Weekly Notice of Operations (WNoO)
Beatrice Offshore Windfarm Limited
Construction Operations

Notice of Operations at Beatrice Offshore Wind Farm, Week 14

Work Planned for the Period 03.04.2017 to 09.04.2017

Construction of the Beatrice Offshore Wind Farm commenced at 0001 hrs on the 1st of April. Some preconstruction is still ongoing. This notice will now be updated weekly giving information on the progress and resources involved in the offshore project.

The intention is to give an overview of activities and vessels involved. Should anyone have questions regarding the operations, we kindly ask you to put them forward well in advance. If you are not the appropriate recipient of these notices, or do not wish to receive the notices in the future, please let us know by reply or email (see details in Section 1).

Beatrice Offshore Windfarm Limited (BOWL) is developing the Beatrice Offshore Wind Farm in the 'Outer' Moray Firth on the north-western point of the Smith Bank, approximately 7 nm off the Caithness coastline. The development site will cover an approximate area of up to 130km^2 and will consist of 84 7MW offshore wind turbines (with a total capacity of 588MW) and two HVAC Offshore Transformer Modules (OTM). Water depths in the area range from approximately 38m below LAT in the south of the field to 60m below LAT in the north. The generated power will be transmitted to the grid via two subsea export / transmission cables with a landfall near Portgordon to the south of the field and grid connection at Blackhillock. The transmission cables will cover a route of approximately 38 nm from the wind farm boundary back to the landfall. The Beatrice Offshore Wind Farm development area is highlighted in red below.

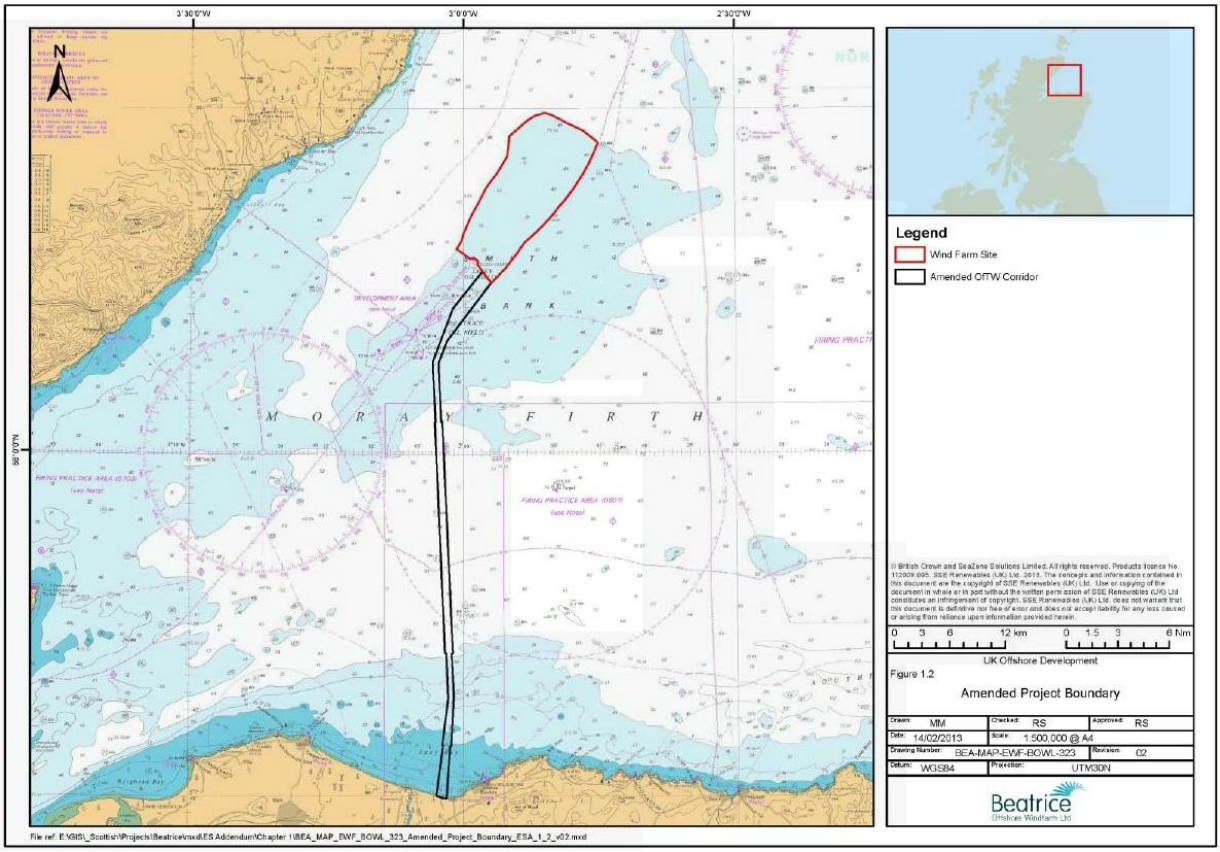

Fig 1 Beatrice Offshore Wind Farm location

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From Saturday 1st April 2017 at 00:01 the Marine Coordination Centre in Wick is manned 24 hours, 7 days a week.

A number of pre-construction activities are continuing offshore, alongside the installation works, which commenced on 01 April 2017.

- Boulder removal operation (Detailed in this notice).
- Commencement of Piling operations (Detailed in this notice).
- Guard Vessel duties. (Detailed in this notice).

1. Contact Details for Marine Coordination

The following contact can provide more information if required. Please note that specific queries can also be addressed to the relevant vessel or shore based representative.

Telephone Number (Day Operations)	+44 (0) 3302020329
Emergency Contact (24/7)	+44 (0) 7342 028207
Email for Marine Coordinator	mc.bowl@sse.com
Address	Unit 1 Harbour Office Wick Caithness KW1 5HA

2. Completed operations

2.1 Deployment of seabed mounted scientific equipment moorings in the Moray Firth by Aberdeen University.

Mariners are advised that, in conjunction with Beatrice Offshore Windfarm Limited (BOWL), and further to notice UoA/03/2017, the University of Aberdeen has installed seabed mounted scientific equipment moorings in the Moray Firth at the locations listed in Table 1 below:

Table 1

Name	As Laid coordinates (WGS84) datum		Characteristics
17	57° 57.759' N	003° 31.258' W	Subsurface with acoustic release.
40	57° 48.984' N	003° 36.382' W	Subsurface with acoustic release.
41	57° 51.154' N	3° 33.048' W	Subsurface with acoustic release.
42	57° 52.338' N	3° 29.066' W	Subsurface with acoustic release.
44	57° 56.416' N	003° 21.417' W	Subsurface with acoustic release.
45	57° 57.261' N	003° 16.063' W	Subsurface with acoustic release.
46	58° 00.858' N	003° 15.396' W	Subsurface with acoustic release.
47	58° 00.816' N	003° 08.539' W	Subsurface.
48	58° 04.006' N	003° 06.921' W	Subsurface.
49	58° 04.449' N	003° 00.998' W	Subsurface.
53	58° 11.741' N	002° 45.762' W	Subsurface.
54	58° 13.517' N	002° 41.969' W	Subsurface.
55	58° 16.158' N	002° 39.644' W	Subsurface.
56	58° 18.725' N	002° 37.063' W	Subsurface.

76	58° 17.337' N	002° 50.312' W	Subsurface with transponder.
78	58° 13.565' N	002° 56.750' W	Subsurface.
82	58° 00.621' N	003° 25.692' W	Subsurface with acoustic release.
89	57° 56.051' N	003° 38.250' W	Subsurface with acoustic release.
90	58° 01.061' N	003° 36.584' W	Subsurface with acoustic release.
98	57° 54.165' N	003° 17.854' W	Subsurface with acoustic release.
99	57° 50.856' N	003° 24.445' W	Subsurface with acoustic release.
108	58° 18.998' N	002° 59.211' W	Subsurface.
110	58° 07.667' N	002° 45.368' W	Subsurface.
143	58° 14.730' N	002° 53.056' W	Subsurface with transponder.
144	58° 14.818’ N	002° 52.414' W	Subsurface with transponder.
145	58° 15.174' N	002° 52.555' W	Subsurface with transponder.
146	58° 15.231' N	002° 53.321' W	Subsurface with transponder.
147	58° 15.523' N	002° 54.256' W	Subsurface with transponder.
148	58° 15.689' N	002° 53.414' W	Subsurface with transponder.
149	58° 16.002' N	002° 52.037' W	Subsurface with transponder.
150	58° 16.660' N	002° 51.076' W	Subsurface with transponder.
151	58° 14.933' N	002° 54.903' W	Subsurface with transponder.
152	58° 14.808' N	002° 56.411' W	Subsurface with transponder.
153	58° 14.746' N	002° 57.912' W	Subsurface with transponder.
154	58° 10.770' N	002° 55.745' W	Subsurface with transponder.
155	58° 10.670' N	002° 56.563' W	Subsurface with transponder.
156	58° 10.993' N	002° 56.624' W	Subsurface with transponder.
157	58° 10.241' N	002° 54.663' W	Subsurface with transponder.
158	58° 09.747' N	002° 53.444' W	Subsurface with transponder.
159	58° 09.262' N	002° 52.228' W	Subsurface with transponder.
160	58° 17.636' N	002° 49.911' W	Subsurface.
161	58° 12.993' N	002° 55.942' W	Subsurface.
163	58° 17.950' N	002° 44.998' W	Subsurface.
165	58° 12.471' N	003° 01.260' W	Subsurface.
166	58° 07.799' N	002° 55.205' W	Subsurface.

The moorings support sound recording equipment, and acoustic loggers that record echolocation clicks of dolphins and porpoises (see images of devices at the foot of this notice). All the above moorings are subsurface, consisting of a 50kg weight and a terminated rope riser. The above moorings do not extend more than three metres vertically from the seabed.
Thirty-two of the above moorings are also equipped with an acoustic release or transponder.

Mariners are also advised that the following two moorings have now been deployed.

Table 2

Name	Proposed Coordinates (WGS84) datum		Characteristics
162	58° 18.200' N	002° 54.240' W	Subsurface with transponder.
164	58° 12.770' N	002° 51.590' W	Subsurface with acoustic release.

2.2 Equipment deployed

The following are examples of equipment which the above moorings will support

		
Acoustic logger (600 x 95mm)	Sound recorder (900 x 170mm)	Sound recorder (200 x 60mm)

Fig 2 Acoustic loggers

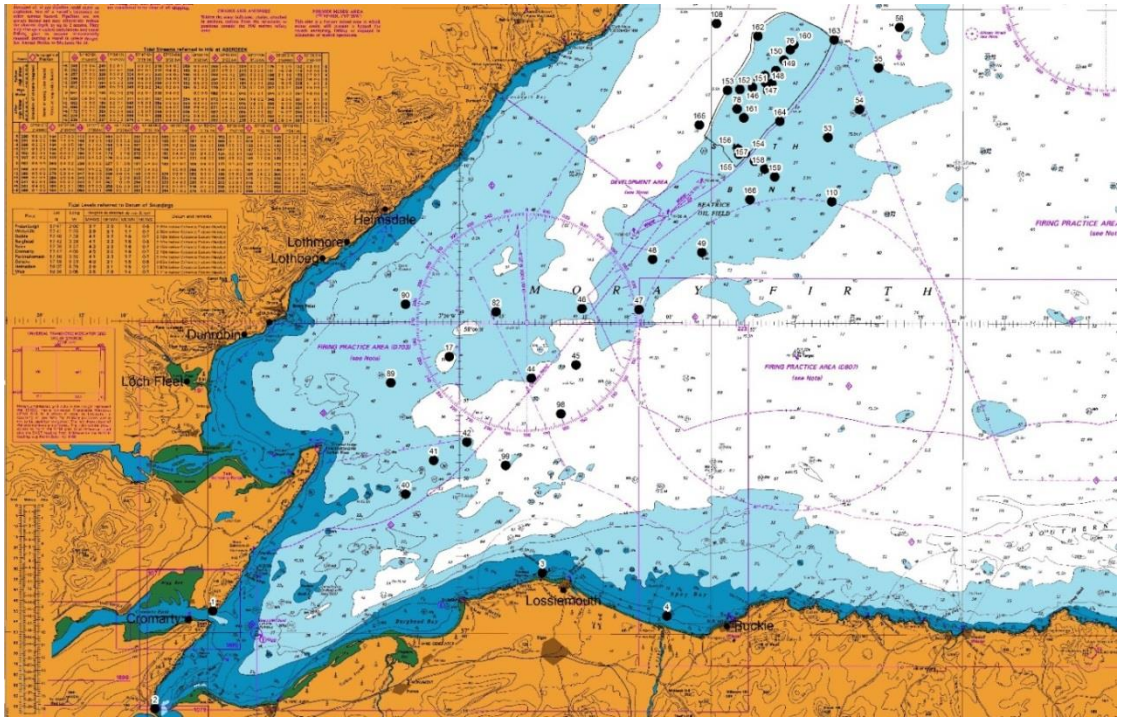

Fig 3 Mooring locations – Moray Firth, all sites

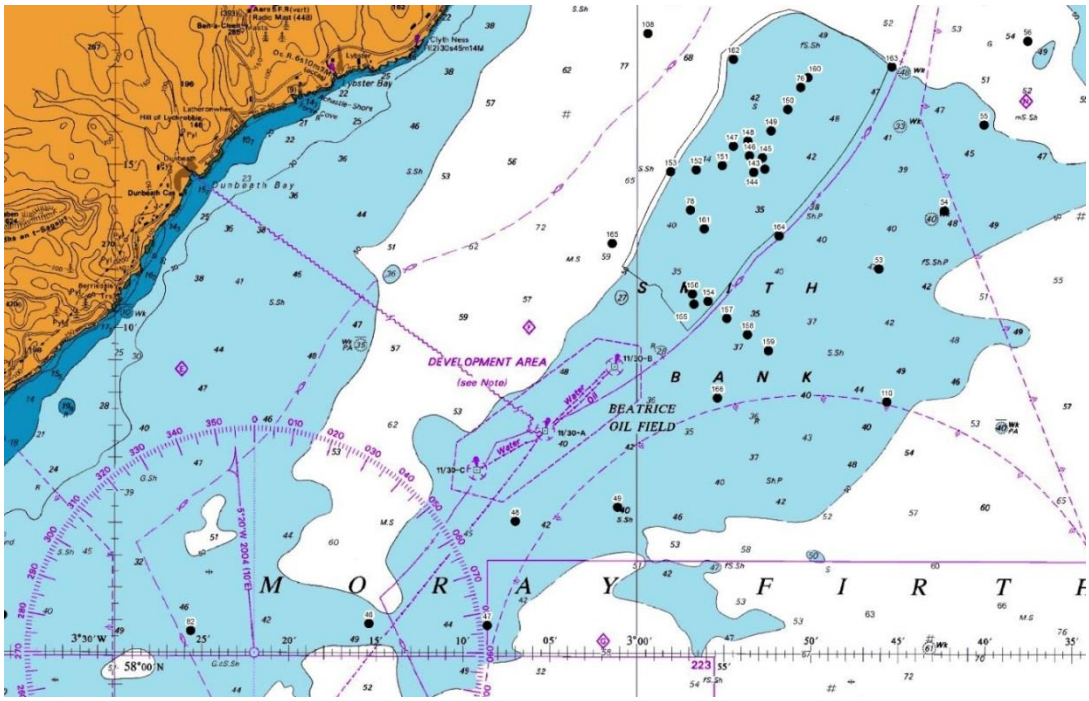

Fig 4 Mooring locations – detail of Smith Bank sites, Moray Firth.

2.3 Beatrice Offshore Wind Farm Wave Rider Buoy Deployment

Project:	Waverider Buoy Deployment
Contractor:	SHL
Contract Purpose:	To install x4 Waverider buoys.
Area:	BOWL construction site: Close proximity to the Cardinal Buoys
Deployment Date:	30th March 2017
Deployment Vessel	Bremen Fighter
Equipment:	Anchor Handling Equipment.

On behalf of BOWL, Seaway Heavy Lifting have deployed four Waverider buoys at the following locations within the Beatrice Offshore Wind Farm,

Name	Coordinates (WGS84)	Characteristics
Wave Rider Buoy #1	58^0 10.613'N 002^0 55.353'W	LED Flashlight Antenna with integrated LED flasher, colour yellow, pattern 5 flashes every 20 s, standard length of antenna is 200 cm
Wave Rider Buoy #2	58^0 18.005'N 002^0 45.369'W	LED Flashlight Antenna with integrated LED flasher, colour yellow, pattern 5 flashes every 20 s, standard length of antenna is 200 cm
Wave Rider Buoy #3	58^{o}19.882'N 002^0 50.553'W	LED Flashlight Antenna with integrated LED flasher, colour yellow, pattern 5 flashes every 20 s, standard length of antenna is 200 cm
Wave Rider Buoy #4	58^0 12.6'N 003^0 00.869'W	LED Flashlight Antenna with integrated LED flasher, colour yellow, pattern 5 flashes every 20 s, standard length of antenna is 200 cm

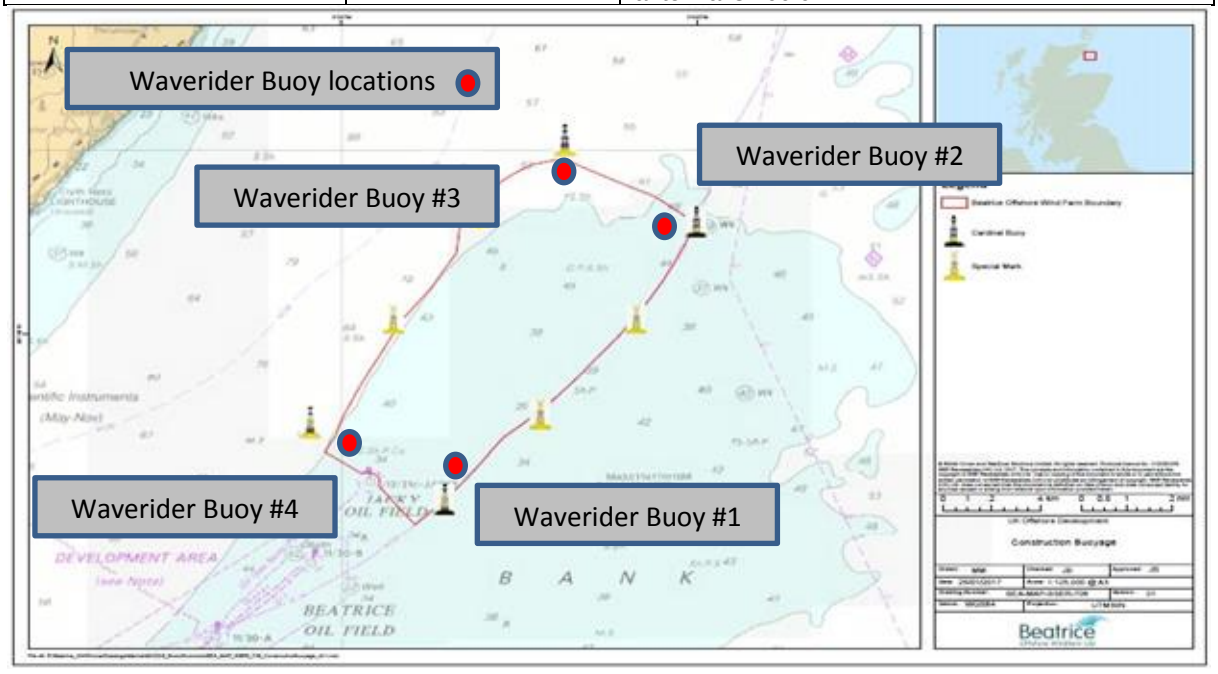

Fig 5 Waverider locations

3. Ongoing Operations

3.1 Beatrice Offshore Wind Farm boulder removal campaign

Project:	Boulder removal
Contractor:	Siem Offshore for SHL
Contract Purpose:	Remove boulders and other debris from the array cable routes and foundation locations
Area:	BOWL construction site: within the array cable routes and foundation locations. (See Fig* for details)
Deployment Dates:	8th March- 11th April 2017
Deployment Vessel (s):	Siem N-Sea for boulder grab
Equipment:	UTROV grabber system

On behalf of BOWL, Seaway Heavy Lifting continues to have one vessel, to carry out the aforementioned work during the period 08/03/2017 – 11/04/2017, within the boundary of the BOWL construction site, along approximately 15% of the array cable routes and at various foundation locations.

3.2 Detailed locations

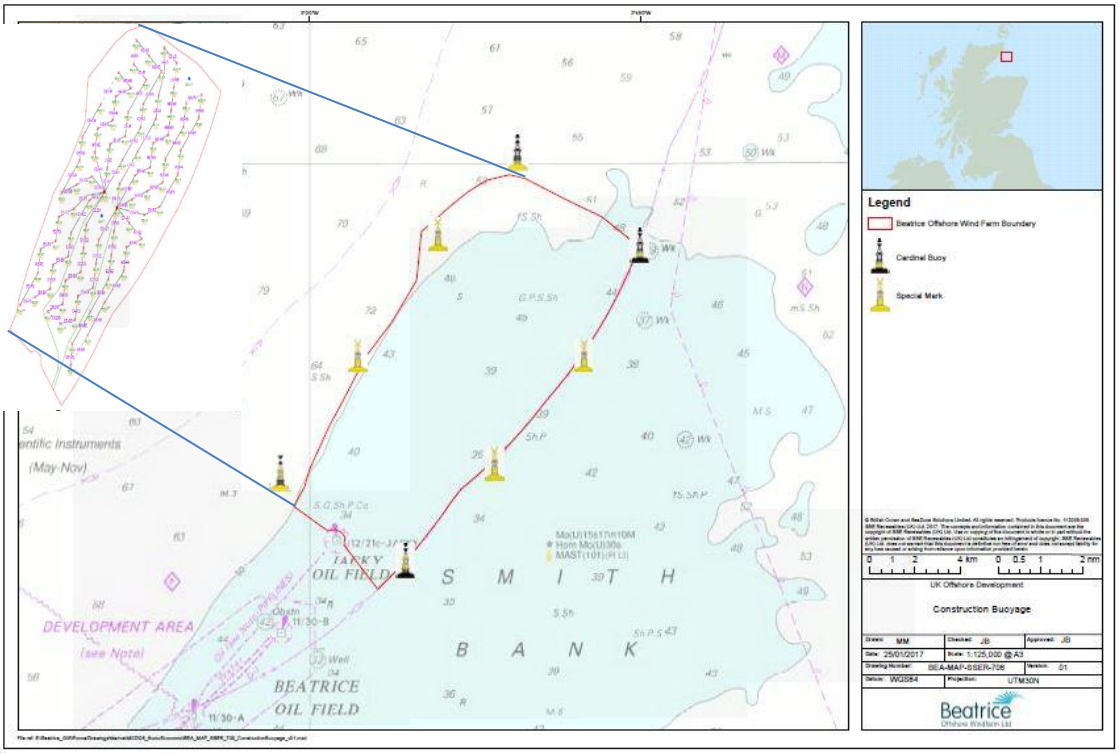

Fig 5 Locations of boulder removal locations

3.3 Vessels on Site Associated with the Activity

SIEM N-Sea	
General Description and Dimensions:	Boulder Removal Vessel - Cable Route DP2 LOA 94m Beam 20m Draft 7.9m
Call Sign:	C6YG5
MMSI:	3110311800
On Board Contact:	Steven Rae
Offshore Manager / Party Chief:	Eric Wittemans / Robert Kyle
E-mail:	siemoffshore@siemoffshore.com
Onshore Representative:	Steve Bell – sbell@shl.nl

Fig 6 UTROV Grabber system for Boulder removal

The Siem N-Sea will deploy a UTROV (Utility ROV) grabber system to pinpoint and remove individual boulders from foundation locations. The UTROV is a remotely operated system with lights and a suite of survey equipment mounted over a grabber tool. The Siem N-Sea will operate in DP at various foundation locations and cable routes.

3.4 Beatrice Offshore Wind Farm Piling Campaign

Project:	Foundation Piling campaign
Contractor:	SHL
Contract Purpose:	To install x 4 piles at each Turbine Location within the construction site.
Area:	BOWL construction site: foundation locations. (See Fig 7 for details)
Deployment Dates:	01st April 2017 – 31st October 2017.
Deployment Vessel (s):	Stanislav Yudin, Bremen Fighter, Smit Sentosa & Rix Lynx, with various tugs and associated barges.
Equipment:	Piling Installation Frame (PIF), Piling Hammer and Transport barges.

On behalf of BOWL, Seaway Heavy Lifting will deploy various vessels to carry out the aforementioned work during the period 27/03/2017 – 31/10/2017 within the boundary of the BOWL construction site.

In preparation for the installation of wind turbine foundations in the Beatrice Offshore Windfarm construction site, a set of four piles will be installed in the seabed at each of the foundation locations outlined in Table 3 below.

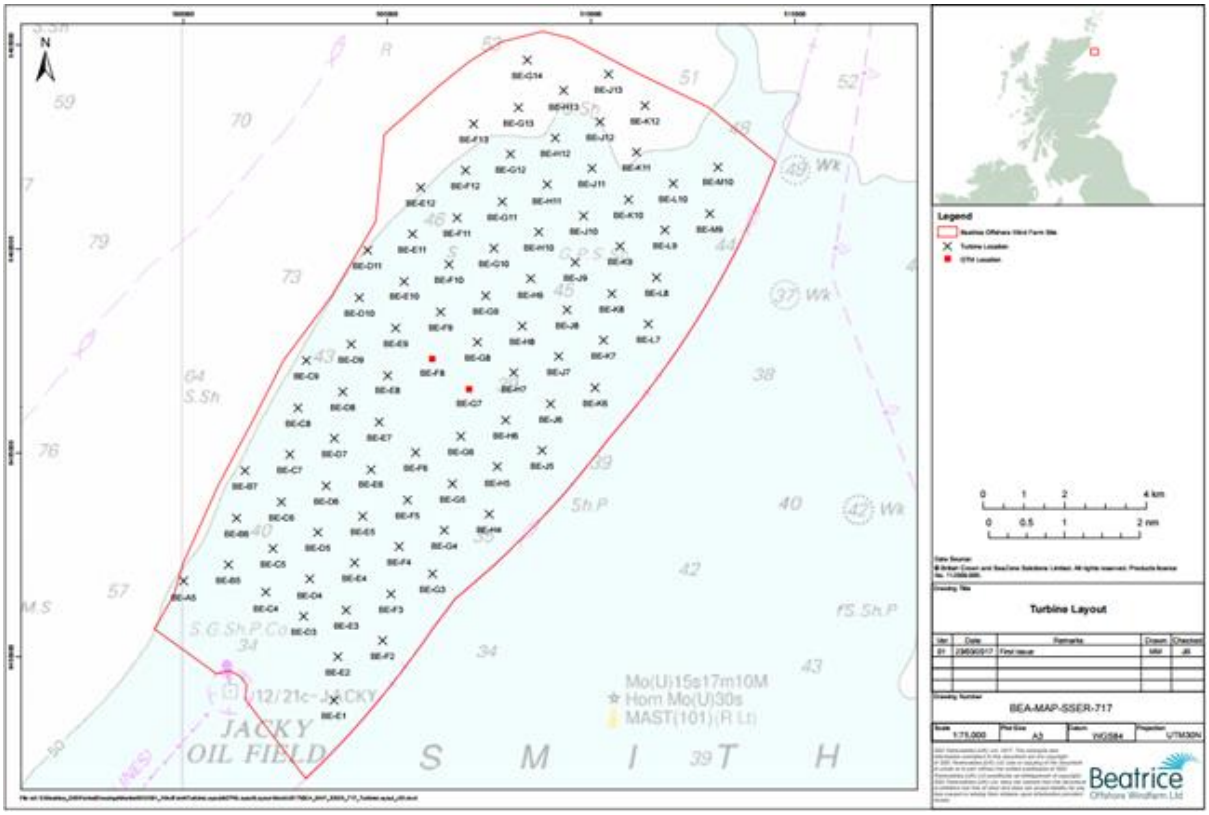

Fig 7 BOWL construction site showing foundation locations

Table 3 WTG and OTM Location Coordinates

Location ID	Latitude (dd mm.mmm) WGS84	Longitude (ddm) WGS84
BE-A5	58 12.471' N	002 59.996' W
BE-B5	58 12.687' N	002 58.873' W
BE-B6	58 13.308' N	002 58.664' W
BE-B7	58 13.929' N	002 58.456' W
BE-C4	58 12.307' N	002 57.948' W
BE-C5	58 12.902' N	002 57.749' W
BE-C6	58 13.524' N	002 57.541' W
BE-C7	58 14.144' N	002 57.332' W
BE-C8	58 14.766' N	002 57.124' W
BE-C9	58 15.386' N	002 56.915' W
BE-D3	58 11.995' N	002 57.002' W
BE-D4	58 12.497' N	002 56.834' W
BE-D5	58 13.117' N	002 56.626' W
BE-D6	58 13.739' N	002 56.417' W
BE-D7	58 14.359' N	002 56.209' W
BE-D8	58 14.981' N	002 55.999' W
BE-D9	58 15.602' N	002 55.790' W
BE-D10	58 16.223' N	002 55.582' W
BE-D11	58 16.844' N	002 55.373' W
BE-E1	58 10.900' N	002 56.256' W
BE-E2	58 11.470' N	002 56.128' W
BE-E3	58 12.090' N	002 55.920' W
BE-E4	58 12.712' N	002 55.710' W
BE-E5	58 13.333' N	002 55.502' W
BE-E6	58 13.954' N	002 55.293' W
BE-E7	58 14.575' N	002 55.084' W
BE-E8	58 15.196' N	002 54.875' W
BE-E9	58 15.817' N	002 54.665' W
BE-E10	58 16.438' N	002 54.456' W
BE-E11	58 17.059' N	002 54.247' W
BE-E12	58 17.680' N	002 54.037' W
BE-F2	58 11.685' N	002 55.005' W
BE-F3	58 12.306' N	002 54.796' W
BE-F4	58 12.927' N	002 54.588' W
BE-F5	58 13.548' N	002 54.378' W
BE-F6	58 14.168' N	002 54.169' W
BE-F8 (OTM1)	58 15.411' N	002 53.750' W
BE-F9	58 16.031' N	002 53.540' W
BE-F10	58 16.653' N	002 53.330' W
BE-F11	58 17.274' N	002 53.120' W

Location ID	Latitude (dd mm.mmm) WGS84	Longitude (ddm) WGS84
BE-F12	58 17.894' N	002 52.911' W
BE-F13	58 18.516' N	002 52.701' W
BE-G3	58 12.544' N	002 53.726' W
BE-G4	58 13.142' N	002 53.464' W
BE-G5	58 13.762' N	002 53.254' W
BE-G6	58 14.384' N	002 53.044' W
BE-G7 (OTM2)	58 15.004' N	002 52.834' W
BE-G8	58 15.625' N	002 52.625' W
BE-G9	58 16.247' N	002 52.415' W
BE-G10	58 16.867' N	002 52.204' W
BE-G11	58 17.488' N	002 51.994' W
BE-G12	58 18.109' N	002 51.784' W
BE-G13	58 18.730' N	002 51.574' W
BE-G14	58 19.351' N	002 51.362' W
BE-H4	58 13.356' N	002 52.339' W
BE-H5	58 13.977' N	002 52.130' W
BE-H6	58 14.598' N	002 51.920' W
BE-H7	58 15.219' N	002 51.709' W
BE-H8	58 15.840' N	002 51.499' W
BE-H9	58 16.461' N	002 51.289' W
BE-H10	58 17.082' N	002 51.079' W
BE-H11	58 17.703' N	002 50.867' W
BE-H12	58 18.324' N	002 50.657' W
BE-H13	58 18.944' N	002 50.446' W
BE-J5	58 14.192' N	002 51.005' W
BE-J6	58 14.812' N	002 50.795' W
BE-J7	58 15.433' N	002 50.585' W
BE-J8	58 16.055' N	002 50.373' W
BE-J9	58 16.675' N	002 50.163' W
BE-J10	58 17.296' N	002 49.952' W
BE-J11	58 17.917' N	002 49.741' W
BE-J12	58 18.538' N	002 49.530' W
BE-J13	58 19.159' N	002 49.319' W
BE-K6	58 15.027' N	002 49.669' W
BE-K7	58 15.648' N	002 49.459' W
BE-K8	58 16.269' N	002 49.247' W
BE-K9	58 16.890' N	002 49.036' W
BE-K10	58 17.510' N	002 48.825' W
BE-K11	58 18.131' N	002 48.614' W
BE-K12	58 18.752' N	002 48.403' W
BE-L7	58 15.862' N	002 48.333' W
BE-L8	58 16.482' N	002 48.122' W

Location ID	Latitude (dd mm.mmm) WGS84	Longitude (ddm) WGS84
BE-L9	58 17.104' N	002 47.910' W
BE-L10	58 17.724' N	002 47.698' W
BE-M9	58 17.317' N	002 46.784' W
BE-M10	58 17.938' N	002 46.571' W

3.5 Vessels on Site Associated with the Activity

Stanislav Yudin	
General Description and Dimensions:	Heavy Lift Vessel L:183.3m B: 40.0m D:8.9m
Call Sign & MMSI:	V20Y1 / 304742000
On Board Contact for BOWL:	Chris Hadlow
Offshore Manager / Party Chief:	Joanes van der Vliet
E-mail:	stanislav-yudin@shl.com.cy
Onshore Representative:	Danny Sprangers email: dsprangers@shl.nl

Bremen Fighter	
General Description and Dimensions:	Anchor Handling Tug L:48.1m B:14.06m D:6.0m
Call Sign & MMSI:	V20Y1 / 304742000
On Board Contact for BOWL:	Chris Hadlow
Offshore Manager / Party Chief:	Joanes van der vliet
E-mail:	stanislav-yudin@shl.com.cy
Onshore Representative:	Danny Sprangers email: dsprangers@shl.nl

Smit Sentosa	
General Description and Dimensions:	Anchor Handling Tug L:51.8m B:15.0m D:5.7m
Call Sign & MMSI:	ORRX / 205696000
On Board Contact for BOWL:	Chris Hadlow
Offshore Manager / Party Chief:	Joanes van der vliet
E-mail:	stanislav-yudin@shl.com.cy
Onshore Representative:	Danny Sprangers email: dsprangers@shl.nl

Piling Operations

Pile foundations will be installed by the Heavy Lift Vessel (HLV) Stanislav Yudin, which will arrive at the proposed foundation installation location and will be positioned in readiness for the foundation installation works. This will involve the placing of an eight point anchor spread using two dedicated anchor handling tugs, Bremen Fighter and Smit Sentosa.

Pile foundations will be installed by the use of a Pile Installation Frame (PIF), an example of which is shown in Figure 8. Pile installation tolerances will be achieved through the use of a hydraulically operated PIF with sufficient travel to accommodate the worst case seabed slopes to ensure the piles are installed correctly.

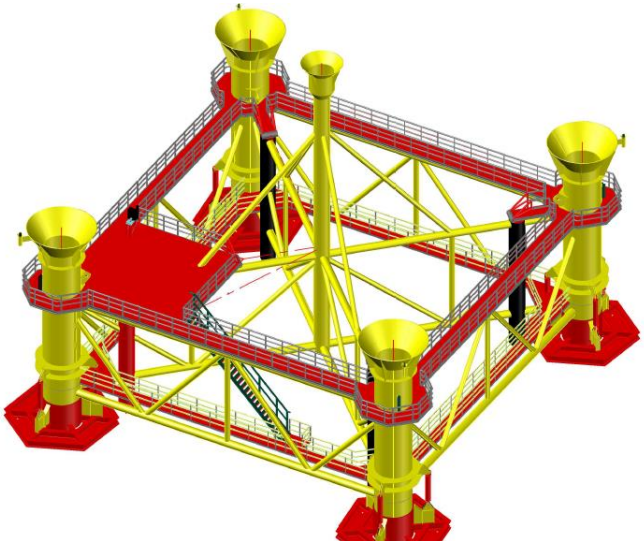

Fig 8 Pile Installation Frame (PIF)

Fig 9 PIF lowering

The PIF will be lifted from the HLV and lowered to the seabed in positon ready for the piling operations and levelled hydraulically to take into account seabed slope. Each of the four piles is then lifted and lowered into the PIF in readiness for the piling operation The approximate duration of pile installation frame positioning will be up 4 hours.

The pile foundations will be delivered to the HLV by cargo barge directly from the manufacturing site. The cargo barge will be moored alongside the HLV and the four piles will each be lifted and transferred to the deck of the HLV. The cargo barge will then be unmoored and will depart. Each of the four piles will then be lifted, upended, lowered into the PIF and vibrated (vibro-piled) in readiness for the piling operation.

Vibropiling is a technique used to make the pile oscillate at a low frequency of about 20Hz. Having been lifted into the PIF, each pile will be vibro-piled to a nominal penetration or until refusal, whichever occurs first. This process continues until all four piles are settled in the PIF. The purpose of the vibropiling will be to settle the piles into the PIF in advance of percussive piling.The approximate duration of pile installation at each location is 7 hours. The approximate duration of vibropiling will be up to 2 hours at each location.

Piling Mitigation protocol

The piling hammer will be lifted on to the top of the first pile in the PIF. The approximate duration of setting up the piling hammer on the first pile will be 2 hours. Prior to commencing piling the Piling Mitigation Protocol will be implemented. This will include the deployment of the Acoustic Deterrence Device (ADD) and a soft start piling procedure.

The approximate duration of mitigation depends on the duration of any breaks, the ADDs may also be deployed concurrently with setting up the piling hammer.

Piling to Full Penetration

Figure 10 Hammer positioned on pile

Following completion of the mitigation described above, the piling operators will gradually increase the hammer energy applied until the pile is penetrating the seabed at the target rate of approximately 1 cm to 2.5 cm per hammer strike (see Figure 10 for pile hammer installing a pile). If this target rate is reached with a lower than anticipated hammer energy, the hammer energy is unlikely to be increased further. Final penetration depth is reached when the pile foundations stick up between 2m and 6m above the seabed. Once the first pile in the PIF has been fully installed, the hammer will be repositioned to commence piling at the next pile in the PIF. The mitigation implemented prior to commencing this second piling event will depend on the duration of the break between piling each pile in the PIF as set out in the Piling Mitigation Protocol. The anticipated duration for re-positioning the hammer to commence piling at the next pile in the PIF will be 10 minutes to 1 hour. For the four piles hammer re-positioning may therefore take up to 3 hours in total.
The anticipated duration of piling to full penetration depth (including the mitigation period) at each wind turbine or OTM location ranges between 5.4 to 12.7 hours. Once all four of the piles in the PIF have been pile-driven to the required depth pile metrology is performed (measurements to determine pile position and depth is satisfactory). The duration for performing pile metrology is 1 hour. The PIF will then be recovered back to the deck of the HLV and the HLV will be readied for transit to the next foundation location. Recovery of the PIF will take approximately 2.5 hours.

The operation will involve placing an anchor spread using a dedicated AHT, using up to eight anchors, with each anchor up to 850 metres from the Stanislav Yudin. An anchor buoy will mark the anchor position.

A Safety Zone of 1500m has been established around the Stanislav Yudin to take into account the size of her anchor spread.

The Stanislav Yudin, the Bremen Fighter and the Smit Sentosa will exhibit appropriate lights and shapes prescribed by the International Regulations for Preventing Collisions at Sea; relative to the operation. They will also transmit an AIS message.

3.6 Beatrice Offshore Wind Farm Guard Vessel Deployment

Project:	Beatrice Offshore Windfarm Guard Vessel Deployment.
Contractor:	SHL – SFF Services Ltd
Contract Purpose:	Guard Vessel for the Windfarm site.
Area:	BOWL construction site: within the array cable routes and foundation locations. (See Fig 1 for details)
Deployment Dates:	From 1st April 2017.
Deployment Vessel (s):	Genesis BCK19
Equipment:	N/A

On behalf of BOWL, Seaways Heavy Lifting has contracted the Scottish Fishermen's Federation to provide guard vessels during the piling and foundation installation campaigns. These vessels will change regularly, however apart from times of extreme weather, there will always be at least one guard vessel on station. The guard vessel's primary duty is security of the construction site by informing and warning non-construction vessels of the ongoing activities and associated Safety Zones. The first guard vessel on site is the Genesis Bck19

Genesis Bck 19	
General Description and Dimensions:	Guard Vessel: L:35.70m B:6m D:3.0m
Call Sign:	MGGT9
MMSI:	235008110
On Board Contact:	A Morrice Tel: 07712114874
E-mail:	ops@sff.co.uk
Onshore Representative:	SFF Services Limited Office. Tel: 01224 646966

4. General Safety Advice

All vessels engaged in the activity will exhibit appropriate lights and shapes prescribed by the International Regulations for Preventing Collisions at Sea; relative to their operations. All vessels engaged in the activity will also transmit an Automatic Identification System (AIS) message.

The Secretary of State has authorised the use of the following safety zones as per Notice to Mariners LF000005-NTM-004.

- 500 metres radius around each wind turbine, offshore transformer module and/or their substructures and foundations comprising the Beatrice Offshore Wind Farm whilst work is being performed as indicated by the presence of construction vessels.

- 50 metres radius around each wind turbine, offshore transformer module and/or their substructure and foundations installed but waiting to be commissioned as part of the Beatrice Offshore Wind Farm.

ALL VESSELS ARE REQUESTED to give all construction and support vessels a wide berth.

MARINERS ARE REMINDED to navigate with caution and keep continued watch on VHF Ch. 70 / 16 when navigating the area.

5. Dedicated Guard Vessel

The guard vessel Genesis will take up station on 1st April 2017. (See section 3.6 above)

6. Fisheries Liaison

Fisheries liaison associated with the activity will be co-ordinated by Brown and May Marine. For any commercial fishery queries please contact: Alex Winrow-Giffin, telephone: +44 (0)1379 872144 and mobile: +44 (0)7760 160039

7. Distribution List

The distribution of this notice is as per email recipient's header. A central list of recipients is maintained by the Marine Coordinator; if you are not the appropriate recipient of these notices, or do not wish to receive the notices in the future, please contact us at the address included in Section 1 of this notice.

8. Website

The official website of Beatrice Offshore Windfarm Limited can be found at:

https://www.beatricewind.com/

This contains all Notices to Mariners (NtM) published by BOWL and all Weekly Notices of Operations, together with a large amount of general information about the Project.

There is also a Twitter feed at https://twitter.com/beatricewind

Beatrice Offshore Windfarm
Vessels, agents, contractors and sub-contractors

Date: 1-Apr-17

Reference to Marine Licence
Conditions 2.5, 2.6 and 3.1.2

Vessel Data Matrix

No Ref	Vessel Picture	Vessel Name / Flag	Type / Function	Operator	Contact / contact details	Call sign / MMSI / IMO	LOA (m) Beam (m) Draft (m)	Date on Site
1		Siem N-Sea	Anchor Handling Tug for Boulder Clearance	Seaway Heavy Lifting (SHL) Albert Einsteinlaan 50 2719 ER Zoetermeer Netherlands 00 31 79 363 7700	Steve Bell (SHL) / s.bell@shl.nl	C6YG5 / 311031800 / 9424508	93.6 / 19.74 /6.3	17.03.2017
2		Bremen Fighter	Anchor Handling Tug assisting the Stanislav Yudin	Seaway Heavy Lifting (SHL) Albert Einsteinlaan 50 2719 ER Zoetermeer Netherlands 00 31 79 363 7700	Danny Sprangers (SHL) C/o Subsea 7 East Campus Prospect Road Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	V20Y1 / 304742000	48.1 / 14.06 / 6.0	27.03.2017
3		Stanislav Yudin	Heavy Lift Vessel	Seaway Heavy Lifting (SHL) Albert Einsteinlaan 50 2719 ER Zoetermeer Netherlands 00 31 79 363 7700	Danny Sprangers (SHL) C/o Subsea 7 East Campus Prospect Road Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	5BYM2 / 210334000	183.3 / 40.0 / 8.9	01.04.2017
4		Smit Sentosa	Anchor Handling Tug assisting the Stanislav Yudin	Seaway Heavy Lifting (SHL) Albert Einsteinlaan 50 2719 ER Zoetermeer Netherlands 00 31 79 363 7700	Danny Sprangers (SHL) C/o Subsea 7 East Campus Prospect Road Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	ORRX / 205696000	51.8 / 15.0 / 6.2	01.04.2017
5		Rix Lynx	Crew Transfer Vessel / CTV	Seaway Heavy Lifting (SHL) Albert Einsteinlaan 50 2719 ER Zoetermeer Netherlands 00 31 79 363 7700	Danny Sprangers (SHL) C/o Subsea 7 East Campus Prospect Road Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	2JGQ6 / 235115745	26 / 7.0 / 2.0	01.04.2017
6		Union Boxer	Anchor Handling Tug	Seaway Heavy Lifting (SHL) Albert Einsteinlaan 50 2719 ER Zoetermeer Netherlands 00 31 79 363 7700	Royal Boskalis Westminster N.V. PO Box 43 3350 AA Papendrecht The Netherlands T +31 78 69 69 000 F +31 78 69 69 555 royal@boskalis.com www.boskalis.com	ORPS / 205575000	96.3 / 21.5 / 6.3	01.04.2017
7		Genesis BCK19	Guard Vessel	Scottish Fisheries Federation for Seaway Heavy Lifting	SSF services Limited (SFFSL) Office, Tel: 01224 646966, E: ops@sff.co.uk	MGGT9 / 235008110	35.0 / 6.0 / 3.0	01.04.2017