



**Dartmoor National Park Authority & Foundation for
Common Land**

**Archaeological geophysical survey of Piles
Hill stone alignment, Harford & Ugborough
Moor, Dartmoor.**



The Western terminal of the Piles Hill stone alignment.

1. Background

1.1 The Foundation for Common Land and the Dartmoor National Park Authority (DNPA) wishes to commission an archaeological geophysical survey of the Piles Hill stone alignment located on Harford & Ugborough Moor, Dartmoor.

1.2 This brief has been prepared by Andrew Crabb, Archaeologist for the Dartmoor National Park Authority (DNPA).

1.3 The project forms part of the Our Common Cause: Our Upland Commons programme, a National Heritage Lottery Fund scheme.

1.4 The project and final report needs to be completed by 31st March 2022.

1.5 Formal quotations are invited to undertake a remote sensing survey across the Piles Hill stone alignments on Harford and Ugborough Moor, Dartmoor. The stone row is a scheduled monument (SM 1013033) The site is located on rough moorland but is bisected by a well surfaced track (a former mineral railway) that provides good access to the site for 4WD vehicles.

1.6 The survey will be undertaken using equipment and techniques appropriate to the local site conditions and objectives of the investigation. The survey must be undertaken in accordance with the Standard and Guidance for archaeological geophysical survey published by the Chartered Institute for Archaeologists (CIFA, 2014) and EAC Guidelines for the Use of Geophysics in Archaeology.

1.7 The moorland terrain of Dartmoor is often difficult to traverse which, combined with the region's unpredictable weather, can often result in unforeseen delays to work in this environment. It is thus advisable to account for this when planning and quotations for the work described here must allow an appropriate contingency which will be released at the DNPA archaeologist's discretion.

1.8 The results of the survey will be used to inform future archaeological investigation and the management of the alignment.

1.9 The DNPA archaeologist will be available at all stages to offer advice on the brief requirements as necessary.

2. Timetable

2.1 We require that the survey is undertaken, and the final report completed and returned to the DNPA by 31st March 2022.

2.2 Therefore, potential contractors must be aware of the following timetable.

Quotes to be received no later than 18:00pm, **Tuesday 22 February 2022.**

Final survey plans and reports returned to Andy Crabb at DNPA by **Tuesday 31st March 2020**.

Please return your quotes to Andy Crabb via email to acrabb@dartmoor.gov.uk. All submissions will be acknowledged by email and the successful candidate notified by **Tuesday 13th February 2022**.

3. The Site

- 3.1 Piles Hill double stone alignment is located on Harford and Ugborough common, Dartmoor National Park approximately 4 miles North of Ivybridge at SX6544 6103 Please see figures 1 and 2 for location.
- 3.2 The area is rough open moorland that is predominantly covered by *Molinia* grass and areas of low gorse scrub.
- 3.3 The area is grazed by livestock and is popular with walkers and cyclists.
- 3.4 Access to the site is possible along the former Redlake tramway using a suitable 4WD vehicle.



Fig 1) General location map of Piles Hill stone row

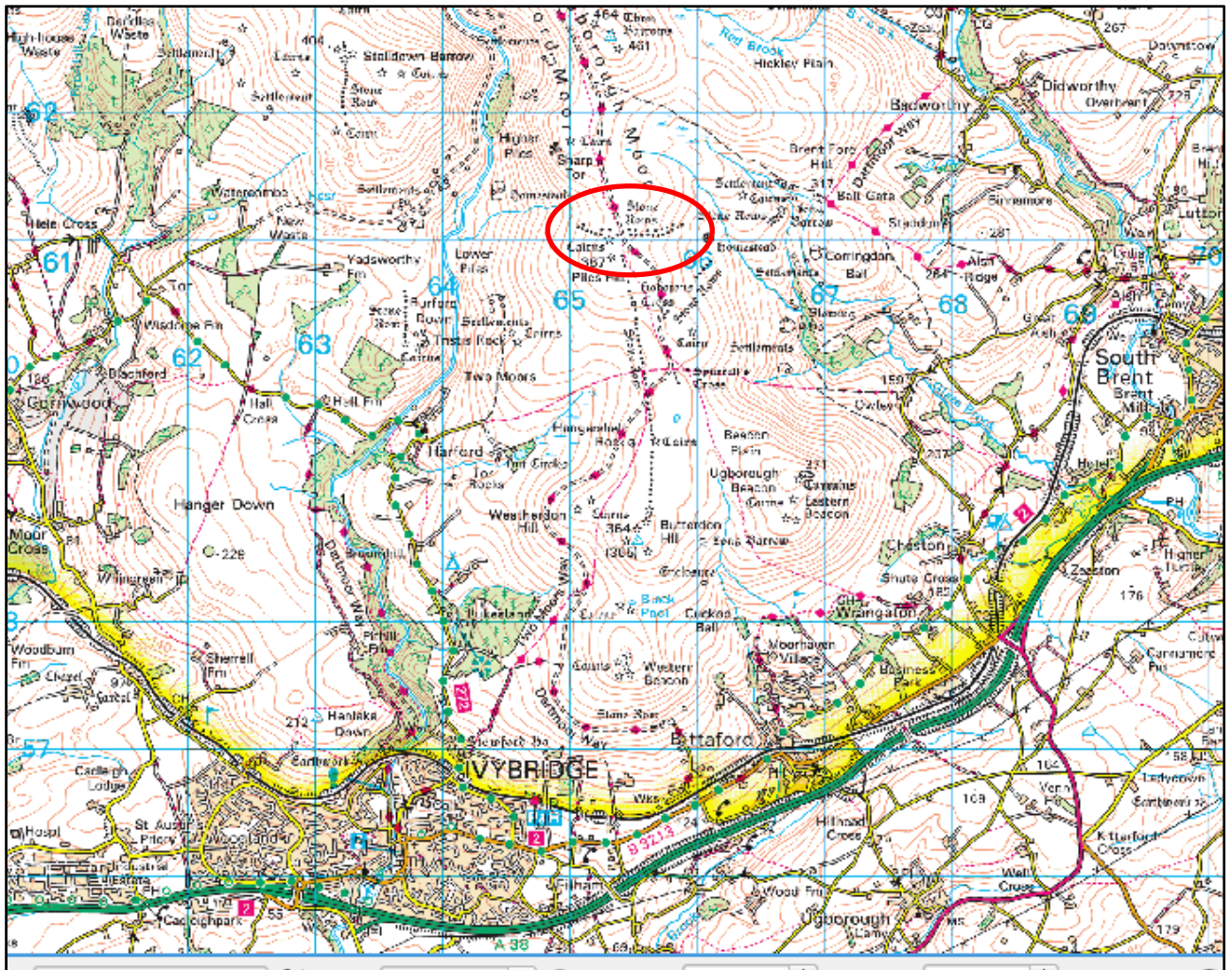


Figure 2) Location of Piles Hill Stone Row

4. Archaeological objectives

4.1 The Piles Hill stone rows is believed to date to the transitional Neolithic - Early Bronze Age period. However, due to a lack of modern excavation, dating evidence is lacking.

4.2 The objectives of the survey are:

- To identify any below ground structural components of the stone alignment and associated cairns such as socket holes, buried stones, ditches, pits and heating events.
- To ascertain if the stone rows continue beyond their current terminals to outlying cairns / standing stones, in the form of buried or robbed out features.
- To ascertain the presence/absence of an encircling ditch or kerb to the cairns.

- To identify any adjacent archaeological features.
- To build on our knowledge of surveying sites of this type using remote sensing techniques.
- To employ a range of modern remote sensing techniques including gradiometry, and earth resistance. The detailed methodology for this work should be set out in the submission, but should include as appropriate:
 - (i) magnetic survey over the full area at a sample density of at least 0.25m x 1.0m.
 - (ii) earth resistance survey over the full area at a sample density of at least 1.0m x 1.0m, using both 0.5m and 1.0m mobile probe spacings.

5. Individual Site Descriptions & objectives

5.1 Listed below are the descriptions for the Piles Hill stone alignment and neighbouring monuments. Please refer to figures 3 and 4 below.

5.2 In addition, please refer to the Dartmoor Historic Environment Record (www.heritagegateway.org.uk) and the National Heritage List for England (www.historicengland.org.uk), for further information.

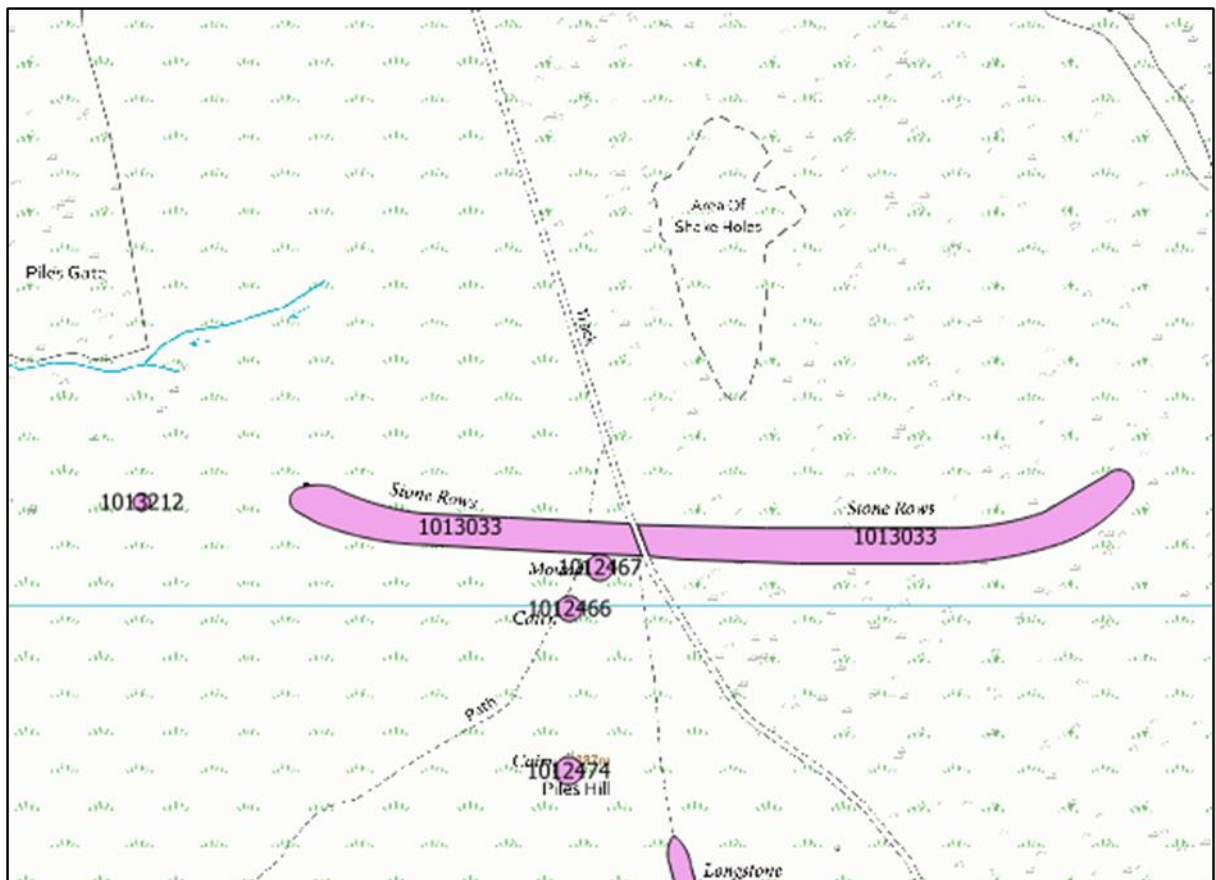


Fig 3. Location and extent of scheduled monuments.

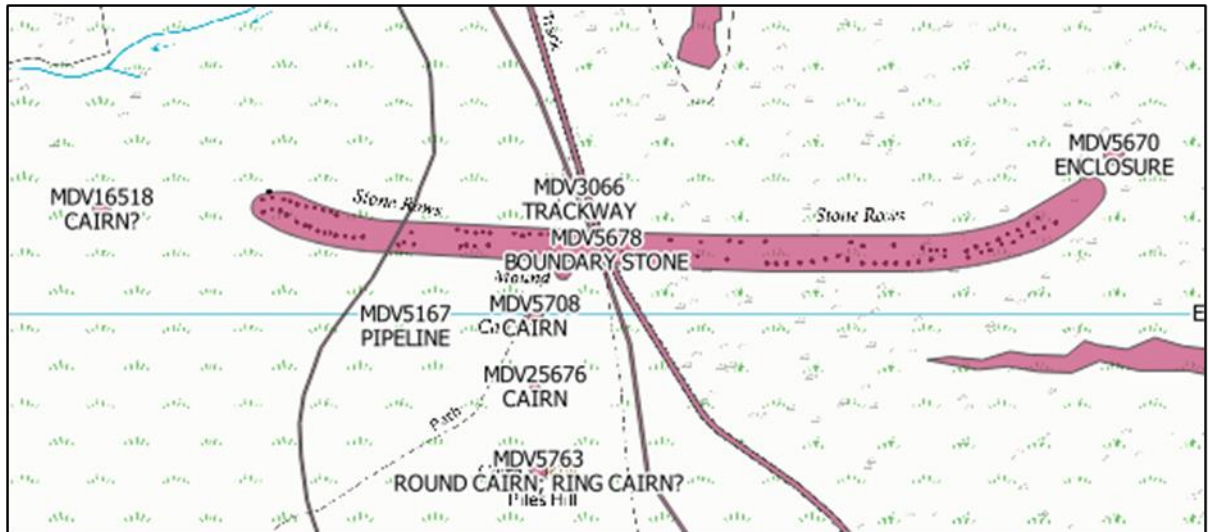


Fig 4. Location and extent of HER sites.

3.1 Piles Hills Double Stone Row MDV 5662 (SM 1013033) SX 6544 6103.

The Piles Hill stone row extends roughly east-west for a total length of 850m, in a gentle curve. Due to the curve of the hill, no more than c.200m of the length is visible at any point. It is a double alignment with over forty stones visible in either row, all of which are fallen or leaning, but further examples may well be hidden in vegetation. The northern row is better preserved and more regular. The western terminal stones were unofficially re-erected within the last three years. The eastern terminal is poorly defined.

The alignment is cut by the Redlake China Clay railway MDV3138, the clay works pipeline MDV 5167 and a trackway known as the Blackwood Path MDV3066. A Holloway, of likely medieval date runs parallel with the northern side of the eastern section of the alignment.

3.2 Cairn MDV 16518 (SM1013212) SX 6489 6110

In close proximity to the row are several cairns. Approximately 140m to the west is a cairn measuring 6m in diameter. It has been speculated that this has an association with the stone row and may have represented a terminal., relating to a former phase of the alignment.

An alignment of at least three cairns can be found approximately halfway along the row, near the crest of the ridge. The cairns are aligned roughly north / south. Starting with the northern example the cairns include.

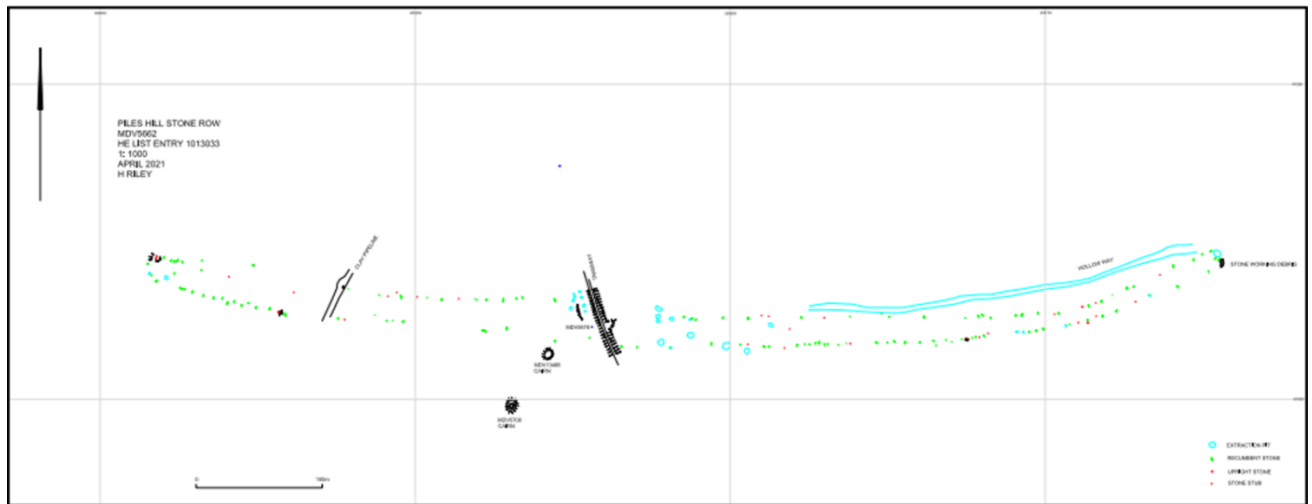


Fig 5. Survey plan of the stone row and associated features. H. Riley 2021. See appendix 1 for a larger print out.

3.3 Cairn MDV 13485 (SM 1012467) SX 6535 6103

This cairn lies north of two other larger cairns on the top of Piles Hill, it is 10 m. in diameter and 0.3 m. in height and grass-covered; it shows no evidence of having been dug into and has a flattish top. The cairn is about 40 m. south of the stone alignment which runs up the eastern slope of Piles Hill from the West Glaze Brook Valley.

3.4 Cairn MDV5708 (SM1012466) SX6532 6099

This cairn consists of a mound of stone and earth covered by turf and lies north of the summit on the brow of Piles Hill. It is 14 m. in diameter and 1.5 m. in height, with a hollow in the centre suggesting that it has been robbed in the past.

3.5 Possible cairn MDV25676. Small undisturbed mound at SX6532 6083 of 3 metres diameter by 0.2 metres high 20 metres north of the summit cairn on Piles Hill.

3.6 Cairn MDV5763 (SM1012474)

This very large cairn, 32 m. in diameter, is situated on the summit of Piles Hill. It consists of a central mound, 1.5 m. in height, on a stone and earth platform, with a 3 m. wide berm extending beyond the circumference of the mound and a bank of stones surrounding the whole monument.

3.7 Cairn MDV 6158 (SM1013212) SX 6489 6110

The cairn, 200m. south of Piles Gate, is 6m. in diameter and 0.7m. high and covered by turf and whortleberry. There are traces of a retaining kerb on the west side.

3.8 Enclosure MDV5670. SX6590 6115

An enclosure measuring 45.0m. north to south and 38.5m. east to west. The low wall, average height 0.3m. consists of heather-covered stones except on the southwest side where it forms a broken line of large orthostats and some flat boulders. The average thickness is 1.4m. There is only one possible hut circle which is visible as a level platform with a few encircling stones.

4. Survey Options

4.1 We require that each of the following four options are individually priced and include gradiometry, and earth resistance. This will enable us to undertake an appropriate project in accordance with the available budget.

For each option there is an individual plan, showing the area to be surveyed in Appendixes 2 to 5.

4.2 Option 1 is for the survey of the double alignment and the adjacent Cairns MDV13485 & MDV 5708 only.

4.3 Option 2 extends the above survey area to the west and east to include cairn MDV 16518 and enclosure 5670.

4.4 Option 3 covers the Stone alignment, adjacent cairns, and the north to south cairn cemetery.

4.5 Option 4 covers all the above areas.

5. Geology

The bedrock consists of granite that forms part of the Dartmoor Intrusion. Igneous Bedrock formed approximately 272 to 308 million years ago in the Permian and Carboniferous Periods. Local environment previously dominated by intrusions of silica-rich magma.

6. Project deliverables

6.1: A draft digital copy, in MS Word format, of an appropriately illustrated report on the work must be provided to Andy Crabb of the Dartmoor National Park Authority Historic Environment team by Thursday 31st March 2022.

6.2 The report will include an executive summary and an assessment of confidence in the interpretation of any anomalies identified.

6.3: Dartmoor National Park Authority Historic Environment team will return the draft report within two weeks of receipt with appropriate comments.

6.4: Following any necessary revisions, an unbound hard copy, as well as 3 bound hard copies of the final report will be delivered to the Dartmoor National Park Authority Historic Environment team, in addition to a digital copy and a PDF version by Thursday 31st March 2022.

6.5: The Report will be accessioned to the Dartmoor National Park Historic Environment Record. It may be made available to researchers via a web-based version of the HER or made available in digital form. A completed HER Deposit Form will be submitted by the contractor with the final copies of the report.

6.6: Digital files of raw and interpreted survey data will be included with the final report on a CD inside the back cover. These should be appropriately geo-referenced and, in a format, agreed with Dartmoor HER.

6.7: The contractor will complete an online OASIS form describing the survey, including a digital copy of the report and relevant GIS data before the completion of this contract. The report will also contain the appropriate OASIS number.

6.8: A copy of the report and any requested survey data will also need to be provided to Historic England. Confirmation that this has been completed should be sent to Dartmoor National Park Authority.

6.9: Copyright statement. All images used MUST have appropriate copyright statements and any permission required given. This is particularly relevant for Ordnance Survey data and images gained from archives such as records offices or published works. The National Park requires permission for full use of the information, reports, and plans, including non-commercial dissemination. The contractor will be fully accredited wherever the material is reproduced.

7. Selection of Contractor

7.1 The contract will be awarded based on confidence in the Contractor achieving accurate and reliable maps/ GIS files in a timely fashion and providing good value for money.

7.2 Selection criteria will include:

- methodology – approach to task; data/output analysis and reporting
- evidence of successful delivery of similar mapping
- ability to produce the surveys to the required deadline.
- ability to provide all the required map elements
- resilience – ability to deliver in the event of unplanned unavailability of key staff
- value for money.

Criteria	Score	Weighting	Max Score
Methodology	1-5	X 2	5
Evidence of successful delivery of similar mapping	1-5	X2	10
Ability to produce the surveys to the required deadline	1-5	X2	10
Ability to provide all the required map elements	1-5	X2	10
Resilience	1-5	X1	5
Value for money	1-5	X2	10
TOTAL			50

8. Intellectual Property Rights

- 8.1** It is the Authority's intention that all data, text, illustrations, information, correspondence, and all documents acquired, created, or otherwise obtained in any work under this Contract shall be the sole property of the Authority who shall be free to use such material or any part thereof as it sees fit.

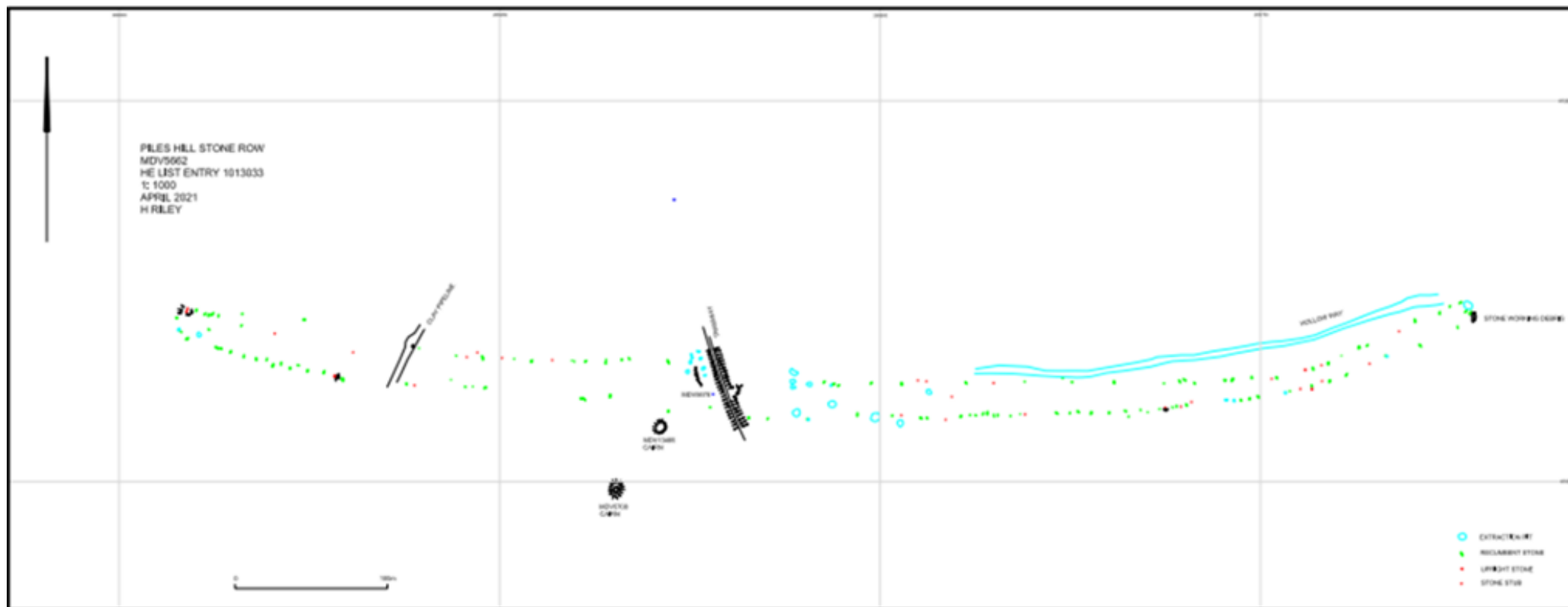
9. Health and Safety at Work

- 9.1** The contractors shall always comply with the requirements of the Health and Safety at Work, Etc., Act 1974, and any other Acts, Regulations or Orders pertaining to the health and safety of employees. All personnel will conduct themselves in an appropriate manner in accordance with relevant *C/fA* guidelines (<http://www.archaeologists.net/codes/ifa>).
A full risk assessment will be submitted to DNPA and agreed by the Authority in advance of any fieldwork. Any variation to working practices set out in the risk assessment must be agreed by the DNPA,

10. Contact details

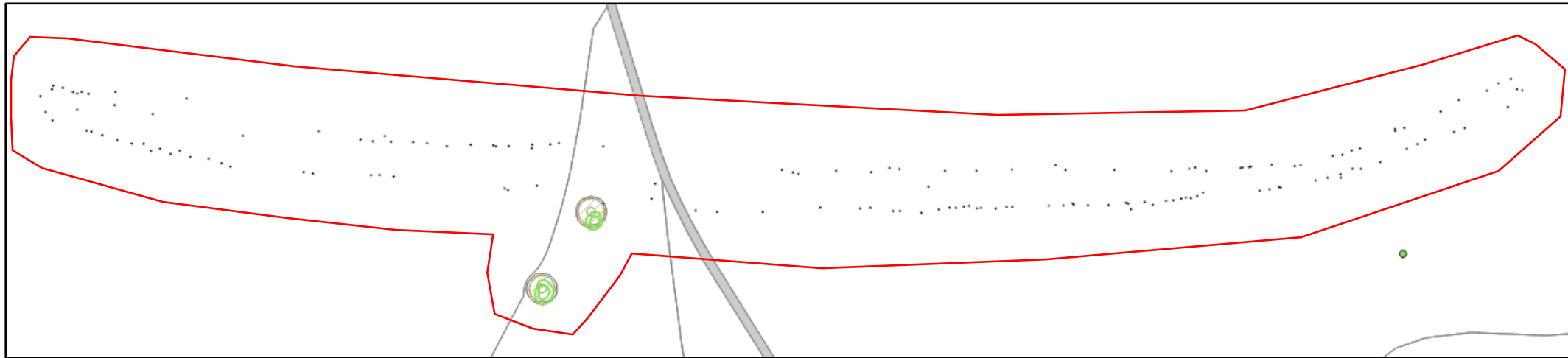
If you wish to contact Andy Crabb, archaeologist DNPA to discuss this brief please email acrabb@dartmoor.gov.uk or phone 07866062108.

Appendix 1)



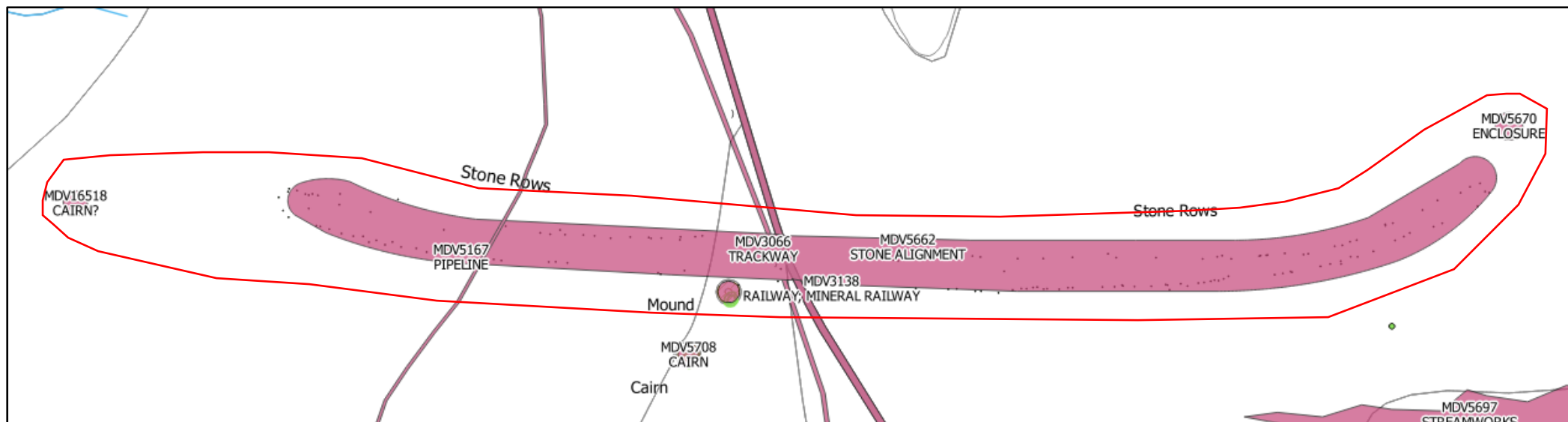
1) Survey of Piles Hill double alignment and associated cairns and features (H Riley 2021).

Appendix 2)



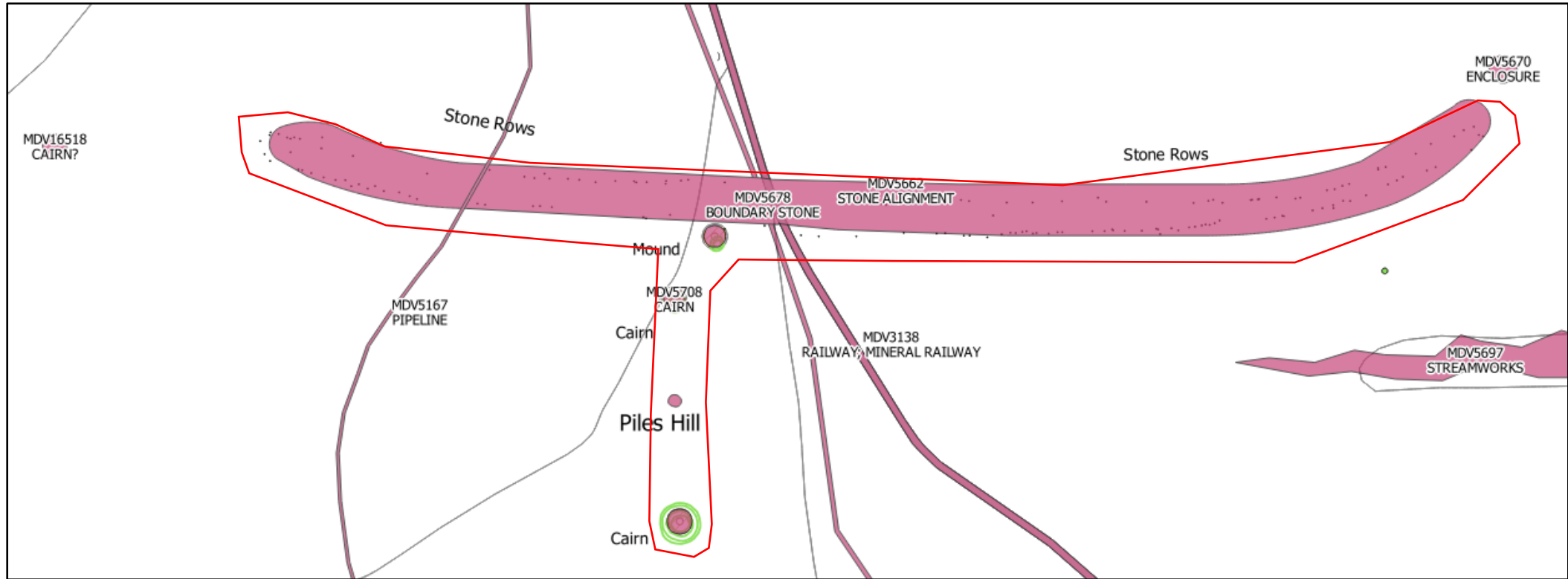
Survey option 1. Stone alignment and Cairns MDV13485 & MDV 5708.

Appendix 3)



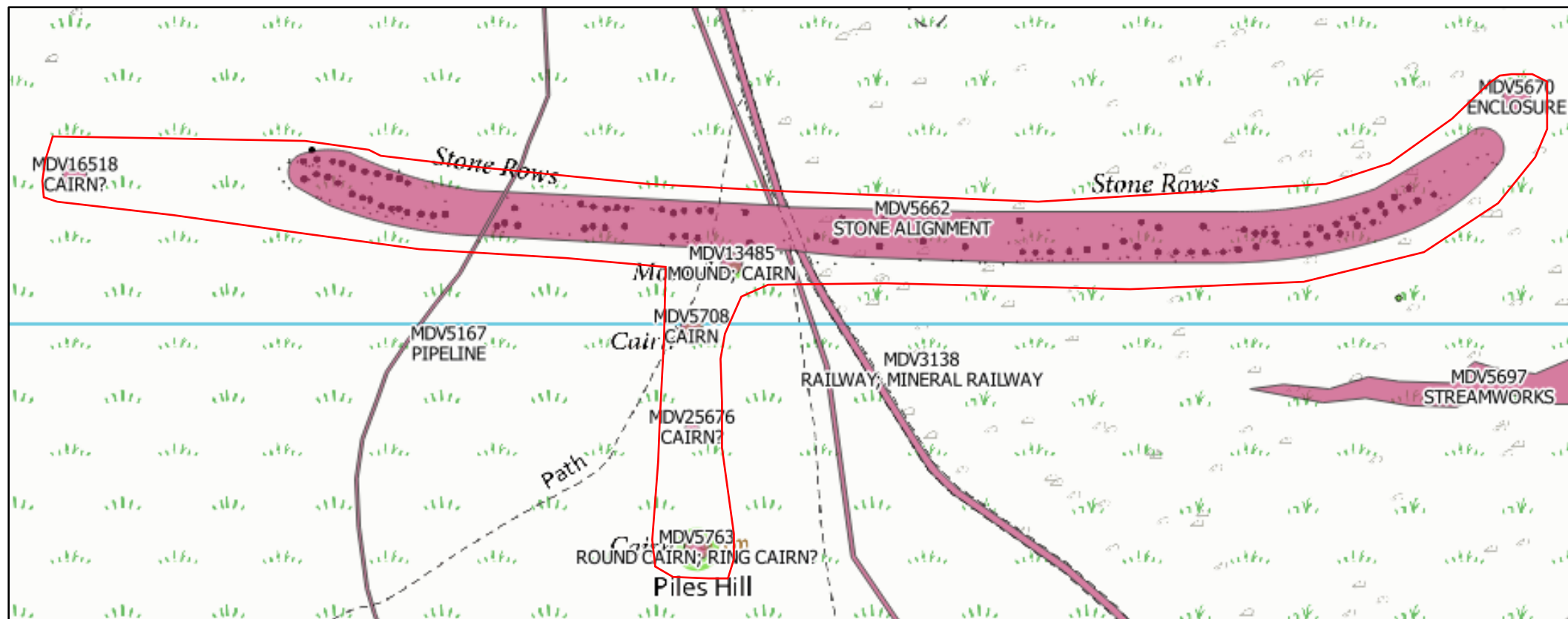
Survey Option 2. Stone alignment, Cairn MDV13485, possible western cairn (MDV 16518) & eastern enclosure (MDV 5670).

Appendix 4



Survey option 3. Stone alignment and Cairns MDV13485, MDV 5708, MDV 25676 (possible) & MDV5763.

Appendix 5



Survey Option 4 Stone alignment, possible western cairn, eastern enclosure and all associated Cairns.