1 NON TECHICAL SUMMARY

- 1.1 This report presents the results of an archaeological evaluation undertaken by AOC Archaeology Group at the site of Polbeth Farm, Polbeth, West Lothian. The work was commissioned by Caledonia Homes Ltd and was designed to satisfy the requirements of the local planning authority, as advised by the West of Scotland Archaeology Service (WoSAS).
- 1.2 The objective of the archaeological works was to evaluate the archaeological potential of the development area. The work was carried out during October 2007 and was conducted according to the terms of a *Written Scheme of Investigation* which was agreed by WoSAS, and approved by the planning authority. The evaluation consisted of fourteen trenches totalling 502 m², comprising an 8% sample of the development area.
- 1.3 The evaluation revealed a number of 19th/20th century walls, and what is interpreted as a red brick courtyard associated with a later phase of the farm buildings. No other features or artefacts of archaeological significance were identified. No further works are recommended.

2 INTRODUCTION

2.1 Planning background

2.1.2 An archaeological evaluation was undertaken by AOC Archaeology Group at the site of Polbeth Farm, Polbeth, West Lothian (centred NGR: NT 0251 6424). The work was commissioned by Caledonia Homes Ltd in respect to a proposed housing development. The evaluation works were designed to satisfy the requirements of the local planning authority, as advised by the West of Scotland Archaeology Service (WoSAS), and were in accordance with the principles inherent in NPPG 5 (SOEnd 1994) and PAN 42 (SOEnd 1994a).

2.2 Location

2.2.1 The site is bounded by residential housing to the south, agricultural land to the west, Polbeth Road to the east and West Calder Burn and a wooded area to the north. It is a generally flat area but slopes sharply at the northern limit of the site. The subsoil comprised light greyish yellow clay. The location and extent of the site is shown in Figure 1.

2.3 Archaeological background

2.3.1 The solid geology of the proposed development area is the Calciferous Sandstone series of the Carboniferous Formation and is located on the shale oil field of West

Lothian. The oil shale field covers an area of approximately 75 square miles and contains seven main oil bearing 'seams'. There are five main faults known as the Murieston, Calder, Middleton Hall, Winchburgh and Ociltree faults (Kerr 1999). The solid geology is overlain by thick deposits of Late-Devensian till, with mounds and eskers of fluvioglacial sand and gravel. The whole area has been affected by isostatic uplift resulting in cutting of the gorge of the River Almond since the end of the last glaciation (McAdam & Clarkson 1986).

- 2.3.2 The earliest maps available for the proposed development provide indications as to the longevity of the various farmstead and place-names in the area. However it is not until Roys map of 1747-55 that a small group of buildings labelled as 'Powbeath' appear, and then Forrests map of 1818 which has the first mention of the modern spelling of 'Polbeth.
- 2.3.3 Ordnance Survey maps from 1853, 1895, 1907 and 1957 show the development and expansion of the farmstead. It is shown to have expanded west from its 1853 extent to comprise a courtyard farmstead with an additional north-south range and one NW-SE range adjacent to the road. The land in the west of the proposed development area is shown to be occupied by a mixture of rough scrub and woodland. The 1907 maps show a further expansion to the south with the addition of NW-SE aligned range adjacent to the road. The 1957 maps indicate a slight growth in the western and southern ranges.
- 2.3.4 Prior to the evaluation, with the exception of Polbeth farmstead no other archaeological sites were known within the proposed development area or its immediate vicinity.

3 OBJECTIVES

- 3.1 The objectives of the archaeological evaluation were:
 - to determine and assess the character, extent, condition, quality, date and significance of any buried archaeological remains within the proposed development area;
 - *ii)* should significant archaeological deposits be discovered, to prepare a mitigation strategy compliant with NPPG 5 and PAN 42.

4 METHODOLOGY

- 4.1 Fourteen trenches (Figure 1) were excavated covering a basal area of 502 m², an 8% sample of the development area.
- 4.2 The trial trenching was designed to establish the extent, condition, character, quality and date of any archaeological features present specifically the earlier

phases of the farmstead phase. The trenches were of varying lengths and set on varying orientations (Figure 1). Weather conditions during the evaluation varied between occasional heavy showers and dry fine weather. The weather conditions failed to compromise archaeological visibility.

- 4.3 Stripping of the overburden was by means of a JCB excavator equipped with a toothless ditching bucket approximately 2.0 m wide. Excavation was undertaken in shallow spits until the first significant archaeological horizon or natural subsoil was reached. All machine excavation was supervised by an experienced field archaeologist.
- 4.4 All trial trenching was undertaken according to AOC Archaeology Group's standard operating procedures.
- 4.5 All significant archaeological features were cleaned and then investigated in order to determine their character, function, nature, date and significance. The trenches were backfilled on completion of evaluation.

5 RESULTS

- 5.1 The archaeological evaluation was undertaken between 29th and 31st October 2007. Fourteen trenches, approximately 2.0 m wide were machine excavated (Figure 2).
- 5.2 The positions of trenches differed slightly from the WSI due to the presence of large stockpiles of building debris at various locations across the site. The existence of a live sewer also impacted on the trench distribution.
- 5.3 The following should be read together with the various data gathered from the evaluation presented in Appendices 1-4 and Figures 1-5.
- 5.4 The topsoil comprising soft dark brown sandy silt, around 0.30 0.40 m in depth, was only present in Trenches 4, 7, 8 and 12. The ground around the now demolished farmstead predominantly consisted of made ground of varying depths and types.
- 5.5 Trenches 2, 3, 5, 6, 8, 9, 13 and 14 all contained 19th /20th century building remains. These consisted of the remnants of walls or a red brick courtyard associated with the later phases of the farmstead.
- Trench 2 (Figure 3) was partly located on the existing foundation/floor level of the western range as documented in the 1907 Ordnance Survey map. The continuation of the trench past the end of the building showed that it lay directly over the clay natural and no earlier phase of the farmstead, or any other building, was discernable.

- 5.7 Trench 3 (Figure 3) was located to the south-east of Trench 2. A substantial wall (306), 1.48 m wide, made up of grey white blocks and red brick lay at its western end. Given its location it is considered to be part of the western extension to the south western range. The subsoil that was exposed either side of (306) also emphasises that this wall was built directly over the natural subsoil and no previous phases were evident.
- 5.8 Trench 5 (Figure 3) contained two areas of exactly the same red brick courtyard material (501) and (504) separated by an area of natural subsoil, and plausibly associated with the red brick areas in Trenches 6, 13, and 14. The trench section revealed a black grit madeground material (503) that acted as a foundation surface for the red bricks. Wall (505) located at the western end of the trench was made up of large dressed blocks, mortar bonded and measuring 2.5 m long and 0.75 m wide. It too was directly above natural subsoil (502). It is thought that this represents one of the eastern corners of the south-west range.
- 5.9 Trench 6 (Figure 3) was parallel with Trench 5 and contained two red brick court yard areas, (603) and (604), directly overlying natural subsoil. The eastern area (603) measured 2.50 m long and covered the base of the trench. Approximately 2.25 m to the western area (603) survived along a length of 3.00 m. Both features consisted of only one course of bricks set on a gritty black hardcore base (602).
- 5.10 Trench 8 (Figure 4) was located to the west of the development area and so was distant from the known farmstead buildings. The remains of a paved area (803) were uncovered at the western end of the trench. It was constructed using large, dressed grey stone blocks that were placed directly above natural. It may represent or be associated with a possible walkway to a well that was to the west of the farmstead.
- 5.11 Trench 9 (Figure 4) was located to the south-east of Trench 1. The majority of the varying fills of this trench were modern tarmac or landfill dumping (901, 902, 903 & 904). One large, concrete block constructed wall (905), orientated NE-SW, overlay over modern debris (906) which in turn directly overlay natural subsoil.
- 5.12 Trenches 12, 13 and 14 were excavated to specifically evaluate the south eastern corner of the site with particular attention to the structure represented in this area on the 2nd Edition Ordnance Survey map (1895). Trench 13 (Figures 4 & 5) was located at the south-east limit of the site. It also contained within it a red brick courtyard floor (1301) that was similar to the courtyard floors encountered in the other trenches. It measured 2.80 m long and was positioned directly above a black grit material (1302). The black grit was directly above the natural subsoil.
- 5.14 Trench 14 (Figure 4 and 5) was located in between Trenches 5 and 6. It contained two areas of red brick court yard (1401) and (1405). Area (1401) measured 1.85 m long, overlying red and black grit (1402) which in turn overlay natural subsoil

(1403). Courtyard area (1405) at the western end of the trench followed a similar pattern. It measured 3.0 m in length and was also positioned directly above black grit (1402) and natural subsoil (1403).

6 FINDS

6.1 There were no significant finds from this evaluation. However, a sample brick was removed from (504). The other bricks present on site were all stamped/moulded with the name 'Burnhouse'.

7 CONCLUSION

- 7.1 The only features revealed by the trial trenching were various walls and floors of Polbeth Farm that appear to be directly associated with the later building phases of the 19th and 20th centuries.
- 7.2 Where building remains were noted they were shown to be directly overlying natural subsoil. Neither features nor artefacts of an earlier date were present. No further works are recommended.

8 CARTOGRAPHIC REFERENCES

1747-55 Roy, W Military Survey of Scotland.

1818 Forrest, W Linlithgowshire

1853 Ordnance Survey *Edinburghshire* Sheet 10

1895 Ordnance Survey *Edinburghshire* Part of Sheet V.I4 *Linlithgowshire* sheets IX.16 & XII.14

1907 Ordnance Survey *Edinburghshire* Part of Sheet V.I4 *Linlithgowshire* sheets IX.16 & XII.14

1957 Ordnance Survey Sheet NT06SW

9 BIBLIOGRAPHIC REFERENCES:

AOC 2007 Polbeth Farm, Polbeth, West Lothian: Written Scheme of Investigation. AOC unpublished client document.

Kerr, D 1999 Shale Oil Scotland Author Publication, Edinburgh

- McAdam, AD & Clarkson ENK 1986 Lothian Geology An Excursion Guide Scottish Academic Press: Edinburgh.
- SOEnD 1994 *National Planning Policy Guideline 5: Archaeology and Planning.* The Scottish Office Environment Department.
- SOEnD 1994a Planning Advice Note 42. Archaeology the Planning Process and Scheduled Ancient Monument Procedures. The Scottish Office Environment Department.

APPENDIX 1: TRENCH DESCRIPTIONS

Trench 1

Dimensions 30 m by 2 m
Total Area 60 m²
Orientation E/W

Depth of Topsoil Topsoil non-existent. Landfill dump at east end of the trench

Depth of excavation 0.70 – 1.4 m Significant Features None

Subsoil Yellow / grey clay

Finds None

Trench 2

Dimensions 30 m by 2 m
Total Area 60 m²
Orientation E/W

Depth of Topsoil Topsoil Topsoil non-existent up to 27 m from east end. 0.28 – 0.5 m thereafter

Depth of excavation After 27 m 0.5 - 0.74 m

Significant Features Remains of farm buildings consisting of in situ concrete flooring

Subsoil Yellow / grey clay

Finds None

Trench 3

Dimensions30 m by 2 mTotal Area 60 m^2 OrientationE/WDepth of Topsoil0.09 - 0.54 m

Depth of excavation 0.16 - 0.63 m

Significant Features Remains of farm buildings consisting of concrete flooring and brick walls

Subsoil Yellow / grey clay

Finds None

Trench 4

Dimensions 10 m by 2 m
Total Area 20 m²
Orientation E/W

Depth of Topsoil 0.18 - 0.23 m. Non-existent after 4 m from east end.

Depth of excavation 0.29 - 0.46 m

Significant Features Remains of farm buildings consisting of red brick flooring, also rubble drain

running NNE – SSW.

Subsoil Yellow / grey clay

Finds None

Trench 5

 $\begin{array}{lll} \textit{Dimensions} & 32 \text{ m by 2 m} \\ \textit{Total Area} & 64 \text{ m}^2 \\ \textit{Orientation} & E/W \\ \textit{Depth of Topsoil} & 0.02 - 0.5 \text{ m} \\ \textit{Depth of excavation} & 0.02 - 0.57 \text{ m} \\ \end{array}$

Significant Features Red brick courtyard floor. Substantial stone wall composed of large dressed

stone blocks.

Subsoil Yellow / grey clay

Finds None

Trench 6

Dimensions30 m by 2 mTotal Area 60 m^2 OrientationE/WDepth of Topsoil0.12 - 0.56 m

Depth of Topsoil 0.12 - 0.56 m
Depth of excavation 0.29 - 0.46 m

Significant Features Red brick courtyard floor

Subsoil Yellow / grey clay

Finds None

Trench 7

Dimensions 25 m by 2 m

Total Area 50 m²

Orientation E/W

Depth of Topsoil 0.44 - 0.48 m Depth of excavation 0.59 - 0.61 m

Significant Features Red brick courtyard floor

Topsoil Yellow / grey, brown silty clay with frequent modern inclusions including

bricks and tin cans

Subsoil Yellow clay Finds None

Trench 8

 $\begin{array}{ll} \textit{Dimensions} & 30 \text{ m by 2 m} \\ \textit{Total Area} & 60 \text{ m}^2 \\ \textit{Orientation} & \text{NW/SE} \\ \textit{Depth of Topsoil} & 0.28 - 0.42 \text{ m} \\ \textit{Depth of excavation} & 0.43 - 0.52 \text{ m} \end{array}$

Description Large grey blocks placed across width of trench. Black compact ashy layer

containing bricks

Subsoil Yellow clay Finds None

Trench 9

Dimensions 13 m by 2 m 26 m^2 Total Area Orientation NE/SW Depth of Topsoil Non-existent 0.10 - 0.90 m Depth of excavation Significant Features Concrete wall Subsoil Yellow clay Finds None

Trench 10

Depth of Topsoil Non-existent. All made ground of tarmac, grit and rubble.

Depth of excavation 0.80 m

Description Electrical service runs E-W through the trench at a depth of 0.47 m. At the base

of the trench a ceramic drain emerged from the eastern section.

Subsoil Yellow clay Finds None

Trench 11

Dimensions4 m by 2 mTotal Area8 m²OrientationE/WDepth of TopsoilNon-existentDepth of excavation1.25 m

Description North facing wall of the northern most building down to the foundation layer

and natural.

Subsoil Yellow clay Finds None

Trench 12

Dimensions 13 m by 2 m
Total Area 26 m²
Orientation N/S

Depth of Topsoil 0.28 m but made ground after 2 m from the north end

Depth of excavation 0.53 m

Description No significant features

Subsoil Yellow clay Finds None

Trench 13

Dimensions 18 m by 2 m
Total Area 36 m²
Orientation E/W

Depth of Topsoil Non-existent all made ground.

Depth of excavation 0.11 - 0.51 m

Significant Features Red brick court yard floor

Subsoil Yellow clay Finds None

Trench 14

 $\begin{array}{ll} \textit{Dimensions} & 9 \text{ m by 2 m} \\ \textit{Total Area} & 18 \text{ m}^2 \\ \textit{Orientation} & E/W \end{array}$

Depth of Topsoil
Depth of excavation
Significant Features
Subsoil
Finds
Non-existent
0.1 - 0.9 m
Concrete wall
Yellow clay
None

APPENDIX 2: CONTEXT REGISTER

Context #	Type	Description
201	Deposit	Concrete foundation layer of farm building 4 m long
202	Deposit	Broken concrete foundation layer of farm building 4 m long
203	Deposit	Concrete foundation layer of farm building 4.5 m long
204	Natural	Yellow/ grey clay
205	Cut	Cut of service pipe
206	Fill	Fill of 205
207	Pipe	Fill of 205
301	Natural	Yellow grey clay
302	Cut	Cut of service pipe
303	Fill	Fill of 302

304	Deposit	Small corner of bricks one course high sitting into the natural
305	Deposit	Concrete foundation layer of farm building 4.5 m in length
306	Wall	External wall of farmstead building. 1.15 m wide including dressed blocks
		and red bricks with packing of bricks, wood and glass.
501	Deposit	Red brick courtyard floor. It consisted of one course of red bricks
	1	compactly placed together over a black /red grit made ground foundation
		layer.
502	Natural	Yellow grey clay
503	Deposit	Black and red grit-made ground deposit
504	Deposit	Red brick courtyard floor. It consisted of one course of red bricks
	1	compactly placed together over a black /red grit made ground foundation
		layer.
505	Wall	Corner of substantial wall constructed out of dressed blocks
506	Deposit	Large blocks in close proximity to one another amongst a mix of made
200	Deposit	ground material - possibly evidence of wall collapse as not constructed in
		the same way as 505.
601	Natural	Yellow grey clay
602	Deposit	Red and black grit. Widespread across the site as a 'B' horizon.
603	Deposit	Red brick courtyard floor. It consisted of one course of red bricks
003	Deposit	compactly placed together over a black /red grit made ground foundation
		layer.
604	Deposit	Red brick courtyard floor. It consisted of one course of red bricks
004	Deposit	compactly placed together over a black /red grit made ground foundation
		layer.
801	Natural	Yellow grey clay
802	Deposit	Very black gritty made ground material that covers an extensive area.
803	Deposit	Paved area constructed out of dressed blocks.
901		
902	Deposit	Land fill dump material Tarmac
	Deposit	
903	Deposit	Red grit- similar to the made ground across the site
904	Deposit	Hardcore – made ground material
905	Wall	Substantial wall constructed from large concrete blocks orientated SE-NW.
906	Deposit	A mixed layer of debris – made ground material.
907	Natural	Yellow grey clay
1301	Deposit	Red brick courtyard floor. It consisted of one course of red bricks
		compactly placed together (over a black /red grit made ground foundation
		layer)
1302	Deposit	Black and red grit-made ground deposit. Directly underlying the 1301 and
		directly over 1303.
1303	Natural	Yellow grey clay
1401	Deposit	Red brick courtyard floor. It consisted of one course of red bricks
		compactly placed together (over a black /red grit made ground foundation
		layer.
1402	Deposit	Red bricks and black gritty material
1403	Natural	Yellow grey clay
1404	Deposit	Black grit.
1405	Deposit	Red brick courtyard floor. It consisted of one course of red bricks
		compactly placed together (over a black /red grit made ground foundation
	1	layer)

APPENDIX 3: DRAWING REGISTER

Drawing #	Area	Details	Scale
1	Tr.2	Plan of Evaluation Trench 2	1:50
2	Tr.3	Plan of Evaluation Trench 3	1:50
3	Tr.5	Plan of Evaluation Trench 5	1:50
4	Tr.6	Plan of Evaluation Trench 6	1:50
5	Tr.8	Plan of Evaluation Trench 8	1:50
6	Tr.9	Plan of Evaluation Trench 9	1:50
7	Tr.13	Plan of Evaluation Trench 13	1:50
8	Tr.14	Plan of Evaluation Trench 14	1:50

APPENDIX 4: PHOTOGRAPHIC RECORD

Black & White Print & Colour Slide Film 1

Frame	Area	Detail	From
1-2		Registration	
3-4		West terminus of Trench 1	W
5-6		East terminus of Trench 1	E
7-8		Wall at west end of Trench 3	S
9-10		Wall at east end of Trench 5	N
11-12		Middle bricks in Trench 5	NE
13-14		Walls at west end of Trench 5	E
15-16		Detail of buildings in Trench 11	N
17-18		Detail of concrete block wall in Trench 9	S
19-20		General shot of Trench 3	E
21-22		General shot of Trench 5	E
23-24		Wall at east end of Trench 6	W
25-26		Wall at west end of Trench 6	W
27-28		Wall at west end of Trench 8	E
29-30		General shot of Trench 6	W
31-32		General shot of Trench 12	N
33-34		Wall at east end of Trench 13	\mathbf{W}
35-36		Wall at west end of Trench 14	E

Black & White Print & Colour Slide Film 2

Frame	Area	Detail	From
1-2		Registration	
3-4		West-facing wall (203)	W
5-6		General shot of Trench 14	W
7-8		North-facing section of Trench 14	N
9-10		West-facing section of Trench 13	W
11-12		North-facing section of Trench 13	N
13-20		General shots of construction debris on the site	S

APPENDIX 5: DISCOVERY AND EXCAVATION IN SCOTLAND REPORT

LOCAL AUTHORITY:	West Lothian Council
PROJECT TITLE/SITE NAME	Polbeth Farm, Polbeth, West Lothian
PROJECT CODE:	AOC 20791
PARISH:	West Calder
NAME OF CONTRIBUTOR:	Sarah Lynchehaun
NAME OF ORGANISATION:	AOC Archaeology Group
TYPE(S) OF PROJECT:	Archaeological Evaluation
NMRS NO(S):	
SITE/MONUMENT TYPE(S):	
SIGNIFICANT FINDS:	
NGR (2 letters, 6 figures)	NT 0251 6424
START DATE (this season)	29 th October 2007
END DATE (this season)	31 st October 2007
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological evaluation was carried out in advance of a proposed housing development at Polbeth Farm, Polbeth, West Lothian. Fourteen trenches (covering an area of 502 m²) were opened. Polbeth Farm dates to at least the mid 18 th century. The only features revealed by the trial trenching were various walls and floor remains that seemed to be associated with 19 th and 20 th century building phases.
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	
SPONSOR OR FUNDING BODY:	Caledonia Homes Ltd
ADDRESS OF MAIN CONTRIBUTOR:	Edgefield Road Industrial Estate, Loanhead, Midlothian, EH20 9SY
EMAIL ADDRESS:	admin@aocscot.co.uk
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited in NMRS