



Highland Archaeology Services Ltd

Bringing the past and future together

Hilliclay Stemster Water Main Replacement



Watching Brief



7 Duke Street Cromarty Ross-shire IV11 8YH Tel / Fax: 01381 600491
Mobile: 07834 693378 Email: info@hi-arch.co.uk Web: www.hi-arch.co.uk

VAT No. 838 7358 80 Registered in Scotland no. 262144
Registered Office: 10 Knockbreck Street, Tain, Ross-shire IV19 1BJ

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Watching Brief

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Authors	Paul Humphreys, Cait McCullagh and John Wood

Summary

This report describes and summarises the results of a desk-based assessment, marking-out programme and watching brief conducted for a replacement water main at Stemster and Hilliclay, Caithness in 2008. The new water main ran through an area rich in archaeology, and 19 features or sites were noted during the desk-based assessment. Key areas of sensitivity were marked off and the route of the water main diverted slightly to avoid them. The watching brief identified no further features or sites, but NW of the Stemster reservoir from about chainage 100m to 600m a lithic scatter including chert, flint and quartzite was found in the ploughsoil.

Acknowledgements

The authors wish to thank Scottish Water Solutions for commissioning this work and in particular Ruairidh Taylor of SWS and the staff of Morrison Construction for their assistance. The desk-based assessment was by Cait McCullagh; sites were marked off for the contractors by John Wombell; the watching brief was carried out by Paul Humphreys.

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Contents

Acknowledgements	2
Location	4
Introduction, Aims and Objectives	4
Desk-based Assessment	4
Marking-out	7
Watching Brief	8
Conclusions and recommendations	15
Appendix 1: Micrographs of lithics	20
Appendix 2: Index to Photographs (Watching Brief)	23
Appendix 3: Table of features identified by desk-based assessment	25

Illustrations

Figure 1 Location Map	4
Figure 2 Features identified by desk-based assessment	5
Figure 3 Chain 800m - 1500m	8
Figure 4 Chain 0m - 800m	9
Figure 5 Chain 1500m - 2200m	11
Figure 6 Chain 2300m - 3100m	11
Figure 7 Chain 3100m – 3500m	12
Plate 1 Lithic debitage (Photo 57)	13
Plate 2 Lithic debitage (Photo 58)	13
Plate 3 Bedrock and till Mickle Burn (Photo 1)	16
Plate 4 Byre-house ND 1700 6308 extension looking SW (Photo 9)	16
Plate 5 Byre-house ND 1708 6315 looking N (Photo 13)	16
Plate 6 Long cairn ND 1702 6320 – past chamber damage, looking W (Photo 18)	17
Plate 7 Trench stripping at chain 600m (Photo 20)	17
Plate 8 Topography; looking S from byre-house ND 1708 6315 (Photo 24)	17
Plate 9 Possible house platform at chain 400m looking NW (Photo 25)	18
Plate 10 Byre-house ND 1670 6350 looking E (Photo 28)	18
Plate 11 Route up to Hilliclay looking NE (Photo 42)	18
Plate 12 Watermill wheel pit at Hilliclay Mains (Photo 46)	19
Plate 13 Disturbed area; Hilliclay Mains, looking NE (Photo 50)	19
Plate 14 Sisa mound looking NE (Photo 55)	19
Plate 15 (x40) - item 2 (Photo 59)	20
Plate 16 (x100) - item 2 (Photo 60)	20
Plate 17 (x100) - item 3 (Photo 61)	21
Plate 18 (x100) - item 15 (Photo 62)	21
Plate 19 (x100) - item 17 (Photo 63)	21
Plate 20 (x100) - item 19 (Photo 64)	22
Plate 21 (x100) - item 7 (photo 57) (Photo 65)	22

Location

Trenching for the new water main was observed between the Stemster Reservoir at OS Grid Ref ND 174 625 and the road junction near the Stonegun Quarries at ND 160 651. This route lies at approximately 104 - 111m above sea level.

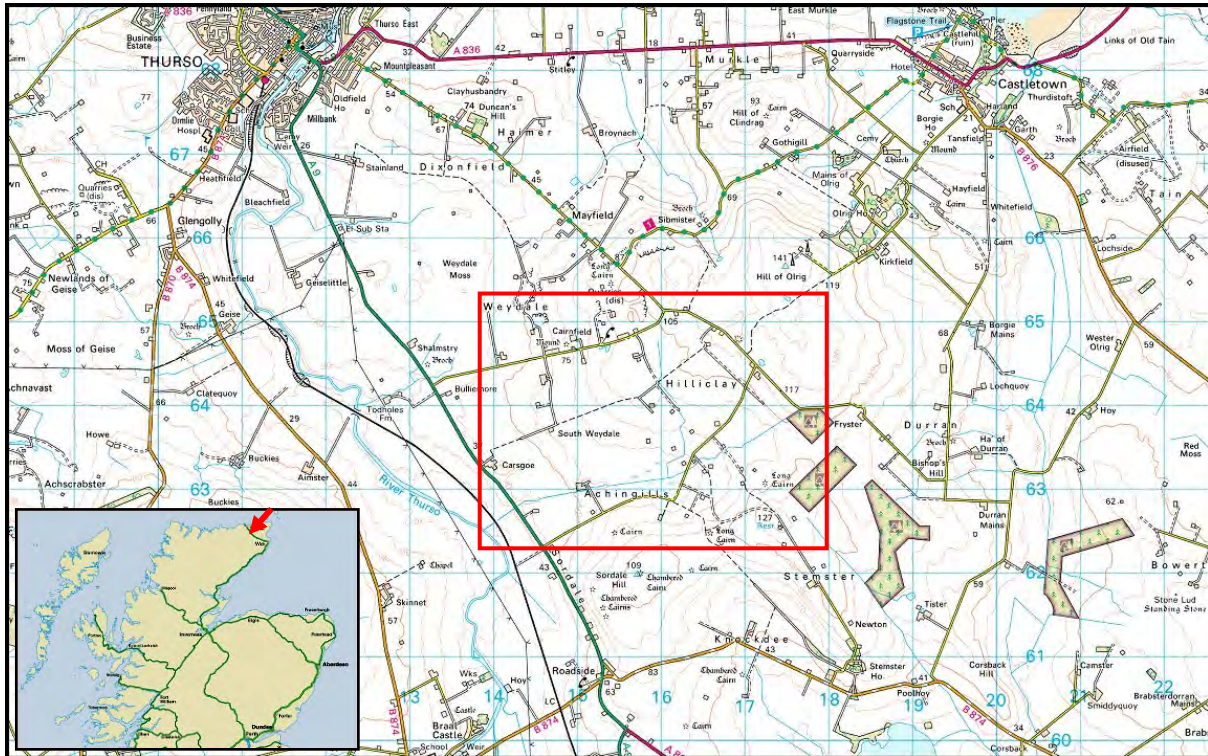


Figure 1 Location Map

(From OS 1:50,000 map; not to scale)

Introduction, Aims and Objectives

Scottish Water Solutions needed to replace the water main from the Stemster reservoir via Hilliclay to Waydale. The favoured route passed close to several known archaeological sites. Planning considerations required a watching brief to be carried out during the top soil stripping and some of the trenching works. The objective was to identify and record any archaeological features or finds affected by the work.

Desk-based Assessment

A desk based assessment of the features of archaeological and cultural features of significance known to be in the vicinity of the proposed Water Main Renwal at Hilliclay, Caithness was carried out by Cait McCullagh at the outset. The proposed route ran through a relic landscape of early nineteenth century agricultural improvement, comprising numerous farmsteads and associated structures, where there is also significant evidence of prehistoric features.

The route map as supplied by the client was checked in detail against the archaeological records, maps and aerial photographs. The offices of the Highland Council Historic Environment Record were visited on 30th July 2008, when relevant archaeological reports and, where available, the RAF vertical

aerial photographs taken in 1946 were examined. The National Monuments Record for Scotland, the 6 inch Ordnance Survey map series, and the map collections of the National Library of Scotland were all checked online¹.

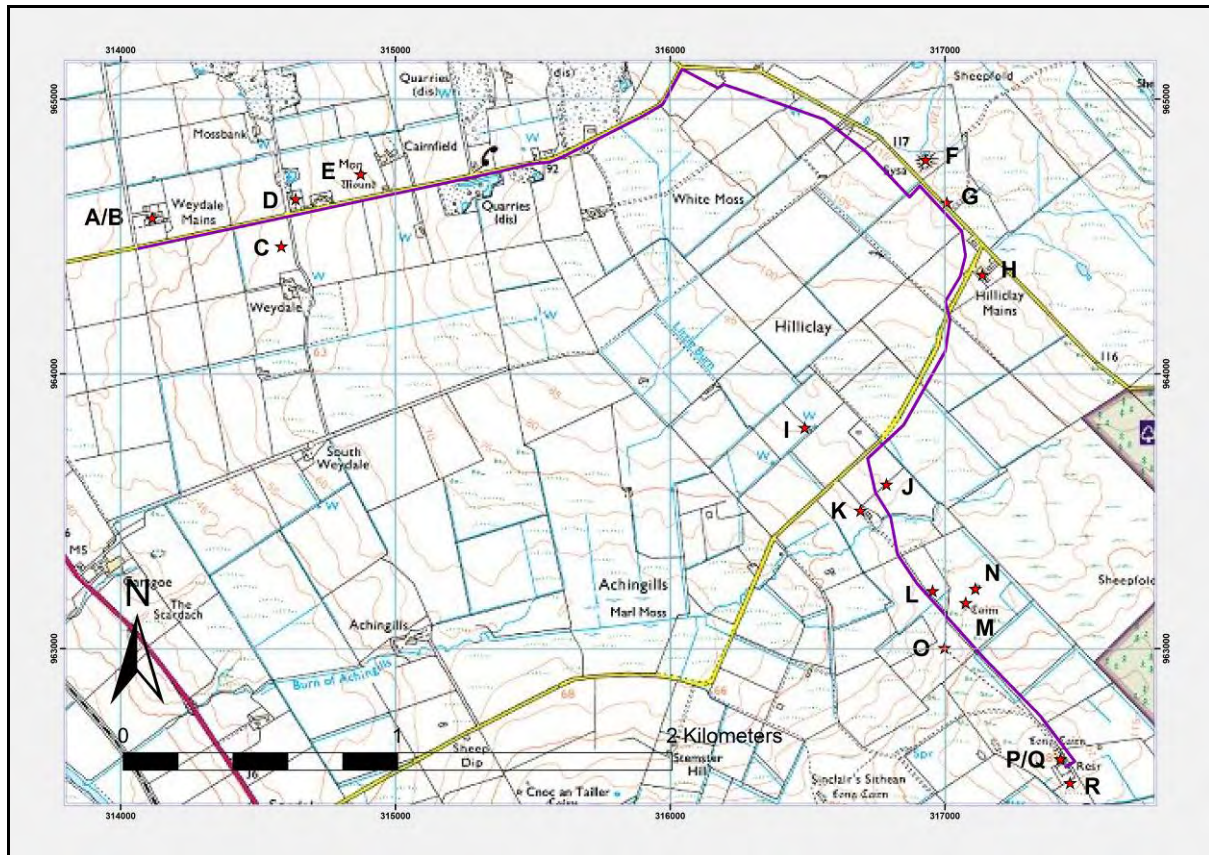


Figure 2 Features identified by desk-based assessment

Nineteen features of archaeological and cultural significance were identified (see Figure 2 above). These are described below; more details, including cross-references to the Highland Historic Environment Record (HHER) and National Monuments Record are given in Appendix 3. After consultation with Historic Scotland and the Highland Council the results were submitted to Scottish Water Solutions with recommendations for further input in 7 cases. Three sites were then marked off and the water main diverted slightly to avoid them; and a watching brief was set up to identify and record any archaeology found to be affected during the excavations for the water main.

Feature A: Weydale Mains Threshing Mill (ND 1413 6454)

Feature B: Weydale Mains (ND 1413 6456)

This Post Medieval Farmstead and associated Threshing Mill are located along an access road NNW of the roadway along which the Water Main Renewal was proposed to run and were therefore extremely unlikely to be directly affected by works. No mitigation was proposed here.

Feature C: Weydale (general)

Described in the Statistical Account of Olrick Parish (1834 – 45)² as being ‘now divided and enclosed by the respective proprietors and fast yielding to cultivation’, Hilliclay comprises a number of built heritage features that signify this early nineteenth century period of agricultural improvement. The whole area has been designated monument status on the Highland Council’s Historic Environment

¹ www.rcahms.gov.uk; www.nls.uk/collections/maps/index.html; <http://www.promap.co.uk/> [Accessed on 25/08/08]

² New Statistical Account of Olrick, County of Caithness, 1834 – 45, <http://stat-acc-scot.edina.ac.uk/link/1834-45/Caithness/Olrick/> [Accessed on 2/09/08]

Record³ and, as such, care was advised where the remains of farmsteads and associated agricultural structures could be seen on or close to the proposed water main. Individual features forming part of this settlement which are separately recorded on both the Historic Environment Record and the National Monuments Record of Scotland⁴ are listed separately below (Features A-B; H-I; K-M; O and S).

Feature D: Weydale Schoolhouse and Primary School (ND 1462 6459)

This undated built feature is located on the opposite side of the road along which the water main was to be routed. It was unlikely to be directly impacted by works, and no mitigation was proposed.

Feature E: Weydale Cairn (ND 1487 6472)

Interpreted as being either a cairn or a mound of Neolithic to Bronze Age date, Weydale Cairn is located N of the opposite side of the road along which the water main would be routed. It is one of six Prehistoric – Early Medieval archaeological features along the water main route – the other five features being: F; J; N; P and Q. However at this point the water main was planned to run within the road line and unlikely to affect archaeology.

Feature F: Sysa Mound (ND 1694 6477)

Believed to be an Early Medieval Moot-hill, Sysa Mound is located to the NE on the opposite side of the road from the water main route as proposed and was therefore unlikely to be directly impacted by the development. Nevertheless, a watching brief was maintained on this section.

Feature G: Olrig Road Block (ND 1700 6460)

Known only from documentary sources, the site of this feature appeared to lie on the line of the water main route, and a site visit by an archaeologist during the trenching of this section of the route was recommended. However no evidence was found during the watching brief stage (see below).

Feature H: Hilliclay Mains Farmstead (ND 1710 6430)

This Post-Medieval Farmstead, associated with a mill and a dam, is still inhabited. Although it was unlikely to be directly impacted care was advised whilst trenching along this section of the route. A watching brief was maintained on this section.

Feature I: Hilliclay Longhouse (ND 1650 6380)

The remains of a double-celled building and associated enclosure is located to the NNW on the opposing side of the roadway from the proposed route of the water main and was therefore unlikely to be directly impacted by the proposed works. A watching brief was maintained on this section.

Feature J: Hilliclay Broch (ND 1679 6360)

Whilst the remains of what was believed to be the site of an Iron Age Broch are thought to have been removed in the early 19th century there remained some potential for buried archaeology in the area. The site is also identified as the find spot of several possibly 18th century bronze belt buckles. The desk-based assessment recommended marking off a 10m exclusion zone around this feature and a watching brief at this point: these recommendations were implemented.

Feature K: Meikle Burn Longhouse / Farmstead (ND 1670 6350)

These remains of three buildings and an associated enclosure lay directly in the path of the proposed water main route. The site was therefore marked out by an archaeologist prior to excavation and the water main route was diverted to avoid disturbing the archaeology here. A watching brief was maintained on this section.

Feature L: Meikle Burn Longhouse (ND 1695 6321)

³ <http://her.hilliclay.gov.uk/SimpleSearch.aspx> [Accessed on 2/09/08]

⁴ <http://www.rcahms.gov.uk/> [Accessed on 2/09/08]

These tri-partite structural remains lie at some distance NNE from the proposed Water Main Renewal route and were unlikely to be directly impacted. However this section was included in the watching brief.

Feature M: Meikle Burn Farmhouse (ND 1712 6322)

These multi-cellular structural remains lie at some distance NNE from the water main route as proposed and were unlikely to be directly impacted. However this section was included in the watching brief.

Feature N: Stemster Chambered Cairn (ND 1708 6315)

This Scheduled Ancient Monument (SAM No. 486) is located at some distance NE of the water main route. Historic Scotland was consulted and the site was then marked out with a buffer zone prior to excavation. The water main route was diverted to avoid disturbing the archaeology here, and a watching brief was also maintained in this area.

Feature O: Meikle Burn Longhouse (ND 1700 6300)

This double-celled structure and its associated annexes is located to the E of the water main route. It was unlikely to be directly impacted, but this section of the water main was subject to a watching brief.

Features P, Q: Shean Chambered Cairn and Feature; Burial, Shean Chambered Cairn (ND 1742 6260)

This Scheduled Ancient Monument (SAM No. 11239) is a Neolithic to Bronze Age Chambered Cairn (P) where an inhumation and cremation (Q) were excavated in 1904. Historic Scotland's Inspector of Ancient Monuments requested that the scheduled area be marked out by an archaeologist and the monument avoided. This was implemented and the area included in the watching brief.

Feature R: Stemster School (ND 1746 6251)

The remains of this structure, visible as a roofed building on the First Edition 6inches to 1 mile OS Map (1877; Caithness, Sheet xii⁵), were recorded prior to being demolished in 2005⁶. The site was located to the NE of the proposed Water Main Renewal route and any remaining footings and associated buried archaeology were unlikely to be directly impacted by the works. This section was included in the watching brief.

Feature S: Stemster Farmstead (ND 1746 6232) –

The remains of this longhouse and associated annexes are located at some distance WSW of the proposed route and, as such were unlikely to be directly impacted by the works. However this section was included in the watching brief.

Marking-out

Features J, K, N, P, Q were marked off in October 2008 before the start of works on site, and the contractors' attention drawn to the areas to be avoided.

⁵ <http://geo.nls.uk/os6inch/> [Accessed on 2/09/08]

⁶ Dagg, C. 01.2005, Stemster Old School, Parish of Bower, Caithness. Report 1402

Watching Brief

The watching brief started on 20 October in very poor weather. The underlying bedrock was found to be close to the surface over much of the area.

The work was then implemented section by section stripping, trenching, pipe installation and re-instatement. The following description reflects the sequence of the civil works as executed, each section being designated by the chain length covered; chain 0m being the Stemster reservoir.

Section circa chain 1100m to chain 800m

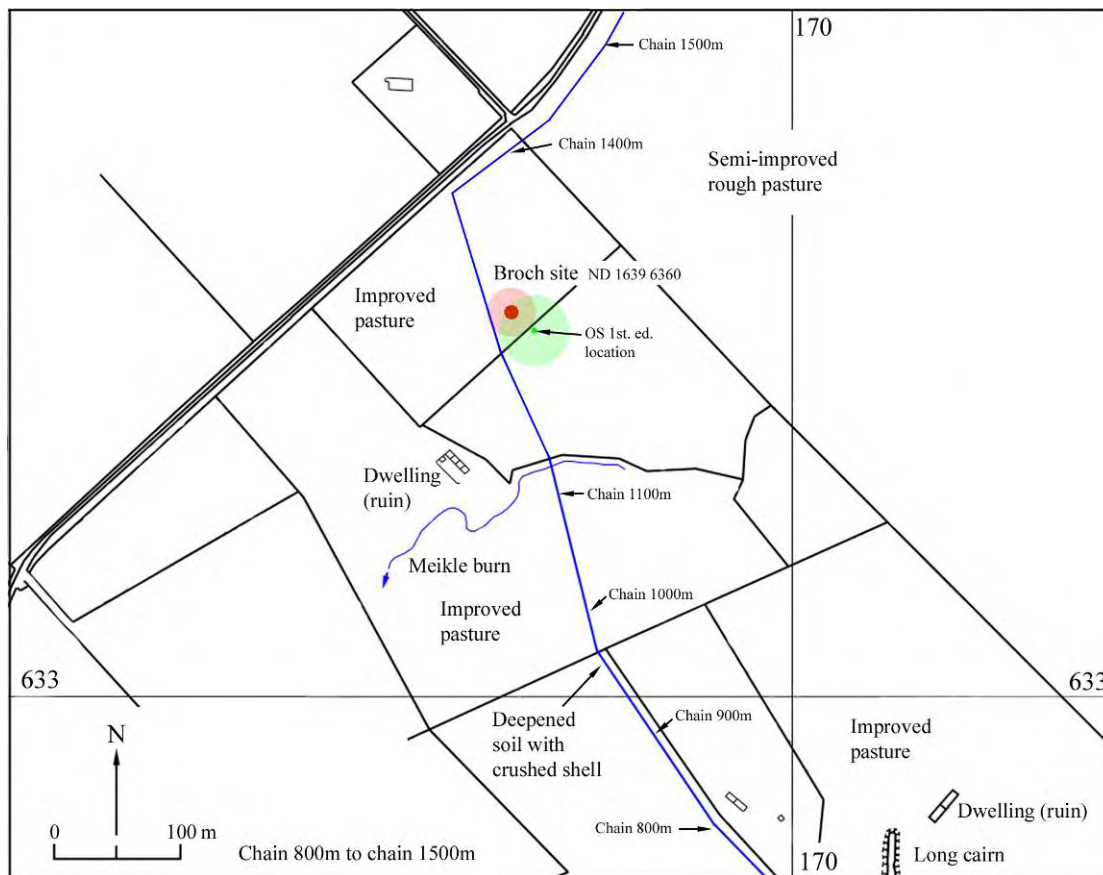


Figure 3 Chain 800m - 1500m

Stripping began at the Meikle burn (figure 2) close to chain 1100m working backwards towards chain 800m. The land (chains 1100m to 1000m) comprised improved pasture; stripping of this section indicated 100 to 160 mm of dark-brown, mineral plough soil overlying a mosaic of friable bedrock and thin oxidised stony-clay till (photo 1). The only finds over this section were occasional sherds of 19th century pottery.

At approximately chain 970m the plough-soil became noticeable deeper (c 400mm) and contained much crushed shell with more frequent occurrences of 19th century pottery. This area of enriched plough-soil extended for circa 30m towards chain 900m and may indicate the site of a 19th century kale yard now obliterated (photo 2). A substantial deposit of lime (photo 3) was encountered at approximately chain 850m, and probably relates to land improvement in the vicinity of a nearby ruined dwelling (ND 1700 6308)(figure 3)(photos 4 to 11).

Section circa chain 800m to chain 0m

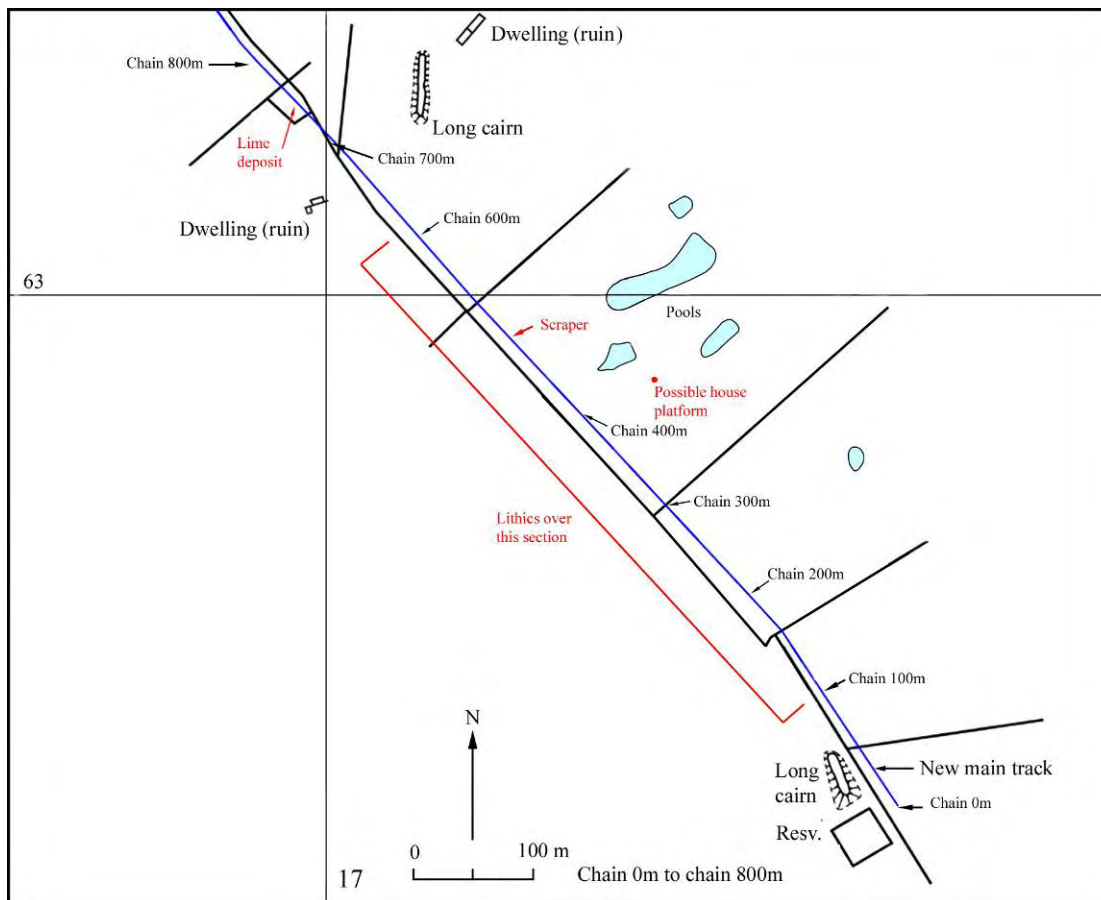


Figure 4 Chain 0m - 800m

At chain 700m the pipe track passed approximately 600 m west of the long cairn (photo 12)(ND 1702 6320).

At this point the pipe track crossed a fence line into an area of poorly drained rough pasture colonised by patches of Gorse (*Ulex europaeus*). The topsoil in this area was peatier than the improved pasture; it varied between 100mm and 200mm deep and overlaid an oxidised stony till interspersed with friable bedrock.

The long cairn (photo 12) and adjacent byre-dwelling (ND 1708 6315) were inspected and photographed as a matter of course (photos 13 to 17). The long cairn had clearly been extensively dug into at some time in the past, leaving the orthostats of the chamber exposed (photo 18).

The byre-dwelling, 30.4 m long by 4.8 m wide, exhibited several construction phases. A circular platform, 8 m diameter (photo 19), and having a small central depression, was noted abutting the mid point of the NW elevation of the byre-dwelling. It had the appearance of a horse gin; however this interpretation is inconsistent with the standing remains of the building. It may have related to an earlier phase of the structure or alternatively relate to an earlier structure unrelated to the byre-dwelling.

Nothing other than 19th century pottery was noted in the stripped area closest to the long cairn. At circa chain 600m, the land started to rise towards the reservoir (photo 20). The thin top soil over this section was noticeably peaty; overlaying bedrock (photo 21).

At this point knapping debitage became noticeable in the topsoil (see lithic summary below). The observed abundance of debitage remained roughly constant between chain 600m and chain 100m after which no debitage was noted.

The topography just to the east of mid point of the lithic scatter (chain 400m)(ND 6320 7190) comprised a series of natural mounds interspersed with water filled hollows (photos 22 and 23). On one of these mounds the vestiges of a possible house platform (ND 1727 6294) could be discerned (photo 24 to 26). Nothing was noted between chain 100m and chain 0m. The thin topsoil over bedrock continued over the section (photo 27).

Section circa chain 1100m to chain 1500m

This section crossed the Mickle Burn to the east of the ruined byre-house at ND 1670 6350 (photos 28 to 39) and traversed two fields of improved pasture before turning north into an area of, poorly drained, rough pasture (figure 2). A broch (now ploughed away) is known to have been sited close to the chain 1220m (photo 40). The position of the broch as recorded on the 1st edition OS map was transposed onto a modern edition to allow comparison with the OS grid reference recorded for the broch location (ND 1679 6360). It was noted that the planned trench path ran through the centre of the most likely position of the broch. A re-routing of the pipeline path 30 m to the west of the supposed location was agreed with the contractor. Subsequent stripping and trenching revealed nothing of note suggesting that the broch site had been successfully avoided (photo 41). The only finds over the whole section were very occasional sherds of modern pottery.

Section circa chain 1500m to chain 2200m

The trench track continued, though rough pasture, rising through a field of arable towards a ridge running NW / SE and Hilliclay Mains farm (ND 1710 6430)(Figure 4; photo 42). The trend of thin topsoil over bedrock and thin rocky till continued over the whole section (photo 43). Most of the buildings comprising Hilliclay mains were relatively modern however the Hilliclay mill building and wheel pit are still extant and were photographed as a matter of course (photos 44 to 46).

An area of disturbance was noted beneath the top soil on the crest of a slight ridge (ND 1707 6437) (photos 47 to 49). The loose small stones were most likely ripped from the bedrock crest by ploughing; however cuts containing red and black stained clay deposits were also noted (photos 50 and 51). The usual interpretation would be 19th century field drains containing deposits of iron and manganese oxides, however the disposition of the 'drains' on the ridge was unusual. It is also conceivable that the feature represents robbed out wall footings of a rectilinear building (photo 53). A further cut, several metres to the north of the feature, was more convincing as a field drain (photo 54).

Section circa chain 2200m to chain 3500m

The final section of the pipe route is indicated on figures 5 and 6 below, passing relatively close to the Sisa mound but separated from it by a public road (photo 55). No evidence was found for the supposed road block at ND 1700 6460: the only features encountered were occasional field drains. The bedrock was very close to the surface over most of this section (photo 56).

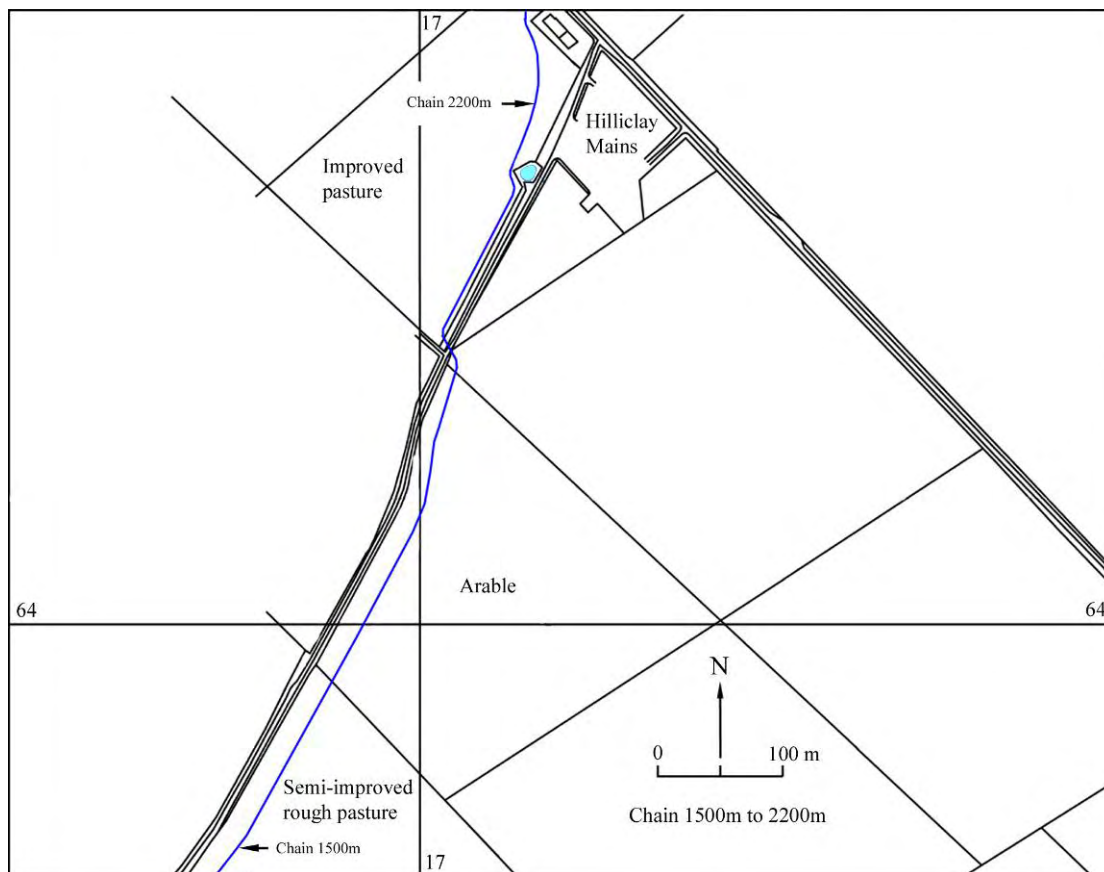


Figure 5 Chain 1500m - 2200m

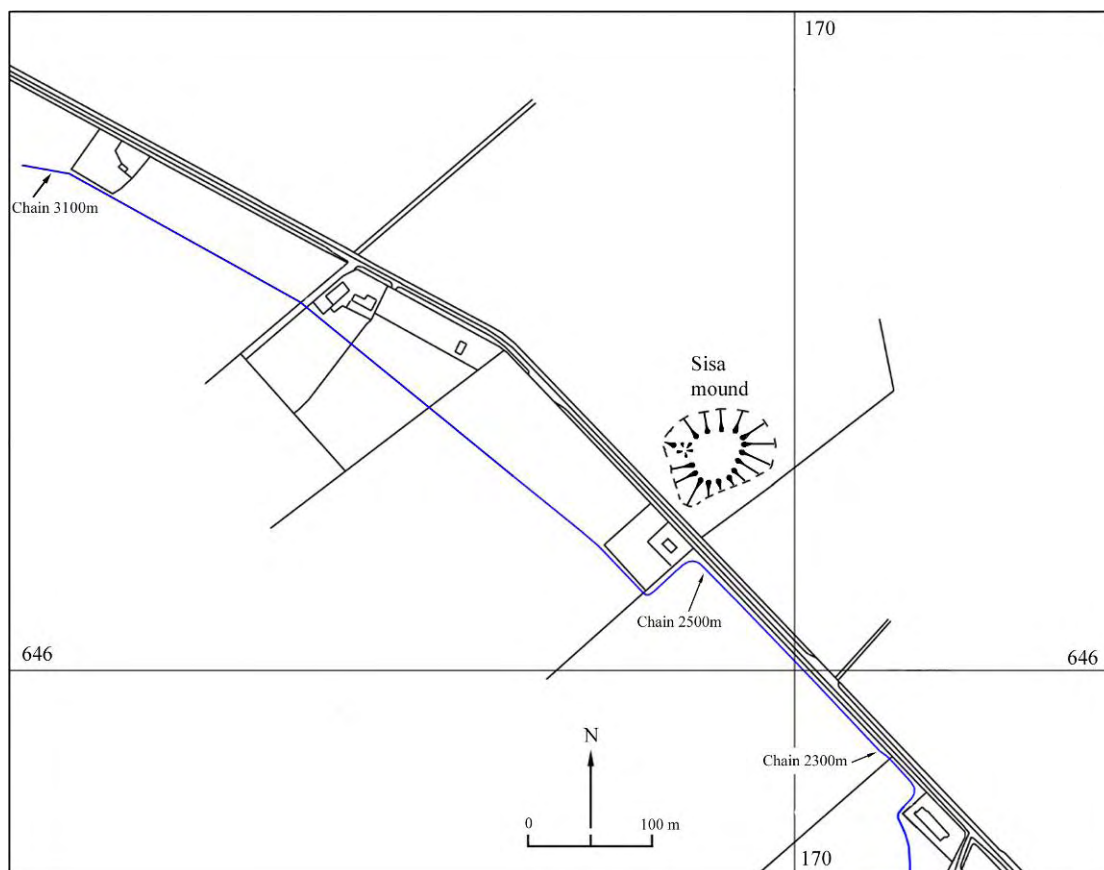


Figure 6 Chain 2300m - 3100m

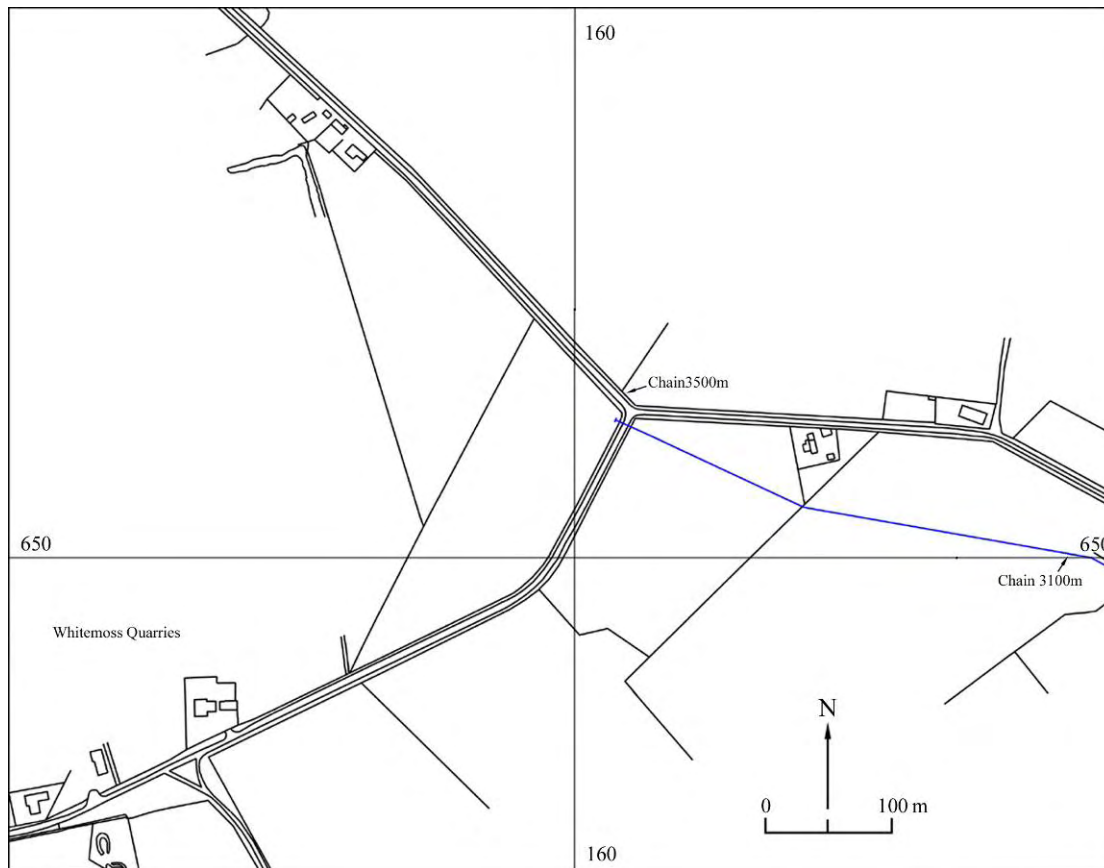


Figure 7 Chain 3100m – 3500m

Lithics summary

It is not thought that a specialist lithic analysis is warranted given the lack of a physical archaeological context. The following is an approximate description of the lithic material pending expert analysis. The material designated flint is generally of poor quality and is typical of that found in Caithness by field walking. Its origin is thought to be cretaceous deposits of the east coast of Caithness and can be found as in the form of beach pebbles. It is also possible that the same material may have been incorporated in the 'shelly till' deposits found in some areas of Caithness. The source of the oolitic chert is not known to the author but appears to exist as water-rounded pebbles. Similar material is known from a lithic scatter at Yarrows Caithness ND 3125 4430.



Plate 1 Lithic debitage (Photo 57)



Plate 2 Lithic debitage (Photo 58)

Item (Plates 1 and 2 above) (Photos 57 and 58)

- 1 Material; flint – blank; pebble - flake L 20, W 22, T 7.7 – colour; dark brown – platform; intermediate, retouched – termination; hinge – primary cortex on dorsal surface – retouch to proximal end and sides - thumbnail scraper.
- 2 Material; oolitic chert – blank; pebble – flake (blade proportions) L 31, W 15, T 7.1 – colour; light grey – platform; complex – termination; feathered – primary cortex on dorsal surface – retouch; none – primary core reduction flake.
- 3 Material; oolitic chert – blank; pebble - flake L 25, W 17, T 5.5 – colour; light grey – platform; cortical – termination; feathered – secondary cortex 80% on one edge – retouch; none – core reduction flake.
- 4 Material; flint – blank; pebble – flake (blade proportions) L 28, W 11, T 5.3 – colour; honey – platform; cortical – termination; feathered – primary cortex on dorsal surface – primary core reduction flake.
- 5 Material; chert – blank; core - flake L 20, W 18, T 3.5 – colour; white – platform; planar – termination; feathered – secondary cortex 60% dorsal surface – retouch; none – secondary core reduction flake.
- 6 Material; chert – blank; core – flake L 14, W 18, T 5.4 – colour; light grey – platform; complex – termination; feathered – cortex; none – retouch; none – tertiary core rejuvenation flake.
- 7 Material; flint – blank; – flake L 17, W 16, T 3.4 – colour; orange – platform; planar (patinated) – termination; feathered – secondary cortex 5% on flake edge – some retouch and edge damage – possible discarded artifact blank.
- 8 Material; flint – blank; reused secondary flake, patination dorsal surface – flake L 14, W 18, T 5.4 – colour; light brown – platform; intermediate (shattered) – termination; plunging – cortex; none – retouch; none – tertiary core reduction flake.
- 9 Material; flint – blank; pebble – flake L 14, W 20, T 4.2 – colour; light grey – platform; cortical – termination; hinge – cortex; primary – retouch; none – primary core reduction flake.
- 10 Material; flint – blank core (broken) – L 17, W 14, T 8.2 – colour; light grey – platform; missing – cortex; primary – broken core; primary reduction flake used as blade core.
- 11 Material; oolitic chert – blank; pebble – chunk L 19, W 16, T 8.2 – colour; dark brown – cortex; primary – shatter from core reduction.
- 12 Material; oolitic chert – blank; pebble – flake L 26, W 20, T 6 – colour; dark brown – platform; cortical – termination; hinge - cortex; secondary – retouch; none – secondary reduction flake.
- 13 Material; quartz – blank; crystalline chunk – flake (blade proportions) L 20, W 10, T, 5.8 – colour; colourless (transparent) – platform; complex - termination; hinge – cortex, not applicable – retouch; none; tertiary flake.
- 14 Material; flint cortex – blank; pebble – fragment L 6.6, W 5.4, T 1 – colour; white – platform; none – termination; not applicable - cortex; primary – retouch; none – primary reduction fragment.

- 15 Material; oolitic chert – blank; flake – flake L 5.7, W 4.4, T 1.1 – colour; light grey with black speckle – platform; planar – termination; feathered – cortex; none – retouch; none – tertiary thinning flake.
- 16 Material; oolitic chert – blank; pebble – flake L 10.6, W 8.6, T 1.1 – colour; light grey – platform; planar – termination; feathered – cortex; none – retouch; none – tertiary thinning flake.
- 17 Material; oolitic chert – plank; pebble – flake L 34.2, W 25, T 4.2 – colour; light grey/brown (banded) – platform; complex – termination; feathered – cortex; none – retouch; none – core rejuvenation flake.
- 18 Material; oolitic chert – blank; pebble – fragment L 23, W 11.8, T 7.4 – colour; light brown – platform; none – termination; none – cortex; primary – retouch; none – angular shatter.
- 19 Material; oolitic chert – blank; pebble – flake; L 17.2 W 17 T 4.5 – colour; light brown – platform; bipolar – termination; N/A – cortex; primary – retouch; none – secondary flake.
- 20 Material; flint – blank; pebble – chunk/core; L 28.4 W 24.6 T 18 – colour; mid-brown – platform; N/A – termination; N/A – cortex; none – retouch; none – chunk / amorphous core.
- 21 Material; flint – blank; flake debitage – flake; L 10.8 W 11.4 T 2.8 – colour; white – platform; planar – termination; stepped – cortex; none – retouch; none – thinning flake.
- 22 Material; quartzite – blank; pebble – flake; L 18.9 W 15.8 T 8.4 – colour; white crystalline – platform; cortical – termination N/A - cortex; primary – retouch; indeterminate due to edge damage - possible thumbnail scraper.

Micrographs of selected lithics were taken to aid characterisation of the source materials. See Appendix 2 below.

Conclusions and recommendations

A desk-based assessment, marking-out exercise, and watching brief were conducted in accordance with The Highland Council specifications. Amendments to the proposed route were made to give a wider berth to a ploughed out broch site. A well defined lithic scatter was the only item of archaeological significance noted during the watching brief. Three byre-houses and a 19th century mill were photographed for the archaeological record.

There are no recommendations for further work.

Please note that it has only been practicable to include an illustrative selection of the photographs as plates below. A full set of photographs is contained in the accompanying CD.



Plate 3 Bedrock and till Mickle Burn (Photo 1)



Plate 4 Byre-house ND 1700 6308 extension looking SW (Photo 9)



Plate 5 Byre-house ND 1708 6315 looking N (Photo 13)



Plate 6 Long cairn ND 1702 6320 – past chamber damage, looking W (Photo 18)



Plate 7 Trench stripping at chain 600m (Photo 20)



Plate 8 Topography; looking S from byre-house ND 1708 6315 (Photo 24)



Plate 9 Possible house platform at chain 400m looking NW (Photo 25)



Plate 10 Byre-house ND 1670 6350 looking E (Photo 28)



Plate 11 Route up to Hilliclay looking NE (Photo 42)



Plate 12 Watermill wheel pit at Hilliclay Mains (Photo 46)



Plate 13 Disturbed area; Hilliclay Mains, looking NE (Photo 50)



Plate 14 Sisa mound looking NE (Photo 55)

Appendix 1: Micrographs of lithics

Micrographs of selected lithics were taken to aid characterisation of the source materials.

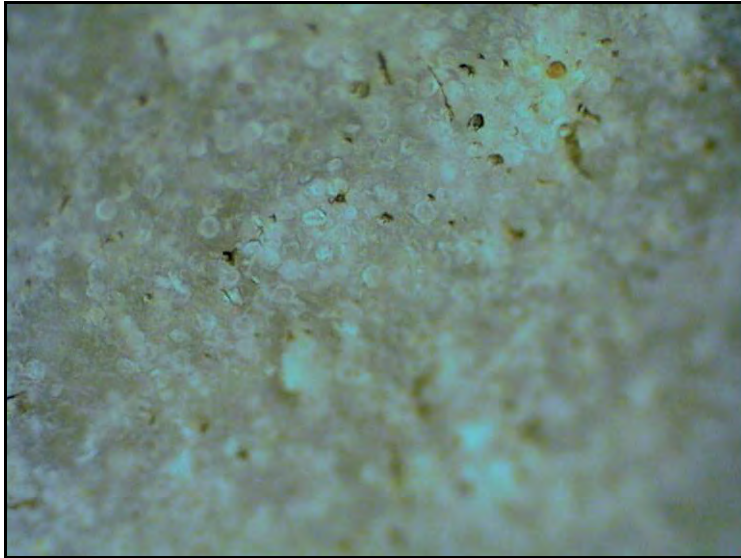


Plate 15 (x40) - item 2, photo 57 - close packed, sub-spherical oolites, ranging in diameter from circa 60 to 120 microns (Photo 59)

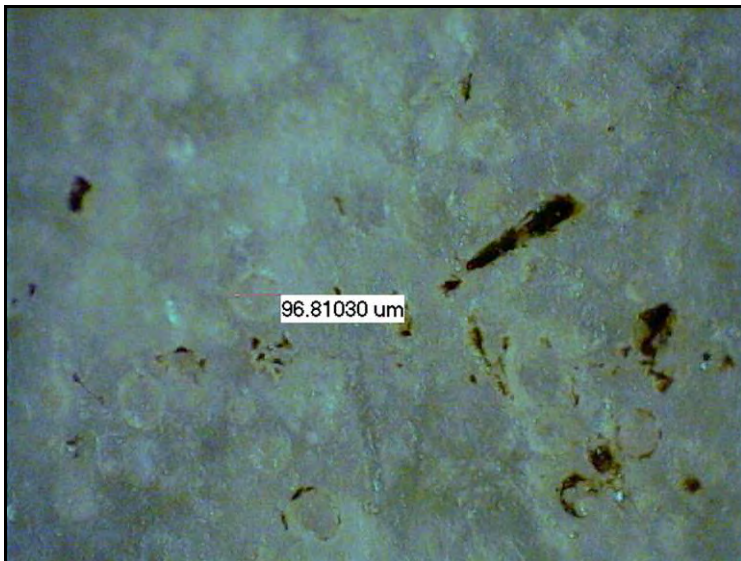


Plate 16 (x100) - item 2, photo 57 - close packed, sub-spherical oolites, ranging in diameter from circa 60 to 120 microns. (Photo 60)

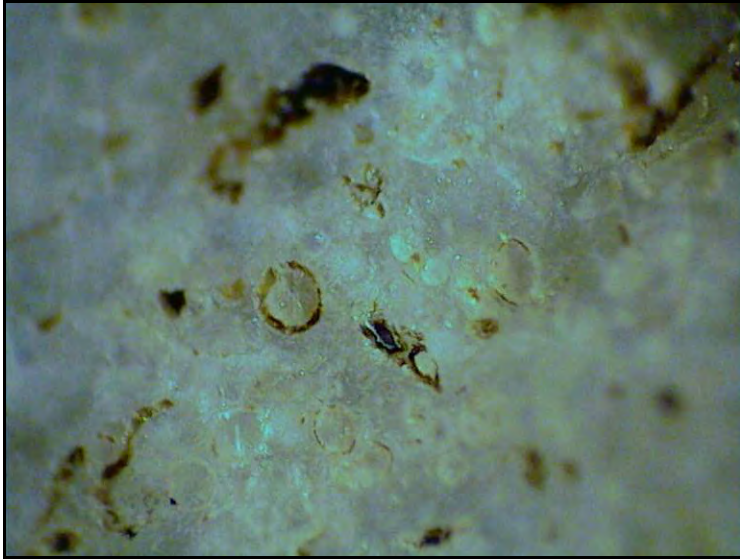


Plate 17 (x100) - item 3, photo 57 - similar to item 2. (Photo 61)

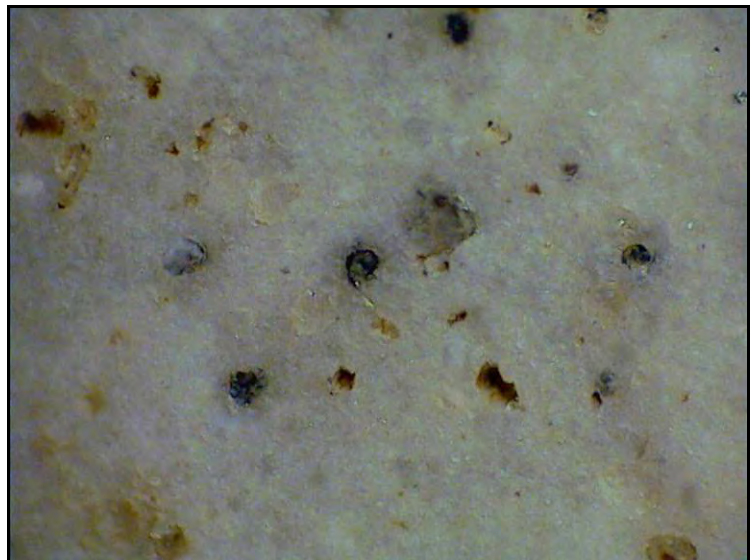


Plate 18 (x100) - item 15, photo 57 - incorporates dark oolitic particles giving a speckled appearance (Photo 62)

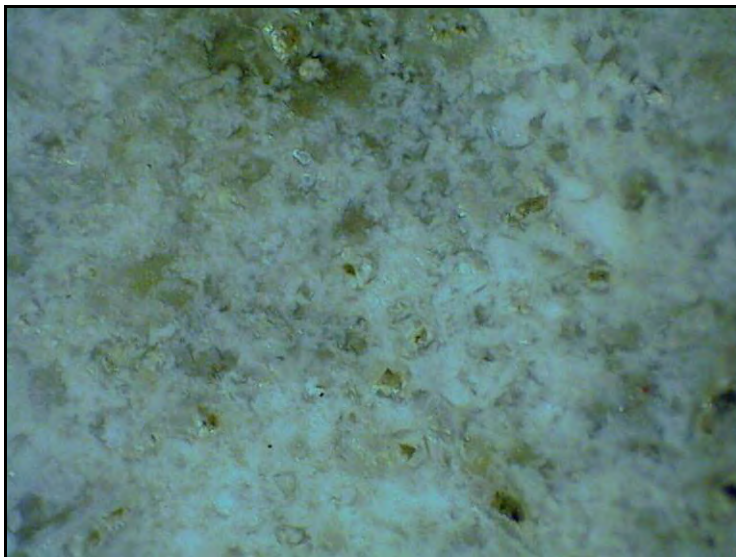


Plate 19 (x100) - item 17, photo 58 - close packed mix of more angular crystals as well as sub-spherical oolites (Photo 63)

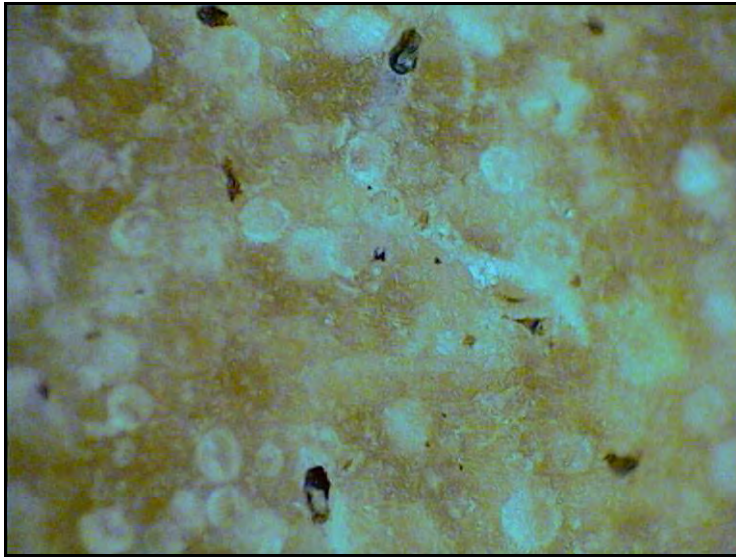


Plate 20 (x100) - item 19, photo 58 – similar to item 2 but having iron stained matrix material (Photo 64)



Plate 21 (x100) - item 7 (photo 57) - translucent microcrystalline flint reference material (Photo 65)

Appendix 2: Index to Photographs (Watching Brief)

Photo No.	Notes	Taken by	Date
1	Bedrock and till Mickle Burn	PDH	21 10 2008
2	Deepened soil profile	PDH	21 10 2008
3	Lime deposit	PDH	22 10 2008
4	Byre-house ND 1700 6308 looking NW	PDH	07 01 2009
5	Byre-house ND 1700 6308 looking N	PDH	27 10 2008
6	Byre-house ND 1700 6308 looking E	PDH	27 10 2008
7	Byre-house ND 1700 6308 looking S	PDH	27 10 2008
8	Byre-house ND 1700 6308 interior looking E	PDH	27 10 2008
9	Byre-house ND 1700 6308 extension looking SW	PDH	27 10 2008
10	Byre-house ND 1700 6308 extension detail	PDH	27 10 2008
11	Byre-house ND 1700 6308 looking W	PDH	27 10 2008
12	Long cairn ND 1702 6320 looking SW	PDH	21 10 2008
13	Byre-house ND 1708 6315 looking N	PDH	21 10 2008
14	Byre-house ND 1708 6315 looking NW	PDH	21 10 2008
15	Byre-house ND 1708 6315 looking NW	PDH	21 10 2008
16	Byre-house ND 1708 6315 looking NW	PDH	21 10 2008
17	Byre-house ND 1708 6315 looking NW	PDH	21 10 2008
18	Long cairn ND 1702 6320 chamber damage looking W	PDH	21 10 2008
19	Byre-house ND 1708 6315 horse gin looking E	PDH	07 01 2009
20	Trench stripping chain 600m	PDH	27 10 2008
21	Soil profile chain 600m	PDH	27 10 2008
22	Topography; chain 400m looking E	PDH	07 01 2009
23	Topography; chain 400m looking N	PDH	07 01 2009
24	Topography; looking S from byre-house ND 1708 6315	PDH	07 01 2009
25	Possible house platform; chain 400m looking NW	PDH	07 01 2009
26	Platform close-up looking NW	PDH	07 01 2009
27	Bedrock chain 100m	PDH	31 10 2008
28	Byre-house ND 1670 6350 looking E	PDH	03 11 2008
29	Byre-house ND 1670 6350 looking S	PDH	03 11 2008
30	Byre-house ND 1670 6350 looking NE	PDH	03 11 2008
31	Byre-house ND 1670 6350 looking SE	PDH	03 11 2008
32	Byre-house ND 1670 6350 looking SE	PDH	03 11 2008
33	Byre-house ND 1670 6350 looking SE	PDH	03 11 2008
34	Byre-house ND 1670 6350 looking SE	PDH	03 11 2008
35	Byre-house ND 1670 6350 looking NW	PDH	03 11 2008
36	Byre-house ND 1670 6350 looking NW	PDH	03 11 2008
37	Byre-house ND 1670 6350 looking E	PDH	03 11 2008
38	Byre-house ND 1670 6350 looking SE	PDH	03 11 2008
39	Byre-house ND 1670 6350 looking E	PDH	03 11 2008
40	Broch location looking N	PDH	07 01 2009
41	Pipe route near broch location looking S	PDH	03 11 2008
42	Route up to Hilliclay looking NE	PDH	03 11 2008
43	Bedrock and till; approach to Hilliclay mains	PDH	13 11 2008
44	Old mill house at Hilliclay Mains	PDH	14 11 2008

Photo No.	Notes	Taken by	Date
45	Old mill house at Hilliclay Mains	PDH	14 11 2008
46	Wheel pit	PDH	14 11 2008
47	Mill tail race pool	PDH	14 11 2008
48	Disturbed area location looking SE	PDH	14 11 2008
49	Disturbed area; Hilliclay Mains looking SW	PDH	14 11 2008
50	Disturbed area; Hilliclay Mains looking NE	PDH	14 11 2008
51	Drain cut; iron and manganese oxide staining	PDH	14 11 2008
52	Drain cut; iron and manganese oxide staining	PDH	14 11 2008
53	Drain cut; Hilliclay Mains looking NE	PDH	14 11 2008
54	Field drain, Hilliclay mains looking SE	PDH	14 11 2008
55	Sisa mound looking NE	PDH	17 11 2008
56	Bedrock Hilliclay ridge	PDH	17 11 2008
57	Lithic debitage	PDH	26 11 2008
58	Lithic debitage	PDH	08 01 2009
59	Orthoquartzite micrograph of item 2 x40 magnification	PDH	08 01 2009
60	Orthoquartzite micrograph of item 2 x100 magnification	PDH	08 01 2009
61	Orthoquartzite micrograph of item 3 x100 magnification	PDH	08 01 2009
62	Orthoquartzite micrograph of item 15 x100 magnification	PDH	08 01 2009
63	Orthoquartzite micrograph of item 17 x100 magnification	PDH	08 01 2009
64	Orthoquartzite micrograph of item 19 x100 magnification	PDH	08 01 2009
65	Orthoquartzite micrograph of item 7 x100 magnification	PDH	08 01 2009

Appendix 3: Table of features identified by desk-based assessment

Feature	Name	NMRS No.	HHHER ID	NGR	Designation	Comments
A	Weydale Mains Threshing Mills	ND16SW51.1	MHG20073	ND14136454	Nil	Mains Farmstead and Threshing Mill (Post Medieval: 1560AD – 1900AD). The buildings of the Mains Farm are arranged around a courtyard square and comprise a barn, L-shaped byre, a two-bay cart shed with granary and a cottage to the W. The cottage adjacent to the granary has a modern flat roof extension, projecting into the courtyard and a row of two cottages with chimneys in each gable lies to the NW of the steading. The barn contained threshing machine, powered by water from a dam to the SE of the site. The site was visited by the RCAHMS commissioners in 1993 and 2000 (www.rcahms.gov.uk) ⁷ .
B	Weydale Mains	ND16SW51.0	MHG37192	ND14136456	Nil	
C	Weydale (general)	ND16SW54	MHG36671	ND14506460	Nil	Information taken from Highland Council Historic Environment Record and www.rcahms.gov.uk
D	Weydale Schoolhouse and Primary School	ND16SW56	MHG42783 MHG36754	ND14626459	Nil	Undated. Information taken from Highland Council Historic Environment Record and www.rcahms.gov.uk
E	Weydale Cairn	ND16SW11	MHG2367	ND14876472	Nil	Mentioned in the OS Name Book (OS. 1871, p.191) ⁸ and measuring 32m in diameter and a height of 1.5m, extending to 2m where topped by a heap of stones, this circular grass-covered mound has been interpreted as both a cairn (Neolithic – 4,000BC – 2,401BC) and a mound (Neolithic) (www.rcahms.gov.uk).

⁷ The website of the RCAHMS: www.rcahms.gov.uk, referenced throughout this table was accessed on 30th July 2008

⁸ Ordnance Survey, 1871, 'Name Book (Caithness).' In, *Original Name Books of the Ordnance Survey, Book No. 11*. HSMO

Feature	Name	NMRS No.	HHER ID	NGR	Designation	Comments
F	Sysa (Doom or Judgement) Mound	ND16SE12	MHG2362	ND16946477	Nil	A grass-covered mound, 165ft (50.2m) wide, with a maximum height of 30ft (9.1m), reputed in local tradition to be an artificial feature associated with events occurring on the day of the Battle of Clontarf, in Ireland (1014) and described by one OS surveyor as having a base similar to that of the Mound at Inverurie. One reading of the site is that it is a Moot Hill (Early Mediaeval – AD 561 – AD 1057) (RCAHMS, 1911, p. 89; No. 330) ⁹ .
G	Olrig Road Block	Nil	MHG30404	ND17006460	Nil	A monument known only from primary documentary sources, this is believed to be the site of a Modern (1901AD – 2100AD) road block (Redfern, N. 1998) ¹⁰ .
H	Hilliclay Mains Farmstead	ND16SE45	MHG19439	ND17106430	Nil	This Post Mediaeval (1560AD – 1900AD) farmstead is still inhabited and is associated with a mill and dam (www.rcahms.gov.uk).
I	Hilliclay Longhouse	ND16SE0048	MHG19482	ND16506380	Nil	Appearing as a roofed building in association with an enclosure on the Ordnance Survey, First Edition 6 inches to 1 mile Map (1877; sheet xii) ¹¹ , this rectangular, originally residential, structure, was visited by commissioners from RCAHMS in 1996. It is recorded as having two annexes and is orientated NW – SE and measures 20m x 5m (www.rcahms.gov.uk).

⁹ RCAHMS. 1911, *The Royal Commission on the Ancient and Historical Monuments and Constructions of Scotland: Third Report and Inventory of Monuments and Constructions in the County of Caithness*. Edinburgh.

¹⁰ Redfern, N. 1998, *Twentieth century fortifications in the United Kingdom*, 5 V. V.1

¹¹ www.old-maps.co.uk [accessed 26/08/08].

Feature	Name	NMRS No.	HHER ID	NGR	Designation	Comments
J	Hilliclay Broch	ND16SE16	MHG1784	ND16796360	Nil	This possible site of an Iron Age (550BC – AD560) Broch was last visited by the Ordnance Survey in 1981. The feature is no longer evident, the ruins having been ‘removed’ in 1830, however, the site marks the find spot of perhaps several and at least one ‘Bronze buckle’ (Find No. FHG1312), possibly dated to the eighteenth century; all found at the time of the broch ruins removal (OS. 1872, p.6 ¹² ; www.rcahms.gov.uk).
K	Meikle Burn Longhouse / Farmstead	ND16SE49	MHG19483	ND16706350	Nil	Three roofed buildings and an enclosure are depicted on the First Edition 6 inches to 1 mile Map (1877; sheet xii ¹³). Visited in 1995 by RCAHMS, the Post Medieval (1560AD – 1900AD) longhouse was recorded measuring 22.8 x 5.35m, a rectangular structure divided into four compartments, the NW of these being a residence. The enclosure was identified as an appendage using the long wall of the longhouse measuring 22.8 x 9.4m. 4.5m NE of the longhouse lie the remains of a parallel structure only the short SE wall of which survives complete. This contains a horse walk whose mechanism is intact. The orientation is NW-SE (www.rcahms.gov.uk).

¹² Ordnance Survey, 1872, ‘Name Book (Caithness).’ In, *Original Name Books of the Ordnance Survey, Book No. 1*. HSMO

¹³ www.old-maps.co.uk [accessed 26/08/08].

Feature	Name	NMRS No.	HHER ID	NGR	Designation	Comments
L	Meikle Burn Longhouse	ND16SE52	MHG19497	ND16956321	Nil	A roofed building and associated enclosure are depicted on the First Edition 6 inches to 1 mile Map (1877; sheet xii ¹⁴), though not on the current edition. The longhouse was recorded by RCAHMS in 1995 as measuring 20.25 x 5.2m. It is a rectangular tripartite structure, the SE unit was the residence, the NW unit, with opposing doorways, was probably a winnowing barn. The RCAHMS also recorded a smaller structure nearby, 5 x 4m, containing a row of cubby holes, oriented NW-SE. Additionally, a range of roofed barns, still in use and arranged on three sides of a rectangle were also noted (www.rcahms.gov.uk).
M	Meikle Burn Farmstead	ND16SE53	MHG19498	ND17126322	Nil	One roofed building and three enclosures are described by the RCAHMS as being depicted on the First Edition 6 inches to 1 mile Map (1877; sheet xii) (www.rcahms.gov.uk). The longhouse was visited by the RCAHMS in 1995 and is described as measuring 27.2 x 5.3m and as being divided into four compartments, the central units apparently being the residences. The SE unit, containing a fireplace, was perceived as being a later addition. A horse engine is attached to the long wall. The orientation NE-SW (ibid.).
N	Stemster Chambered Cairn	ND16SE11	MHG1786	ND17086315	Scheduled Ancient Monument No: 486	Visited by the RCAHMS in 1995 and recorded as a chambered cairn measuring 65m in length. This is a long cairn 2m high situated on a ridge with two depressions on its W side one of which contains a slab set on edge. It appears to have originally consisted of 2 round cairns which have been conjoined into a long cairn. The orientation is NE-SW (www.rcahms.gov.uk). Human remains were found here in 1840 (OS, 1872, p.5 ¹⁵)

¹⁴ Ibid.

¹⁵ Ordnance Survey, 1872, 'Name Book (Caithness).' In, *Original Name Books of the Ordnance Survey, Book No. 1*. HSMO

Feature	Name	NMRS No.	HHER ID	NGR	Designation	Comments
O	Meikle Burn Longhouse	ND16SE54	MHG19488	ND17006300	Nil	This Post- Medieval (1560AD – 1900AD) Farmstead is depicted as a roofed building with associated enclosure is depicted on the OS First Edition 6 inches to 1 mile Map (1877; sheet xii ¹⁶). The site was visited by RCAHMS in 1996 when the longhouse was recorded as measuring 10.5 x 4.7m and having been divided into two compartments, the SW of these being residential. An annexe, attached to SW end measures 3.4 x 4.7m. A second annexe attached to NE end measures 2.5 x 2.9m. Walling was attached to the NW corner of this in order to form a unit 5.4 x 5.4m, with a fireplace and what is described as a 'a low animal door' (www.rcahms.gov.uk).
P	Shean Chambered Cairn	ND16SE1	MHG2361	ND17426260	Scheduled Ancient Monument No. 11239	This Neolithic to Late Bronze Age Chambered Cairn (4000Bc – 551BC) has been identified with that excavated by Tress Barry in 1904. In the report of this excavation an inhumation is recorded as having been found in the chamber and a cremation, accompanied by urn fragments is recorded as having been found in the debris near the top of the cairn. Recorded in 1991 as being 'turf-covered and mutilated' with an orientation SSE – NNW, the SSE extent rising into a circular mound, height: 2.4m (Davidson, J. L. and Henshall, A. S. 1991, pp.132 – 4 ¹⁷ ; www.rcahms.gov.uk).
Q	Burial, Shean Chambered Cairn	ND16SE1	MHG40633	ND17426260	See above	In 2000 the monument was visible as grass covered mound N of the Stemster reservoir compound. The long cairn was recorded as having been reduced in size by construction of reservoir and track running alongside. (Dagg, C. 2000 19/11/00 ¹⁸).

¹⁶ www.old-maps.co.uk [accessed 26/08/08].

¹⁷ Davidson, J. L. and Henshall, A. S. 1991, *The Chambered Cairns of Caithness: an inventory of the structures and their contents*. Edinburgh University Press: Edinburgh

¹⁸ Dagg, C. 2000, *Highland Council Report 170*. Information taken from Highland Council Historic Environment Record

Feature	Name	NMRS No.	HHER ID	NGR	Designation	Comments
R	Stemster School	ND16SE57	MHG19487	ND17466251	Nil	A roofed building is visible on the OS First Edition 6 inches to 1 mile Map (1877; sheet xii ¹⁹). A desk based assessment and photographic record of this structure, prior to its demolition was conducted by C. Dagg in 2005 ²⁰
S	Stemster Farmstead	ND16SE58	MHG19489	ND17466232	Nil	Three roofed buildings and a number of associated enclosures are depicted on the OS First Edition 6 inches to 1 mile Map (1877; sheet xii ²¹). Visited in 1995 by the RCAHMS, the Post-Mediaeval (1560AD – 1900AD) Longhouse was recorded as measuring 38.1 x 4.6m. Rectangular structure comprising four units. An annexe overlying the E wall of the longhouse, measuring 5.2 x 5.4m and another at the N end, measuring 5.7 x 4.7m and containing a fireplace and cupboard were also recorded. The structure orientation is N-S (www.rcahms.gov.uk).

¹⁹ www.old-maps.co.uk [accessed 26/08/08].

²⁰ Dagg C. 01.2005. Stemster Old School, Parish Of Bower, Caithness. Report 1402

²¹ www.old-maps.co.uk [accessed 26/08/08].