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SHEPHERDS' RIG WIND FARM

ADDITIONAL ENVIRONMENTAL INFORMATION (AEI) II

TECHNICAL APPENDIX A2.1

ASSESSMENT OF CUMULATIVE EFFECTS WITH SCOPING SITES

MARCH 2021

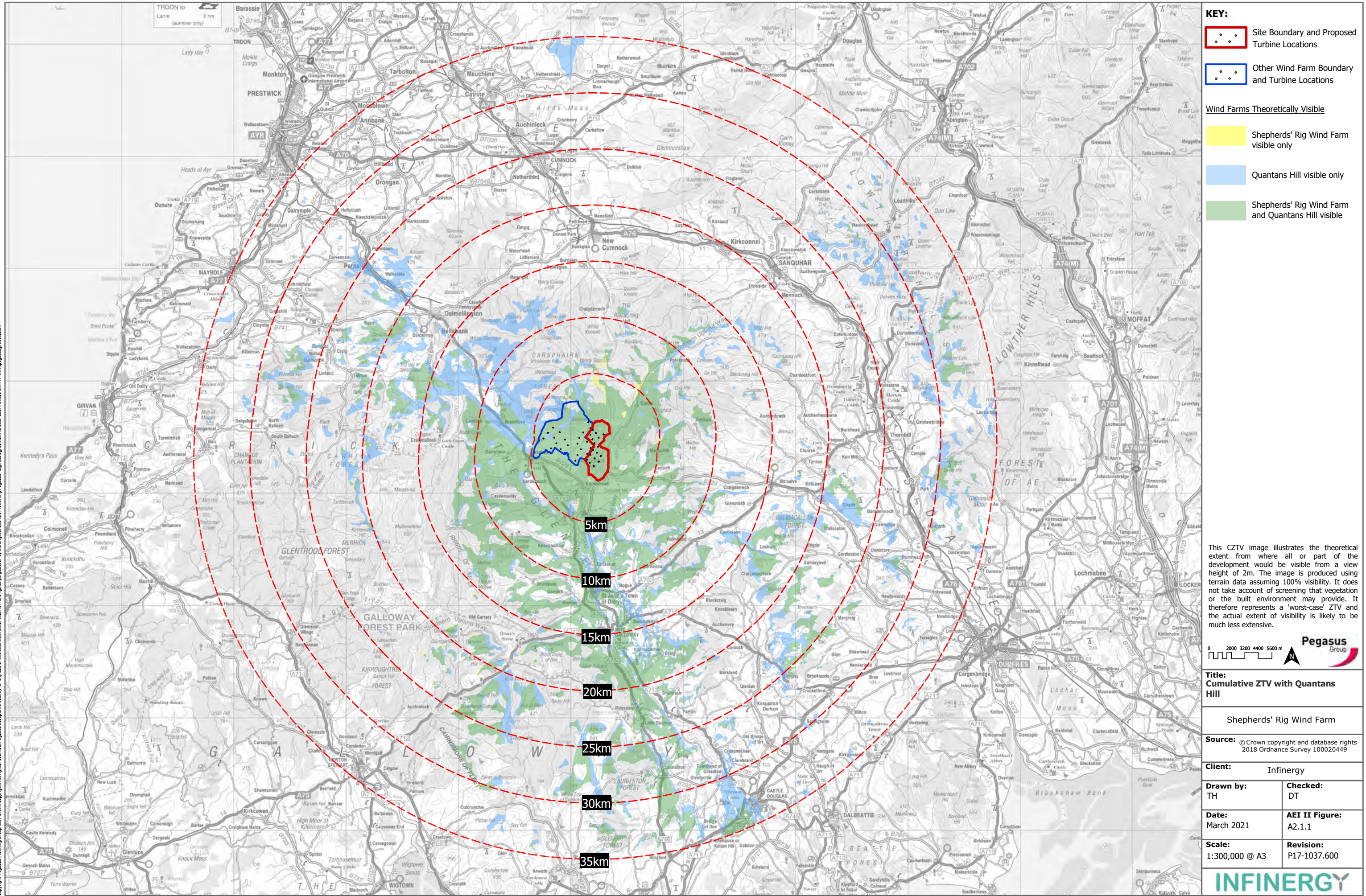
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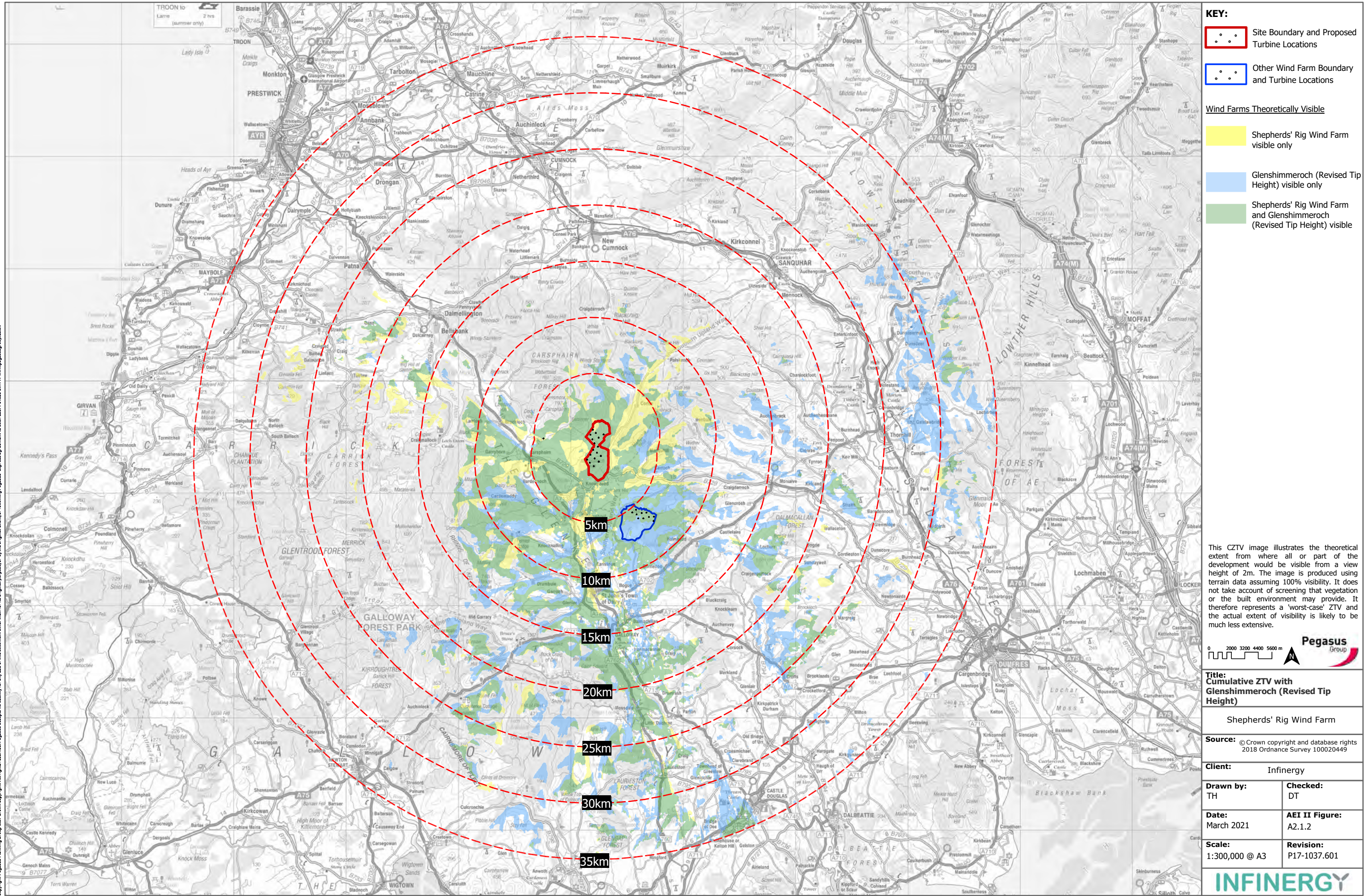
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1. Assessment of Cumulative Effects with Scoping Sites
 - 1.1.1. The current cumulative situation within the 15km detailed study area is illustrated on AEI II Figure 2.1 **'Other Wind Farms within 15km' of this AEI II** submission.
 - 1.1.2. In addition to those schemes which have been considered within the updated CLVIA, it is understood that there are two further schemes within 10km of the site, where either a Scoping Request has been made, or there is **information on the developer's website that a scheme is at an early stage:**
 - Quantans Hill;
 - Glenshimmeroch (Revised Tip Height)
 - 1.1.3. This Appendix therefore considers the scenario whereby these schemes were also to form part of the baseline landscape into which the Revised Development is located in addition to the other operational, consented and proposed schemes considered in the main cumulative assessment.
 - 1.1.4. A cumulative ZTV (CZTV) has been produced to illustrate the theoretical visibility between each of the above schemes and the **Shepherds' Rig Wind Farm** layout (AEI II Figures A2.1.1 – A2.1.2). In turn an updated set of visualisations have been prepared which also show these additional two schemes (AEI II Figures A2.1.3 – A2.1.24), as have 360-degree wireframes at six more elevated viewpoint locations (AEI II Figures A2.1.25 – A2.1.30).
 - 1.2. Glenshimmeroch (Revised Tip Height)
 - 1.2.1. The main cumulative assessment has already considered the consented Glenshimmeroch scheme of 10no. 149.9m turbines. It is understood that a proposal may be submitted for a revised tip height of 160m-180m for the 10 turbines. It is noted that such a revision would require aviation lighting to be included on the turbines as they would be greater than 150m.
 - 1.2.2. Given the distance between the Glenshimmeroch site and the **Shepherds' Rig Wind Farm** it is not considered the increase in tip height would have the potential to bring about any additional significant cumulative effects beyond those already identified in the main cumulative assessment. For the most part the increase of 10-30m to the tip height of the turbines would not be perceptible when compared to the consented development.
 - 1.3. Quantans Hill
 - 1.3.1. The Quantans Hill scheme lies immediately adjacent to the west of the **Shepherds' Rig Wind Farm and is presently at a scoping stage.** Its proposed scale would be far larger than the Revised Development (potentially by as much as 100m) and would require aviation lighting to be included on the turbines. As can be seen with regard to the alternative version of the visualisations, the scheme would appear in the same part of the view as the Revised Development and would generally be highly noticeable in the landscape.

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- 1.3.2.** In this context if the Quantans Hill scheme were already to form part of the baseline landscape the effect of the **Shepherds'** Rig Wind Farm on both landscape character and visual amenity would reduce. This is because views of a much larger wind energy development would already be an established element of this part of the landscape. It is recognised that the overall combined effect would be greater, but the greater part of that effect would arise from Quantans Hill rather than the Revised Development. In particular it is noted that the Quantans Hill scheme lies closer to the Galloway Hills RSA and would be much more prominent in views from it.

2. Figures: Assessment of Cumulative Effects with Scoping Sites

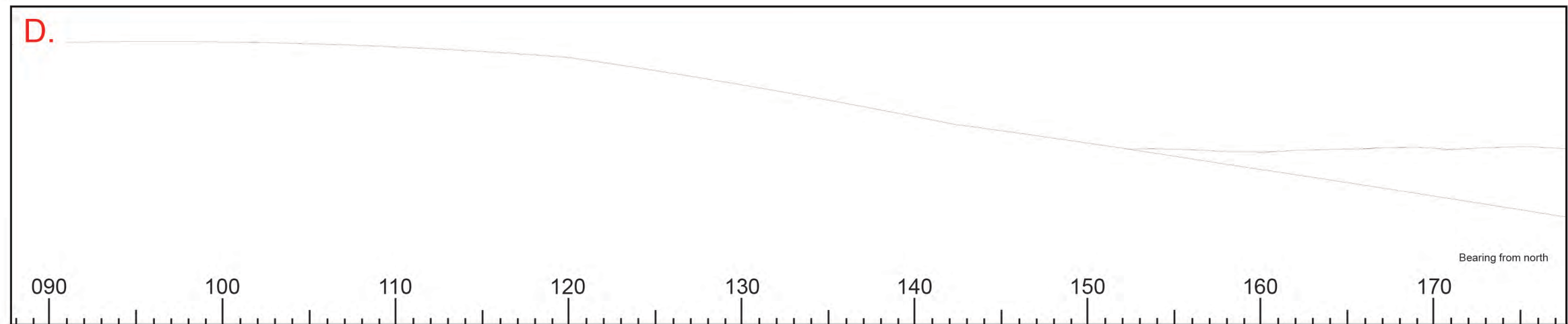
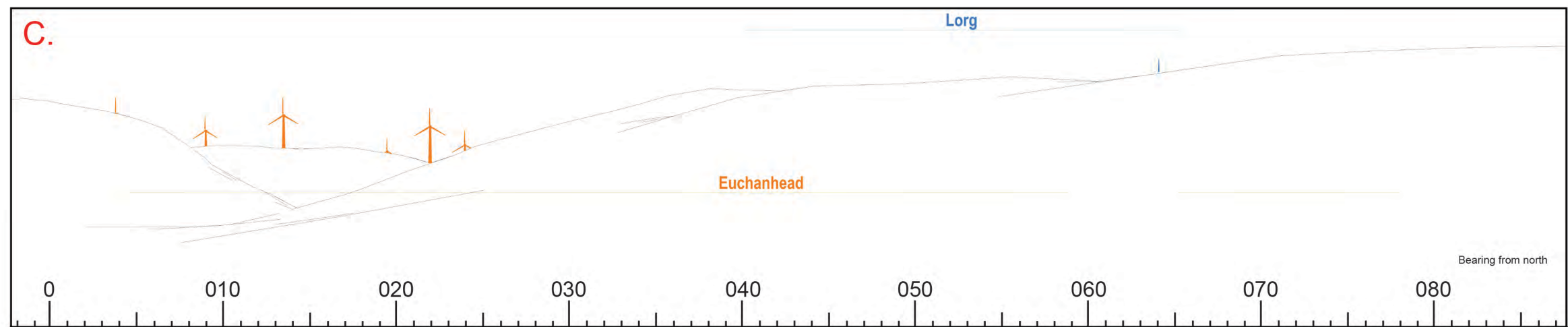
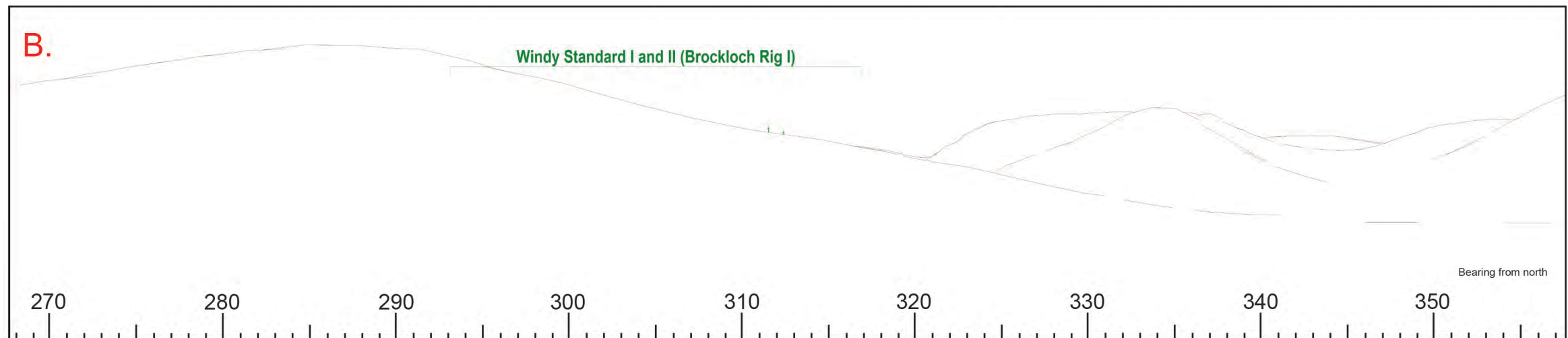
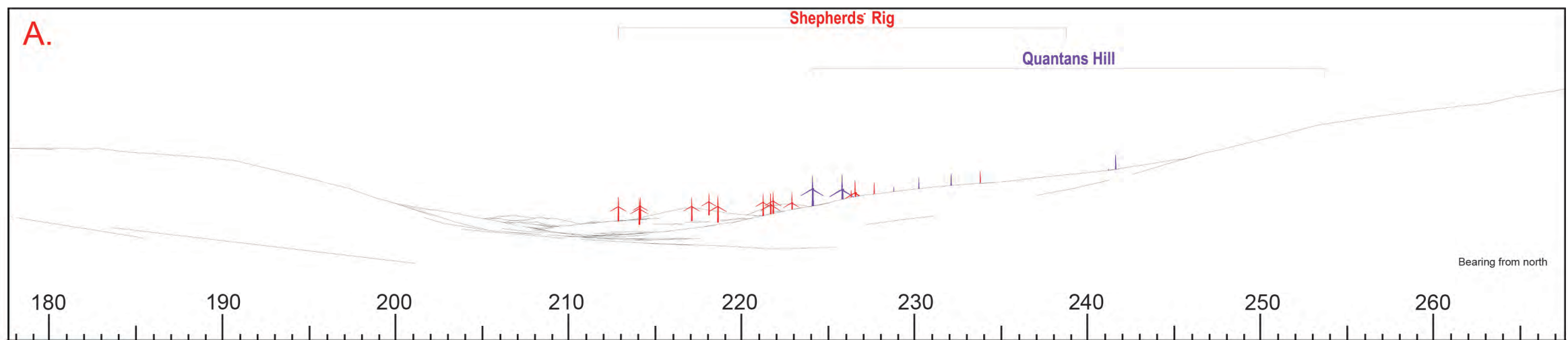




Appendix A2.1

AEI II Figures A2.1.3 – A2.1.24

Are found in Volume 2b: AEI II Landscape and Visual Visualisations



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Viewpoint Information

OS Reference: E 265860 N 598002

Viewpoint height: 251m (AOD)

Distance to nearest turbine: 4048m (T17)

Direction from site: Northeast

Angle of view: 90 degrees



Proposed Shepherd's Rig Turbines



Operational & Under Construction Turbines



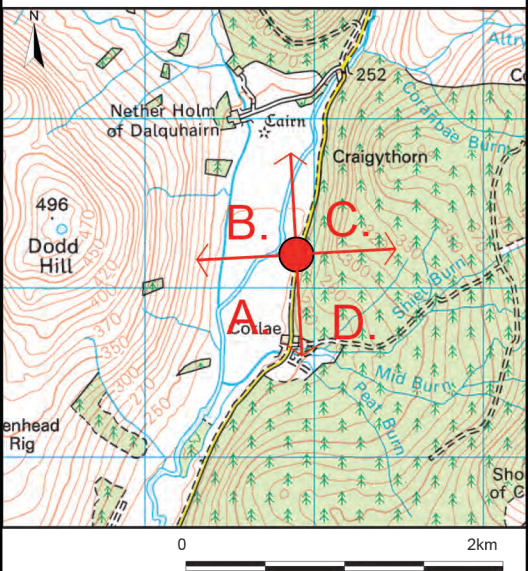
Consented Turbines



Other Turbines in planning



Other Turbines in Scoping



Produced By: TH
Produced By: FH

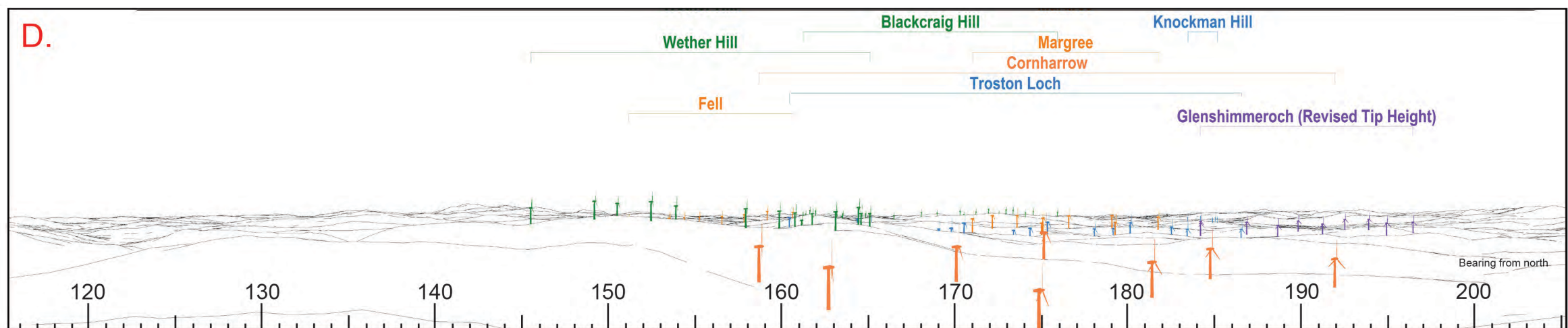
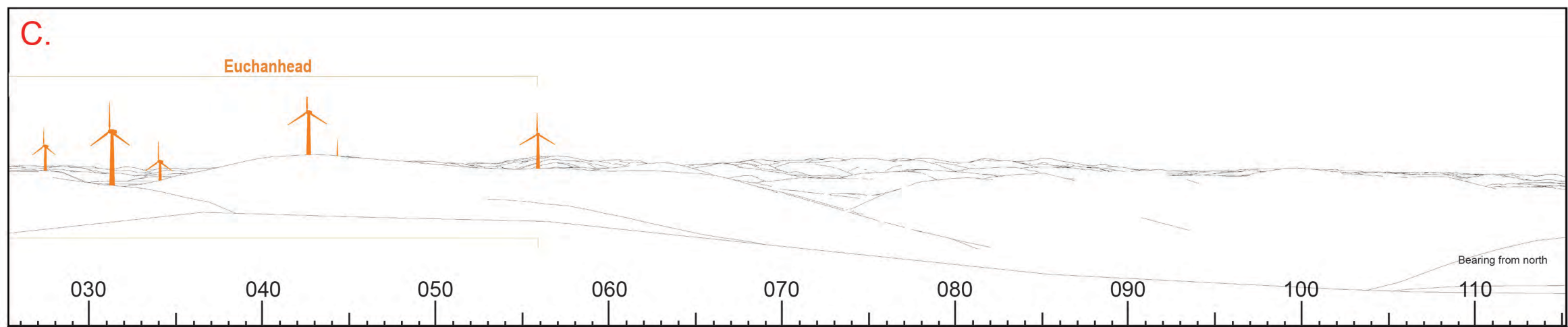
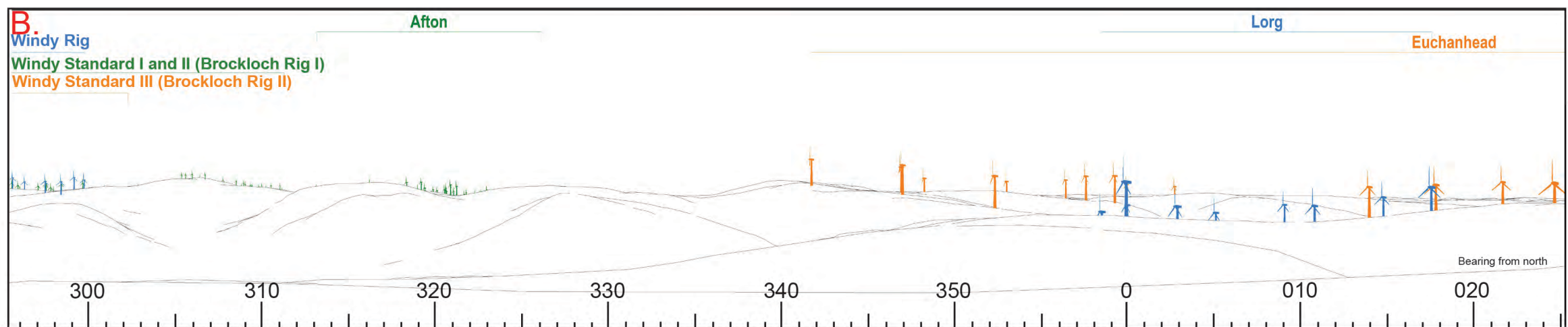
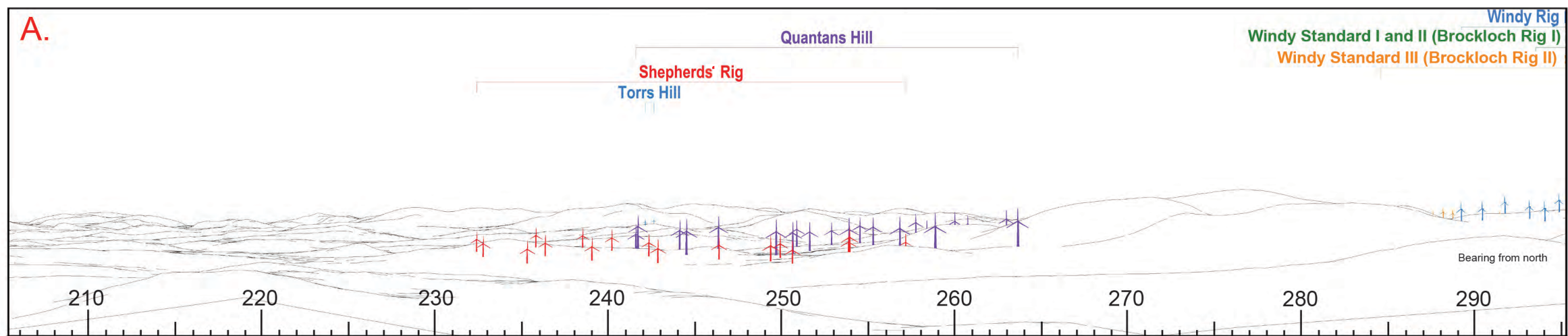
Ref: P17-1037.206

Date: 18_02_2021

Rev:

AEI II Figure A2.1.25
360 Degree Cumulative Wireframes
Viewpoint 6: Head of Ken Valley

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Viewpoint Information






OS Reference: E 268029 N 597036

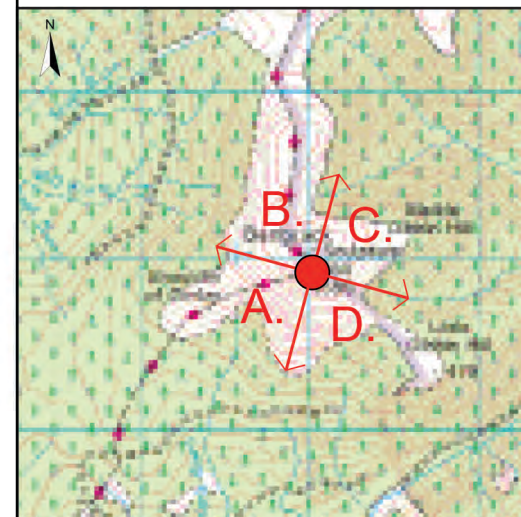
Viewpoint height: 574m (AOD)

Distance to nearest turbine: 5425m (T3)

Direction from site: Northeast

Angle of view: 90 degrees

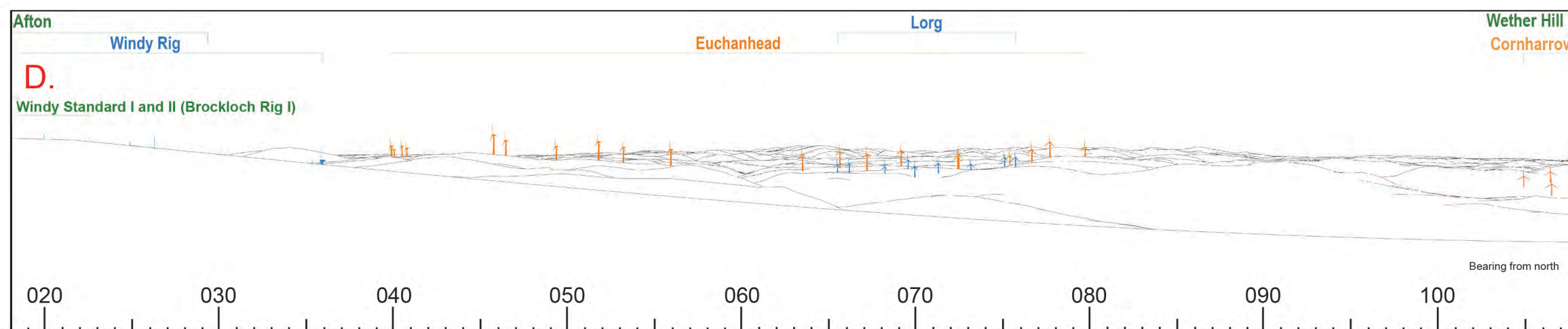
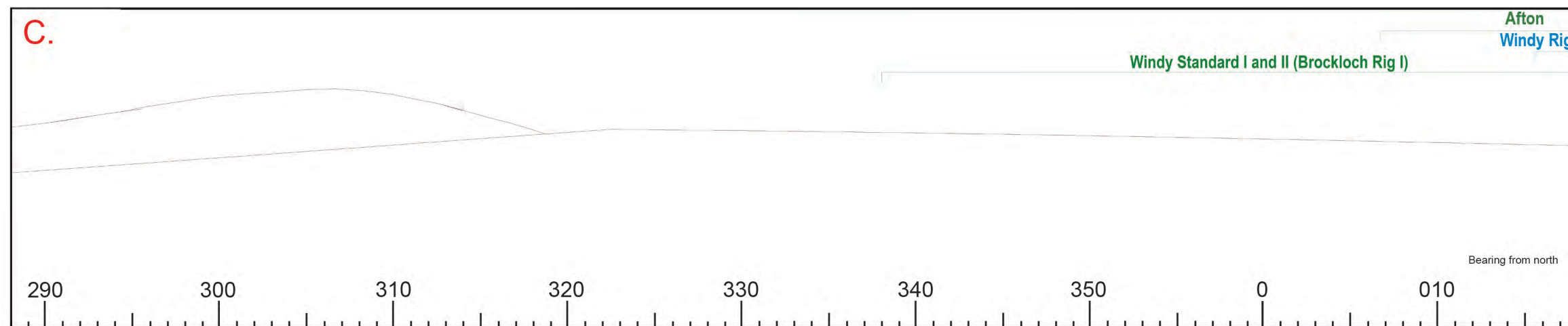
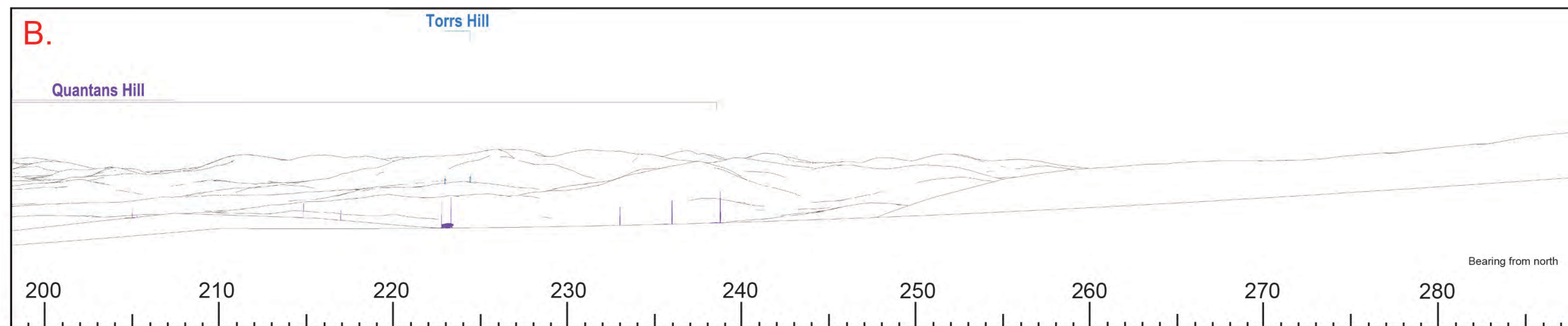
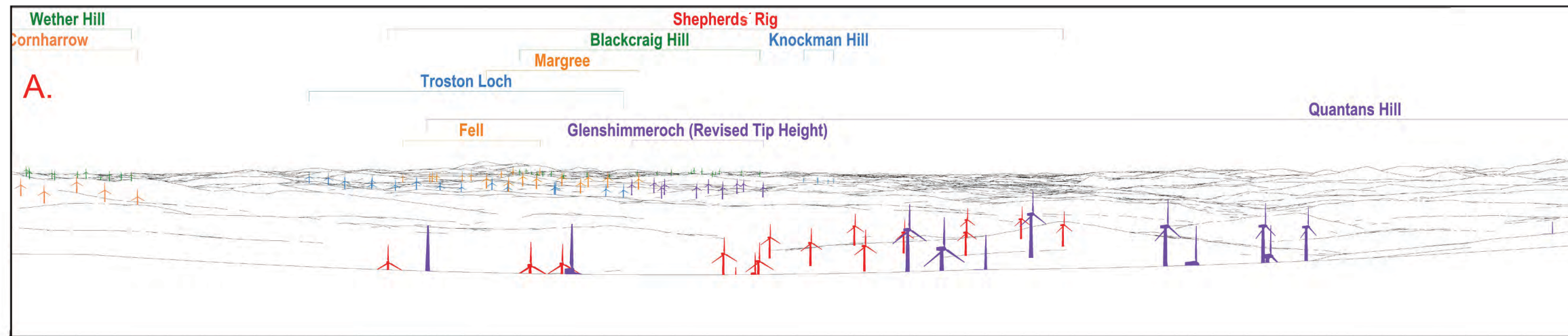
-  Proposed Shepherds' Rig Turbines
-  Operational & Under Construction Turbines
-  Consented Turbines
-  Other Turbines in planning
-  Other Turbines in Scoping



Produced By: TH	Ref: P17-1037.210	Rev:
Produced By: FH	Date: 18_02_2021	

AEI II Figure A2.1.26
360 Degree Cumulative Wireframes
Viewpoint 10: Southern Upland Way,
Benbrack (Striding Arch)

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Viewpoint Information






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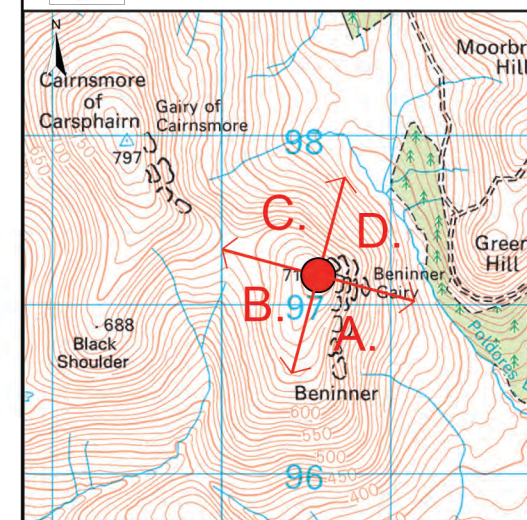
Viewpoint height: 153m (AOD)

Distance to nearest turbine: 2045m (T1)

Direction from site: Northwest

Angle of view: 90 degrees

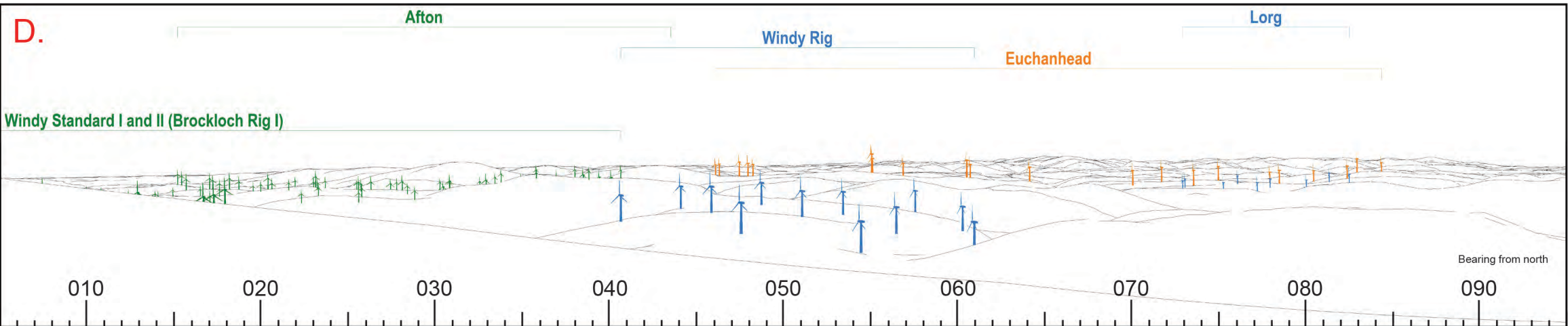
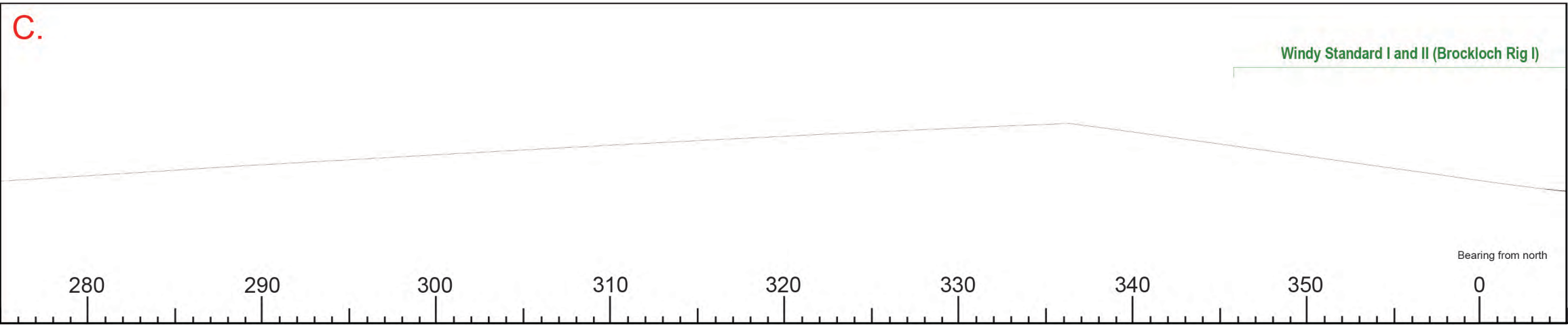
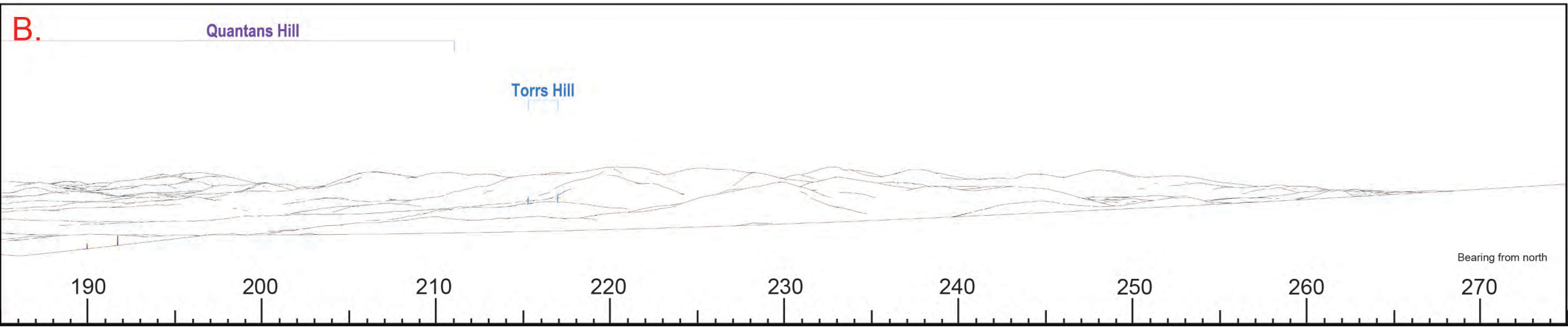
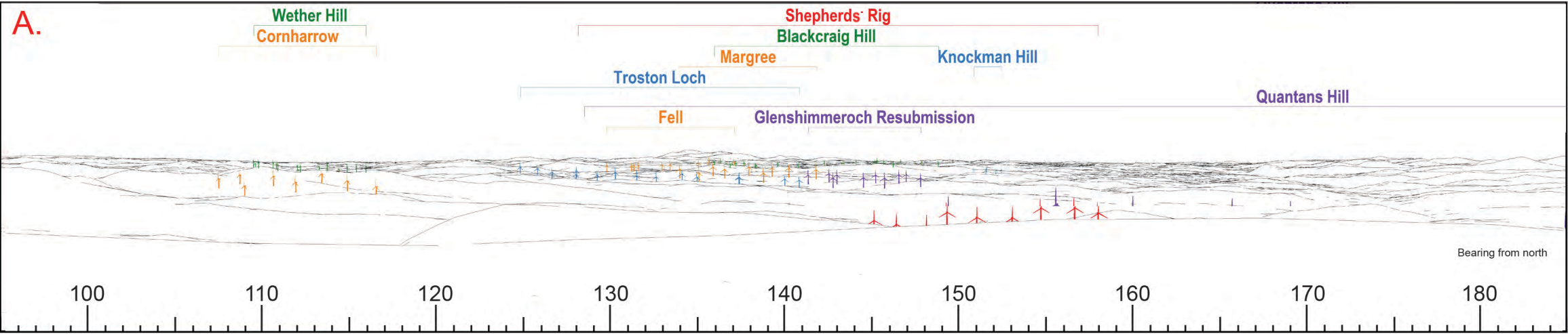
-  Proposed Shepherds' Rig Turbines
-  Operational & Under Construction Turbines
-  Consented Turbines
-  Other Turbines in planning
-  Other Turbines in scoping



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AEI II Figure A2.1.27
360 Degree Cumulative Wireframes
Viewpoint 13: Beninner

SHEPHERDS' RIG WIND FARM



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Viewpoint Information






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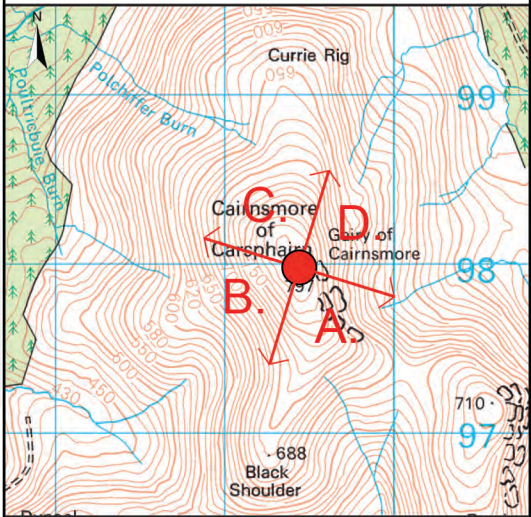
Viewpoint height: 794m (AOD)

Distance to nearest turbine: 3420m (T1)

Direction from site: Northwest

Angle of view: 90 degrees

-  Proposed Shepherds' Rig Turbines
-  Operational & Under Construction Turbines
-  Consented Turbines
-  Other Turbines in planning
-  Other Turbines in scoping



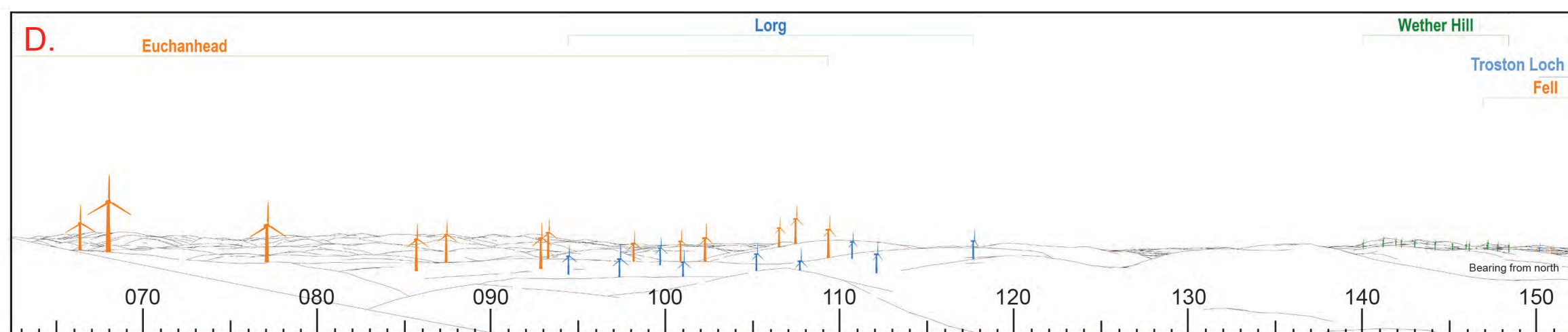
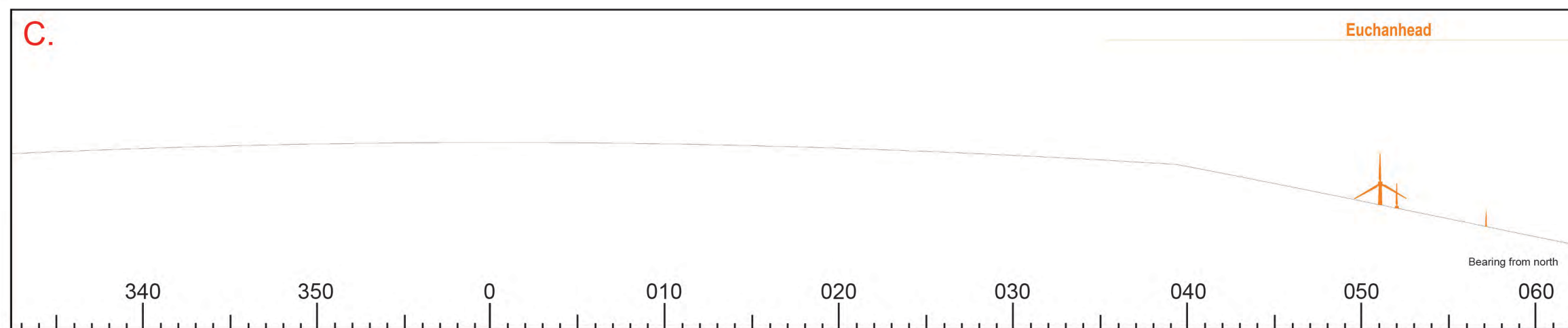
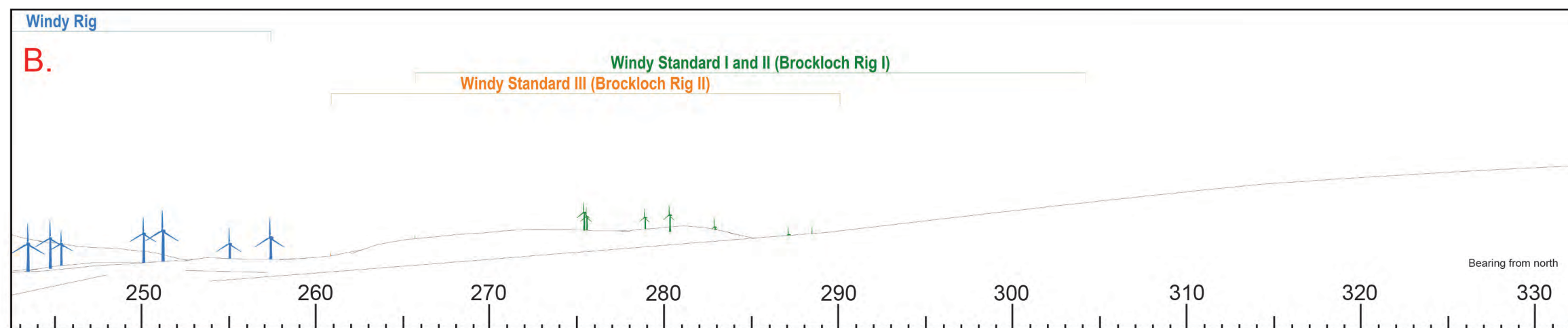
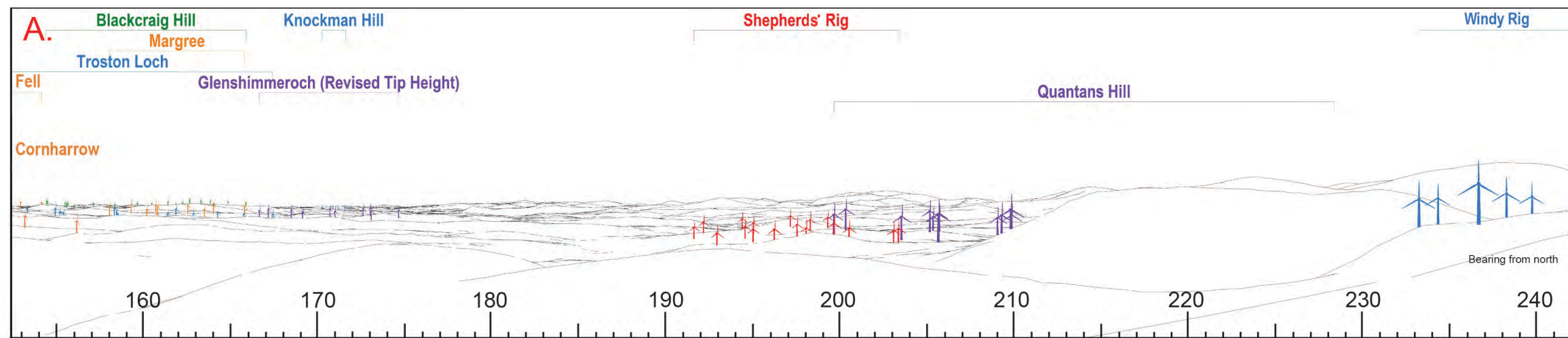
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Ref: P17-1037.214
Date: 18_02_2021

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AEI II Figure A2.1.28
360 Degree Cumulative Wireframes
Viewpoint 14: Cairnsmore of Carsphairn

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Viewpoint Information






OS Reference: E 264228 N 601023

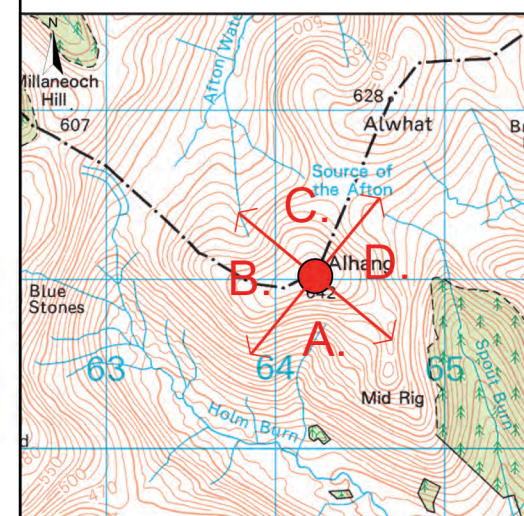
Viewpoint height: 636m (AOD)

Distance to nearest turbine: 5847m (T1)

Direction from site: North

Angle of view: 90 degrees

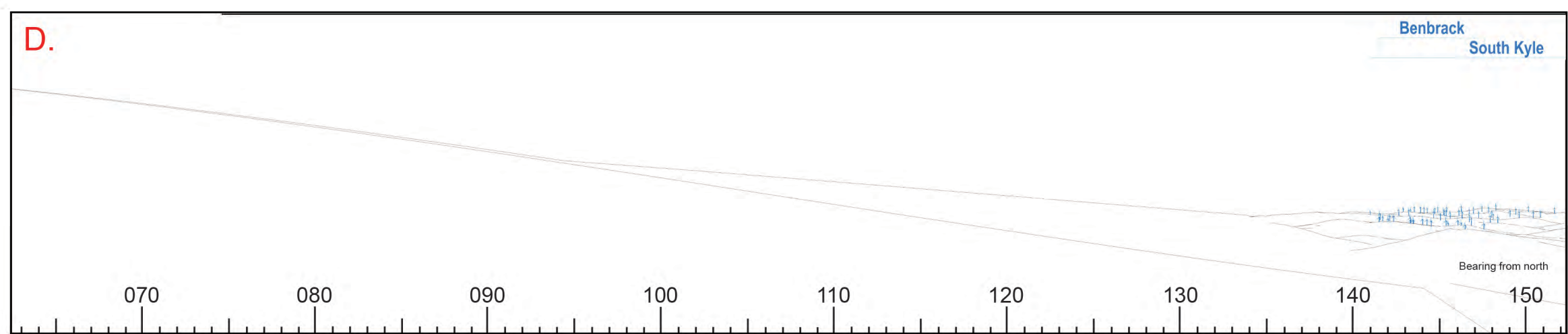
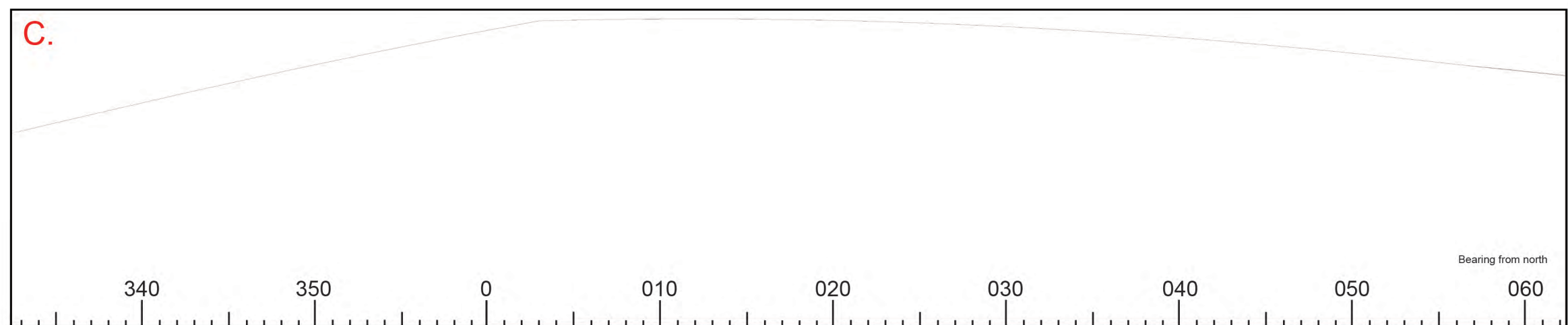
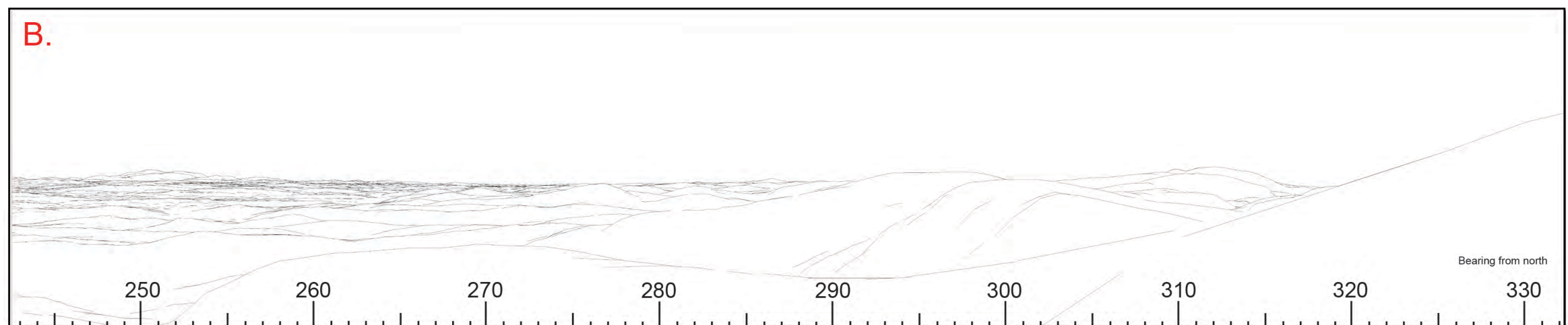
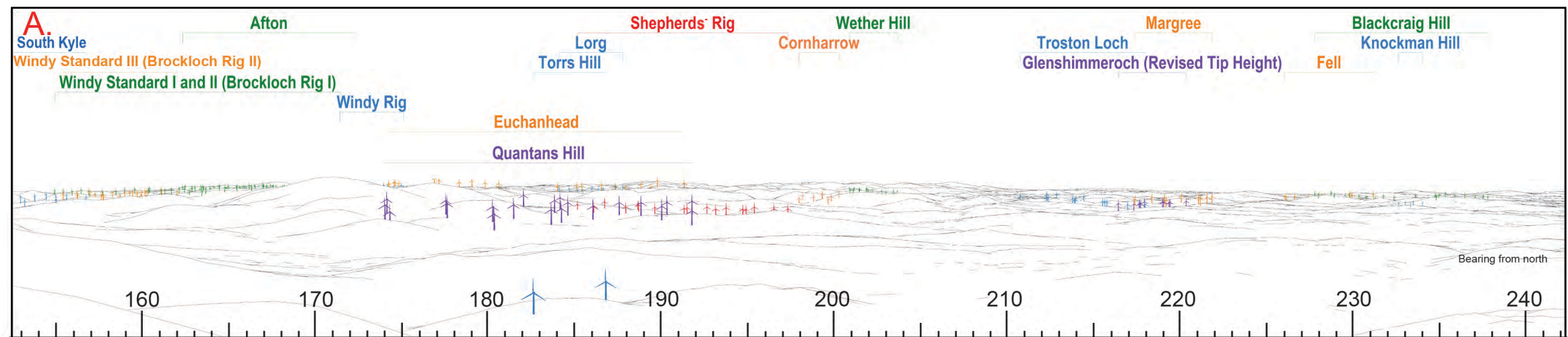
-  Proposed Shepherds' Rig Turbines
-  Operational & Under Construction Turbines
-  Consented Turbines
-  Other Turbines in planning
-  Other Turbines in scoping



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AEI II Figure A2.1.29
360 Degree Cumulative Wireframes
Viewpoint 16: Alhang

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Viewpoint Information






OS Reference: E 250447 N 587287

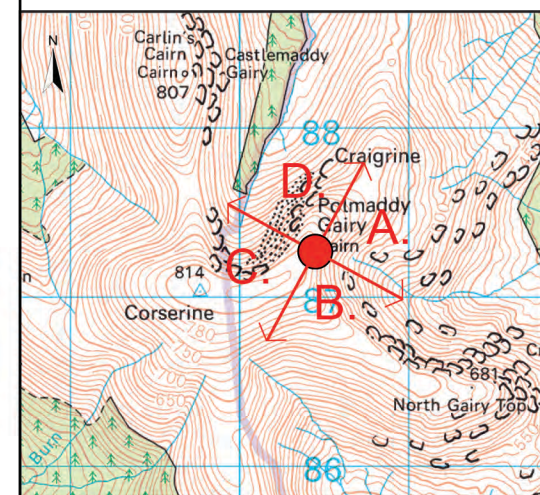
Viewpoint height: 793m (AOD)

Distance to nearest turbine: 12,380m (T16)

Direction from site: West-southwest

Angle of view: 90 degrees

-  Proposed Shepherds' Rig Turbines
-  Operational & Under Construction Turbines
-  Consented Turbines
-  Other Turbines in planning
-  Other Turbines in scoping



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AEI II Figure A2.1.30
360 Degree Cumulative Wireframes
Viewpoint 21: Corserine (Hennessey's Shelter)

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