

**MAINS OF PETMATHEN
STEADING
OLD RAYNE
ABERDEENSHIRE**



Standing Building Survey

Carried out 25th January 2012

by

Murray Archaeological Services Ltd



Report No: MAS 2012-5

by

H K Murray and J C Murray

H K Murray BA, PhD, MIFA, FSA Scot

J C Murray BA, MIFA, FSA Scot, FMA

Hill of Belnagoak, Methlick, Ellon, Aberdeenshire AB41 7JN

Telephone: (01651) 806394 e-mail: cmurray@btinternet.com

**MAINS OF PETMATHEN
STEADING
OLD RAYNE
ABERDEENSHIRE**

- Standing Building Survey -

1. Background

1.1 A standing building survey was required for the steading buildings at Mains of Petmathen, Old Rayne Aberdeenshire, prior to their conversion into a dwelling house.

1.2 The archaeological condition (Condition No 4) was applied in the context of planning legislation (PAN 2/2011, SPP, SHEP), which states that it is necessary for developers to arrange for archaeological work to take place prior to development, in appropriate circumstances. Planning Application Number: APP/2011/3085.

1.3 A Level 1 Standing Building Survey was required which includes measured floor plans and a written account of the building's plan, form, function, age and development sequence, in addition to a photographic survey.

1.4 Murray Archaeological Services Ltd was commissioned to undertake the work by John Wink Design on behalf of his clients Mr and Mrs Bisset. The site element of the survey was completed on the 25th January 2012.

2. Desk-top survey

2.1 A search was carried out in the Sites and Monuments Record, Archaeology Service, Aberdeenshire Council and in the Sites and Monuments Records of the Royal Commission for Ancient and Historic Monuments in Scotland (RCAHMS) through Canmore, Canmap and Pastmap.

2.2 The 1st, 2nd and 3rd edition Ordnance Survey maps were consulted.

2.3 Site plans of the site were kindly supplied by John Wink Design and have been annotated and used as a basis for detailed plans of the observed areas.

3. The Site

3.1 The site lies at c.115m OD on the low hilly ground between the Shevock and the Gadie Burns and midway between Oyne and Old Rayne, SW of the A96 Aberdeen to Inverness road.

Parish: Oyne

GPS: 36696, 82722 (front of steading)

RCAHMS No: NJ62NE 49.04

Aberdeenshire SMR: NJ62NE0073



Illus 1 The site, general view of the N range

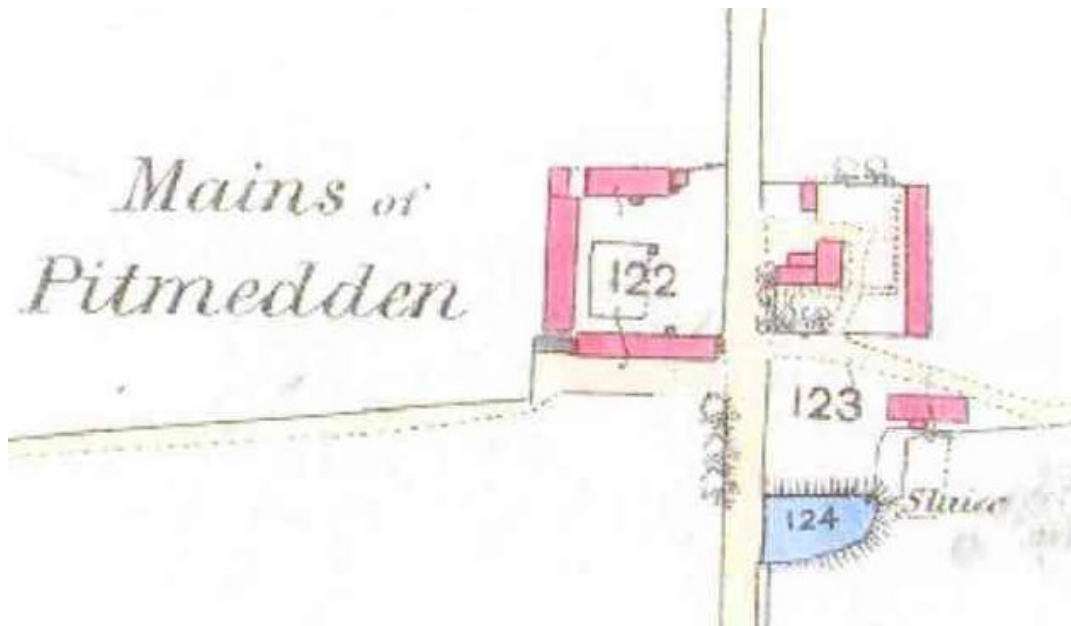
4. Documentary evidence

4.1 Petmathen House, a late 19th-century country house demolished in 1956 may have been on or near the site of a medieval manor (RCAHMS). The Mains of Petmathen was the home farm of the estate.

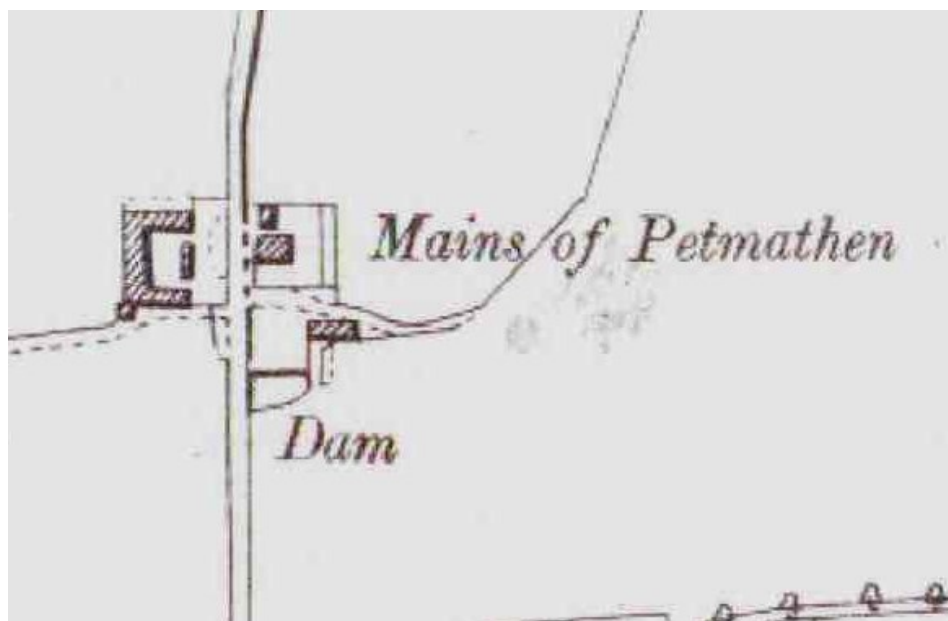
4.2 Roy's Military Map of 1747/55 shows Pitmaden (*sic*) as a small settlement cluster to the N of the enclosures of the Westhall estate.

4.3 The 1st edition Ordnance Survey 25" to the mile map (Aberdeen sheet XLIV.8 Oyne), surveyed in 1867 (published 1870) shows Mains of Pitmedden (*sic*) with a U-shaped steading (the subject of the present survey) to the W of the public road and the farmhouse (still extant) to the E of the road with a small outbuilding to the N and a long narrow steading to the E. A water mill (still extant) lies to the SE of the farmhouse (Illus 2).

In 1867 the U-shaped steading is shown as three freestanding, separate buildings around a dung court.



Illus 2 1st edition OS map (25"/mile) surveyed 1867, published 1870 (www.nls.ac.uk)



Illus 3 2nd edition 6"/mile Ordnance Survey of 1899 (pub 1901) (www.nls.ac.uk)

4.3 By the 2nd edition 6"/mile Ordnance Survey of 1899 (published 1901. Aberdeenshire Sheet XLIV.NE) the U-shaped steading appears to have been modified to form a continuous block of buildings, with the previously longer S range foreshortened to equal the length of the N range. A small freestanding structure forms a new E range (Illus 3).

The change in the main steading appears to have coincided with a change to the layout on the E side of the road, with the long narrow E steading roofless, suggesting its functions may have been absorbed by the main steading.

This change in layout between 1867 and 1899 may reflect an upgrading of the Mains farm coinciding with the building of the mansion at Petmathen in the late 19th century. The name Mains of Petmathen is used on the 1899 map.

5 Methodology

5.1 The ground plans have been annotated to show details and to indicate differences in the building materials which may help in understanding the development and history of the building.

5.2 The areas recorded were photographed. The full set of photographs will be supplied on CD for the archive and annotated plans in the present report (Illus 30) indicate the position of each.

6 The Buildings

6.1 *The House*

The farmhouse was not part of the present survey. It is shown on the 1st edition OS map of 1867.

6.2 *The Mill*

The water mill was not part of the present survey. It is shown on the 1st edition OS map of 1867.



Illus 4 View looking N, with steading to LHS, house and mill to RHS

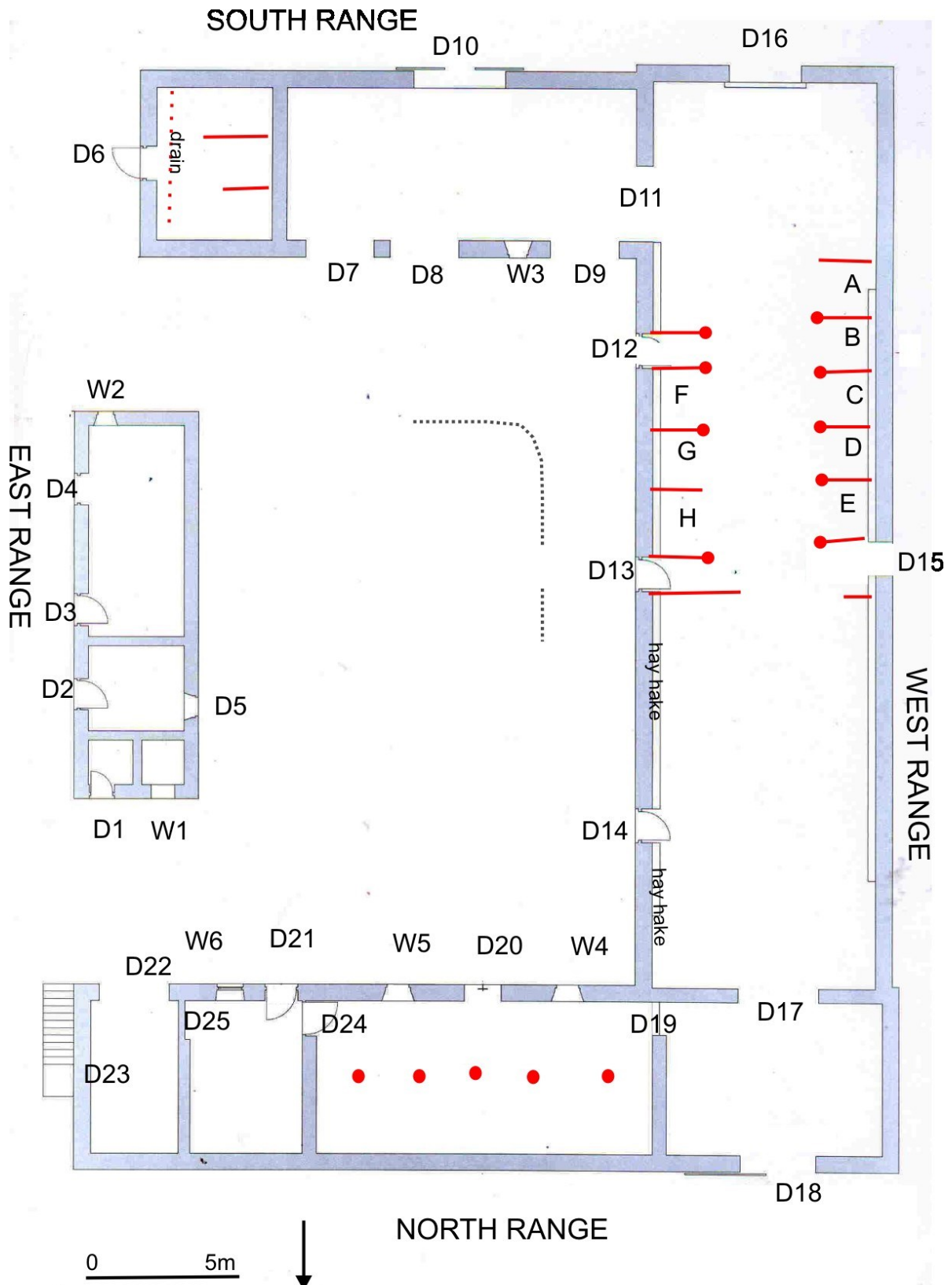
6.3 *The Steading*

Dimensions U-shaped steading around open dung court. Total width: E-W: 27m externally. Maximum length N-S: 36m externally. A smaller, freestanding E range partially blocked the E side of the court.

Original Use A rectangular steading around open dung court with entry from E. Cattle in W range. Stable and cart bays in S range. N range included cattle with an attic floor for hay and for grain storage and bruising for feed.

Present/recent use

At present derelict. It has been used in the recent past for livestock and for storage. Concrete floors to the S and W show the position of modern buildings which have been removed, the building to the W clearly having been burnt, with some burning of the W side of the W range wall.



Illus 5 Detailed plan (Annotated from plan by John Wink Design)

Description

E RANGE

Dimensions Width: 4m ext. Length: 12.65m ext.

Walls Rubble stone in strongly horizontal courses. Stone colours from buff/pink to dark grey, with often angular faces. Rybats at corners and openings, wall head and skews of pink to buff granite. Vertical stacked pinnings by rybats at NE corner, N wall.

Roof Single pitch, sloping down to courtyard at W. Original slate at N end, replaced elsewhere by corrugated iron, now mostly displaced. Skew putts at NW (displaced) and SW moulded to an elegant curve to hold the skew stones.

Chimney A square chimney was central to the front (E) facade. Moulded stones on either side curve down to the wall head.



Illus 6 E range from front (W face)



Illus 7 Detail of skew putt



Illus 8 Detail of chimney from the E

Doors and windows

N wall

D1 W: 0.82m H: 1.94m. buff/pink granite lintel and rybats. Wooden door with small central light/vent.

W1 W: 0.77m H: 1.02m. buff/pink granite lintel and rybats. Pivot for shutter.

Strictly this is not a window but an access hatch to the cess chamber.

E wall

D2 W: 1.02m H: 2.03m. buff/pink granite lintel and rybats. Wooden half-doors

D3 W: 1.07m H: 2.03m. buff/pink granite lintel and rybats. Wooden door with small central light/vent

D4 W: 1.02m H: 2.03m. buff/pink granite lintel and rybats. Wooden half-doors

S wall

W2 W: 0.49m H: 0.66m. buff/pink granite lintel and rybats. Internal splay. Wooden frame.

W wall

D5 W: 0.62m H: 1.05m. buff/pink granite lintel and rybats. Internally the top of this door is only 0.90m above floor level. It is possible that this was an access door for pigs to go out to the midden in the court.

Possible drain A break in the wall at the wall base at the N end may indicate the position of a drain for water waste from sewage from the cess chamber out into the midden.

Interior

At the N end there was a small dry toilet with surviving wooden seat and box over a stone-built chute into the NW chamber which appears to have been a cess chamber with an access hatch with shutter (W1) for emptying and possibly with a drain through the W wall for liquid waste.



Illus 9 Toilet

Next to the toilet, with access through D2 was a small room with a low door (D5) into the midden/central court. The half-door suggests this was used for livestock and the low back door indicates this may have been a pig sty with access to the midden.



Illus 10 W wall of E range

The S room appears to have been originally partitioned as suggested by the two doors. Holes in the inner faces of E and W walls probably held wooden timbers for a timber partition. The room to the N of the partition, accessed through D3 has a flue in the E wall. This is between 0.72m and 1.07m from the floor level and has a stone lintel. It was not directly below the chimney but the flue is angled with a ceramic pipe lining. The sides of the opening are partly bricked. A displaced iron chimney with small ventilating shutter stamped 'The Falkirk Iron Company', dumped in the toilet room, may have been part of the original boiler. The Falkirk Iron Company was established under that name in 1819 and continued in production until 1961 (although the name was changed for the years 1830-1849).

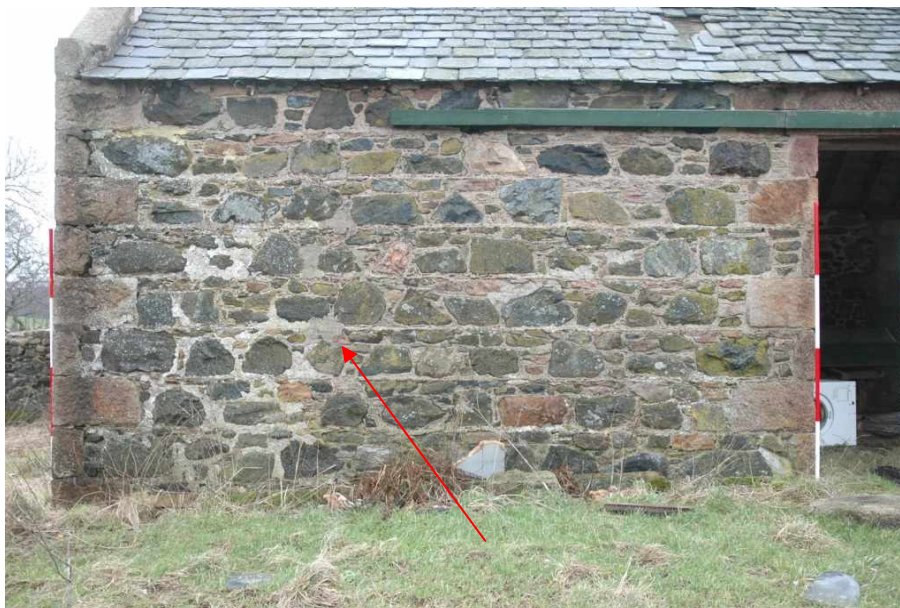


Illus 11 E range interior showing flue below dark coloured lintel in centre of wall. Ranging rod lies just to RHS of former partition.

S RANGE

Dimensions Width: 6.10m ext. Length 19.2m ext

Walls Rubble stone in good horizontal courses. The E gable appears to incorporate a greater quantity of dark grey stones with angular outer surfaces than are apparent in the N and S walls. This may reflect a partial re-building of the S range between 1867 and 1898 during which period the map evidence shows it was foreshortened to match the length of the N range. In both the N and S walls the line of this rebuilding is clear in the stonework. Rybats and lintels of pink-buff granite.



Illus 12 S range. Detail of E end of N wall. Arrow marks the rebuild.



Illus 13 S range. Detail of E end of S wall. Arrow marks the rebuild.

Roof Pitched roof over A-frame close-set couples with sarking. Roof slated with ceramic ridge without ventilators. Metal roof lights. Skew putts at E gable moulded to an elegant curve to hold the skew stones.

Doors and windows

E wall

D6 W: 1.16m H: 2.05m. buff/pink granite lintel and rybats. Wooden half-doors

N wall

D7 W: 2.24m H: 2.47m. buff/pink granite lintel and rybats. Cart bay with more recent sliding door rail.

D8 W: 2.25m H: 2.34m. buff/pink granite lintel and rybats. Cart bay.

D9 W: 2.37m H: 2.05m. buff/pink granite lintel and rybats. Cart bay. Floor raised by concrete. Not original height.

W3 W: 0.57m H: 0.92m. Internal splay. Lintel missing.

S wall

D10 W: 3.03m/ Concrete block sides. Steel lintel. Rail for sliding door. Modern break-through/widening.



Illus 14 N wall of S Range showing cart bays. Dung pit in foreground

Interior

The E end was a stable, entered through D6, with wooden trevise and hay racks for three stalls (Illus 15). The cobbled flooring survives with a N-S drain in the cobbles behind the stalls.

The main part of the block was originally the cart shed with three bays, opening from D7-D9.



Illus 15 Stable interior

W RANGE

Dimensions. Width: 7.25m ext Length: c.30m ext



Illus 16 View looking W across dung pit to E wall of W Range (revetment of dung pit visible to LHS of ranging rod)

Walls Rubble stone with good horizontal courses. E and S walls show predominance of buff-pink, fairly weathered stones (similar to N range). This is less clear in W wall which has been considerably affected by a fire. Rybats of buff-pink granite.

Roof Pitched roof over close set couples with bracing. Sarked. Roof slated with ceramic ridge tiles with ventilators for livestock. Metal roof lights. Skew putts at S gable moulded to an elegant curve to hold the skew stones.

Doors and windows

E wall

D11 (interior door) W: 2.5m

D12 W: 1.12m H: 2.10m. buff/pink granite lintel and rybats.

D13 W: 1.10m H: 2.10m. buff/pink granite lintel and rybats. Wooden door with ventilator strips for livestock.

D14 W: 1.10m H: 2.10m. buff/pink granite lintel and rybats. Wooden door with ventilator strips for livestock.

W wall

D15 W: 1.17m. Rebuilt with concrete blocks.

S wall

D16 W: 2.30m H: partly blocked by raised floors of removed modern building to S. Buff/pink granite lintel and rybats.

Interior

This was built as a cattle shed and retains many original fittings (Illus 17). Much of the S end retains the tied cow stalls with original wooden trevises fitted to cast iron end posts. The stalls along the W wall (Illus 5: A-E) were 1.75-1.85m wide and were double stalls, with metal tying brackets and cow chains remaining. Wooden hay hakes were fixed above feeding troughs, the further edge of which was a widening of the base of the wall to avoid erosion of the wall itself.

The stalls along the E wall (Illus 5: F-H) were identical except that they were wider, being between 2.0 and 2.03m. The extra width may suggest that these were stalls for cows with young calves at foot. There was no evidence to indicate if the stalls originally continued to the S gable, although this could have been an area for calves or a turnip store.



Illus 17 Interior of W Range showing tied cow stalls on W wall

The N half of the building, accessed through D14, was divided off from the S end by wooden partitions with a gate between. This appears to have been an open shed for store cattle with wooden hay hakes along the inner face of the E wall and the widening of the wall base on both E and W walls suggesting a similar trough arrangement to that seen in the individual stalls. Illus 18.



Illus 18 Looking S through W Range with open cattle area in foreground with hay hakes showing on LHS. Wider footings on both sides for feed trough. Tied cow stalls in background.

N RANGE

Dimensions Width: 26.9 ext. Length: 6.10m.

Walls Rubble stone with good horizontal courses. Predominance of buff-pink, fairly weathered stones (similar to W range). More grey stones in outer, N wall, so the use of pink/buff for the walls facing the inner court and road may have been a deliberate choice. Rybats of buff-pink granite.

Roof Pitched A-frame roof with close set couples with sarking. Slate with ceramic ridge. Metal sky lights.

Doors and windows

N wall

D18 W: 2.45m. H: 2.7m. Buff/pink granite lintel and rybats. Modern metal sliding door removed.

Vents 5 small vents along the top of the wall (not measured). These are angled down through the wall into the central byre (Illus 20, 27).

Window (not measured) at first floor level into grain loft.



Illus 19 N wall of N Range



Illus 20 N wall of N Range. Detail of ventilators for byre. These go down diagonally through the wall to avoid draughts.

E wall

D23 (First floor) W:1.08m. H: 1.98m. Entered up flight of stone steps with iron railing. Steps 1m wide with treads 0.26m deep and 0.17m high. A small opening on the N side below the stairs was 400mm wide and 570mm high with a granite lintel and sides. There was no other access and it is possible that this was shelter for a dog.



Illus 21 N Range showing steps up to loft at E gable



Illus 22 Steps in E gable of N Range. Small opening below steps- possibly for a dog?

Wall

D17 (internal) Not measured. Modern widened opening or knock-through with cement block sides and steel lintel.

D20 W: 1.02m. H: 2.23m.

D21 W: 1.02m. H: 2.23m. Wooden door. No light or vent.

D22 W: 2.15m. H: 2.17m

W4 W: 0.72m. H: 1.07m. Splayed internally to byre.

W5 W: 0.72m. H: 1.07m. Splayed internally to byre.

W6 W: 0.56m. H: 1.09m. Glazed with 6 astragals

D26 (first floor- not measured) Loft door above D20. (not measured).

Interior

D19 W: 1.10m H: 1.09m. Wooden lintel. Step down into byre.

D24 W: 1.15m. H: 2.20m Wooden lintel. Granite sill.

D25 W: 1.25m. Blocked with concrete blocks.

Interior

This was the only two-storied part of the steading. The loft floor was over the three E rooms, but the W room was open to the roof with a wooden partition at first floor level between it and the loft. There was a door (not measured) in this partition. The first floor could not be entered on safety grounds, but was photographed through D23 (Illus 23). The E end would have been the grain store and a small bruiser for crushing grain survived, with a wooden chute down into the E room below. Threshing would also have taken place here with a wooden chute for the chaff also remaining in the E room below. The E end of the loft was lit by two small windows.



Illus 23 View into loft from door in E gable. Note bruiser on RHS.



Illus 24 N Range E room with chutes for grain from bruiser (background) and for chaff from thresher (roof foreground)

The W end is likely to have been a hay loft, loaded from the door D26 at first floor level (Illus 25) and forked down into the W end of the building through the 1st floor door in the wooden partition (Illus 26). This would have allowed easy access to feed cattle both in the byre in the N range and in the W range.



Illus 25 S wall of N Range, showing door to hay loft



Illus 26 W end of N Range, looking SE showing door to byre and door to hayloft above in wooden upper partition (just L of vertical timber)

At ground floor level the N range was divided into four rooms. At the W, as referred to, there was an area open to the roof and with a door into the hay loft.

This area opened into a byre with 5 pad stones in the floor, each 2.65m S of the N wall and spaced to divide the interior into 6 bays, each 1.88m wide. The pad stones may have held trevis end posts that have since been removed, or may have been supports for the centre of the loft floor. This area was certainly intended for cattle/livestock as there were 5 vents angled up through the wall to keep the air fresh (Illus 27).



Illus 27 N Range byre. Note the inside of the ventilation shafts in N wall (LHS).

The third room was wooden panelled on one side but had no other features.

The E room contained the chutes from the grain loft for both crushed grain from the bruiser and for chaff from the thresher (Illus 24). The quite small scale of this may suggest that this was a secondary use of this end of the loft as it could be expected that the threshing and bruising would originally have been undertaken by the water-powered mill on the opposite side of the road, beside the farmhouse. This smaller arrangement may have been run off a tractor belt or electric engine.

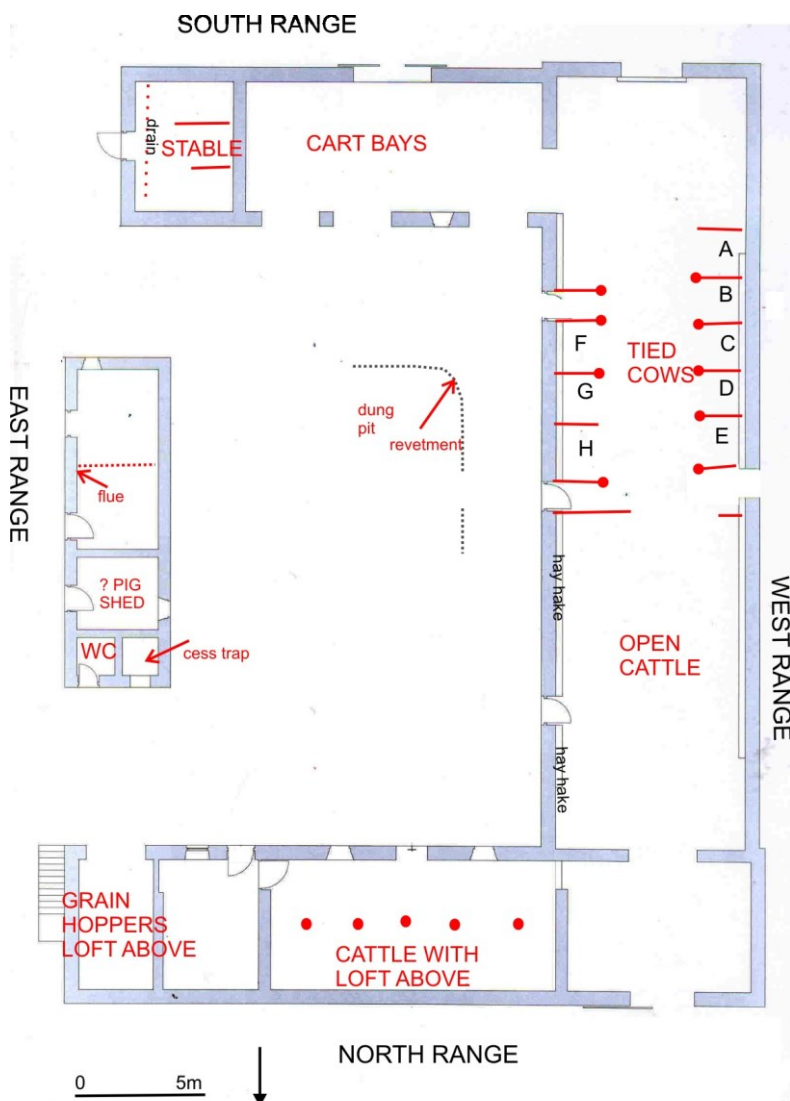
CENTRAL COURT

The central court had a roughly central dung pit with a walkway around 3 sides. On the S side the walkway was *c.*5.2 in width. On the W side it was *c.*2.9m wide. Part of a stone revetting survives at the SW corner where the visible part of the pit is *c.*0.50m deep.

7 Discussion

Mains of Petmathen is a fairly typical Aberdeenshire improvement steading, probably dating from *c.* 1800 (RCAHMS 2007, 208. Glendinning and Wade Martins 2008, 119-120), with development in the second half of the 19th century when Petmathen House was built and the Mains of Petmathen farm appears to have been improved with some sophistication. This estate influence is seen, for example, in the well-balanced E range with the decorative moulding on either side of the chimney, the

quite elegant skew putts on all buildings (all to the same pattern), the use in places of well-placed vertically stacked pinnings and the extra timber used in the close-set roof couples. The good preservation of some internal features such as the cattle trevies allows a degree of certainty in identifying the functions of each area (Illus 28).

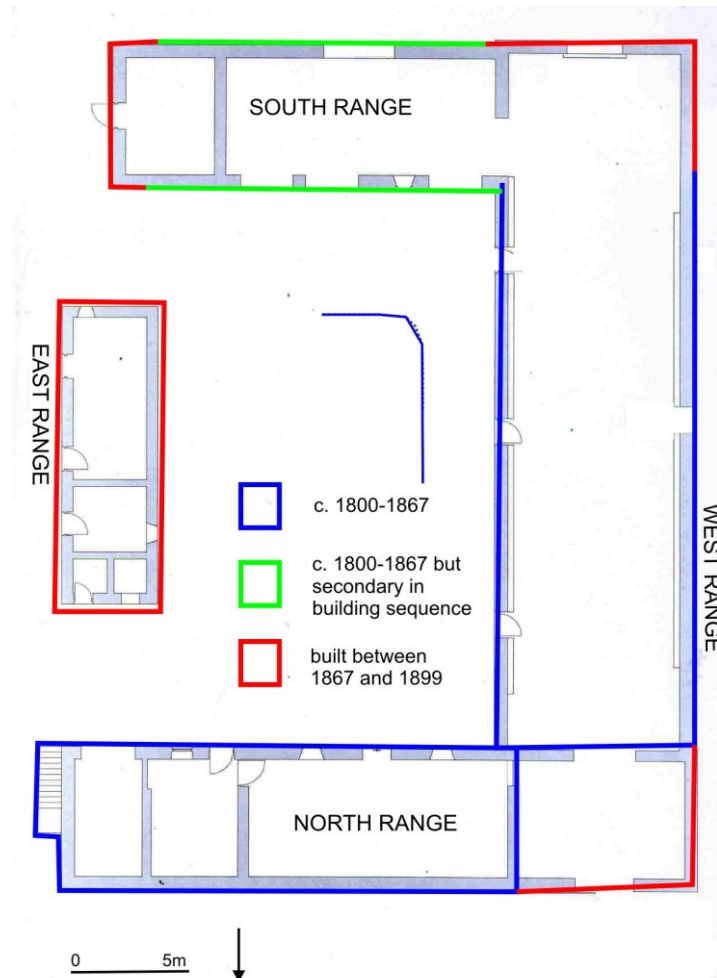


Illus 28 Building functions (Annotated from plan by John Wink Design)

The map evidence allows an insight into the building development with the N, S and W ranges in existence by 1867 and the E range added between 1867 and 1889. The stonework allows some further detail. The original (1867) S range extended almost to the road. By 1898 this had been foreshortened to match the N range, almost certainly at the same time as the E range was built. The scars of the rebuilding of the E gable of the S range are visible in the stonework. The S range can also be seen to abut the W range, which is therefore at least structurally earlier than it. At some point after 1867,

however, the S end of the W range had been extended, so what may be reflected here is the original W end of the S range as shown on the 1867 map.

The W range also appears to abut the N range, however, again this sequence is confused as the N and W ranges were each freestanding in 1867, with the NW corner being built up subsequently. The stonework of the N and W ranges is very similar, with a greater use of softer-coloured buff-pink stones and the overall impression is that these were both contemporary.



**Illus 29 Suggested sequence of buildings based on observed and documentary evidence
(Annotated from plan by John Wink Design)**

8. References

Glendinning, M and Wade Martins, S 2008 Buildings of the Land: Scotland's Farms 1750-2000 Edinburgh: RCAHMS.

RCAHMS 2007 *In the shadow of Bennachie: A Field Archaeology of Donside, Aberdeenshire*. Edinburgh: RCAHMS.

Roy. Military Map of 1747-55 on line at <http://www.nls.uk/maps>

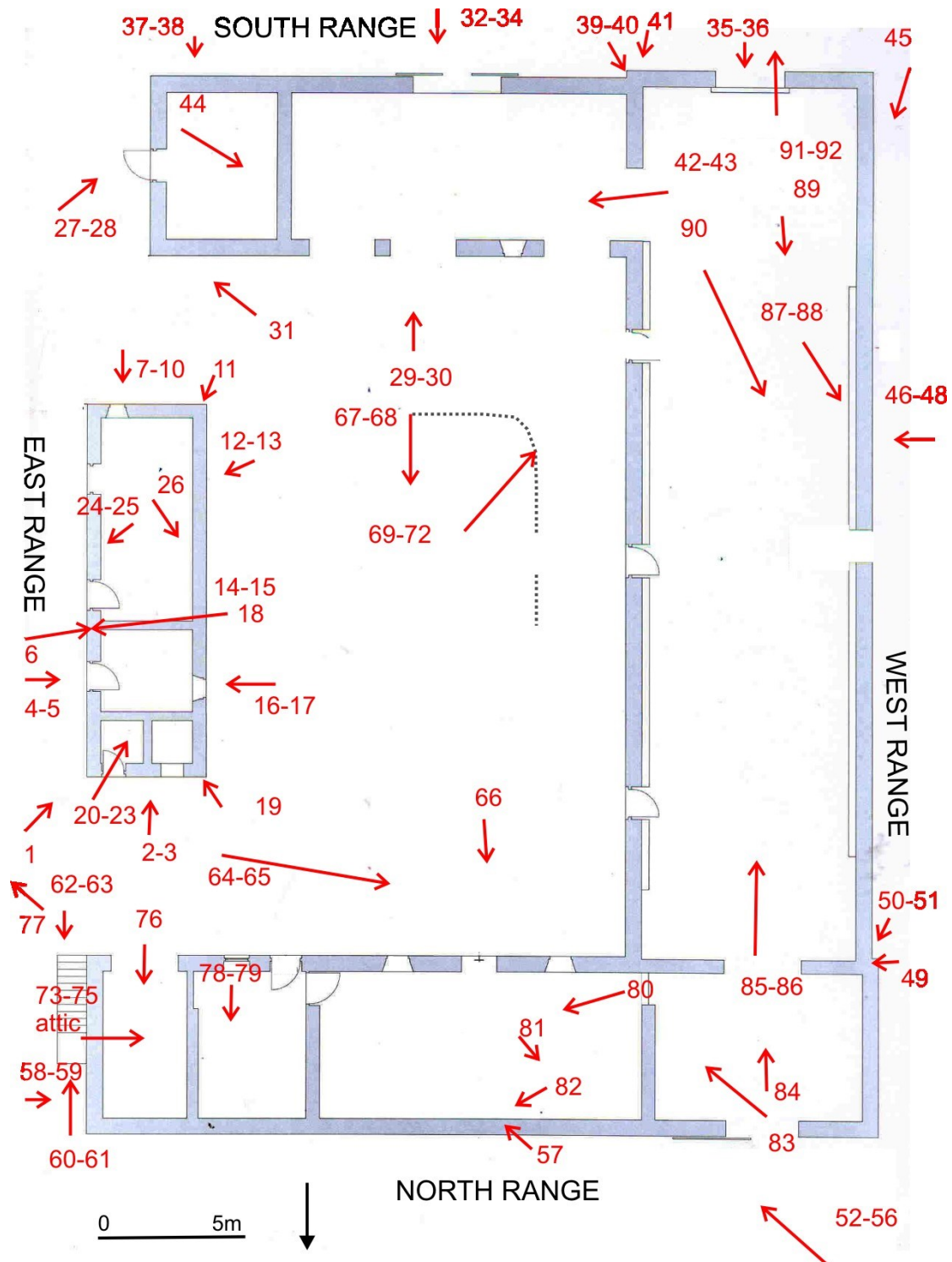
9 Archive

A full set of photographs with the photo location plans will be supplied on CD to the Aberdeenshire SMR in Aberdeen and to the NMRS.

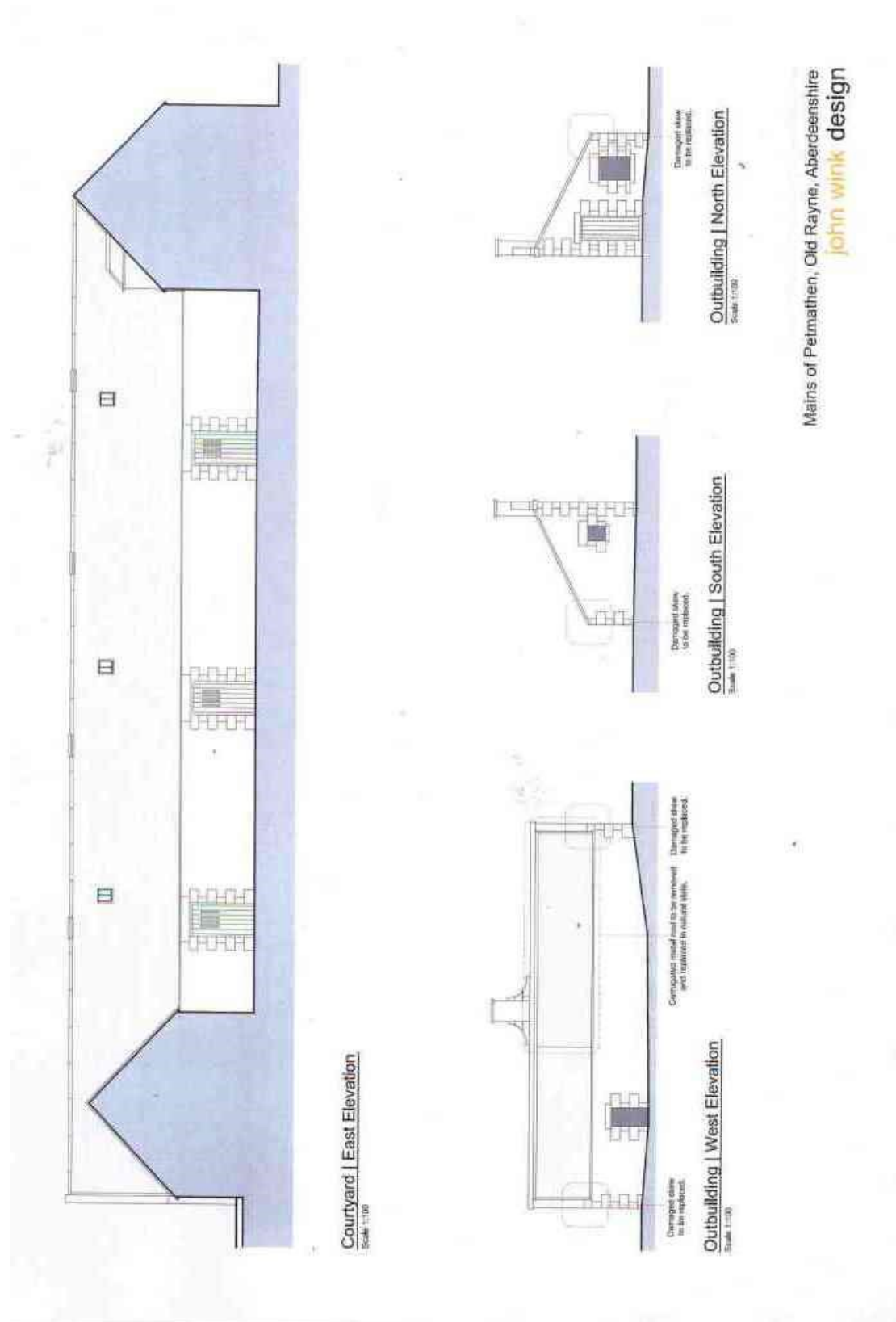
Appendix 1: Photographic archive

Digital 1-92 See Illus 30

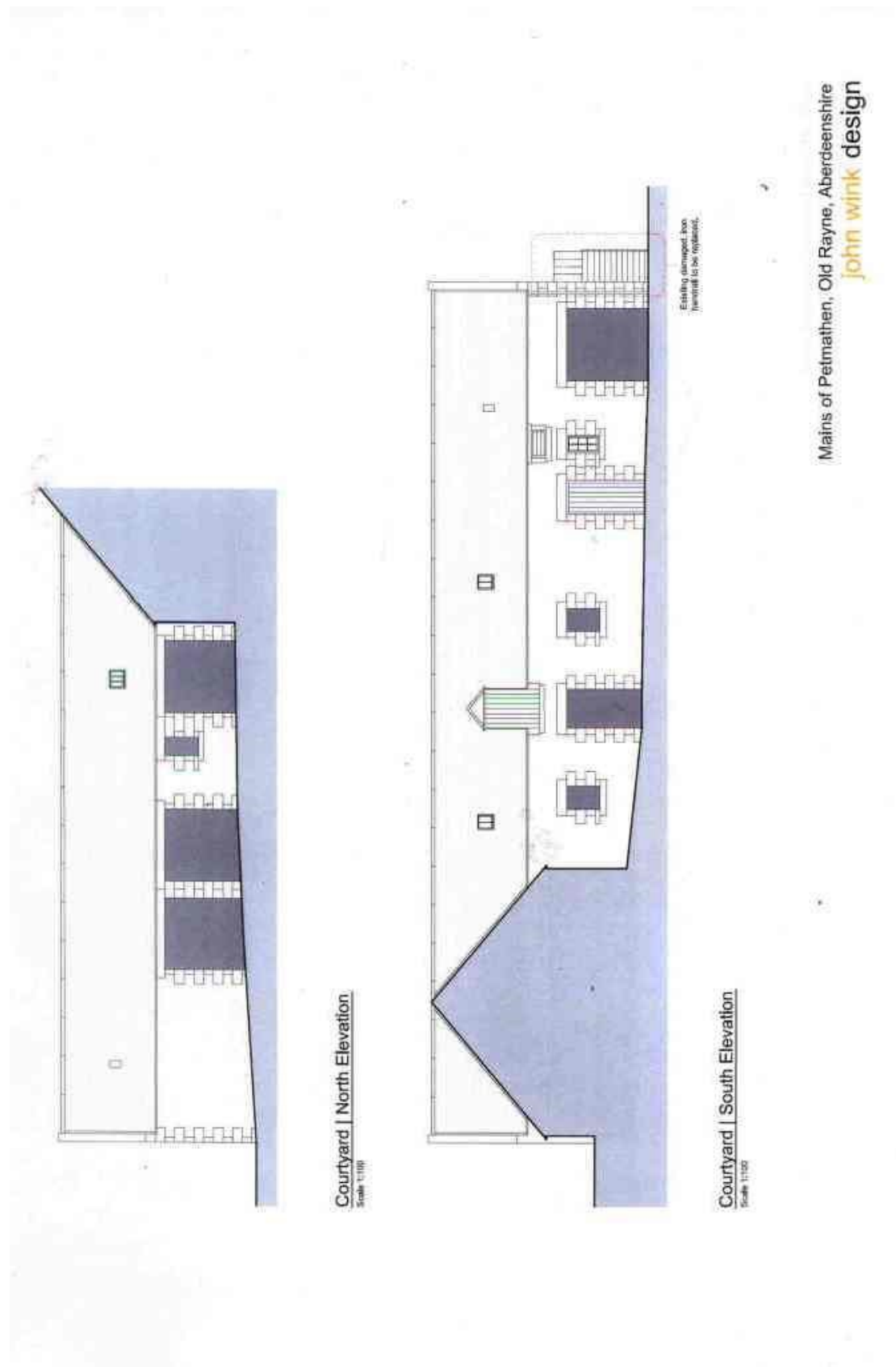
Digital 93-94 View of Mains of Petmathen looking N



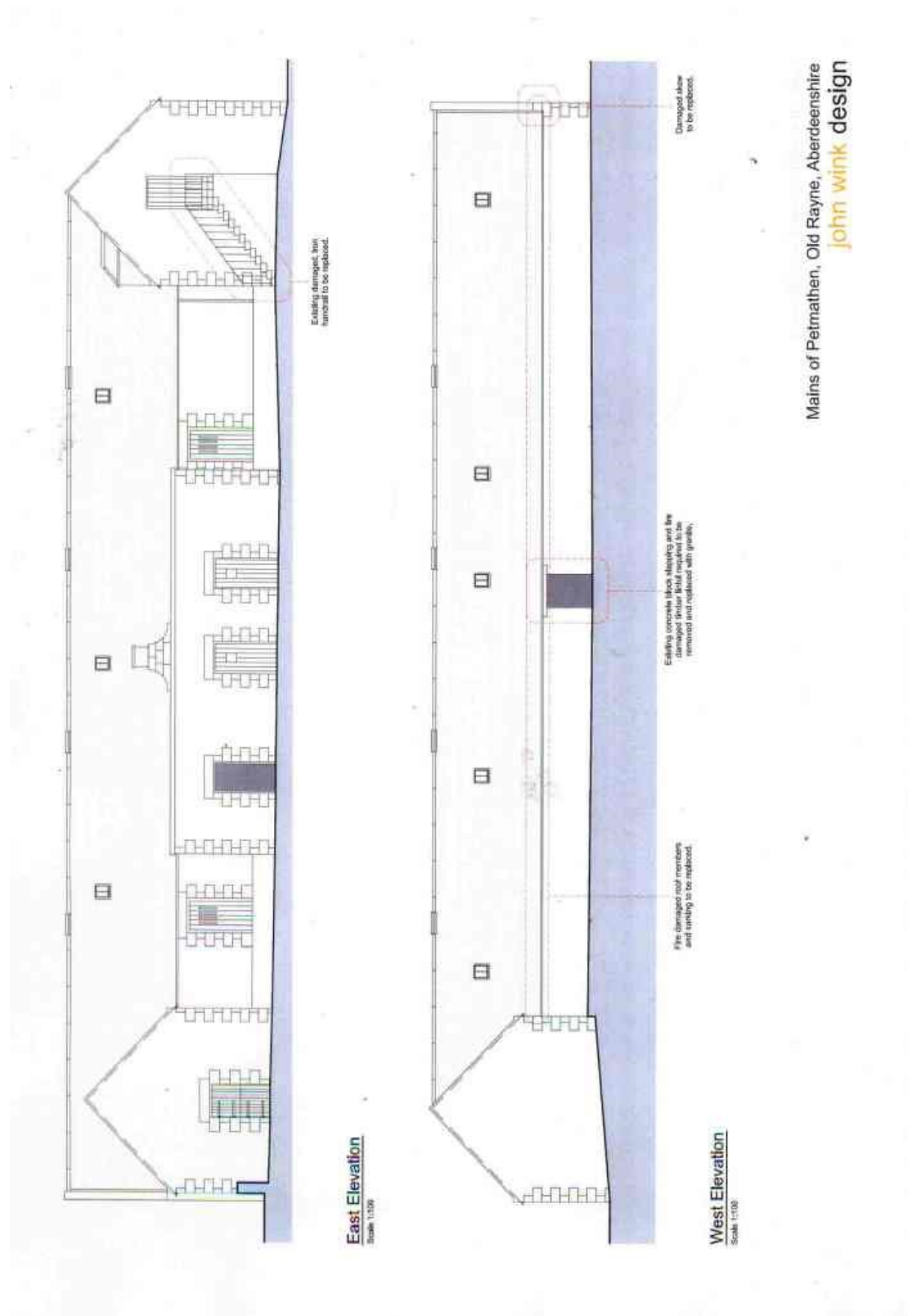
Illus 30 Photographic references



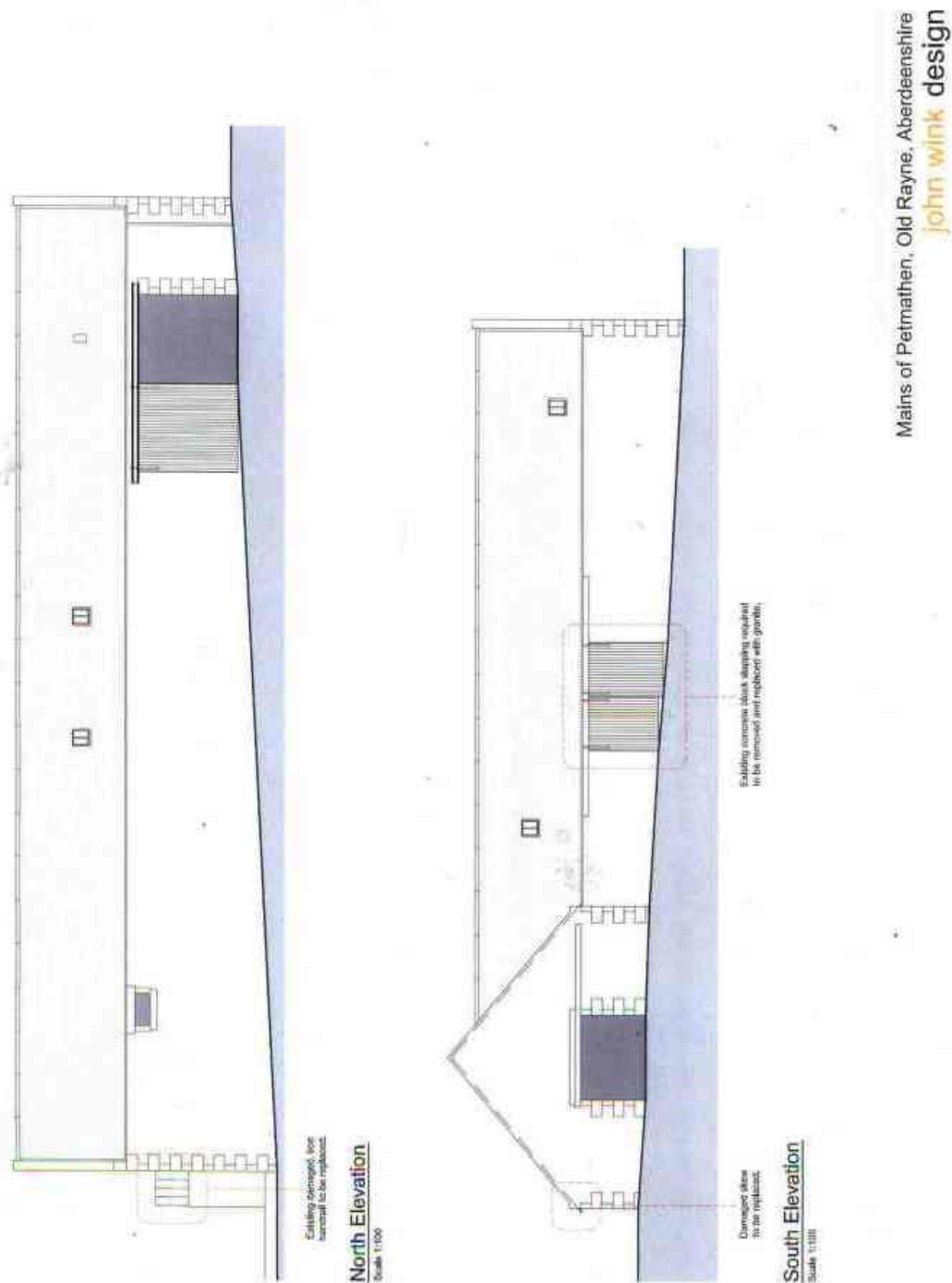
Illus 31 Elevations of E wall of W Range (Courtyard E Elevation) and of W,S and N walls of E Range (Outbuilding) (Drawings courtesy of John Wink Design). Note The E Range, N wall door has a square window/vent.



Illus 32 Elevations of N wall of S Range with cart bays(Courtyard N Elevation) and of S wall of N Range (Courtyard S Elevation.) (Drawings courtesy of John Wink Design).



Illus 33 E Elevation showing E gable of S and N ranges, front (E) wall of E Range. Below W range with W gable of N range. (Drawings courtesy of John Wink Design). Note N doorway of E wall of E Range has half doors.



Illus 34 N Elevation showing N wall of N Range and Below S wall of S range and S gable wall of W range. (Drawings courtesy of John Wink Design). Note: N Range wall has 5 small ventilation holes near top of wall.