

THE BRIEF FOR THE MAINTENANCE AND/OR INSTALLATION AND/OR PROVISION OF HYDRODYNAMIC EQUIPMENT

Scheme Title	Northeast Regional Coastal Monitoring Programme
Employer's Address	Scarborough Borough Council, St Nicholas Street, Scarborough YO11 2HG
Nominated Employer's Representative	Mr Robin Siddle
Survey Title	Maintenance and/or installation and/or provision of hydrodynamic equipment
Purpose of Survey	The hydrodynamic network is used as a part of a long-term programme of coastal monitoring, to analyse coastal processes and provide data for operational and strategic shoreline management
Specification	Regional Coastal Monitoring Programmes Specification for maintenance and/or installation and/or provision of hydrodynamic equipment v1.0
Delivery Schedule	The delivery schedule for assumption of full responsibility for the network of existing instrumentation is 01 April 2016 or within 3 calendar months of award of contract, whichever is the later
Tender Submission Date	See the invitation to tender letter
Contract Completion Date	31 March 2021
Known Hazards	The Employer is unaware of any special hazards other than those normally associated with offshore and onshore instrumentation deployment and maintenance. The Consultant shall carry out a full Risk Assessment before each deployment/maintenance visit and shall prepare a Safe System of Working based on the Assessment. A copy shall be forwarded to the Employer's Representative. The Consultant's attention is drawn to the desirability, among other things, of monitoring weather conditions and of notifying the Coastguard of the deployment/maintenance activities.
Site Conditions/ Restrictions, Access and Public Relations	A letter of introduction will be provided which should be presented as a matter of course, and without it being demanded, at all meetings with landowners or the public

This Brief provides details specific to instrumentation which shall be maintained (including unscheduled maintenance) and/or deployed and/or provided according to the Specification.

1. Variations to Specification

The following sections and clauses in the Specification are excluded from this Contract:

N/A

The following clauses in the Specification are replaced by:

Clause	Subject	Variation
2.1.3	Licencing and consultations	Applications for MMO licences (formerly known as Food and Environmental Protection Act 1985 [FEPA] licence) for all new deployments at sea will be made by the Consultant. Copies of the application and licences will be provided to the Employer. Copies of existing licences will be provided to the Consultant. All other licences will be the responsibility of the Consultant. Consultation with, and service of notice upon, mariners and other interested parties will be the responsibility of the Consultant.
C2.9	Tide gauge benchmarks	The Consultant will be responsible for surveying a tide gauge benchmark as close as possible to the installation, and will supply the Employer with the Ordnance Datum elevation of the benchmark. The Consultant will apply the necessary offset to reduce all measured tide data to OD.

2. Phased assumption of responsibility for continuity of data and of unscheduled maintenance

There will be a phased programme of transfer of responsibility from the Employer's representative to the Consultant during the 3 months prior to the Delivery Schedule date. It is crucial that continuity of data is maintained during this period and that any data losses are kept to a minimum. If required, the Employer's representative will be available to accompany the Consultant to a half day's visit to each shore station, to aid the transfer of responsibility.

The Consultant will provide in the method statement a procedure for how the transfer of responsibility will be achieved and a programme for assuming responsibility for all sites by the Delivery Schedule.

3. Equipment spares

An extensive stock of spares for the deployed equipment is held by the Employer, as listed in the schedule (Appendix I). The Consultant will be expected to liaise with and co-operate with the Employer's representative in Hampshire to arrange a phased hand-over of the spares. This is to ensure that sufficient spares are available to both the Consultant and the Employer's representative during the 3 month period prior to the Consultant assuming responsibility for the network.

4. Existing deployments

The locations listed in [Table 1](#) and shown in [Figure 1](#) have instruments deployed, for which the Consultant will become fully responsible by the Delivery schedule. Full details of the equipment at each site are given in the Schedule (Appendix 1). The wave buoys are Datawell Directional Waverider (DWR) Mk III.

The seabed mooring at Scarborough consists of a Datawell shallow water mooring with 30 m rubber cord. To combat a high number of drifted buoy events, the standard mooring design has been amended to incorporate a 20 mm diameter galvanised cable riser line for increased durability/resistance to cutting, and A6 Polyform fender for increased visibility and lift.

When this mooring requires replacement, the standard mooring will be amended to incorporate 18 mm diameter combined wire and rope riser line for increased durability/resistance to cutting and A6 Polyform fender for increased visibility and lift.



The seabed moorings at Whitby consist of a Datawell shallow water mooring with a single 30 m rubber cord, 1.2 m diameter yellow marker buoy complete with radar reflector, St. Andrew's cross and navigation light (GpFl Y 5/20) and riser line comprising 16 mm diameter combined wire and rope. A similar marker buoy may be installed at the Scarborough site should the Whitby Marker prove successful.

The seabed mooring at Newbiggin consists of a Datawell standard shallow water mooring with 30 m rubber cord, 10 kg float and polypropylene riser rope.

The tide gauges at Whitby and Scarborough have local shore stations, but the data is also transmitted to Council offices (respective DWR shore stations) for onward routing to websites.

The shore stations will continue to host equipment and all have a phone line and broadband installed. All existing equipment has been maintained according to the manufacturer's recommendations and in accordance with the Specification. It can be assumed that all deployed equipment will be operational when the Consultant assumes responsibility for it.

Where indicated in [Table 1](#), a display of real-time wave/tide/met/other parameters, customised to the shore station host's requirements, shall be provided and maintained at the shore station.

Where receiving/logging/data transfer systems for the DWR's are integrated with those for other wave/tide/met/ARGUS/other data, any changes at the shore station must maintain the service to the other equipment.

Site name	Approx. Location	Instrument	Approx. service intervals	Comments
Newbiggin	55.1852°N 01.4785°W	Datawell Directional Waverider Mk III	6 months	Shore station display at Newbiggin Maritime centre
Whitby	54.5052°N 00.6082°W			Shore station display at Whitby Harbour Office and NYCC office, Cholmley Way, Whitby Non-standard mooring
Scarborough	54.2937°N 00.3177°W			Shore station display at Scarborough Town Hall Non-standard mooring
Whitby Harbour	54.4885°N 00.6129°W	Valeport Tide Master	6 months	Tidal elevations only (no waves) Shore station display at Whitby Watch Keepers office, Whitby NYCC office, Scarborough Harbour office, and Scarborough Town Hall
Scarborough	54.2823°N 00.3886°W	Valeport Model 740		

Table 1: Location of existing deployments

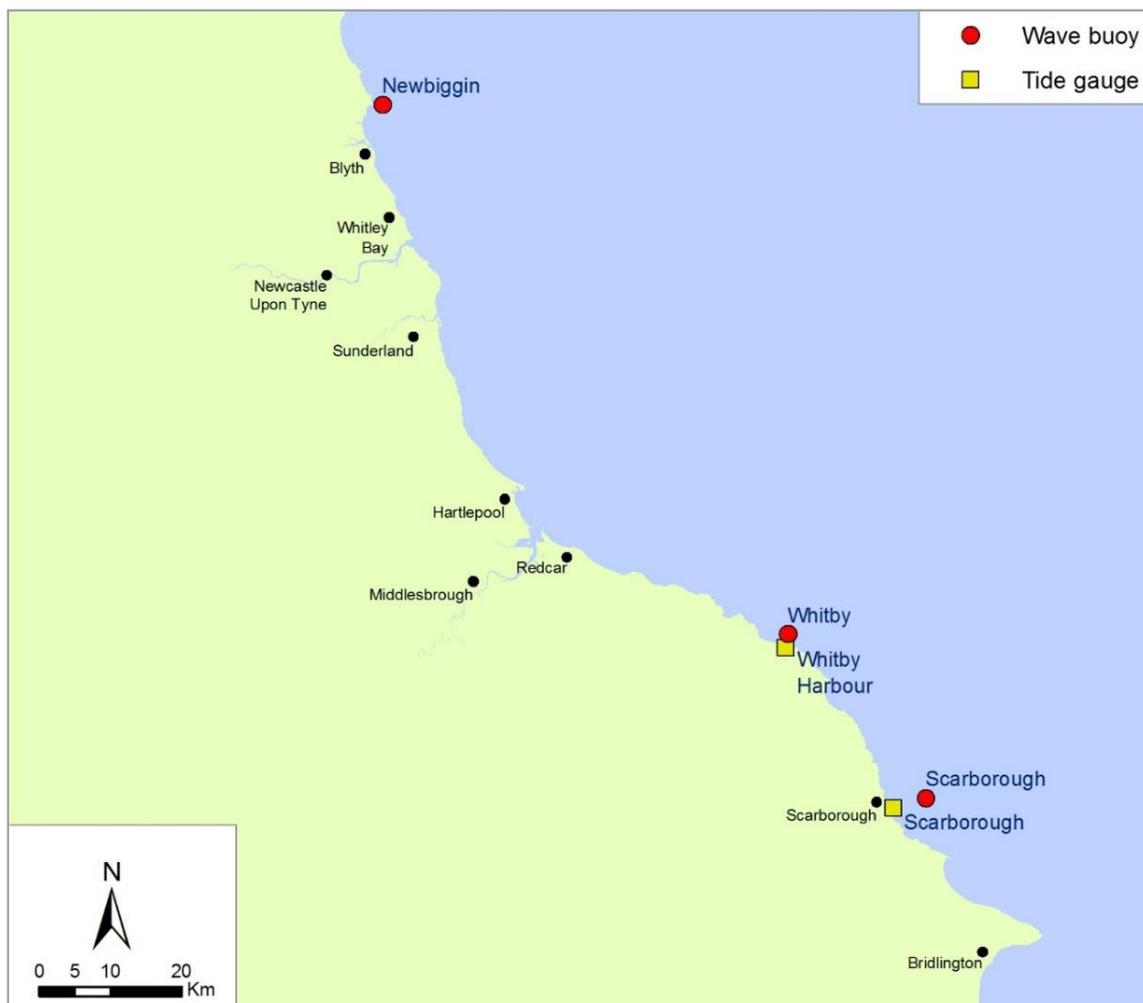


Figure 1: Location of existing deployments

5. New deployments

There are no planned new deployments at present.

6. Instrument/buoy lettering

The wording to be used on a wave buoy is:

0151 934 259
NO MOORING
Northeast Coastal Observatory

On award of contract, however, the telephone number shall be amended to that of the Consultant's 24-hour contact number. The revised telephone number need only be applied to new deployments or following a service visit.

7. Additional tasks

Scheduled service visits to the wave buoy at Whitby shall include cleaning/maintenance of site marker buoy.

8. Vessel costs for unscheduled maintenance

Vessel costs for unscheduled maintenance visits are expected to be kept to a minimum, and not to exceed £1,000 per (12 hour) day. Only in exceptional circumstances will the Employer agree to vessel costs exceeding this sum, which must be authorised in advance by the Employer.

9. Technical Requirement

Required data shall be delivered within 4 weeks of the activity. Deployment/service reports shall be delivered quarterly.

APPENDIX I - SCHEDULE OF HYDRODYNAMIC EQUIPMENT

The schedule of deployed and spare equipment is correct at the time of issue of the tender documents.

Equipment	No.	Comments
Newbiggin DWR		
Datawell Directional Waverider buoy Mk III	1	Newbiggin DWR deployed at: 55.1852°N 01.4785°W
Datawell 30 m shallow water mooring	1	
Datawell HF antenna + cable	1	Shore station is located at Newbiggin Maritime Centre.
Datawell RX-C	1	
Computer Windows XP, Datawell rfbuoy software	1	
VDU	1	
UPS	1	
BT broadband	1	
BT phone line	1	
Whitby DWR		
Datawell Directional Waverider buoy Mk III	1	Whitby DWR , deployed at: 54.5052°N 00.6082°W
Datawell shallow water mooring with 30 m rubber cord	1	
1.2 m diameter yellow marker buoy with radar reflector, St. Andrew's cross and navigation light (Fl. 5 Y 20s), and riser line comprising 16 mm diameter combined wire and rope	1	
Datawell HF antenna + cable	1	Located at North Yorkshire County Council Offices, Cholmley Way, Whitby.
Datawell RX-C	1	
Computer Windows XP, Datawell rfbuoy software	1	Shore station also receives data from Whitby tide gauge, via Whitby Watch Keepers' office
VDU	1	
UPS	1	
Cabinet	1	
BT broadband	1	
BT phone line	1	
Whitby tide gauge		
Valeport Tide Master	1	Whitby tide gauge, deployed at west side of harbour, adjacent to fish marked building
Computer	1	

Equipment	No.	Comments
VDU	1	Shore station is located at Whitby Watch Keepers' office.
Cabinet	1	
BT broadband	1	Data is transmitted on to North Yorkshire County Council office (by UHF radio) for forwarding onward to websites
BT phone line	1	
Scarborough DWR		
Datawell Directional Waverider buoy Mk III	1	Scarborough DWR deployed at: 54.2937°N 00.3177°W
Datawell shallow water mooring with 30 m rubber cord	1	
Datawell HF antenna + cable	1	Shore station is located at Scarborough Town Hall.
Datawell RX-C	1	
Computer Windows XP, Datawell rfbuoy software	1	Shore station also receives data from Scarborough tide gauge, via Scarborough Harbour office
VDU	2	
UPS	1	
BT broadband	1	
BT phone line	1	
Scarborough tide gauge		
Valeport Model 740	1	Located on end of the West Pier, at the mouth of the harbour
Computer	1	Shore station is located at Scarborough Harbour office.
VDU	1	
BT broadband	1	Data is transmitted on to Scarborough Town Hall office (by UHF radio) for forwarding onward to websites
BT phone line	1	
Computer	1	
VDU	2	
BT broadband	1	
BT phone line	1	
Spare equipment		
Buoy finder (shared with Northwest Coastal Monitoring Programme)	1	Spares held by Employer's Representative in Hampshire
30m mooring		