

Arinagour Water Pipeline Realignment, Coll: Historic Environment Assessment

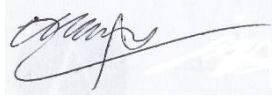


by Callum Allsop
for Scottish Water Shared Solutions
issued 16th January 2017

RATHMELL 
ARCHAEOLOGY LTD

Quality Assurance

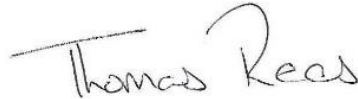
This report covers works which have been undertaken in keeping with the issued brief as modified by the agreed programme of works. The report has been prepared in keeping with the guidance of Rathmell Archaeology Limited on the preparation of reports. All works reported on within this document have been undertaken in keeping with the Chartered Institute for Archaeologists' Standards and Policy Statements and Code of Conduct.



Signed

Date ...16th January 2017..

In keeping with the procedure of Rathmell Archaeology Limited this document and its findings have been reviewed and agreed by an appropriate colleague:



Checked

Date ...16th January 2017..

Copyright Rathmell Archaeology Limited. All rights reserved.

No part of this report may be copied or reproduced by any means without prior written permission from Rathmell Archaeology Limited. If you have received this report in error, please destroy all copies in your possession or control and notify Rathmell Archaeology Limited.

This report has been prepared for the exclusive use of the commissioning party and unless otherwise agreed in writing by Rathmell Archaeology Limited, no other party may use, make use of or rely on the contents of the report. No liability is accepted by Rathmell Archaeology Limited for any use of this report, other than the purposes for which it was originally prepared and provided.

Opinions and information provided in the report are on the basis of Rathmell Archaeology Limited using due skill, care and diligence in preparation of the same and no explicit warranty is provided as to their accuracy. It should be noted and it is expressly stated that no independent verification of any of the documents or information supplied to Rathmell Archaeology Limited has been made.

Contents

Introduction	3
Approach to Assessment	3
Desk Assessment	3
Walkover Study.....	3
Aims and Objectives of the Assessment.....	3
Historic environment baseline	4
Historic Mapping.....	4
Known Archaeological Sites	12
Site Walkover (See Table 1)	12
Significance	12
Recommendations	13
Summary and Conclusions.....	13
References and Sources	14

Introduction

1. This report has been prepared for Scottish Water Shared Solutions and details the assessment and survey works undertaken to consider the Historic Environment in respect of the proposed realignment of a raw water main approximately 0.5km north of Arinagour, Coll. The new pipeline will run from the existing pipeline at NM 22347 57719 and re-joins at NM 22795 58289. These works were designed to inform on the character of historic environment sites which may be affected, assess the significance of the anticipated impact and thereby inform on any necessary mitigation strategy.
2. The development area concerned covers open moorland to the north and north-east of Arinagour, Coll running across the estuary of Loch Eatharna. The ground of this moorland rises from around 0m OD at the centre of the estuary, upwards to its western boundary at approximately 10m OD.
3. The open land is bounded on the western edge by the B8071, with open land extending to the north, east and south of the development area. The estuary of Loch Eartharna also runs through the centre of the development.

Approach to Assessment

4. A desk-based assessment of both the pipeline route and the immediate surrounding area was undertaken to inform the comprehension of the known and potential archaeological value of the development area. Known sites are only numbered where they fall within 50m of the pipeline route (see Table 1 and Figures 1 and 2).
5. All works were conducted in keeping with West of Scotland Archaeology Service Standard Conditions, the Chartered Institute for Archaeologists' Standards and Policy Statements and Code of Conduct and Historic Environment Scotland Policy Statements.

Desk Assessment

6. Archival sources consulted during this assessment included:
 - ❖ the Historic Environment Scotland Collections (Scheduled Monuments and other designations, known archaeological sites; aerial photography; archived commercial reports);
 - ❖ West of Scotland Archaeology Service (WoSAS), Sites & Monuments Record (known archaeological sites; archived commercial reports);
 - ❖ National Library of Scotland (bibliographic records, historic Ordnance Survey and pre-Ordnance Survey mapping); and
 - ❖ local museums, libraries and other archives (Old & New Statistical Accounts, local history books).
7. Information contained within available published and web-based sources was also consulted with the baseline compiled using a Geographic Information System package (QGIS).

Walkover Study

8. A walkover survey of the proposed development area was undertaken on 9th January 2017, to assist in the characterisation of those monuments previously identified by the desk-based assessment and to identify any additional upstanding archaeological sites.

Aims and Objectives of the Assessment

9. The aim of the assessment was to assess the known historic environment sites and the potential for currently unlocated sites. The assessment was then to determine the potential impact of the development on this resource and hence recommend a mitigation strategy to reduce any adverse impacts. The specific objectives of the assessment were to:
 - ❖ determine whether any designated historic environment sites could be affected by the development proposal;

- ❖ locate and characterise both known and previously unknown historic environment sites within the development area through a combination of desk-based assessment and walkover survey;
 - ❖ consider the underlying potential for historic environment sites that cannot be identified through the assessment techniques used;
 - ❖ assess the potential impact of the development on the historic environment, taking into account its varied importance; and
 - ❖ propose strategies to suppress adverse impacts through the protection of sites or to mitigate unavoidable impacts where the importance of the site warrants this.
10. For all identified sites, the characterisation process will be to establish the nature, form and extent of the site incorporating an assessment of its date, integrity, level of preservation and importance.




Historic environment baseline




11. Presented below are details of the historic environment sites located on the course of the pipeline, including the 50m buffer (Figures 1 and 2 for location of sites).
12. The desk-based assessment identified no sites within the area that were protected for their archaeological or historical merit under any historic environment designation (see Table 1). Seven undesignated sites were identified within the assessment area: two Fish Traps **S01** and **S02**, an Enclosure/House Platform **S03**, a Ford **S04**, an Enclosure **S05**, a Slipway **S06** and a 'Mound' **S07**. No further sites were identified by field survey.


Historic Mapping

13. The earliest available mapping which shows the assessment area in an appropriate level of detail is the 1st edition Ordnance Survey 1885 (See Figure 3a). It shows the route of the pipeline to be passing through open moorland. This land use does not change over time and is largely unchanged on both the 2nd edition Ordnance Survey 1896 and 3rd edition Ordnance Survey 1907 (See Figures 3b and 4). By the time of the 2nd edition Ordnance Survey the settlement of Arinagour has established a church and school to the north of the village.
14. No archaeological features within the study area are depicted on any cartographic evidence.

Table 1: Historic Environment Sites within study area

Site	Name	NGR Ref:	UID, Designation & Description	Period	Image from Site Inspection
S01	ARINAGOUR	NM 22394 58241	<p>WoSAS ID: 59957 – FISH TRAP</p> <p>A wall constructed from large boulders extends across the tidal end of the river at the mouth of Loch Eatharna, to the north of Arinagour. It measures some 2-2.5m in width and stands some 1.5m high; in overall length it exceeds 50m. It is locally thought to serve as a salmon trap. The wall head is broad enough to walk over and it is probable that it also served as a crossing place. From this point inland, the river appears to have been embanked, one of the effects of which has been to contain the water and create deeper pools within the river.</p> <p><i>Site inspection confirmed presence of the recorded feature. While the site does have credible views to the development area at its western extremity, it will not be compromised by the proposed pipeline.</i></p>	Post-Medieval (AD 1560 – 1900)	
S02	ARINAGOUR	NM 22433 58133	<p>WoSAS ID: 59967 – FISH TRAP</p> <p>A wall constructed of large boulders extends across the river at the head of Loch Eatharna. Measuring some 35m in length, this wall is 2-2.5m in width and up to 1.5m high. It is locally thought to be a salmon trap but may also have served as a crossing place on the river.</p> <p><i>Site inspection confirmed presence of the recorded feature. While the site does have credible views to the development area at its western extremity, it will not be compromised by the proposed pipeline.</i></p>	Post-Medieval (AD 1560 – 1900)	
S03	ARINAGOUR	NM 22444 57874	<p>WoSAS ID: 60015 – ENCLOSURE/HOUSE PLATFORM</p> <p>The footings of a possible enclosure occupy an area of greener vegetation on sloping ground some 25m from the coast edge. Some stonework remains but more has been robbed out. The enclosure measures 8m by 4m and is aligned E-W. The W end is best preserved. The enclosure has been on a platform of apparently artificial origin and more likely to have been constructed to accommodate a house.</p> <p><i>Site inspection confirmed presence of the recorded feature, although it was significantly overgrown with heather vegetation. While the site does have credible views to the development area towards the northwest of the feature, it will not be compromised by the proposed pipeline.</i></p>	Post-Medieval (AD 1560 – 1900)	

Site	Name	NGR Ref:	UID, Designation & Description	Period	Image from Site Inspection
S04	ARINAGOUR	NM 22412 58073	<p>WoSAS ID: 60016 – FORD</p> <p>A ford across the river reuses an old slipway for boats. The channel has been cleared of large stone with the displaced material piled up to either side. There are several trough-like features set into the ground surface in this area. All are filled with washed in stone. They may represent old kelp kilns but could equally be associated with the fishing industry.</p> <p><i>Site inspection confirmed presence of the recorded features. There is a likelihood that the western extremity of the site will be compromised by the proposed pipeline.</i></p>	Post-Medieval (AD 1560 – 1900)	
S05	ARINAGOUR	NM 22397 58046	<p>WoSAS ID: 60017 – ENCLOSURE</p> <p>A small curvilinear enclosure backs onto a bedrock outcrop. It measures 3m in diameter and is constructed from a double row of stones. The function of this structure is unclear.</p> <p><i>Site inspection confirmed presence of the recorded feature. There is a likelihood that the majority of this site will be compromised by the proposed pipeline.</i></p>	Post-Medieval (AD 1560 – 1900)	
S06	ARINAGOUR	NM 22453 57930	<p>WoSAS ID: 60018 – SLIPWAY</p> <p>Two slipways are cleared at the side of the river. The displaced stone is heaped into three rows forming rough rubble walls. The slipway extends for some 40m into the deep water channel.</p> <p><i>Site inspection confirmed presence of the recorded feature. While the site does have credible views to the development area, it will not be compromised by the proposed pipeline.</i></p>	Post-Medieval (AD 1560 – 1900)	

Site	Name	NGR Ref:	UID, Designation & Description	Period	Image from Site Inspection
S07	LOCH EATHARNA	NM 2240 5849	<p>CANMORE ID: 21687, WoSAS ID: 279 – 'MOUND'</p> <p>On the east side of Loch Eatharna, just where the stream enters the sea-loch, is a bracken-covered mound, which seems to be an ancient site of some description, although its precise character has not been satisfactorily determined. This is probably a green mound, c. 5.0m in diameter. There are indications of a rectangular structure, c. 4.0m by c. 3.0m, within it. To the immediate vicinity are two or three smaller bracken-covered humps, classification uncertain.</p> <p><i>Site inspection could not confirm presence of recorded features due to high water levels in the estuary obstructing access.</i></p>	Unclassified	

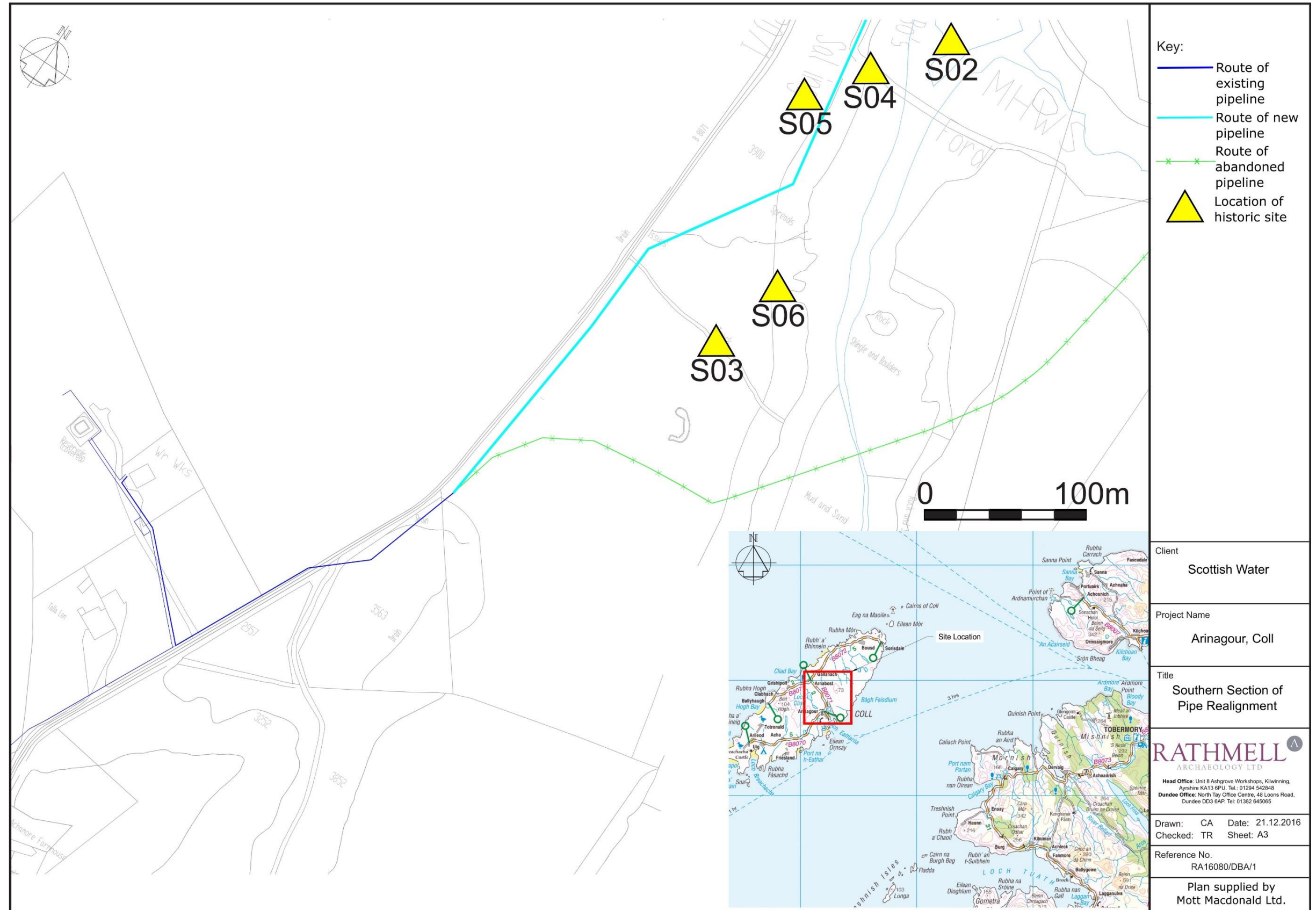


Figure 1: Location Map showing Historic Environment Sites within 50m of the Southern Section of Pipe Realignment (see Table 1)

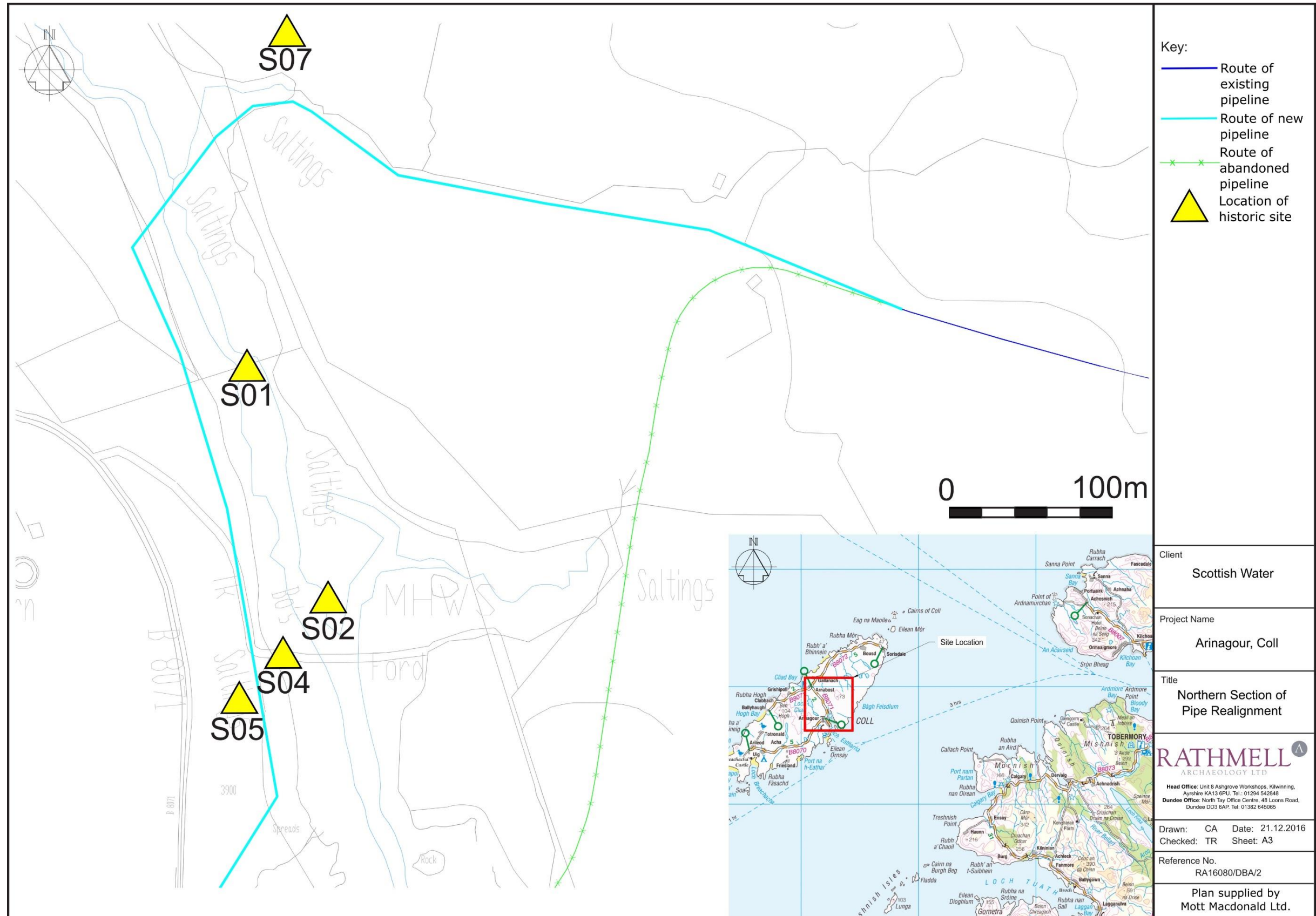


Figure 2: Location Map showing Historic Environment Sites within 50m of the Southern Section of Pipe Realignment (see Table 1)



Figure 3a: 1st Edition Ordnance Survey (1885)

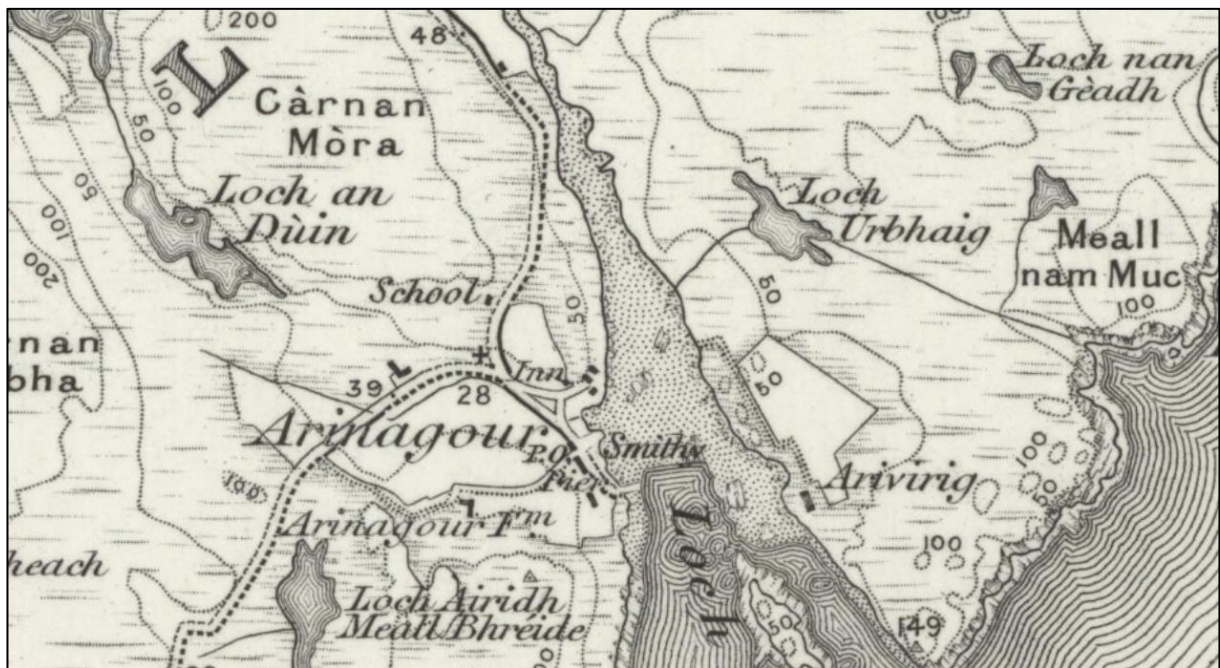


Figure 3b: 2nd Edition Ordnance Survey (1896)



Figure 4: 3rd Edition Ordnance Survey (1907)

Known Archaeological Sites

15. A single archaeological event has been carried out previously within the assessment area (Moore & Wilson 2002). This archaeological coastal survey identified the majority of recorded historic environment sites (**S01 - S06**) within close proximity of the estuary of the sea loch.
16. Also, a bracken-covered mound **S07** is mentioned by Beveridge (Beveridge 1903) '*where the stream enters the sea-loch*' and given a general ancient classification. The precise location of the mound was confirmed by a site visit on 29th June 1972 and was measured to be approximately 5m in diameter, with a 4m long by 3m wide structure contained within it and a further two or three smaller bracken-covered mounds in the immediate vicinity.
17. The Old Statistical Account of Tiree and Coll (MacLean 1794) notes a total of thirty nine duns, forts or watch-towers on both islands that were '*[...]generally built of rock, round the whole coast, and within sight of each other.*' and the old habitation of the family seat on Coll being '*[...] a square built castle, with turrets and some lower additions.*'. This castle, known as Breacacha, was commented in the New Statistical Account of Tiree and Coll (McColl 1845) as '*[...] in a pretty entire state and the roof standing. It ceased to be inhabited perhaps one hundred years ago.*' The account records a total of '*[...]eight duns or Danish forts[...]*' on the island with no discernible locations. Two standing stones on a farm on the west of the island and a horde of silver coins have also been recorded.

Site Walkover (See Table 1)

18. The survey took place on the 9th January 2017. It confirmed that the study area consisted of open moorland with the B8071 at the western extent and the estuary of the sea-loch, Loch Eatharna, running through the centre. Due to high water levels, access to the eastern bank of the estuary was not conducted during the walkover.
19. Arinagour Fish Traps **S01** and **S02** were inspected and the form and nature of these features are readily identified. The structure of **S01** appears in good condition with very little displacement of the stones used in its construction. In contrast, the condition of **S02** is rather poor with many stones being robbed out or washed downstream.
20. The assessment identified the locations of the Arinagour Enclosure/House Platform **S03**, Arinagour Ford **S04**, Arinagour Enclosure **S05**, and Arinagour Slipway **S06**. The condition of Enclosure/House Platform **S03** could not be determined due to heavy heather vegetation covering the feature. Heavy vegetation also obscured the Enclosure **S05**, however the condition of this site was noted as poor with the majority of the stonework robbed out. Comparatively, the Ford **S04** and Slipway **S06** were both of good condition; with evidence of the ford still being in use today.
21. It was not possible to confirm the location of Loch Eatharna Mound **S07**; although the open moorland on the eastern bank of the estuary appears to have several bracken-covered mounds with one showing visible stonework. The on-site assessment was that the mound/s stand on a southwest facing slope where a burn enters the sea-loch.
22. The walkover survey did not identify any new historic environment sites.

Significance

23. The seven known archaeological sites are not of equal significance and none are designated. On balance, using the categorisation of National, Regional, Local and Other for significance, the seven sites fall between Local and Other. The Arinagour Fish Traps **S01** and **S02**, and Loch Eatharna Mound **S07** are all considered to be of local significance. For both Fish Traps, this is based on the character of the structures present and the contribution they make to the historic landscape in understanding the nature of Post-Medieval maritime practices.
24. The Mound **S07** could not be satisfactorily inspected due to ground conditions. What can be inferred of this feature is that the mounds are possibly elements of a larger site, traces of which may yet survive and embody sufficient information that would allow us to better understand the character of that site. Therefore, the potential for the residual elements of

the mound and the internal stone structure are considered to be of local significance.

25. In contrast to these contributions, the Arinagour Enclosure/House Platform **S03** and Arinagour Enclosure **S05** are the remnants of known agricultural features, and the Arinagour Ford **S04** and Arinagour Slipway **S06** are the remains of known maritime features. There is anticipated to be no substantive information embodied in these features and hence they make a minimal contribution to the historic environment, and are considered to be of Other significance.

Recommendations

26. Mitigation is appropriate to recover information from archaeological sites that are anticipated to be lost, as compensation for their loss, and to consider any currently unknown or poorly located archaeological sites.
27. The development as currently understood does not constitute a significant impact on Arinagour Fish Traps **S01** and **S02**, Arinagour Enclosure/House Platform **S03**, Arinagour Slipway **S06**, and Loch Eatharna Mound **S07**.
28. Arinagour Ford **S04** and Arinagour Enclosure **S05** will be affected by the pipeline development, but are considered to be of Other significance and do not warrant mitigation by themselves. However, due to the relatively high level of anthropic activity dating to the Post-Medieval Period along the western bank of Loch Eatharna, it is recommended that ground-breaking works should be subject to archaeological monitoring on a precautionary basis in case additional sites that are not identifiable from surface remains are present.
29. Specifically, we recommend that mitigation should cover:
- a. works along the pipeline on the west bank of the estuary between the track at NM 22370 57905 and the field boundary at NM 22362 58245;
30. An archaeologist should be present during ground breaking work to monitor activity, identify potentially significant archaeological features and safeguard such features until they have been subject to archaeological excavation. The locations of these areas are depicted on Figures 1 and 2.
31. The mitigation should be detailed through a Written Scheme of Investigation. The appropriateness of further mitigation (excavation, post-excavation analyses and reporting) would be based on, and proportionate to, the features identified during the monitoring exercise.

Summary and Conclusions

32. A programme of assessment and survey was conducted to consider the potential impacts on the historic environment from a pipeline realignment to the north of Arinagour, Coll. During the assessment two archaeological sites, which are not protected by designation, were identified as being at risk of direct impact from the proposal. These were the Ford and associated trough-like features **S04**, and the remnants of an Enclosure of unknown function **S05**.
33. The proposed development will not constitute a significant adverse impact in terms of the protection of the historic environment and redesign of the route is not recommended. Mitigation has been proposed to address the potential for meeting archaeological remains associated with Arinagour Ford **S04** and Arinagour Enclosure **S05**.

References and Sources

Documentary

Beveridge, E. 1903 *Coll and Tiree: their prehistoric forts and ecclesiastical antiquities with notices of ancient remains in the Treshnish Isles*. Edinburgh, 53

Chartered Institute for Archaeologists 2014 *Code of Conduct*

Chartered Institute for Archaeologists 2014 *Standard and Guidance for Historic Environment Desk-Based Assessment*

Historic Scotland 2009 *Managing Change in the Historic Environment - Setting*

Historic Scotland 2011 *Scottish Historic Environment Policy*

MacLean N. 1794 *Tiree and Coll, County of Argyle*, Old Statistical Account, Vol. X, 401-402

McColl, A. 1845 *Tiree and Coll, County of Argyle*, New Statistical Account, Vol. VII, 207

Moore, H. & Wilson, G. 2002 *Report on a Coastal Zone Assessment Survey on the Islands of Coll and Tiree*. EASE Archaeology

Scottish Government 2010 *Scottish Planning Policy*

Scottish Government 2011 *PAN 2/2011 Planning and Archaeology*

Cartographic

1885	Ordnance Survey	1 st edition Ordnance Survey, Sheet 51
1896	Ordnance Survey	2 nd edition Ordnance Survey, Sheet 51
1907	Ordnance Survey	3 rd edition Ordnance Survey, Sheet 51

End of Document