25 August 2025

Mynydd Maen Wind Farm

Request for further information: Cultural Heritage

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Date	25/08/2025
Ref	04412-11531700

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1 Introduction

1.1 Overview

1.1.1 This document has been prepared in response to a formal request for further information issued by Planning and Environment Decisions Wales (PEDW) as part of the ongoing planning application for the Mynydd Maen Wind Farm (DNS/3276725). The request forms part of the regulatory framework under Regulation 24 of the Environmental Impact Assessment (EIA) Regulations and Regulation 15(2) of the Development of National Significance (DNS) regulations. The regulations mandates consultation and submission of supplementary technical information to support the determination of the application and the formal request was made by PEDW in a letter addressed to the Applicant dated 03 June 2025.

1.1.2 The application has undergone consultation with statutory consultees and stakeholders, and this document aims to address specific queries and provide clarifications as requested by the appointed inspector. Each topic has been addressed by subject matter experts to ensure the responses are robust, evidence-based, and aligned with regulatory expectations.

1.2 Author

1.2.1 The advice note has been prepared by James Meek MCIfA Director (Archaeology), with nearly 40 years' experience in the commercial archaeology sector. James is a Member of the Chartered Institute for Archaeologists (MCIfA). Prior to joining HCUK in 2019, he was Head of DAT Archaeological Services for 10 years, the fieldwork team at Dyfed Archaeological Trust (now part of Heneb: The Trust for Welsh Archaeology). He has worked on many renewables projects across England and Wales, including other wind farm and solar sites in South Wales.

1.2.2 The advice note will be used by RES, the applicant, to provide further information on the possible archaeological sites to address the Cadw response and provides the information needed to complete the Cultural Heritage section for the Mynydd Maen Wind Farm DNS application.

1.3 Stakeholder Concerns

1.3.1 Cadw requested further information on the possible archaeological features that had been identified (response dated 14th May 2025), Lidar areas 3 and 4. Lidar Area 3 comprised two earth mounds that could be Bronze Age round barrows (burial mounds). Lidar Area 4 comprised a series of smaller and numerous earth mounds considered as a potential Bronze Age cairn field (burial mounds).

1.3.2 Cadw noted in their response, in relation to the two possible round barrows, that

'This interpretation has not been confirmed by archaeological evaluation, but they could be of national importance. … Consequently, unless archaeological evaluation proves that they are not of national importance, there is a need for the impact of the turbines on their setting to be assessed.'

1.3.3 In relation to Lidar Area 4, the possible Bronze Age cairn field, Cadw noted

'this identification and therefore their importance, has not been tested by archaeological evaluation. … the impact of the turbines and the proposed access track on their settings has not been considered in the environmental statement.'

1.3.4 Both concerns are addressed within this advice note, using further information obtained through a site visit and reinterpretation of the features.

2 Assessment of Lidar Data

2.1.1 An archaeological desk-based assessment was prepared by HCUK for the proposals as well as a supporting Cultural Heritage Chapter for the Environmental Statement for the application. As part of these assessments Digital Terrain Model Lidar data at 1 m resolution was interrogated for the Site using QGIS software, to prospect the area for any hitherto unrecorded archaeological remains that may be present within the proposed wind farm.

2.1.2 Six areas of possible archaeological features were identified through Lidar analysis within the site. These were recorded in the desk-based assessment as Lidar Areas 1 to 6. Of most relevance to the Cadw response are Lidar Areas 3 and 4 (Figures 1 and 2).

2.1.3 Appendix 8.2 of the Environmental Statement for the application, the Historic Environment Desk-Based Assessment, recorded Lidar Area 3 as lying in;

'*the eastern side of the site, located around 520 m south-west of Turbine 9 and 460 m north-east of Turbine 10. The site comprises of two adjacent circular mounds that could potentially represent prehistoric round barrows. The north-eastern mound is centred on ST 25936 97595 and is around 27 m in diameter. The south-western mound is centred on ST 25919 97553 and is around 30 m in diameter. Lidar data indicates that both mounds are just under 1 m in height above the surrounding land, with the north-eastern mound top being at around 468.50 m aOD and the top of the south-western mound at 467.45 m aOD. Both appear to comprise a flat-topped mound with a slight encircling ditch. The size and shape are characteristic of round barrows typically of Bronze Age date. These were not visible during the site visit.*' (Appendix 8.2, para 4.138)

2.1.4 Lidar Area 4 was described as follows;

'*To the north of these two possible round barrows lie a large number of smaller mounds running to the north for around 180 m, Lidar Area 4 (Figure 32). These are centred on ST 25961 97729 and lie around 420 west-south-west of Turbine 9. The possibility that these could be smaller burial cairns has been considered, although their number and positioning in directly adjacent, if not touching one another, is not a typical layout for burial cairns. These variations in the ground level may be results of vegetation growth (compact reed grasses or clumps of gorse) creating raised root balls rather than being of archaeological origin. Their proximity to the likely barrows at Lidar Area 3 is such that they are highlighted. The proposed access road between Turbines 10 and 11 and Turbine 9 to the east has been located to run between Lidar Area 3 and Lidar Area 4.*' (Appendix 8.2, para 4.139)

2.1.5 In July 2025 the Lidar Areas were visited to learn more about the possible origins of the earthworks identified through Lidar analysis and to learn more about their setting.

2.2 Lidar Area 3

2.2.1 The southwestern of the two mounds showed quite clearly as circular on Lidar data, at around 30m diameter. A slight mound was visible during the site visit although it appeared more irregular in its shape, rather than the circular as it appeared on the Lidar data. The surface of the mound was quite densely covered in vegetation, but there was a clear earth mound beneath, rising up from the surrounding ground.

2.2.2 As noted from Lidar data, the height of the mound was probably around 1 m at most. There was no indication of any stone either on the surface of the mound or around its perimeter. A metre long photographic scale with pointed end was taken on the site visit and through careful and limited use of this point, did not indicate any stone immediately beneath the turf line. The sound from stamping on the mound suggested it was quite a solid earth mound. There was no indication of depressions on the summit which might indicate previous investigations or disturbances.

2.2.3 A linear channel was present on its northeastern edge which exaggerated the height of the mound in this location. The channel is also apparent on Lidar data and runs between the two mounds. Vegetation in the base of the channel indicated it was probably quite wet at times (although dry during the site visit). The channel was very straight suggesting it was a man made feature. It ran roughly parallel to the existing surfaced footpath that runs to the east, which also mirrors the kink in its alignment to the north of the possible round barrow, perhaps indicating it was an earlier footpath route. This had truncated the northeastern edge of the mound. Lidar data also indicates a number of small, parallel ridges in the area to the southwest of the mound, which continue and project across its surface. The function of these ridges is uncertain and they were not visible during the site visit.

2.2.4 The northeastern mound was quite easily visible as a feature in the landscape to the northeast of the other mound. Although slightly smaller in diameter at 27m as indicated on Lidar data, it did seem clearer as a feature. The mound was less irregular and its perimeter relatively easily discerned. The mound was again covered in vegetation on top of the earth mound. No evidence for stones on or immediately beneath the surface or around its perimeter was visible, indicating a solid earth mound. The channel which runs between the two mounds, which is noted as possibly an earlier footpath (above), runs further to the southwest and does not truncate the northeastern mound. There was no indication of depressions on the summit which might indicate previous investigations or disturbances.

2.2.5 Both mounds occupy a similar location in the landscape, on the southern edge of the summit of Mynydd Maen, with the land sloping slightly to the west, south and east, and rising slightly towards the north and the summit of Mynydd Maen (Figure 3). The top of the southwestern mound lies at a height above Ordnance Datum (aOD) of roughly 467.2m aOD, with the surrounding ground between 466.20m aOD to the south and 466.9m aOD to the north. The top of the northeastern mound lies at round 468.6m aOD, with the surrounding ground between 467.2m aOD to the south and 468.0m aOD to the north. The summit of Mynydd Maen is at approximately 472.5m aOD.

2.2.6 There are long ranging views to the southeast, south, southwest including across the Bristol Channel. The views to the north include Bannau Brycheiniog, and those to the west range across the Valleys area of South Wales. Views to the northeast are towards the summit of Mynydd Maen.

2.2.7 The modern landscape has been significantly altered. Views to the southwest, west and northwest include in the foreground a line of large metal electricity pylons running roughly northwest to southeast across the southwestern, western and northwestern side of the summit of Mynydd Maen. They are very clear in all views looking westwards from two mounds. The buildings associated with the high pressure gas pipeline are visible to the northwest, including the large mast adjacent to this. The trig point on the top of Mynydd Maen is also visible from the mounds. A number of the modern towns and villages in the Valleys are also visible in views to the west.

2.2.8 In summary, it is considered likely that the two features do represent Bronze Age round barrows, located on a prominent location on the southern part of the summit of Mynydd Maen. Such features would be considered of high (national) archaeological importance. Neither of the features will be directly impacted by the proposed Mynydd Maen Wind Farm due to the proposed detailed design. Furthermore, these features can and will be protected from any accidental disturbance during construction and operation of the Proposed Development.

2.3 Lidar Area 4

2.3.1 Lidar Area 4 comprised a grouping of small mounds which were highlighted as potentially being a Bronze Age cairn field due to their location between the two possible barrow mounds identified in Lidar Area 3 and the summit of Mynydd Maen. It was also acknowledged that these could be vegetation mounds rather than man-made.

2.3.2 The site visit demonstrated that the features corresponded with larger clumps of vegetation. The majority had a build-up of soil underneath, making them stand proud of the surrounding ground surface. The features were irregularly laid out and of many different sizes and heights. The larger mounds corresponded with the larger and taller clumps of vegetation.

2.3.3 In a few places the exposed surface of the mounds were visible, where vegetation had been pulled away or worn down through animal action (livestock graze the common land). The soil within the mounds was very loose, humic and friable. No stone was observed in any part Lidar Area 4, including within the exposed surface of the mounds. Prospection into the surface of the mounds with the pointed end of the photographic scale also failed to indicate the presence of any stone at all.

2.3.4 It was concluded from the site visit that these features were of natural origin associated with vegetation growth. The soil build-up was a result of the vegetation growth, presumably due to specific types of vegetation. No stone to indicate the presence of cairns was visible within the area. It was confidently concluded that these features are of natural origin and are not archaeological.

2.4 Setting of the Probable Round Barrows in Lidar Area 3

2.4.1 As noted above, the two potential round barrows are located at the southern end of the summit of Mynydd Maen, with good views to the northwest, west, south and east. The summit of Mynydd Maen to the north and northeast prevents wider views in those directions.

2.4.2 There are eight scheduled sites of similar date (comprising round barrows and cairns) to the southwest and south of the two round barrows where there is theoretical intervisibility between them (lying within the ZTV prepared for the wind farm proposals). These include the following monuments:

- MM149 Pen-y-Rhiw Round Cairn *c.*10.6km to the southwest;
- MM196 Cairn Cemetery on Mynydd Bach, Bedwas, *c.*10.6km southwest;
- MM033 Twyn Cae-Hugh Round Barrow, *c.* 10.5km southwest;
- MM070 Twyn-Yr-Oerfel Round Barrows, *c.*10.35km southwest;
- MM071 Begwns Round Barrow, Mynydd Machen, *c.*8.38km south-southwest;
- MM065 Twyn Pant-Teg Round Barrow, *c.*8.95km south-southwest;
- MM045 Cairns West of Craig y Dyffryn, *c.*4.9km south-southwest; and
- MM046 Round Cairn 315m south of Upper Wenallt, *c.*7.05km to the south.

2.4.3 Round barrows being located on prominent hill tops was a typical practice during the Bronze Age and it is assumed that this was in order to maximise their visibility in the landscape. Such locations also naturally lead to intervisibility between similar sites in similar locations. The distances involved between all but one of these monuments at over 7km, would mean that any intervisibility would be dependent upon weather conditions and surrounding vegetation. How prominent the features were in the landscape (heights of the mounds, whether earth, stone or grass covered) would also be very important when considering intervisibility. At the distances involved it is more likely that the hilltop itself would be the prominent and visible feature, rather than the individual mounds themselves. The closest scheduled monuments of similar character would be the Cairns West of Craig y Dyffryn(MM045) located just under 5km to the south-southwest. Here again, visibility would more likely be to the natural hilltop as opposed to the individual features.

2.4.4 Although later scheduled monuments are also recorded within 10km of the two round barrows, and may have had intervisibility with them, they would not have formed part of their original setting. The extant landscape on Mynydd Maen has also been altered in recent years, with the additions of the overhead power cables and pylons, and the high pressure gas buildings and the mast to the northeast. There are quarry sites to the north, the trig point on the summit of Mynydd Maen and the modern pathways. The channel that runs between the two probable round barrows would also appear to be a much later feature. The original setting of the two probable round barrows, has clearly been altered.

2.4.5 The proposed turbines 10, 11, 12 and 13 lie to the southwest of the two probable round barrows and they would therefore also be visible when looking towards the scheduled round barrows and cairns also to the southwest and south. The turbines would not completely obscure the views, but would be a prominent addition in the landscape. Their construction would alter the current setting of the two probable round barrows, although this would be a temporary addition to the landscape during the operation of the wind farm.

2.4.6 No direct impacts are proposed in the area of the two probable round barrows from development and they can be protected during development through fencing, signage and information to all contractors working on the site to avoid accidental damage.

2.4.7 The Proposed Development would not lead to any unacceptable change to the archaeological significance of the two probable Bronze Age round barrows by the introduction of wind turbines. They have been identified through evaluation (desk-based, Lidar analysis and field visit) associated with the wind turbine application. Assuming that these features are indeed round barrows, then the significance of the impact on the setting of the probable round barrows would be considered adverse, however the scale of this impact would be low to moderate. The turbines are quite widely spaced and not present in views to the west or southeast.

2.4.8 There are opportunities to reduce the impact on the setting of the probable round barrows by considering offsetting measures as part of the wind farm proposals. This could include further (limited) investigation at a later date to learn more about the features, potentially in the form of a small trial trench across one or both of the mounds, during the trial trench evaluation of the wider site proposed to be undertaken by way of a condition on approval for the development. Information on the probable round barrows can be provided to visitors to Mynydd Maen through information boards indicating the location of the mounds and highlighting similar features in the wider landscape. The information will also be made available through the Historic Environment Record (HER) and made publicly accessible through the Archwilio website (online searchable HER) and the National Monuments Record of Wales.

3 Conclusion

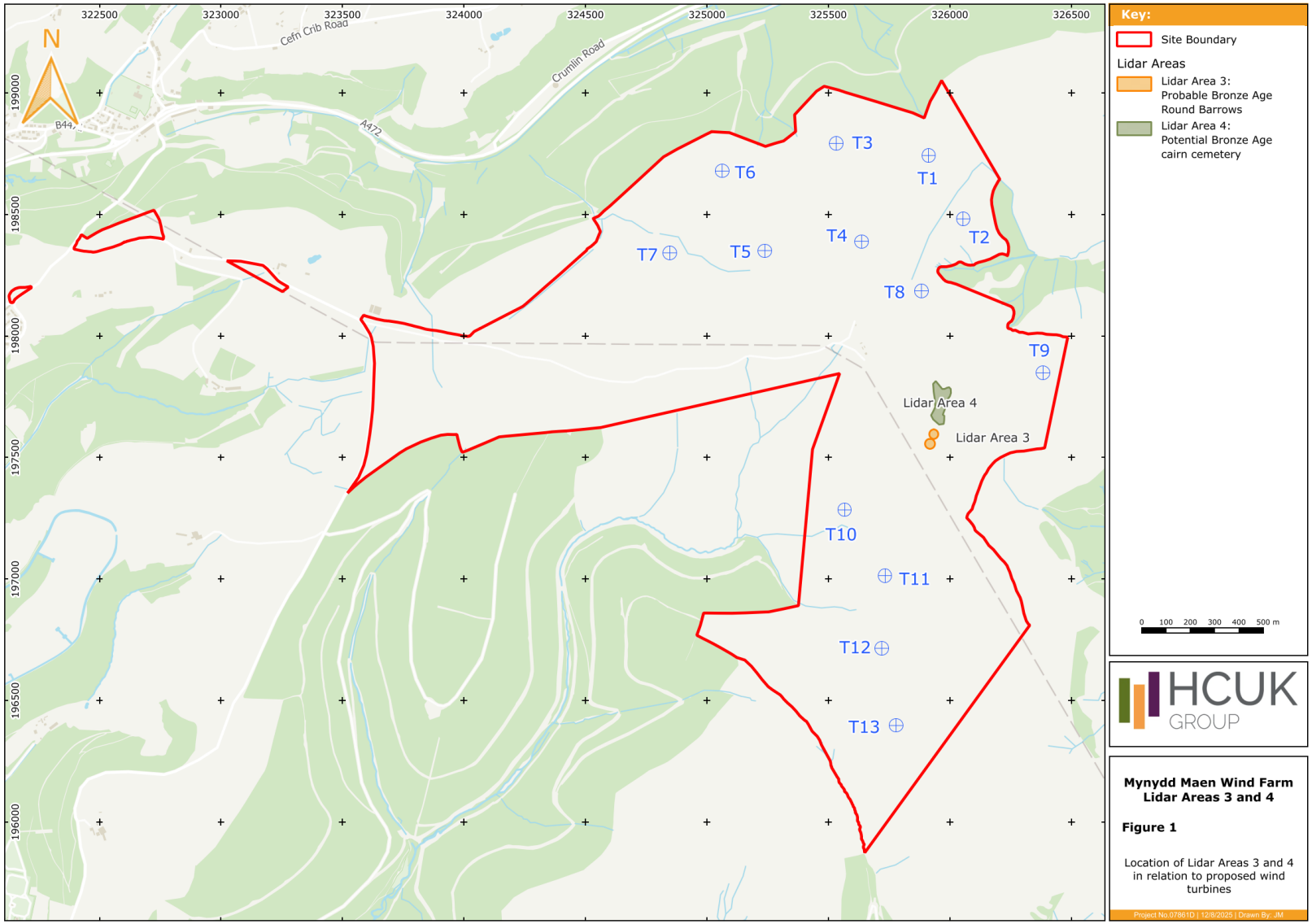
3.1.1 Based on our original assessment and the further assessment and investigation undertaken of the archaeological sites identified through Lidar data interrogation, we do not believe that the Proposed Development will have any unacceptable direct or indirect impacts on any potential cultural heritage features or on their setting.

3.1.2 RES remains committed to constructive engagement throughout the planning process and welcomes the opportunity to meet with stakeholders, consultees, and interested parties. We are happy to address any outstanding, maintained, or emerging concerns as part of the next round of consultation.

3.1.3 Our aim is to work collaboratively toward a shared understanding and to identify areas of common ground ahead of the hearing. We believe this approach will support a transparent and informed dialogue ultimately contributing to a robust and balanced decision-making process.

4 Appendix 1 – Figures

Please see figures as referenced in the text below.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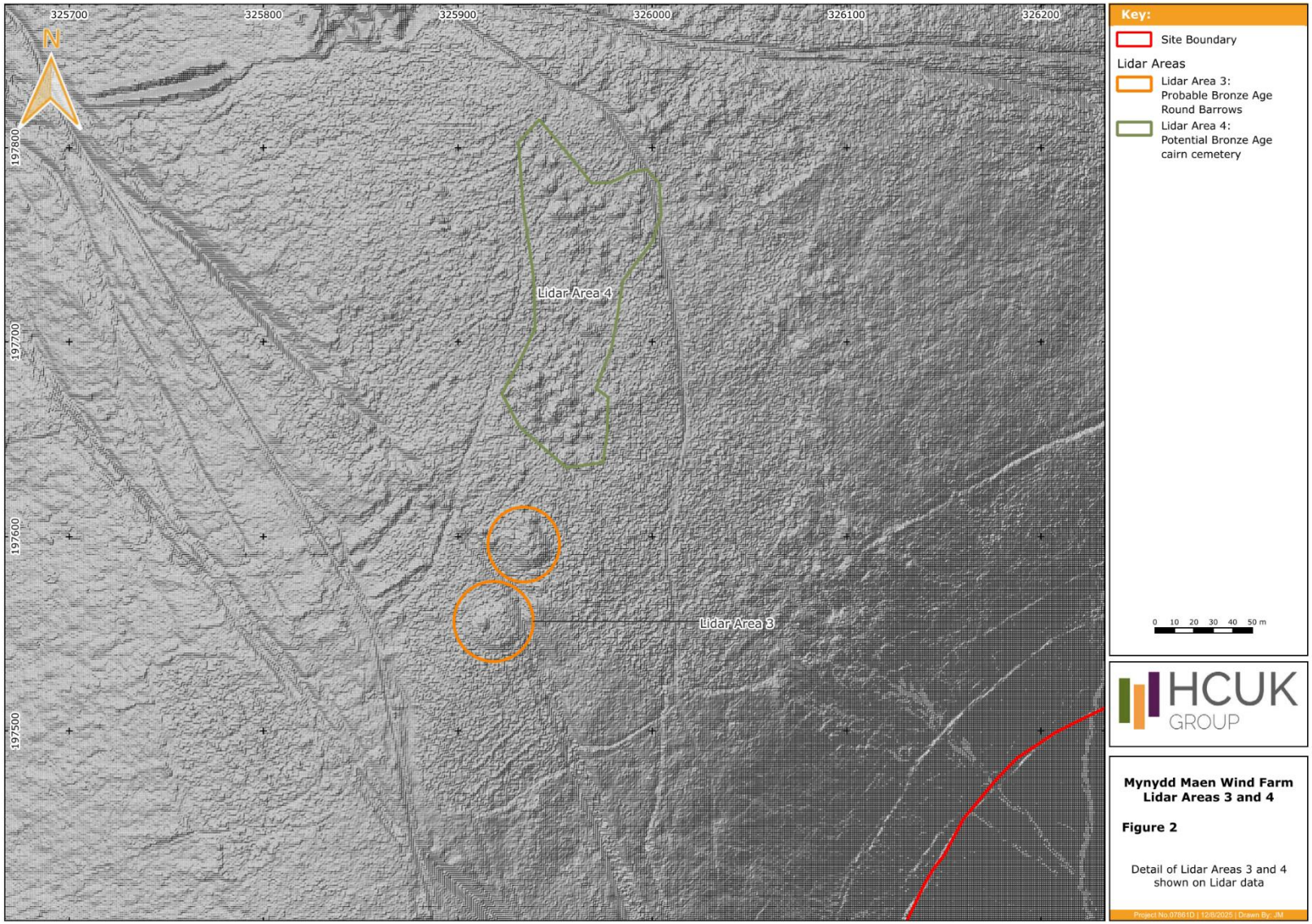
197000
196500
196000
Cefn Crib Road
Crumlin Road
A472
T1
T2
T3
T4
T5
T6
T7
T8
T9
T10
T11
T12
T13
Lidar Area 4
Lidar Area 3
Key:
Site Boundary
Lidar Areas
Lidar Area 3: Probable Bronze Age Round Barrows
Lidar Area 4: Potential Bronze Age cairn cemetery
0 100 200 300 400 500 m
HCUK GROUP
Mynydd Maen Wind Farm
Lidar Areas 3 and 4
Figure 1
Location of Lidar Areas 3 and 4 in relation to proposed wind turbines
Project No.07861D | 12/8/2025 | Drawn By: JM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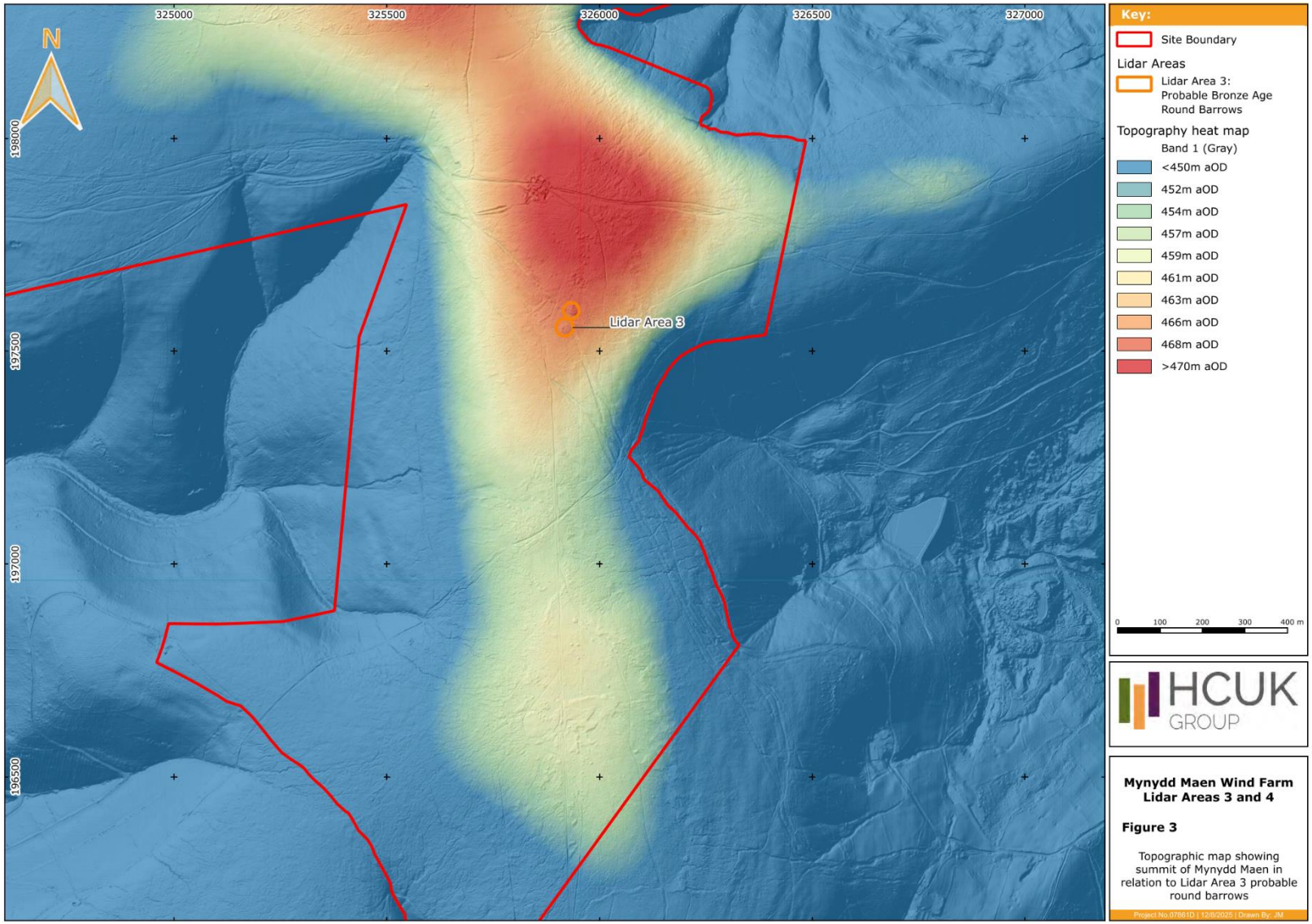
325800
325900
326000
326100
326200
N
197800
197700
197600
197500
Lidar Area 4
Lidar Area 3
Key:
Site Boundary
Lidar Areas
Lidar Area 3: Probable Bronze Age Round Barrows
Lidar Area 4: Potential Bronze Age cairn cemetery
0 10 20 30 40 50 m
HCUK GROUP
Mynydd Maen Wind Farm
Lidar Areas 3 and 4
Figure 2
Detail of Lidar Areas 3 and 4 shown on Lidar data


N
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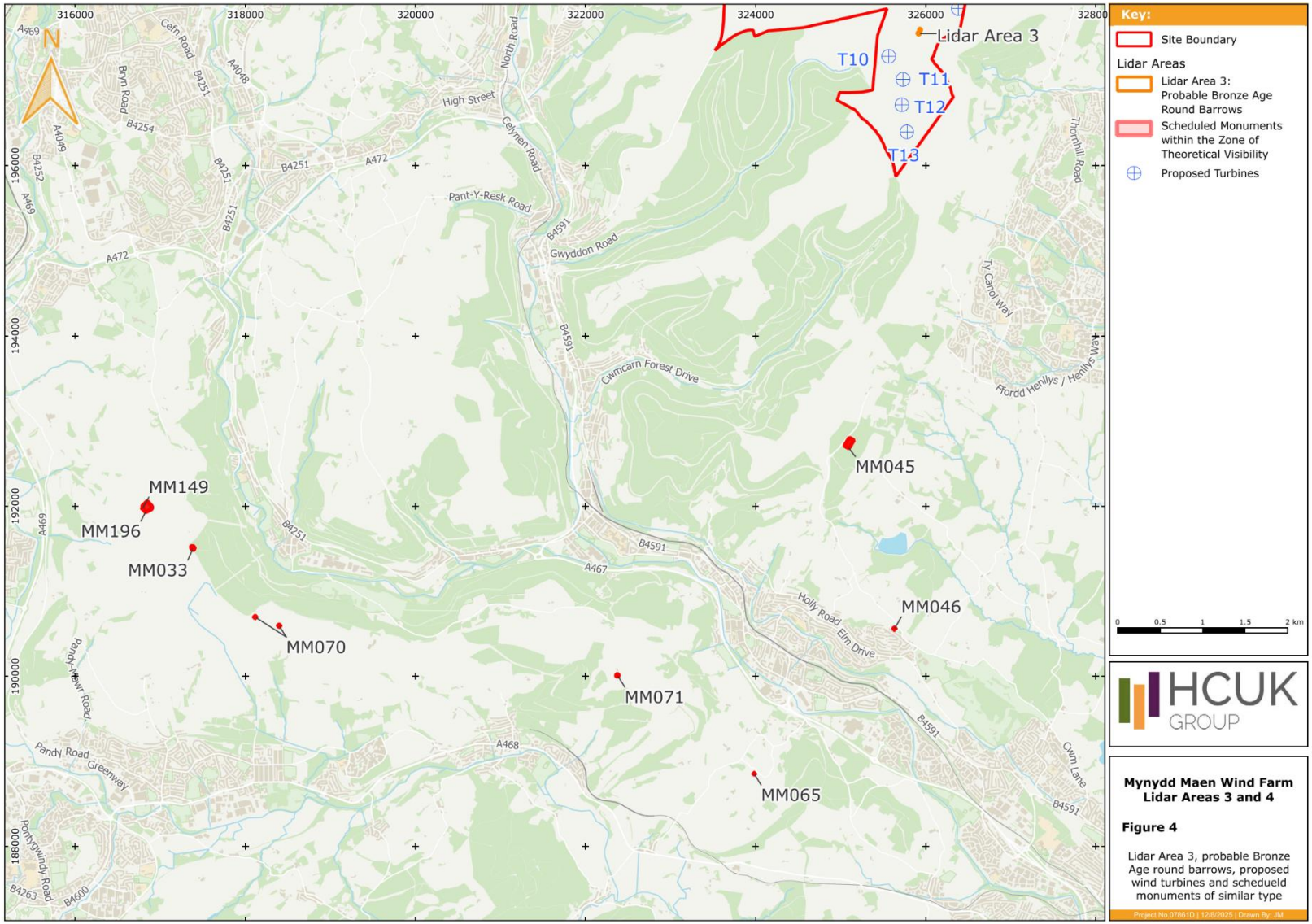
325500
326000
326500
327000
198000
197500
197000
196500
Lidar Area 3
Key:
Site Boundary
Lidar Areas
Lidar Area 3: Probable Bronze Age Round Barrows
Topography heat map
Band 1 (Gray)
<450m aOD
452m aOD
454m aOD
457m aOD
459m aOD
461m aOD
463m aOD
466m aOD
468m aOD
>470m aOD
0 100 200 300 400 m
HCUK GROUP
Mynydd Maen Wind Farm
Lidar Areas 3 and 4
Figure 3
Topographic map showing summit of Mynydd Maen in relation to Lidar Area 3 probable round barrows


Key:
Site Boundary
Lidar Areas
Lidar Area 3: Probable Bronze Age Round Barrows
Scheduled Monuments within the Zone of Theoretical Visibility
Proposed Turbines
Lidar Area 3
T10
T11
T12
T13
MM045
MM046
MM065
MM070
MM071
MM149
MM196
MM033
0 0.5 1 1.5 2 km
HCUK GROUP
Mynydd Maen Wind Farm
Lidar Areas 3 and 4
Figure 4
Lidar Area 3, probable Bronze Age round barrows, proposed wind turbines and scheduled monuments of similar type

5 Appendix 2 – Site Photographs

Photo 5.1 - Looking west towards the probable southwestern round barrow (Highlighted)

Photo 5.2 - Looking northwest towards the probable northeastern round barrow (highlighted)

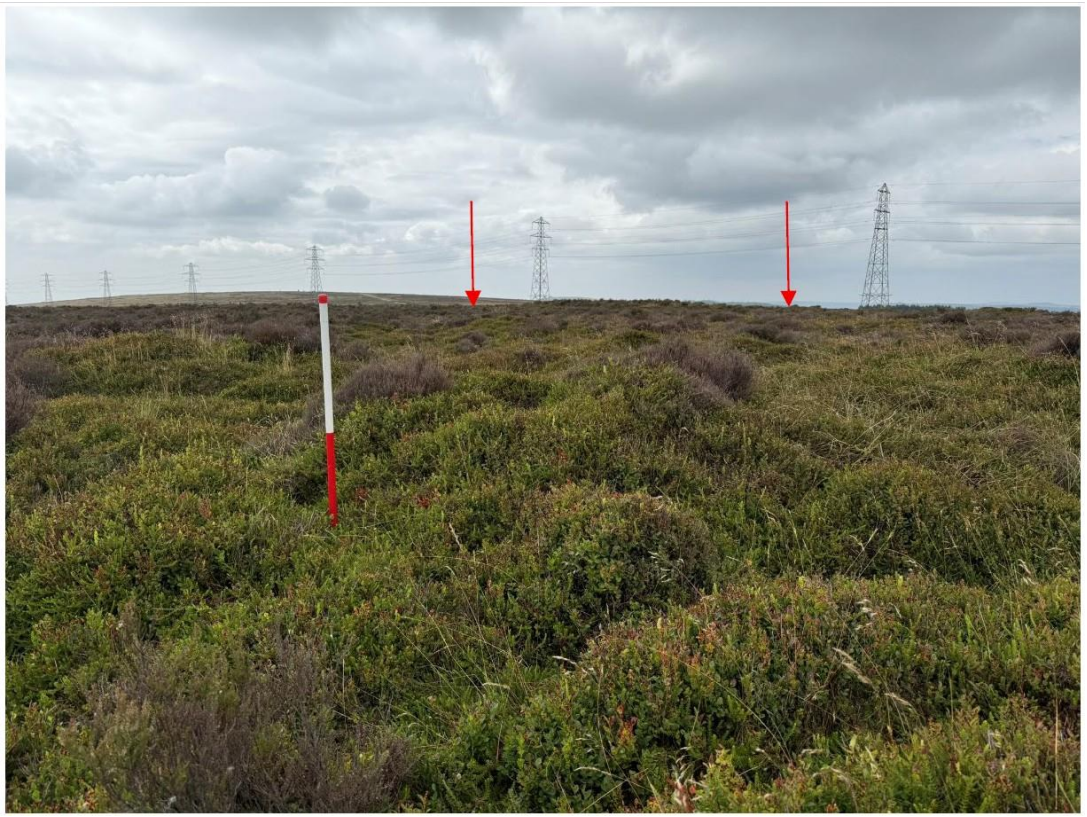


Photo 5.3 - Looking southwest from the top of the probable northeastern round barrow towards the southeastern round barrow (highlighted)

Photo 5.4 - Looking northeast towards the sites of the two probable round barrows (highlighted)

Photo 5.5 - Panoramic view from probable southwestern round barrow from southwest to northwest

Photo 5.6 - Panoramic view from probable southwestern round barrow from north to southwest

Photo 5.7 - Panoramic view from probable northeastern round barrow from southeast to northwest

Photo 5.8 - Panoramic view from probable northeastern round barrow from northwest to east

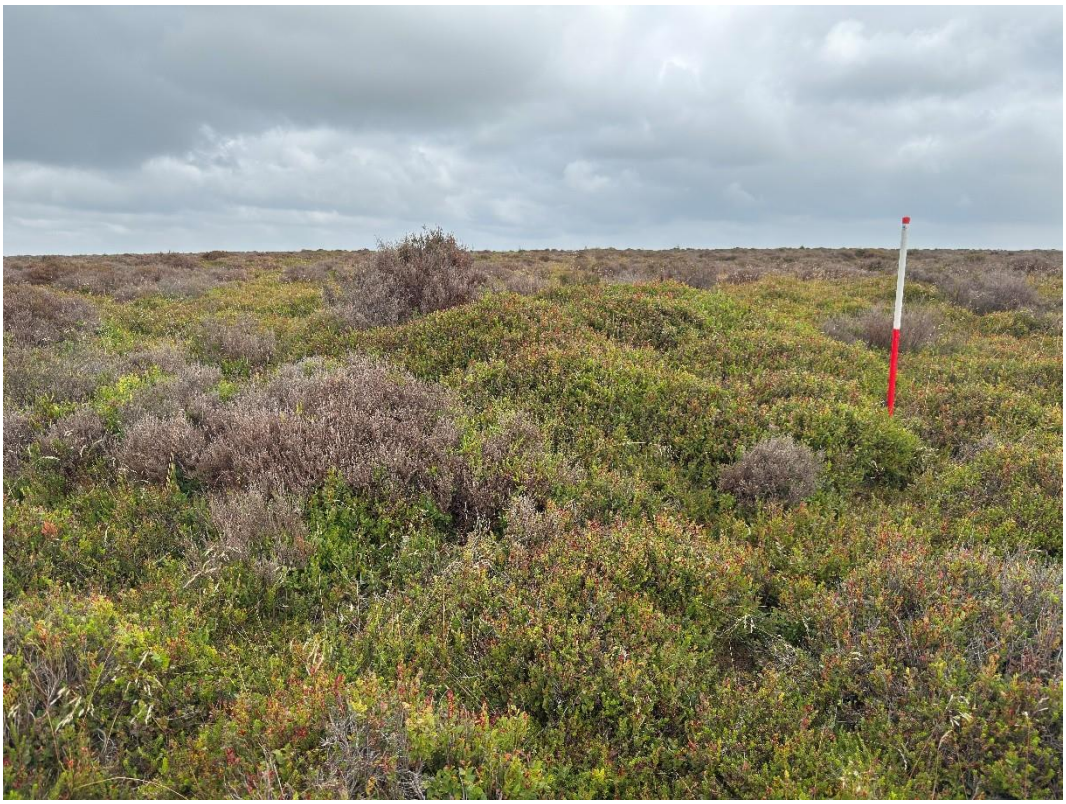


Photo 5.9 - General area of Lidar Area 4 showing one of the larger vegetation mounds

Photo 5.10 - General area of Lidar Area 4 showing groups of smaller vegetation mounds

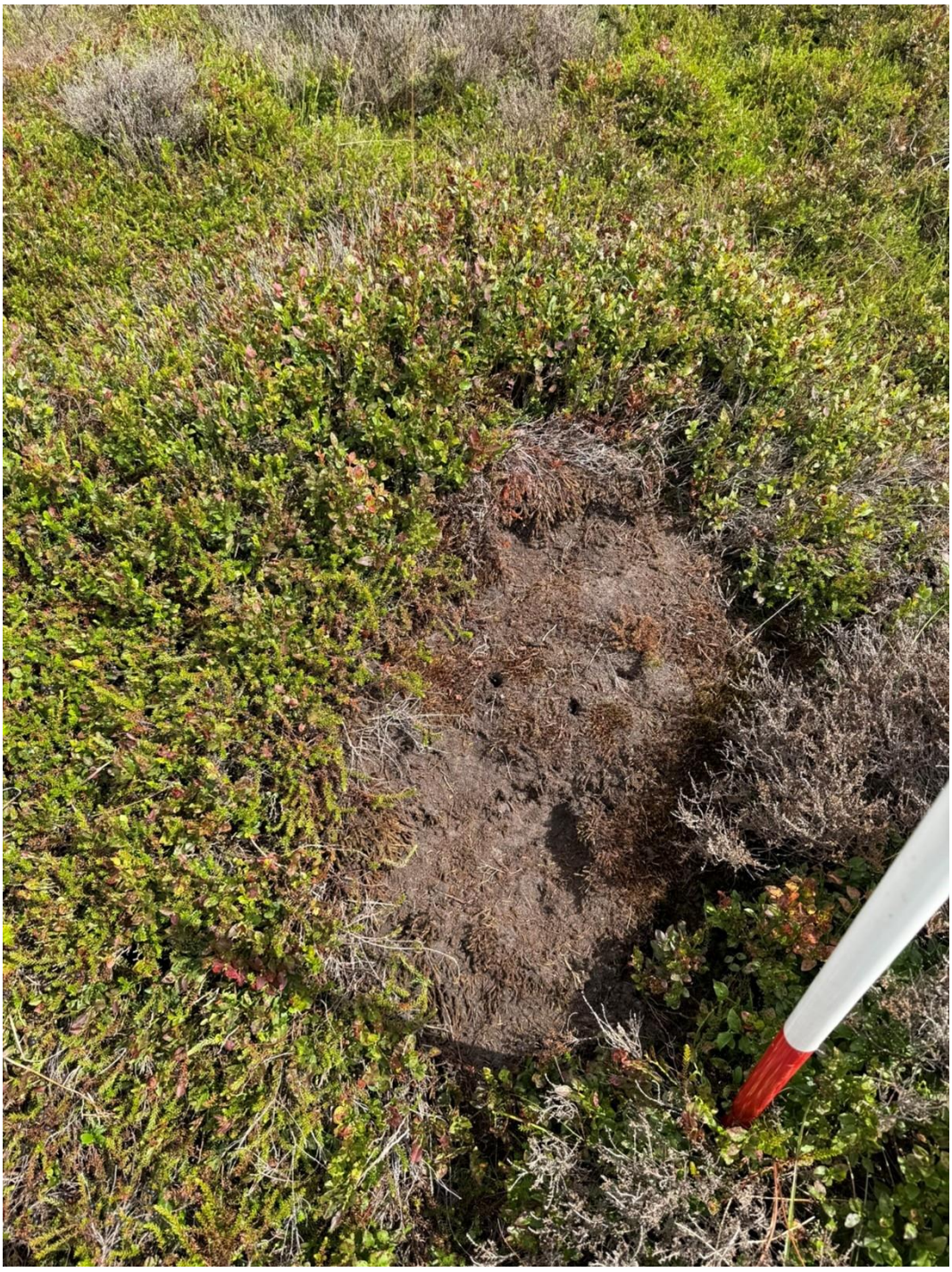


Photo 5.11 - General area of Lidar Area 4 showing one of the exposed soil areas of a vegetation mound

Photo 5.12 - General view southwest from the summit of Mynydd Maen across Lidar Area 4, with the area of Lidar 3 (the probable round barrows) in the distance, but the features are not discernible.