and so provides a detailed record of this section. In particular, the profile across this section of the dyke will allow comparisons to be made with other recorded dykes in the area. It was also noted that some of the trees of the surrounding plantation lie very close to the outer edges of the monument (see plate 9), and it would be appropriate to fell these to ground level (but not remove the stumps), to ensure the continued preservation of adjacent archaeological deposits.

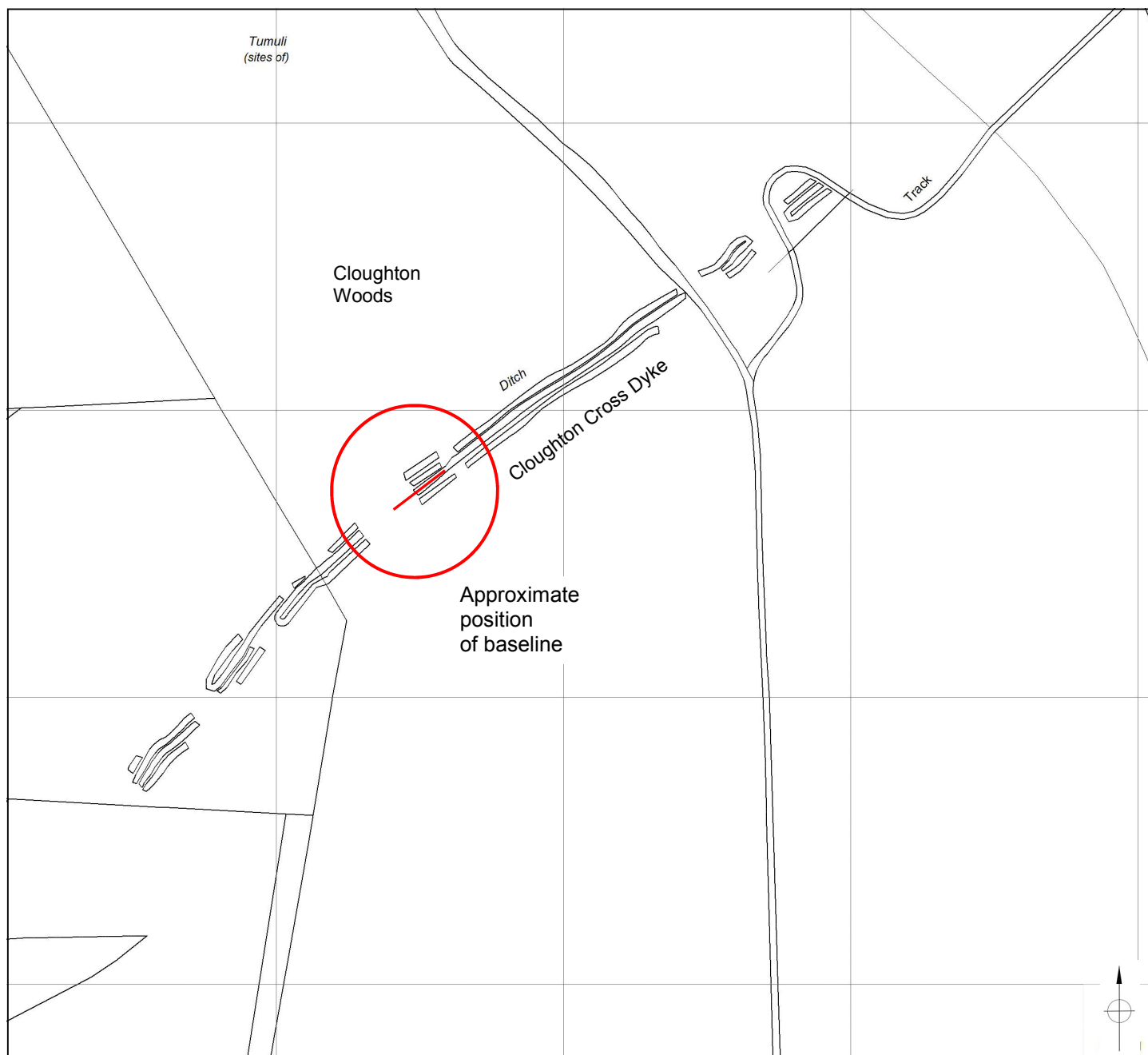
5 ACKNOWLEDGEMENTS

- 5.1 The archaeological recording was commissioned by the North York Moors National Park Authority (NYMNP), and EDAS would like to thank their Head of Historic Environment, Mags Waughman, for her help in setting up the project and for arranging access. Thanks are also due to Ian Austermuhle, Forestry Manager for the North and Central Team of Tilhill Forestry for allowing access.
- 5.2 The on-site survey work was undertaken by Shaun Richardson with assistance from Ed Dennison. The final report and other drawings were produced by Shaun Richardson and Ed Dennison, with the latter taking responsibility for any errors or inconsistencies.



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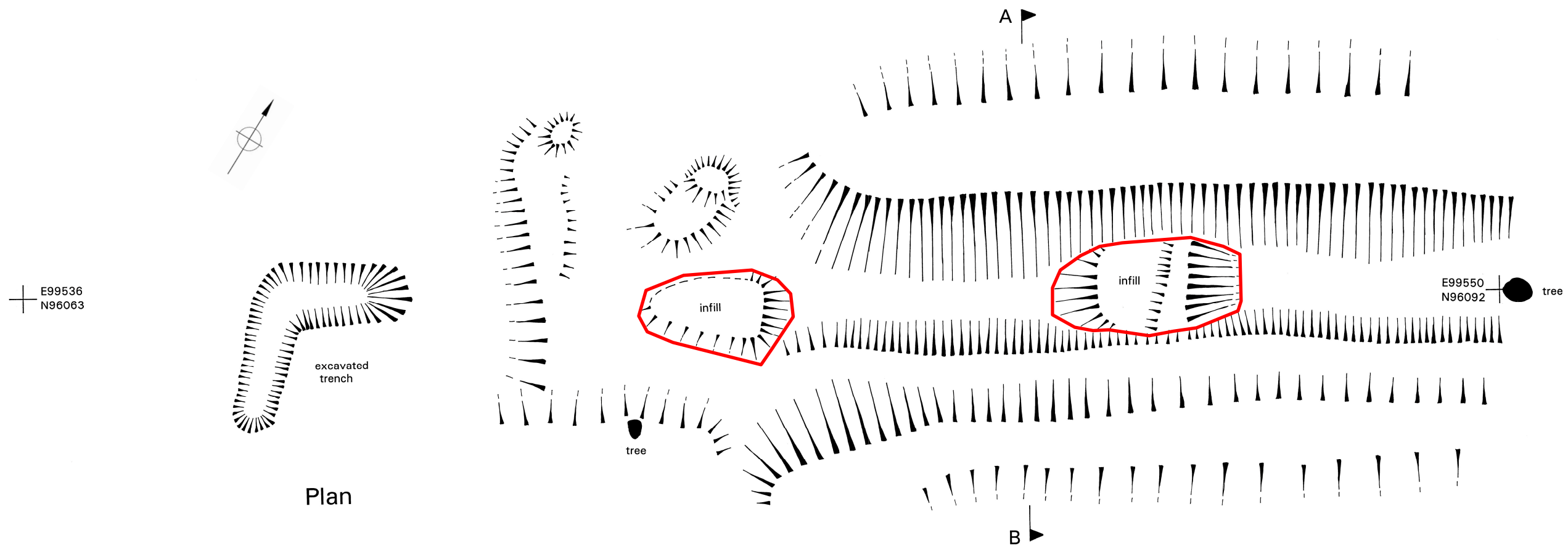
PROJECT		CLOUGHTON CROSS DYKE	
TITLE		GENERAL SITE LOCATION	
SCALE	AS SHOWN	DATE	FEB 2019
EDAS		FIGURE	1



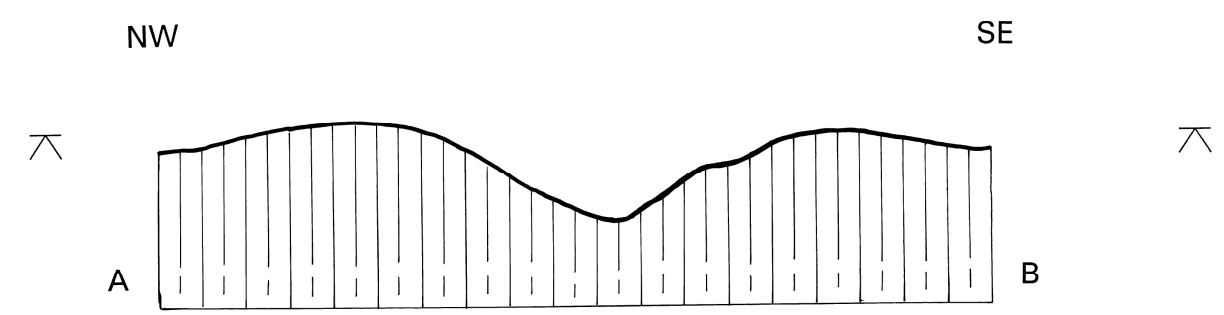
0 100m

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PROJECT		CLOUGHTON CROSS DYKE	
TITLE		DETAILED SITE LOCATION	
SCALE	AS SHOWN	DATE	FEB 2019
EDAS		FIGURE	2



Plan



Profile A-B



PROJECT		CLOUGHTON CROSS DYKE	
TITLE		SURVEY PLAN	
SCALE	AS SHOWN	DATE	FEB 2019
EDAS		FIGURE	3



Plate 1: Line of dyke on edge of plantation to south-west of survey area, looking NE (photo 1/124).



Plate 2: Dyke, immediately south-west of surveyed section beyond gap, looking SW (photo 1/980).



Plate 3: Excavated trench after cleaning, looking SW (photo 1/981).



Plate 4: General view of ramps in central ditch of dyke, looking NE (photo 1/991).



Plate 5: West ramp, looking SW (photo 1/998).



Plate 6: East ramp and dyke, looking NE (photo 1/993).



Plate 7: General view of ramps and dyke, with no entry sign, looking SW (photo 1/995).



Plate 8: Line of dyke immediately north-east of surveyed section, beyond gap, looking NE (photo 1/997).



Plate 9: Line of dyke in plantation to north-east of survey area, looking SW (photo 1/118).

APPENDIX 1
EDAS PHOTOGRAPHIC CATALOGUE

APPENDIX 1: CLOUGHTON CROSS DYKE PHOTOGRAPHIC CATALOGUE

Film 1: Colour digital photographs taken 6th February 2019

<i>Film</i>	<i>Frame</i>	<i>Subject</i>	<i>Scale</i>
1	116	Rutting of track crossing dyke to NE of survey area caused by forestry operations, looking NW	-
1	117	Rutting of track crossing dyke to NE of survey area caused by forestry operations, looking NW	-
1	118	Line of dyke in plantation to NE of survey area, looking SW	-
1	120	Line of dyke in rough pasture to SW of survey area, looking SW	-
1	121	New fence crossing dyke on edge of plantation to SW of survey area, looking SE	-
1	123	Dyke, immediately SW of surveyed section beyond gap, looking SW	-
1	124	New fence crossing dyke on edge of plantation to SW of survey area, looking NE	-
1	977	Excavated trench prior to cleaning, looking S	2 x 1m
1	978	Excavated trench prior to cleaning, looking NE	2 x 1m
1	979	Excavated trench prior to cleaning, looking NW	2 x 1m
1	980	Dyke, immediately SW of surveyed section beyond gap, looking SW	-
1	981	Excavated trench after cleaning, looking SW	2 x 1m
1	982	Excavated trench after cleaning, looking NE	2 x 1m
1	983	Excavated trench after cleaning, looking NE	2 x 1m
1	984	Excavated trench after cleaning, looking SW	2 x 1m
1	985	Excavated trench after cleaning, S arm section, looking E	1m, 0.3m
1	986	Excavated trench after cleaning, S arm section, looking E	1m, 0.3m
1	987	Excavated trench after cleaning, E arm section, looking N	1m, 0.3m
1	988	Excavated trench after cleaning, E arm section, looking N	1m, 0.3m
1	989	East ramp and dyke, looking NE	3 x 1m
1	990	General view of ramps and dyke, looking NE	3 x 1m
1	991	General view of ramps and dyke, looking NE	3 x 1m
1	992	East ramp and dyke, looking NE	3 x 1m
1	993	East ramp and dyke, looking NE	3 x 1m
1	994	General view of ramps and dyke, looking SW	3 x 1m
1	995	General view of ramps and dyke, with no entry sign, looking SW	-
1	996	Line of dyke immediately NE of surveyed section, beyond gap, looking NE	1m
1	997	Line of dyke immediately NE of surveyed section, beyond gap, looking NE	1m
1	998	West ramp, looking SW	2 x 1m
1	999	West ramp and dyke looking NE	2 x 1m