



# Aberdeen Harbour Expansion Project

## **Construction Environmental Management Document**

11<sup>th</sup> May 2017

**DRAGADOS**

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# Chapter 4

## Archaeology Plan

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## 4 Archaeology Plan

### 4.1 Introduction

This Archaeology Plan consisting of a plan to record the historic slipway, a Written Scheme of Investigation (WSI) and a Protocol for Archaeological Discovery (PAD) has prepared by Arup on behalf of Dragados for the Aberdeen Harbour Expansion Project (AHEP).

The aim of this plan is to set out clear steps to minimise impacts on the historic environment and, if required record any archaeology/cultural heritage that will be lost during the development of AHEP.

The development of a PAD, is required under condition 3.2.9 of the Marine Licence for Construction and 3.2.7 of the Marine Licence for Dredging. The production of ‘a written scheme for archaeological investigation and mitigation’ or WSI is a condition listed within the Harbour Revision Order, Schedule 2. There is a commitment to record the Historic Slipway within Chapter 24 of the AHEP Environmental Statement (ES). This Plan is considered to fulfil these requirements.

### 4.2 Roles, Responsibilities and Cross-Referencing

The following individuals are responsible for ensuring that the requirements of this Archaeology Plan are implemented at the AHEP site.

Table 4.1: Roles and Responsibilities

Job Title	Name	Responsibilities
Environmental Manager	Craig Hynd	If an archaeological find is discovered, it will be immediately reported to the EM. The EM will be responsible for managing all steps that are outlined within the Archaeology Plan. This includes stopping all work in proximity to the archaeological find and contacting the archaeological advisor
Environmental Clerk of Works	Emma Bias	If the EM is unavailable the ECoW will undertake all the responsibilities of the EM. See above.
Cameron Archaeology	Ali Cameron	The archaeological advisor will determine the nature and date of the finds, relative importance and determine future actions. If there are specific legal requirements the archaeological advisor will determine the actions required in consultation with the Dragados EM and contact the relevant organisations

### 4.2.1 Cross –Referencing

The Archaeology CEMD should be read in conjunction with the following CEMD:

- Vessel Management Plan.

## 4.3 Recording of the Historic Slipway

There is a historic vernacular slipway located on the north side of Nigg Bay which will be buried by the construction of the North Quay. The slipway is recorded as WA 1028 in the Environmental Impact Assessment (EIA). The slipway is illustrated on 25" 1st Edition OS mapping as a cleared area of beach, surveyed in 1868. The slipway is located seaward of small building at the back of the beach with which it may be associated. The slipway is constructed of faced boulders embedded in the surface of beach extending at least 40m south and obscured partially by boulders and beach armouring. The upper sections have been skimmed in concrete presumably a later phase of use. A number of iron fittings and holes for fittings are observed here. Anecdotally, the site is said to have been used by lobster fishermen until the 1960s.

The slipway will be cleared of any boulders and other debris. The structure will be photographically recorded during a low tide and measured drawings will be prepared of all aspects of the structure including details of the materials used in the construction, subsequent alterations and additions, any fittings and evidence of the use of the structure.

This survey will take place prior to works taking place which may damage or cover the slipway.

This recording will form the basis for a Standing Building Survey which will be submitted to Aberdeen City Council (ACC) and Historic Environment Scotland (HES). Cameron Archaeology has been sub-contracted to undertake this work.

## 4.4 Protocol for Archaeological Discovery

Protocols for Archaeological Discovery (PADs) are designed for monitoring of unexpected and incidental finds offshore where traditional watching briefs are not possible. They are recommended in ‘Historic Environment Guidance for the Offshore Renewable Sector’<sup>1</sup>. COWRIE states that:

*‘The aim of protocols for unexpected discoveries is to reduce any adverse effects of the development upon the marine historic environment by enabling people working on the project to report their discoveries or recovered material rapidly in a manner that is convenient and effective. The protocol will set out the respective responsibilities of the developer, main contractors, and archaeological contractors/consultants. The protocol therefore provides a mechanism to aid compliance with the Merchant Shipping Act 1995 in respect to recovery of*

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<sup>1</sup> COWRIE 2007 Historic Environment Guidance for the Offshore Renewable Sector’. 11.3, 45-6.



*'wreck', as defined by the Act and reporting of military vessel and aircraft wrecks to the Ministry of Defence'.*

A geophysical survey of the AHEP area has been carried out and the results are available in Appendix 24A of the ES<sup>2</sup>. There are a number of possible anomalies many of which have been determined as natural or modern. During the construction work this PAD will be used if finds are made during marine construction activities.

A WSI has also been prepared and accepted by ACC for the AHEP development and this PAD will be used in conjunction with the WSI. (See Section 4.5).

The PAD includes finds that are human in origin and does not include geological, ecological or other non-human archaeological origin unless they link to human activity.

This protocol takes into account existing statutory and non-statutory methods for reporting discoveries and the legal requirements (i.e. Treasure Trove and human remains) and is based upon best practice identified in the Wessex Archaeology 2014 report 'Protocol for Archaeological Discoveries: Offshore renewables Projects'.

#### 4.4.1 PAD Methodology

Whilst there was limited potential for archaeological discovery identified in the ES, it is most likely that any marine archaeology encountered will be associated with the drilling, blasting and dredging activities undertaken by Jan De Nul (JDN).

This PAD will be on board each and every Jan De Nul vessel as well as others involved in the marine construction works, be communicated to all staff and audits carried out to ensure the PAD is adhered to.

1. If an archaeological find is uncovered staff will immediately inform the JDN staff member in charge and the JDN Environment Manager (EM). If the find is ordnance then all operational procedures related to ordnance will be followed, and then these protocols once safe to do so. The JDN EM will report any finds to the Dragados EM.
2. Archaeological items will be:
  - Handled with care
  - Retained as found (no rust or surface treatment should be removed)
  - Groups of items should not be separated
  - Photographed and their find spot recorded and detailed on a label

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<sup>2</sup> Wessex Archaeology 2015b Appendix 24A Historic Environment Desk-Based Assessment. Aberdeen Harbour Expansion Project Environmental Statement. <http://www.aberdeen-harbour.co.uk/article/expansion-project-environmental-impact-assessment/>.

- If the find is waterlogged the items should be stored in the same condition (i.e. seawater in a clean container)
  - Items found on board ship (i.e. in the hopper barge) will be treated as above and an estimate made of the find-spot
3. If an *in situ* anomaly is identified the location and details should be passed immediately to the JDN EM and then the Dragados EM. No work should continue in the area of the anomaly until further investigations have been completed. Depending on the exact location, these investigations may be by way of side scan surveys, drop down video or other survey techniques.
  4. Finds made after work on site has occurred (i.e. in the laboratory or during data processing) should be reported immediately to the JDN EM and then the Dragados EM.
  5. Finds onshore should be reported immediately to the Dragados EM who will contact the archaeological advisor. The archaeological advisor will determine the nature and date of the finds, relative importance and determine future actions. Onshore ordnance finds will also follow all operational procedures related to ordnance, and then the same listed protocols as an offshore discovery once safe to do so.
  6. If there are specific legal requirements (such as human remains) Dragados' archaeological advisor will determine the actions required in consultation with the Dragados EM and contact the relevant organisations.

#### 4.4.2 PAD Reporting

At the end of each six month period after construction commences, a half yearly report on anomalies encountered, finds made and any actions undertaken, will be compiled by Dragados and submitted to HES and the ACC Archaeologist. If there is nothing to report, an email to detail this fact will be sent.



## 4.5 Written Scheme of Investigation (WSI)

### 4.5.1 WSI Introduction

The site is located at Nigg Bay, Aberdeen is at AB12 3LT, NJ 96590 04650, at 0-10m OD and in the parish of Aberdeen (Figure 4.1).

An application has been lodged with ACC (P151742) for a National Development comprising construction of new infrastructure to facilitate the creation of a new deep water harbour, including new roads, parking and means of access, temporary construction and fabrication areas and other associated development which may include public realm areas, paths, lighting and signage and there is a standard archaeology condition.

This WSI is being written prior to compound construction and ACC require a 7-10% archaeological evaluation prior to any development in these areas. Further archaeological work will be required and this WSI should be used in conjunction with the EIA Heritage Chapter 24<sup>3</sup>.

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<sup>3</sup> Wessex Archaeology 2015 'Aberdeen Harbour Expansion Project, Nigg Bay, Aberdeen Historic Environment Desk-Based Assessment'. EIA Chapter 24 and data accessed online. <http://www.aberdeen-harbour.co.uk/article/expansion-project-environmental-impact-assessment/>. 30.11.16.



Figure 4.1 Location plan (Contains Ordnance Survey data © Crown copyright and database right 2016)

### 4.5.2 WSI Archaeological Background

There are five Scheduled Ancient Monuments within 1km of the current site. These include two Bronze Age cairns on Tullos Hill (Crab's Cairn NJ90SE.4; Tullos Cairn NJ90SE.2), medieval and early post-medieval St Fittick's Church (NJ90SE.1), Balnagask Motte, a possible motte or garden feature (NJ90NE.13) and Torry Battery (NJ90NE.22.0) a mid -19th century coastal defence battery. None will be directly affected by the current proposed works and Chapter 24 of the EIA<sup>3</sup> deals with the mitigation for these sites.

Nigg Bay is the coastal bay between Girdle Ness and the north and Greg Ness at the south. Previous archaeological work includes a watching brief carried out prior to tree planting on the links between St Fittick's Church and the sewage works<sup>4</sup>; no archaeological contexts were recorded but two broken flint nodules were recovered. A watching brief at Upper Kirkhill Farm<sup>5</sup> and a watching brief during the construction of the sewage works<sup>6</sup> both produced no archaeological finds or contexts. An excavation and research project at St Fittick's Church<sup>7</sup> revealed the foundations of the former manse on the NW side of the church and produced medieval pottery associated with a terraced field system. A series of trial pits were observed in preparation for this harbour development on the Nigg Bay beach and foreshore in 2013 but no archaeological deposits were identified during this work<sup>8</sup>.

A shell midden (NJ90SE 8) was recorded on the '25 feet raised beach' at Bay of Nigg and was excavated and found to contain periwinkle, limpet and mussel shells as well as fish and mammal bones<sup>9,10</sup>. The exact location is unknown and there is now nothing visible of this midden.

A flint arrowhead was also found near the church and now resides in the Marischal Museum (ABDUA; 17209; NMRS No: NJ90SE 100).

A silver chain was found 'at Nigg' (NJ90SW 13) and was presented to Marischal Museum by Jonathan Troup, Surgeon, in 1796. The links are circular, and pairs alternate with single links. They are 115mm long and the diameter of the rings is 33mm<sup>11</sup>. The chain is probably 7th century in date and is in University of Aberdeen Collections (ABDUA 15644).

St Fittick's well was located on the bay in the south-west edge at the high tide level; it is marked on the First and Second Ordnance Survey maps (1867/1091) but by the Third Edition (dated 1923) the well is recorded as 'site of'. This well is associated with St Fittick, a saint of the 7th century. The well is mentioned after the reformation when the protestant authorities attempted to ban people from using the well for its curative powers<sup>12</sup>.

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<sup>4</sup> Buchanan, S., 2009. St Fittick's Road, Aberdeen. Aberdeen: Aberdeen City Council Archaeological Unit doi. 10.5284/1003487  
<http://archaeologydataservice.ac.uk/archsearch/record.jsf?titleId=1944740>

<sup>5</sup> Peters, C (2008) South Kirkhill farm, Aberdeen. Aberdeen: Aberdeen City Council Archaeological Unit doi: 10.5284/1003153

<sup>6</sup> Cameron, A 2000 Nigg Headworks archaeological watching brief. Unpublished report, Aberdeen City Council Archaeological Unit. 147.

<sup>7</sup> Cameron, A 2009 St Fittick's Church and Manse, Aberdeen. Aberdeen: Aberdeen City Council Archaeological Unit doi: 10.5284/1003891

<sup>8</sup> Cameron, A 2013 'Nigg Bay' Discovery Excav Scot, New Series, Volume 14, 11

<sup>9</sup> Reid, R W 1912 Illustrated catalogue of the Anthropological Museum, Marischal College, University of Aberdeen, Aberdeen. 15.

<sup>10</sup> Simpson, W D 1943 The Province of Mar, being the Rhind Lectures, Aberdeen University Studies, 121 Aberdeen, 11.

<sup>11</sup> Reid, R W 1912 Illustrated catalogue of the Anthropological Museum, Marischal College, University of Aberdeen, Aberdeen. 18.

<sup>12</sup> Aberdeen City Council 'Torry Coastal Trail: a guide to Torry's coastline' Aberdeen City Council leaflet.

Nigg Bay salt pans (NJ90SE 12) is recorded in 1845 to have been out of use for many years and nothing of these pans now survives (NSA 1845, 209). This sea salt manufactory and refinery was established in 1796 by Alexander Smith, a merchant from Old Aberdeen. A building and slipway (NJ90NE 42) is visible on Ordnance Survey maps from the first edition onwards. On the 1901 version, a well is marked nearby and even today the remains of a slipway can be seen. Local people recall it being used seasonally by lobster and crab fisherman up until the 1960s<sup>12</sup>.

A kelp works was in use by 1728 by John Gordon, a merchant from Aberdeen, who had been collecting 'sea ware' in the Bay of Nigg and burning it in his nearby kilns. The Town Council objected to this because it encroached on the rights of those who lived there and collected the seaweed for dung for their fields. On 8 March 1750, George Leslie, a merchant trading in Aberdeen, applied to Aberdeen Council for a warrant to cut and burn kelp. He wanted to undertake this work as part of what he described as his 'soapere'<sup>12</sup>.

There are two house platforms on the south side of Greg Ness depicted on the 2<sup>nd</sup> Edition OS map and recorded during the walkover<sup>3</sup>.

There are possible rig and furrow cultivation marks on Balnagask Golf course (NJ90NE 44)<sup>13</sup>.

A pillbox (NJ90SE 57) and anti-tank blocks (NJ90SE 58) have been identified on aerial photographs of Nigg Bay but nothing now survives. There are circular depressions in the intertidal zone which may be bomb craters but this is undetermined and uncertain (SMR). This work may clarify these features.

Early maps show the bay between Girdle Ness and Greg Ness (for example Moll c 1745; Figure B1) but no detail of features or sites. First Edition Ordnance Survey (Figure B3) shows the west foreshore was occupied by a firing range including target areas. The area had been occupied by a series of boundary stones (V, W, X, Y and 10) none of which now survive.

There are 89 shipwrecks in the study area; details of these appear in the EIA and appendices<sup>3</sup> and in the PAD<sup>14</sup>.

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<sup>13</sup> Harding, D I 1997 'Aberdeen area (Aberdeen; Dyce; Newhills; Peterculter parishes), assessment', *Discovery Excav Scot*, 5

<sup>14</sup> Cameron 2016 Protocol for Archaeological Discoveries (PAD): Nigg Bay. For Aberdeen Harbour Board.

### 4.5.3 WSI Method Statement

Cameron Archaeology will carry out a 7-10% archaeological evaluation of the proposed compound areas prior to any construction work, possibly in tandem with engineering trial pits.

#### 4.5.3.1 North Compound

The First and Second Edition OS maps (Figure 4.2, Figure 4.3) show a group of buildings in the centre of what is now the park within a circular enclosure. The evaluation will include this area to investigate the nature of these buildings. There are bench marks and boundary stones along the wall of the park which no longer survive, parts through the area from the north west to the lighthouse and a boundary wall across the area. No other archaeological or historical sites are known within the area.

#### 4.5.3.2 Central Compound

There are no known archaeological sites within the boundary but flints have been found in the area adjacent to St Fittick's Church. This area is tree covered and tip materials were noted during the Tullos Burn Restoration<sup>15</sup> (Figure 4.4 and Figure 4.5).

#### 4.5.3.3 South Compound

There are no known archaeological sites within the boundary of the area on the west side of the railway and on the cliff edge at Greg Ness (Figure 4.6).

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<sup>15</sup> Murray, J.C. and Harding, D.I. (2014) East Tullos Burn Restoration, St Fittick's Community Park, Aberdeen. Aberdeenshire: Murray Archaeological Services Ltd (MAS), MAS 2014-16.doi:10.5284/1035145



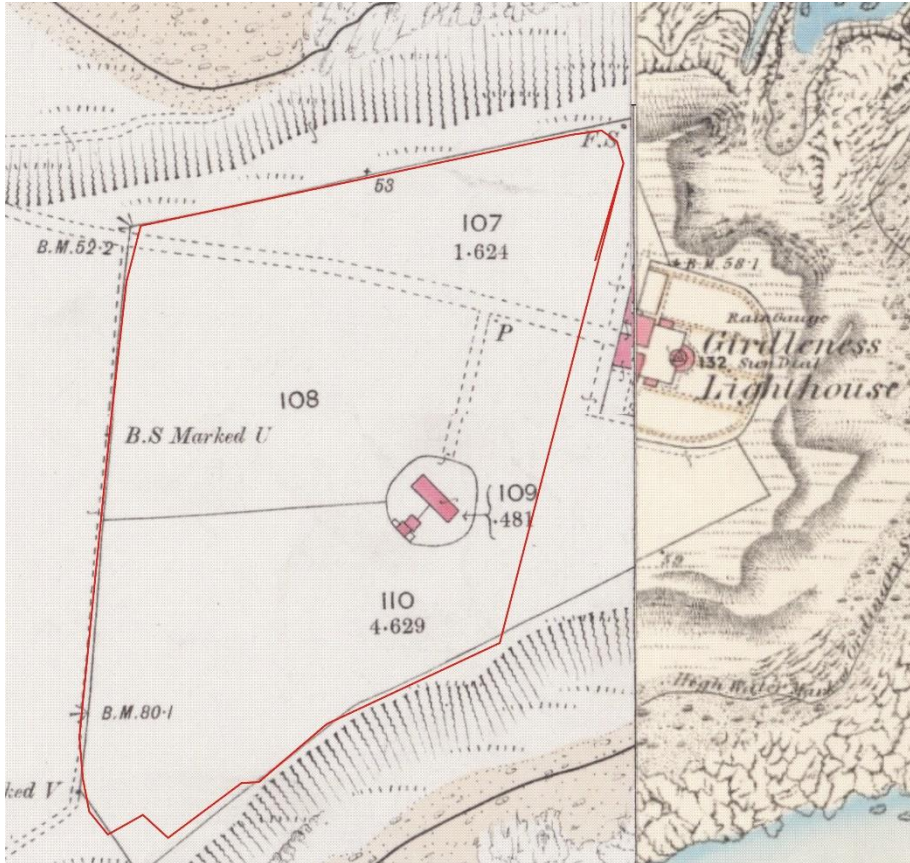


Figure 4.2 North Compound overlain on 1st edition OS map (©National Library of Scotland)

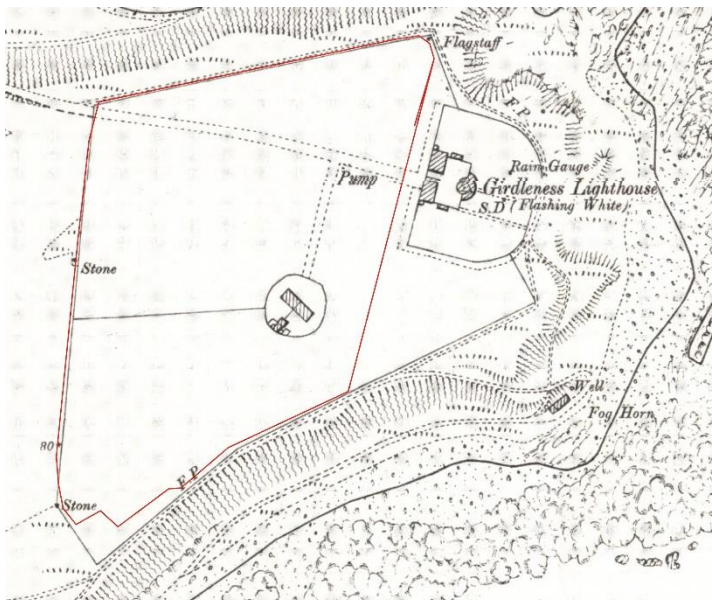


Figure 4.3 North Compound overlain on 2nd edition OS map (©National Library of Scotland)



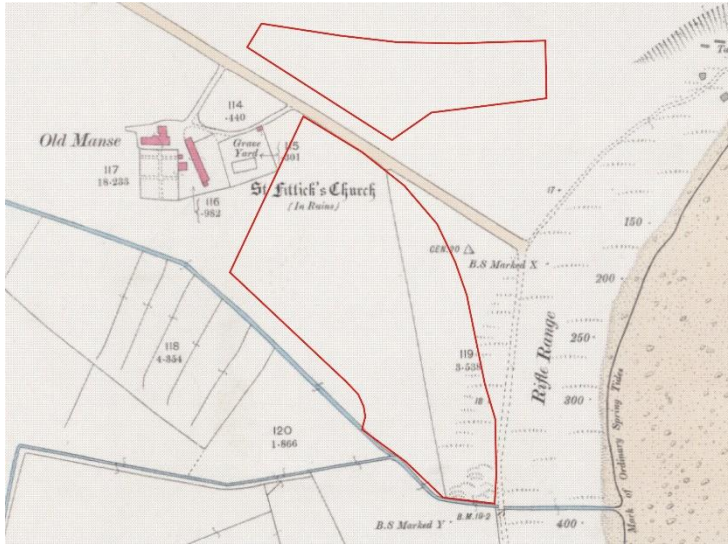


Figure 4.4 Central Compound overlain on 1<sup>st</sup> edition OS map (©National Library of Scotland)

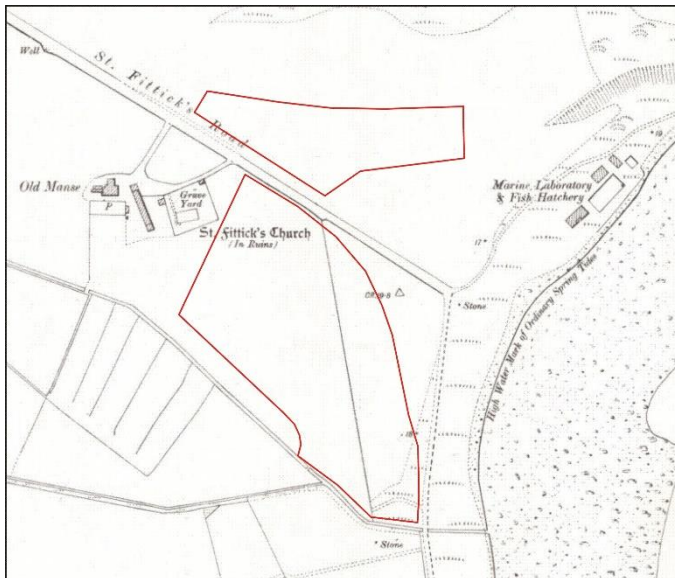


Figure 4.5 Central Compound overlain on 2nd edition OS map (©National Library of Scotland)

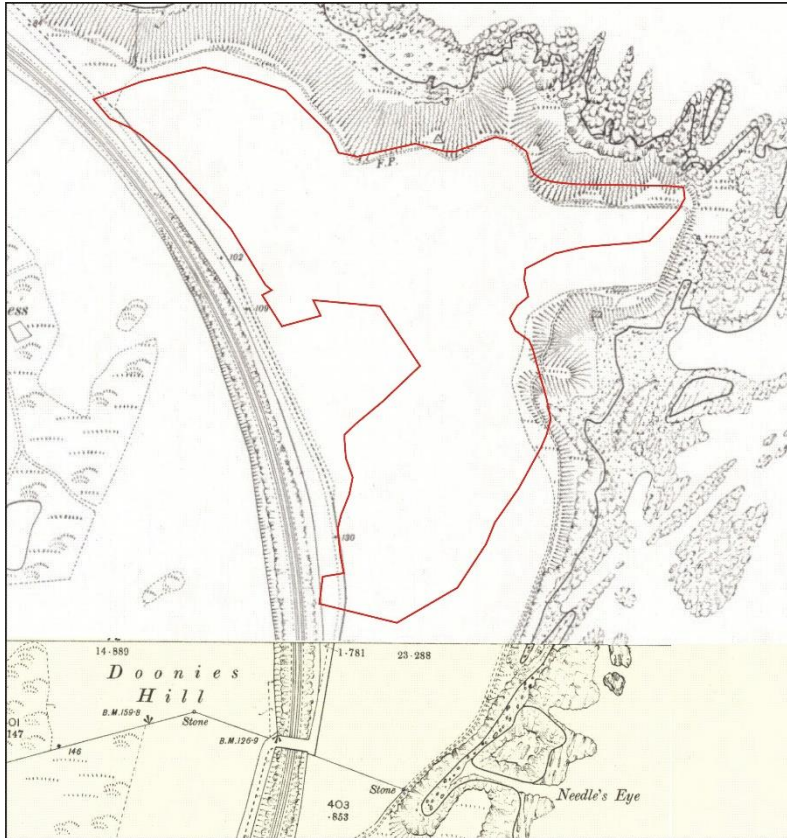


Figure 4.6 South Compound overlain on 1<sup>st</sup> Edition OS map (©National Library of Scotland)

#### 4.5.4 WSI Reporting and Finds

Finds of objects will be subject to the Scots Laws of Treasure Trove and Bona Vacantia and reported by the archaeological contractor to the Secretariat of the Treasure Trove Panel (National Museums of Scotland, Queen Street, Edinburgh, EH2 1JD) for disposal to an appropriate museum.

Any human remains which are encountered will initially be left *in situ*. Their discovery will be reported to the Procurator Fiscal and the client. ACC will also be informed. Their removal will comply with the provisions of Scots Law.

#### 4.5.5 WSI Access and Safety

Cameron Archaeology will inform Aberdeenshire Council Archaeology Service (who are covering ACC area) prior to the start of fieldwork.

All relevant health and safety legislation, regulations and codes of conduct will be respected. The watching brief will be carried out in the context of Scottish Planning Policy (SPP) Planning Advice Note (PAN 2/2011) and Historic Environment Scotland Policy (HESP), which state that archaeological remains should be regarded as part of the environment to be protected and managed.

Staff will wear steel toe-capped boots, hard hats and hi-visibility vests at all times and they will carry Construction Skills Certificate Scheme (CSCS) cards.

The archaeologist will hand clean and record any features and some will be part excavated to determine nature and depth.

#### **4.5.6 WSI Recording Systems**

A Cameron Archaeology fieldwork number (CA313-2016) has been allocated to this site. This number will appear on all site records and finds and all post-excavation material. Cameron Archaeology recording systems will be used on this project.

A site location plan will be produced which will tie in to National Grid and will locate Ordnance Survey Bench Marks and Temporary Bench Marks used on the site.

Plans of contexts will be produced at 1:20 (or other scale as appropriate) and sections of features at 1:10. All site drawings will be on polyester-based drawing film.

The Ordnance Data height of contexts will be calculated and recorded on plans, sections and level book.

For complex stratification, a Harris matrix will be prepared to record stratigraphic relationships.

A photographic record will consist of high quality digital images for all main contexts as well as working and general site and location photographs.

#### **4.5.7 WSI Treatment of Finds and Samples**

Sampling strategies will depend on the perceived importance of the deposit or feature under excavation. Bulk samples for sieving will be taken as necessary. A selection of samples will be sent for analysis by specialist archaeological soil analysts.

Finds will be exposed, recorded, lifted, cleaned, conserved, marked, bagged and boxed in line with archaeological guidelines. All metalwork will be x-rayed and selected for conservation.

Organic samples will be collected or sampled and subjected to conservation, dendrochronology, carbon 14 sampling or other analytical technique as necessary.

Cameron Archaeology can confirm that arrangements are in place to cover all necessary processing, conservation, specialist analysis and subsequent storage of finds and samples.

Finds of objects will be subject to the Scots Laws of Treasure Trove and Bona Vacantia and reported by the archaeological contractor to the Secretariat of the Treasure Trove Panel (Nicholas Holmes, National Museums of Scotland, Queen Street, Edinburgh EH2 1JD) for disposal to an appropriate museum.

### 4.5.8 WSI Post-excavation and Publication

A report will be prepared for the client within two weeks of the end of fieldwork.

If archaeological remains are discovered which cannot be dealt with under this WSI, a discussion will take between Lead Curator, Local History and Archaeology, ACC and the client and a mitigation strategy produced. This may require further excavation of archaeological remains which cannot be left in situ, and a timescale and costings for this work will then be produced.

Following further fieldwork a Post-Excavation Research Design (PERD) will be produced which will outline costs for post-excavation analysis and publication.

Publication will take place in a suitable journal.

### 4.5.9 WSI Archive

Copies of the fieldwork report will be sent to the applicant and the Local Authority archaeologist and Planning Authority.

If archaeological remains are uncovered a brief survey of results should be submitted to *Discovery and Excavation in Scotland*, along with the appropriate fee.

An OASIS report will be completed for this site within 4 weeks of the end of fieldwork. This is a data capture form through which archaeological and heritage practitioners can provide information about their investigations to local Historic Environment Records (HERs) and respective National Heritage Bodies.

The site archive will be lodged with Historic Environment Scotland (HES).

### 4.5.10 WSI References

Aberdeen City Council 'Torry Coastal Trail: a guide to Torry's coastline'  
Aberdeen City Council leaflet.

Buchanan, S., 2009. St Fittick's Road, Aberdeen. Aberdeen: Aberdeen City Council

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NSA 1834-1845 The new statistical account of Scotland by the ministers of the respective parishes under the superintendence of a committee of the society for the benefit of the sons and daughters of the clergy, 15v Edinburgh, Vol.11, (Kincardineshire), 209.

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Wessex Archaeology 2014 'Protocol for Archaeological Discoveries: Offshore renewables Projects'. The Crown Office.

Wessex Archaeology 2015 'Aberdeen Harbour Expansion Project, Nigg Bay, Aberdeen

Historic Environment Desk-Based Assessment'. EIA Chapter 24 and data accessed online. <http://www.aberdeen-harbour.co.uk/article/expansion-project-environmental-impact-assessment/>. 30.11.16.

#### **4.5.11 WSI Acknowledgements**

Thanks to Zoe Crutchfield, Arup, for initiating this project and Bruce Mann, Aberdeenshire Council Archaeology Service (who cover Aberdeen City) for his advice during this work.

## Appendix A

Scheduled Sites within 1km of  
Current Site



## A1 Scheduled Sites within 1km of Current Site

INDEX NUMBER	NAME	LOCAL AUTHORITY	ORIGINAL SCHEDULE DATE	LAST SCHEDULE DATE	NGRs
4060	Crab's Cairn, cairn	ABERDEEN, CITY OF	251683200000	1026777600000	NJ963038
4055	Tullos Cairn, cairn	ABERDEEN, CITY OF	251683200000	984441600000	NJ959041
10400	St Fittick's Church, Aberdeen	ABERDEEN, CITY OF	1035936000000	- 2209161600000	NJ962049
10403	Balnagask motte, Baxter Place, Aberdeen	ABERDEEN, CITY OF	1035936000000	- 2209161600000	NJ957051
9215	Torry Battery, battery 130m ESE of Old South Breakwater	ABERDEEN, CITY OF	973555200000	- 2209161600000	NJ965056

## A2 RCAHMS Sites within 1km of Current Site

SITE NUMBER	NMRS NAME	CLASS
NJ90NE.13.-	ABERDEEN, FOOTDEE, FISHER COTTAGES, GENERAL. Alternative: NORTH SQUARE, SOUTH SQUARE, MIDDLE ROW, PILOT SQUARE, 1-5 NEW PIER ROAD, FITTIE	COTTAGE(S)
NJ90NE.3.-	BALNAGASK HOUSE, 'MOTTE'. Alternative: NIGG, MAINS OF BALNAGASK, BALNAGASK HOUSE POLICIES	GARDEN FEATURE
NJ90NE.7.1	ABERDEEN HARBOUR, BALNAGASK, JETTY.	CAPSTAN, JETTY
NJ90SE.12.-	NIGG BAY. Alternative: -	SALT WORKS
NJ90NE.8.0	ABERDEEN, GREYHOPE ROAD, GIRDLENESS LIGHTHOUSE AND KEEPERS' COTTAGES. Alternative: GIRDLE NESS LIGHTHOUSE, ABERDEEN HARBOUR, WALKER PARK	LIGHTHOUSE (19TH CENTURY), LIGHTHOUSE KEEPERS HOUSE(S) (19TH CENTURY)
NJ90NE.27.-	ABERDEEN, GREYHOPE ROAD, CITY OF ABERDEEN MAIN DRAINAGE WORK. Alternative: GIRDLENESS SEWAGE WORKS, GIRDLE NESS	WORKS
NJ90NE.24.-	ABERDEEN HARBOUR, CANNON. Alternative: HALL RUSSELL SHIPYARD	CANNON
NJ90NE.19.-	ABERDEEN, FOOTDEE, POCRA QUAY, BLOCKHOUSE. Alternative: ABERDEEN HARBOUR, NEW ENTRANCE	BLOCKHOUSE (15TH CENTURY)
NJ90SE.1.-	NIGG, ST FITTICK'S CHURCH. Alternative: NIGG, OLD PARISH CHURCH, BALNAGASK, ST FITTICK'S CHURCH	BURIAL GROUND, CHURCH, HOLY WELL

NJ90SE.2.-	TULLOS CAIRN. Alternative: LOIRSTON, TULLOS HILL, NIGG BAY	CAIRN
NJ90SE.4.-	CRAB'S CAIRN. Alternative: LOIRSTON, TULLOS HILL, PETERSEAT	CAIRN, CINERARY URN
NJ90NE.22.0	ABERDEEN, TORRY BATTERY. Alternative: TORRY POINT, ABERDEEN HARBOUR, OLD SOUTH BREAKWATER, GIRDLE NESS, BALNAGASK	COASTAL BATTERY (20TH CENTURY)
NJ90NE.20.-	ABERDEEN, ESPLANADE, PUBLIC CONVENIENCES. Alternative: FOOTDEE	PUBLIC CONVENIENCE(S)
NJ90NE.26.-	ABERDEEN, GIRDLE NESS, COAST DEFENCE BATTERY. Alternative: GREYHOPE ROAD, WALKER PARK, ABERDEEN HARBOUR, BALNAGASK GOLF COURSE	COASTAL BATTERY (20TH CENTURY)
NJ90NE.7.2	ABERDEEN HARBOUR, NORTH PIER. Alternative: ABERDEEN HARBOUR ENTRANCE	PIER
NJ90NE.7.4	ABERDEEN HARBOUR, OLD SOUTH BREAKWATER. Alternative: ABERDEEN HARBOUR ENTRANCE, INNER SOUTH BREAKWATER	BREAKWATER
NJ90NE.7.5	ABERDEEN HARBOUR, SOUTH BREAKWATER. Alternative: ABERDEEN HARBOUR ENTRANCE	BREAKWATER
NJ90NE.7.6	ABERDEEN HARBOUR, SOUTH BREAKWATER, LIGHTHOUSE. Alternative: ABERDEEN 2, SOUTH PIER, ABERDEEN HARBOUR ENTRANCE	BEACON
NJ90NE.7.7	ABERDEEN HARBOUR, LOWER BASIN, POCRA QUAY. Alternative: -	QUAY
NJ90NE.7.15	ABERDEEN HARBOUR, ABERCROMBY JETTY, PORT ENTRANCE CONTROL TOWER. Alternative: ABERDEEN HARBOUR ENTRANCE, ROUNDHOUSE, NAVIGATION CONTROL CENTRE, FOOTDEE, FITTY, 'THE OCTAGON'	CONTROL TOWER
NJ90NE.8011.-	BENSCREEL: GIRDLE NESS, ABERDEEN, NORTH SEA. Alternative: A121, BEN SCREEL, GIRDLENESS, ABERDEEN HARBOUR	STEAM TRAWLER (20TH CENTURY)
NJ90NE.8001.-	CARLO: GIRDLE NESS, ABERDEEN, NORTH SEA. GIRDLENESS, ABERDEEN HARBOUR	STEAMSHIP (20TH CENTURY)
NJ90SE.19.-	TULLOS HILL. NIGG, LOIRSTON COUNTRY PARK	CAIRN(S)
NJ90NE.42.-	ABERDEEN, BAY OF NIGG. Alternative: -	BUILDING, SLIPWAY
NJ90NE.44.-	ABERDEEN, BALNAGASK GOLF COURSE. Alternative: -	RIG AND FURROW
NJ90NE.8009.-	SCOTT: GIRDLE NESS, ABERDEEN, NORTH SEA. Alternative: GIRDLENESS, ABERDEEN HARBOUR	SMACK (19TH CENTURY)
NJ90NE.8010.-	CALEDONIAN: GIRDLE NESS, ABERDEEN, NORTH SEA. Alternative: CALEDONIA, GIRDLENESS, ABERDEEN HARBOUR ENTRANCE	BRIG (19TH CENTURY)
NJ90NE.8008.-	PROVIDENCE: GIRDLE NESS, ABERDEEN, NORTH SEA. Alternative: BAY OF NIGG, GIRDLENESS, ABERDEEN HARBOUR	SCHOONER (19TH CENTURY)
NJ90NE.48.-	ABERDEEN HARBOUR, POCRA QUAY, TS SCYLLA. Alternative: SEA CADET CORPS, NAVAL CADETS' NISSEN HUTS, FOOTDEE, FITTIE	MILITARY HEADQUARTERS, NISSEN HUT(S)

NJ90SE.23.0	ABERDEEN, DOONIES HILL CHAIN HOME LOW RADAR STATION. Alternative: LOIRSTON COUNTRY PARK	RADAR STATION (20TH CENTURY)
NJ90NE.49.-	ABERDEEN, GREYHOPE ROAD, ROCKET HOUSE. Alternative: ABERDEEN HARBOUR, COASTGUARD LIFESAVING STATION	BUILDING
NJ90NE.51.-	ABERDEEN, TORRY, EAST BLOCK MARINE LABORATORY. Alternative: TORRY RESEARCH STATION, VICTORIA RD, BAXTER ST, WOOD ST, ABBEY RD, GREYHOPE RD, ST FITTICK'S RD	SCIENTIFIC RESEARCH ESTABLISHMENT
NJ90SE.36.-	ABERDEEN, NIGG BAY, SEWAGE TREATMENT PLANT. Alternative: NIGG BAY, WASTE WATER TREATMENT PLANT, NIGG HEADWORKS	SEWAGE WORKS
NJ90SE.34.-	ABERDEEN, BALNAGASK CIRCLE, BRIMMOND COURT. Alternative: ABERDEEN, BALNAGASK SOUTH SECTION 14	POINT BLOCK
NJ90SE.28.-	ABERDEEN, BUCHAN ROAD, GENERAL. Alternative: -	GENERAL VIEW
NJ90SE.31.-	ABERDEEN, BALNAGASK CIRCLE, GRAMPIAN COURT. Alternative: ABERDEEN, BALNAGASK SOUTH SECTION 14	POINT BLOCK
NJ90SE.53.-	ABERDEEN, BALNAGASK CIRCLE, MORVEN COURT. Alternative: -	POINT BLOCK
NJ90NE.72.-	ABERDEEN, FOOTDEE, PILOT SQUARE, GENERAL. Alternative: NEW PIER ROAD, FISHER COTTAGES	GENERAL VIEW
NJ90NE.73.-	ABERDEEN, FOOTDEE, NEW PIER ROAD, GENERAL. Alternative: -	GENERAL VIEW
NJ90NE.74.-	ABERDEEN, FOOTDEE, 1 NEW PIER ROAD. Alternative: FISHER COTTAGES	COTTAGE (19TH CENTURY)
NJ90NE.75.-	ABERDEEN, FOOTDEE, NORTH SQUARE, GENERAL. Alternative: FISHER COTTAGES	GENERAL VIEW
NJ90NE.77.-	ABERDEEN, FOOTDEE, 4 SOUTH SQUARE. Alternative: FISHER COTTAGES	COTTAGE
NJ90SE.23.1	ABERDEEN, DOONIES HILL RADAR STATION. Alternative: LOIRSTON COUNTRY PARK	PILLBOX (20TH CENTURY)
NJ90SE.57.-	ABERDEEN, NIGG BAY. Alternative: -	PILLBOX (20TH CENTURY)
NJ90SE.58.-	ABERDEEN, NIGG BAY. Alternative: -	ANTI TANK BLOCKS (20TH CENTURY)
NJ90NE.62.-	ABERDEEN, FOOTDEE, PILLBOX. Alternative: ABERDEEN HARBOUR	PILLBOX (20TH CENTURY)
NJ90NE.63.-	ABERDEEN, FOOTDEE, ANTI-TANK BLOCKS.	ANTI TANK BLOCKS (20TH CENTURY)
NJ90NE.64.-	ABERDEEN, FOOTDEE, PILLBOX. Alternative: -	ANTI TANK BLOCKS (20TH CENTURY), PILLBOX
NJ90NE.79.-	ABERDEEN, TORRY, WOOD STREET	GENERAL VIEW
NJ90SE.59.-	NIGG BAY. Alternative: -	NO CLASS (EVENT)
NJ90NE.80.-	ABERDEEN, TORRY, BALNAGASK HOUSE. Alternative: -	HOUSE

NJ90SE.60.-	GREGNESS COASTGUARD STATION. Alternative: GREG NESS, DOONIES HILL, LOIRSTON COUNTRY PARK	COASTGUARD STATION
NJ90NE.110.-	ABERDEEN, BALNAGASK GOLF COURSE, GREYHOPE COTTAGES. Alternative: GIRDLE NESS, TORRY BATTERY	COTTAGE(S)
NJ90NE.91.-	ABERDEEN, GIRDLE NESS, STONE. Alternative: WALKER PARK, BALNAGASK GOLF COURSE	STONE
NJ90NE.92.-	ABERDEEN, GIRDLE NESS, BOUNDARY STONE. Alternative: WALKER PARK, BALNAGASK GOLF COURSE	BOUNDARY STONE
NJ90NE.93.-	ABERDEEN, GIRDLE NESS, BOUNDARY STONE. Alternative: WALKER PARK, BALNAGASK GOLF COURSE	BOUNDARY STONE
NJ90NE.94.-	ABERDEEN, GIRDLE NESS, BOUNDARY STONE. Alternative: BALNAGASK GOLF COURSE	BOUNDARY STONE
NJ90NE.95.-	ABERDEEN, GIRDLE NESS, BOUNDARY STONE. Alternative: BALNAGASK GOLF COURSE	BOUNDARY STONE
NJ90NE.96.-	ABERDEEN, TORRY, NORTH KIRKHILL. Alternative: BALNAGASK GOLF COURSE	COTTAGE, CROFT
NJ90NE.97.-	ABERDEEN, TORRY, ABBEY ROAD, BOUNDARY STONE. Alternative: -	BOUNDARY STONE
NJ90NE.98.-	ABERDEEN, TORRY, ABBEY ROAD, BOUNDARY STONE. Alternative: -	BOUNDARY STONE
NJ90NE.101.-	ABERDEEN, BALNAGASK MAINS. Alternative: TORRY, BALNAGASK HOUSE, STEADING, BALNAGASK HOUSE POLICIES	FARMHOUSE, FARMSTEAD
NJ90NE.102.-	ABERDEEN, SOUTH KIRKHILL. Alternative: TORRY, VICTORIA ROAD	FARMHOUSE, FARMSTEAD
NJ90NE.103.-	ABERDEEN, SOUTH KIRKHILL. Alternative: BALNAGASK GOLF COURSE, TORRY	FARMHOUSE, FARMSTEAD
NJ90NE.105.-	ABERDEEN, BALNAGASK GOLF COURSE, BOUNDARY STONE. Alternative: TORRY	BOUNDARY STONE
NJ90NE.106.-	ABERDEEN, BALNAGASK GOLF COURSE, SAND PIT. Alternative: TORRY	SAND AND GRAVEL WORKINGS
NJ90NE.107.-	ABERDEEN, BALNAGASK GOLF COURSE, SAND PIT. Alternative: TORRY	SAND AND GRAVEL WORKINGS
NJ90NE.108.-	ABERDEEN, BALNAGASK GOLF COURSE, SAND PIT. Alternative: TORRY	SAND AND GRAVEL WORKINGS
NJ90NE.8149.-	WELSH PRINCE: GIRDLE NESS, ABERDEEN, NORTH SEA. Alternative: A 280, ABERDEEN HARBOUR ENTRANCE, GIRDLENESS	STEAM TRAWLER (20TH CENTURY)
NJ90NE.111.-	ABERDEEN, GREYHOPE BAY. Alternative: GREYHOPE ROAD, TORRY BATTERY	ANTI TANK BLOCKS (20TH CENTURY)
NJ90NE.8083.-	JOHN CALLAM: GIRDLE NESS, ABERDEEN, NORTH SEA. Alternative: JOHN CALLUM, GIRDLENESS POINT, ABERDEEN HARBOUR, GIRDLENESS LIGHTHOUSE	BRIG (19TH CENTURY)
NJ90NE.8131.-	MARY JANE: ABERDEEN HARBOUR ENTRANCE, NORTH SEA. Alternative: GIRDLE NESS	SCHOONER (20TH CENTURY)

NJ90NE.8132.-	FISHER LASSIE: ABERDEEN HARBOUR ENTRANCE, NORTH SEA. Alternative: TORRY	LUGGER (20TH CENTURY)
NJ90NE.8133.-	PRIMROSE: ABERDEEN HARBOUR ENTRANCE, NORTH SEA. Alternative: TORRY	LUGGER (20TH CENTURY)
NJ90NE.8087.-	EAGLE: ABERDEEN HARBOUR, NORTH SEA. Alternative: ABERDEEN HARBOUR ENTRANCE	BRIG (19TH CENTURY)
NJ90NE.86.-	ABERDEEN, FOOTDEE, 8 SOUTH SQUARE. Alternative: FISHER COTTAGES	COTTAGE
NJ90NE.22.1	ABERDEEN, TORRY BATTERY. Alternative: -	PILLBOX (20TH CENTURY)
NJ90SE.23.2	ABERDEEN, DOONIES HILL, RADAR STATION. Alternative: LOIRSTON COUNTRY PARK	PILLBOX (20TH CENTURY)
NJ90NE.8123.-	VINE: ABERDEEN HARBOUR ENTRANCE, NORTH SEA. Alternative: ABERDEEN HARBOUR, NORTH PIER, END	SCHOONER (19TH CENTURY)
NJ90NE.8112.-	DUCHESS: ABERDEEN HARBOUR ENTRANCE, NORTH SEA. Alternative: ABERDEEN BAY	STEAMSHIP (19TH CENTURY)
NJ90SE.79.-	DOONIES HILL, BOUNDARY STONE. Alternative: NESS FARM GULLEY	BOUNDARY STONE
NJ90SE.80.-	DOONIES HILL, BOUNDARY STONE. Alternative: -	BOUNDARY STONE
NJ90SE.81.-	NESS. Alternative: -	FARMHOUSE, FARMSTEAD
NJ90SE.84.-	MIDDLETON, SAND PIT. Alternative: TULLOS WOOD, TULLOS HILL	SAND AND GRAVEL WORKINGS
NJ90SE.85.-	NIGG BAY, BOUNDARY STONES. Alternative: -	BOUNDARY STONE(S)
NJ90SE.86.-	NIGG BAY, BOUNDARY STONE. Alternative: -	BOUNDARY STONE
NJ90SE.87.-	NIGG BAY, BOUNDARY STONE. Alternative: -	BOUNDARY STONE
NJ90SE.88.-	NIGG, ST FITTICK'S CHURCH, MANSE. Alternative: NIGG, OLD PARISH MANSE, BALNAGASK	BUILDING, MANSE
NJ90NE.8103.-	CHARLES GREEN: ABERDEEN HARBOUR ENTRANCE, NORTH SEA. Alternative: ABERDEEN BAY, ABERDEEN HARBOUR, NORTH PIER	SCHOONER (19TH CENTURY)
NJ90NE.8104.-	ISABELLA: ABERDEEN HARBOUR ENTRANCE, NORTH SEA. Alternative: ABERDEEN BAY, ABERDEEN HARBOUR, NORTH PIER, RIVER DEE	SCHOONER (19TH CENTURY)
NJ90NE.8107.-	MARS: ABERDEEN HARBOUR ENTRANCE, NORTH SEA. Alternative: ABERDEEN BAY	BRIG (19TH CENTURY)
NJ90NE.8068.-	AID: GIRDLE NESS, ABERDEEN, NORTH SEA. Alternative: GIRDLENESS POINT, ABERDEEN HARBOUR	SLOOP (19TH CENTURY)
NJ90NE.8125.-	WATCHFUL: ABERDEEN HARBOUR ENTRANCE, NORTH SEA. Alternative: -	LUGGER (19TH CENTURY)
NJ90SE.94.-	TULLOS HILL, BOUNDARY STONE. Alternative: -	BOUNDARY STONE
NJ90NE.8048.-	OSCAR: GREYHOPE, ABERDEEN, NORTH SEA. Alternative: ABERDEEN HARBOUR ENTRANCE, 'BETWEEN THE GIRDLE AND SHIRTNESS', GIRDLE NESS, GREY HOPE, SHORT NESS	CRAFT (19TH CENTURY)

NJ90NE.8050.-	THAMES: ABERDEEN HARBOUR ENTRANCE, NORTH SEA. Alternative: GREYHOPE ROCKS	SMACK (19TH CENTURY)
NJ90NE.8053.-	HUDDLESTONE: ABERDEEN HARBOUR ENTRANCE, NORTH SEA. Alternative: -	CRAFT (19TH CENTURY)
NJ90NE.8120.-	DELIGHT: ABERDEEN HARBOUR ENTRANCE, NORTH SEA. Alternative: -	LUGGER (19TH CENTURY)
NJ90NE.8134.-	NO 4: ABERDEEN HARBOUR, NORTH SEA. Alternative: PADDY'S JETTY	LUGGER (20TH CENTURY)
NJ90NE.8113.-	TOM DUFF: ABERDEEN HARBOUR ENTRANCE, NORTH SEA. Alternative: ABERDEEN HARBOUR, NORTH PIER, 'ON THE NORTH PIER, ABERDEEN'	SCHOONER (19TH CENTURY)



## Appendix B

### Maps

## B1 Maps

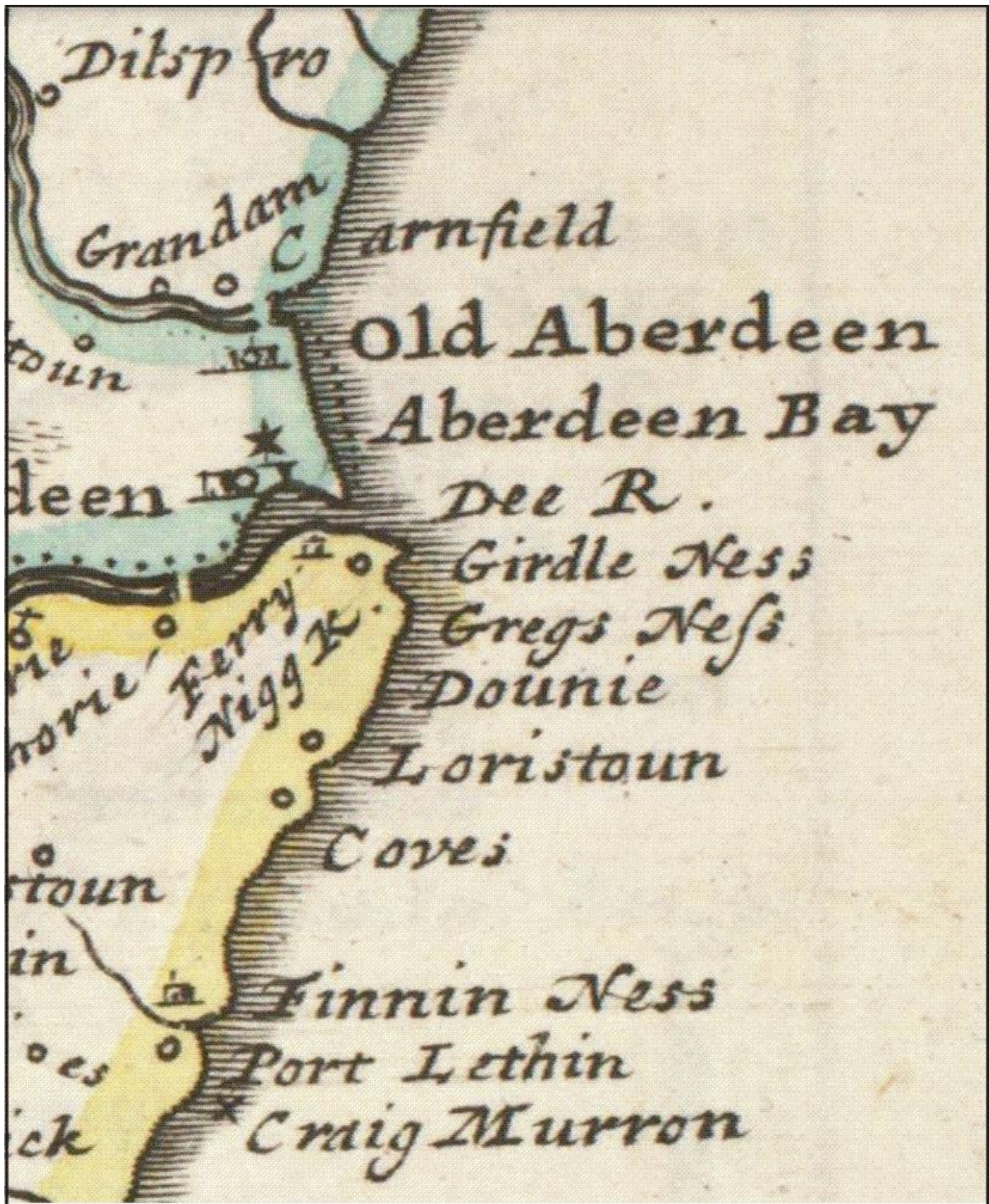


Figure B1: Hermann Moll, c. 1654-1732, The Shires of Bamf [i.e. Banff] and Aberdeen  
 Published: 1745 (©National Library of Scotland)



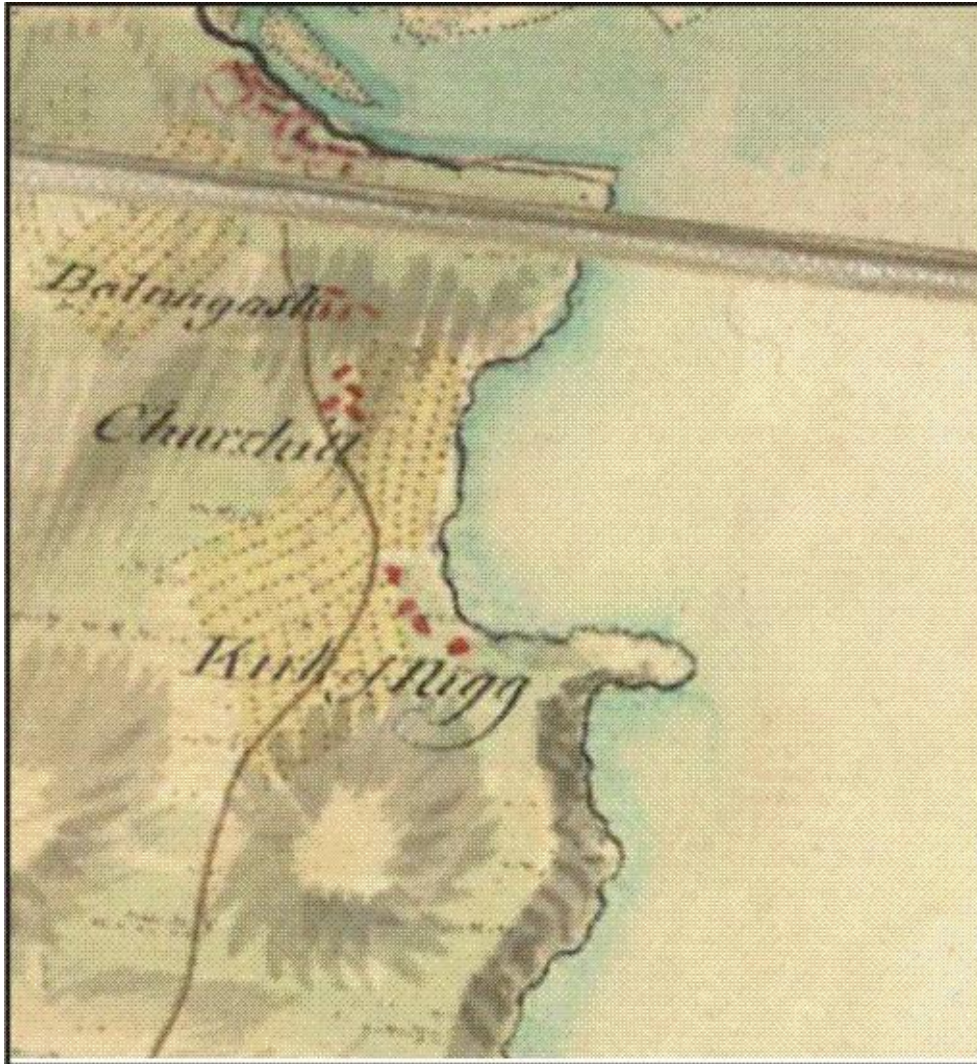


Figure B2: Roy Military Survey of Scotland, 1747-55 (©National Library of Scotland)



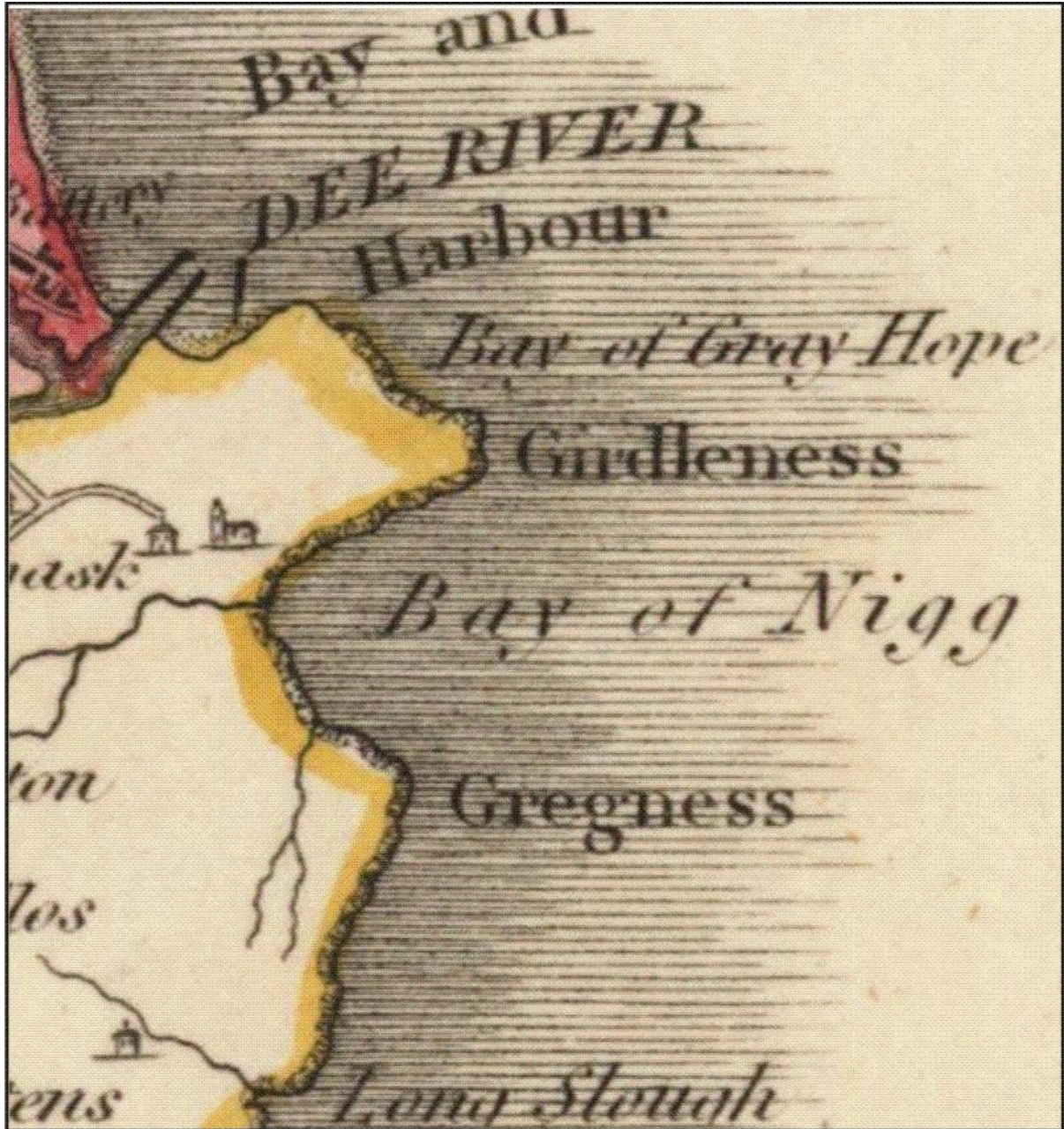


Figure B3: John Thomson, Northern Part of Aberdeen & Banff Shires. Southern Part.  
Published: 1826 (©National Library of Scotland)







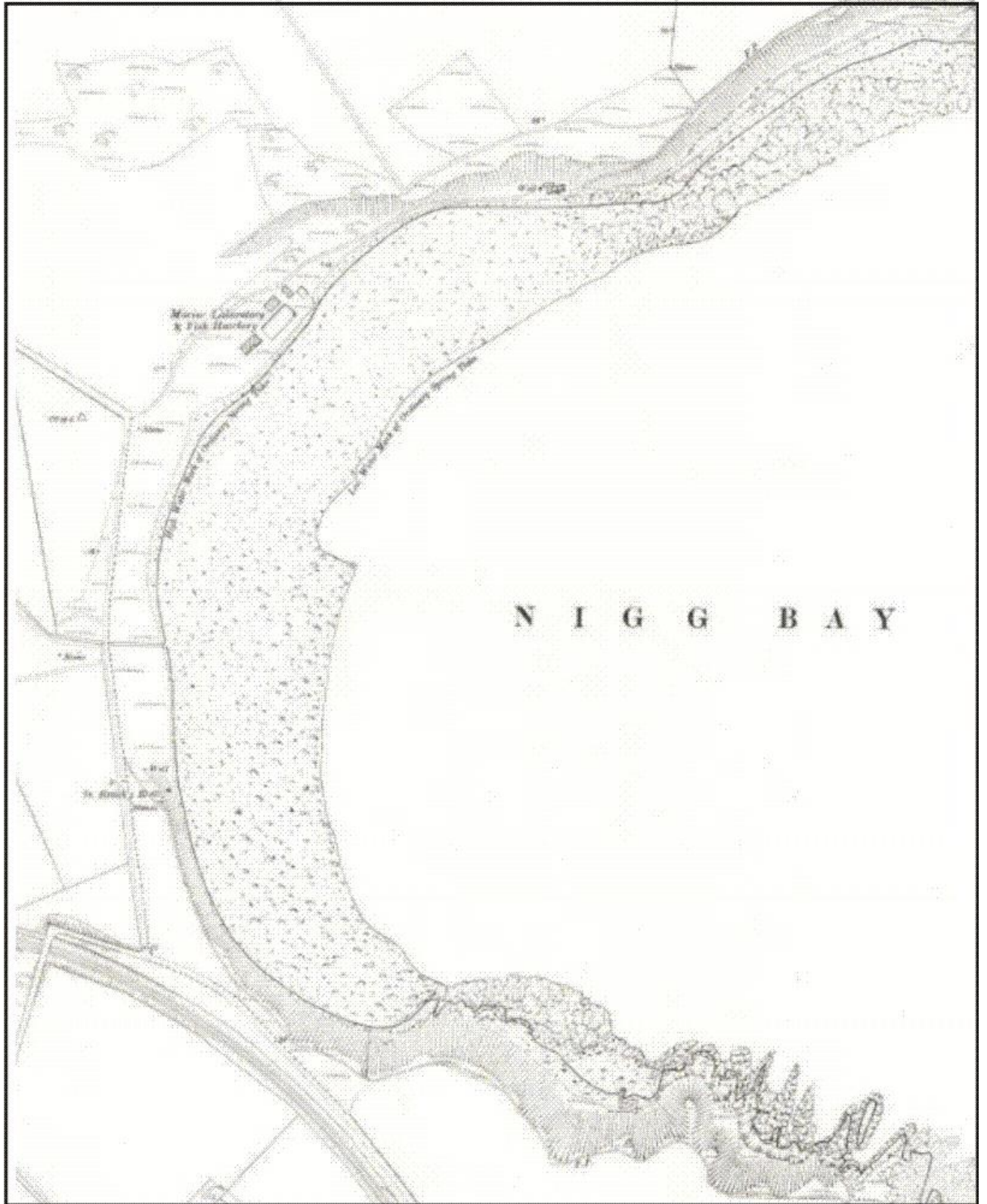


Figure B5: Second Edition Ordnance Survey (©National Library of Scotland)



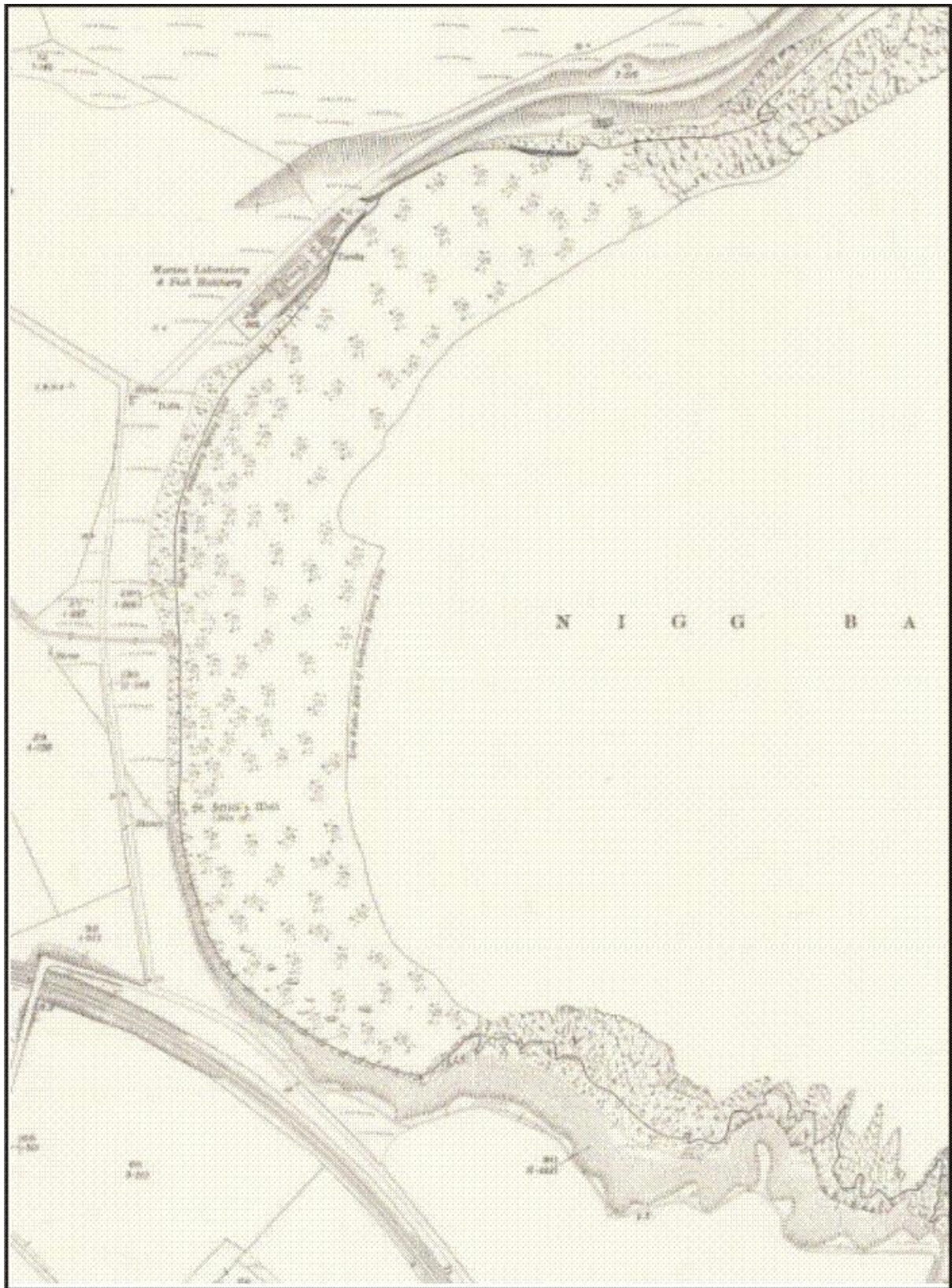


Figure B6: Third Edition Ordnance Survey (©National Library of Scotland)

Title: Aberdeenshire, Sheet 075.16

Publication date: 1926 Revised: ca. 1923 Levelled: 1899