

2 Site Description

2.1 Introduction

- 2.1.1 The Site is located on the south of Yell which is the largest of the Shetlands North Isles (Figures 1.1 and 1.2). The area within the Application Boundary extends to approximately 1,135ha (Figure 1.2) and the Site is centred on the Burn of Hamnavoe at Grid Reference HU 50461 82092.
- 2.1.2 This chapter describes land uses within the Site and surrounding area with specific regard to topography and drainage, designated areas, transport and access routes. The potential sensitive receptors with respect to a wind farm development have also been identified and described in brief.

2.2 Land use

- 2.2.1 The land within the Site is owned by the Burravoe Estate and comprises 35 crofts^a. The majority of the Site is heather moorland interspersed with areas of bare peat, resulting from overgrazing. Habitats within the Site are characterised by blanket bog, degraded blanket bog and moorland pasture with more extensive areas of deep peat on higher ground to the west of the Site (Chapter 12: Soil and Peat). Appendix 2.1 provides photographs of the Study Area.
- 2.2.2 To the south of the Site, the Application Boundary borders the settlements at Hamnavoe and Houlland where crofting^b land typifies the agricultural use on this lower lying land. Crofters that live within the surrounding settlements of Burravoe, Hamnavoe, Gossabrough and Ulsta manage the area for moorland sheep grazing and the in-bye land forms the lower lying agricultural land close to the settlements. Peat cutting remains active in the locality and takes place within the Site. The resultant brick pyramids are typical features of the landscape in early summer. Recreation within and around the Site includes walking, and bird watching together with leisure and sporting activities associated with the coast (Chapter 6: Socio-Economic, Tourism and Recreation Assessment).

2.3 Topography and drainage

- 2.3.1 The Site is characterised by lowland, undulating ground, rising to more hilly terrain towards the northwest. The topography ranges from approximately 200m Above Ordnance Datum (AOD) at the Hill of Arisdale in the north, to less than 10m AOD in the south. The majority of the Site lies between 80 to 150m AOD; the summit known as Beaw Field is at 120m AOD.
- 2.3.2 The Site includes a number of watercourses, waterbodies and associated catchments (Chapter 15: Hydrology and Hydrogeology and Figure 2.2). The majority of the Site is drained by the Burn of Hamnavoe and its tributaries, which discharge into Hamnavoe. The Evra Water (loch) drains into the Burn of Evrawater, which has a confluence with the Burn of Hamnavoe in the vicinity of the settlement of Hamnavoe. The north eastern part of the Site drains into the Bay of Whinnifirt and the Wick of Gossabrough. The western part of the Site drains into the Burn of Arisdale and its tributaries, eventually discharging into Hamnavoe. The southern part of the Site drains into the Loch of Kettlester and the

^a A small farm typically worked by one tenant farmer (also known as a crofter)

^b Crofting is a system of land tenure unique to the Scotland and is a traditional social system defined by small-scale food production

Loch of Neapaback, which are adjacent to the southern boundary of the Site, both lochs discharge into Burra Voe, to the west of Burravoe.

- 2.3.3 The underlying bedrock at the Site is composed of a group of metamorphic rocks known as the Yell Sound Division. The bedrock is covered by a thin horizon of glacial drift (small stones and soil) and thought to be the residue of a thin and persistent layer of true glacial till (Chapter 13: Geology).

2.4 Sensitive receptors

Settlements

- 2.4.1 The Site is located to the north of Upper Neepabak and to the south of Gossabrough (Figure 2.1). Upper Neepabak forms a part of the larger community of Burravoe situated on the north shore of Burra Voe. To the west of Burravoe the settlements of Houlland and Hamnavoe form a ribbon of residential properties along the B9081, which connects to the A968 and onwards to the ferry port at Ulsta. To the north of Burravoe, the community of Gossabrough, which overlooks the beach at the Wick of Gossabrough, has vehicle access from a minor road leading from the B9081. These settlements are all within 1km of the Site (Figure 2.1).

Designated areas

- 2.4.2 There are no designated areas within the Site (Figure 2.1). The Otterswick and Graveland Special Protection Area (SPA), and Site of Special Scientific Interest (SSSI) are adjacent to the northwest boundary of the Site, (Figure 2.2). The SPA and SSSI extend across 1,388ha of coastal and uplands that supports maritime grassland, blanket bog and dry heather moorland and the qualifying species of the SPA, the Red-throated diver (*Gavia stellata*), (Chapter 10: Ornithology).
- 2.4.3 Yell Sound Coast SAC and SSSI, the East Mires and Lumbister SAC and SSSI, the East Mainland Coast SPA and the Bluemull and Colgrave Sounds SPA are also within 10km of the Application Boundary (Figure 2.2, and Chapter 11: Ecology). The latter two have been designated since the original EIA and S36 consent.

Other sensitive features

- 2.4.4 There are no landscape designations within the Site (Figure 2.1). Two National Scenic Areas are located within 30km of the Site (Fethaland, Esha Ness and Muckle Roe), all east of Yell on Mainland (Figure 2.2). Three local landscape areas (Ronas Hill, Nibon and Mangaster, and Luna Ness and Lunning) are also situated on Mainland and within 25km of the Site (Figure 2.2). The nearest designated wild land is Ronas Hill and North Roe, which is 25km west of the Site and located on Mainland (Chapter 7: Landscape and Visual Impact Assessment and Figure 2.2).
- 2.4.5 There is a Scheduled Ancient Monument (SAM) and a number of listed buildings within 1.5km of the Site (Figure 2.1). The broch and settlement at Gossabrough, a SAM, survives as a mound set on a knoll with turf-covered foundations of rectangular structures, east and south which are likely to be the remains of a settlement either of the post-broch Iron Age or, more likely, of the Norse-medieval period (Chapter 9: Cultural Heritage).

2.4.6 Listed buildings in the locality of the Site include four properties in Burravoe (Figure 2.1):

- Old Hall of Brough
- Episcopal Church
- Old Haa or Manor House; and
- Pier Shop and Former Booth.

2.4.7 Hamnavoe Kirk, overlooks the community of Hamnavoe, with further listed buildings to the west, on Yell, at Ulsta, Mid Yell and West Sandwick (Figure 2.1). Figure 2.2 illustrates the number of listed buildings within the wider area, on adjacent islands, up to 30km from the Site.

Water resources

2.4.8 The Site lies within a Drinking Water Protection Area (Groundwater), as designated by the Water Framework Directive¹. The Loch of Kettlester, which lies adjacent to the southern boundary of the Site, is also classified as a Drinking Water Protection Zone (Chapter 15: Hydrology and Hydrogeology and Figure 2.1)².

2.5 Transport and access

Public road network

2.5.1 A car ferry service operates from Toft Ferry Terminal, Mainland to Ulsta, Yell. This service connects to the A968, the main road that continues northwards to the ferry terminal at Gutcher on the north coast of Yell (Figure 2.1). SIC operates a ferry service from Gutcher to Belmont, Unst and Hamars Ness, Fetlar (see Figure 2.2). The B9081 joins the A968, to the north of Ulsta and connects the ferry port to the settlements of Hamnavoe, Burravoe (located in the south east of Yell and to the south of the Site) and Gossabrough, which is to the north east of the Site (Chapter 18: Traffic and Transportation and Figure 2.1).

2.5.2 The Site is to the north of the B9081, on the section of road from the west of Hamnavoe through to Burravoe; and as the B-class road turns northwards connecting Burravoe to Gossabrough, the Site will be evident to both the west and east of the road (Figure 2.1). From Gossabrough, the B9081 continues northwards through Otterswick to Mid Yell (Figure 2.2).

Footpaths, tracks and cycle routes

2.5.3 The Land Reform (Scotland) Act 2003 gives a right of responsible, non-motorised access to all land and inland water throughout Scotland. There is a Core Paths Plan (CPP) on Yell, which is sufficient for the purpose of giving reasonable access to members of the public. Core Paths include waymarked routes from a farm track to a recognised path in a guide book. There are two CPP routes to the north and south of the Site. The CPP to the north is a circular coastal route that leads to a single track road (Figure 2.2). The second CPP to the south of the Site is also a circular community route that can be accessed from several points within the village of Burravoe (Figure 2.2). To the west of the Site the Catalina memorial walk begins at Arisdale Brig and finishes at the head of Arisdale on Fluga Moss where there is a tribute to the crew members of the Catalina who were killed during World War II. A waymarked footpath leading to the Catalina Memorial and a promoted path to Ward of Otterswick are

located within the Site. There are also a number of unclassified roads/tracks located within the Site that are used by the local crofting community for farm access.

- 2.5.4 The National Cycle Route (NCR) 1 starts at Norwick, Unst, in the north and crosses to Gutcher by ferry. The route then follows the A968 to the Ulsta ferry crossing to Mainland heading south (Figure 2.2). A local cycle route follows the B9081, forming a circular route on Yell (see Figure 2.1), connecting with NCR1 to the north at mid Yell.

2.6 Previous landuse, services and technical constraints

Waste management

- 2.6.1 There are three former landfill identified within the Site (Chapter 13: Geology and Figure 2.2). No wind farm construction activities will be located in areas that have previously been used for landfill.
- 2.6.2 Site 1 is a former landfill operated by SIC. The site is located near Hamnavoe and is now restored to agricultural use. Site 2 is adjacent to the B9081, to the north of Burravoe and the current land use is agricultural. Site 3 comprises of an unregulated landfill identified in January 2007. The site has now been restored and is in agricultural use.

Peat cutting

- 2.6.3 Peat is cut for fuel in many parts of Shetland and is evident within and adjacent to the Site. Generally, peat is cut from trenches, or banks, during May and June, where the extracted bricks of peat are raised into small pyramids to dry, before they are removed to the croft for use as a winter fuel. Throughout the Site there is evidence of current and former areas of peat cutting.

Services

- 2.6.4 Scottish Water has a drinking water supply pipe, servicing the communities of Burravoe, Houlland and Hamnavoe, which crosses Site from the B9081 (north of Burravoe) to a manhole, south of Beaw Field, replacing the former water supply from an underground reservoir, at Beaw Field (see Figure 2.3).
- 2.6.5 Scottish and Southern Energy have over ground electric cables that generally follow the B9081 (see Figure 2.3). Through Houlland and Hamnavoe there are two connections that head north into the Site to service pumping stations at Arisdale and Beaw Field (see Figure 2.3).
- 2.6.6 A British Telecoms (BT) microwave receiver is located approximately 6km to the north of the Site, at Hill of Reafirth, to the west of the B9081, from the receiver station there is a second microwave with a connection to the northeast.
- 2.6.7 To the east of the Site, a weir and sluice is located on the Arisdale, regulating flow to the fisheries and hatcheries located in Hamnavoe.

Aviation

- 2.6.8 The Site is located approximately 8NM (nautical miles) north east of Scatsta Airport. There are three radars operating within 40NM of the Site and within this area wind farm development has the potential to cause interference (Chapter 21: Aviation):

- Sumburgh Primary Surveillance Radar, located 40NM to the south of the Site;
- Fitful Head Monopulse Secondary Surveillance Radar 38NM to the south of the Site;
- Saxa Vord Remote Radar head 19NM to the north; and
- Scatsta Primary Surveillance Radar, based at the aerodrome and 8NM to the southwest of the Site.

2.6.9 The obstacle limitation surface is a safeguarding area for Scatsta Airport which limits the development of tall structures (see Figure 2.3).

2.7 Summary

2.7.1 The area within the Application Boundary is in agricultural use managed by 35 crofters, most of whom reside locally. The vegetation within the Site has been overgrazed resulting in a mosaic of moorland habitats interspersed with bare peat, lochans^c and tributaries to water courses. To the north and west of the Application Boundary is the Otterswick and Graveland SPA and SSSI. The coastline of southern Yell is also a designated SAC and SSSI. Road access to the Site is on the B9081, which connects to the A968, to the west of the Site and then to the ferry terminal at Ulsta to Burravoe. There are two Core Paths in the locality, in addition the way-marked path to the Catalina Memorial starts from the B9081 adjacent to the western boundary of the Application Boundary.

2.7.2 There are three former landfills within the Site that have been restored and are now in agricultural use and peat cutting for fuel remains a use of the land within the Site. The services in and adjacent to the Site include overhead electricity, microwave telecommunication links and the water supply pipeline that crosses the southern part of the Site. The location of Scatsta Airport to the south of Yell, on Mainland requires a safeguarding area for tall structures, including wind turbines that extends into the south western portion of the Site.

^c A small inland loch



¹ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000

² The Water Framework Directive establishes a legal framework to protect and restore clean water across Europe and to ensure its long-term, sustainable use. The relevant transposition into Scottish law was via the Water Environment and Water Services (Scotland) Act 2003 (WEWS Act).