Request for Additional Information:

DC22/064/FUL

Our Ref: DC22/064/FUL Date: 20 November 2023



Coriolis Energy Ltd/
Vale of Leven Wind Farm Ltd.
c/o Mr James Baird
106 Hope Street,
Glasgow
G2 6PH

Dear Mr Baird,

UNDER THE TOWN AND COUNTRY PLANNING (SCHEMES OF DELEGATION AND LOCAL REVIEW PROCEDURES) (SCOTLAND) REGULATIONS 2013: REQUEST FOR ADDITIONAL INFORMATION.

REVIEW OF DECISION: REF: DC22/064/FUL - Request planning permission for

installation and erection of an anemometer mast up to 100 metres in height, guyed with a lattice tower. Guy wires to be orientated at 45, 165 and 285 degrees.

The Local Review Body, at the meeting of the 8 November 2023, requested further information from the applicant on the following:

Please provide dimensions of the mast at its base and its overall height.

Also, how the mast is fixed to the ground at its base and the maximum depth any part of the actual mast or its base goes into the ground?

Please provide a method statement detailing:

- The length of the construction phase
- Details of the construction process, including location of any compound needed for construction, including welfare units.
- Details of the weight of any welfare units.

Please provide information the construction vehicles and routes, including:

- The type of vehicles, their weight with the construction load and the expected impact on the soil and habitat.
- The routes to and from the construction site and whether any ground works are required in association with these.
- Evidence that multiple access routes across minimises impact to the blanket bog habitat compared to a single route.

- The maximum number of vehicles, and the types of vehicles, on site at any one time during construction.
- The expected frequency of trips to the site for maintenance and the type and weight of vehicle expected to be used for this purpose.

Please provide information on the expected disturbance to wildlife during the construction phase, (including to non-protected species such as deer).

Please provide information on the decommissioning process and a description of the sites expected state following decommissioning, including:

- What is expected to remain on site following removal of the mast?
- Restoration of habitat following decommissioning?

Please provide the further information requested, within 28 days. Please respond by email to Nicola.moorcroft@west-dunbarton.gov.uk by 4pm on Monday 18 December 2023.

Yours sincerely,

Nícola Moorcroft

Nicola Moorcroft Committee Officer

West Dunbartonshire Council Municipal Buildings Station Road Dumbarton G82 1NR

e- mail: nicola.moorcroft@west-dunbarton.gov.uk



DC22/064/FUL: Response to Request for Additional Information 20 November 2023

Local Review Body Request	
Mast dimensions	Triangular lattice shape, with each face <500mm in width. Final mast selection faces may be as little as 350mm . Mast will be no higher than 100 metres .
Ground fittings	The mast base rests on a platform of railway sleepers. No excavation is required at the base of the mast structure. The mast structure is held in place with stay wires. Excavation is required at each stay wire anchor point. At each anchor point a small excavation approximately 2.5 metres deep x 1.5 metres W x 2.5 metres L is dug. A railway sleep and rod are buried as a dead man anchor. The top level vegetation (e.g. grass / peat turves) is set aside, and each layer of subsoil / aggregate are carefully managed to ensure that any site work impact are minimised.
The length of the construction phase	Anchors: 2-5 days to install anchors. Subject to weather and ground conditions . Mast Structure: 3-4 days to construct structure and install meteorological instrumentation.
Details of the construction process, including location of any compound needed for construction, including welfare units.	Full details of the construction process are contained in the method statement, uploaded 22 June 2022. (Extract from 9 contained in Appendix A). No welfare unit will be required. A small mobile welfare unit may be sited next to the drop off point or an arrangement will be made with farm business.
Details of the weight of any welfare units. The type of vehicles, their weight with the construction load and the expected impact on the soil and habitat.	No HGV vehicles will be required for the mast installation. The excavator / Hagglund will be deliver to the farm on a low loader. Van/4x4 and trailer will be used to deliver the mast and equipment to the nearby farm property.
	The mast equipment/instrumentation and crew (4-5 persons) will then be transferred to the works location using a wide tracked, low ground impact all-terrain vehicle



	Liter3)
	such as a Hagglund, Argocat or similar commonly used on such sites.
	A low ground impact wide tracked excavator will be utilised to excavate the mast anchor points. The excavator is normally around 13 tonnes. This weight is necessary as the machine is utilised as part of a pull-test procedure, to ensure that the anchor points are appropriate.
	13 tonne wide tracked excavator / Hagglund BV206 approx 4 tonnes / Argocat would be approx. 750kg.
The routes to and from the construction site and whether any	There will be no groundworks associated with routes to and from the construction site.
ground works are required in association with these.	All vehicles are selected to minimise ground impacts.
Evidence that multiple access routes across minimises impact to the blanket bog habitat compared to a single route.	This was a recommendation contained within the ecological appraisal report produced by MacArthur Green (Uploaded 12 September 2022) and based on the ground conditions of this specific site. See extract taken from 7.1 contained in Appendix B. In addition, it should be noted that all vehicles are selected as they minimise ground impacts.
The maximum number of vehicles, and the types of vehicles, on site at any one time during construction.	2 - The majority of the short lived construction phase will involve an excavator and a low ground impact ATV (Hagglund/Argo) being on site.
The expected frequency of trips to the site for maintenance and the	The mast will undergo annual preventative maintenance. An argocat will be sufficient to transport the crew and climbing equipment to the mast location.
type and weight of vehicle expected to be used for this purpose.	In exceptional circumstances (broken anemometer, broken wind vane, telecommunications error, power issues etc) additional visitation may be necessary.
What is expected to remain on site following removal of the mast?	The mast including all equipment will be removed from site after 5 years.
Restoration of habitat following decommissioning?	During excavations, the top level vegetation (e.g. grass / peat turves) is set aside, and each layer of subsoil /



aggregate are carefully managed to ensure that any impact is minimised allowing the grounds to recover.

Appendix A

8.	METHOD STATEMENT: (sequence)				
9.	Method: 1. Toolbox Talk to be carried out on site prior to the task commencing. 2. Before work commences, approved method statement will be communicated to all site personnel involved in this task by Site Supervisor / Manager. 3. Inspection to be carried out on work area before work commences. 4. On arrival at the workplace, a JSRA should be completed taking account of additional activity specific hazards or changes to the work environment, methodology, materials and tools etc. 5. Only those involved in the task are allowed in the task area. 6. OPS Ltd. Site Supervisor to assign specific duties ensuring roles and responsibilities of individuals are clear for the duration of the work activity.				
	 Ground Works: Ensure site is safe and secured before commencing installation. Land owner/site office notified of arrival and planned departure. Mast location identified using GPS unit and marked. Using sighting compass, dumpy level and measure, mark out the ground anchor points using ground spray. Anchor points dug at 56m 42m and 21m. All anchor points tested to the required loading. All attachment points/rods/slings to have an swl equal to or greater than the required s.wl. shown on the anchor layout sketch for the relevant pull test. Using an excavator, excavate frenches approximately 3 m long, 1 m wide and 2 m deep for each ground anchor. Excavate a similar trench for the winch anchor when not using a capstan winch attached to a suitable vehicle. Top soil to be kept separate. If deeper holes are required to obtain ground loadings, additional excavations must be carried out to ensure that maximum vertical wall height is not exceeded. Personnel are not permitted to enter the excavation at any time. Excavation will be backfilled in less than 30 mins so dewatering will not be required. At times of heavy rain no excavations will take place. All excavations will be inspected by a competent person on a daily basis or after exposure to adverse weathe with the inspection documented on the AF3 Form. The contractor completing the excavation work will complete all initial inspection verifying that it is appropriately sloped or shored for a person to safely access A copy of this form must be given to the Project Manager to retain on file. From the base of each trench, (See fig. 1) using the Machine, create a slot in which the stay rod/sling will lie An angle of 45 degrees from base to top in the direction of the expected pull. Anchors are to be slung into the excavations on loops of 20mm polypropylene				
	Figure 1 Ground anchor installation 11. Holes are then backfilled ASAP and regularly compacted, with top soil placed back on top. 12. The anchors will be pull tested with the strain being created by a Tirfir, anchored to the excavator. The bucket and dipper arm of the excavator will be bedded in the ground so as to create as stable a base as possible. A sling rated at 10 tonnes will be placed close to the main jib/dipper arm hinge, in a position ensuring no slippage in any direction. Hydraulic pipework on the excavator will be protected by way of a spacing timber placed so				





Obelisk

Implementation & Operation

EHS - Risk Assessment Method Statement

- as to deflect the sling away from the pipework. When the correct loading is observed in the digital load cell, it is photographed and the loading is immediately removed.
- Base plate position, sleeper raft base or concrete base foundation to be finalized by aligning with anchor
 points. Raft base is to consist of 6 sleepers minimum.
- 14. Bird deflectors to be installed on each guy lane at agreed heights.
- 15. The first 2 Lower sections of mast are fitted to base plate and bolts tightened. These are secured with 3 temporary guy ropes to the inner anchor points.
- 16. If mast base is sleepers, then lower mast section to be further secured with 6 No. Coach bolts
- 17. The Anti Climb device will now be installed.
- Clear site, ensuring that all tools have been collected and, where possible, the site is left in same condition it
 was found.

Erection of a Temporary Met Mast:

- 1. The gin pole brackets (2 off) are then u bolted to the top of section 2
- The gin pole is lifted into position and secured to the mast section top with 1t swl. slings. These are wrapped around the leg section of the mast and secured with 1t s.wl. shackles. The gin pole is held in position centrally on its brackets by u-bolts. Dependant on mast type, it may be secured to the climbing face steps.
- 3. The winch is secured to a mounting bracket which is in turn secured to the inner anchor point. If a capsian winch is used, this may be connected to a vehicle equipped with a suitable welded attachment point
- All lifting/slinging to be carried out by a certified slinger/signaller if a mechanical lifting appliance, e.g. crane, is used on site OGRA 01 Lifting Operations Rev 0 must be followed.
- 5. A lifting bond rope exceeding 2 times the mast height plus 50m is then run from the winch, through a horizontal block, equal or greater than 30kn swl, at mast base, up the mast to a block, equal or greater than 30kn swl, secured to the gin pole. This is then attached to the next mast section to be lifted. See attached layout sheet. A second lifting bond is attached to the section as a safety line. This is directed via blocks to a rope brake.
- A 120m tag line/rope is attached to the section to be lifted to hold out and prevent snagging/dashing with the structure
- The tag line is to be held by one operative, outside the fall zone.
- 8. A third gin pole bracket is attached to the top of the section to be lifted
- The free end of the winch bond is then attached to the top of the third section of mast via 2 x 1t swl slings and initial weight taken. The lift is then halted.
- Carry out a final visual check of the winch, lifting bond and rigging blocks by both the ground crew and the
 erection crew.
- 11. With the agreement of both parties the lift may commence. At all times the lift is to be controlled by the senior rigger on the mast.
- 12. Lift the third section into place and secure.
- 13. Repeat for the fourth section.
- 14. Using the tag line, pull 2 No. guys into position and attach to the guy attachment points. Pull the third guy into position and attach to the guy attachment point.
- 15. The rigging crew then climb down to the last secured section
- 16. Ground crew then secure and tension guys to the inner anchor point.
- 17. When secure, the temp guys may be removed.
- 18. Rigging crew then ascend the mast.
- 19. Liff the gin pole into place on this section and secure with 1t swl slings. Detach the now free lower gin pole bracket and secure to the lifting bond.
- 20. The lifting bond is then detached from the mast section, attached to the tag line and pulled back to the ground position. The winch bond is then attached to the fourth mast section and the tag line secured to this section also.
- 21. Attach the gin pole holding bracket to the top of the fourth section.
- All connection bolts in each of the faces should be checked and torqued to 160Nm.
- 23. At all times, all ground staff are to remain outside the fall zone unless given permission by the senior rigger on the mast and all lifting operations are halted. Fall Exclusion Zones must be delineated visually e.g. bunting ribbons tied to anchor points being used as the limits.
- 24. The winch operator must ensure a smooth lift. In addition the winch operator has 2 main roles:
 - a) Maintain check on lifting weight and tag line operator. Notify site manager of any irregularities.
 - Maintain a check on erection crew, notifying site manager of any irregularities
 - c) The site manager must ensure that all the above responsibilities are clearly delegated and each operator signs to say that they have understood their role.
 - d) On securing a guy attachment section, the crew must retreat down the mast to a lower secured guy point whilst the ground crew attach and tension the guys.





Implementation & Operation

EHS - Risk Assessment Method Statement

- 25. These steps are repeated until the total mast height is reached. Temporary guys must be attached to the top of each second panel in between permanent guy levels. i.e. At the top of the second panel, at the top of the sixth panel, at the top of the 10th panel, 14th, 18th, 22nd, 26th and 30th panel.
- 26. Panels 2, 6, 10, 14 to be secured to the inner anchor, 20, 24,26 and 30 to be attached to the outer anchor.
- 27. At all stages communication is maintained by walkie-talkie and visual hand signals (see section 8)
- 28. When all mast sections are attached and all guys secured the top boom section is lifted into place and secured.
- 29. Lightning finial can now be installed.
- 30. The mast should now be adjusted for shape.
- 31. This is achieved by adjusting and pulling on the relevant guys. At no time are the guys to be restrained by hand. Slack can be added by loosening the top crosbie, pulling through slack, retightening the crosbie then repeating for each subsequent crosbie.
- 32. Correct guy wire tension and torque settings on all rope grips are checked. Loose wires trimmed, coiled and secured with cable ties. 8mm guy @ 450kgf tension Rope grips for 8mm guys torque to 6Nm.
- 33. Fit fall arrest system if specified by the Client
- Fit anti climb device to mast via U-bolts.
- 35. Site to be reinstated and where possible, the site is left in same condition found.
- Clear site, ensuring that all tools have been collected and, where possible, the site is left in same condition it
 was found.

Appendix B

7 RECOMMENDATIONS

7.1 Habitats

When using ATVs to access the mast location, it is recommended that the route is varied in order to avoid damage to any sensitive peatland habitats crossed. Particularly sensitive habitats which are likely to be crossed by ATVs accessing the Site include blanket bog, wet modified bog, acid neutral flush and wet heath. A mosaic of these sensitive habitats is located immediately to the south-west of the proposed mast location (Figure 2). Within these habitats, tracking over the same area twice should be avoided in order to avoid damage.

Areas of deep peat (>1m depth) should be avoided when choosing an access route. The planned access does not pass through any areas of deep peat, and the mast and ground anchor locations are not within deep peat. 100m to the east of the mast location there is an isolated area of deep peat (up to 1.4m). Tracking over this area should be avoided.



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Our Ref: DC22/064/FUL Date: 4 December 2023



Coriolis Energy Ltd/
Vale of Leven Wind Farm Ltd.
c/o Mr James Baird
106 Hope Street,
Glasgow
G2 6PH

Dear Mr Baird,

UNDER THE TOWN AND COUNTRY PLANNING (SCHEMES OF DELEGATION AND LOCAL REVIEW PROCEDURES) (SCOTLAND) REGULATIONS 2013: REQUEST FOR ADDITIONAL INFORMATION.

REVIEW OF DECISION: REF: DC22/064/FUL - Request planning permission for

installation and erection of an anemometer mast up to 100 metres in height, guyed with a lattice tower. Guy wires to be orientated at 45, 165 and 285 degrees.

Thank you for your email in which you provided a response to queries raised at the meeting of the Local Review Body on the 8 November 2023. The response was forwarded to the Development Management Team.

Whilst you have addressed the majority of the questions there is one that was of particular interest to the Local Review Body we would like to give you the opportunity to further elaborate if possible.

With regard to the route used to access the site, no additional information has been provided. We understand that the ecological assessment recommends varied routes when travelling across the bog habitat; however the Local Review Body was interested in how the site would be accessed in a broader sense. If possible, it is suggested that, you provide the point at which construction vehicles leave the public highway and the proposed route to the construction site to the point at which it will begin to vary. A map may be the best way to present this information.

Please respond by email to <u>Nicola.moorcroft@west-dunbarton.gov.uk</u> by 4pm on Monday 18 December 2023.

Yours sincerely,

Nícola Moorcroft

Nicola Moorcroft Committee Officer

West Dunbartonshire Council Municipal Buildings Station Road Dumbarton G82 1NR

e- mail: nicola.moorcroft@west-dunbarton.gov.uk

 From:
 Nicola Moorcroft

 To:
 Cameron Clow

 Cc:
 Alan Williamson

Subject: FW: Local Review Body - Review of Planning Application REF: DC22/064/FUL - Request for additional

information

Date: 06 December 2023 15:00:43

Attachments: image001.ipg

Dear Cameron,

Please see below and attached additional information, as requested.

Regards, Nicola

Nicola Moorcroft Committee Officer

West Dunbartonshire Council

Municipal Buildings Dumbarton G82 1NR

nicola.moorcroft@west-dunbarton.gov.uk

From: James Baird < James.Baird@coriolis-energy.com>

Sent: 06 December 2023 14:51

To: Nicola Moorcroft < Nicola. Moorcroft@west-dunbarton.gov.uk>

Subject: RE: Local Review Body - Review of Planning Application REF: DC22/064/FUL - Request

for additional information

Dear Nicola,

Many thanks for the request for further additional information.

If I understand the Local Review Body request correctly, they are seeking information on the location at which the 2-3 vehicles associated with the delivery of mast components and the ATV will leave the public highway and thereafter the route towards the site on an all-terrain vehicle (ATV) up until the point that the route is varied in order to minimise any impacts on existing habitats.

Assuming, I have this correct, I have prepared Figure 1 and Figure 2 as attached, which shows the initial route to the site from Merkins Farm.

Road going vehicles would access the site from Merkins Farm (G83 9LX) off the adopted Auchencarroch Road. Once at Merkins Farm there are areas of hardstanding where the ATV and anemometer mast components can be readied before taking access on to the moor.

From Merkins Farm there is an existing tarmac track, which later reduces to gravel, heading southwards as far as a sheepfold (as can be seen on Google Streetview Scotland - Google Maps). From this point there is then an existing and well established ATV track which continues generally southwards as shown on the Figures. From this point there is a further network of ATV tracks which are in constant use for general farming activities for at least 40 years and which would be used as far as practicable in order to further minimise the impacts and for the general ease of the vehicle operator.

I know from previous anemometer masts which I've been involved with, that an Argocat + trailer is commonly used for access on the moor. I've attached an image of an Argocat + trailer if that's helpful and also an image depicting the flatbed trailer which the Argocat would be transported to site on.

I hope this clarifies matters.

Best Regards,

James

James Baird MRTPI

Wind Farm Development Manager

Mob: 07768141923

Address: Suite 2.3, 106 Hope Street, Glasgow, G2 6PH

Website: www.coriolis-energy.com

Coriolis Energy is a Limited Liability Partnership, Registered Number OC10189460, Registered Address at 22-24 King Street,

Maidenhead, Berks, SL6 1EF



From: Nicola Moorcroft < Nicola.Moorcroft@west-dunbarton.gov.uk >

Sent: 04 December 2023 09:08

To: Neil Thomson < Neil.Thomson@coriolis-energy.com > **Cc:** James Baird < James.Baird@coriolis-energy.com >

Subject: RE: Local Review Body - Review of Planning Application REF: DC22/064/FUL - Request

for additional information

Dear Mr Baird and Mr Thomson,

Thank you for your email and my apologies for the delayed response, I have been on annual leave.

Please see below and attached a request for additional information:

Dear Mr Baird,

UNDER THE TOWN AND COUNTRY PLANNING (SCHEMES OF DELEGATION AND LOCAL REVIEW PROCEDURES) (SCOTLAND) REGULATIONS 2013: REQUEST FOR ADDITIONAL INFORMATION.

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Please respond by email to <u>Nicola.moorcroft@west-dunbarton.gov.uk</u> by 4pm on Monday 18 December 2023.

Regards,

Nicola

Nicola Moorcroft

Committee Officer

West Dunbartonshire Council

Municipal Buildings

Dumbarton G82 1NR

nicola.moorcroft@west-dunbarton.gov.uk

From: Neil Thomson < Neil. Thomson@coriolis-energy.com >

Sent: 28 November 2023 09:51

To: Nicola Moorcroft < Nicola. Moorcroft@west-dunbarton.gov.uk >

Cc: James Baird < <u>James.Baird@coriolis-energy.com</u>>

Subject: RE: Local Review Body - Review of Planning Application REF: DC22/064/FUL - Request for additional information

Good morning Nicola,

Many thanks for allowing us the opportunity to respond to the below requests. Please find a response attached which we hope answers the queries raised on 8th November 2023. Please don't hesitate to get in touch should you require further information. Kind regards,

Neil

From: Nicola Moorcroft < Nicola. Moorcroft@west-dunbarton.gov.uk >

Sent: Monday, November 20, 2023 2:17 PM

To: Neil Thomson < Neil. Thomson@coriolis-energy.com >; James Baird < James. Baird@coriolis-energy.com >

Subject: Local Review Body - Review of Planning Application REF: DC22/064/FUL - Request for additional information

Dear Mr Baird,

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- Details of the weight of any welfare units.

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- The type of vehicles, their weight with the construction load and the expected impact on the soil and habitat.
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- The maximum number of vehicles, and the types of vehicles, on site at any one time during construction.
- The expected frequency of trips to the site for maintenance and the type and weight of vehicle expected to be used for this purpose.

Please provide information on the expected disturbance to wildlife during the construction phase, (including to non-protected species such as deer).

Please provide information on the decommissioning process and a description of the sites expected state following decommissioning, including:

- <!--[if !supportLists]-->• <!--[endif]-->What is expected to remain on site following removal of the mast?
- <!--[if !supportLists]-->• <!--[endif]-->Restoration of habitat following decommissioning

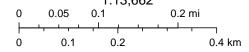
Please provide the further information requested, within 28 days. Please respond by email to Nicola.moorcroft@west-dunbarton.gov.uk by 4pm on Monday 18 December 2023.

Regards,

Nicola Moorcroft
Committee Officer
West Dunbartonshire Council
Municipal Buildings
Dumbarton G82 1NR
nicola.moorcroft@west-dunbarton.gov.uk

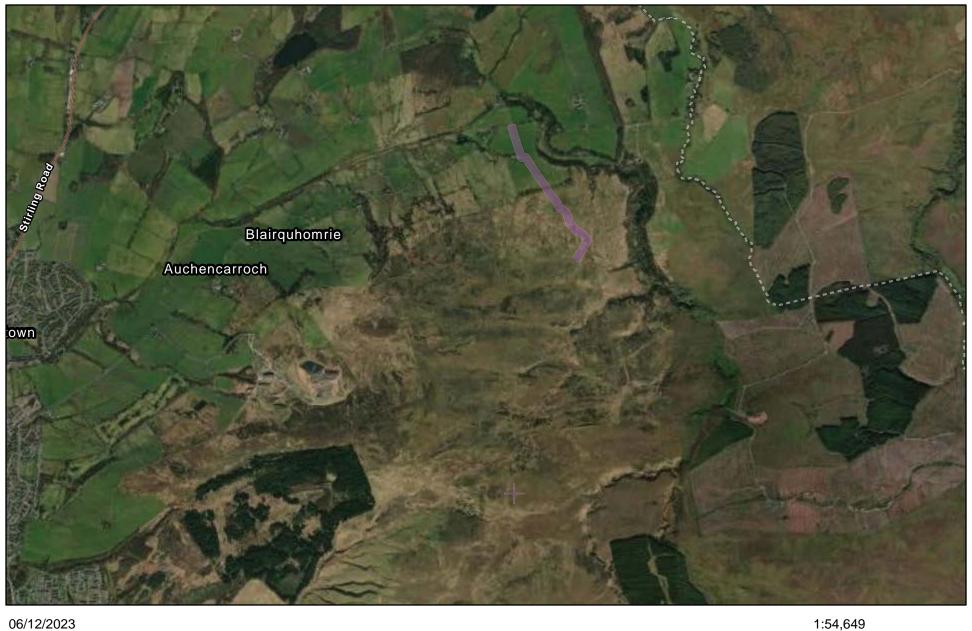
Figure 1: Vale of Leven Wind Farm Anemometer track



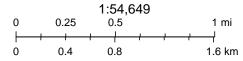


Maxar, Microsoft, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

Figure 2: Vale of Leven Wind Farm Anemometer Access Track showing Proposed Anemometer Location



Proposed Anemomter
Existing track from Merkins Farm



Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/ NASA, USGS, Earthstar Geographics



