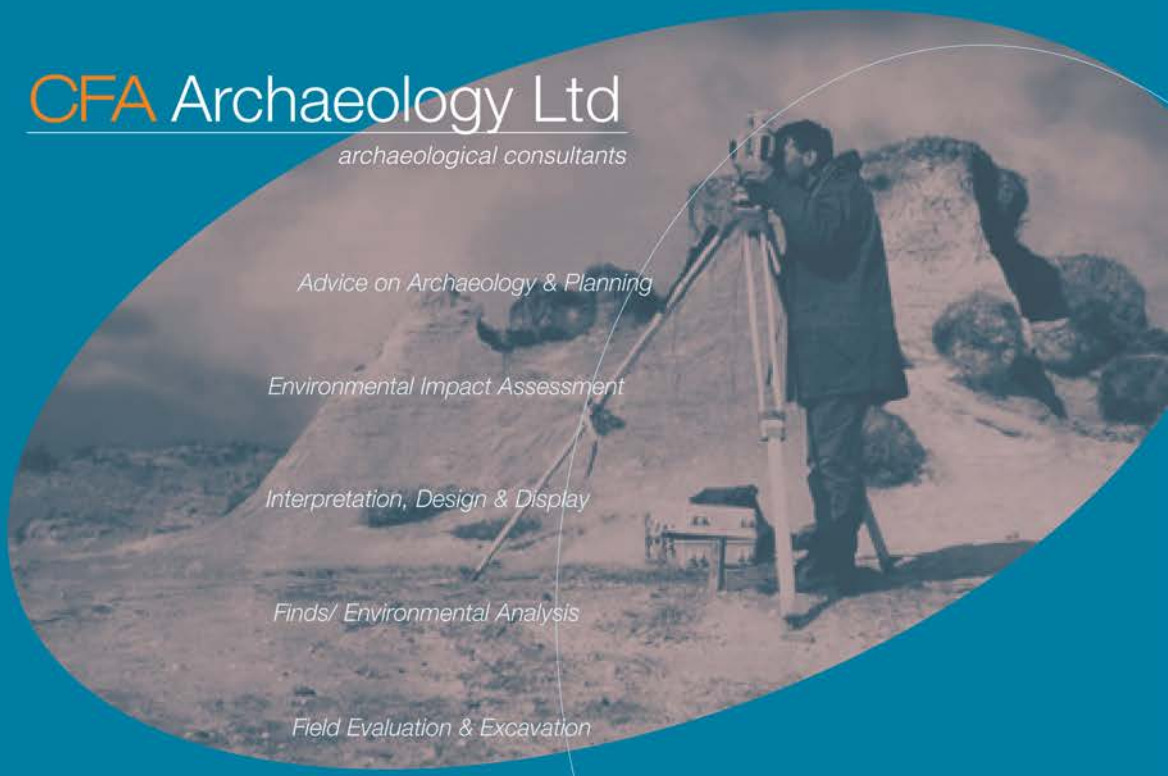
CFA Archaeology Ltd

archaeological consultants



Advice on Archaeology & Planning

Environmental Impact Assessment

Interpretation, Design & Display

Finds/ Environmental Analysis

Field Evaluation & Excavation

Historic Building Recording

Site & Landscape Survey

Geophysical Survey

Bridgehouse Mill, West Linton
Scottish Borders

Standing Building Survey
& Watching Brief

Report No. 3156

t 0131 273 4380 f 0131 273 4381 e info@cfa-archaeology.co.uk w www.cfa-archaeology.co.uk

CFA ARCHAEOLOGY LTD

The Old Engine House
Eskmills Business Park
Musselburgh
East Lothian
EH21 7PQ

Tel: 0131 273 4380
Fax: 0131 273 4381
email: info@cfa-archaeology.co.uk
web: www.cfa-archaeology.co.uk

Author	Michael Cressey BA MSc PhD MIfA FSA Scot
Illustrator	Kevin Hicks BA (Hons) FSA Scot
Editor	Bruce Glendinning BSc PgDip MIfA
Commissioned by	Bergmark Architects Ltd on behalf of Mr and Mrs Wood
Date issued	July 2014
Version	0
Planning Ref	12/01527/FUL
Grid Reference	NT 1435 5240
Oasis Ref No.	cfaarcha1-178387

This document has been prepared in accordance with CFA Archaeology Ltd standard operating procedures.

Bridgehouse Mill, West Linton
Scottish Borders

Standing Building Survey
& Watching Brief

Report No. 3156

CONTENTS

Appendices

Figures (bound at rear)

Plates (Bound at Rear)

18 Wall founded on natural river gravels (007)
19 Slabs (005) below ashy fire derived deposits (011)
20 Recess in eastern wall

Contact Plates (bound at rear)

1. INTRODUCTION

1.1 General

This report presents the results of a standing building survey and an evaluative watching brief carried out by CFA Archaeology Ltd (CFA) between April and May 2014 at Bridgehouse Mill, West Linton, Scottish Borders (NGR: NT 1435 5240) (Fig. 1). The work was commissioned by Mr Jens Berkmark on behalf of the owners Mr and Mrs Wood to fulfil a planning condition. A Written Scheme of Investigation was approved by the Scottish Borders Council Archaeology Officer, Dr Christopher Bowles, in advance of work commencing.

The derelict mill was considered by the Scottish Borders Council Archaeology Officer to be a regionally important asset. The present building appeared on maps of the area in the 18th century and was partly ruinous in 1858 according to the First Edition Ordnance Survey map of that year. The same map showed the lade that fed the mill, and an indication of the wheel and pit on the north end of the building. In the recent past a flat roof was built on the shell of the building and red brick was used to level up the walls to a height of about 2.5m.

Dr Bowles requested that an *Enhanced* building survey be carried out in order to preserve by record the present historical/architectural form of the building prior to alteration. An evaluative archaeological watching brief was undertaken to record any significant buried archaeological remains surviving within the interior and exterior of the building that were uncovered during groundbreaking associated with this development.

In keeping with a request from Dr Bowles, the ruin of a small ancillary building outside the property boundary to the east of the mill was photographed (Plates 15 & 16).

1.2 Objectives

The objectives of the programmes of archaeological works were:

1. To carry out a rapid desk-based assessment and place the mill building in its historical context;

2. To carry out a standing building survey, to include a photographic and written record of the mill building prior to its conversion;

3. To produce a Historic Building Survey report outlining the results of the work.

4. To conduct an evaluative watching brief to monitor ground breaking works and where necessary undertake mitigation works to mitigate the effect of the development on any uncovered archaeological features or deposits, and to produce a data structure report on the results of this work.

2. METHODOLOGY

2.1 General

CFA follows the Institute for Archaeologists' Code of Conduct, Standards and Guidelines as appropriate.

2.2 Desk-based Assessment

A rapid desk-based assessment was conducted prior to fieldwork, in order to collate relevant information on the historic development of the building. Sources that were consulted included:

- *National Monuments Record of Scotland*. All relevant records were checked and bibliographic sources followed up.

- *Early map coverage for the area*. An examination of all the Ordnance Survey 6" map editions was made, together with earlier cartographic information on pre-recent land use in the project area.

- Historical Documentary Search. The Statistical Accounts published for West Linton were checked for any information on Bridgehouse Mill. The National Library on-line data base was also checked for relevant historical records.

2.3 Historic Building Survey

The survey requirements for the cottage are listed in Table 1 and are based on an Enhanced survey as defined by ALGAO 2013.

Specific area or feature	**Total Station**	**Photographic Survey**
Exterior elevations	Enhanced	Comprehensive
Interior elevations	N/a	Detailed

Table 1 – List of specific requirements for the former mill building

A written descriptive record of the building was made on pro-forma building recording forms to record all significant building fabric and blocking work and any other features of historical and architectural significance.

The interior of the building was confined to photographic survey only, supported by a descriptive narrative.

Metric Survey

A ground plan (Fig 3) of the building was created.

Elevations drawings were created using an industry-standard, reflectorless Total Station (Figs 4a-d). The infra-red beam from this instrument enabled points to be recorded in 3D to an accuracy of 1mm. Control points on the wall heads, windows, doors and architectural phasing was surveyed. The data was downloaded using

Penmap software and imported to AutoCad. The resulting images were processed to produce wire-frame elevations to correct the digital photographic overlays.

Photographic survey

CFA used a digital Nikon D300 during the photographic survey. A photographic record was made of all internal and external elevations of the building. The orientation at which each photograph was taken is shown on Fig 3.

In keeping with the requirements of the Borders Council Archaeologist, the ruined building remains on the east side of the mill was photographed (Plates 15 & 16). This building was lies outside the owner's property boundary and will not be affected by the re-development work.

A full list of all the photographs taken is appended in the rear of the report (Appendix 1). A full set of thumbnail prints is included at the rear of the report.

2.4 Watching brief

Groundbreaking that was monitored included the reduction of ground levels within the interior of the building and the excavation of service tracks and a manhole to the exterior of the building. The removal of a large tree stump at the northwestern corner of the building was also monitored. All soil /overburden stripping was carried out using a 360º tracked mini-digger equipped with a smooth-bladed ditching bucket. This operation was carried out under constant archaeological supervision.

The stratification of all excavated areas was recorded whether or not significant archaeological deposits were identified.

All excavation and on-site recording was carried out according to standard CFA procedures, principally by drawing, photography and by completing standard CFA record forms.

3. DESK-BASED SURVEY RESULTS

3.1 Cartographic sources

The cartographic sources examined are listed in Section 8.

The place name *Bridgehouse* is shown on General Roy's map of 1752-55 (Fig 2a) but the mill is not identifiable. Armstrong's map of 1769 shows the position of a mill to the east of Bridgehouse (Fig 2b). Thompson's map of 1832 also depicts *Bridgehouse Mill* by name for the first time (Fig 2c).

The First Edition 1856 Ordnance Survey map (Fig 2d) depicts three buildings. Depicted as *Bridgehouse Mill (Sawing)* implying that it had worked as a lumber mill. However, the building in question is depicted as being roofed but a ruin. Three unroofed out-shot buildings are shown attached on the north, east and west side of the mill. An L-shaped arrangement shown on the south side might be collection of small pens which suggests the building may have been used for housing livestock. The lade is shown running along the northern end of the building.

According to the 1898 2nd Edition Ordnance Survey map (Fig 2e) mill was enlarged and was now milling corn. The building on the east side of the building in question is depicted as unroofed. The building in question is shown as roofed but the outshot building on its southern side is no longer depicted and the outshot building on its eastern side had been extended over the lade and is shown as having two compartments. An enclosure has been built around to its western side.

The 1908 3rd Edition Ordnance Survey map (Fig 2f) shows the building in question as having a single outshot building on its west side. The narrow attached building on the east side has been removed leaving a small square detached structure at the north end.

The 1955 Ordnance Survey map (Fig 2g) shows the position of the cottage and mill. The mill is depicted as a rectangular building as it stands today.

3.2 National Monuments Record of Scotland (NMRS)

The NMRS holds one record for Bridgehouse Mill (NT15 SW7). The entry mentions that a mill at West Linton is mentioned in an early charter, before the year 1210 (Renwick 1897) as belonging to William Comyn of Kilbride. It was in the vicinity of Bridgehouse and was called Bridgehouse Mill in the 18th century (Buchan and H Paton 1927). The entry also mentions that in 1970 when the site was visited the Ordnance Survey and two buildings were present at the site. One was a small cottage (the present house) and the other a hay barn (the derelict mill). According to the Ordnance Survey neither appeared to be of any great age and there are no features associable with a mill.

3.3 Documentary sources

The National Library of Scotland holds a record relating to Bridgehouse Mill in 1743. The record entitled *Extract tack by Mr. Alexander Walker of Stonypath to Alexander Aikman in Bridgehouse, of Bridgehouse mill and North Bridgehouse, in (the) parish*

of Lintoun, for 57 years. Stonypath is a farm about 2km NNE of Bridgehouse and it may have been a reasonably sized upland estate in the 18th century. It would appear that the lands of Bridgehouse were originally part of the Stonypath Estate and that the estate owners erected a mill at an early date (possibly in the medieval period). The mill was let in tack to various millers that ensured that all the tenants on the estate were thirled[1] to the owners mill.

In 1815 Alexander Pennecuik, in his *Description of Tweedsdale* mentions Bridgehouse and Bridgehouse Mill, the latter is cited as being a corn mill and that it was rebuilt.

4. BUILDING SURVEY RESULTS

4.1 General

The layout of the mill is described first followed by the external and internal elevations. The roof of the building had been removed prior to the start of the building survey as it was structurally unsafe. Prior to this the roof had been clad with metal sheeting resting on softwood timber (Plate 2).

The entire building appears to have been built in to a slope running downslope in an approximately south – north.

4.2 Layout plan (Fig. 3)

The building occupies a rectangular footprint measuring 12.7m long and 6m wide. The walls are 0.6m thick. The floor is rubble with vestigial traces of concrete surviving at on the south side of the entrance. The only notable features visible are two Hurst frame plinths which are situated against the east-facing elevation. These are described in below in more detail.

4.3 Exterior details

For ease of description the building is described below as if it was aligned north to south whereas in reality it is aligned north-east - south west.

North-facing Elevation (Fig 4a, Plate 3)

The north-facing elevation is 7.2m long, 2m high and is 0.7m thick and has been constructed using rectangular blocks of coursed sandstone and whinstone. At the east-end of the elevation a series of stugged quoins survive. At the opposite end, the elevation has been terraced into a slope and is approximately 1m high. There is a noticeable change in fabric with courser whinstone blocks used along the base of the wall which are surmounted by blocks of coursed sandstone. The change in construction points to a substantial re-build rather than repair. Situated 0.76m from the east corner of the building is the remains of a window opening which measures

[1] Thirlage was the Scottish feudal law by which the Laird could force all those vassals living on his lands to bring their grain to his mill to be ground.

0.9m by 0.6m. The wall head is irregular. At the base of the wall there is a small rectangular opening that may have been a small drain.

East-facing Elevation (Fig 4b, Plate 4)

The east-facing elevation is 14.1m long and stands to a maximum height of 2.25m. The elevation is built of random rubble and is 0.6m thick. The fenestration includes the remains of a large bay opening measuring 4m wide and three window openings. Window opening (a) measures 0.87m wide and is 0.5m high, and has no dressed surrounds. The middle window (b) still has a sill and some of its surrounds. These are cream sandstone and droved. The remains of an iron window bar projects from the sill. The northernmost window, window (c) is the best preserved and has a sill and droved surrounds. The sill has lead-filled sockets marking the position of its window bars. A small drain is present at the north end of the building just above ground level.

On the north side of the large bay opening the remains of its stone door surrounds survive with iron spikes in place for retaining a timber door frame. The surrounds are droved and contemporary with the window dressings.

South-facing elevation (Fig 4c, Plate 5)

The south-facing elevation was the former mill gable wall and this has been reduced to a height of 1.6m. Measuring 7.2m long the wall is constructed of coursed rubble and is 0.7m thick. The quoins at its west end have been robbed. At the east end these survive to a height of 0.5m and comprise Old Red Sandstone blocks with droving.

West-facing Elevation (Fig 4d, Plate 6)

The west-facing elevation 13.9m long and 0.7m high and is constructed of random rubble. An inspection pit recently dug against the wall towards the north end showed its foundations to be at least 2.5m deep below the current ground level. More or less at the centre of the wall is a blocked square opening measuring c.1.05m wide and 0.65m high. The blocking work comprises and assortment of sandstone rubble bonded with grey cement.

4.4 Interior details

Interior North-facing elevation (Plate 7)

The interior north-facing elevation (former gable) is constructed of random rubble and is 6.8m wide and 2.2m high in the south-west corner. The wall is featureless with the exception of remnants of original cream-coloured plaster that survives best at its west end.

Interior East-facing elevation (Plates 8-10)

The interior east-facing elevation measures 12.8m long and 2.2m high and is constructed of random rubble that has been heavily pointed with grey cement. At its centre is the blocked opening observed on the opposite side of the wall. The opening contains no architectural remains of a window. It may have once contained a smaller

opening for a wheel shaft associated with a small cast-iron wheel. The presence of a waterwheel is supported by the presence of two Hurst frame plinths (see Fig 3, Plates 9, 13-14) that were in situ at the base of the wall and more or less in line with the blocked opening. Each plinth comprised hewn sandstone blocks measuring 0.75m by 0.70m and 0.85m by 0.75m respectively. At the centre of each was a square socket (0.2m x 0.2m) which had been carved to a depth of 0.05m.

At the north end of the east-facing elevation there appears to be the remains of a reliving arch (Plate 10) comprising five blocks of stone set vertically in the wall. This appears to be not connected to a window but is the result of a recent rebuild judging by the nature of the modern grey cement that is holding the stonework together.

Interior South-facing elevation (Plate 11)

The interior south facing elevation (former gable) measures 6.6m wide and is 2.2m high and is constructed of random rubble throughout. At the base of the wall as it was visible a 0.16m wide ledge was advanced off the main wall line. In the north-east corner is a window opening with splayed reveals.

Interior West-facing elevation (Plate 12)

The interior west facing elevation is 2m high for most of its length. The splayed reveals of windows a-b are visible all set within random rubble. The base of window (b) is sloping. Window (c) has rebates cut into its surrounds which suggest that a wooden window frame was inserted after its window bars had been made redundant.

5. WATCHING BRIEF RESULTS

Building Interior

The interior ground strip was undertaken to a depth of 0.4m to provide a formation level for the new floor.

Following the removal of the vegetation small patches of concrete floor surface adhered to the southern and western walls. This suggests that in its later phase of use it had a concrete floor.

The rest of the interior was covered with rubble and mixed soil deposits. At the northern end of the building the rubble (**002**) contained modern debris, slates and some sizeable sandstone blocks. The size of some of the blocks meant that the stripping went slightly deeper in this area (c. 0.6m total). This deeper strip covered the most northerly 2.7m of the interior. The rubble continued below this depth but no further excavation was required. Logically the walls at this end of the building continued to a deeper level as it was built on a slope.

Within the demolition rubble near the north end of the mill a piece of a mill stone was discovered (Plate 17). This had a curved outer edge and the broken remains of a socket and the edge of a possible circular central shaft hole were just visible in one corner of the piece. The dimensions were 0.75m x 0.48m (sub one quarter of a full circle) indicating an original diameter of around 1.50m (the broken centre made an

exact measurement impossible) with a thickness of 0.11m. The piece was too large and heavy to recover for transport to CFA for further examination but the client intends to incorporate it as a feature in the development.

In the centre of the building about in line with the Hurst Plinths three flat stone slabs (**009**) were identified. These lay on top of the rubble (**002**), so if purposefully laid they relate to recent use of the structure. Below the rubble in the centre of the site was a deposit of waterworn river gravels including larger cobbles (**007**). This deposit extended to the southern end of the building and was thought to be the natural subsoil. Apart from the northern end of the building where the base of the wall was not identified the walls were founded on this deposit (Plate 18), as were the Hurst Plinths. Across the central part of the building bedrock (**004**) outcropped just below these gravels.

Against the eastern wall and lying over the natural the remains of a small fire were identified (Plate 19). A few flat slabs lay on the natural (**005**) and a thin spread of ashy black soil (**011**) lay over them. This was not a formal fire place as there was no chimney. Whilst it appeared to overlie the natural subsoil (**007**) it was sealed by the rubble and mixed soil deposits (**002**) so it was probably of limited antiquity.

A recess was found built in to the eastern wall (Plate 20) this matched with the external opening in the east facing exterior elevation which is thought to be the remains of a drain.

Building Exterior

A water pipe trench and manhole was excavated to the south of the standing building. A 1.80m by 1.90m by 1m deep manhole was positioned at the southeastern corner of the building with pipe trench extending 30m to the southwest. The pipe trench was 0.70m wide and was 1m deep at the manhole, becoming shallower (0.6m deep) to the southwest. A branch of the pipe trench extended at right angles towards the south western corner of the building. This measured 6m by 0.70m. The trench was 1m deep at the eastern end rising to 0.60m deep at the western end. Only natural river gravels below several layers of modern made ground were present in section.

6. DISCUSSION

6.1 Standing Building Survey

The following development phases are proposed for the mill:

Phase 1: The mill and cottage are constructed during the first half of the 18th century with the mill operating as a corn mill, with a wheel probably located on the outside of its north gable. The mill is substantially rebuilt sometime before 1815 according to historical documentary sources.

Phase 2: During the first half of the 19th century the mill operated as a saw mill but became semi-derelict by the mid-19th century and was probably used as a byre or stable (note the drain holes on the north and east-facing elevation). The 1856 Ordnance Survey First Edition map (Fig 2d) depicts the mill as a saw mill in *Ruin* yet

the main core block is still shown as roofed. The three outshot buildings are unroofed at this time but the mill building was still in as a byre judging by the position of a drain on the north-facing gable. According to the same map the mill lade ran eastwards on line with the north gable which logically would have been the best location for a waterwheel.

Phase 3: By the late 19th century the mill is converted back into corn mill possibly driven by a small wheel now re-located on its exterior west-facing elevation. Water supply may have been by pipe work diverted off the mill lade to drive a small cast-iron wheel. If this is the case it means that the plinths and later blocked opening represent a second phase of water power associated with the late 19th century corn mill. For this to work, the water supply must have been diverted higher upslope off the main lade, probably by a large diameter pipe that possibly fed an overshot water wheel? The survey has confirmed that the north-facing elevation has evidence of major re-building work. A distinct change from massive whinstone boulders to regular coursed sandstone blocks was recorded (Fig 4a, Plate 3) and it is possible that this rebuilding is contemporary with this change in layout.

Phase 4: In 1955 the mill occupied the same footprint as today. By then it had probably had its walls reduced and a flat pent-shaped roof added. In 1970 according to the Ordnance Survey it was in use as a hay barn. For the last 30 years the building was used as a builder's store (Mr Wood *pers comm*.).

6.2 Watching Brief

Building Interior

The watching brief has confirmed that the building was built onto a slope rather than terraced into it. This was probably due to the presence of bedrock just below the surface. This has led to the downslope walls being higher than the upslope walls. The rubble (**002**) contained in this downslope void appears to be later demolition rubble so it was not deposited to level up the interior floor, at least in the earlier phases of use of the mill. It is probable that a wooden floor was simply laid level to the rest of the building and that the void remained below these boards.

Building Exterior

The natural river gravels were identified in the pipe trenches around the southern end of the building. No other features were identified.

7. CONCLUSION

Today there is no physical trace of the historic outshot buildings that were once attached to the building (eg, wall scars, roof lines or sockets). The fabric of the mill is in keeping with the early - mid-18th century period. The droved surrounds that survive on the east-facing elevation are similar to those present on the cottage and this strongly suggest the surviving remains of the cottage and mill are likely to be contemporary as suggested by the map evidence.

The survey has been completed to an *Enhanced* level and no further recording work is required on the building prior to its conversion.

The watching brief identified that the building was built onto a slope rather than terraced into it.

A fragment of a grinding stone was also recovered and this has been retained on site for incorporation in to the scheme.

An entry in *Discovery and Excavation in Scotland* is considered sufficient to disseminate the results of the survey. The project will also be reported through the OASIS protocol.

The project archive, comprising all CFA record sheets, maps and reports, will be deposited with the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) and copies of reports will be lodged with the Scottish Borders Council Sites and Monuments Record within six months from completion of the project.

8. REFERENCES

8.1 Bibliographic

ALGAO: Scotland Historic Building Recording Guidance 2013, East Lothian Council Archaeology Service.

Buchan and Paton, J W and H (1927) A history of Peeblesshire*, vol.3* Glasgow Page(s): Vol.3, 100, 132 Held at RCAHMS D.1.2.BUC

NLS GD170/3685 *Tack Extract by Mr. Alexander Walker of Stonypath to Alexander Aikman.* Entry dated 1743, Papers in the Campbell Family of Barcladine 1539-1961.

Pennecuik, Alexander 1815 *Works, containing the Description of Tweeddale, and miscellaneous poems. New ed., with copious notes, forming a complete history of the county to the present time. (https://openlibrary.org)*

Renwick, R (1897a) Historical notes on Peeblesshire localities, Peebles Page(s): 491-2 Held at RCAHMS D.1.21.REN

8.2 Cartographic

Roy's Military map of Scotland 1752-55

Armstrong, M 1775 *This Map of the County of Peebles*

Thomson, J 1821 *Peebleshire*

Ordnance Survey 1856 1st Edition. 25" Peebles Sheet V.9

Ordnance Survey 1898 2nd Edition 25" Peebles-shire 005.09

Ordnance Survey 1908 3rd Edition Revised 25" Peebles-shire 005.09

Ordnance Survey 1955 Sheet NT15 1:25,000 Scale

APPENDIX 1: PHOTOGRAPHIC REGISTER

Building Survey

Shot No	Summary description	Facing
001-002	South-facing external elevation (former gable)	N
003-006	East-facing elevation, general distance view	W
007-010	North-facing elevation, general view	S
011-012	West-facing elevation, general view	E
013-014	South-west corner of the mill	NE
015-016	South-east corner of the mill	NW
017-020	North-east corner of the mill	SW
021-022	North-facing elevation and terrace	S
023-024	North-west corner of the mill showing collapsed masonry	SE
025-030	South-facing elevation (gable), overlapping shots	N
031-044	East-facing elevation, overlapping shots	W
045-056	North-facing elevation, overlapping shots	S
057-081	West-facing elevation, overlapping shots	E
082-084	General view of the interior of the mill	N
085-087	General view of the interior of the mill	SW
088	General view looking onto the internal west-facing elevation	E
089-091	General view of the internal west-facing elevation	E
092	Oblique view of the internal west-facing elevation	NE
093-096	Detail shot of the window openings on the internal west-facing elevation	E
097-100	Detail shot of the internal south-facing elevation	N
101-110	Overlapping shots of the internal east-facing elevation	W
111-113	Internal oblique view of the north and east-facing elevations	S
114-115	Fabric detail on middle window on the internal west-facing elevation	E
116-117	Fabric detail on northernmost window on the internal west-facing elevation	E
118	Re-used building stone at the base of the internal south-facing elevation	N
119	Window opening on the internal south-facing elevation (gable)	N
120-121	Blocked opening seen on the internal east-facing elevation	W
122-123	Repairs to wall head using re-used stones end-on forming a pseudo reliving arch that supports nothing	W
124-125	Advanced lower foundation course at the base of the internal south-facing elevation	N
126-127	Raised margins on the northernmost window opening at the north-east corner of the east-facing elevation	W
128-129	Courses of whinstone (basalt) at the bases of the external north-facing elevation	S
130	General topographic view of the mill	SW
131	General topographic view of the mill and terrace	S
132	General topographic view of the mill and terrace	E
133	Sondage up against the west-facing elevation showing foundations	E
134	General view of the south-west corner of the mill	NE
135	General view of the south gable wall	N
136-137	Stone-built door surround with lead-plugs and iron spikes for holding a timber door frame	NE
138	General view of the interior north-facing elevation (gable) with remnants of original wall plaster	S
139-140	Blocked opening for the mills drive shaft	W

Shot No	Summary description	Facing
141	Northernmost window opening on the internal west-facing elevation	E
142	Advances foundation course on the internal south-facing gable wall	N
143	Northernmost window opening on the internal west-facing elevation	E
144-145	Sill of the northernmost window on the east wall showing window bar sockets	Oblique
146	Sandstone dressings of the northernmost window opening showing droving work	W
147	Remains of droving work on the east-facing stub of the south gable	W
148	Sample of droving work on a north-facing window of the cottage	S
149	West facing wall of a ruin on the east side of the mill	W
150	North-west corner of the ruins gable wall on the east side of the mill	SE
151	Distance shot of the mill from the NE	SW
152-153	The remains of the mill lade on the west side of the cottage	W
154-155	Remains of the ruined building on the east side of the mill	N
156-159	A pair of Hurst frame plinths situated against the internal east-facing elevation of the mill.	W
160	General view of the Hurst frame plinths in relation to the building interior	N
161-163	Looking down on the Hurst frame plinths	Vertical

Watching Brief

Shot No	Summary description	Facing
001	Register ID shot	N/A
002	Pre-strip view of interior of mill	N
003	Pre-strip view of interior of mill	S
004	Excavator commencing vegetation strip at NE corner, first layer of rubble (002) revealed	E
005	View of interior after vegetation strip	N
006	View of NW corner after rubble (002) stripped - roof slate fragments and metal bed frame inclusions	W
007	One quarter of possible mill stone found in rubble (002) – view of 'flat' possible grinding surface	Oblique
008	Detail of central socket in possible mill stone piece	Oblique
009	Rough upper surface of possible mill stone piece	Oblique
010	Rough upper surface of possible mill stone piece	Oblique
011	View of excavator clearing rubble through mill entrance to remove to dumper	N
012	Stone found in rubble with detail of a small socket and grove	Oblique
013	Post clean view of Hurst Plinths and surround [003] prior to lifting of plinths	W
014	Post clean view of Hurst Plinths and surround [003] prior to lifting of plinths	S
015	Post clean view of Hurst Plinths and surround [003] prior to lifting of plinths	N
016	Stone slabs in centre of mill with Hurst Plinths in background	W
017	Location of possible hearth [005] against interior of east wall	E
018	Close up of possible hearth [005]	E

Shot No	Summary description	Facing
019	Section through remains of concrete floor [006] over subsoil (007) at south end of mill	SE
020	Northern extent of remains of concrete floor [006] on west wall close to Hurst Plinths	W
021	Post clean view of stone slabs [009] in centre of mill	W
022	Post clean view of stone slabs [009] in centre of mill	N
023	Post clean view of stone slabs [009] in centre of mill	S
024	View of subsoil (007) over weathered sandstone bedrock (004) at south end of mill	S
025	Mid removal of stone slabs [009] showing slate and debris (002) below and in mortar between	W
026	Mid removal of stone slabs [009] showing slate and debris (002) below and in mortar between	S
027	Post removal of stone slabs [009] showing slate and debris (002) below and clay deposit (010) on south side	W
028	Hurst plinths after removal of surround [003]	W
029	View after removal of north plinth	S
030	Subsoil below south plinth with bees nest in centre	W
031-032	Hurst plinths stacked for re-use as a possible feature in development	Oblique
033	Subsoil (007) merging into subsoil (008) under Hurst plinths with spur of bedrock (004)	W
034	Possible hearth [005] after removal of charcoal rich fill (011)	E
035	Post strip view of interior – north end	N
036	View of top of possible fire place and recess in north wall	N
037	View of recesses at north east corner	NE
038	Post strip view of interior – south end	S
039	Post strip view of entrance to mill	E
040	General post strip view of interior of mill	NW
041	General shot of pipe trench	N
042	W facing section 002	W
043	Oblique shot sect 002	N
044	S facing elevation 001	S
045	S facing elevation 001	S
046	General shot of pipe trench	N
047	General shot of pipe trench	E
048	General shot of pipe trench	W
049	General shot of tree removal from NW corner wall	N
050	General shot of tree removal from NW corner wall	W
051	General shot of tree removal from NW corner wall	NW
052	Scale shot of NW corner wall	NW
053	Scale shot of NW corner wall	NW
054	Shot of W wall and rubble	W
055	General shot of tree removal from NW corner wall	W
056	General shot of tree removal from NW corner wall	W
057	West wall post tree removal	W
058	Scale shot of NW corner wall post tree removal	W
059	Scale shot of NW corner wall post tree removal	NW
060	Scale shot of NW corner wall post tree removal	NW
061	Scale shot of NW corner wall post tree removal	N
062	General shot of pipe trench	N

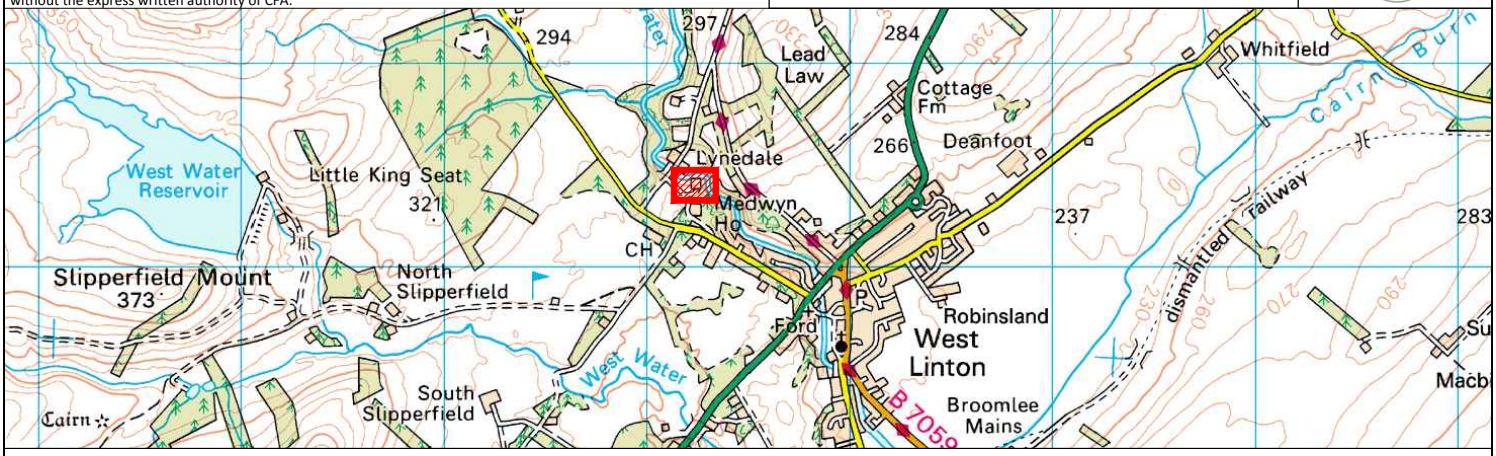
APPENDIX 2: CONTEXT REGISTER

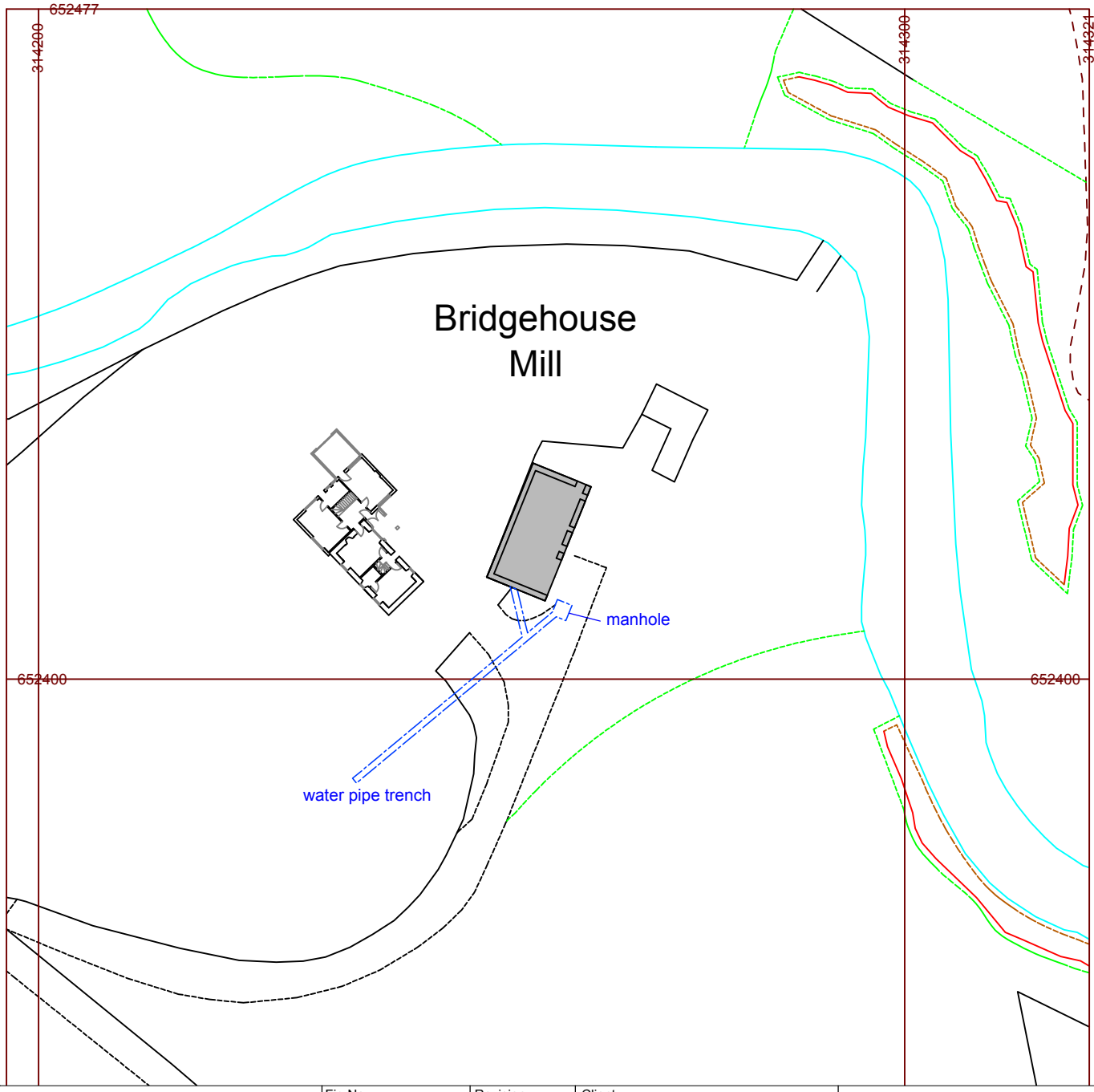
Watching Brief

Context	Description
001	Topsoil and vegetation
002	Building demolition debris
003	Mortar bonded whinstone surround to Hurst plinths
004	Natural weathered sandstone bedrock
005	Stones forming base of fire
006	Concrete floor remains
007	Natural sands and gravels underlying 002
008	Isolated soil deposit below (001) and overlying demolition rubble 002
009	Stone slabs in centre of mill
010	Clay deposit on south side of [009]
011	Charcoal rich deposit over [005]
012	Modern Made Ground – Type 1 hardcore
013	Modern Made Ground – Dark Brown Sandy Silt
014	Modern Made Ground – Yellow Sand
015	Possible Subsoil – dark greyish brown sandy silt
016	Natural sands and gravels in pipe trench. Same as 007

APPENDIX 3: DISCOVERY AND EXCAVATION IN SCOTLAND

LOCAL AUTHORITY:	Scottish Borders
PROJECT TITLE/SITE NAME:	Bridgehouse Mill, West Linton Scottish Borders Standing Building Survey & Watching Brief, Report No. 3156
PROJECT CODE:	BRIM
PARISH:	West Linton
NAME OF CONTRIBUTOR:	M Cressey
NAME OF ORGANISATION:	CFA Archaeology Ltd
TYPE(S) OF PROJECT:	Buildings Survey & Archaeological Watching Brief
NMRS NO(S):	NT15 SW7
SITE/MONUMENT TYPE(S):	Mill
SIGNIFICANT FINDS:	N/a
NGR	NT 1435 5240
START DATE (this season)	April 2014
END DATE (this season)	May 2014
PREVIOUS WORK (incl. *DES* ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An Enhanced standing building survey was carried out on the former Bridgehouse mill building near West Linton. The mill dates to the second half of the 18th century and occupies a rectangular footprint. The 1856 Ordnance Survey map indicates that the mill lade supplied a wheel on its north gable. This gable wall had evidence for a substantial rebuild that incorporated large blocks of whinstone with coursed sandstone. This was rebuild was probably due a change in layout as the available evidence pointed to a later a smaller wheel being situated on the west side of the building. It's position was marked on the interior of the building by the presence of two Hurst frame plinths. These surviving plinths were two of four plinths that would have supported the iron gear wheels and shaft. A cast-iron water wheel was probably fed by a pipe, none of which survives today. Later the mill was converted to a byre or barn then a builders shed. Interior reduction of the ground floor was archaeologically monitored. The results confirmed that the mill had been built on to a slope rather than being terraced in to it. This was probably due to the presence of bedrock just below the surface.
PROPOSED FUTURE WORK:	None
SPONSOR OR FUNDING BODY:	Mr and Mrs Wood (owners)
ADDRESS OF MAIN CONTRIBUTOR:	CFA Archaeology Ltd, Old Engine House, Eskmills Park, Musselburgh, EH21 7PQ.
EMAIL ADDRESS:	mcressey@cfa-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited in NMRS, Reports lodged with SMR and NMRS.





Key:

Mill building

Scale at A4: 1:700 (main plan)

Fig No:	Revision:	Client:
1	0	Mr & Mrs Wood

Title: Location plan

Project: Bridgehouse Mill, West Linton, Scottish Borders

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park
Musselburgh
East Lothian, EH21 7PQ
t: 0131 273 4380
f: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Drawn by:	Checked:	Report No:
KH	MC	3156

Figure 2a – Roy 1752–55

Figure 2b – Armstrong 1769

Key:	Fig. No: 2a–b	Revision: 0	Client: Mr & Mrs Wood
	Title: Historical map regression		
Scale at A4: nts	Project: Bridgehouse Mill, West Linton, Scottish Borders		

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Drawn by:	Checked:	Report No:
KH	MC	3156

Figure 2c – Thompson 1832

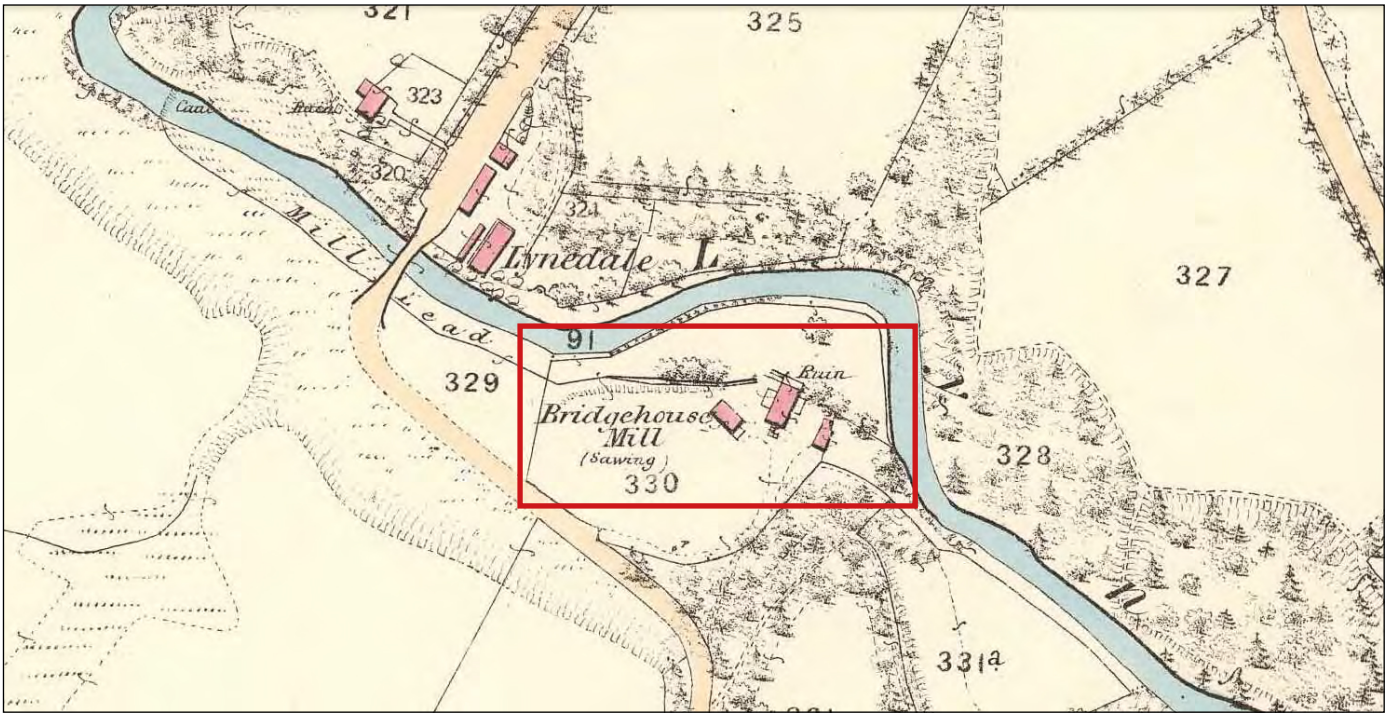


Figure 2d – Ordnance Survey 1856

Key:

Scale at A4: nts

Fig. No:	Revision:	Client:
2c–d	0	Mr & Mrs Wood

Title: Historical map regression

Project: Bridgehouse Mill, West Linton, Scottish Borders

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Drawn by:	Checked:	Report No:
KH	MC	3156

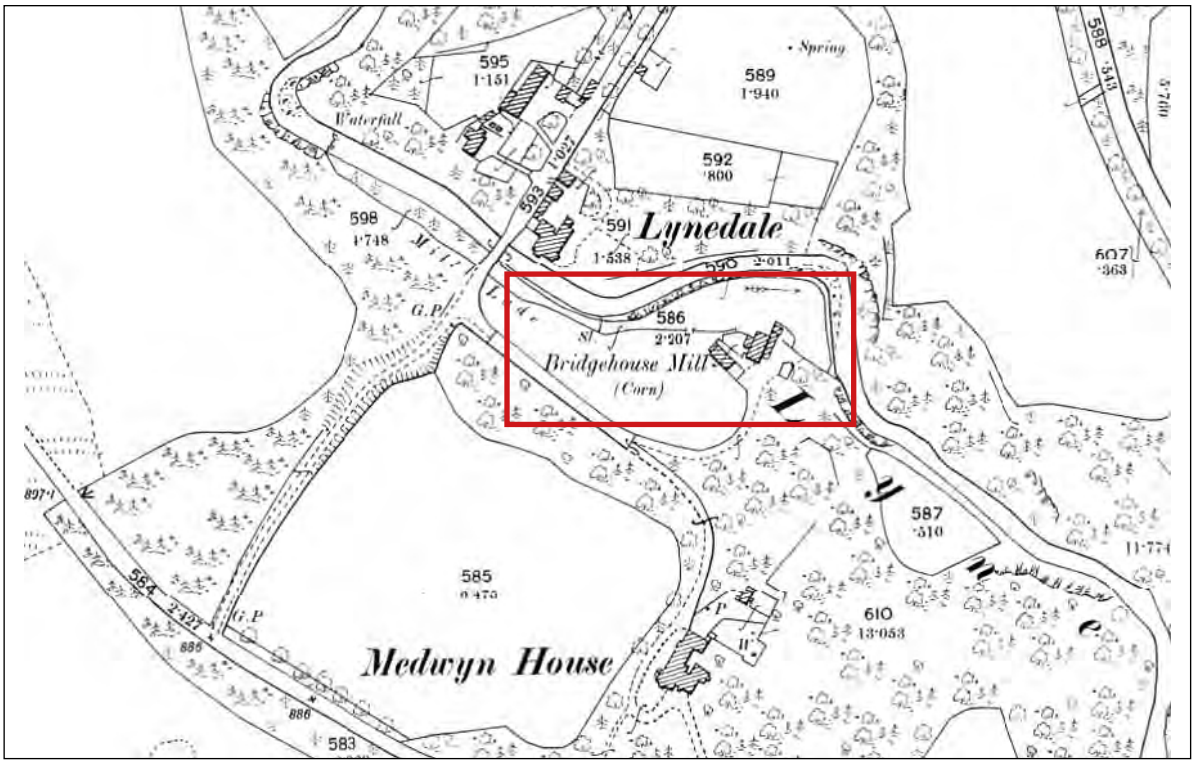


Figure 2e – Ordnance Survey 2nd Edition 1898

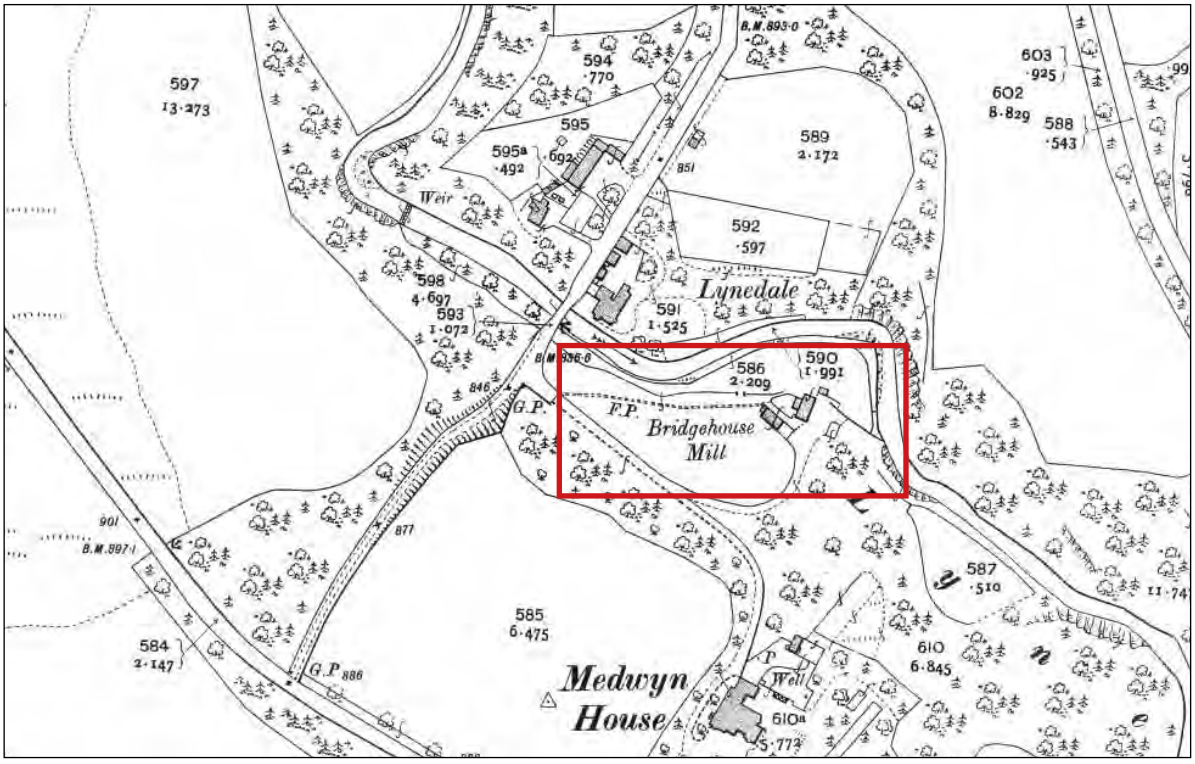


Figure 2f – Ordnance Survey 1906

Key:	Fig. No: 2e–f	Revision: 0	Client: Mr & Mrs Wood
	Title: Historical map regression		
Scale at A4: nts	Project: Bridgehouse Mill, West Linton, Scottish Borders		

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Drawn by:	Checked:	Report No:
KH	MC	3156

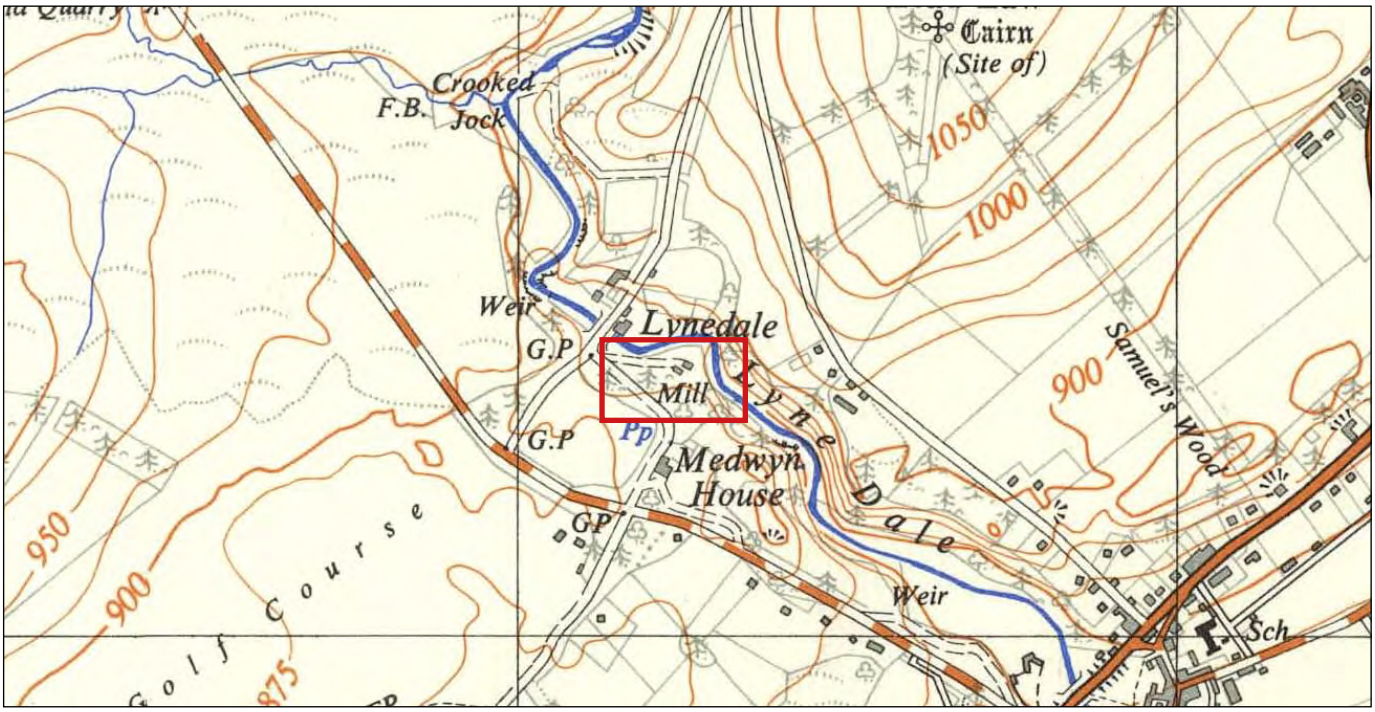


Figure 2g – Ordnance Survey 1955

Key:

Fig. No: 2g

Revision: 0

Client: Mr & Mrs Wood

Title: Historical map regression

Project: Bridgehouse Mill, West Linton, Scottish Borders

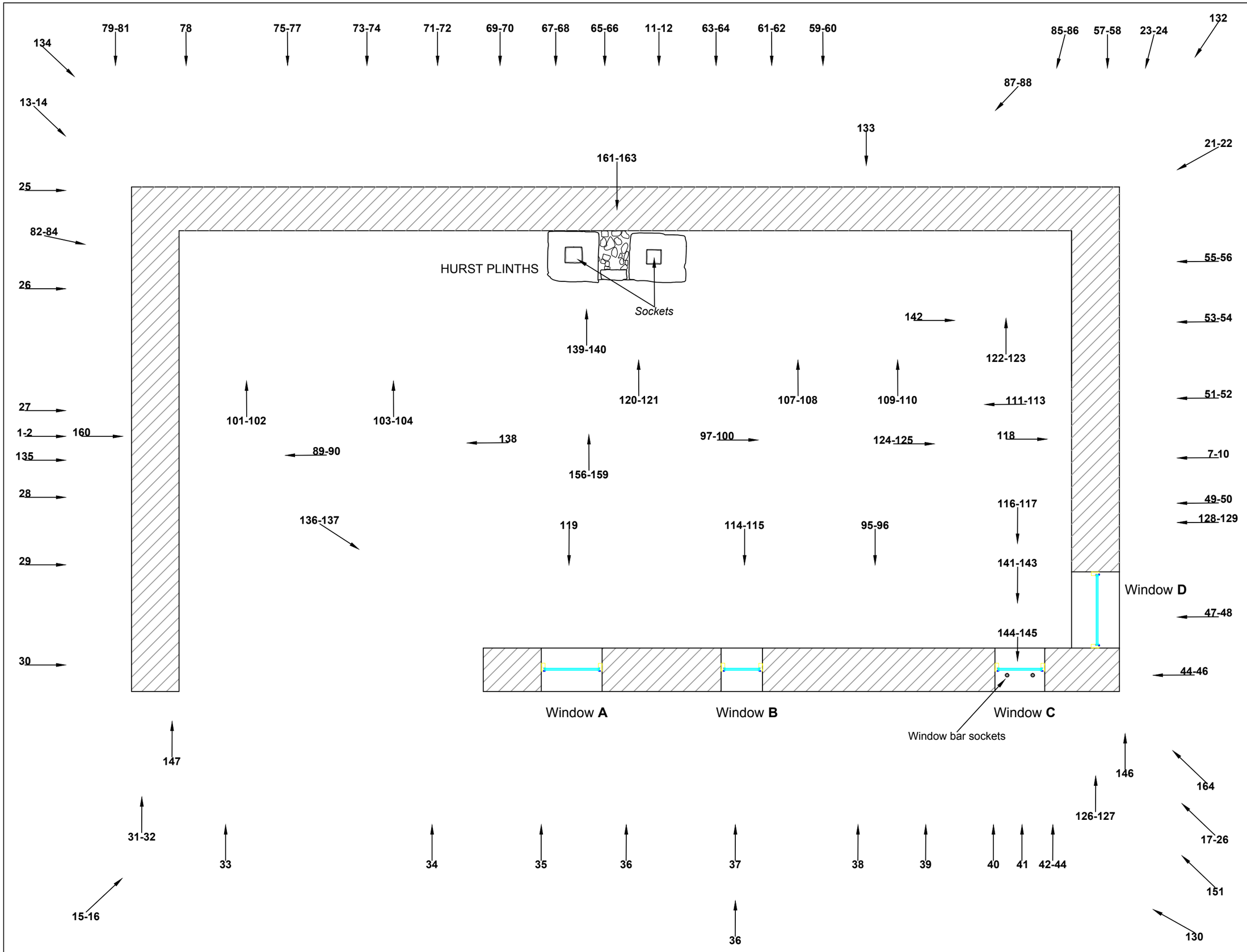
Scale at A4: nts

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Drawn by: KH

Checked: MC

Report No: 3156



Key:

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park
Musselburgh
East Lothian, EH21 7PQ
t: 0131 273 4380
f: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Fig. No:	Revision:
3	0

Title:
Ground floor plan showing photograph locations

Project:
Bridgehouse Mill, West Linton, Scottish Borders

Client:
Mr & Mrs Wood

Scale at A3:
1:50

Drawn by:	Checked:	Report No:
KH	MC	3156

Fig. 4a - North-facing elevation

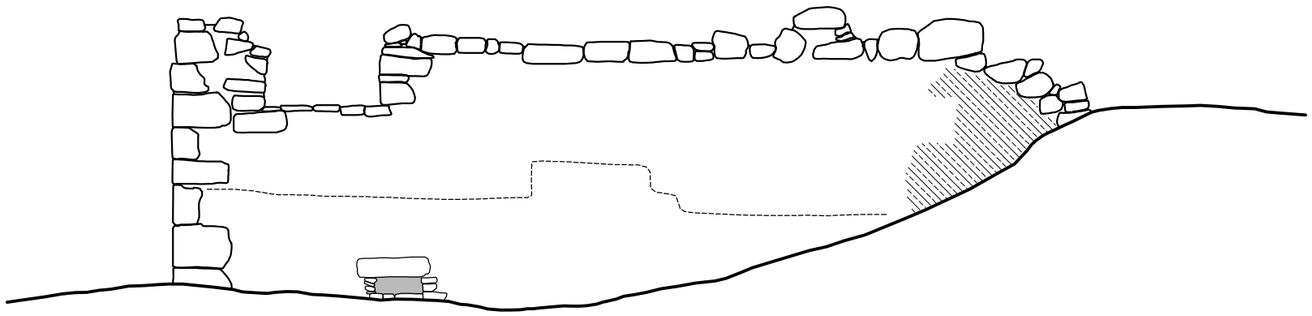


Fig. 4b - East-facing elevation

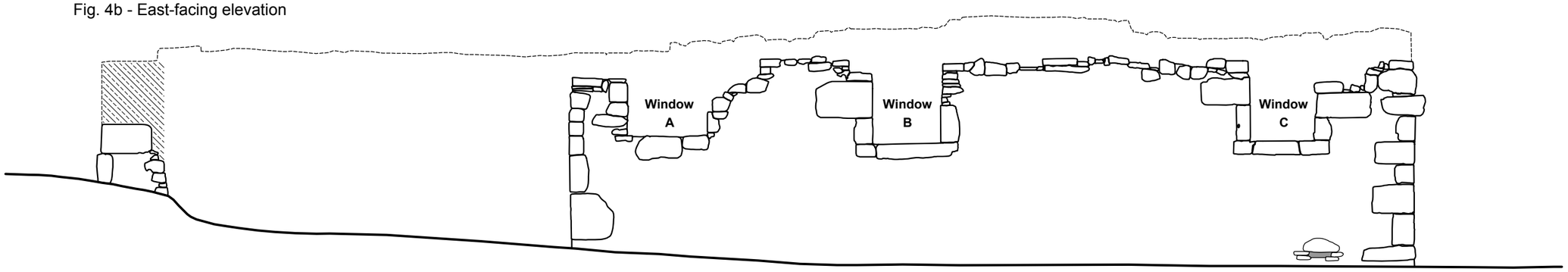


Fig. 4c - South-facing elevation

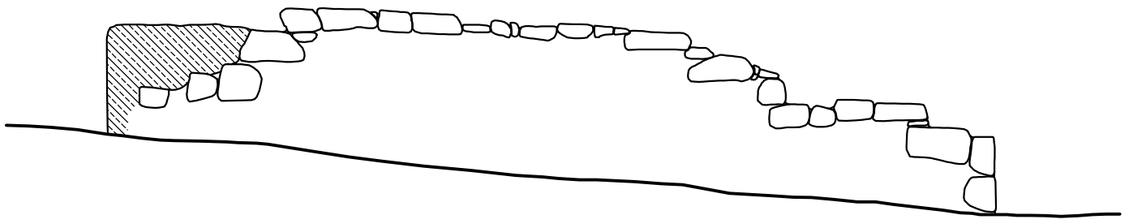
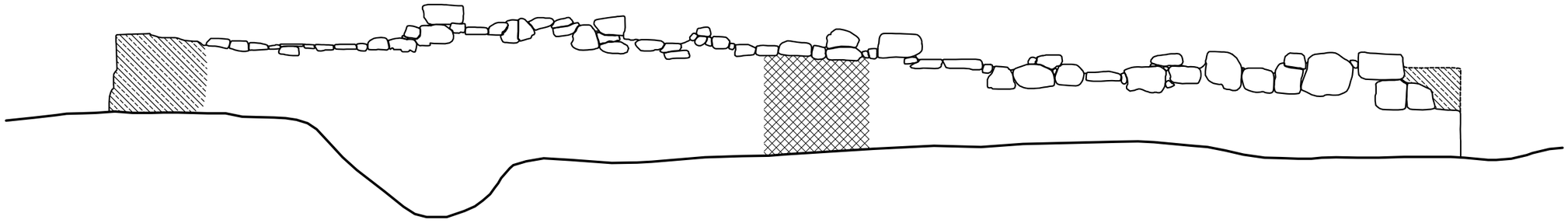


Fig. 4d - West-facing elevation



Key:

Collapsed walling

Blocking

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park
Musselburgh
East Lothian. EH21 7PQ
t: 0131 273 4380
f: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Fig. No: 4a-d

Revision: 0

Title: External elevations

Project: Bridgehouse Mill, West Linton, Scottish Borders

Client: Mr & Mrs Wood

Scale at A3: 1:50

Drawn by: KH | Checked: MC | Report No: 3156

Plate 1 – General topographical view of the mill and cottage looking south

Plate 2 – North and east-facing elevations of the mill with a roof prior to removal

Fig. No: 1 – 2		Revision: A	Project: Bridgehouse Mill, West Linton, Scottish Borders
Drawn by: KH	Checked: MC	Report No: 3156	Client: Mr & Mrs Wood

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Plate 3 – External north-facing elevation

Plate 4 – External east-facing elevation looking south-west

Fig. No: 3 – 4		Revision: A	Project: Bridgehouse Mill, West Linton, Scottish Borders	
Drawn by: KH	Checked: MC	Report No: 3156	Client: Mr & Mrs Wood	

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Plate 5 – External south-facing elevation

Plate 6 – External west-facing elevation

Fig. No: 5 – 6		Revision: A	Project: Bridgehouse Mill, West Linton, Scottish Borders
Drawn by: KH	Checked: MC	Report No: 3156	Client: Mr & Mrs Wood

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Plate 7 – Internal north-facing elevation

Plate 8 – Internal east-facing elevation (southern end)

Fig. No: 7 – 8		Revision: A	Project: Bridgehouse Mill, West Linton, Scottish Borders	
Drawn by: KH	Checked: MC	Report No: 3156	Client: Mr & Mrs Wood	

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Plate 9 – Internal east-facing elevation (mid-section)

Plate 10 – Internal east-facing elevation (northern end)

Fig. No: 9 – 10		Revision: A	Project: Bridgehouse Mill, West Linton, Scottish Borders	
Drawn by: KH	Checked: MC	Report No: 3156	Client: Mr & Mrs Wood	

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Plate 11 – Internal south-facing elevation

Plate 12 – Internal west-facing elevation

Fig. No:		Revision:	Project:		
11 – 12		A	Bridgehouse Mill, West Linton, Scottish Borders		
Drawn by:	Checked:	Report No:	Client:		
KH	MC	3156	Mr & Mrs Wood		

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Plate 13 – Hurst plinths in relation to the building layout, looking north

Plate 14 – Vertical shot of the Hurst plinths

Fig. No: 13 – 14		Revision: A	Project: Bridgehouse Mill, West Linton, Scottish Borders	REGISTERED ORGANISATION IfA	CFA ARCHAEOLOGY LTD
Drawn by: KH	Checked: MC	Report No: 3156	Client: Mr & Mrs Wood		

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ

T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Plate 15 – Ruined building remains on the east side of the mill looking south

Plate 16 – Ruined building remains on the east side of the mill looking south

Fig. No: 15 – 16		Revision: A	Project: Bridgehouse Mill, West Linton, Scottish Borders
Drawn by: KH	Checked: MC	Report No: 3156	Client: Mr & Mrs Wood

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Plate 17 – Fragment of Mill Stone

Plate 18 – Wall founded on natural river gravels (007)

Fig. No: 17 – 18		Revision: A	Project: Bridgehouse Mill, West Linton, Scottish Borders	
Drawn by: KH	Checked: MC	Report No: 3156	Client: Mr & Mrs Wood	

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ

T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

Plate 19 – Slabs (005) below ashy fire derived deposits (011)

Plate 20 – Recess in eastern wall

Fig. No: 19 – 20		Revision: A	Project: Bridgehouse Mill, West Linton, Scottish Borders		
Drawn by: KH	Checked: MC	Report No: 3156	Client: Mr & Mrs Wood		

CFA ARCHAEOLOGY LTD
The Old Engine House
Eskmills Park, Musselburgh
East Lothian, Eh21 7PQ
T: 0131 273 4380
F: 0131 273 4381
e: info@cfa-archaeology.co.uk
w: www.cfa-archaeology.co.uk

BRIM_001

BRIM_002

BRIM_003

BRIM_004

BRIM_005

BRIM_006

BRIM_007

BRIM_008

BRIM_009

BRIM_010

BRIM_011

BRIM_012

BRIM_013

BRIM_014

BRIM_015

BRIM_016

BRIM_017

BRIM_018

BRIM_019

BRIM_020

BRIM_021

BRIM_022

BRIM_023

BRIM_024

BRIM_025

BRIM_026

BRIM_027

BRIM_028

BRIM_029

BRIM_030

BRIM_031

BRIM_032

BRIM_033

BRIM_034

BRIM_035

BRIM_036

BRIM_037

BRIM_038

BRIM_039

BRIM_040

BRIM_041

BRIM_042

BRIM_043

BRIM_044

BRIM_045

BRIM_046

BRIM_047

BRIM_048

BRIM_049

BRIM_050

BRIM_051

BRIM_052

BRIM_053

BRIM_054

BRIM_055

BRIM_056

BRIM_057

BRIM_058

BRIM_059

BRIM_060

BRIM_061

BRIM_062

BRIM_063

BRIM_064

BRIM_065

BRIM_066

BRIM_067

BRIM_068

BRIM_069

BRIM_070

BRIM_071

BRIM_072

BRIM_073

BRIM_074

BRIM_075

BRIM_076

BRIM_077

BRIM_078

BRIM_079

BRIM_080

BRIM_081

BRIM_082

BRIM_083

BRIM_084

BRIM_085

BRIM_086

BRIM_087

BRIM_088

BRIM_089

BRIM_090

BRIM_091

BRIM_092

BRIM_093

BRIM_094

BRIM_095

BRIM_096

BRIM_097

BRIM_098

BRIM_099

BRIM_100

BRIM_101

BRIM_102

BRIM_103

BRIM_104

BRIM_105

BRIM_106

BRIM_107

BRIM_108

BRIM_109

BRIM_110

BRIM_111

BRIM_112

BRIM_113

BRIM_114

BRIM_115

BRIM_116

BRIM_117

BRIM_118

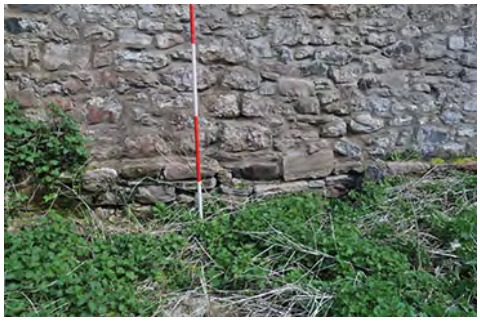
BRIM_119

BRIM_120

BRIM_121

BRIM_122

BRIM_123



BRIM_124

BRIM_125

BRIM_126

BRIM_127

BRIM_128

BRIM_129

BRIM_130

BRIM_131

BRIM_132

BRIM_133

BRIM_134

BRIM_135

BRIM_136

BRIM_137

BRIM_138

BRIM_139

BRIM_140

BRIM_141

BRIM_142

BRIM_143

BRIM_144

BRIM_145

BRIM_146

BRIM_147

BRIM_148

BRIM_149

BRIM_150

BRIM_151

BRIM_152

BRIM_153

BRIM_154

BRIM_155

BRIM_156

BRIM_157

BRIM_158

BRIM_159

BRIM_160

BRIM_161

BRIM_162

BRIM_163

BRIM_164