Item: 4.1

Planning Committee: 18 December 2019.

Erect Anemometer Mast for a Temporary Period of Two Years at Quanterness Farm (Land Near), St Ola.

Report by Executive Director of Development and Infrastructure.

1. Summary

1.1.

It is proposed to erect an anemometer mast on the land of Quanterness Farm, St Ola, north of the A965 Kirkwall to Stromness road. The proposed mast is 90 metres in height and would be secured by guy wires extending 50 metres in four directions. The mast is proposed for a temporary period of 24 months. The purpose of the mast is to capture wind speed data and direction measurements to provide an accurate understanding of key wind characteristics of the site. The anemometer mast is in a sensitive location and there would be short-term impacts on landscape, natural heritage, built heritage and amenity. However, the nature and design of the mast are such that on balance it has been assessed that the impacts would not be of such significance to warrant a refusal. Five letters of objection have been received which are not considered of sufficient weight to outweigh policy considerations. The proposed development is therefore considered to accord with Policies 1, 2, 7D(vi), 8, 9 and 14 of the Orkney Local Development Plan 2017, relevant planning guidance and material planning considerations. Accordingly, the application is recommended for approval.

Application Number:	19/285/PP.
Application Type:	Planning Consent – Temporary 2 years.
Proposal:	Erect an anemometer mast for a temporary period of two years (maximum height 90 metres).
Applicant:	Orkney Islands Council, c/o Mr Sweyn Johnston.
Agent:	Justin Reid, TNEI, 1 West Regent Street, Glasgow, G2 1RW.

1.2.

All application documents (including plans, consultation responses and representations) are available for members to view at the following website address:

https://www.orkney.gov.uk/Service-Directory/D/application_search_submission.htm (then enter the application number given above).

2. Consultations

Consultees have not objected or raised any issues which cannot be addressed by planning conditions.

3. Representations

3.1.

Five letters of objection have been received from:

- Mrs C Lea, Sprindrift, Northfield Road, Burray.
- Ms J Gray, Laithe, Tenston, Sandwick.
- Mrs L Lea, 44 Grieveship Brae, Stromness.
- Mrs N Dixon, 24 Coplands Drive, Stromness.
- Mr L Sinclair, 31A Broad Street, Kirkwall.

3.2.

Several objections raise concerns that 5G technology will be used to gather the data required or that there would be 5G antenna on the mast. Lack of independent research into the side effects of 5G technology has also been raised.

3.3.

The developer has advised that 5G technology will not be used for this development. It is advised that the site has a good mobile signal so communications would be through a modem using the mobile phone network, and the modem normally powers up and sends data twice daily for around 30 minutes at a time, therefore nothing more than a mobile phone would be emitted during this short time. Due to the nature of the equipment it has also been confirmed that a certificate of conformity in respect of the public exposure guidelines of ICNIRP (International Commission on Non-Ionising Radiation) is not required.

3.4.

Objections state that the development does not accord with the following policies of the Orkney Local Development Plan 2017 and associated Supplementary Guidance, including matters associated with landscape, natural heritage, amenity and energy:

- The applicant does not justify the need for a monitoring period of 3 years which exceeds the maximum period of 2 years as stated in Policy 7, Energy, part D (vi).
- The applicant has not provided sufficient justification for the use of a physical anemometer mast rather than low impact digital monitoring equipment as indicated in Policy 7, part D (vi) and Supplementary Guidance ‘Energy’ paragraph 4.07.
- The proposed site lies close to sensitive and designated areas for birds and otters. Alternative locations are available in close geographic proximity to the site.

4. Relevant Planning History

Reference.	Proposal.	Location.	Decision.	Date.
19/175/SCO	Scoping opinion request to erect 6 x 4MW wind turbines (max height 150 metres)	Quanterness, St Ola	Scoping opinion adopted.	16.07.2019
PREAPP/004/19	Proposal of Application Notice to erect six wind turbines	Quanterness, St Ola	There is no decision for a Proposal of Application Notice.	

5. Relevant Planning Policy and Guidance

The full text of the Orkney Local Development Plan 2017 and supplementary guidance can be viewed on the Council website at:

https://www.orkney.gov.uk/Service-Directory/D/Planning-Policies-and-Guidance.htm

The policies listed below are relevant to this application.

- Orkney Local Development Plan 2017:
  - Policy 1 – Criteria for All Development.
  - Policy 2 – Design.
  - Policy 7D (vi) – Onshore Wind Energy Development (monitoring equipment).
  - Policy 8 – Historic Environment and Cultural Heritage.
  - Policy 9 – Landscape.
  - Policy 14 – Transport, Travel and Road Network Infrastructure, section C – Road Network Infrastructure.
- Supplementary Guidance and Planning Policy Guidance:
  - Supplementary Guidance: Energy (March 2017).
  - Natural Environment (April 2017).
  - Historic Environment and Cultural Heritage (April 2017).
- Development Management Guidance: Energy (July 2019).

6. Legal Aspects

6.1.

Section 25 of the Town and Country Planning (Scotland) Act 1997 as amended (the Act) states, “Where, in making any determination under the Planning Acts, regard is to be had to the development plan, the determination is, unless material considerations indicate otherwise…to be made in accordance with that plan…”.

6.2.

Where a decision to refuse an application is made, the applicant may appeal under section 47 of the Act. Scottish Ministers are empowered to make an award of expenses on appeal where one party's conduct is deemed to be unreasonable. Examples of such unreasonable conduct are given in Circular 6/1990 and include:

- Failing to give complete, precise and relevant reasons for refusal of an application.
- Reaching a decision without reasonable planning grounds for doing so.
- Not taking into account material considerations.
- Refusing an application because of local opposition, where that opposition is not founded upon valid planning grounds.

6.3.

An award of expenses may be substantial where an appeal is conducted either by way of written submissions or a local inquiry.

7. Assessment

7.1. Location and Site

It is proposed to erect an anemometer mast on the land of Quanterness Farm, St Ola, north of the A965 Kirkwall to Stromness road, as shown on the location plan attached as Appendix 1 to this report. The site lies approximately 650 metres north of the A965 and 130 metres from the coast. The site is low lying with a small incline down from the A965 to the coast (south to north). The site is in agricultural use laid down to grass with the field boundaries generally post and wire fencing with dry stone dykes. An existing farm track runs down the field boundary to the east of the site from the A965.

7.2. Proposal

The proposed mast is 90 metres in height and would be secured by guy wires extending 50 metres in four directions. The proposed pole-type mast is 203 millimetres in diameter at the base tapering to 152 millimetres at the top. It would be made from galvanised steel and have a dull grey finish. The meteorological monitoring system would be mounted on the mast fixed to horizontal booms, and would consist of a series of anemometers, wind vanes and a data logger, solar panel, temperature sensor and antenna. The mast is proposed for a temporary period of 24 months. The time period requested is to maximise robustness and accuracy of wind measurements at the site, and increase understanding of key wind characteristics, specifically wind speeds, wind direction, turbulence, gust speeds and wind shear.

7.3. Principle

7.3.1.

Orkney Local Development Plan 2017 Policy 7D(vi) and part 4 of Supplementary Guidance: Energy provide general support for wind energy monitoring equipment. However, under those policy and Supplementary Guidance provisions, paragraph 4.07 of Supplementary Guidance: Energy requires that monitoring equipment be digital monitoring equipment only, unless it is demonstrated that there are location-specific technical reasons why a physical anemometer mast is required.

7.3.2.

The purpose of the met mast is confirmed by the applicant within the submitted planning statement, primarily to take wind speed and direction measurements at various heights over a period of time to provide an accurate understanding of key wind characteristics of the site. The recording and understanding of wind characteristics would be used to assess the suitability of the site for wind energy development.

7.3.3.

The use of less visually obtrusive alternative wind monitoring technologies would be in line with paragraph 4.07 of Supplementary Guidance: Energy, such as ground-mounted laser technology. This was discussed with the developer. The developer has stated that such technology is relatively new and unreliable, and that financial institutions and turbine suppliers are less willing to use wind data collected by technology other than a met mast.

7.3.4.

The developer raises issues regarding the project financing and has highlighted that fixed met masts provide a widely accepted wind measurement method, stating “fixed met masts currently represent the only bankable industry wide accepted wind measurement method”. Although financing of this or any subsequent development is not a planning matter, the developer further states that Quanterness, “due to the coastal nature of the site, remote sensing data capture rates are likely to be affected by the regular adverse weather conditions experienced. It is difficult to accurately operate remote sensing devices under fog and rain conditions because of the unpredictability and non-control of the weather, the moist air acts as a screen for the infrared radiation. Both fog and rain reduce laser intensity by absorption and diffusion phenomena of the laser beam by the small water droplets. Fog and rain act then as a screen on remote sensing devices sensors that limit their capabilities and detection range, this poses a risk to project value and reduction in renewable energy benefits for any future windfarm proposal because of design and layout due to elevated measurement uncertainties”.

7.3.5.

Supplementary Guidance: Energy allows for anemometer masts in situations where it can be demonstrated that there are locational-specific technical reasons why a physical anemometer mast is required. The technical information provided by the

developer, regarding why digital monitoring equipment has not been selected for this site, specifically climatic considerations, has therefore been considered.

7.3.6.

This proposal was initially submitted for a temporary period of three years. Policy 7, Part D (vi) states that anemometer masks will be supported subject to the other development plan policies and other material considerations, and critically that a temporary permission will normally be limited to a maximum two year period unless the need for a longer period has been demonstrated. The developer has agreed to reduce the requested period for the temporary consent to two years.

7.4. Aviation

Neither Highlands and Islands Airports Limited (HIAL) nor Kirkwall Airport senior pilot have identified the requirement for aviation lighting and have not indicated any safeguarding issues in relation to Kirkwall Airport. HIAL has stated that all proposed developments over 90 metres in height for Off Route Airspace should be notified to the Civil Aviation Authority (CAA). This development does not exceed 90 metres in height. The Ministry of Defence (MoD) also has an interest in structures at height for the purpose of military aviation. As a precautionary approach, a condition would be attached, requiring the developer to advise MoD, CAA and NATS (air traffic control) of the development, noting that this may require further actions in the interests of aviation safety.

7.5. Natural Heritage

7.5.1. European Protected Species

The site of the proposed mast is on low-lying land adjacent to the coastline which is crossed by drainage ditches and there are freshwater ponds nearby. Otters are known to use this area. Otters may be attracted to ground works associated with the development; therefore, measures should be put in place to avoid harm or disturbance to the animals.

7.5.2. Ornithology

The site of the proposed mast is close to the Keelylang and Swartaback Burn Site of Special Scientific Interest (SSSI) which forms part of the Orkney Mainland Moors Special Protection Area (SPA). Breeding hen harrier is a qualifying feature of the SSSI. Non-breeding hen harrier, breeding short-eared owl and breeding red-throated diver are qualifying species of the wider SPA.

7.5.3.

Wide Firth, which borders the proposed development area, forms part of the North Orkney proposed SPA (pSPA), where the qualifying features are breeding red-throated diver and wintering wildfowl. The site is also close to several Local Nature Conservation Sites (LNCS), which support a range of breeding and foraging birds, including waders and birds of prey such as short-eared owl, hen harrier and merlin. The proposed development area and this coastline is an important feeding area for waders and wildfowl and may be used for forage. To minimise the risk of disturbance

to breeding birds and their young, erection of the mast and associated infrastructure, and its removal, should be undertaken outwith the main breeding season, which extends from 1 April to 31 August.

7.5.4.

Scottish Natural Heritage (SNH) and the Royal Society for the Protection of Birds (RSPB) requested that, due to the proximity of the site to protected sites and bird features that may utilise the area near the coast, a condition be attached requiring installation of bird deflectors to guy wires, together with a condition which requires that all work is undertaken outwith the main breeding bird season from April to August inclusive. SNH has also requested that the developer records any bird carcasses found in the surrounding area during the operational phase, which may be a result of collision.

7.6. Historic Environment

The proposed site is located a significant distance from the closest scheduled monument (Quanterness, chambered cairn and prehistoric house, approximately 900 metres to the south east). There is other known underlying archaeology within the wider area. It is considered that, due to the separation distance from the scheduled monument, it is unlikely that there would be significant impact on the setting of those monuments or upon the wider historic environment. Given the risk of unknown archaeology in the area, a condition requiring a watch brief for any ground-breaking works would be attached.

7.7. Access

The development will use the existing farm track directly off the A965 with no stated alterations required to accommodate the scale of vehicles or equipment required for the installation, maintenance or removal of the structure.

7.8. Landscape and Visual

7.8.1.

The proposed site is located to the north of the A965 and lies along a section of coastline to the west of Kirkwall. The site is low lying with a small incline down from the A965 to the coast. To the south of the A965 the land rises beyond Quanterness farm to Wideford Hill.

7.8.2.

This location is sensitive with regards landscape impact, visual amenity and natural heritage. The site is close to Kirkwall and is highly visible from the A965. The landscape is sensitive in archaeological terms with three scheduled monuments in the surrounding landscape: Quanterness Chambered Cairn and Prehistoric House; Wideford Hill Chambered Cairn; and Cuween Hill Chambered Cairn.

7.8.3.

The site is defined in the Orkney Landscape Character Assessment (SNH, 1998) as Inclined Coastal Pastures Landscape Character Type, with small areas of Rolling Hill

Fringes in the south. Generally, this landscape is characterised by extensive views out to sea and restrictive views inland.

7.8.4.

The area is a settled landscape, which has open views and vistas towards the West Mainland and to the North Isles and is largely undeveloped. The Kirkwall town boundary lies approximately 1.5 kilometres to the east of the site. The mast would be a single structure in this flat open landscape, with the closest other vertical structure being the Rennibister turbine, which is approximately 1.5 kilometres to the west.

7.8.5.

The closest view points to the mast would be from the A965, the main Kirkwall to Stromness/west mainland route. At its nearest point, the mast would be 650 metres from the public road. The open nature of the landscape makes it sensitive to development. The mast will be visible to a range of receptors as well as those from the public road.

7.8.6.

Taking account of the narrow profile of the mast and the temporary nature of the application, it is considered that the impact would be adequately limited and that it would be acceptable.

8. Conclusion and Recommendation

8.1.

For the avoidance of doubt, the proposed development would not constitute a renewable energy development; therefore, renewable energy policies are not relevant to the consideration. The decision of the current application has no weight in any decision on the potential for the site to be developed in future and does not prejudice any future decision. Supplementary Guidance: Energy clarifies that approval of monitoring equipment is not an indication that any subsequent wind farm application would be considered acceptable.

8.2.

The mast is tall, but slender in nature which, along with its position within the landscape, would not result in any unacceptable impact on the landscape, natural heritage, built heritage or amenity during the two years that it would be erected. Planning conditions would ensure that it is fitted with bird deflectors, that the work would be undertaken outside the bird breeding season and that the mast would be removed and the land reinstated at the end of the two-year period.

8.3.

All relevant matters have been considered and, although some concerns exist with regards the visual and landscape impact, on balance it is considered that the proposal accords with the principles of relevant policies and is acceptable in terms of all other relevant material considerations. The proposal would comply with Orkney Local Development Plan 2017 Policies 1, 7D(vi), 8, 9G and part 4 of Supplementary

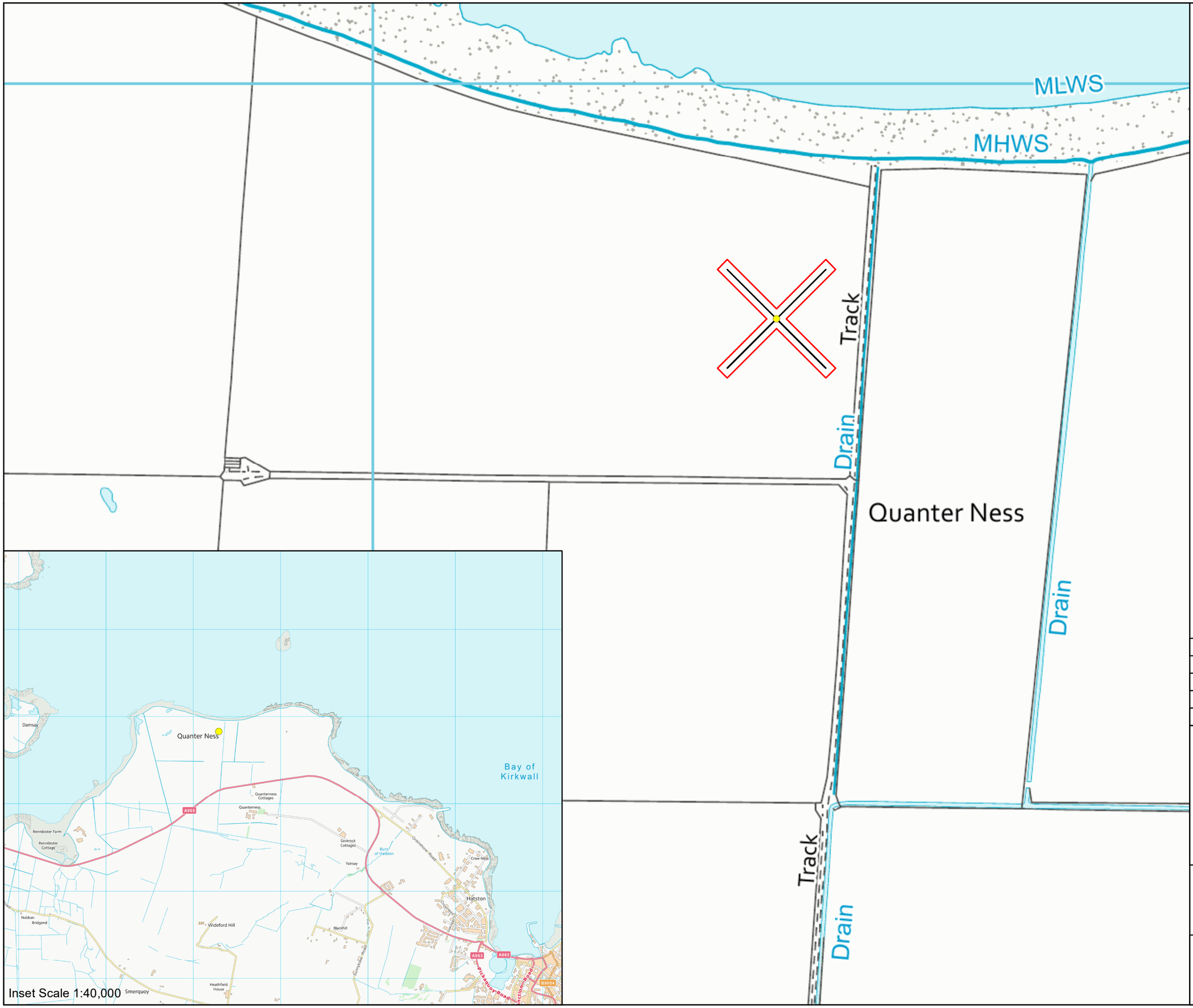
Guidance: Energy (March 2017). The objections do not raise issues of sufficient weight to recommend refusal. Accordingly, the application is **recommended for approval**, subject to the conditions listed in Appendix 2.

9. Contact Officer

Margaret Gillon, Senior Planner, extension 2505, Email Margaret.gillon@orkney.gov.uk

10. Appendices

- Appendix 1: Location Plan.
- Appendix 2: Planning conditions.



Legend

- Met Mast
- Guy Wires
- Proposed Application Site Boundary

Grid Reference:
341289, 1013832

0 50 100 Metres

N

REV.	DETAILS	DRAWN	CHK'D	APP'D	DATE
R1	SECOND ISSUE	JR	JKR	JKR	18/07/2019
R0	FIRST ISSUE	JR	JKR	JKR	17/07/2019

Project	Quanterness Met Mast
Client	Orkney Islands Council
Title	Met Mast Site Location Plan
Figure No.	2
Scale	1:2,500 @A3
Doc. Ref.	13048-005

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Appendix 2

Conditions

01. This planning permission shall expire and cease to have effect after a period of two years from the date of commencement of development. Prior to the cessation date, the application site shall be cleared of all development approved under the terms of this permission and reinstated, in accordance with a Scheme of Decommissioning and Restoration as required by condition 02.

Reason: In recognition of the temporary nature of the proposed development, to enable the Planning Authority to reassess the impact of the development over that temporary period, and to secure removal and restoration.

02. No development shall commence until a Scheme of Decommissioning and Restoration for the application site has been submitted to, and approved in writing by, the Planning Authority. Thereafter, the site shall be cleared, and land reinstated in accordance with the approved Scheme of Decommissioning and Restoration.

Reason: To ensure that the restoration of the site is carried out in an appropriate and environmentally acceptable manner.

03. Bird flight deflectors shall be fitted to all meteorological mast guy wires, fitted at five metre intervals. Stops or clamps shall be fitted to the guy wires to prevent the deflectors slipping. The mast shall be inspected and maintained annually to ensure the deflectors remain in place, with any damaged or lost defectors replaced. In this case, any annual inspections shall be carried out prior to the breeding bird season, commencing 1 April.

Reason: The use of bird flight deflectors will make the mast guy wires more visible to birds, therefore reducing the risk of collision which could lead to their injury or death.

04. All site works associated with the development, including erection and removal of the mast and associated infrastructure hereby approved, shall be undertaken outwith the main bird breeding season, namely 1 April to 31 August inclusive.

Reason: Due to the proximity to protected sites and bird features that may utilise the area near the coast.

05. The developer shall provide a record, to the Planning Authority, of any bird carcasses found in the surrounding area during the period of this consent.

Reason: To monitor the risk of bird collision with the mast or guy ropes.

06. No development, including site clearance, shall commence until full details of an archaeological watching brief are submitted to, and approved in writing by, the Planning Authority. The watching brief shall be carried out during all ground breaking and excavation works. Thereafter, the watching brief shall be implemented wholly in accordance with approved details.

Reason: To protect the archaeological interest in the area.

07. The developer shall notify the Civil Aviation Authority (CAA), NATS and Ministry of Defence (MoD) Defence Infrastructure Organisation prior to installation of the mast and shall provide to those bodies:

- The precise location, including grid co-ordinates, of the development.
- Anticipated date of commencement of construction.
- Anticipated date of completion of construction.
- The height above ground level of the tallest structure.
- The maximum extension height of any construction equipment.

If aviation warning lighting is required by any of these bodies, full details of that aviation warning lighting shall be submitted to, and agreed in writing by, the Planning Authority prior to its installation. No development shall commence until the CAA, NATS and MoD Defence Infrastructure Organisation provide confirmation of no objection to the development, and all confirmations are provided to the Planning Authority. Any mitigation or other measures shall be submitted to, and agreed in writing by, the Planning Authority prior to being carried out.

Reason: To ensure that the CAA, NATS and MoD are made aware of the development, and so any aviation warning lighting required is identified and agreed, in the interests of aviation safety.

08. Prior to entering the site, all personnel involved in the development should be made aware that otters may be present in the area. The following measures shall be carried out to avoid disturbance:

- Access to open-water habitats shall be safeguarded at all times and impacts to traditional routes between such areas, such as drainage ditches, during the construction phase shall be minimised.
- Any temporarily exposed open pipe system shall be capped in such a way as to prevent otters gaining access, as may happen when contractors are off-site.
- Open pits shall be covered at night, and exit ramps provided in steep-sided trenches. All excavations shall be checked daily to ensure that no wildlife has become trapped.

Reason: To ensure measures are taken to protect a European Protected Species.