

# **Laggan Dairy, Ballantrae: Archaeological Watching Brief**

Data Structure Report



by Liam McKinstry

issued 19<sup>th</sup> June 2017


on behalf of J & A McKinley Ltd

**RATHMELL**   
ARCHAEOLOGY LTD

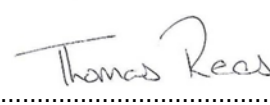
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## Quality Assurance

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 ...19<sup>th</sup> June 2017.....

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

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## Introduction

1. This Data Structure Report has been prepared on behalf of J & A McKinley Ltd, in support of construction works for a new slurry lagoon at Laggan Dairy, Ballantrae which has been granted Planning Consent by South Ayrshire Council. These archaeological works were designed to mitigate any adverse impact on any archaeological remains within the development area and were carried out the 14<sup>th</sup> June 2017.
2. West of Scotland Archaeology Service, who advises South Ayrshire Council on archaeological matters, has provided guidance on the structure of archaeological works required. Archaeological monitoring has been required as a condition appended to the planning consent (Condition 2, 16/00894/APP).
3. A Written Scheme of Investigation (Allsop 2017) provided the detail of the works (archaeological monitoring, exclusion, excavation, post-excavation analyses and publication) for the mitigation pertaining to ground breaking within the development area and hence the direct physical impact on buried sediments.

## Historical and Archaeological Background

4. The development area is a new access track and slurry lagoon lying east of an existing access track, that is currently accessed by a classified roadway due south of Laggan Dairy (centred on: NX 09512 82236). Archaeological works in the area have been largely centred on the historic burgh of Ballantrae 750m to the west and the Scheduled Monument of Garleffin standing stones and Mesolithic settlement 900m to the southwest. This has highlighted the high potential for prehistoric, and medieval activity along the course of the River Stinchar to the east of Ballantrae.
5. The development area is situated on igneous bedrock formed approximately 451 to 467 million years ago in the Ordovician Period known as Downan Point Lava Formation with a Devensian Till superficial deposit, known as Diamicton, comprising clay and sand formed up to 2 million years ago in the Quaternary Period indicating that the local environment was previously dominated by ice age conditions (British Geological Society Map Viewer).
6. Situated within a single agricultural field, the development does not intersect with any known archaeological sites. There is a single significant site some 120m to the east of the development - the Mote Knowe 'Fort' (Canmore ID: 60937, HER ID: 11248) identified by Ordnance Survey in 1856 as the former site of a fort (named then Moat Knowe). Subsequently the small round elevated knoll with a small horse-shoe ridge around a hollow, has been suggested to be a robbed out cairn.
7. Inspection by the Ordnance Survey in 1977 suggested small-scale quarrying with the dumped spoil giving the impression of a 'U' shaped rubble and earth bank. A shallow rectangular depression in grass, about 3m by 4m, possibly indicates a former wooden structure and due to its position was almost certainly connected with the quarrying operations. Overall, the exact function of the site remains inconclusive.
8. There is evidence for prehistoric occupation in the surrounding landscape demonstrated by a number of crop-markings indicating the presence of sub-surface deposits that potentially represent a round-house, a possible souterrain and a number of pits. These have all been identified from the area between Ballantrae Bridge and Garleffin. A group of standing stones (Canmore Id: 160935, WoSAS Pin: 11246) are also present in this area and there have also been numerous finds of worked flint recovered in the vicinity.
9. Concerning the current development, approximately 200m WSW there is a crop-mark of a ring-ditch measuring about 7m in internal diameter, with a gap in the ditch on its north-eastern side (Canmore Id: 60943, WoSAS Pin: 11254). The crop-marking of another ring-ditch measuring around 8m in internal diameter with a gap in the ditch on its eastern side has also been recorded from the area to the east of Mote Knowe (Canmore Id: 62031, WoSAS Pin: 11390).
10. It is clear from the wealth of material present in the landscape surrounding Laggan that this area was densely occupied during prehistory. Apart from agricultural activity the lack



Figure 1a: Roy's Military Survey of Scotland (1752-55)

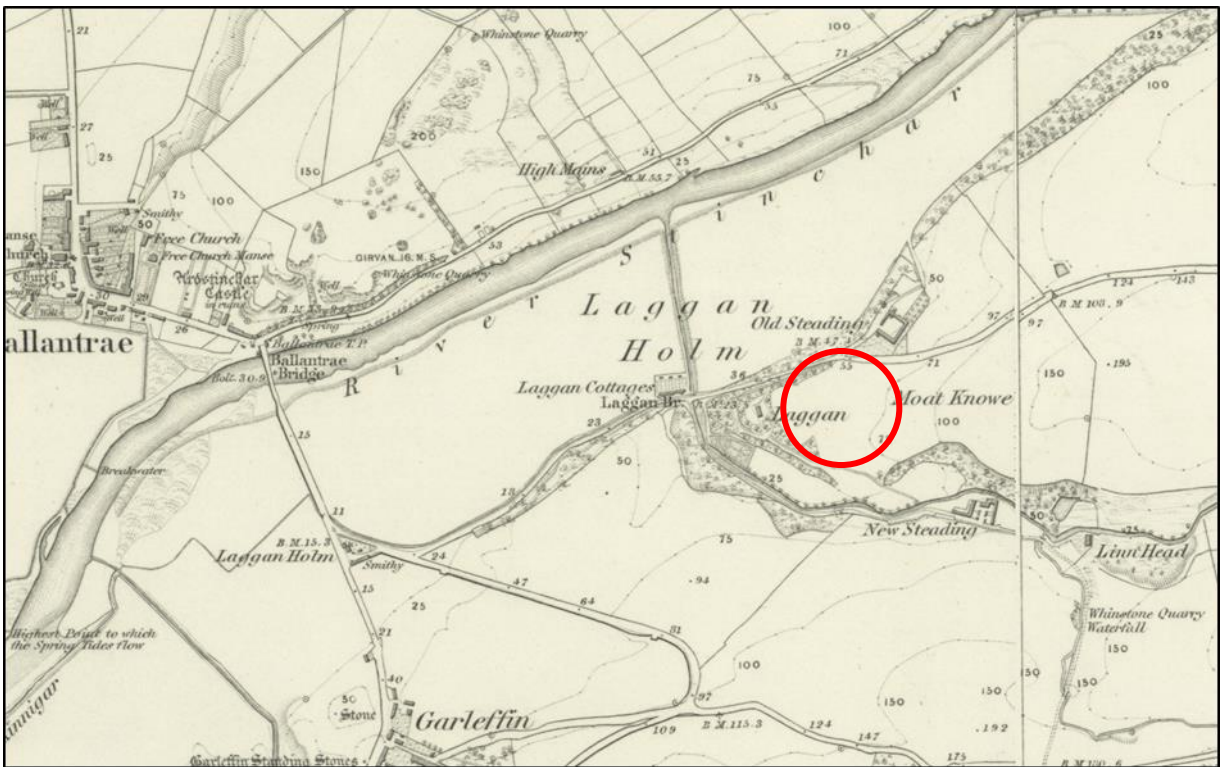


Figure 1b: 1<sup>st</sup> edition Ordnance Survey of 1857



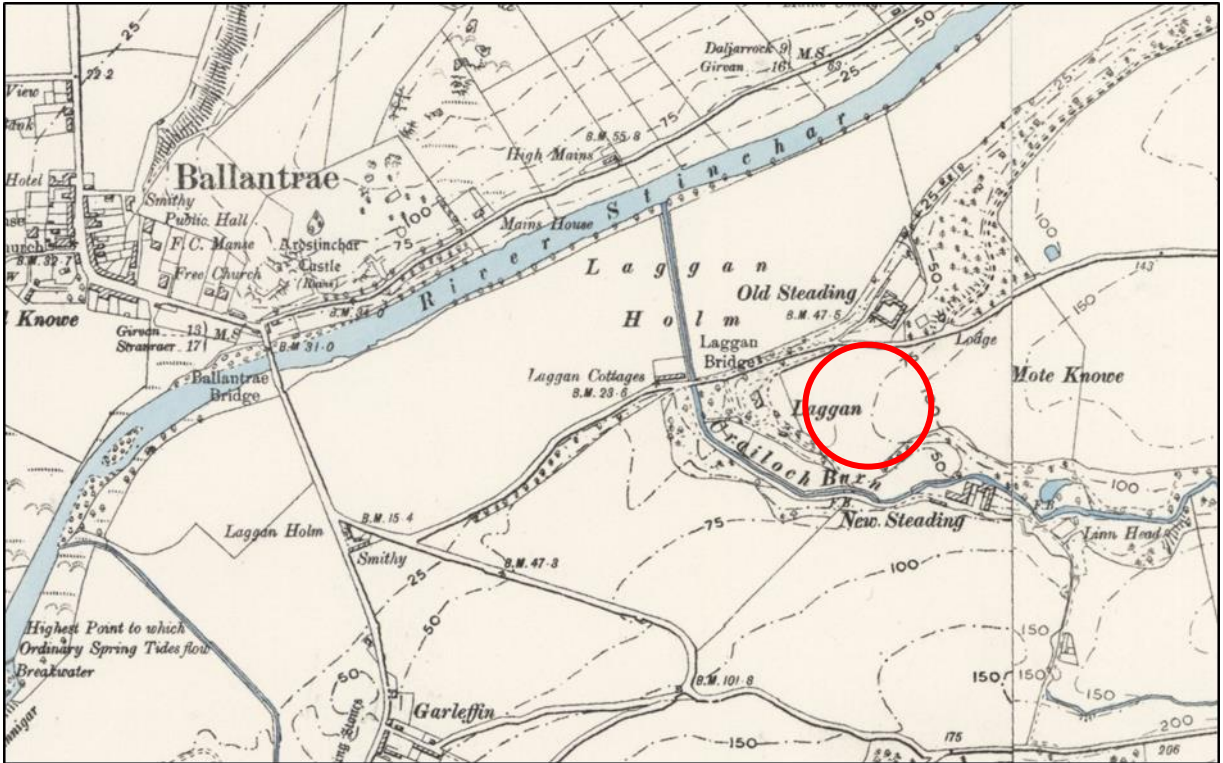


Figure 2: 2<sup>nd</sup> edition Ordnance Survey of 1909

of any substantial and extensive disturbance during the modern period within the proposed development area provides the potential to recover previously unrecorded archaeological features.

11. The first definite evidence of activity within the development area comes from Roy's Military Survey of Scotland (1752-55) (Figure 1a). It provides the earliest mapping of the area that is sufficiently accurate to allow clear and direct comparison with the modern landscape. The map shows a largely unimproved landscape with significant proportions of the ground under cultivation in the form of rigs, but much of the land is unenclosed.
12. The 1st edition Ordnance Survey (Figure 1b) of 1857 depicts the area as open land on the downslope of Moat Knowe hill to the east framed by Crailoch Burn to the west and south, and the route of the modern classified road to the north. The same is shown on the 2nd edition Ordnance Survey of 1909 (Figure 2) and it is of note that the existing access track between the Old Steading and New Steading has not yet been established.

## Project Works

13. The programme of works comprised the archaeological monitoring of excavations at Laggan Dairy, Ballantrae (Figures 3 and 4a). These works involved the monitoring of the construction works for a new slurry lagoon at Laggan Dairy, Ballantrae. The footprint of the development consisted of a large trapezoidal shaped area linked by a new access track which ran off an existing farm track (Figure 3) which covered an area of 4279m<sup>2</sup>. Only part of the development footprint was to be machine stripped down to the underlying subsoil with the outer limits retaining its topsoil and having soil deposited as banks on it and the access track only having the upper layer of sod removed over which a terram layer was to be added followed by a layer of type 2 hard-core. The area monitored was rectangular shaped and measured 37m (from east to west) by 38m (from north to south), 1443m<sup>2</sup> in total. The works were carried out in compliance with the terms agreed in the Written Scheme of Investigation (Allsop 2017).
14. Any potential archaeological features were investigated and recorded, with the on-site works taking place on the 14<sup>th</sup> of May 2017. All works were conducted in accordance with the Chartered Institute for Archaeologists' Standards and Policy Statements and Code of Conduct and Historic Scotland Policy Statements.

## Findings

15. The Topsoil, (001), within the excavated part of the development area (Figure 4b) consisted of moderately compacted, mid grey brown sandy silt with occasional small stone and pebble inclusions. The topsoil layer had a depth range of between 0.16m-0.27m (Figure 5a). The main underlying subsoil, (002), consisted of moderately compacted, mid orange brown (with mid yellow patches) sandy silt with moderate grey coloured angular and small rounded stone inclusions. In the easternmost part of the excavated area the subsoil, (004), though similar to the main subsoil, contained more frequent inclusions of stone.
16. A group of two parallel linear trenches, (003), were identified crossing the easternmost part of the site (Figure 5b). These features were spaced 6m apart and measured 0.3m wide by 0.37m deep. The trenches cuts were filled by a mix of 80% sub angular and sub rounded stone and 20% redeposited subsoil material similar to the main subsoil type on site (002). No other significant features or artefacts were identified on the site.

## Discussion

17. The only anthropic features within the development area were a group of 19th century (or later) stone filled field drains, (003), which were located in the north eastern part of the development area. The sparsity of other agricultural drains and features may be due to the subsoil within the excavated part of the development area which upon inspection appeared to be well drained and also the fact that development area and the surrounding fields seems to be used almost exclusively as pastureland rather than for arable farming which would explain the lack of agricultural features like furrows or drains.

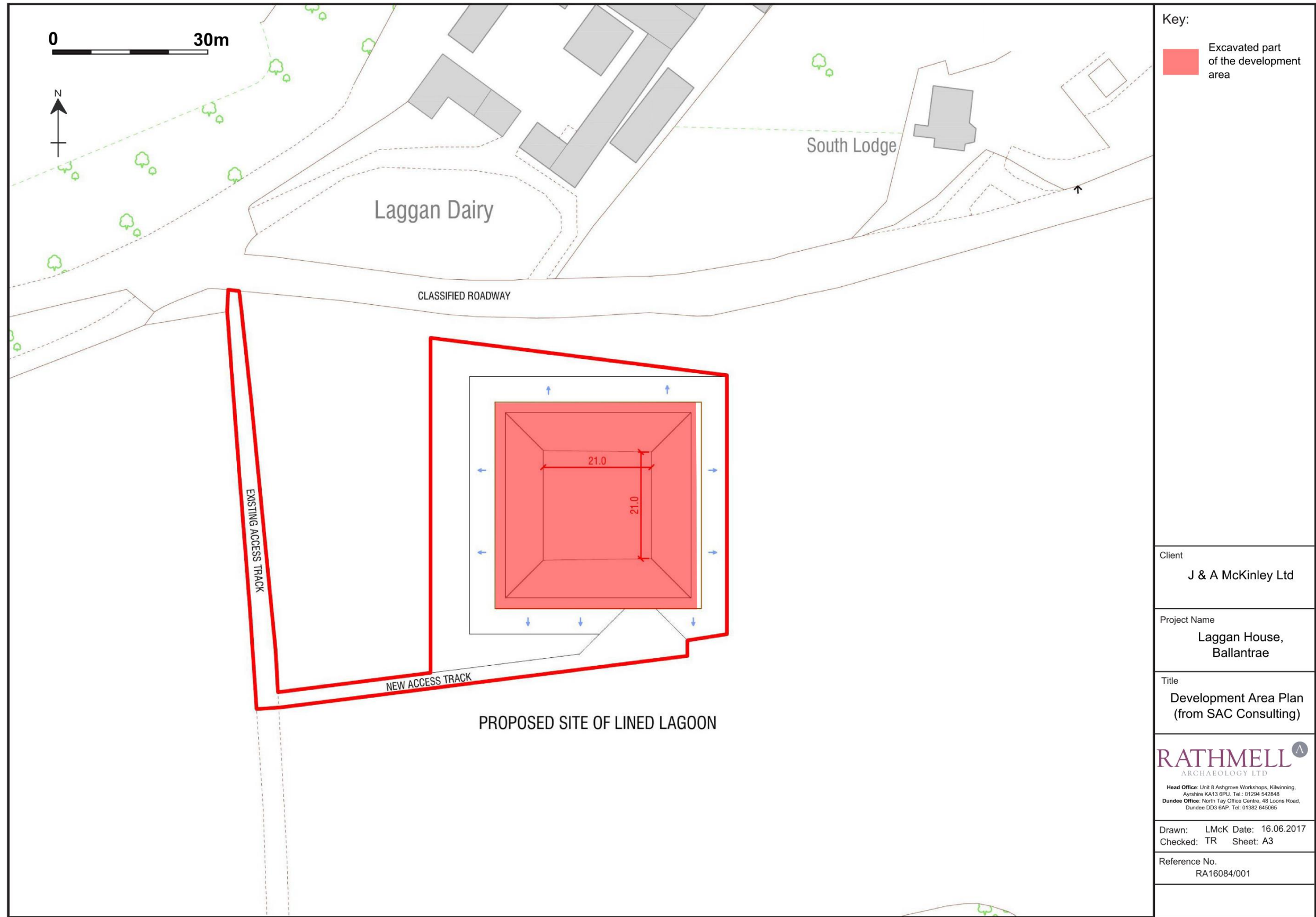


Figure 3: Plan of the excavated part of the development area.





Figure 4a: Pre excavation view of the development area. From the NW.



Figure 4b: Post excavation view of the development area. From the SW.



Figure 5a: View showing the topsoil thickness within the development area. From the NW.



Figure 5b: View stone filled drains (003). From the NNW.

## Recommendations

18. This Data Structure Report covers archaeological works undertaken in support of construction works for a new slurry lagoon at Laggan Dairy, Ballantrae. South Ayrshire (Planning Reference 16/00894/APP). The recommendations put forward in this document will be contributory to any final recommendations made on the completion of the works.
19. The archaeological monitoring works identified only stone filled agricultural drains dating most likely dating to the 19<sup>th</sup> century or later. No other significant archaeological features or artefacts were identified and as such it is recommended that no further work will be required.
20. The appropriateness and acceptability of our recommendations rest with the representative of the West of Scotland Archaeological Service.

## Conclusion

21. Archaeological monitoring work was carried out for North Ayrshire Council, in support of construction works for a new slurry lagoon at Laggan Dairy, Ballantrae. South Ayrshire (Planning Reference 16/00894/APP). These archaeological works are designed to mitigate any adverse impact on the archaeological remains within the development area.
22. This report covers the monitoring of the machine stripping of the development area. During the monitoring a group of two stone filled field drains was identified in the eastern part of the development area. These drains most likely dated from the 19<sup>th</sup> century or later. Other than these agricultural features no other significant features or artefacts were identified.

## Acknowledgements

23. The author would like to thank the client Alan McKinley of J & A McKinley Ltd for his assistance on site. The author would also like to thank Claire Williamson senior archaeologist with Rathmell Archaeology Ltd for her kind input and editing.
24. This project has been monitored for the West of Scotland Archaeological Service by Martin O'Hare who has given guidance and direction throughout.

## References

### *Documentary*

Museum of London, 1994, Archaeological Site Manual

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Allsop, C. 2017 Laggan Dairy, Ballantrae, South Ayrshire: Archaeological Mitigation, Written Scheme of Investigation, unpublished commercial report by Rathmell Archaeology Ltd.

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### *Cartographic*

Roy, W. 1752-55. Roy's map of the Lowlands

Ordnance Survey, 1857, 25-inch 1<sup>st</sup> edition, Ayr Sheet LXV.12

Ordnance Survey, 1909, 25-inch 3<sup>rd</sup> edition, Ayrshire Sheet 065.12

## Appendix 1: Registers

Within this appendix are all registers pertaining to works on-site during the watching brief:-

### *Context Register*

<b>Context No.</b>	<b>Type</b>	<b>Description</b>	<b>Interpretation</b>
001	Deposit	Moderately compacted, mid grey brown sandy silt with occasional small stone and pebble inclusions. The layer had a depth range of between 0.16m-0.27m.	Topsoil within the development area.
002	Deposit	Moderately compacted, mid orange brown (with mid yellow patches) sandy silt with moderate grey coloured angular and small rounded stone inclusions.	The main naturally occurring subsoil within the development area.
003	Cut/fill	Group of two stone filled linear trenches which were orientated in a NNW to SSE direction. The trenches were parallel and spaced 6m apart. The trenches cut was 0.3m wide and 0.37m deep. The fill of the trenches consisted of 80% small to medium sized sub angular shaped stone and 20% redeposited naturally occurring subsoil similar to the main subsoil within the development area (002).	Group of two 19 <sup>th</sup> century or later stone filled drains.
004	Deposit	Moderately compacted, mid orange brown (with mid yellow patches) sandy silt with frequent grey coloured angular and small rounded stone inclusions.	Naturally occurring subsoil located in the Eastern part of the development area.



*Photographic Register*

<b>Image No.</b>	<b>Digital</b>	<b>Description</b>	<b>From</b>	<b>Date</b>
01	DSCN0351	Pre excavation view of the development area.	NW	14/06/17
02	DSCN0352	Pre excavation view of the development area.	ESE	14/06/17
03	DSCN0353	Working shot (at the start of the day).	W	14/06/17
04	DSCN0354	View of the 1 <sup>st</sup> strip of the development area.	E	14/06/17
05	DSCN0355	View of the 1 <sup>st</sup> and 2 <sup>nd</sup> strips of the development area. Shows soil depth.	W	14/06/17
06	DSCN0356	View of the 2 <sup>nd</sup> strip of the development area.	N	14/06/17
07	DSCN0357	View of stone filed drain (003) in the NE part of the development area.	N	14/06/17
08	DSCN0358	View of the development area machine strip (1/3 done).	W	14/06/17
09	DSCN0359	Working shot.	WNW	14/06/17
10	DSCN0360	View of the development area machine strip (2/3 done).	WSW	14/06/17
11	DSCN0361	Post excavation view of the development area.	S	14/06/17
12	DSCN0362	Post excavation view of the development area.	ENE	14/06/17
13	DSCN0363	Post excavation view of the development area.	SW	14/06/17
14	DSCN0364	Post excavation view of the development area.	NW	14/06/17



## Appendix 2: Discovery & Excavation in Scotland

<b>LOCAL AUTHORITY:</b>	South Ayrshire
<b>PROJECT TITLE/SITE NAME:</b>	Laggan Dairy, Ballantrae
<b>PROJECT CODE:</b>	RA16084
<b>PARISH:</b>	Ballantrae (Kyle And Carrick)
<b>NAME OF CONTRIBUTOR:</b>	Liam McKinstry
<b>NAME OF ORGANISATION:</b>	Rathmell Archaeology Limited
<b>TYPE(S) OF PROJECT:</b>	Watching brief
<b>NMRS NO(S):</b>	None
<b>SITE/MONUMENT TYPE(S):</b>	None
<b>SIGNIFICANT FINDS:</b>	None
<b>NGR (2 letters, 8 or 10 figures)</b>	NX 09541 82252 (centred)
<b>START DATE (this season)</b>	14 <sup>th</sup> June 2017
<b>END DATE (this season)</b>	14 <sup>th</sup> June 2017
<b>PREVIOUS WORK (incl. DES ref.)</b>	None
<b>MAIN (NARRATIVE) DESCRIPTION:</b> (may include information from other fields)	<p>Archaeological monitoring work was carried out for North Ayrshire Council, in support of construction works for a new slurry lagoon at Laggan Dairy, Ballantrae. South Ayrshire (Planning Reference 16/00894/APP). These archaeological works are designed to mitigate any adverse impact on the archaeological remains within the development area.</p> <p>This report covers the monitoring of the machine stripping of the development area. During the monitoring a group of two stone filled field drains was identified in the eastern part of the development area. These drains most likely dated from the 19th century or later. Other than these agricultural features no other significant features or artefacts were identified.</p>
<b>PROPOSED FUTURE WORK:</b>	None
<b>CAPTION(S) FOR ILLUSTRS:</b>	None
<b>SPONSOR OR FUNDING BODY:</b>	J & A McKinley Ltd
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<b>ARCHIVE LOCATION (intended/deposited)</b>	Report to West of Scotland Archaeology Service and archive to National Record of the Historic Environment

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