

Culzean Castle, Outfall: Archaeological Monitoring

Data Structure Report



by Alan Matthews

issued 27th March 2014

on behalf of The National Trust for Scotland

RATHMELL 
ARCHAEOLOGY LTD

Quality Assurance

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Signed

Date ...27th March 2014.....

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 ...27th March 2014.....

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Introduction

1. This Data Structure Report has been prepared for the National Trust for Scotland in support of a series of test pits relating to the establishment of a new sewage outfall at Culzean Castle, South Ayrshire. The archaeological works were designed to mitigate any adverse impact on the archaeological remains within the development area. The location of the work is in proximity to several known historical and archaeological features including:
 - Culzean Castle Estate, Culzean Castle, which is a category A listed building protected under the terms of Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997.
 - Culzean Coves, Caves, which is a scheduled monument protected under the terms of Ancient Monuments and Archaeological Areas Act 1979.
2. A number of other structures and significant archaeological sites are known to exist in proximity to the development area and as elements of the wider Designed Landscape surrounding Culzean Castle. The test pits have been located so as not to disturb any known archaeological sites.
3. Rathmell Archaeology Ltd has been appointed by the National Trust for Scotland to undertake the implementation of archaeological mitigation works. All works undertaken comply with Rathmell Archaeology Ltd standard working procedures and West of Scotland Archaeology Service standard conditions. The Data Structure Report is designed to meet the requirement of the National Trust for Scotland, West of Scotland Archaeology Service and South Ayrshire Council.

Archaeological and Historical Background

4. From the 12th to the early 17th century, Culzean was one of a number of small castles of the Kennedy family. It occupied a strong position on top of cliffs, with a steep valley and escarpments defending the landward side (Figure 1a). A series of caves in the rock beneath contained "two dainty spring wells". The fortified caves can still be seen at NS 2327 1030, just above high water mark. In the hands of a cadet branch before it became the seat of the head of the family in the mid-18th century, it remained a comparatively modest and typical Scots tower house.
5. The old castle was remodelled by Robert Adam (Close and Riches 2012) for David, 10th Earl of Cassilis, starting in 1775. The S front was built up, incorporating some of the masonry of the old tower in the main block; wings were added to E and W. Although the central range of Culzean Castle incorporates remains of the earlier castle it is not built on the site of it. After some years, the drum tower on the edge of the cliff was added, and the central well was filled in. Adam's work included the stable buildings, also the mock ruined arch and causeway which now form the main approach to the castle. Figure 1b shows the Culzean Castle as it appears on the 1st edition Ordnance Survey. In 1879, the castle took its final form with the addition of the W wing on the site of Adam's brewhouse.
6. In 1945, the Kennedy family gave the castle and its grounds to the National Trust for Scotland (thus avoiding inheritance tax). In doing so, they stipulated that the apartment at the top of the castle be given to General of the Army Dwight D. Eisenhower in recognition of his role as Supreme Commander of the Allied Forces in Europe during the Second World War. The General first visited Culzean Castle in 1946 and stayed there four times, including once while President of the United States. An Eisenhower exhibition occupies one of the rooms, with mementoes of his lifetime.
7. The Ayrshire (Earl of Carrick's Own) Yeomanry, a British Yeomanry cavalry regiment, was formed by The Earl of Cassillis at Culzean Castle in about 1794. The castle re-opened in April 2011 after a refurbishment funded by a gift in the will of American millionaire William Lindsay to the National trust for Scotland. Lindsay, who had never visited Scotland, requested that a significant portion of his \$4 million go towards Culzean.

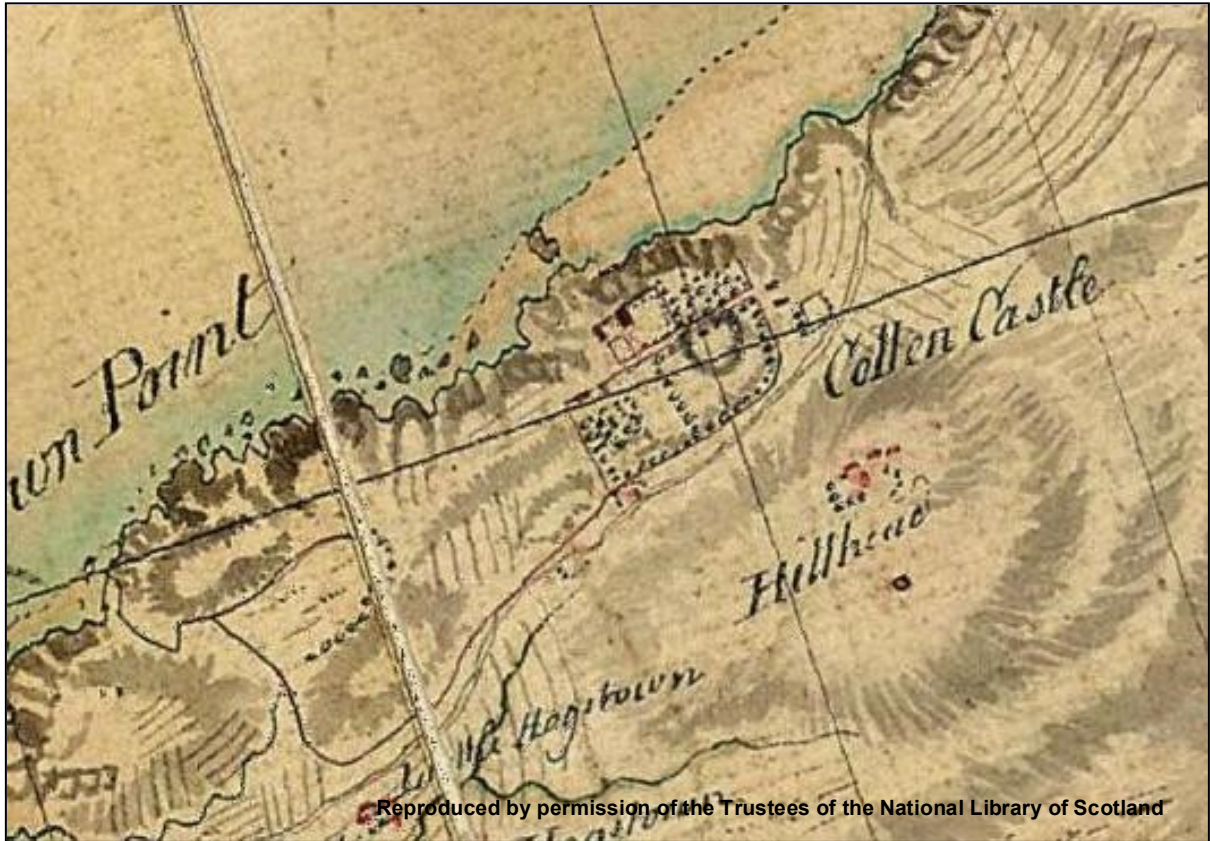


Figure 1a: Extract from Roy's Military Map of 1752-55

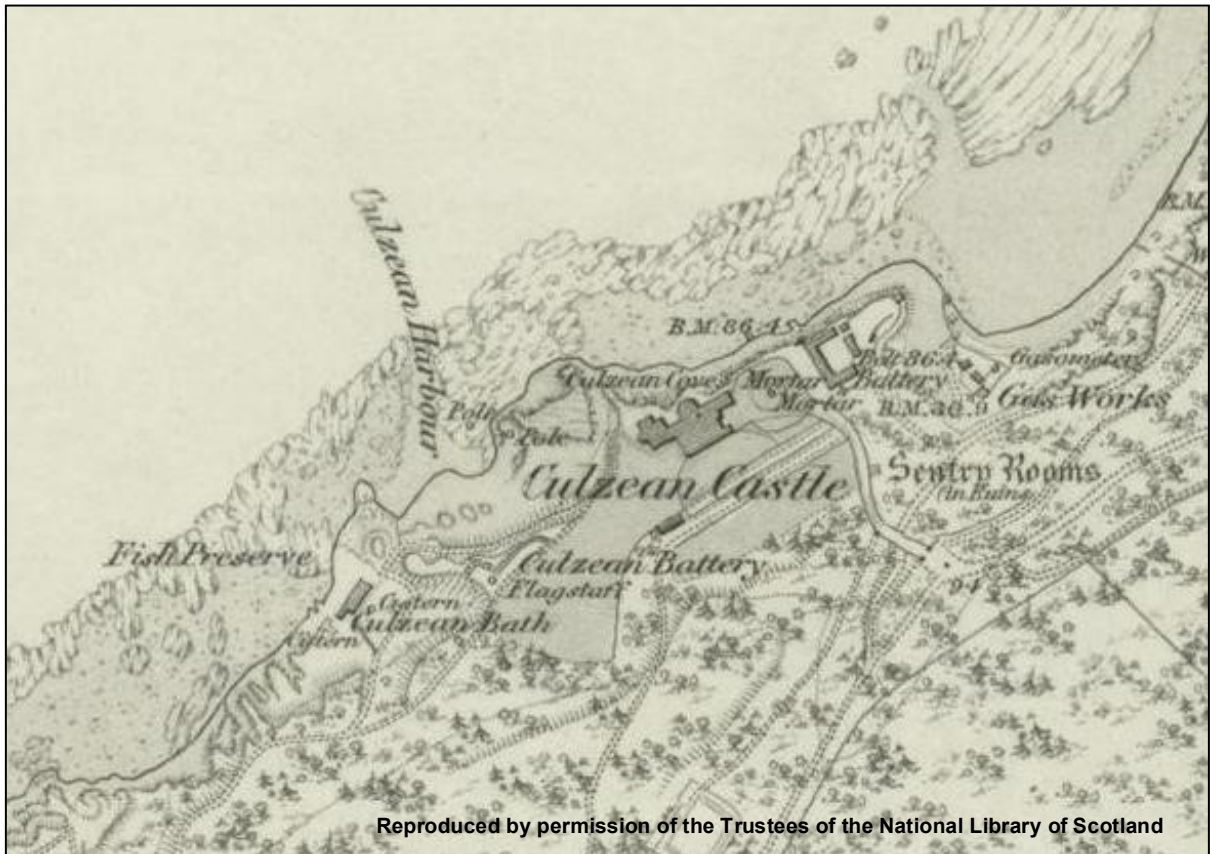


Figure 1b: Ordnance Survey 1st edition Map of 1864



Figure 2a: Culzean Castle



Figure 2b: Looking up slope from the test pits

Project Works

8. Archaeological monitoring works took place on the 18th of February 2014. Rathmell Archaeology Ltd arrived on site by 1100 by which time two of the test pits had been completely excavated and left open for inspection while the third was still in the process of excavation. Archaeological work involved the examination and recording of the open test pits along with any archaeological material uncovered. No further work was planned at this stage of the project and so no further monitoring work was carried out.

Findings

9. The archaeological monitoring work was carried out immediately to the north-west of Culzean Castle (Figure 2a) on a steep bank (Figure 2b). Test pits were being excavated by structural engineers to determine the suitability of each location for a concrete pad. The concrete pads are intended to support a waste outflow pipe. Therefore, the location of each test pit was determined by the engineers on site and based on a previous examination of the area (Figure 5).
10. Test pit 1 (TP1) (Figure 3a) measured 0.95m north-west by south-east and 1m south-west by north-east. Due to the natural slope of the landscape it was excavated to a depth of 0.58m at the north-east end and 0.74m at the south-west end. The topsoil (1001) was about 40mm thick and composed of grass and moss with some shallow sandy soil. Deposit (1002) contained angular fragments of stone in a sandy soil matrix. Included within this context were some small fragments of building debris. TP1 had brown sandy silt at the base (1003).
11. Test pit 2 (TP2) (Figure 3b) measured 0.8m north-east by south-west and 0.9m south-east by north-west. Again, due to the natural slope of the landscape it was excavated to a depth of 0.75m at the south-west end and 0.6m at the north-east end. The deposits uncovered were very similar to those observed in TP1. Approximately 60mm of topsoil (2001) of similar character to (1001) was present. Deposit (2002) was mainly composed of angular stones similar to (1002) but with less of the sandy matrix and no building material present. TP2 had bedrock (2003) at the base.
12. Test pit 3 (TP3) (Figure 4a) measured 0.8m north by south and 0.65m east by west. TP3 was excavated to a depth of 0.78m. The sediments observed in TP3 were similar to those described above, the upper half of the test pit was composed of topsoil (3001) and the lower half was composed of a mid-brown silty subsoil (3002). A quantity of building material was recovered from (3001) including window glass, fragments of iron fence posts, and pieces of slate. Also recovered from (3001) was bed springs. Three architectural fragments were also recovered measuring approximately 280mm by 350mm (Figure 4b).
13. There was no indication of *in-situ* structural remains in any of the three test pits excavated to the north-west of Culzean Castle. Anthropogenic material was recovered from the upper levels of TP1 and TP3 including two large architectural fragments from TP3. This material was recovered from a mixed context from which other modern (late 20th or 21st century) material was also uncovered. All anthropic material was recovered from disturbed and unsecure contexts.



Figure 3a: TP1



Figure 3b TP2



Figure 4a: TP3



Figure 4b: Architectural fragments recovered from TP3

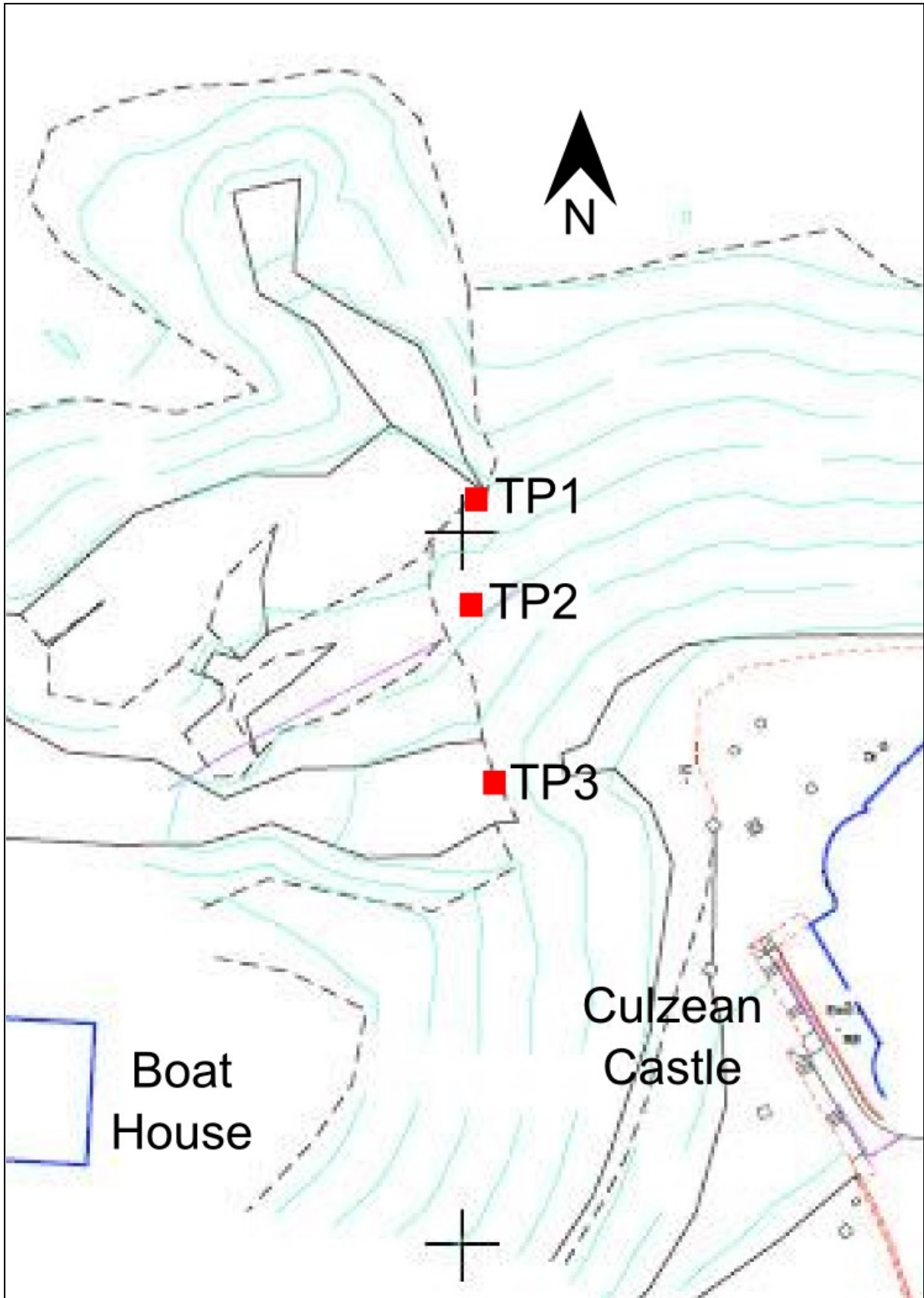


Figure 5: Location of test pits.

Discussion

14. Archaeological examination of the three test pits excavated to the north-west of Culzean Castle revealed no *in-situ* structural remains and the anthropic material uncovered was all from disturbed and unsecure contexts which contained a mixture of modern material.
15. Those architectural fragments which were uncovered from TP3 were assessed to be sandstone quoins and probably of late 18th or early 19th century date. Given the frequency of refurbishment which has taken place to the Castle and its surrounding walls and structures, it is not surprising that these larger fragments would have been discarded here along with other building debris. In this case their presence in the test pits in an unsecure context is of no archaeological significance.
16. While it is true that there is clearly the potential for the recovery of anthropic material from the surrounding area, it is likely that this too would be from disturbed contexts.

Recommendations

17. No significant archaeological deposits were uncovered and no *in-situ* structural remains were uncovered during examination of the test pits. Anthropic material was uncovered in the test pits but it was of mixed date and no archaeological significance.
Rathmell Archaeology Ltd therefore recommend that no further archaeological works are required on site in relation to the excavation of these test pits or in the case of future work at these test pit locations.
18. The appropriateness and acceptability of our recommendations rests with the West of Scotland Archaeology Service and South Ayrshire Council.

Conclusion

19. A programme of archaeological monitoring was carried out in support of the establishment of a new sewage outfall at Culzean Castle, South Ayrshire. Three test pits were examined by an archaeologist from Rathmell Archaeology Ltd corresponding to the location for concrete footing for the proposed pipe. The archaeological works were designed to mitigate any adverse impact on the archaeological remains within their development area. The archaeological works took place on a steep bank on the shore immediately to the north-west of Culzean Castle.
20. No archaeologically significant deposits or *in-situ* structural remains were uncovered during the course of this work. No archaeologically significant anthropic material was recovered. Rathmell Archaeology Ltd recommends that no further archaeological work is required with regards to this development.

References

Close, R. and Riches, A., 2012, *The Buildings of Scotland, Ayrshire and Arran*. Yale University Press.

Cartographic

Roy, 1747-55, Military Survey of Scotland

Ordnance Survey, 1864, 1st edition

Appendix 1: Registers

Within this appendix are all registers pertaining to works on-site during the archaeological mitigation.

Photographic Register

Image No.	Digital	Description	From	Date
1	813	Working shot of TP3 during excavation	-	18/2/14
2	814	TP1	S	18/2/14
3	815	TP1	SE	18/2/14
4	816	TP1	NW	18/2/14
5	817	NW facing section TP1	NW	18/2/14
6	818	NE facing section of TP1 – sandstone at top	NE	18/2/14
7	819	Relationship between TP1 and TP2	S	18/2/14
8	820	Show position	S	18/2/14
9	821	TP2 as dug	W	18/2/14
10	822	Looking up slope	NW	18/2/14
11	824	Looking up slope	NW	18/2/14
12	825	TP2 as dug	W	18/2/14
13	826	NW facing section TP2	NW	18/2/14
14	828	NW facing section TP2	NW	18/2/14
15	829	Looking down into TP2	NW	18/2/14
16	830	TP3 as dug	NW	18/2/14
17	831	E facing section TP3	E	18/2/14
18	833	E facing section TP3	E	18/2/14
19	834	N facing section of TP3 – dressed stone	-	18/2/14
20	835	N facing section of TP3 – dressed stone	-	18/2/14
21	836	N facing section of TP3 – dressed stone	N	18/2/14
22	837	Architectural frags from (3001)	-	18/2/14
23	839	Architectural frags from (3001)	-	18/2/14
24	840	Architectural frags from (3001)	-	18/2/14
25	841	Molded stone architectural frag from (3001)	-	18/2/14

Context Register

Context No.	Area/ Trench	Type	Description	Interpretation
1001	TP1	Deposit	Loose, dark brown, silty loam, vegetation, roots, up to 4cm thick but generally 1cm, covers whole area of test pitting.	Topsoil
1002	TP1	Deposit	Loose, angular stones up to 12cm at top of context, reducing to 4cm at base matrix between is gritty sand, moderate chunks of sandstone blocks at top of context up to 27cm x 21cm, 55cm to 70cm, visible in all sections	Hillwash of shattered bedrock and topsoil with some stone and building stone
1003	TP1	Deposit	Loose, mid-yellow brown, sandy silt	Silty layer above bedrock
2001	TP2	Deposit	Loose, dark brown, silty loam, roots, up to 10cm thick but generally 6cm, covers whole area of test pitting, same as (1001) and (3001)	Topsoil
2002	TP2	Deposit	Loose, angular stones up to 35cm x 22cm, large and smaller stones mixed throughout, matrix is dark brown gritty silt, same as (1002)	As (1002) except less matrix present
2003	TP2	Deposit	Bedrock basalt	Bedrock
3001	TP3	Deposit	Loose, dark brown, silty loam, roots grass and tree, building rubble multi-period bricks and white clay dressed stone and sandstone architectural fragments up to 55cm thick, covers whole area of test pitting, same as (1001) and (2001)	Topsoil – thicker than other TPs as located on flat terrace below steep bank
3002	TP3	Deposit	Mid brown, silty loam, angular stones less than 5cm, tree roots, at least 42cm deep as excavated, visible in all sections.	Subsoil

Appendix 2: Discovery & Excavation in Scotland

LOCAL AUTHORITY:	South Ayrshire
PROJECT TITLE/SITE NAME:	Culzean Castle, Outfall
PROJECT CODE:	RA14009
PARISH:	Kirkoswald
NAME OF CONTRIBUTOR:	Alan Matthews
NAME OF ORGANISATION:	Rathmell Archaeology Limited
TYPE(S) OF PROJECT:	Monitoring
NMRS NO(S):	
SITE/MONUMENT TYPE(S):	
SIGNIFICANT FINDS:	None
NGR (2 letters, 8 or 10 figures)	NS 23240 10354
START DATE (this season)	18 th February 2014
END DATE (this season)	18 th February 2014
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (may include information from other fields)	Three test pits were examined corresponding to the location for concrete footing from a proposed outfall pipe. The archaeological works took place on a steep bank on the shore immediately to the north-west of Culzean Castle. No archaeologically significant deposits and no <i>in-situ</i> structural remains were uncovered during the course of this work. No archaeologically significant anthropic material was recovered.
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	None
SPONSOR OR FUNDING BODY:	The National Trust for Scotland
ADDRESS OF MAIN CONTRIBUTOR:	Unit 8 Ashgrove Workshops, Kilwinning, Ayrshire KA13 6PU
E MAIL ADDRESS:	contact@rathmell-arch.co.uk
ARCHIVE LOCATION (intended/deposited)	Report to West of Scotland Archaeology Service, South Ayrshire Council and archive to RCAHMS Collections.

Contact Details

21. Rathmell Archaeology can be contacted at our Registered Office or through the web:

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Ayrshire	f.: 01294 542849
KA13 6PU	e.: contact@rathmell-arch.co.uk

22. The West of Scotland Archaeology Service can be contacted at their office or through the web:

West of Scotland Archaeology Service	www.wosas.org.uk
Charing Cross Complex	
20 India Street	t.: 0141 287 8332/3
Glasgow	f.: 0141 287 9259
G2 4PF	e.: enquiries@wosas.glasgow.gov.uk

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