

Marine Licence Application for Dredging and Sea Disposal

Version 1.0

Marine (Scotland) Act 2010

Acronyms

Please note the following acronyms referred to in this application form:

BPEO	Best Practicable Environmental Option
MHWS	Mean High Water Springs
MMO	Marine Mammal Observer
MPA	Marine Protected Area
MS-LOT	Marine Scotland – Licensing Operations Team
PAM	Passive Acoustic Monitoring
SAC	Special Area of Conservation
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
WGS84	World Geodetic System 1984

Explanatory Notes

The following numbered paragraphs correspond to the questions on the application form and are intended to assist in completing the form. These explanatory notes are specific to this application and so you are advised to read these in conjunction with the Marine Scotland Guidance for Marine Licence Applicants document.

1. Applicant Details

The person making the application who will be named as the licensee.

2. Dredging Contractor Details

The person whose activities produce the substance(s) or object(s) to be dredged and/or intended for sea disposal (e.g the dredging contractor).

3. Agent Details

Any person acting under contract (or other agreement) on behalf of any party listed as the applicant and having responsibility for the control, management or physical deposit or removal of any substance(s) or object(s).

4. Payment

Indicate payment method. Cheques must be made payable to: The Scottish Government.

Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.

5. Application Type

Indicate if the application is for a new dredging site or a site that has previously been dredged. Provide the existing or previous consent/licence number, expiry date and quantity (in wet tonnes) dredged under the consent/licence up to a stated date if applicable.

6. Dredging and Sea Disposal Details

- (a) Give a brief description of the dredging and sea disposal operation.
- (b) Provide the proposed start date of the project. The start date will not be backdated, since to commence a project for which a licence has not been obtained will constitute an offence, which may result in appropriate legal action. A licence is normally valid for the duration of the project but not exceeding 3 years. If a project will not be completed before a marine licence lapses, it will be necessary for licence holders to re-apply for a further licence to continue any ongoing work at least 14 weeks prior to the expiry date of the licence. **Target duration for determination of a marine licence application is 14 weeks.**
- (c) Provide the proposed completion date of the project.

- (d) Describe the location of the proposed works. Include a list of the latitude and longitude co-ordinates (WGS84) of the boundary points for each dredge site area. WGS84 is the World Geodetic System 1984 and the reference co-ordinate system used for marine licence applications. Co-ordinates taken from GPS equipment should be set to WGS84. Coordinates taken from recent admiralty charts will be on a WGS84 compatible datum. Ordnance survey maps do not use WGS84.

Example: For positions read from charts the format should be as in the example: 55°55.555'N 002°22.222'W (WGS84). The decimal point specifies that decimals of minutes are used and the datum is stated explicitly. If seconds are used then the format should be as in the example: 55°55'44"N 2°22'11"W (WGS84).

It is important that the correct positions, in the correct format, are included with this application, as any errors will result in the application being refused or delayed.

To supplement your application, please provide a suitably scaled extract of an Ordnance Survey Map (1:2,500 scale but not more than 1:10,000) or Admiralty Chart which must be marked to indicate:

- the full extent of the works in relation to the surrounding area;
- latitude and longitude co-ordinates defining the location of the works;
- the level of MHWS;
- any adjacent SAC, SPA, SSSI, MPA, Ramsar or similar conservation area boundary.

Drawings and plans will be consulted upon. If they are subject to copyright, **it is the responsibility of the applicant to obtain necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.**

- (e) Provide details of the proposed disposal site for the dredged substance(s) or object(s) and, if necessary, any alternative disposal site(s) considered. In determining whether to grant a marine licence, MS-LOT will take into account any site nominated by the applicant. However, should this site be unsuitable, the nearest suitable disposal site for the dredged substance(s) or object(s) will be identified. Should you wish to establish a new site, please provide details in a covering letter with your application and MS-LOT will contact you to discuss your proposal before your application is determined. The cost of any site investigations to identify any new disposal site will normally be the responsibility of the applicant.
- (f) Indicate if any part of the works (dredging or sea disposal site) are located within the jurisdiction of a statutory harbour authority and provide details of the statutory harbour authority where relevant.
- (g) Provide a full method statement. The method statement must include details such as the rate of dredging, timing of the operation and order of the areas to be dredged.
- (h) Provide assessment of the potential impacts the works may have, including interference with other uses of the sea. Please include details of areas of concern e.g designated conservation areas, such as a SAC, SPA, SSSI, MPA or Ramsar site and shellfish harvesting areas. Further guidance on designated conservation areas can be obtained from SNH at this website: <http://gateway.snh.gov.uk/sitelink/index.jsp> and guidance on shellfish harvesting areas can be obtained from <http://www.foodstandards.gov.scot/> with regards to the Shellfish Waters Directive (2006/113/EC) which has parameters set to protect the water quality in which edible shellfish are grown.

Applicants should also be aware of the need to pay due regard to coastal and marine archaeological matters and attention is drawn to Historic Scotland's Operational Policy Paper HP6, "Conserving the Underwater Heritage".

Any application for beach replenishment works must be cross checked as to whether the proposed site is a designated bathing water site. If so, all physical works should ideally be done outwith the Bathing Water Season (1st June to 15th September). Further guidance on the Bathing Waters Directive (2006/7/EC) can be obtained from <http://apps.sepa.org.uk/bathingwaters/>.

Where there are potential impacts from the works, please provide details of proposed mitigation, such as use of MMOs or PAM, in response to potential impacts.

7. Details of Substance(s) or Object(s) to be Dredged

Information is required for each dredge site area listed in section 6 (d). please provide the following information:

Name of Dredge Area: For example Approach Channel or West of South Quay.

Type (Maintenance or Capital): **Maintenance dredge** applies to an area that has been dredged more than once and either annually or on a regular basis and was last dredged with the past 7 years; and a **Capital dredge** applies where an area/depth is being dredged either for the first time, or which has not been dredged within the past 7 years.

For capital dredging operations, a pre-dredge survey and sediment chemical analysis report will be required by MS-LOT prior to the issue of a sea disposal licence. Please contact MS-LOT for details in relation to specific projects. For maintenance dredging operations sites that have not been chemically analysed for more than 3 years, pre-dredge chemical analysis will be required to be undertaken. In addition to those samples analysed by the applicant, sediment sub-sample(s) must be submitted to MS-LOT as check monitoring may be required.

Estimated Specific Gravity: Indicate the specific gravity of the substance(s) or object(s) to be dredged from each dredge area.

Depth: Indicate the maximum depth (in metres) below the current seabed level, to which it is expected dredging is to be carried out, for each dredge area.

Quantity to be Dredged per Year (wet tonnes): Indicate the quantity of substance(s) or object(s) to be dredged (per year) from each dredge area. The quantity must be provided in wet tonnes.

8. Physical Composition

Indicate the approximate proportions as a percentage for each size range against each of the dredge site areas listed in section 6 (d) which are expected to be removed.

9. Details of Substance(s) or Object(s) Quality

Please indicate whether the substance(s) or object(s) from any of the areas to be dredged have been chemically analysed within the past 3 years. If yes, please provide details (locations, dates, results) on a separate sheet. If no, please provide justification. For capital projects, you are required to have representative sediment samples analysed at a laboratory of choice (see MS-LOT Pre-dredge Sampling Guidance document at <http://www.gov.scot/Topics/marine/Licensing/marine/Applications/predredge> for analytical requirements. This is liable to extend the time required to consider your application as **marine licence applications will not be determined without provision of this chemistry data.**

As part of the application determination process, you are required to carry out an assessment of the chemical and physical characteristics of the substance(s) or object(s) to be deposited at sea and potential effects upon the marine environment. It is your responsibility to show that the substance(s) or object(s) are suitable to be considered for sea disposal. This assessment should form part of your BPEO.

Under section 27(2) of the Marine (Scotland) Act 2010, the licensing authority has an obligation to consider the availability of practical alternatives when considering applications involving disposal of substance(s) or object(s) at sea. All applications for sea disposal must be supported by a detailed assessment of the alternative options - BPEO assessment. This must include a statement setting out the reasons why deposit of the substance(s) or object(s) at sea is the preferred option and applications will not be considered unless they are accompanied by such an assessment. All options in the BPEO must be explored fully (as per the guidance documents) otherwise your form and BPEO are liable to be returned to you, thereby delaying processing of the application.

As part of the licence conditions, you are likely to be required to take representative samples of the dredged substance(s) or object(s) during the dredging/sea disposal operations for analysis by MS-LOT. In such cases, samples must be taken at specified locations and depths and placed in containers which will be provided. The

samples must then be returned to MS-LOT at the Marine Laboratory Aberdeen. This process enables MS-LOT to fulfil its obligations under international conventions.

10. Details of Vessel(s) Undertaking Dredging and Sea Disposal

Provide the vessel name, vessel type (e.g cutter-suction) and name and address of all vessel operators to be used for dredging and sea disposal operations. If vessel details are not available at the time of application, please indicate this on the form as these details will be required prior to licence issue.

11. Noise Monitoring

Under the Marine Strategy Regulations (2010), there is now a requirement to monitor loud, low to mid frequency (10Hz to 10kHz) impulsive noise. Activities where this type of noise is produced include seismic airguns, other geophysical surveys (<10kHz), pile driving, explosives and certain acoustic deterrent devices. Where noisy activity is being undertaken, you must complete an initial registration form for the noise registry which allows you to provide details on the proposed work. Completion of a 'close-out' form, which allows licensees to provide details of the actual dates and locations where the activities occurred, is also required within 12 weeks of the completion of the 'noisy' activity or, in the case of prolonged activities such as piling for harbour construction or wind farms, at quarterly intervals or after each phase of foundation installation.

These forms can be downloaded from:

<http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction>

Marine licence applications will not be accepted until this form has been completed and submitted.

12. Statutory Consenting Powers

Please describe in the answer to this question what (if any) statutory responsibilities you (or your client) have to consent any aspect of the project.

13. Scotland's National Marine Plan

Scotland's National Marine Plan has been prepared in accordance with the EU Directive 2014/89/EU, which came into force in July 2014. The Directive introduces a framework for maritime spatial planning and aims to promote the sustainable development of marine areas and the sustainable use of marine resources. It also sets out a number of minimum requirements all of which have been addressed in this plan. In doing so, and in accordance with article 5(3) of the Directive, Marine Scotland have considered a wide range of sectoral uses and activities and have determined how these different objectives are reflected and weighted in the marine plan. Land-sea interactions have also been taken into account as part of the marine planning process. Any applicant for a marine licence should consider their proposals with reference to Scotland's National Marine Plan. A copy of Scotland's National Marine Plan can be found at:

<http://www.gov.scot/Publications/2015/03/6517/0>

Indicate whether you have considered the project with reference to Scotland's National Marine Plan and provide details of considerations made including reference to the policies that have been considered. If you have not considered the project with reference to Scotland's National Marine Plan please provide an explanation.

14. Consultation

Provide details of all bodies consulted and give details of any consents issued including date of issue.

15. Associated Works

Indicate whether the application is associated with any other marine projects (e.g. land reclamation, or marine/harbour construction works etc). If this is the case, provide reference/licence number for the related marine projects.

Marine Licence Application for Dredging and Sea Disposal

Version 1.0

Marine (Scotland) Act 2010

It is the responsibility of the applicant to obtain any other consents or authorisations that may be required.

Under Section 54 of the Marine (Scotland) Act 2010, all information contained within and provided in support of this application will be placed on a Public Register. There are no national security grounds for application information not going on the Register under the 2010 Act.

Public Register

Do you consider that any of the information contained within or provided in support of this application should not be disclosed:

- (a) for reasons of national security; YES ☐ NO ☐
- (b) for reasons of confidentiality of commercial or industrial information where such confidentiality is provided by law to protect a legitimate commercial interest? YES ☐ NO ☐

If **YES**, to either (a) or (b), please provide full justification as to why all or part of the information you have provided should be withheld.

WARNING

It is an offence under the Act under which this application is made to fail to disclose information or to provide false or misleading information.

Target duration for determination is 14 weeks. Please note that missing or erroneous information in your application and complications resulting from consultation may result in the application being refused or delayed.

Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.

Declaration

I declare to the best of my knowledge and belief that the information given in this form and related papers is true.

Signature



Date

15 May 2018

Name in BLOCK LETTERS

GARY McCANN

Application Check List

Please check that you provide all relevant information in support of your application, including but not limited to the following:

- Completed and signed application form ☒
- Maps/Charts ☒
- Co-ordinates of the boundary points of the area of harbour jurisdiction (if you are a statutory harbour authority) ☒
- Method Statement ☒
- BPEO Assessment ☒
- Analytical chemistry data (for capital projects) ☒
- Transportation plan (dredger route to and from disposal site – if required) ☒
- Additional information e.g. photographs, consultation correspondence ☒
- Noise Registry – Initial Registration Form (if applicable) ☐
- Payment (if paying by cheque) ☐

1. Applicant Details

Title: Initials: Surname:

Trading Title (if appropriate):

Address:

Name of contact (if different):

Telephone No. (inc. dialing code):

Email:

Statutory Harbour Authority? YES ☐ NO ☐

If **YES**, please provide a list of the latitude and longitude co-ordinates (WGS84) of the boundary points of the area of harbour jurisdiction using Appendix 01 Additional Co-ordinates form if necessary.

2. Dredging Contractor Details (if any)

Title: Initials: Surname:

If the Dredging Contractor is the Applicant shown in section 1 please tick the box ☐

Trading Title (if appropriate):

Address:

Name of contact (if different):

Telephone No. (inc. dialing code):

Email:

3. Agent Details (if any)

Title: Initials: Surname:

Trading Title (if appropriate):

Address:

Name of contact (if different):

Telephone No. (inc. dialing code):

Email:

4. Payment

Enclosed Cheque ☐

Invoice ☐

Contact and address to send invoice to:

Applicant ☐

Agent ☐

Other ☐

If **OTHER**, please provide contact details:

Title:

Initials:

Surname:

Address:

Email:

5. Application Type

Is this application for a new dredging site or a site that has previously been dredged:

New Site ☐ Previously Dredged Site ☐

If an **PREVIOUSLY DREDGED SITE**, please provide the following:

Consent/Licence Number	Expiry Date	Quantity (wet tonnes) dredged under consent/licence as at (date)

6. Dredging and Sea Disposal Details

(a) Brief description of the dredging and sea disposal operation:

(b) Proposed start date (**Target duration for determination of a marine licence application is 14 weeks**):

(c) Proposed completion date:

(d) Location of Dredging:

Latitude and Longitude co-ordinates (WGS84) defining the extent of all dredge areas (continue on Appendix 01 Additional Co-ordinates form if necessary):

Dredge Area A

Latitude									Longitude								
		°			.			' N				°			.		' W
		°			.			' N				°			.		' W
		°			.			' N				°			.		' W
		°			.			' N				°			.		' W
		°			.			' N				°			.		' W
		°			.			' N				°			.		' W

Dredge Area B

Latitude								Longitude							
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W

Dredge Area C

Latitude								Longitude							
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W

Dredge Area D

Latitude								Longitude							
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W

Dredge Area E

Latitude								Longitude							
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W

(e) Name of Disposal Site and Oslo Code:

Latitude and Longitude co-ordinates (WGS84) defining the extent of disposal site (continue on Appendix 01 Additional Co-ordinates form if necessary):

Latitude								Longitude							
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W
		°			.		' N				°			.	' W



(f) Is any part of the works (dredging or sea disposal site) located within the jurisdiction of a statutory harbour authority?

YES ☐ NO ☐

If **YES**, please specify statutory harbour authority:

(g) Method statement including rate of dredging, timing of the operation and order of the areas to be dredged (continue on separate sheet if necessary):

(h) Potential impacts the works may have (including details of areas of concern e.g. designated conservation and shellfish harvesting areas) and proposed mitigation in response to potential impacts (continue on separate sheet if necessary):

7. Details of Substance(s) or Object(s) to be Dredged (Please provide details for each of the Dredge Areas listed in Section 5 (d) above. Continue on a separate sheet if necessary):

Dredge Area	Name of Dredge Area	Type (Maintenance or Capital)	Harbour bed, Seabed or Estuary bed?	Estimated Specific Gravity	Depth (metres)	Quantity to be Dredged per Year (wet tonnes)
A						
B						
C						
D						
E						

8. **Physical Composition of Substance(s) or Object(s) to be Dredged** (Please provide the approximate proportions as a percentage for each size range against each of the dredge site areas listed in Section 6 (d) above. Continue on a separate sheet if necessary):

Dredge Area	Clay and Silt (< 0.063 mm)	Sand ($0.063 \leq \text{Sand} < 2.0$ mm)	Pebbles, Cobbles & Boulders (≤ 2.0 mm)
A			
B			
C			
D			
E			

9. **Details of Substance(s) or Object(s) Quality**

Have the dredged substance(s) or object(s) been chemically analysed in the last 3 years?

YES ☐ NO ☐

10. **Details of Vessel(s) Undertaking Dredging and Sea Disposal** (please note that a marine licence cannot be issued until the vessel details have been confirmed. Continue on a separate sheet if necessary):

Vessel Name	Type of Vessel	Name and Address of Operator

11. Noise Monitoring

Will loud, low to mid frequency (10Hz to 10kHz) impulsive noise be produced by the project?

YES ☐ NO ☐

If **YES**, which please indicate the noise generating activities and sound frequencies:

Noise Generating Activity	Sound Frequency (Hertz)
Use of Explosives	
Other (please describe below):	

If you have ticked **YES**, please complete the Noise Registry – Initial Registration form located at: <http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction>

A marine licence application will not be accepted until this form has been completed and submitted.

12. Statutory Consenting Powers

Do you, or (if appropriate) your client, have statutory powers to consent any aspect of this project?

--

13. Scotland's National Marine Plan

Have you considered the application with reference to Scotland's National Marine Plan?

YES ☐ NO ☐

If **YES**, provide details of considerations made including reference to the policies that have been considered:

If **NO**, please provide an explanation of why you haven't considered the National Marine Plan?

--

14. Consultation

List all bodies you have consulted and provide copies of correspondence:

15. Associated Works

Provide details of other related marine projects, including reference/licence numbers (if applicable):

APPENDIX 01 – PROPOSED DREDGE PLAN AREA CO-ORDINATES

To be read in conjunction with Section 6(d) of the Marine License Application for Dredging and Sea Disposal, and Atkins Drawing Number 5121683-ATK-PH4-ZZ-DR-C-0015, rev P02.

Point	Latitude Longitude (DDM)
A1	N57°41.198" W04°10.954"
A2	N57°41.193" W04°10.954"
A3	N57°41.186" W04°11.124"
A4	N57°41.191" W04°11.124"
B1	N57°41.188" W04°11.162"
B2	N57°41.170" W04°11.147"
B3	N57°41.083" W04°11.138"
B4	N57°41.055" W04°11.126"
B5	N57°41.044" W04°11.124"
B6	N57°41.046" W04°11.147"
B7	N57°41.064" W04°11.168"
B8	N57°41.083" W04°11.158"
C1	N57°41.069" W04°11.028"
C2	N57°41.045" W04°11.024"
C3	N57°41.041" W04°11.124"
C4	N57°41.064" W04°11.127"
D1	N57°41.076" W04°10.966"
D2	N57°41.047" W04°10.961"
E1	N57°41.057" W04°10.899"
E2	N57°41.017" W04°10.936"
E3	N57°40.983" W04°11.264"
E4	N57°41.046" W04°11.152"

APPENDIX 02a – BOUNDARY POINTS FOR HARBOUR JURISDICTION

Outer port limit:

57 43.7N 003 55.8W

57 42.5N 003 52.2W

57 38.0N 003 57.0W

57 39.4N 004 01.7W

Inner limit 100m East of Cromarty Bridge

APPENDIX 02b – TRANSPORTATION PLAN

The passage plan to the dump site will be subject to vessel movements and agreed between PoCF's duty Marine Manager and the vessel Master.

Under normal circumstances the following is indicative of routing to be taken:

1. On completion of each dredging, proceed due south until clear of Phase 3 / Queen's Dock or Service Base.
2. Turn on to a course of 084° to pass south of Nigg's Sands west buoy, north of isolated danger buoy and approx. 200m north of the yellow semisubmersible platform legs, to position 57° 41.43' N 004° 03.49' W.
3. Turn onto course 097° and proceed directly to the dumping site.
4. The return journey will be the reverse of the above.

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following:

CONSTRUCTION

	N/A
--	-----

MAINTENANCE/CLEANING

	N/A
--	-----

DECOMMISSIONING/DEMOLITION

N/A

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement

NOTES:

1. ADMIRALTY CHART 1889 EXTRACT
2. INVERGORDON CHART DATUM (CD) IS 2.10m BELOW ORDNANCE DATUM NEWLYN (ODN).
3. INVERGORDON TIDE LEVELS:
MHWS 4.3mCD
MHWN 3.3mCD
MLWN 1.6mCD
MLWS 0.7mCD

KEY:

 APPROXIMATE LOCATION OF PHASE 4 DEVELOPMENT

FOR INFORMATION
PURPOSES ONLY

[illegible]

P0.1	01.05.18	FOR INFORMATION	BJH	PJT	PJT
Rev.	Date	Description	By	Chk'd	App'

Drawing Status	WORK IN PROGRESS	Suitability	SO
----------------	-------------------------	-------------	-----------

ATKINS

200 Broomielaw
Glasgow
G1 4RU

Copyright © Atkins Limited (2018)

Tel: [REDACTED]
Fax: [REDACTED]
www.atkinsglobal.com



Project Title

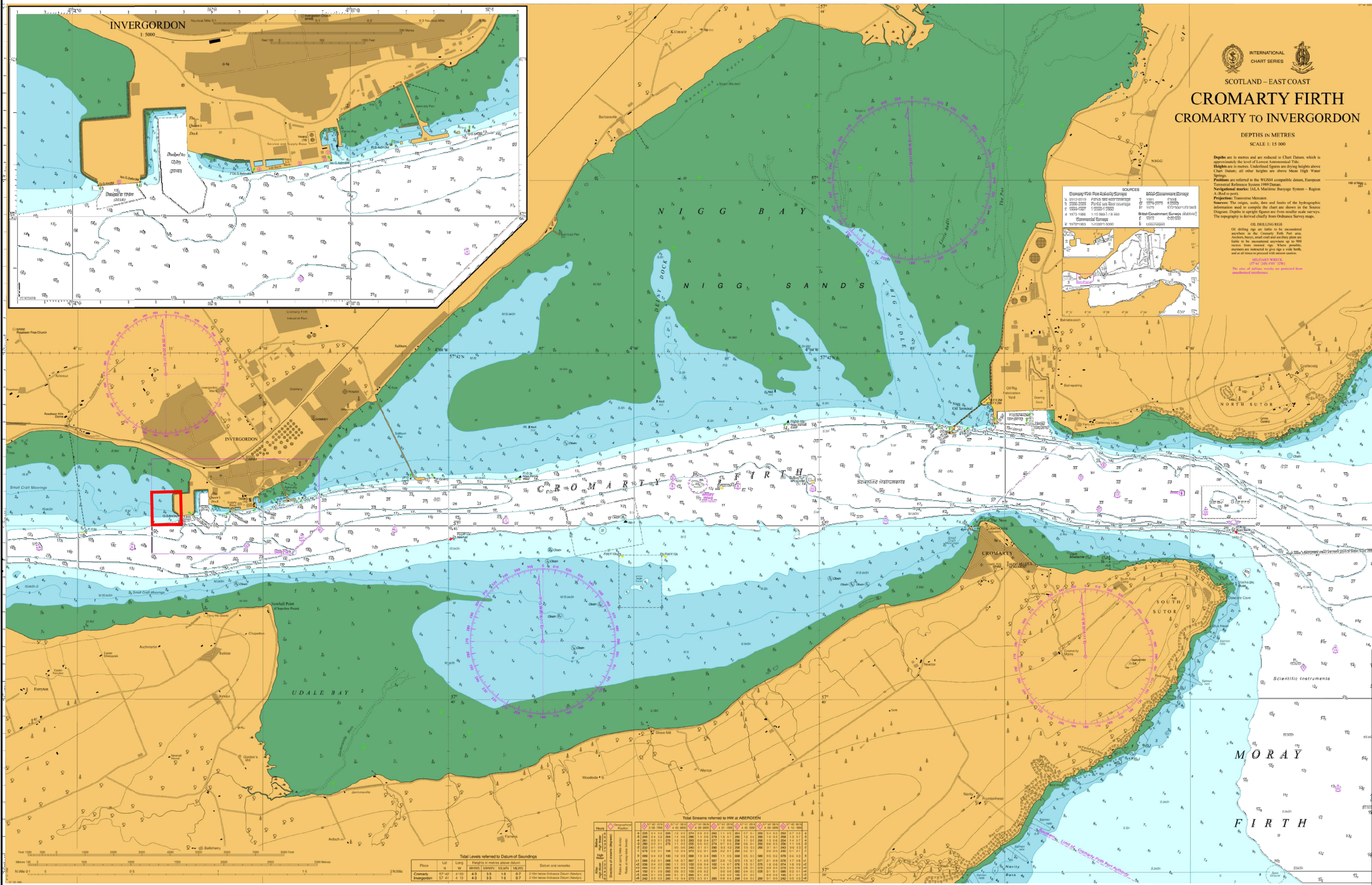
INVERGORDON SERVICE BASE
PHASE 4 DEVELOPMENT

Drawing Title

ADMIRALTY CHART EXTRACT

Scale NTS	Designed -	Drawn BJH	Checked PJT	Authorised PJT
Original Size A1	Date -	Date 01/05/18	Date 01/05/18	Date 01/05/18

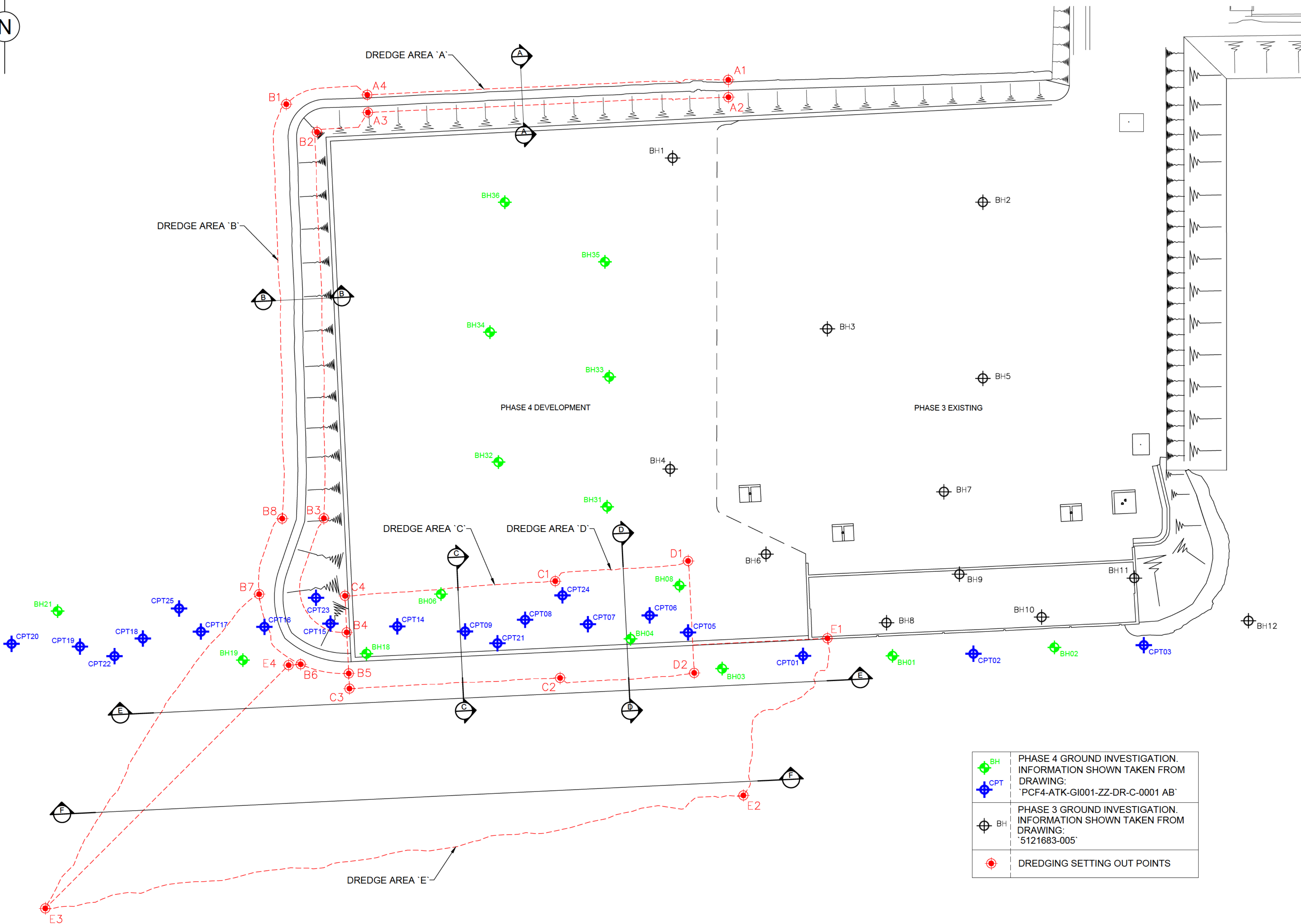
Drawing Number	Revision
5121683-ATK-PH4-ZZ-DR-C-0010	P0.1



100
0 10
Millimetres



DO NOT SCALE



SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following:

CONSTRUCTION

N/A

MAINTENANCE/CLEANING

N/A

DECOMMISSIONING/DEMOLITION

N/A

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement

NOTES:

1. THE CONTENTS OF THIS DRAWING ARE FOR INFORMATION PURPOSES ONLY AND SUBJECT TO CHANGE.
2. ALL DIMENSIONS SHOWN ARE TO METRES UNLESS STATED OTHERWISE.
3. ALL LEVELS SHOWN ARE TO CHART DATUM UNLESS STATED OTHERWISE.
4. FOR CROSS SECTIONS REFER TO DRAWING No. '5121683-ATK-PH4-ZZ-DR-C-0016'.

DREDGING SETTING OUT POINTS

POINT	LATITUDE			LONGITUDE		
A1	57.00	41.00	11.85	4.00	10.00	57.24
A2	57.00	41.00	11.59	4.00	10.00	57.22
A3	57.00	41.00	11.18	4.00	11.00	7.42
A4	57.00	41.00	11.45	4.00	11.00	7.46
B1	57.00	41.00	11.27	4.00	11.00	9.74
B2	57.00	41.00	10.22	4.00	11.00	8.81
B3	57.00	41.00	5.00	4.00	11.00	8.30
B4	57.00	41.00	3.28	4.00	11.00	7.55
B5	57.00	41.00	2.66	4.00	11.00	7.45
B6	57.00	41.00	2.78	4.00	11.00	8.82
B7	57.00	41.00	3.82	4.00	11.00	10.06
B8	57.00	41.00	4.98	4.00	11.00	9.48
C1	57.00	41.00	4.16	4.00	11.00	1.69
C2	57.00	41.00	2.70	4.00	11.00	1.46
C3	57.00	41.00	2.43	4.00	11.00	7.42
C4	57.00	41.00	3.84	4.00	11.00	7.63
D1	57.00	41.00	4.54	4.00	10.00	57.94
D2	57.00	41.00	2.84	4.00	10.00	57.67
E1	57.00	41.00	3.43	4.00	10.00	53.92
E2	57.00	41.00	1.00	4.00	10.00	56.16
E3	57.00	40.00	58.95	4.00	11.00	15.83
E4	57.00	41.00	2.76	4.00	11.00	9.16

FOR INFORMATION PURPOSES ONLY

P0.2	04.05.18	FOR INFORMATION	BJH	PJT	PJT
P0.1	01.05.18	FOR INFORMATION	BJH	PJT	PJT
Rev.	Date	Description	By	Chk'd	App'd

Drawing Status	FOR INFORMATION	S2
----------------	-----------------	----

ATKINS 200 Broomielaw
Glasgow
G1 4RU

Copyright © Atkins Limited (2018) Tel: [REDACTED]
Fax: [REDACTED]
www.atkinsglobal.com



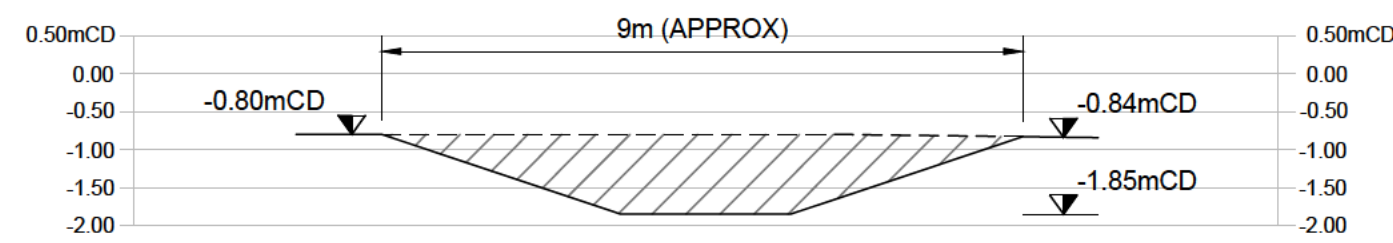
Client
Project Title
**INVERGORDON SERVICE BASE
PHASE 4 DEVELOPMENT**

Drawing Title
DREDGE PLAN

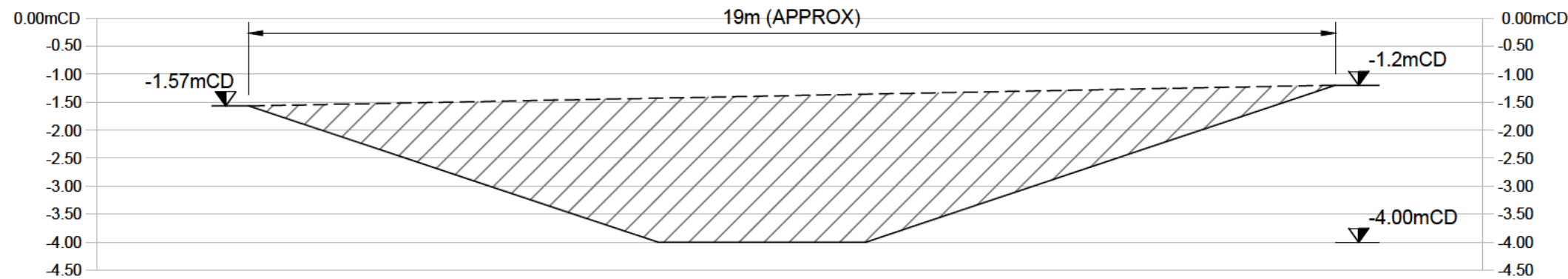
Scale	Designed	Drawn	Checked	Authorised
AS SHOWN	-	BJH	PJT	PJT
Original Size	Date	Date	Date	Date
A1	-	01/05/18	01/05/18	01/05/18

Drawing Number	Revision
5121683-ATK-PH4-ZZ-DR-C-0015	P0.2

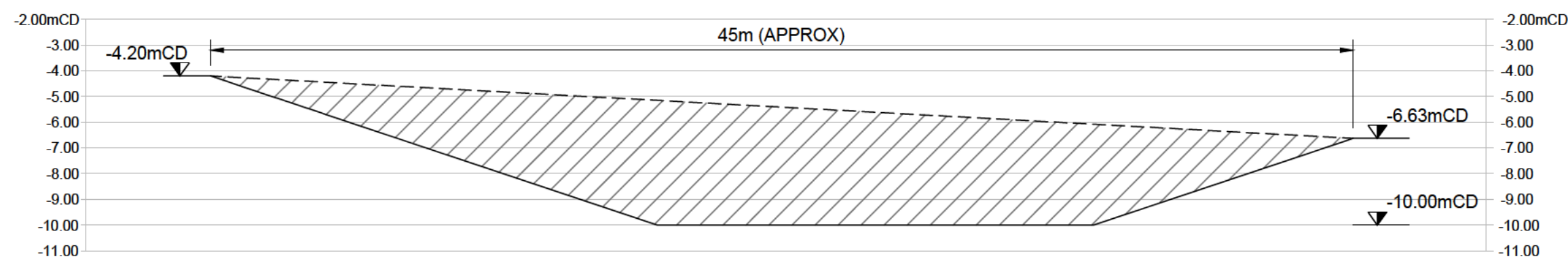
100
0 10
Millimetres



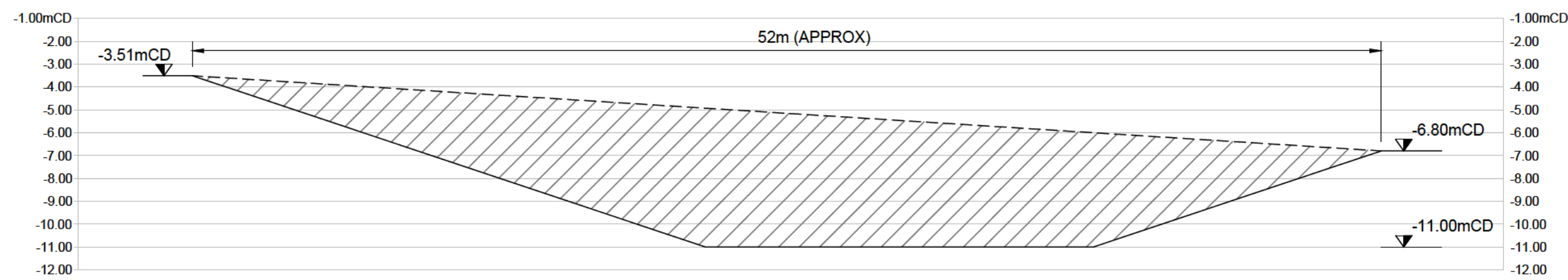
SECTION A-A
SCALE 1: 100



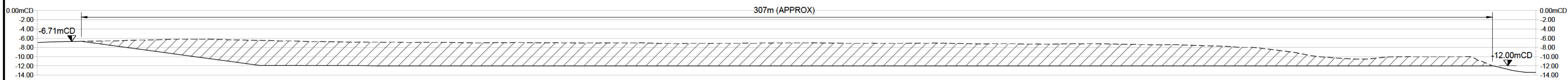
SECTION B-B
SCALE 1: 100



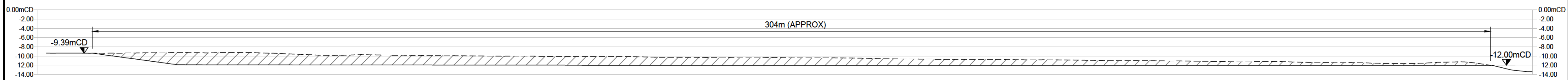
SECTION C-C
SCALE 1: 200



SECTION D-D
SCALE 1: 200



SECTION E-E
SCALE 1: 500



SECTION F-F
SCALE 1: 500

DO NOT SCALE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following:

CONSTRUCTION

N/A

MAINTENANCE/CLEANING

N/A

DECOMMISSIONING/DEMOLITION

N/A

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement

NOTES:

1. THE CONTENTS OF THIS DRAWING ARE FOR INFORMATION PURPOSES ONLY AND SUBJECT TO CHANGE.
2. ALL DIMENSIONS SHOWN ARE TO METRES UNLESS STATED OTHERWISE.
3. ALL LEVELS SHOWN ARE TO CHART DATUM UNLESS STATED OTHERWISE.
4. FOR LOCATION OF CROSS SECTIONS REFER TO DRAWING No. '5121683-ATK-PH4-ZZ-DR-C-0015'.

FOR INFORMATION PURPOSES ONLY

Rev.	Date	Description	By	Chk'd	App'd
P0.1	01.05.18	FOR INFORMATION	BJH	PJT	PJT

Drawing Status	Suitability
FOR INFORMATION	S2

ATKINS

200 Broomielaw
Glasgow
G1 4RU

Tel:

Fax:

Copyright © Atkins Limited (2018)

www.atkinsglobal.com

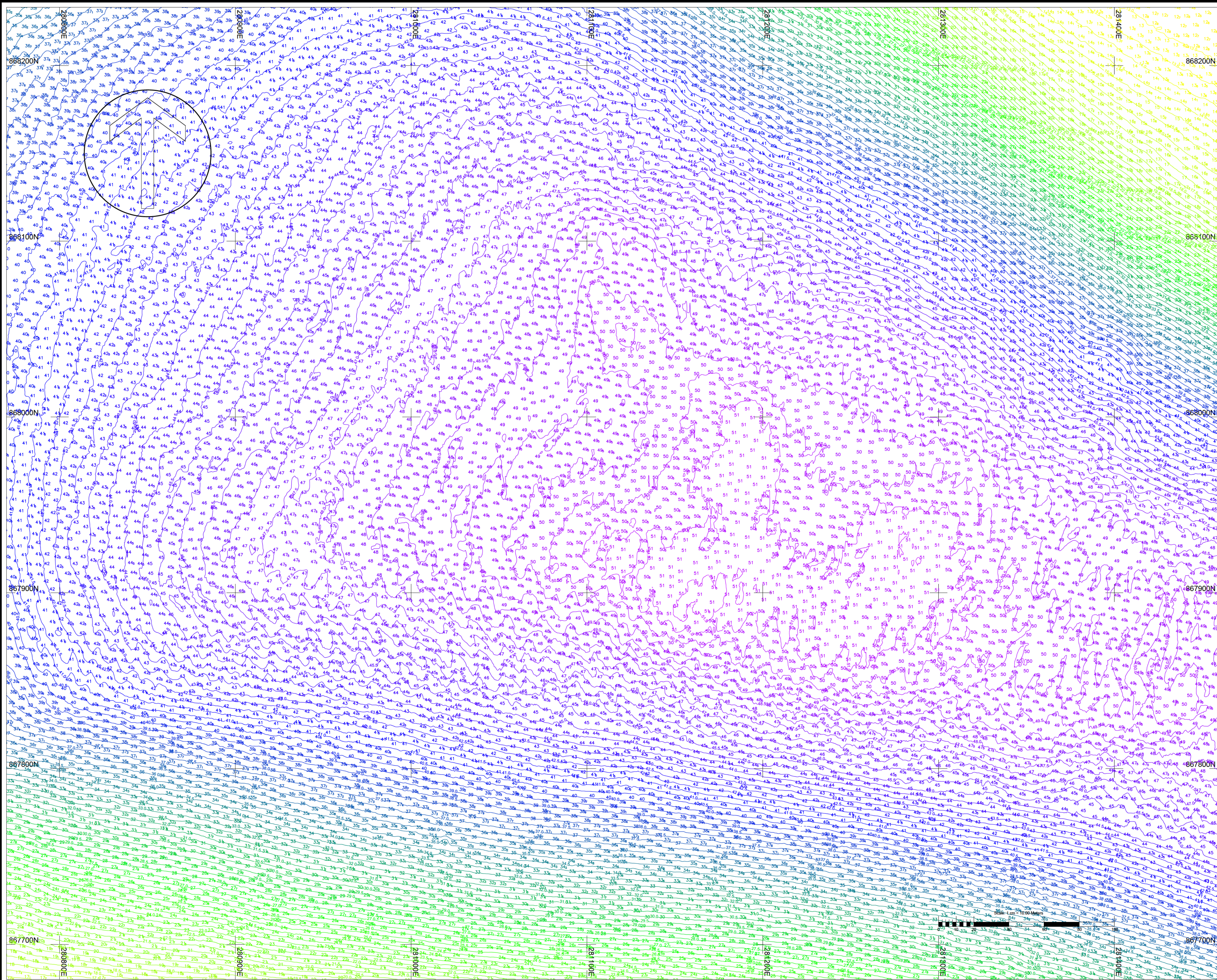


Project Title
INVERGORDON SERVICE BASE
PHASE 4 DEVELOPMENT

Drawing Title
INDICATIVE SECTIONS

Scale	Designed	Drawn	Checked	Authorised
AS SHOWN	-	BJH	PJT	PJT
Original Size	Date	Date	Date	Date
A1	-	01/05/18	01/05/18	01/05/18

Drawing Number	Revision
5121683-ATK-PH4-ZZ-DR-C-0016	P0.1



Legend

Depths relative to CHART DATUM.

Seo-bed contour relative to CHART DATUM.

Survey Parameters & Equipment			
Survey Vessel:	Marine Sensor (MCA COT II)		
Positioning System:	Coda F185+R INS RTK GPS		
GPS Correction Source:	Trimble VRS NOW Network RTK		
Echosounder:	R2Sonic 2024 Multibeam System 400kHz		
Motion Compensator:	Coda F185+R		
Positioning System Spheroid & Datum:	ETRS89		
Grid System:	National Grid of Great Britain		
Geoid Model:	OSGM15		
Transformation Parameters:	OSTN15		
Spheroid:	Airy		
Semi Major Axis:	6377563.396		
Flattening (1/f):	299.324964600		
Vertical Datum (Topographic):	-		
Vertical Datum (Hydrographic):	Chart Datum		
Distance Unit:	Metre		

Chart Datum is 2.10m below Ordnance Datum.

The datum was established using corrected OS Rinx data and post-processed using Trimble Business Centre Software.

Coloured Depth Bands:

< 0.00	27.00 - 27.99
0.00 - 0.99	28.00 - 28.99
1.00 - 1.99	29.00 - 29.99
2.00 - 2.99	30.00 - 30.99
3.00 - 3.99	31.00 - 31.99
4.00 - 4.99	32.00 - 32.99
5.00 - 5.99	33.00 - 33.99
6.00 - 6.99	34.00 - 34.99
7.00 - 7.99	35.00 - 35.99
8.00 - 8.99	36.00 - 36.99
9.00 - 9.99	37.00 - 37.99
10.00 - 10.99	38.00 - 38.99
11.00 - 11.99	39.00 - 39.99
12.00 - 12.99	40.00 - 40.99
13.00 - 13.99	41.00 - 41.99
14.00 - 14.99	42.00 - 42.99
15.00 - 15.99	43.00 - 43.99
16.00 - 16.99	44.00 - 44.99
17.00 - 17.99	45.00 - 45.99
18.00 - 18.99	46.00 - 46.99
19.00 - 19.99	47.00 - 47.99
20.00 - 20.99	48.00 - 48.99
21.00 - 21.99	49.00 - 49.99
22.00 - 22.99	50.00 - 50.99
23.00 - 23.99	51.00 - 51.99
24.00 - 24.99	52.00 - 52.99
25.00 - 25.99	53.00 - 53.99
26.00 - 26.99	54.00 - 54.99
>= 55.00	>= 55.00

Notes:

The Bathymetric survey limits are MHWs, data is relative to Chart Datum.

Heights in metres above Chart Datum (Cromarty)			
MHWS	MHLWN	MLWN	MLWS
4.3	3.3	1.6	0.7

CONTROL STATION COORDINATES (CD)			
STN	EASTING	NORTHING	LEVEL
CROM2	278629.901	867821.993	6.589

Aspect
Land + Hydrographic Surveys
CHARTERED SURVEYORS
Thornhouse Business Centre
Ballot Road
Irvine
KA12 0HW

Tel: [REDACTED] Fax: [REDACTED]
E-mail: [REDACTED]
Web: www.aspectsurveys.com

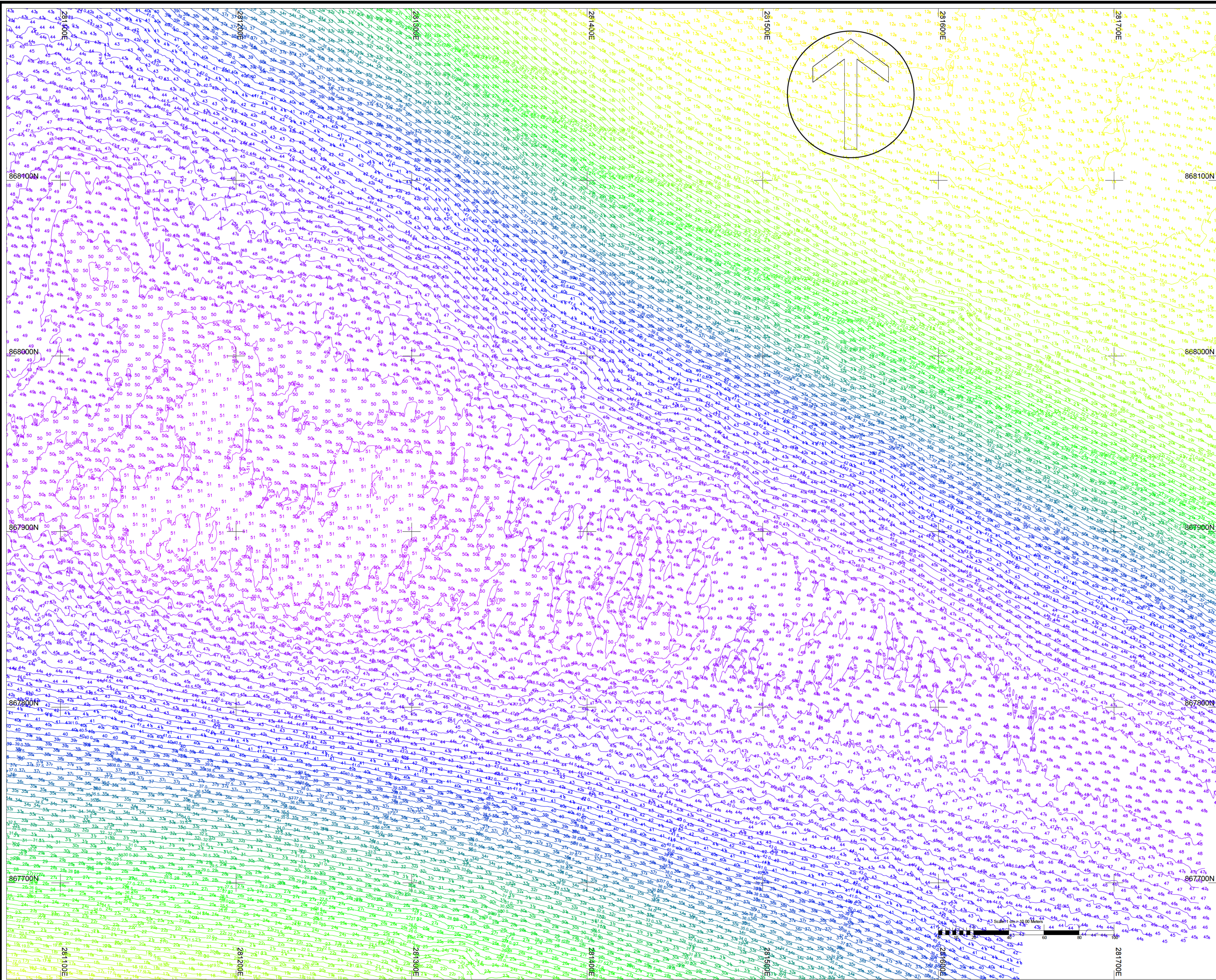
Client :

PORT OF CROMARTY FIRTH
PORT OFFICE
SHORE ROAD
INVERGORDON
IV18 0HD

Project Title :

MULTIBEAM BATHYMETRIC SURVEY
THE SUTORS SPOIL GROUND
CROMARTY

Project No:	A6349	Scale:	1:1000
Surveyed date:	20th July 2017	Issued date:	21st July 2017
Surveyed by:	TAD	Checked by:	EJS
Sheet No.:	1 of 2	Plot Scale:	1:1 @ A1



Legend

Depths relative to CHART DATUM.

Seo-bed contour relative to CHART DATUM.

Survey Parameters & Equipment	
Survey Vessel	Marine Sensor (MCA COT II)
Positioning System	Coda F185+R INS RTK GPS
GPS Correction Source	Trimble VRS NOW Network RTK
Echosounder	R2Sonic 2024 Multibeam System 400kHz
Motion Compensator	Coda F185+R
Positioning System Spheroid & Datum	ETRS89
Grid System	National Grid of Great Britain
Geoid Model	OSGM15
Transformation Parameters	OSTN15
Spheroid	Airy
Semi Major Axis	6377563.396
Flattening (1/f)	299.324964600
Vertical Datum (Topographic)	-
Vertical Datum (Hydrographic)	Chart Datum
Distance Unit	Metre

Chart Datum is 2.10m below Ordnance Datum.

The datum was established using corrected OS Rinx data and post-processed using Trimble Business Centre Software.

Coloured Depth Bands:

< 0.00	27.00 - 27.99
0.00 - 0.99	28.00 - 28.99
1.00 - 1.99	29.00 - 29.99
2.00 - 2.99	30.00 - 30.99
3.00 - 3.99	31.00 - 31.99
4.00 - 4.99	32.00 - 32.99
5.00 - 5.99	33.00 - 33.99
6.00 - 6.99	34.00 - 34.99
7.00 - 7.99	35.00 - 35.99
8.00 - 8.99	36.00 - 36.99
9.00 - 9.99	37.00 - 37.99
10.00 - 10.99	38.00 - 38.99
11.00 - 11.99	39.00 - 39.99
12.00 - 12.99	40.00 - 40.99
13.00 - 13.99	41.00 - 41.99
14.00 - 14.99	42.00 - 42.99
15.00 - 15.99	43.00 - 43.99
16.00 - 16.99	44.00 - 44.99
17.00 - 17.99	45.00 - 45.99
18.00 - 18.99	46.00 - 46.99
19.00 - 19.99	47.00 - 47.99
20.00 - 20.99	48.00 - 48.99
21.00 - 21.99	49.00 - 49.99
22.00 - 22.99	50.00 - 50.99
23.00 - 23.99	51.00 - 51.99
24.00 - 24.99	52.00 - 52.99
25.00 - 25.99	53.00 - 53.99
26.00 - 26.99	54.00 - 54.99
> 55.00	> 55.00

Notes:

The Bathymetric survey limits are M-HWS, data is relative to Chart Datum.

Heights in metres above Chart Datum (Cromarty)			
M-HWS	M-HWN	M-LWN	M-LWS
4.3	3.3	1.6	0.7

CONTROL STATION COORDINATES (CD)			
STN	EASTING	NORTHING	LEVEL
crom2	278629.901	867821.993	6.589

Aspect
Land + Hydrographic Surveys
CHARTERED SURVEYORS
Thomhouse Business Centre
Ballot Road
Irvine
KA12 0HW

Tel: [REDACTED] Fax: [REDACTED]
E-mail: [REDACTED]
Web: www.aspectsurveys.com

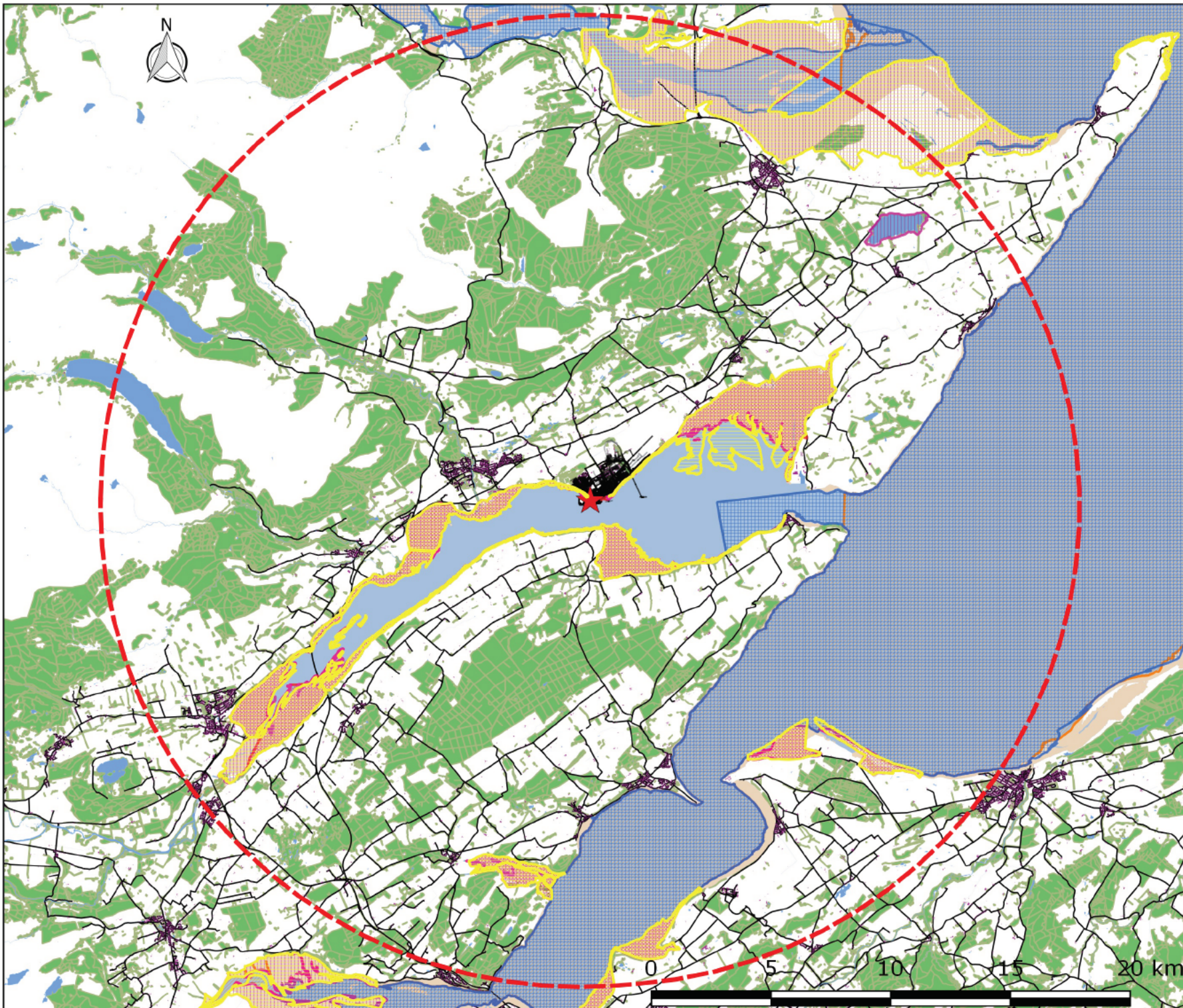
Client :

PORT OF CROMARTY FIRTH
PORT OFFICE
SHORE ROAD
INVERGORDON
IV18 0HD

Project Title :

MULTIBEAM BATHYMETRIC SURVEY
THE SUTORS SPOIL GROUND
CROMARTY

Project No:	A6349	Scale :	1:1000
Surveyed date :	20th July 2017	Issued date :	21st July 2017
Surveyed by :	TAD	Checked by :	EJS
Sheet No. :	2 of 2	Plot Scale :	1:1 @ A1



Registered Office:
Port Office, Shore Road
Invergordon, IV18 0HD

Telephone: [REDACTED]
Email: port@pocf.co.uk
www.pocf.co.uk

Title: Designated Sites within
20Km

Projection: OSGB 1936/British National Grid
EPSG:27700

ORDNANCE SURVEY DATA LICENCE

Your use of OS OpenData is subject to the
terms at <http://os.uk/odata/licence>

Contains Ordnance Survey data © Crown
copyright and database right 2018

Page 1

Rev No: 1

Drawing Date:
01/05/2018

Drawn by: Innes Beaton

Legend

- Invergordon Service Base
- 20km Boundary
- RAMSAR_SCOTLAND
- SPA
- SAC
- SSSI
- pSPA
- Foreshore
- Inland Water
- Tidal Water
- Woodland
- Roads



Summary of Designated Nature Conservation Sites

Site	Designation	Distance and Direction	Feature Category/Feature
Cromarty Firth	SSSI	Immediately adjacent	Designated for non-breeding birds (bar-tailed godwit, red-breasted merganser, redshank, whooper swan, and wigeon), littoral sediment (coast/saltmarsh), and littoral sediment (marine/mudflats and sandflats).
Cromarty Firth	SPA	Immediately adjacent	Designated for breeding osprey and common tern and non-breeding whooper swan, bar-tailed godwit and greylag goose. Also designated for its non-breeding waterfowl assemblage comprising wigeon, pintail, scaup, red breasted merganser, knot, curlew and redshank. .
Morangie Forest	SPA	5km N	Designated for supporting breeding population of Capercaillie
Moray Firth	SAC	5km E	Designated for inshore sublittoral sediment (marine/subtidal sandbanks), and mammals (marine/bottlenose dolphin <i>Tursiops truncatus</i>).
Alness River Valley	SSSI	5km NW	Designated for broadleaves, mixed and yew woodland (upland mixed ash woodland).
Kinrive-Strathroy	SSSI	5km N	Designated for coniferous woodland (native pinewood) and fen, marsh and swamp (wetland/springs including flushes).
Loch Achnacloich	SSSI	6km NW	Designated for fen, marsh and swamp (wetland/open water transition fen), and standing open water and canals (eutrophic loch).
Loch Achnacloich	SAC	6km NW	Designated for standing open water and canals (naturally nutrient-rich lakes or lochs which are often dominated by pondweed).
Moray Firth	pSPA	10km E	Designated for breeding and non-breeding European shag, and non-breeding common eider, common goldeneye, common scoter, great northern diver, greater scaup, long-tailed duck, red-breasted merganser, red-throated diver, Slavonian grebe, and velvet scoter.
Pitmaduthy Moss	SAC	10km NE	Designated for coniferous woodland (bog woodland).
Rosemarkie to Shandwick Coast	SSSI	10km E	Designated for breeding birds (cormorant), broad-leaved, mixed and yew woodland (upland birch woodland), palaeontology (mesozoic palaeobotany), stratigraphy (Callovian), structural and metamorphic geology (moine), supralittoral rock (coast/maritime cliff), supralittoral sediment (coast/sand dunes), and vascular plants (purple oxytropis <i>Oxytropis halleri</i>).
Whiteness Head	SSSI	12km SE	Designated for non-breeding birds (bar-tailed godwit, and knot <i>Calidris canutus</i>), geomorphology (coastal geomorphology of Scotland), littoral sediment (coast/saltmarsh), and littoral sediment (marine/mudflats), supralittoral sediment (coast/sand dunes), and supralittoral sediment (coast/shingle).
The Dens	SSSI	12km S	Geomorphology (mass movement).
Dam Wood	SAC	14km SW	Designated for broad-leaved, mixed and yew woodland (upland/juniper on heaths or calcareous grasslands), fen, marsh, swamp (upland/base-rich fens).

Dam Wood	SSSI	14km SW	Designated for dwarf shrub heath (lowland wet heath).
Dam Wood	SAC	14km SW	Designated for broad-leaved, mixed and yew woodland (upland/juniper on heaths or calcareous grasslands), fen, marsh, swamp (upland/base-rich fens).
Ardersier Glacial Deposits	SSSI	14km SE	Quaternary geology and geomorphology (quaternary of Scotland).
Loch Eye	SSSI	15km NE	Designated for non-breeding birds (greylag goose, whooper swan and standing open water and canals (eutrophic loch).
Loch Eye	SPA	15km NE	Designated for non-breeding birds (greylag goose, whooper swan).
Lower River Conon	SSSI	15km SW	Designated for broad-leaved, mixed and yew woodland (wet woodland), fen, marsh, swamp (wetland/open water transition fen), and littoral sediment (coast/saltmarsh).
Conon Islands	SAC	15km SW	Designated for broad-leaved, mixed and yew woodland (alder woodland on floodplains).
Monadh Mor	SSSI	15km SW	Designated for coniferous woodland (native pinewood).
Monadh Mor	SAC	15km SW	Designated for bogs (wetland/very wet mires often identified by an unstable "quaking" surface), and coniferous woodland (bog woodland).
Roskill	SSSI	15km SW	Fen, marsh, swamps (grassland/fen meadow).
Talich	SSSI	16km NE	Designated for broad-leaved mixed and yew woodland (wet woodland).
Munlochy Bay	SSSI	17km S	Designated for non-breeding birds (greylag goose <i>Anser anser</i> and Wigeon <i>Anas penelope</i>), littoral sediment (coast/saltmarsh), and littoral sediment (marine/mudflats).
Inner Moray Firth	SPA	17km S	Designated for breeding (osprey <i>Pandion haliaetus</i>) and non-breeding birds (common tern, goldeneye, goosander, greylag goose, red-breasted merganser, redshank, scaup, bar-tailed godwit, cormorant, curlew, waterfowl assemblage, oystercatcher, and teal.
Allt nan Caorach	SSSI	18km W	Designated for broad-leaved, mixed and yew woodland (upland birch woodland).
Ben Wyvis	SSSI	18km W	Designated for breeding birds (dotterel <i>Charadrius morinellus</i>), bogs (upland/blanket bog), mosaic (upland assemblage), quaternary geology and geomorphology (quaternary of Scotland), standing open water (dystrophic and oligotrophic lochs) and canals and vascular plants (vascular plant assemblage).
Ben Wyvis	SAC/SPA/SSSI	18km W	Designated for bogs (upland/blanket bog), dwarf shrub heath (upland / dry heaths), inland rock (tall herb communities), inland rock (plants in crevices on acid rocks), inland rock (acidic scree), montane habitats (alpine and subalpine heaths), montane habitats (montane acid grasslands), and standing open water and canals (clear water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels).
Longman and Castle Stuart Bays	SSSI	20km S	Designated for breeding birds (cormorant, goldeneye, red-breasted merganser, redshank, wigeon, littoral sediment (coast/saltmarsh), littoral sediment (marine/eelgrass beds), littoral sediment (marine/mudflats).
Kildrummie Kames	SSSI	20km SW	Designated for broad-leaved, mixed and yew woodland (upland/juniper scrub), fen, marsh, swamp (wetland, open water transition fen), quaternary geology and

			geomorphology (quaternary of Scotland), and standing open water and canals (eutrophic loch).
Dornoch Firth and Morrich More	SAC	20km NE	Designated for inshore sublittoral rock (marine/reefs), inshore sublittoral sediment (marine/subtidal sandbanks), littoral sediment (coast/Atlantic salt meadows and glasswort/other annuals colonising mud and sand), littoral sediment (marine/estuaries), mammals (otter <i>Lutra lutra</i>), mammals (marine/harbour seal <i>Phoca vitulina</i>), supralittoral sediment (coast / coastal dune heathland and dunes with juniper thickets).
Dornoch Firth and Loch Fleet	SPA	20km NE	Designated for breeding birds (osprey, and non-breeding birds (dunlin, greylag goose, wigeon, bar-tailed godwit, curlew, oystercatcher, and teal).
Craigroy Burn	SSSI	20km N	Designated for broad-leaved, mixed and yew woodland (upland birch woodland).
Loch Ussie	SSSI	20km SW	Designated for broad-leaved, mixed and yew woodland (upland oak woodland), and standing open water and canals (oligo-mestrophic loch).
Loch Ussie	SAC	20km SW	Designated for standing open water and canals (clear water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels).