

CONTENTS

SUMMARY	3
1 INTRODUCTION	3
1.1 Project origins	3
2 BACKGROUND	4
2.1 Location, topography and geology	4
3 HISTORICAL CONTEXT	5
3.1 Desk-based assessment	5
4 RESULTS	6
4.1 Development proposals	6
4.2 Methodology	7
4.3 Results	8
4.4 Discussion	12
4.5 Archive	13
5 ACKNOWLEDGMENTS	14
6 BIBLIOGRAPHY	14

FIGURES

Figure 1	Site location	3
Figure 2	Location of the proposed dwelling	4
Figure 3	Ordnance Survey map of 1875-76 illustrating the study area	6
Figure 4	Development proposals for the dwelling	7
Figure 5	Ground plan of the extant blackhouse prior to removal	8
Figure 6	Breached wall	9
Figure 7	Crude south wall to annex	9
Figure 8	Buttress with blocked door	9
Figure 9	East elevation of blackhouse	9
Figure 10	Reduction of stone by hand	10
Figure 11	Rear doorway without stonework	10
Figure 12	The site following building removal	10
Figure 13	Agricultural equipment dated 1879	10
Figure 14	Hand-made glass float with anchor motif	10
Figure 15	Stone disc, a toilet seat?	10
Figure 16	Soil profile towards the west	11
Figure 17	Plan of finished footprint	12
Figure 18	Western footing	12
Figure 19	Northern footing	13
Figure 20	Footprint fully excavated	13

SUMMARY

Reduction of the former blackhouse indicated that it had been constructed in the traditional style; a double dry-stone wall filled with sand.

Occupation deposits were severely compromised by later occupation and only relatively recent activity was evident within the building.

Excavation of the footings revealed no cultural activity associated with recent or the remote past.

The development of the site involved the hand removal of the extant stonework forming the extant blackhouse and machine removal of modern overburden and some topsoil within the proposed development footprint (figure 2).

This report describes the results of that archaeological watching brief and its archaeological context as summarised in the desk-based assessment.

All projects undertaken by Gerry Martin associates Ltd are carried out in accordance with PPS 5 (2010) and the guidelines and recommendations issued by the Institute of Field Archaeologists and English Heritage. Gerry Martin has achieved the accreditation level of MIfA (Member) with the Institute of Archaeologists (IfA).



Figure 2. Location of the proposed dwelling

2. BACKGROUND

2.1 Location, topography and geology

The study area (NM 05022 48425) is situated on the northern coast of Tiree, part of the archipelago forming the Inner Hebrides. The location overlooks Vaul beach from a raised beach. The sea has encroached during the 20th century (pers comm) although comparison between the first edition Ordnance Survey map (figure 3) and current cartography (figure 1) suggests that this has not been significant.

Local drift geology comprises sand often formed into sand dunes and relic sand dunes now under pasture providing good drainage, although outcrops of wet, peaty ground *sliabh* and areas of standing water are present throughout the island.

Communities are dispersed, articulated as a series of crofts whereby each township held areas of dark, rich cultivable earth, wet, peaty areas and grazing on higher ground.

The study site comprises the remains of a derelict blackhouse, standing to wall head height with a small southern annex and a short stretch of westward dry-stone wall.

The former dwelling lies adjacent to the road on ground sloping northwards. The extant building has been partially excavated into a raised field

3. HISTORICAL CONTEXT

3.1 Desk-based assessment

The study building has been subject to two formal surveys;

- Ease Archaeology in the Coastal Zone Assessment of Tiree (2001)
- Standing Building Survey (Level II) of 5 Vaul by Damien Hind (2011)

It is not the purpose of this report to repeat the findings of these documents but a short summary of the historical development on the Isle of Tiree will be relevant to the watching brief.

Iron Age settlement comprises over twenty fortified houses and two brochs. Only *Dun Mor Bhalla* (the big fort of Vaul) has been systematically excavated. These buildings remain as conspicuous dry-stone enclosures and monuments.

Roman occupation although indirect appeared to destabilise local tribes, forcing these peoples to the western and northern margins of Scotland, an area that was subject to early Christian missionaries such as St Columba who founded a daughter monastery on Tiree.

From the late eighth century, the first Viking raids occurred, leading to semi-permanent settlement. This action merged ethnicities; Gael, the native population and Norse, incoming mercenary warriors.

Between 1000 and 1500 the area was in a political state of flux passing between the Kings of Norway, the Isle of Man, local warlords and finally the Scottish Crown.

In the eighteenth century, Tiree held Jacobite sympathies.

In 1716, 358 Tiree men were disarmed over two days in Scarinish by the Duke of Argyll's representative while following the defeat of Culloden in 1745 thirty government soldiers were sent to Tiree with the orders "to apprehend some of the leading rebels and drive their cattle, nay I should be glad if he would even burn some of their houses".

During the nineteenth century, the island flourished through agricultural improvements such as the introduction of the potato and the development of a chemical industry derived from long-stemmed seaweeds known as *kelp*.

From kelp, soda and potash could be extracted vital for the soap, glass and bleaching industries associated with linen. This practice involved burning the kelp in U-shaped pits and pounded into lumps with kelp irons. The whole pit was then left overnight covered in turf, the cooled ash cakes collected the following day. Kelp pits and ridges still survive in the local landscape.

These developments lead to a population of nearly 4,500 by the 1830's with 600 horses and carts available by 1862 when a new extraction process was introduced onto the island necessitating construction of a factory at Middleton.

Inward investment appears to have been of limited success and caused resentment. The Duke of Argyll had initiated clearance often by grant but sometimes by eviction. In 1849, 600 people

emigrated to Canada, whilst towards the end of the nineteenth century Patagonia in Argentina was a popular location.

Sympathetic to the difficult conditions faced by kelp gatherers and the issue of insecure land tenure, the Napier Commission was set up by the Government to examine land issues during the early 1880s.

The Crofters Act of 1886 set fair rents, security of tenure, rights of succession for croft-holders and compensation when crofts were abandoned. In 1887, upon the arrival of the new Commission, rents were dramatically cut for the benefit of croft-holders (www.isleoftiree.com/history.html).

Despite these reforms, the process of de-population continued into the twentieth century the current population size being around 800.



Figure 3. Ordnance Survey map of 1875-76 illustrating the study area

4. RESULTS

4.1 Development proposals

The footprint for the development comprised a 22.80m x 7.87m rectangle that maintains the foundations for the new dwelling, reduced to a depth of approximately 2.00m (figure 4).

The ground-works involve two operations that require archaeological monitoring; the reduction of the extant building and the insertion of footings within the development footprint.

The western half of the development was benched in order to provide a flat surface into which the foundations were dropped to a depth between 0.60m and 0.90m.

Slight variations relating to the location of the ground plan were undertaken in order to account for an unknown water pipe that required re-routing.

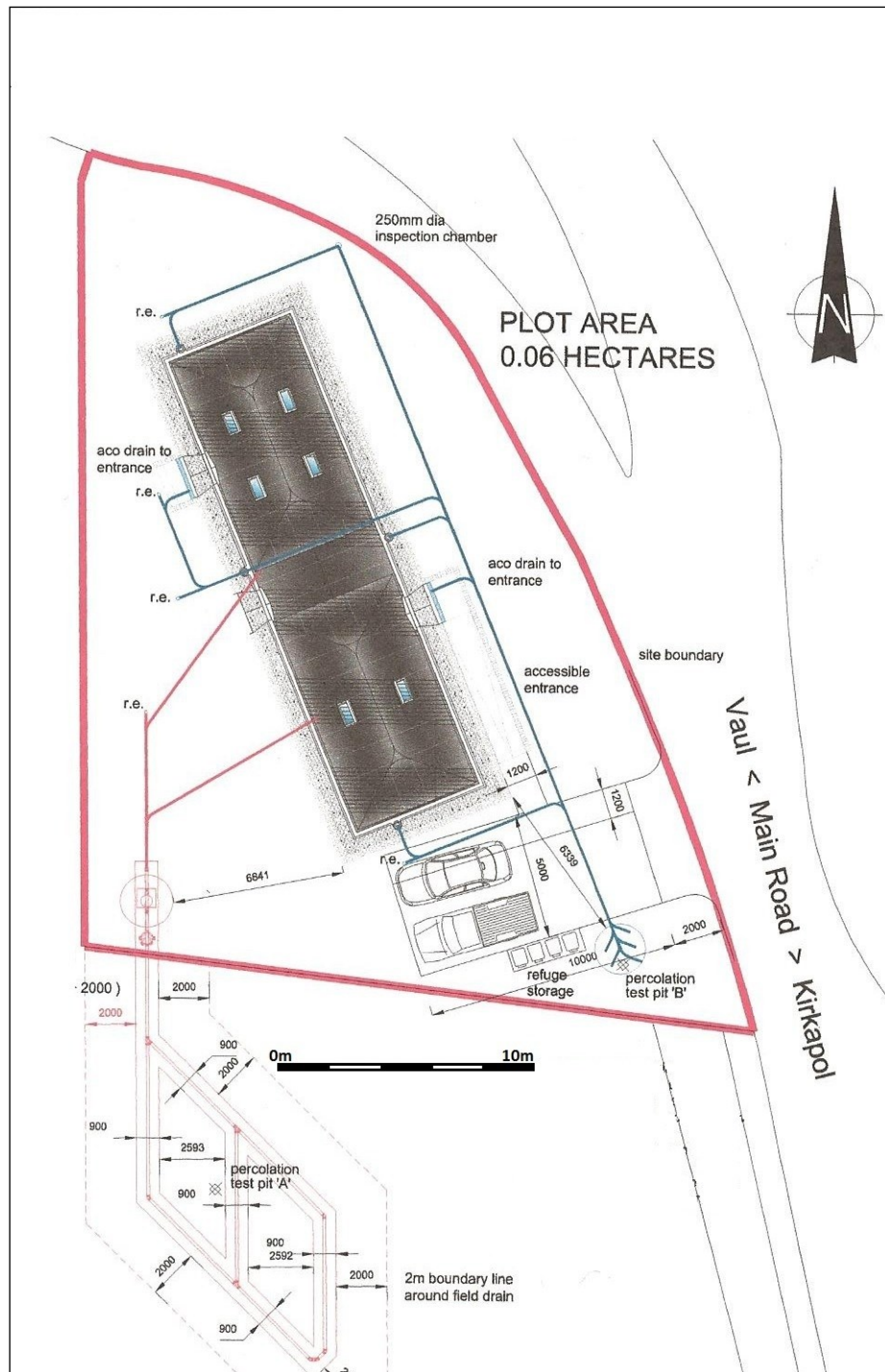


Figure 4. Development proposals for the dwelling

4.2 Methodology

The objective of the watching brief investigation is to carry out a formal programme of archaeological observations and investigations during any operations on site that may disturb or destroy archaeological or architecturally informative deposits or remains. The specific aims of the work are to:

- Provide a record of those works associated with the removal of the topsoil

- Provide a record of any significant archaeological or architectural features encountered by intrusive activities

In order to achieve these objectives, a record of all archaeological informative deposits encountered during the ground operations were made consisting of detailed context records on individual proforma sheets and field drawings, according to the protocols set out in the GMA manual.

The ground-works were undertaken by machine under archaeological supervision. This action consisted of observation of the spoil removal and monitoring the displaced soil. Revealed sections were checked for any past cultural activity and if necessary recorded according to the protocols of the GMA manual.

4.3 Results

The first archaeological operation conducted was to answer a series of questions arising from the standing building survey (figure 5).

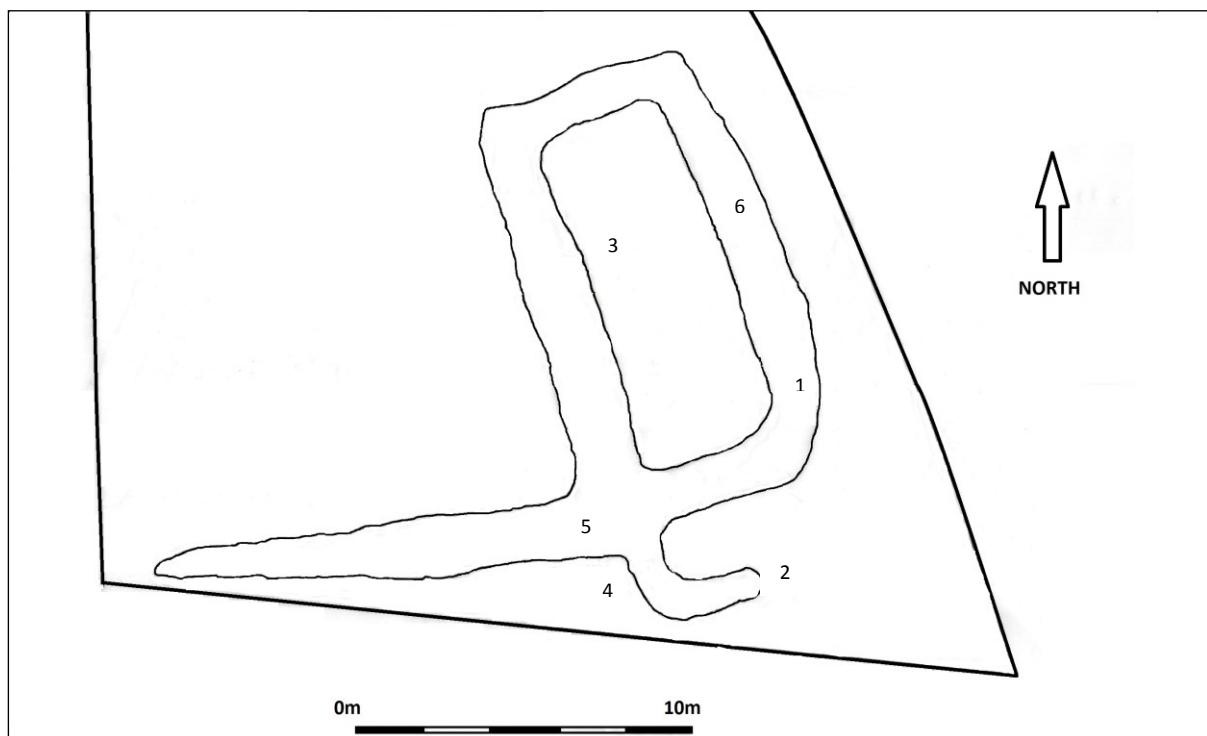


Figure 5. Ground plan of the extant blackhouse prior to removal

The following points were resolved:

1. The eastern limb of the southern wall was cleaned in order to observe whether a doorway existed in the south-eastern corner of the building. The internal face was seen to be roughly faced consistent with a later breach in the wall (figure 6).
2. There was no return on the southern annex wall indicating either a doorway or open space that probably served as a cart shed or store (figure 7).

3. An internal buttress was not keyed into the western wall and was therefore a later support for the roof or to staunch a bowing wall (figure 8).
4. The stone southern annex was a later addition butting the blackhouse.
5. A coarse rubble-stone wall butted the main building and was a later addition.
6. Larger stones were used on the eastern exposed wall where it was subject to driving rain (figure 9). Smaller stones were used on the internal faces probably to negate draughts caused through small cracks.



Figure 6. Breached wall



Figure 7. Crude south wall to annex



Figure 8. Buttress with blocked door



Figure 9. East elevation of blackhouse

The second operation was the hand reduction of the existing stonework (figure 10).

This process revealed that larger stones were used on the facing side of any exposed wall with smaller stones employed on the internal faces.

A rear blocked doorway was reduced (figure 8) confirming that this was a rear entrance leading to a back garden. Soil and other discarded material built up beside the western wall establishing a ground level almost as high as the wall head (figure 11).

Original doorways were formed from larger roughly shaped stones to form crude quoins (figures 9 and 11) with stone lintels. The rear door had a small step (figure 8) leading from the chamber but no formal threshold remained or existed for the front door (figure 9).



Figure 10. Reduction of stone by hand



Figure 11. Rear doorway without stonework

The wall fabric followed the traditional method of construction, namely erecting two skins of dry-stone wall without mortar and the void filled by sand. These thick walls up to 1.85m in width supported the roof trusses on the inside with water from the roof discharging through the sandy core of the wall.

No architectural embellishments were encountered including a total lack of windows.

After three days, the walls were reduced to ground level where it was clear that no foundations existed (figure 12)



Figure 12. The site following building removal



Figure 13. Agricultural equipment dated 1879



Figure 14. Hand-made glass float with anchor motif



Figure 15. Stone disc, a toilet seat?

No dating or diagnostic evidence was recovered from the core of the wall that may have suggested a date for construction. Circumstantial evidence from nearby unsecure contexts included farm machinery built in 1879 (figure 13), an undated but hand-made glass float with an anchor motif recovered from behind the western wall (figure 14), a circular stone disc with a central hole (figure 15) formed from a slab (toilet seat?) and occasional fragments of rusty iron, the remains of former tools and part of a cast iron range.

As the building was featured on the 1875 Ordnance Survey map it would appear likely that the study building dates to the mid-19th century. Curiously, no clay pipe was encountered nor pottery, items that may have defined occupation to a tighter date range

The third operation was to level the site that required reduction of the internal area within the building footprint.

Modern nylon fishing nets were encountered with spreads of dark grey ash that appeared to indicate casual occupation; probably occurring after the blackhouse was no longer inhabited but used as a fishing hut and store.

The floor of the building did not appear to be formalised being an earthen floor or a sandy floor perhaps covered in dried grass or straw.

Natural drift geology consisted of clean light brown sand (figure 16). Overlying this horizon were spreads of occasional crushed shell. Shallow and nebulous deposits of dark brown earth (sandy silt) were also prevalent. These contexts were non-cultural, the result of processes associated with dune formation and shifting sand, geo-morphological conditions that can accrue over a short period of time (figure 16).



Figure 16. Soil profile towards the west

The fourth operation involved the insertion of foundation trenches for the footings. These footings measured 1.70m in width and up to 0.90m in thickness forming a rectangle 22.80m x 7.87m (figure 17). The footings penetrated what was observed to be archaeologically sterile ground (figure 18). As there existed a remote possibility of encountering prehistoric deposits such as middens, buried below shifting sands and dunes, a watching brief was maintained.

The northern footing traversed a modern water pipe requiring re-routing of the pipe (figure 19).

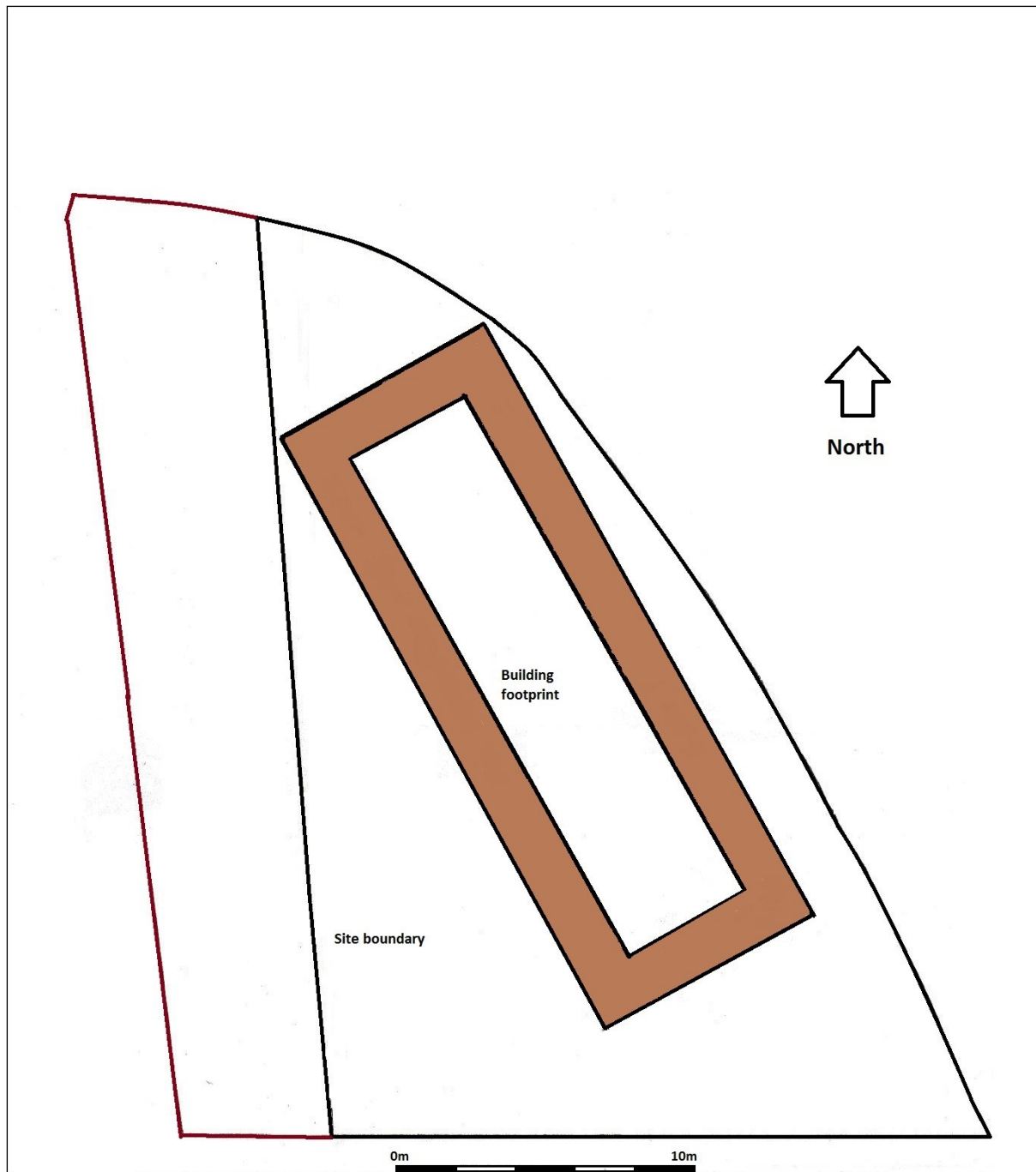


Figure 17. Plan of finished footprint

4.4 Discussion

The former blackhouse at 5, Vault appears to obey the principles of this form of vernacular architecture namely, thick double-skin stone walls filled with sand, minimal points of entry and a low profile negating the effects of inclement and severe weather.

It is not certain whether this building primarily served a domestic use or was part of a suite of agricultural buildings. No chimney was present, but a range may have exited through the grass roof. If this was case, then construction would appear to be no earlier than circa 1850 when the increased thermal efficiency of ranges became popular.

From 1950 onwards, this style of building went largely out of use and served as informal fishing huts where nets could be stored.

No archaeological deposits pre-dating the building were encountered (figure 20).



Figure 18. Western footing



Figure 19. Northern footing



Figure 20. Footprint fully excavated

4.5 Archive

The archive has been compiled in accordance with the project design and the guidelines set out by curatorial authority (WoSAS) and the Institute of Field Archaeologists.

The archive will be deposited with an appropriate repository and a copy of the report donated to the Sites and Monuments Record, as requested by the curatorial authority.

5. ACKNOWLEDGMENTS

I am grateful to Mr Andrew Herd for commissioning the project and his assistance with the plans and development details. I am also in debt to Andrews' team of builders for their co-operation and tolerance; Jim, Fergus and Willem, I thank you.

I would also like to thank Mr Martin O'Hare (WoSAS) for his guidance with the archaeological brief, Mr Damien Hind for providing the building survey report and other relevant documentary material and finally, numerous islanders who provided background and anecdotal information pertaining to the Isle of Tiree and the study area.

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