

Site & Landscape Survey

Smeaton Barn, Preston Mains Farm Historic Building Appraisal

Report No. 1838







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1. INTRODUCTION

1.1 General

- 1.1.1 This report presents the results of a standing building appraisal carried out by CFA Archaeology Ltd (CFA) in October 2010 at Smeaton Barn, Preston Mains Farm, East Linton, East Lothian (NGR NT 5910 7870, Fig 1). The project is based on a Written Scheme of Investigation approved by East Lothian Council.
- 1.1.2 The barn is a single storey detached structure situated within a strip of land currently used for rough grazing (Plate 1). The barn is more or less square in plan and open on three sides. Its principal features include a main rubble-built gable with ashlar quoins and six rubble-built round piers that support the A-frame joists and pantile roof. A partition wall occupies the centre of the barn and this has been partly reduced in length in the recent past.

1.2 Background

- 1.2.1 East Lothian Council has given consent for the conversion of the barn into a single modern dwelling (Planning Application Number 10/00068/P)
- 1.2.2 Due to the nature of the work to be carried out at the development site, and the historical value attached to the buildings, the Archaeology Officer at East Lothian Council has requested a Historic Building Appraisal be carried out to provide a basic record of the structures prior to its conversion and to place the structure in its geographical, architectural and historical context.

1.3 Objectives

- 1.3.1 In line with Simpson and Connolly (2006), the aims of the building appraisal are as follows:
 - Carry out a rapid desk-based assessment to examine and include map regression of first and second edition and any earlier historical map coverage.
 - to carry out an on-site appraisal of the building to assess both external and internal elevations, supported by a photographic survey and to assess any relevant information that has been gathered during the desk-based assessment;
 - to produce an illustrated buildings appraisal report to bring together the results of the desk-based assessment.
 - An assessment of any further work resulting from the findings of the Appraisal survey.

2. WORKING METHODS

2.1 General

2.1.1 CFA Archaeology Ltd follows the Institute for Archaeologists' Code of Conduct, Standards and Guidance for Historic Building Surveys.

2.2 Desk-based Survey

2.2.1 A desk-based study of the buildings has been carried out and has included examination of historical maps, and other on-line sources. Assessments of plans held by the landowner at Preston Mains Farm were also assessed.

2.3 Building recording

- 2.3.1 A historic building appraisal was carried out according to the guidelines outlined in Simpson and Connolly (2006). A site appraisal was carried out on 27 October 2010 to assess the character, and significance of the building in order to provide an informed and coherent report as a basis for further work if necessary.
- 2.3.2 A 35mm digital photographic record was maintained during the survey Appendix 1 provides a list of the photographs taken. Selected plates have been used in this report (Plates 1-10 bound at the rear).
- 2.3.3 Critical dimensions were obtained using a Leica distometer and 30m tapes. Fabric detail and architectural features were recorded onto CFA standing building recording sheets. Measured sketches were made where appropriate to inform the interpretation of the structure.

3. ARCHAEOLOGICAL RESULTS

3.1 Desk Based Assessment

National Monument Record of Scotland (NMRS)

3.1.1 The NMRS provides descriptive information on Smeaton House which was once situated to the west of Smeaton barn (see below). The house was demolished in 1947 (NMRS No. NT57NE 185.00). There is no mention of the barn in the NMRS record. The Smeaton Estate belonged to the Hepburn family for 400 years, until 1934 when it was taken over by the Gray family, the present day owners.

Cartographic

3.1.2 East Linton appears on is Roy's map (1744-55) and the placename *Smeatoun* is depicted but not the barn. The 1820 Smeaton estate map (Fig 2a) depicts a small rectangular building situated alongside a track to the north-west of Smeaton House. The 1853 First Edition Ordnance Survey map (Fig 2b) shows a square building at the same location. The 1907 Third Edition Ordnance Survey map depicts a square building with two compartments. The building footprint remains the same on all subsequent Ordnance Survey maps.

3.2 Building Appraisal

Plan layout (Fig 3a)

3.2.1 The barn has a square layout plan (Fig 3a) and measures 9m by 8.8m. Six stone-built round piers with an average height of 1.6m that supports a timber wall plate on either side to support the A-frame pantiled roof. A central partition wall occupies the middle of building providing it with two compartments. The north and south side and the east elevation are open.

North-facing elevation (Fig 3b, Plate 2)

3.2.2 The north-facing elevation measures 9m long and has two bays formed between the three drum piers which each support a softwood wall plate which in turn supports the pantile roof. The pier at the west end has been incorporated into the main gable. The piers are 1.6m high and constructed of random rubble and have been underpinned with concrete. The gable ridge has sandstone copings and the ashlar quoins are all yellow sandstone.

East-facing elevation (Fig 3c, Plate 3)

3.2.3 The east-facing elevation is open-ended with a series of softwood planks attached to the top half of the A-frame roof joist which rests on a softwood timber wall plate carried on two drum piers. Architectural drawings show that at the time that these were produced, the east elevation was boarded with planks with a gated opening situated on the north side of the gable. A plank-

built door was situated on the south side of the partition wall. These features no longer survive.

South-facing elevation (Fig 3d, Plate 4)

3.2.4 The south-facing elevation measures 9m long and has two bays formed between the three drum piers which support a softwood wall plate which in turn supports the pantile roof. The drum pillar at the east end has been incorporated into the main gable. The piers are 1.6m high and constructed of random rubble and have been underpinned with concrete. The gable ridge has sandstone copings and the ashlar quoins are all yellow sandstone.

West-facing elevation (Main Gable, Fig 3e, Plate 5-6)

3.2.5 The west-facing elevation comprises the main gable which is pitched and is 1.9m high at the corners and rising to 6m high at its apex. The ridge is covered with sandstone coping stones and the quoins and skewputs are dressed cream sandstone. The gable incorporates both sub-angular and angular whinstone and occasional sandstone (average 0.2m by 0.15m) bonded with lime mortar. Four dressed blocks of Old Red Sandstone have been used to form the apex of the gable. The corners of the gable incorporate two drum piers. The gable has been underpinned with concrete in an attempt to stabilise it.

Interior architectural details (Plate 7)

3.2.6 The central partition wall measures 6m long and 2.8m high and 0.6m wide. The wall is constructed of random rubble bonded with lime mortar and has been whitewashed. The wall abuts the gable at the west end. At the east end the wall has been reduced in height to about 0.2m. The wall head is 0.1m below the A-frame roof joists. On the south side of the wall, 1m above the floor is a line of crude sockets probably marking the position of wooden stalling.

Roof details (Fig 3f, Plate 8-10)

3.2.7 The roof comprises thirteen softwood A-frame trusses with nailed scarfe-jointed collars. Roof batons run transversely across the rafters which support the pan tiles. The trusses rest directly on top of the timber wall plates which in turn are carried by the drum piers.

4. CONCLUSION

- 4.1 The Smeaton barn at Preston Mains, East Linton has been subject to a desk-based assessment and buildings appraisal and its architectural form and layout is now better understood.
- 4.2 The desk-based assessment indicates that the building was standing in 1820 and according to the estate map, the building had a rectangular footprint. By 1853, according to the First Edition map sheet the building has a square plan. The disparity in shape could be the result of a reduction in size that occurred between 1820 and 1853. In all probability the building once had a stone-built gable on its eastern end but this has been demolished. This could account for its present layout. The machine sawn roof trusses are of late 19th or early 20th century date showing that it has been re-roofed.
- 4.3 The barn is a purpose-built livestock shelter shed and it is still known by the present owner as the lambing shed (Mr Gray pers. Comm..). The structure has parallels with English animal shelters where livestock were provided shelter and feed from the worst of the weather (Brunskill 2000, 168). Traditionally, shelter sheds could have its trusses carried on cast-iron columns, wooden posts or as is the case at Smeaton, stone built piers.
- 4.4 A summary statement of the results of this evaluation will submitted for publication in *Discovery and Excavation in Scotland*. The project will be reported through the OASIS protocol.
- 4.5 The project archive, comprising all CFA record sheets, maps and reports, will be deposited with the National Monuments Record of Scotland (NMRS) and copies of reports will be lodged with the East Lothian Council Sites and Monuments Record.

5. RECOMMENDATIONS

- 5.1 The Appraisal Survey has recorded the character of the building and is supported by a photographic and drawn record.
- 5.2 The building has been recorded in sufficient detail not to warrant any further archaeological recording work prior to its conversion but the decision for any additional work rest with East Lothian Council.
- 5.3 An entry in *Discovery and Excavation in Scotland* (Appendix 3) is considered sufficient to disseminate the results of the survey.

6. **BIBLIOGRAPHY**

Cartographic

Estate of Smeaton 1820 Surveyed by William Dickenson (scale unrecorded)

Ordnance Survey 1853 First Edition 6" *Haddingtonshire* Sheet No. 6. 1:10,560 Scale

Ordnance Survey 1907 First Edition 6" *Haddingtonshire* Sheet No.IV.9 1:10,560 Scale

Bibliographic

Brunskill, R.W. 2000 Vernacular Architecture, An Illustrated Handbook p.168.

APPENDIX 1: Digital Photographic Register

Photo No.	Description	Facing
1	South-facing elevation of the barn	N
2	South-facing elevation of the barn	N
3	West-facing elevation, gable	Е
4	West-facing elevation, gable	Е
5	West-facing elevation, gable, general shot of the skewput	Е
6	West-facing elevation, gable, general shot of the south side of gable	Е
7	North-facing elevation, general shot	S
8	North-facing elevation, general shot	S
9	East-facing elevation, general shot	W
10	East-facing elevation, general shot	W
11	East-facing internal wall of the gable, south side	W
12	East-facing internal wall of the gable, north side	W
13	North-facing internal partition wall (Flash)	S
14	North-facing internal partition wall (Flash)	S
15	North-facing internal partition wall (Normal)	Е
16	Oblique view of the north side of the partition wall	SE
17	General shot of the demolished end of the partition wall	W
18	General shot of the A-frame roof trusses resting on the wall plate	Е
19	General shot of the A-frame roof trusses resting on the wall plate	Е
20	General shot of the A-frame roof trusses at the east end of the barn	W
21	General shot of the A-frame scarf-jointed collars (near vertical)	-
22	Topographical setting of the barn	NW
23	Topographical setting of the barn	NNW
24	North-facing elevation, gable detail	S
25	South-facing elevation and gable detail	N
26	East-facing elevation (gable) and south-elevation	NW
27	North-elevation and east-facing gable	SE
28	North-facing elevation, wall plate resting on the piers	NE

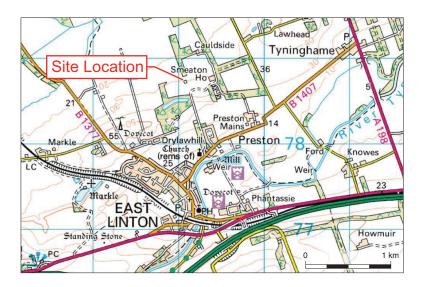
APPENDIX 2: Discovery and Excavation in Scotland Entry

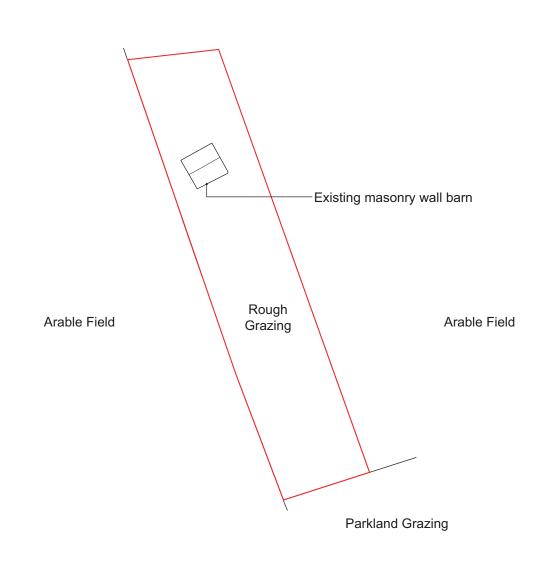
LOCAL AUTHORITY:	East Lothian
PROJECT TITLE/SITE NAME:	Smeaton Barn, Preston Mains Farm, Historic Building Appraisal
PROJECT CODE:	PREF
PARISH:	East Linton
NAME OF CONTRIBUTOR:	Michael Cressey
NAME OF ORGANISATION:	CFA Archaeology Ltd
TYPE(S) OF PROJECT:	Building Survey
NMRS NO(S):	N/a
SITE/MONUMENT TYPE(S):	Barn (Shelter shed)
SIGNIFICANT FINDS:	N/a
NGR (2 letters, 10 figures)	NT 59100 78700
START DATE (this season)	October 2010
END DATE (this season)	Octoner 2010
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A detached barn situated on the Preston Mains estate near East Linton was subjected to a Standing Building Appraisal in order to inform East Lothian Council on its historical and architectural significance prior to its conversion into a modern dwelling. The barn is present on an 1820 estate map and is likely therefore to date to the late 18 th or early nineteenth century. The barn has a square plan with six stone-built piers and a single west-facing stone-built gable. The east gable has been demolished in antiquity and the opening later replaced by planking. The A-frame roof is a 20 th century replacement which carries pan tiles. A central partition wall, now partly demolished provided two areas where animals could shelter from the worst of the weather. The building is best described as shelter shed.
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	N/A
SPONSOR OR FUNDING BODY:	Mr Gray, Preston Mains Farm, near East Linton, East Lothian.
ADDRESS OF MAIN CONTRIBUTOR:	The Old Engine House, Eskmills Park, Musselburgh, EH21 7PQ
EMAIL ADDRESS:	cfa@cfa-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	National Monuments Record of Scotland East Lothian Council Sites and Monuments Record

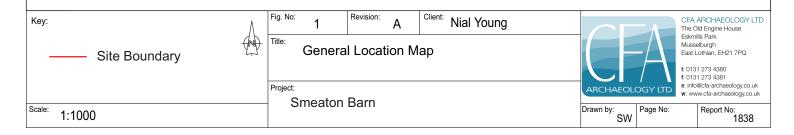
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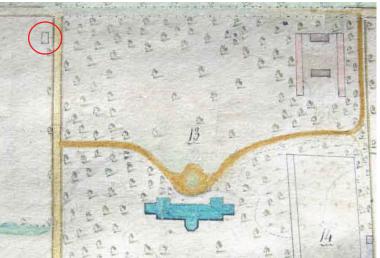
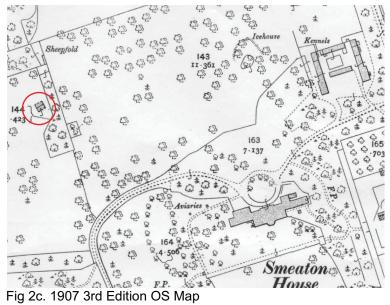
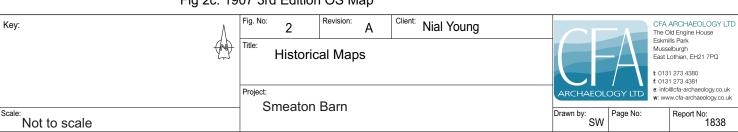


Fig 2a. 1820 Estate Map



Fig 2b. 1853 1st Edition OS Map







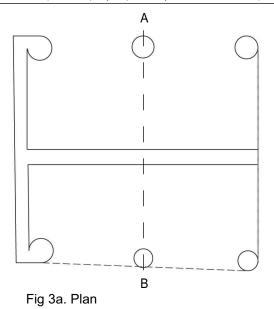


Fig 3b. Exisiting North Elevation

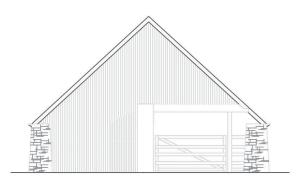


Fig 3c. Exisiting East Elevation before the timber cladding was removed

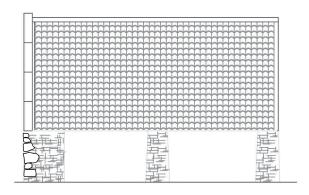


Fig 3d. Exisiting South Elevation

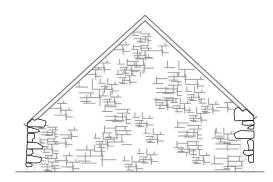


Fig 3e. Exisiting West Elevation

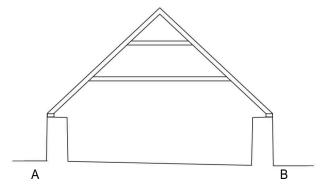


Fig 3f. Section as Existing

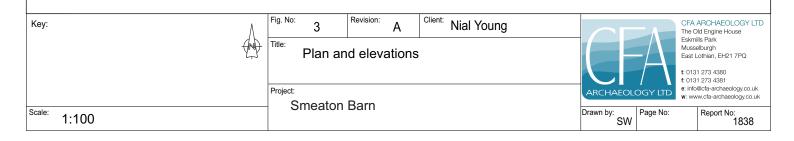






Plate 1, Smeaton barn in its topographical setting



Plate 2. North-facing elevation of the barn

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	Title:				Eskmills Park Musselburgh East Lothian, EH21 7PQ t: 0131 273 4380
Scale:	Project: Smeat	on Barn		ARCHAEOLOG Drawn by: Pa	f: 0131 273 4381 e: info@cfa-archaeology.co.uk w: www.cfa-archaeology.co.uk age No: Report No:





Plate 3. East-facing elevation of the barn



Plate 4. South-facing elevation of the barn

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Plate 5. West-facing gable of the barn



Plate 6. West-facing gable, quoin detail

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Scale:	Project: Smeaton	Barn		ARCHAEOL Drawn by: SW		o@cfa-archaeology.co.uk ww.cfa-archaeology.co.uk Report No: 1838





Plate 7. East-facing interior wall of the west gable and adjoining central partition wall



Plate 8. South-facing elevation of the central partition wall and scarf-joint details on the tie beam

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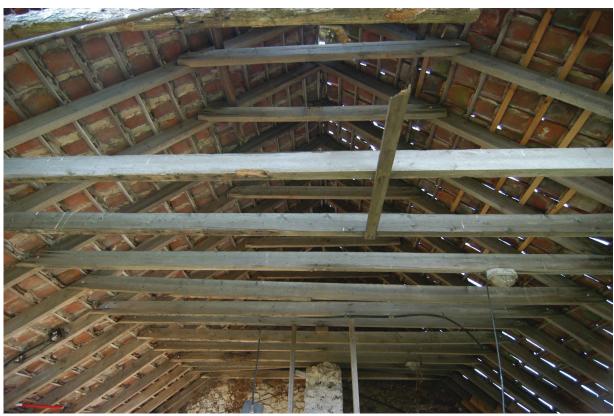


Plate 9. General view of the A-frame roof joists



Plate 10. North-facing elevation, middle pier and wall plate

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