

THE HIGHLAND COUNCIL

**SOUTH PLANNING APPLICATIONS COMMITTEE
20 August 2013**

Agenda Item	5.3
Report No	PLS 044/13

**13/02293/FUL: WPD Beinn Mhor Limited
South west of Tomich, Strathglass, Inverness**

Report by Area Planning Manager – South

SUMMARY

Description: Erection of a temporary 80m meteorological mast at the proposed Beinn Mhor Wind Farm

Recommendation: GRANT

Ward: 13 - Aird and Loch Ness

Development category: Local

Pre-determination hearing: N/A

Reason referred to Committee: Objections from 5 or more addresses.

1. PROPOSAL

- 1.1 The application relates to the erection of an 80 metre anemometer mast on land at Beinn Mhor, located at the eastern edge of Guisachan Forest. The submission confirms that the mast will be required for a temporary period of up to 3 years, to determine the feasibility of the site, including wind speeds, in connection with a proposed wind farm adjacent to the mast site which will be subject to separate consideration at a later date. The mast will be used to mount anemometers (wind speed measurement devices) and held in place by stay lines at six points around the mast.
- 1.2 No pre-application discussion has taken place in relation to this application.
- 1.3 The site is accessed from the B-road south of the village of Tomich. From there an existing farm track would be used on Guisachan Estate. The tracked vehicles required in this case would leave the existing farm track west of Loch a'Ghreidlein and follow a direct route in a southern direction onto the hill of Beinn Mhor.
- 1.4 A supporting statement has been submitted with the application which gives an overview of the site and the proposed development along with a schedule of works and a method statement.
- 1.5 There have been no variations made during the course of this application.

2. SITE DESCRIPTION

- 2.1 The application site is approximately 5.5km south of Cannich and 2km south east of Tomich, Strathglass. Occupying an elevated position on sloping ground, it would be bounded to the south by a mature plantation and to the north by Beinn Mhor. The immediate area surrounding the proposal is predominantly rural with a low population. The location and height of the proposed anemometer mast will mean that it will be visible from within the surrounding landscape.

3. PLANNING HISTORY

- 3.1 N/A

4. PUBLIC PARTICIPATION

- 4.1 Advertised: 28.06.2013

Representation deadline: 15.07.2013

Timeous representations: 82

Late representations: 0

- 4.2 Material considerations raised are summarised as follows:

- The visual impact of the mast will be out of character with the surrounding landscape.
- The cumulative visual impact, attributed to the replacement of the Beaully-Denny pylons and Corrimony Wind Farm in several representations, of the mast is unacceptable in Glen Affric which is designated a National Nature Reserve and National Scenic Area.
- The erection of this mast will have a detrimental impact on tourism and local businesses.
- The application, as submitted, appears to be deliberately misleading as it infers the development is attached to Corrimony Wind Farm and not the Beinn Mhor Wind Farm.
- The mast will have an unacceptable impact on the character of Tomich which is a conservation area and upon the Tweedmouth Memorial which is a Scheduled Monument.
- Inland wind farms are not effective and do not generate as much energy as the developer states they do. It is an unreliable form of energy generation which has a negligible effect on UK carbon emissions.
- The proposed development is likely to have a detrimental impact on protected species.
- The abandoned wind farm and associated works will be an eyesore on the landscape.
- Low frequency noise pollution in the area will be amplified to the detriment of the amenity of local residents.

- There is no proper research on the effects of low frequency secondary transmission through the bedrock - the rock of the Moine Thrust is at that point relatively friable and could suffer 'fracking' style disintegration.
- The mast will require access through an area of pristine heather bog and there is no indication of how the channel erosion from the track will be controlled.
- Approval of this mast will be seen as a positive indicator and set a precedent for the approval of a large wind farm in this location.
- This application fails to meet with SPP 92 and 93 as it will not contribute towards sustainable economic growth and will not provide employment or community benefit.

4.3 All letters of representation are available for inspection via the Council's eplanning portal which can be accessed through the internet www.wam.highland.gov.uk/wam. Access to computers can be made available via Planning and Development Service offices.

5. CONSULTATIONS

- 5.1 **Strathglass Community Council:** No response received.
- 5.2 **Scottish Natural Heritage (SNH):** No comments.
- 5.3 **TECS (Area Roads and Community Works Manager):** No comments.
- 5.4 **Highland and Islands Airport Authority (HIAL):** No objection.
- 5.5 **National Air Traffic Services (NATS):** No objection. Informative recommended.
- 5.6 **Civil Aviation Authority (CAA):** No objection.
- 5.7 **Ministry of Defence (MOD):** No objection. Condition recommended.
- 5.8 **Royal Society for the Protection of Birds (RSPB):** No comments.
- 5.9 **Environmental Health:** No comments.

6. DEVELOPMENT PLAN POLICY

The following policies are relevant to the assessment of the application

6.1 Highland-wide Local Development Plan 2012

28	Sustainable design
43	Tourism
57	Natural, Built and Cultural Heritage
58	Protected species
61	Landscape
67	Renewable Energy Developments

6.2 Inverness Local Plan (March 2006) (as continued in force)

BP3 Remote Land

7. OTHER MATERIAL CONSIDERATIONS

7.1 Highland Council Supplementary Planning Policy Guidance

Highland Renewable Energy Strategy & Planning Guidelines (May 2006)

Onshore Wind Energy (Draft - April 2011)

7.2 Scottish Government Planning Policy and Guidance

Scottish Planning Policy (The Scottish Government, February 2010)

8. PLANNING APPRAISAL

8.1 Section 25 of the Town and Country Planning (Scotland) Act 1997 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise.

8.2 This means that the application requires to be assessed against all policies of the Development Plan relevant to the application, all national and local policy guidance and all other material considerations relevant to the application.

8.3 Development Plan Policy Assessment

Strategic national guidance is set out in SPP 2010 and in other Scottish Government web-based renewables advice, which forms the main policy framework under which wind energy developments are assessed. These contain various siting and other environmental criteria to assist the planning consideration process. Locally, there are local development plan policies, including Policy 67, together with Highland Renewable Energy Strategy & Planning Guidelines (May 2006).

In terms of the requirements of Policy 67, the proposal does not impact upon any environmental, landscape or heritage designation. It is not located on prime agricultural land, is unlikely to have a significant impact on tourism/recreational interests and will not interfere with radio signals or aircraft activity.

Consideration then is focussed mainly upon visual impact – that is, assessing landform and landscape characteristics, the size of the mast, how it relates to the skyline, access tracks and ancillary components. Although it will be readily visible from the surrounding landscape given its height and elevated position, its modest width means that it is considered that the surrounding landscape has sufficient capacity to absorb the development and that the level of visual impact would be acceptable. As such it would represent an appropriate form of development which can be accommodated within the landscape. In this respect, it would be compatible with Policies 67 and 61 which seek to safeguard the landscape. In addition, the mast would not be a permanent feature, with any impact being limited to an initial 3 year period.

Consequently, subject to conditions as recommended, the proposal is not considered to have a significant adverse impact on any of the various relevant criteria identified in Policy 67, or in the supplementary guidance, including access, natural or built heritage, aircraft activity interests, etc.

8.4 Material Considerations

- **Access:** there are no abnormal loads associated with the delivery of components. As such, the Roads Authority has not raised any objection to the grant of planning permission.
- **Protected Species:** as per SNH/ RSPB standard advice pertaining to mast developments, the use of bird scarers/ guys will be subject of a planning condition.
- **Visual and Cumulative Impact:** the visual and cumulative impact of the proposed development in this location has been addressed in detail in the main body of the report.
- **Impact on tourism and local economy:** there will be no significant detrimental impact on tourism as a direct result of this application. This application relates to the erection of a single anemometer mast on a temporary basis.
- **The address is incorrect, implying the proposed development is associated with Corrimony:** there is no suggestion that the developer has attempted to mislead the public in this regard. The location map and associated documentation depicts the application site accurately. The resultant address of the proposed development has been drawn from The Highland Council's GIS mapping system at the validation stage.
- **The proposed mast will have an unacceptable impact on the character of Tomich which is a conservation area:** the proposed development is located approximately 2 kilometres south of Tomich. As such, there is no direct impact on the conservation area. The visual and cumulative impact of the proposal from the surrounding landscape, including settlements, is discussed in detail in the main body of the report.
- **Inland wind farms are not effective and do not generate as much energy as the developer states they do. It is an unreliable form of energy generation which has a negligible effect on UK carbon emissions:** the viability of the technology proposed is the responsibility of the developer, and is not the subject of consideration through the planning process. It is noted that the purpose of the anemometer mast is to provide accurate data on potential energy generation in this location.
- **The proposed development is likely to have a detrimental impact on protected species:** the low key nature of the construction phase, coupled with the fact that there are no moving parts proposed during the operational phase, means that there is no significant threat to protected species as a direct result of this development.

SNH and the RSPB were contacted following certain representations being received by members of the public. Neither objects to the application.

- **The abandoned wind farm and associated works will be an eyesore on the landscape:** this is an application for a wind monitoring mast, not a wind farm. It should be noted that the decommissioning phase of any such proposal would be the subject of stringent planning conditions requiring the removal of masts etc within a stipulated time period.
- **Low frequency noise pollution in the area will be amplified to the detriment of the amenity of local residents:** there are no moving parts associated with this proposal so there will be no significant increase in noise associated with the development during the operational phase.
- **There is no proper research on the effects of low frequency secondary transmission through the bedrock - the rock of the Moine Thrust is at that point relatively friable and could suffer 'fracking' style disintegration:** this is not a material planning consideration. It is not the responsibility of the Council (as Planning Authority) to undertake research on certain subjects, but to take account of research that has been undertaken and tested extensively. This is then incorporated into planning legislation. It is noted that this representation does not relate to a specific weakness in the vicinity of the application site in this instance, merely pointing out that there is a lack of research into the subject in general.
- **The tower will require access through an area of pristine heather bog and there is no indication of how the channel erosion from the track will be controlled:** SNH were consulted on this issue and have not raised any objection to the grant of planning permission.
- **Approval of this mast will be seen as a positive indicator and set a precedent for the approval of a larger wind farm in this location:** this application relates to the erection of a wind monitoring mast exclusively. The determination of an application for a temporary wind monitoring mast will not have any bearing on any future application for a wind farm.
- **This application fails to meet with SPP 92 and 93 as it will not contribute towards sustainable economic growth and will not provide employment or community benefit:** there is a policy assessment in the main body of the handling report.

8.5 **Other Considerations – not material**

It is noted that many of the letters of representation received were in relation to a proposed wind farm. This application relates to the erection of a wind monitoring mast only.

8.6 **Matters to be secured by Section 75 Agreement**

N/A

9. CONCLUSION

- 9.1 Based on the above observations, this proposal is considered to represent an acceptable form of development, which satisfies development plan requirements including those in the relevant supplementary guidance, and accordingly attracts a recommendation of approval. There are no material considerations which would attract any other recommendation.

10. RECOMMENDATION

Action required before decision issued	N
Notification to Scottish Ministers	N
Notification to Historic Scotland	N
Conclusion of Section 75 Agreement	N
Revocation of previous permission	N

Subject to the above, it is recommended the application be **GRANTED** subject to the following conditions and reasons / notes to applicant:

1. Where ground conditions specifically require it, the mast, areas of hardstanding and tracks may be micro-sited within the application site boundary. However, unless otherwise approved in writing by the Planning Authority (in consultation with SEPA and SNH), micro-siting is subject to the following restrictions:
- i. No foundation shall be positioned higher, when measured in metres Above Ordinance Datum (Newlyn), than the position shown on the original approved plans;
 - ii. No mast, hardstanding or track shall be moved:
 - a. More than 25m from the position shown on the original approved plans;
 - b. So as to be located within 250m (for mast foundations) or 150m (for hardstanding, tracks or trenches) of Groundwater-dependent Terrestrial Ecosystems;
 - c. To a position within 50m of any watercourse or, where it outlines a lesser distance, to a position within a watercourse buffer zone identified within the approved plans;
 - d. To a position within an area identified within the approved plans as having a gradient constraint, being deep peat (that is peat with a depth of 1.5m or greater) or having a peat landslide hazard risk of significant or greater;

- iii. No mast, hardstanding or track shall be moved where a change to its position, location or route has been proscribed under a condition of this permission.

Reason: To enable appropriate micro-siting within the site to enable the developer to respond to site-specific ground conditions.

2. The approval hereby granted is for a limited period of three years only from the date of this consent. At the end of this period, unless otherwise approved by the Planning Authority, the mast and all associated structures, including anemometers and supporting guy wires, shall be permanently removed from the site and the site shall be re-instated to its existing condition in accordance with a scheme for the restoration of the site which shall previously have been submitted to and approved by the Planning Authority not less than one month prior to the expiry of the consent hereby granted.

Reason: In order that the Planning Authority may retain control over the use of the site and to ensure that further consideration can be given to the operation, effects and impact of the use approved herewith on the amenity and character of the area.

3. For the duration of the development, the guyed supports shall be clearly marked with bird deflector tags.

Reason: In order to minimise the risk of birds colliding with the guyed supports of the wind mast.

4. Before development begins written evidence must be submitted to the Planning Authority which demonstrates that the applicant has submitted the following information to the Defence Estates MOD Safeguarding Officer (icgdgc-aero@mod.uk), D-UKDVOF & Power Lines, Air Information Centre, Defence Geographic Centre, DGIA, Elmwood Avenue, Feltham, Middlesex, TW13 7AH:-

- the date construction starts and ends
- the maximum height of construction equipment
- the latitude and longitude of the turbine

Reason: To maintain air safety.

INFORMATIVE NOTE REGARDING THE TIME LIMIT FOR THE IMPLEMENTATION OF THIS PLANNING PERMISSION

FOOTNOTE TO APPLICANT

Statutory Requirements: The following are statutory requirements of the Town and Country Planning (Scotland) Act 1997 (as amended). Failure to meet their respective terms represents a breach of planning law and may result in formal enforcement action.

1. The developer must submit a Notice of Initiation of Development (NID) in accordance with Section 27A of the Town and Country Planning (Scotland) Act 1997 (as amended) to the Planning Authority prior to work commencing on site. Furthermore, work must not commence until the notice has been acknowledged in writing by the Planning Authority.
2. On completion of the development, the developer must submit a Notice of Completion in accordance with Section 27B of the Town and Country Planning (Scotland) Act 1997 (as amended) to the Planning Authority.

Copies of the notices referred to are attached to this consent for your convenience.

Conditions: Your attention is drawn to the conditions attached to this permission. Any pre-conditions (those requiring certain works, submissions etc. prior to commencement of development) must be fulfilled prior to work starting on site. Failure to meet these conditions may invalidate your permission or result in formal enforcement action.

Flood Risk: It is important to note that the granting of planning permission does not imply there is an unconditional absence of flood risk relating to (of emanating from) the application site. As per Scottish Planning Policy, planning permission does not remove the liability position of developers or owners in relation to flood risk.

Signature: Allan J Todd

Designation: Area Planning Manager – South

Case Officer: Stuart Morrison

Background Papers: Highland-wide Local Development Plan, Inverness Local Plan

Relevant Plans: Plan 1: LOCATION PLAN A3 - S005_ENV_ECO_0011_D1

Plan 2: FLOOR PLAN A3 - HC-CW-80M-002 REV A

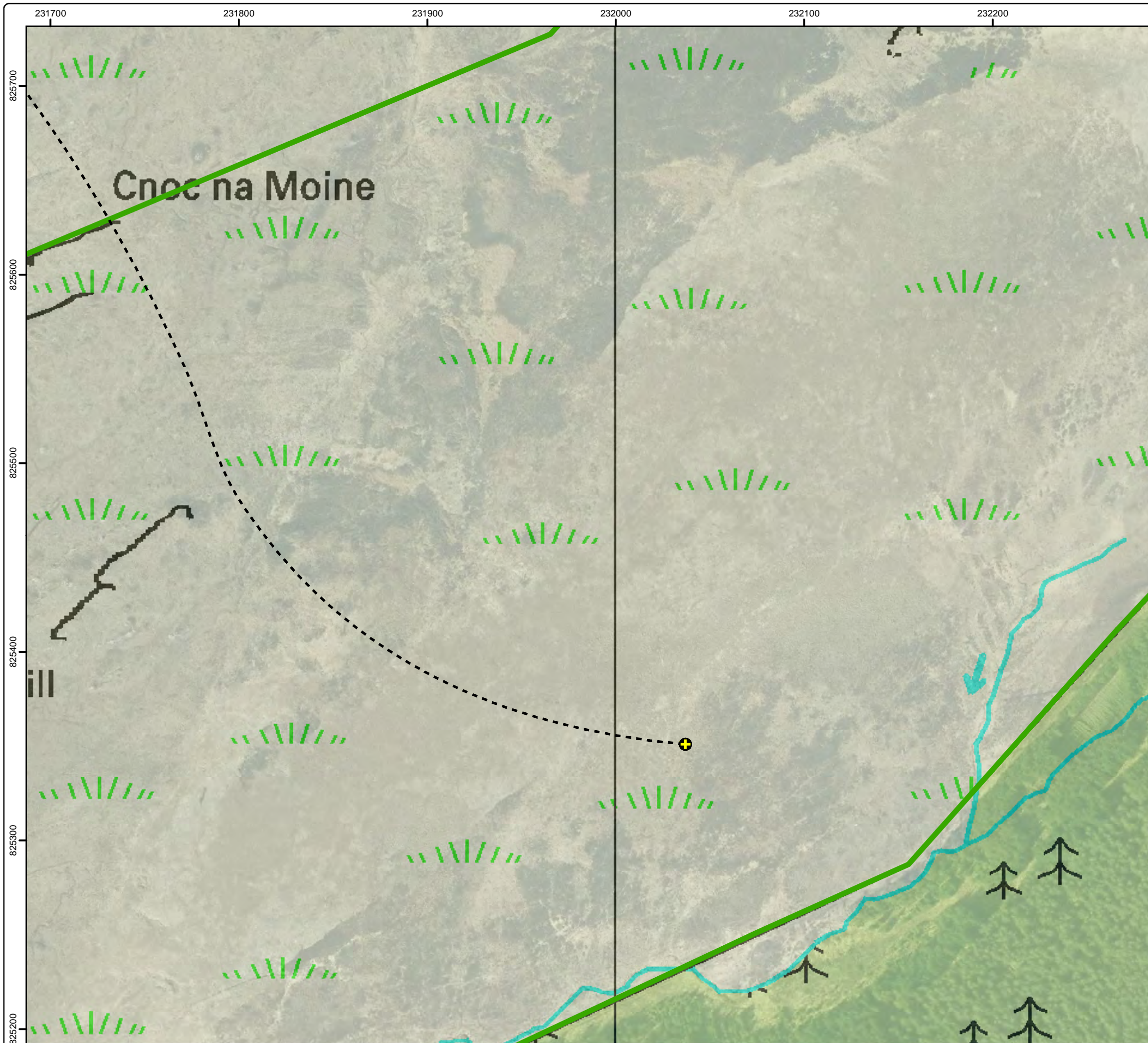
Plan 3: ELEVATION PLAN A3 - HC-CW-80M-001 REV A




Plan 4: ACCESS LAYOUT PLAN A3 - S005_ENV_ECO_0011_D1

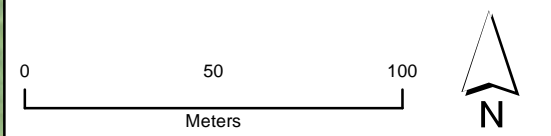
Appendix – Letters of Representation

1. Ms Kirstie Cohen, Culour, Breakachy, Beaully, IV4 7AE,
2. Mr Alan Hood, Glen Affric Holiday Park, Cannich, Beaully, IV4 7LT,
3. Mr George Herraghty, Lothlorien, Lhanbryde, Elgin, IV30 8LD,
4. Mr Brian Carmichael, 60 Lochfield Road, Dumfries, DG2 9BG,
5. Mr Matthew Jones, Cannich, Inverness-shire, IV4 7LN,
6. Mr Chris Herraghty, Lothlorien, Lhanbryde, IV30 8LD,
7. Mrs Jane Chisholm, 21 Smith Avenue, Inverness, IV3 5ES,
8. Mr Michael O'Connell, Dunglass Cottage, Maryburgh, IV78EQ,
9. Mr Richard Doake, 15 Blackford Hill View, Edinburgh, EH9 3HD,
10. Mrs Jacqueline Whitaker, 24 Tomich, Tomich, IV4 7LZ,
11. Dr Ian Brown, Morvich House, Golf Course Road, Blairgowrie, PH10 6JL,
12. Mr Russell Baker, Carron Lane, Midhurst, GU29 9LB,
13. Mrs Jennifer Eldrett, Flat 3, 34 Bouverie Avenue, Salisbury, SP2 8DT,
14. Mrs Anne Rutherford, 19 Harris Close, Newton Mearns, Glasgow, G77 6TU,
15. Mr John Mutch, The Old Henhouse, 4 Pump Meadow, Great Missenden, HP16 9BB,
16. Mrs Kate Morgan, Strathglass View, Mullardoch Road, Cannich, IV4 7LX,
17. Mr Ian Campbell, Strathglass View, Mullardoch Road, Cannich, IV4 7LX,
18. Mrs Sylvia Ellis, 11 Bencharin View, Cannich, Beaully, IV4 7LJ,
19. Mr David Stirling, The Kennels, Tomich, Strathglass, Inverness-shire, IV4 7LY,
20. Mr Scott Phillips, 5910 East 355th Street, Drexel, MO 64742, U.S.A.,
21. Mr Stuart Murdoch, Peterfair, Ballindalloch, AB37 9BB,
22. Mr Aubrey Moore, 5 Kirkhill Drive, Lhanbryde, Elgin, IV30 8QA,
23. Mrs Pauline Chapman, The Bothy, Cannich, IV4 7NA,
24. Mrs Carole Hamilton, Plodda Cottage, Tomich, Beaully, IV4 7LY,
25. Mr And Mrs Richard And Pamela Soper, Midway, East End, North Leigh, Witney, Oxford, OX29 6PZ,
26. Mr Thomas Gough, Parkhead Farmhouse, Marypark, Ballindalloch, AB37 9BJ,
27. Ms Janice Mair, The Steading, East Mains of Fairburn, Marybank, IV6 7UT,
28. Ms Shirley Hill, 79 Clayhills Drive, Dundee, DD2 1SG,
29. Mrs Susan Land, 17 Holm Dell Road, Inverness, IV2 4GS,
30. Ms Gillian Kirkpatrick, Guisachan Cottage, Tomich, Cannich by Beaully, IV4 7LY,
31. Mr Gavin Hamilton, Plodda Cottage, Tomich, Beaully, IV4 7LY,
32. Mr Tim Ambrose, 8 Cleveden Road, Glasgow, G12 0NT,
33. Mrs Jacqueline Gill, The Tomich Hotel and The Old Schoolhouse, Tomich, Inverness-shire, IV4 7LY,
34. Mr. Mathieu Oosterwijk, Guisachan Cottage, Tomich, Cannich by Beaully, IV4 7LY,
35. Dr Geoffrey Moody, Dundonnell, Dunsmore Lodges, Farley, Near Beaully, IV4 7EY,
36. Mrs Carolyne Dance, Crooksbury Lodge, Smugglers Way, Farnham, GU101NA,
37. Mrs Lyndsey Ward, Darach Brae, Beaully, IV47AE,
38. Mrs Denise Davis, White House, Ardblair, Kiltarlity, IV4 7HT,
39. Mr Anthony Bloomfield, 2, Vanburgh Place, Edinburgh, EH6 8AE,
40. Mr Alastair Traquair, 39a Drummond Road, Inverness, IV2 4NU,
41. Mrs Christine Brumhead, 13 Beech Close, Sproatley, Hull, HU11 4XB,
42. Mrs Jean Muircroft, 30 Herondale Crescent, Stourbridge, West Midlands,
43. Dr Barry Middleton, 11 Croftside, Aviemore, PH22 1QI,
44. Mr Clark Cross, 138 Springfield Road, Linlithgow, EH49 7JT,
45. Ms Julia Muir Watt, 55 George Street, Whithorn, DG8 8NU,
46. Mr Angus Farquhar, The Steading, East Mains of Fairburn, Mains of Fairburn, Muir Of Ord, IV6 7UT,
47. Mr Callum Farquhar, The Steading, East Mains Of Fairburn, Marybank, IV6 7UT,
48. Mr David Briggs, 30 Braehead Road, Edinburgh, EH4 6BB,
49. Mr Julian Bishop, Rose Cottage, Fasnakyle., By Cannich, Beaully, IV4 7NB,
50. Professor Andrew Walker, Dalnashian, Keltneyburn, Aberfeldy, PH15 2LQ,
51. Mr Donald Mack, Wycke House, Littlethorpe, Ripon, N. Yorks, HG4 3LG,
52. Mr John Murray, Mid Main, Eskadale, BEAULY, IV4 7JR,
53. Mr Andrew Shiells, Barrachan Home Farm, Newton Stewart, DG8 9NG,
54. Mrs Rae Leigh, Kirkbride Cottage, Gelston, Castle Douglas, DG7 1SU,
55. Mr Charlie Scott, 71 Clarence Gardens, Glasgow, G11 7JW,
56. Mr Duncan Maclean, 49 High Street, Invergordon, IV18 0DG,
57. Mr Peter Heaton, Wester Cruinassie, Breakachy, By Beaully, IV4 7AE,
58. Mrs M.M. Forbes, Lower Knockfin, Tomich, Cannich, Beaully, IV4 7LY,

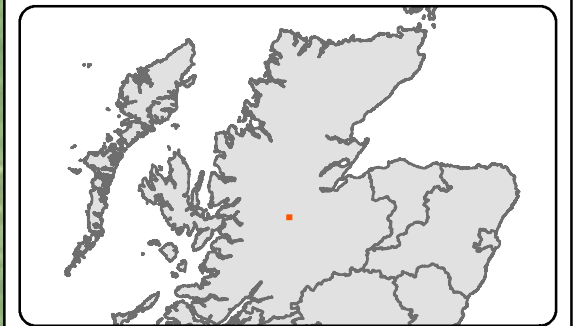
59. Mrs Mary Bromilow, 10 Queensberry Brae, Thornhill, DG3 5AQ,
60. Mrs Agnes Anderson, Glenlora, 506 Darvel Road, Caldermill, Strathaven, ML106FB,
61. Mrs Agnes Anderson, Glenlora, 506 Darvel Road, Caldermill, Strathaven, ML10 6FB,
62. Mr Mark Stewart, 11 Capel Place, Wilmington, DA2 7PU,
63. Mr David Gilmour, 7 Grange Road, Eccles, M30 8JW,
64. Mr Michael Whitaker, 24 Tomich, Cannich, Beaully, IV4 7LZ,
65. Mr Glyn Freeman, 7 Gordon Drive, Inverurie, AB51 4GR,
66. Ms. Rosemary Kirkwood, 3 Broallan, Kilmorack, Beaully, IV4 7AH,
67. Mrs Janice Toulmin-Rothe, Hillview, Knockfin, Cannich, Beaully, IV4 7LY,
68. Dr David Brown, 11 Caskie Drive, Skelmorlie, PA17 5AW,
69. Mr Ian Cameron, 34 Church Street, Newtyle, Blairgowrie, PH12 8TZ,
70. Dr Mike Morris, Inchley, Alyth, PH11 8HJ,
71. Mr Angus Brumhead, 13 Beech Close, Westlands Road, Sproatley, HU11 4XB,
72. Mr George Charles, Hawthorn Cottage, Inverey, Ballater, AB35 5YB,
73. Mrs Floris Greenlaw, Knockchoille, Kiltarlity, Beaully, IV4 7JL,
74. Mr John Graham, Cluanie Breakachy Breakachy Road, Beaully, Highland, IV4 7AE,
75. Mrs Agnes Carmichael, 60 Lochfield Road, Dumfries, DG2 9BG,
76. Mr Nick Ward, Darach Brae, Beaully, IV47AE,
77. Mr John Dalziel, 11 MacColl Road, Cannich, By Beaully, IV4 7LP,
78. Mrs Sue Morris, Bluebell House, Breakachy, Beaully, Inverness, IV4 7AE,
79. Dr David Bruce, 29 Glassel Park Road, LONGNIDDRY, EH320PA,
80. Mr William Gardiner, 5 Ardoch Road, Bearsden, Glasgow, G61 2BB,
81. Mr Gary Butler, 12 Tomich, Cannich, Beaully, IV4 7LZ,
82. Mrs Aulikki Butt, An Sabhal Fada, Inchtellach, Drumnadrochit, IV63 6XG,



-  Met Mast Location
-  Indicative Off-Road Access Route
-  Proposed Wind Farm Site



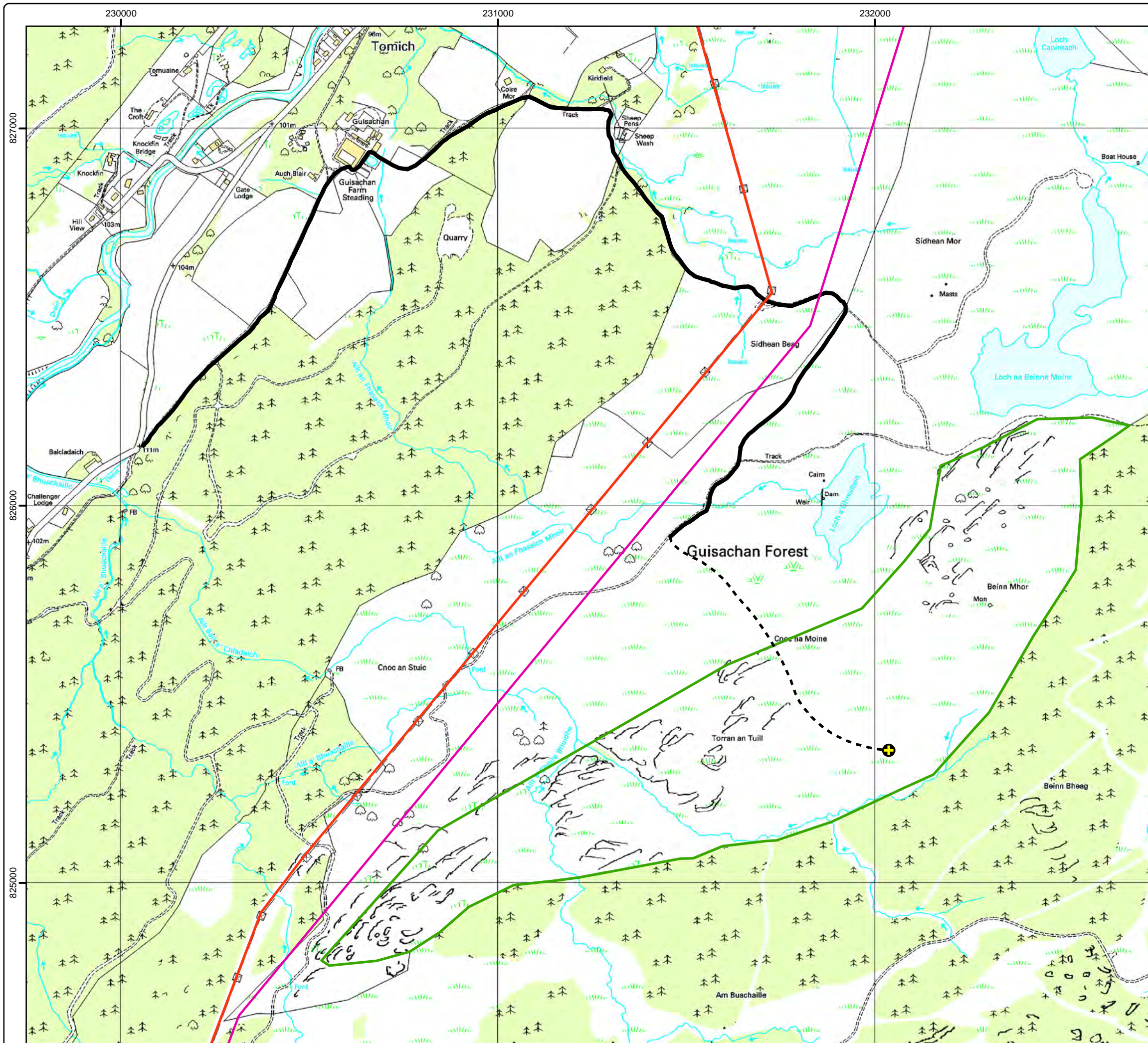
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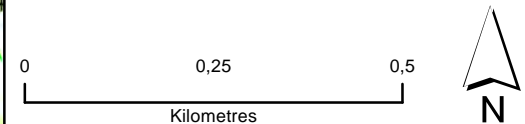
Proposed Met Mast Location
Figure 2: Met Mast Location

Scale (A3) 1:2,000
 Drawn: HK
 Approved: - Date: 27.05.2013
 Ref No: S005_ENV_ECO_0011_D1

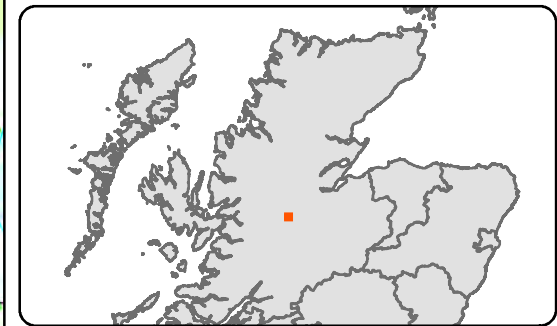




- Met Mast Location
- Existing Farm Track
- Indicative Off-Road Access Route
- Proposed Wind Farm Site
- Overhead Power Lines**
 - In Use
 - Proposed / Under Construction



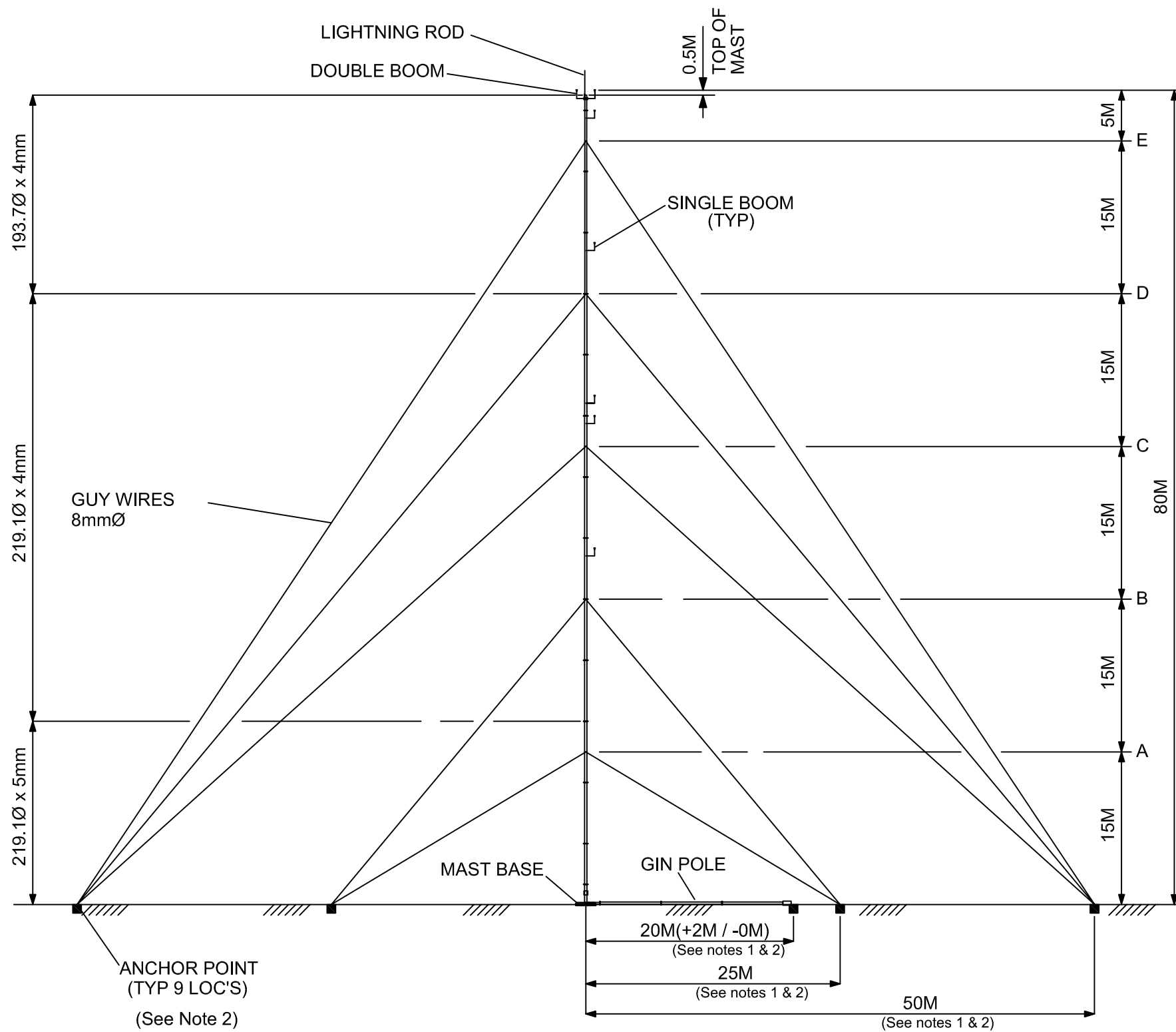
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Proposed Met Mast Location
Figure 1: Site Access

Scale (A3) 1:10,000
 Drawn: HK
 Approved: - Date: 27.05.2013
 Ref No: S005_ENV_ECO_0010_D1





80M Mast
Scale 1:500 (A3)

Chillwind 80M Mast

Specification

Mast Diameter: 219.1 / 193.7mm
 Section Lengths: 1.5M, 2M, 4M & 6M
 Wall Thickness: 4 & 5mm
 Guying Interval: 15M
 Material: CHS Steel Grade S355J2H

Chillwind 80M Gin Pole

Specification

Pole Diameter: 244.5 x 5mm / 168.3 x 6.3mm
 Section Lengths: 6M & 1.2M
 Overall Length: 19M
 Gin Pole Head 0.8M Long. (Temp Item, Not Left On Site)
 Material: CHS Steel Grade S355J2H

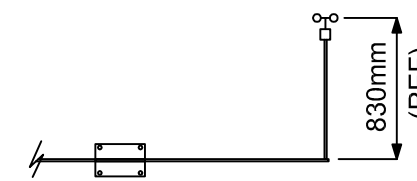
Guy Wire Specification

8mmØ & 10mmØ:
 7x19 Construction
 1960 N/mm
 1 WRC - Independant wire rope
 RHOL - Right hand ordinary lay
 GALV' Dry

Boom Info'

All Components Aluminium
 Boom Locates on to Mast
 with M12 U Bolts.

Booms shown are illustrative; actual installations will
 be as per clients order for selected instrumentation.
 Variations of mass may affect design limits.



Single Booms at 35M, 48M, 50M, 65M & 78M.

REFERENCE DRAWINGS

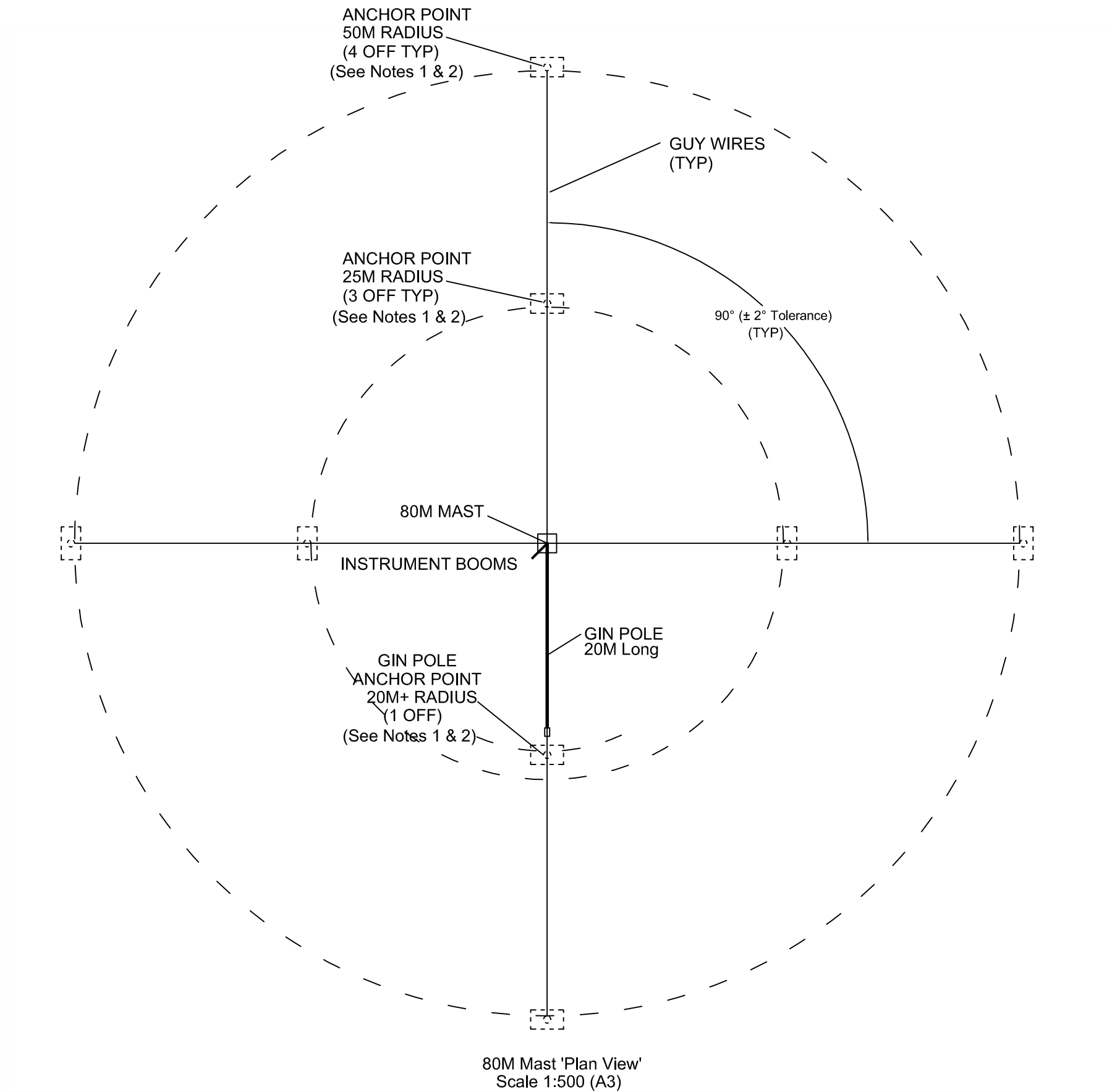
HC-CW-80M-002 (Mast Plan)
HC-CW-80M-003 (Mast Base Ass'y)
HC-CW-80M-004 (Gin Pole Ass'y)
HC-CW-80M-005 (Mast Ass'y)
HC-CW-80M-006 (Guy Wires)
HC-CW-80M-007 (Gin Pole Head)

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 NOT BE DISCLOSED OR REPRODUCED IN WHOLE
 OR IN PART WITHOUT THE PRIOR WRITTEN
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 OF CHILLWIND LIMITED.

NOTES.

- Anchor point site level tolerance: a=10m/-1.5m vertical.
 Any changes to the ground level of the anchor point that decrease the guying angle may reduce load limits; The supervising mast technician is to determine the implications, and where practicable, refer back to Chillwind HQ, where necessary and practical to do so, the supervisor may complete the installation, noting all variations in his report, and ensure that the client and Chillwind are alerted A.S.A.P. for follow up action.
- For anchor points refer to Chillwind mast installation handbook and site specific survey report.

 HI-CAD TECHNICAL SERVICES REDSHANK HOUSE ALNESS POINT BUSINESS PARK ALNESS IV17 0UP Tel: 01349 885120 A Member of Group plc	Drawn By: Graham Oliver Date: 16th Feb' 2011 Job No.: 11502				 CHILLWIND LIMITED CORRARY, GLENELG, ROSS-SHIRE, IV40 8JX Tel: 01599 522288 www.chillwind.co.uk	
	REVISION NOTES	DRAWN	CHK'D	REV.		DATE
	ISSUED FOR REVIEW AND COMMENTS	GO	HDR	0		16-2-2011
GUY WIRE REVISED AND REV NOTES ADDED	GO	HDR	1	01-3-2011	TITLE: 80M MET MAST 'ELEVATION' GARRAD HASSAN SPECIFICATION DRAWING No: HC-CW-80M-001 SHEET 1 of 1	
DRAWING NOTES REVISED	GO	HDR	2	09-3-2011		
ISSUED FOR CONSTRUCTION	GO	RS	A	04-4-2011		



Chillwind 80M Mast

Specification

Mast Diameter: 219.1 / 193.7mm
 Section Lengths: 1.5M, 2M, 4M & 6M
 Wall Thickness: 4 & 5mm
 Guying Interval: 15M
 Material: CHS Steel Grade S355J2H

Chillwind 80M Gin Pole

Specification

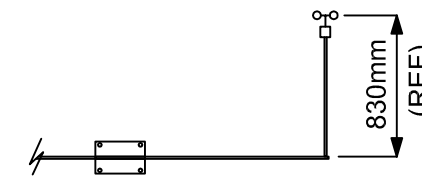
Pole Diameter: 244.5 x 5mm / 168.3 x 6.3mm
 Section Lengths: 6M & 1.2M
 Overall Length: 19M
 Gin Pole Head 0.8M Long. (Temp Item, Not Left On Site)
 Material: CHS Steel Grade S355J2H

Guy Wire Specification

8mmØ & 10mmØ:
 7x19 Construction
 1960 N/mm
 1 WRC - Independant wire rope
 RHOL - Right hand ordinary lay
 GALV' Dry

Instrument Boom Info'

All Components Aluminium
 Boom Locates on to Mast with M12 U Bolts.
 Booms shown are illustrative; actual installations will be as per clients order for selected instrumentation. Variations of mass may affect design limits.



N.T.S.
 Single Booms at 35M, 48M, 50M, 65M & 78M.

REFERENCE DRAWINGS
HC-CW-80M-001 (Mast Elevation)
HC-CW-80M-003 (Mast Base Ass'y)
HC-CW-80M-004 (Gin Pole Ass'y)
HC-CW-80M-005 (Mast Ass'y)
HC-CW-80M-006 (Guy Wires)
HC-CW-80M-007 (Gin Pole Head)

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NOTES.

- Anchor radius tolerance: +10% -2%. Any changes to the ground level of the anchor point that decrease the guying angle may reduce load limits; The supervising mast technician is to determine the implications, and where practicable, refer back to Chillwind HQ. Where necessary and practical to do so, the supervisor may complete the installation, noting all variations in his report, and ensure that the client and Chillwind are alerted A.S.A.P. for follow up action.
- For anchor points refer to Chillwind mast installation handbook and site specific survey report.

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	Date: 16th Feb' 2011				
	Job No. : 11502				
REVISION NOTES	DRAWN	CHK'D	REV.	DATE	© Chillwind TITLE: 80M MET MAST 'PLAN VIEW' GARRAD HASSAN SPECIFICATION DRAWING No: HC-CW-80M-002 SHEET 1 of 1
ISSUED FOR REVIEW AND COMMENTS	GO	HDR	0	16-2-2011	
GUY WIRE & ANCHOR POINTS REVISED	GO	HDR	1	01-3-2011	
DRAWING NOTES REVISED	GO	HDR	2	09-3-2011	
ISSUED FOR CONSTRUCTION	GO	RS	A	04-4-2011	