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Roman Camps in Scotland

Rebecca H Jones

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KNOWN ROMAN CAMPS

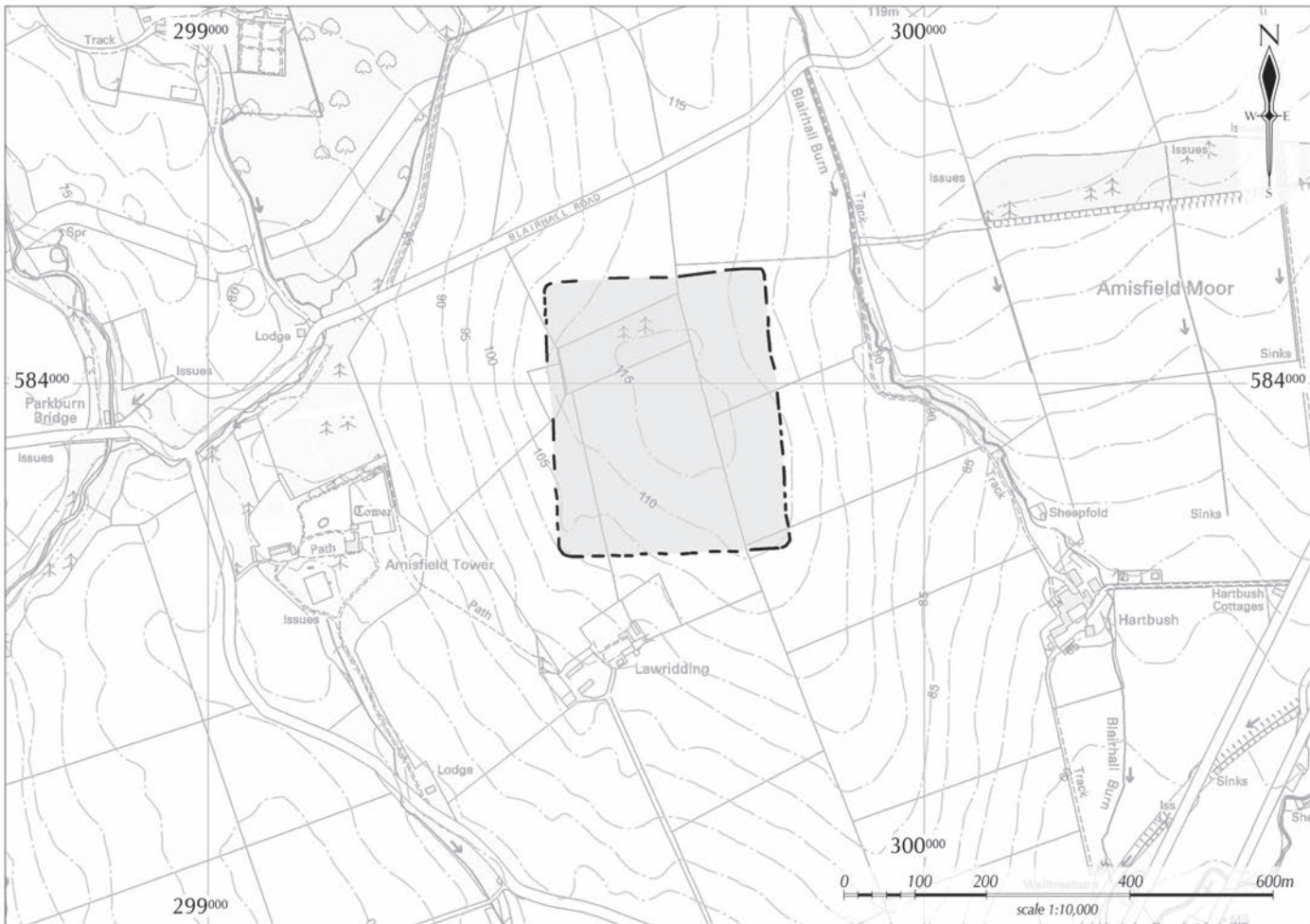


Illustration 74

Amisfield Tower. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Amisfield Tower (illus 47 & 74)

NX 9964 8395 NX 98 SE 70

First discovered from the air in 1984 (Maxwell & Wilson 1987: 40), the camp at Amisfield Tower encloses the summit of a low hill close to the presumed line of the Roman road from Annandale to Nithsdale. It measures

some 385m from north to south by 316m transversely, enclosing around 12.2ha (30.1 acres). Most of the site has been recorded in pasture and no gates are currently known.

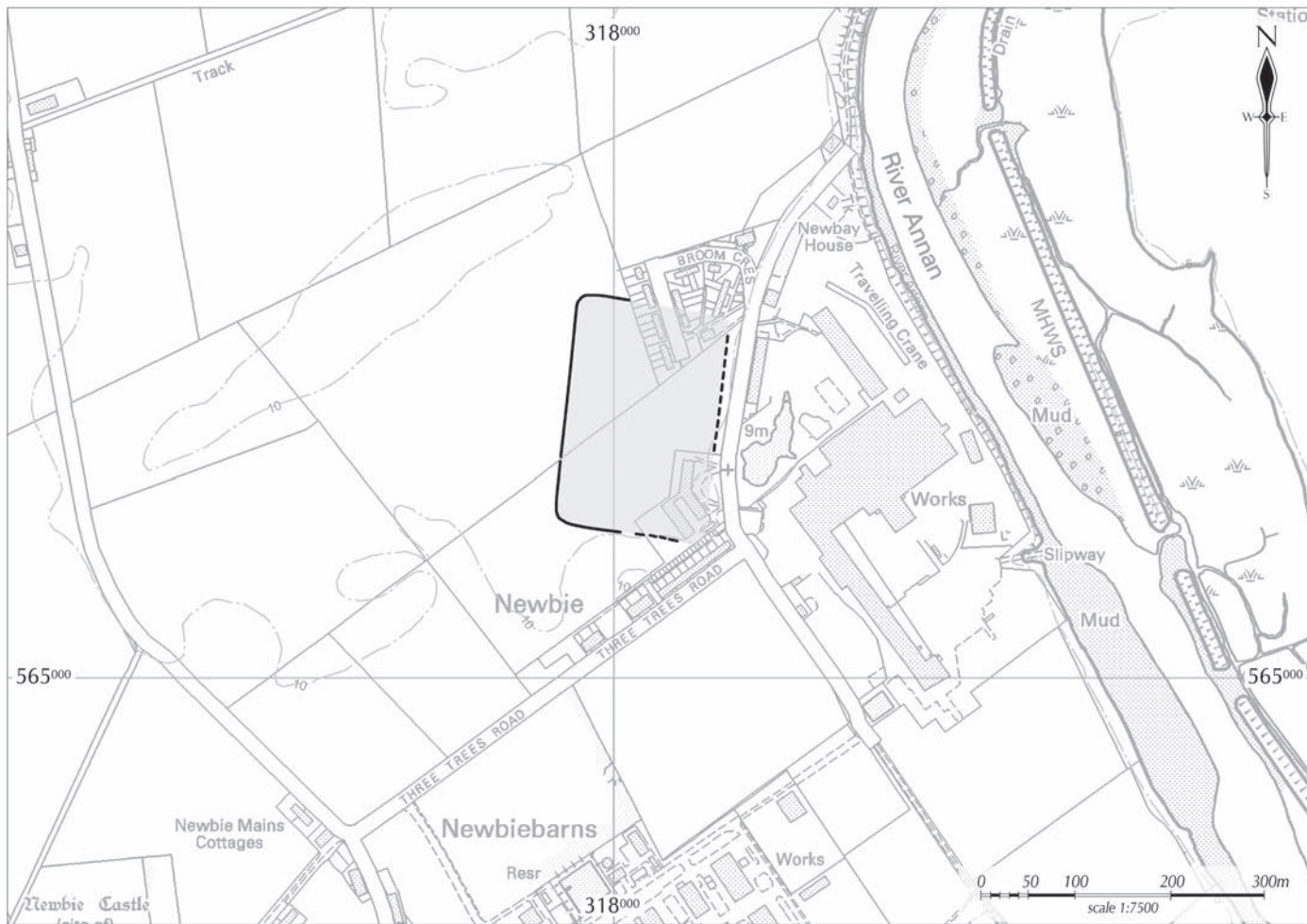


Illustration 75

Annanfoot. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Annanfoot (illus 47 & 75)

(Newbie, Waterfoot)

NY 1802 6526 NY 16 NE 22

First recorded in 1977 during aerial survey by Barri Jones (1979), the camp at Annanfoot is located on the west side of the River Annan, close to its confluence with the Solway Firth. Parts of three sides of the camp have been recorded as a cropmark, with the location of the east side recorded through excavation (Jones 1995; Gordon & Rees 2004). The camp measures some 241m (from north to south) by 159m transversely, enclosing some 3.8ha (9.5 acres). There is no break in the west side for an entrance, but there is a possible gap in the cropmark on the south side.

In addition, Jones recorded further linear cropmarks, including an irregular outer ditch, but none of these cropmarks has the appearance of Roman work, despite a section of the 'outer ditch' recorded as 2.9m wide and 1.4m deep (Jones 1995). The east side was noted as being up to 1.8m wide and 0.9m deep (Jones 1995); later excavations recorded that it was up to 1.5m wide and 0.96m deep (Gordon & Rees 2004). These also recorded a severely truncated post-hole in the interior of the camp, but there was no dating evidence (Gordon & Rees 2004: 8).

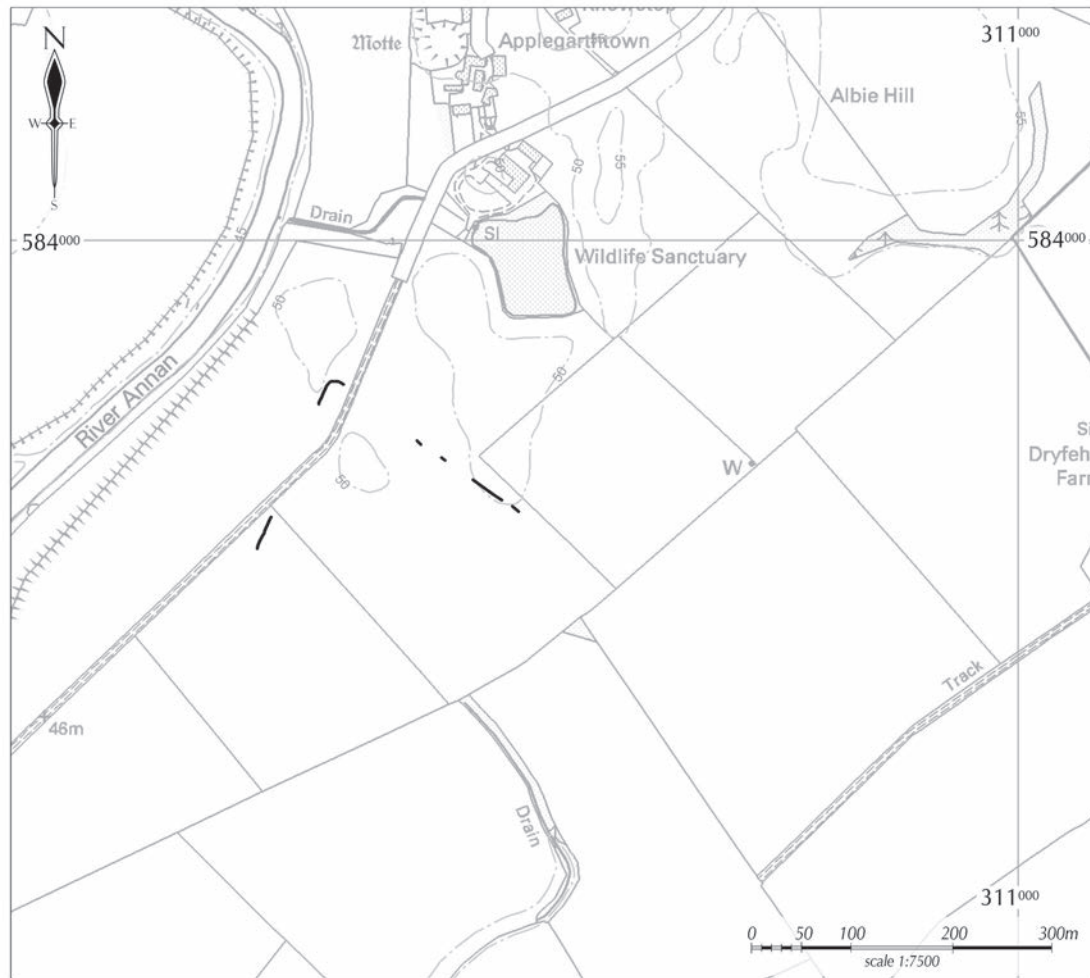


Illustration 76

Applegarthtown. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Applegarthtown (illus 26 & 76)

NY 1032 8384 NY 18 SW 93

First recorded in 1996 by RCAHMS following re-interpretation of air photographs taken in 1989 and 1992 (RCAHMS 1997: 184, 309), this camp is sited on level ground close to the River Annan, some 2km NNW of the Roman fort at Ladyward. The known portion of the camp

comprises its northern corner and stretches of the adjacent sides. Some 228m is recorded of the north-east side and at least 183m of the north-west side, demonstrating that the camp enclosed at least 4.2ha (10.5 acres) and probably significantly more.

GAZETTEER: KNOWN ROMAN CAMPS

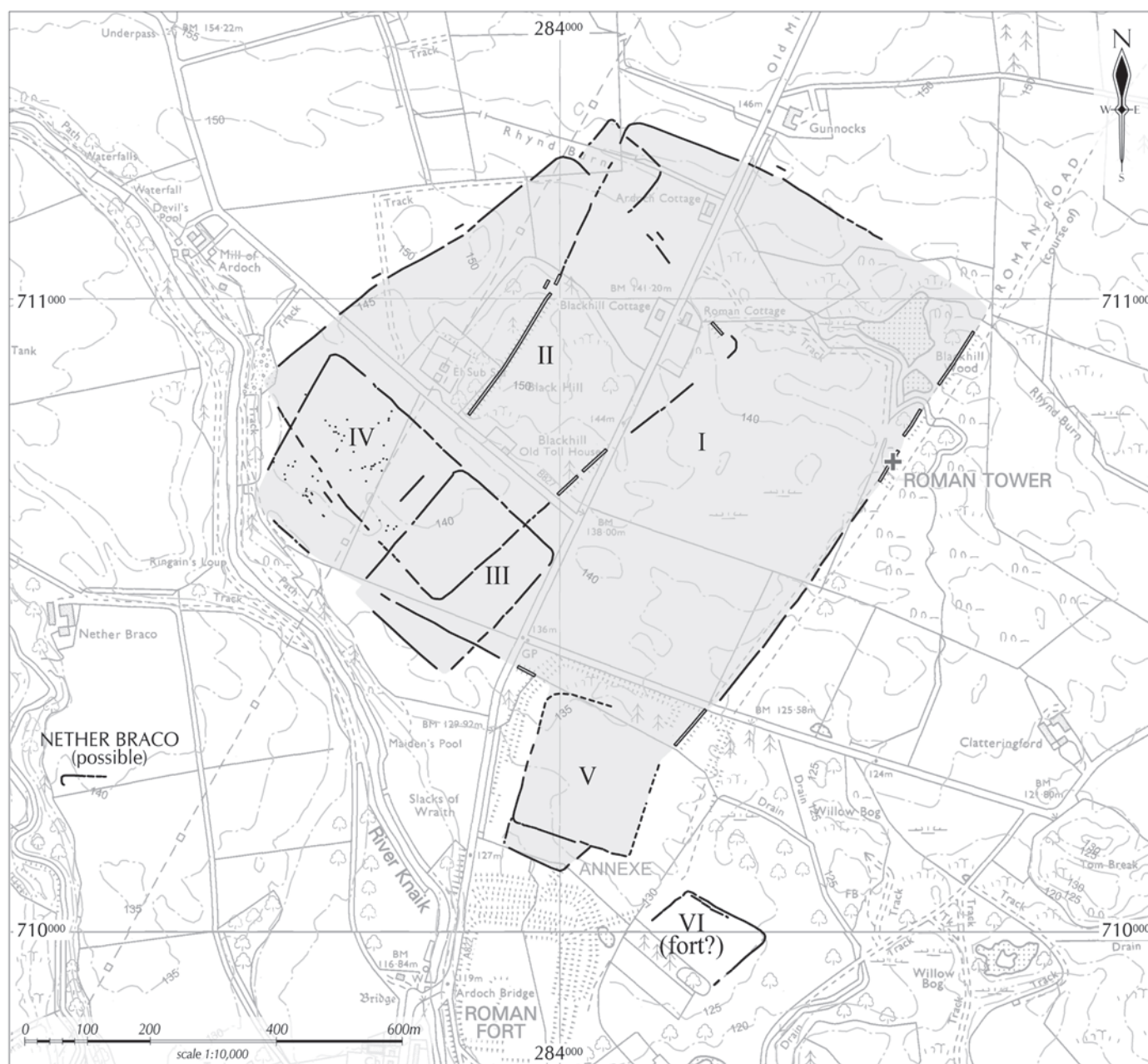


Illustration 77

Ardoch I–V and the possible fort (VI) to the east, and Nether Braco (possible). Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Ardoch (illus 12, 24, 47 & 77)

- | | |
|---------------------------------|--------------------------------|
| <i>Ardoch I:</i> NN 8420 1080 | <i>Ardoch IV:</i> NN 8370 1069 |
| NN 81 SW 18 | NN 81 SW 16 |
| <i>Ardoch II:</i> NN 8390 1090 | <i>Ardoch V:</i> NN 8405 1025 |
| NN 81 SW 15 | NN 81 SW 19 |
| <i>Ardoch III:</i> NN 8384 1056 | |
| NN 81 SW 17 | |

The Flavian and Antonine fort at Ardoch has long been known and identified with the Roman army (see Christison 1898). On the plain to the north of the fort lie five camps of varying sizes, first apparently identified as ‘several larger squares’ by Sibbald (1707: 37), with two camps recorded and planned by Roy in 1755 (1793: Pl. X) (illus 12). Parts of these two can still be traced on the ground today. Pennant depicted these two stretches along with a third earthwork, which may well represent the east side of Ardoch III (1776: 103, Pl. X).

A further possible camp is recorded at **Nether Braco** across the River Knaik to the west, and a further immediately to the east of the fort (St Joseph 1976: 14; marked as site VI on illus 77) was reinterpreted as another fort following excavations in 1977 (RCAHMS St Joseph Collection: Notebook 7).

Camp I, the largest in the complex, measures 874m by about 600m, and enclosed 52ha (129 acres) of gently undulating ground. Stretches of the south-east, south-west and north-west sides, including a *titulus*, survive as earthworks. Most of the remaining perimeter ditch, and the north-eastern *titulus*, have been recorded as cropmarks. It is assumed from the position of the *tituli* that the camp probably had six gates. This camp intersects several others on the complex and a watchtower in Blackhill Wood on its south-east side. Here, excavations have recorded that the perimeter of the camp overlies the presumed Flavian tower (St Joseph 1977: 135, fig 8; Glendinning & Dunwell 2000). The ditch at this point was V-shaped and measured about 3.6m wide and 1.25m deep. Excavations on the west side, where the camp overlaps camps II, III and IV, recorded that the ditch of the camp was wide (2.7–3.0m) but very shallow, cut only some 0.3m into the subsoil then left unfinished. It stopped short of the ditch of camp II, suggesting that it was later (St Joseph 1970a: 170–1), and again stopped short of camp II at the northern intersection of the two (Hanson 1978a: 148). The upstanding segment of ditch on the north-west side is significantly deeper than that recorded by St Joseph’s excavations, demonstrating differential survival rates and/or differing ditch depths dug by troops in antiquity. The excavations on the south-east side recorded that the ditch appeared to have silted up naturally (Glendinning & Dunwell 2000: 277). A *titulus* was also excavated on this side, the ditch of which was recorded as being 2.9m wide and 1.55m deep (Glendinning *et al* 2000: 262). The intersection between camps I and V has also been excavated, with camp I recorded as the later of the two (St Joseph 1976: 19).

The finds from the watchtower excavation were dated to the 1st and 2nd centuries, but were unstratified. An oven

was located just inside the perimeter between the ditches of the watchtower; this probably relates to the occupation of the camp rather than the tower (Glendinning & Dunwell 2000: 287).

Camp II lies to the north-west of camp I, intersecting its north-western side. A short stretch of its south-eastern side survives as an upstanding earthwork but the remainder of the camp has been recorded as cropmarks. It measured about 635m from north-east to south-west by about 440m transversely and enclosed almost 27ha (66 acres). *Tituli* are visible in the centre of the north-east and south-west ends, with a further two on its north-west side suggesting that it had six in total. Excavations where it overlaps camps I, III and IV recorded that the ditch was up to 2.7m wide and 1.2m deep. It had been deliberately in-filled where it lay within camp I, particularly on the line of the rampart of that camp (St Joseph 1970a: 167–71).

The camp has an annexe on its north-east end, measuring 118m by 85m and enclosing an additional 1ha (c 2.5 acres).

St Joseph observed that the gap in the camp earthwork on the south-east side is exactly between the presumed gates of camp I; this suggests that camp I is the later of the two, the rampart of camp II being flattened for the street lines of this later camp (1976: 17). He also commented that hardly any silt had accumulated in the ditch at this point, and that therefore there was little time difference between the construction of the two camps (1976: 19). It is unclear when this section was excavated, although it may have been in 1970 (RCAHMS St Joseph Collection: Notebook 5).

Camp III was rediscovered from the air in 1948 (St Joseph 1951a: 62; 1955: 87), but was partially recorded in 1772 by Pennant (1776: 103, Pl. X). It overlaps the southern corner of camp II and the south-west side of camp I and is now wholly known as a rectangular cropmark measuring 263m from north-east to south-west by 205m transversely, enclosing 5.3ha (just over 13 acres) (illus 24). Excavations by St Joseph in 1969 recorded that the ditch was some 2.3m wide and nearly 1m deep on its north-west side. The ditch had been deliberately filled (and contained tiny fragments of coarseware and mortaria); he interpreted this as having taken place with the enlargement of the camp into camp IV. A trench under the presumed line of camp II suggested that there were two phases of in-filling, one for the construction of camp IV and the other for camp II (St Joseph 1970a: 167–9). However, given the small-scale nature of the trenches, it is perhaps rather ambitious to be so confident on the identification of differential ditch fills.

He also commented that this camp must be early in the sequence at Ardoch because it occupied the best location close to the fort (1969: 114). No entrances are known, but there is a possible gap close to the centre of the north-west side.

Camp IV was also discovered from the air in 1948 by St Joseph (1951a: 62; 1955: 87), and was seen by him as an extension of camp III. On the assumption that it shares three of the sides of camp III, it measures around 450m from north-west to south-east by 266m transversely, enclosing about 11.8ha (29 acres). No gates are known.

The enlargement of camp III to become camp IV is not the only possible explanation for deliberate refilling of the ditches, because St Joseph's trenches were also within camp I. Furthermore, the dangers inherent in attributing time periods to ditch silting and back filling were exemplified at **Ythan Wells** (Hanson 1978a: 145). It is also possible that camp IV was later reduced to become camp III.

Camp V was discovered in the 1970s by St Joseph following a re-examination of Roy's field boundaries (1976: 19; 1977: 137) and lies within the annexe (so-called 'Procestrium', a term coined by Roy), north of the fort. It survives as a low earthwork measuring 220m from north-south by 197m transversely, enclosing 4.3ha (10.7 acres). St Joseph placed numerous trenches through this camp between 1975 and 1978 to determine its full extent. The rampart measures up to 2.7m wide and 0.3m high, with the excavated ditch up to 1.6m wide and 1.2m deep. Elsewhere, the ditch is visible as a hollow, some 2.4m wide. It appears to have been deliberately filled in, and St Joseph suggested that the camp must be earlier than the annexe because the earthworks of the latter block all visibility (1976: 19; 1977: 138). It is also overlain by camp I (St Joseph 1976: 19).

Camp V possesses an annexe on its south side, which measures up to 140m by some 42m, enclosing an additional 0.6ha (1.45 acres). Excavations in 1977 on this annexe revealed that its ditch was up to 1m deep and 1.5m wide (RCAHMS St Joseph Collection: Notebook 7).

The five camps have therefore been subject to various excavations over the years, principally to establish the sequence between them, because members of St Joseph's '30-acre', '63-acre' and '130-acre' series are represented (see above, Chapter 9). These have led to conclusions about chronologies, but some are suppositions and not all are fully sustained by the evidence.

From the earthworks, Roy concluded that camp II was later than camp I (1793: 62–3), but Hanson examined an original drawing of Roy's plan which depicted camp I cutting camp II (Hanson 1978a: 148). This chronology was confirmed by excavations at the two intersections of camps I and II, where camp I stops short of camp II in both cases (St Joseph 1970a: 170–1; Hanson 1978a: 148). Camp I also overlaps the Gask Ridge watchtower of Blackhill Wood to the east. To the south it overlaps camp V and the annexe north of the fort. It is clearly later than the watchtower and also later than camp V (St Joseph 1977: 138). There is some debate regarding its relationship with the annexe of the fort. It was widely believed that the earthworks of the annexe override the south-east corner of camp I (Roy 1793: 63; Crawford 1949: 33; Breeze 1973: 126), although St Joseph disputed this, stating that the camp was the later of the two (1977: 135). At the west intersection of the two, the annexe appears to be later, but this may have been recut as a later field boundary (Hanson 1978a: 146). However, at the eastern intersection the camp does appear to overlie the annexe.

Thus the main chronological evidence indicates that camps II and V are earlier than camp I, which possibly represents one of the latest phases of occupation at the site. Camp I was constructed after the watchtower, and is therefore likely to be post-Flavian in date. It also appears to be later than the 'Procestrium', which is probably an annexe for one or more phases of the fort – at the latest Antonine II. That camps I and II are later in the sequence could explain the better survival of their earthworks into the 18th century, but part of camp III also appears to have been so recorded (Pennant 1776: 103, Pl. X). Camps III and IV probably pre-date camps I and II, but the sequence between these is not yet defined.

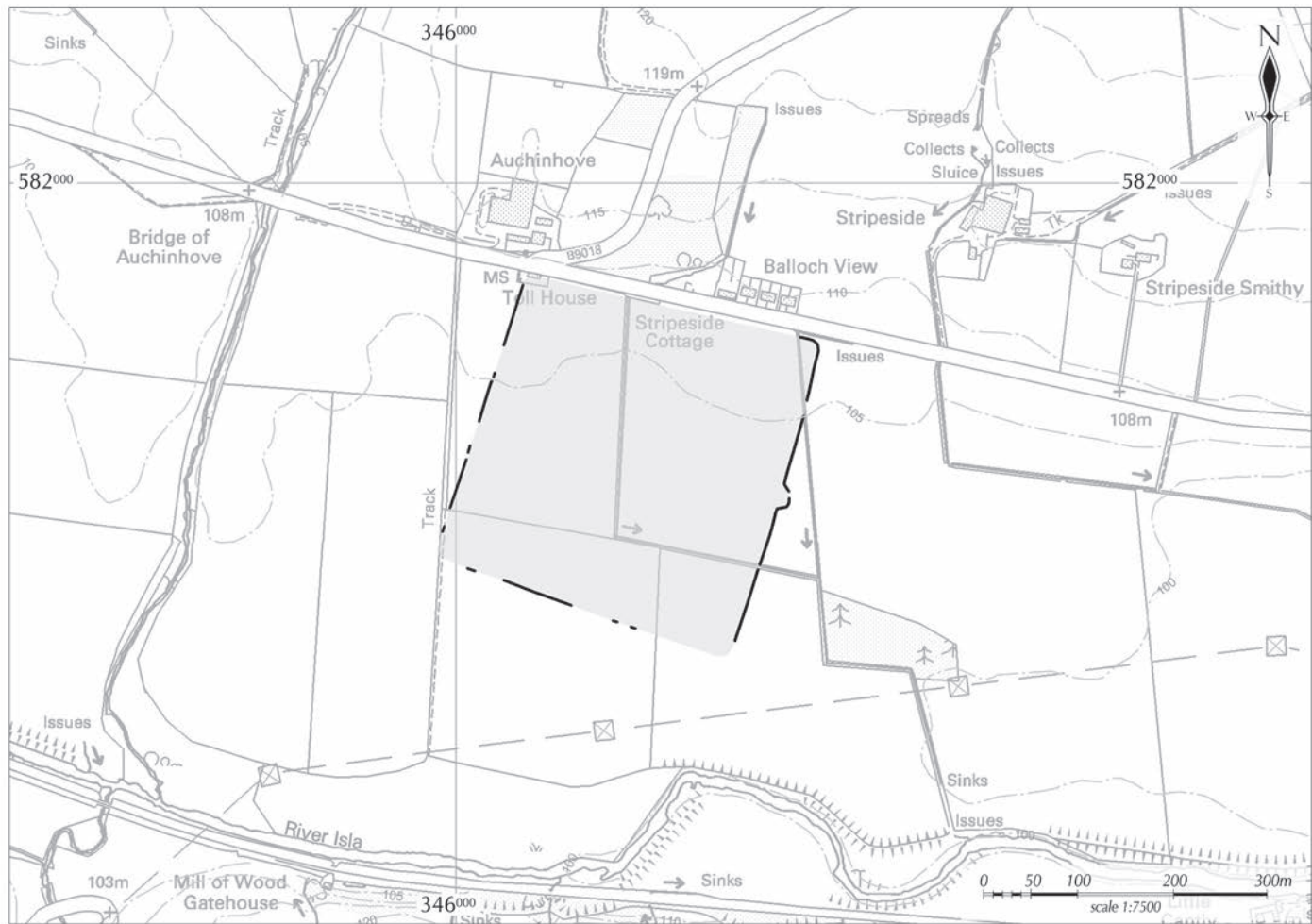


Illustration 78

Auchinhove. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Auchinhove (illus 47 & 78)
 NJ 4630 5167 NJ 45 SE 5

The camp at Auchinhove was first recorded from the air by St Joseph in 1949 (St Joseph 1951a: 65). It lies to the east of Keith, on low-lying ground just to the north of the River Isla close to the Pass of Grange. The camp of **Muiryfold** lies about 2.5km to the east. The presence of the camp of Auchinhove has been used to argue for nearby Knock Hill (just over 8km to the north-east) as the site of the Battle of Mons Graupius, with Auchinhove established after the battle, and after the Pass of Grange had been secured (Burn 1953: 132–3). The camp has been dated to the Flavian period, owing to the presence of a Stracathro-type gate (St Joseph 1958: 93) in its east side (see Chapter 10).

The camp lies in a series of arable fields to the south of the A95 from Banff to Keith. Parts of three sides are known from air photographs with a corner suggesting the position of the fourth, along the side of the road. There is an external *clavicula* and oblique traverse (Stracathro-type) entrance on the ESE side. The camp measures some 337m from NNE to SSW by 328m transversely and encloses some 10.9ha (27 acres). St Joseph conducted excavations on several occasions, recording that the ditch on the SSE side was small, measuring only 0.85m in width by 0.7m in depth (RCAHMS St Joseph Collection: Notebook 2). He also excavated three other trenches on the SSE side

with slightly smaller dimensions (RCAHMS St Joseph Collection: Notebook 1), and five further trenches across the SSW side to establish its location several years later

(RCAHMS St Joseph Collection: Notebook 6), because there were two sets of linear cropmarks that could have represented that side of the camp.

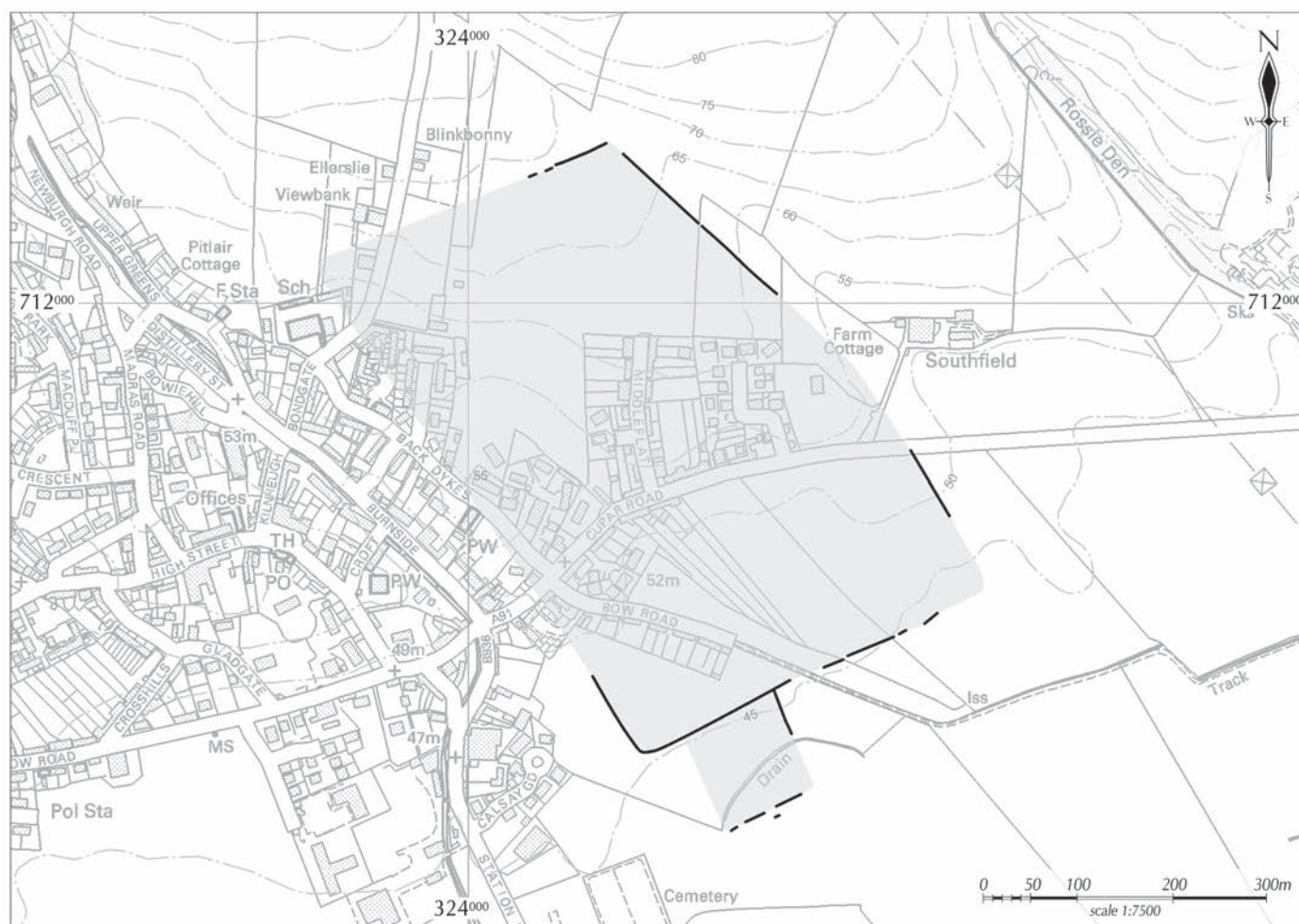


Illustration 79

Auchtermuchty. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Auchtermuchty (illus 47 & 79)

(Black Dykes)

NO 2424 1185 NO 21 SW 17

The camp at Auchtermuchty was first recorded from the air by St Joseph in 1962 (St Joseph 1965: 82). It lies on the east side of the village of Auchtermuchty, and parts of all four sides have been recorded as cropmarks over the years, indicating that the camp measured some 601m from north-west to south-east by 408m transversely, enclosing some 23.5ha (58 acres). A gap in the cropmark

on the south-east side may represent the position of an entrance, but no other entrances are known. A possible annexe or attached camp is recorded on its south-east side, lying to the west of the probable entrance. Here, a narrow cropmark ditch is visible running SSE at almost right angles to the camp ditch, and a further narrow ditch is discernible in the neighbouring field, suggesting the

possible south-east side of the annexe, with hints of a possible entrance gap and a *titulus*. The annexe measures some 106m by at least 100m, enclosing a minimum of 1.23ha.

The camp has been subjected to numerous small-scale excavations and watching briefs, with the excavated ditch recorded as V-shaped, measuring 2.35–3.0m wide and 0.6–1.5m deep (RCAHMS St Joseph Collection:

Notebook 3; St Joseph 1965: 82; Cachart & Williams 1992; Duffy 1993: 183). A watching brief in 1992 on the probable line of the south-west side of the camp recorded a round-bottomed ditch which measured 2.35m wide and 0.6m deep. The ditch had a small piece of medieval pottery in its fill, although the excavators interpreted the ditch as belonging to the Roman camp (Cachart & Williams 1992).

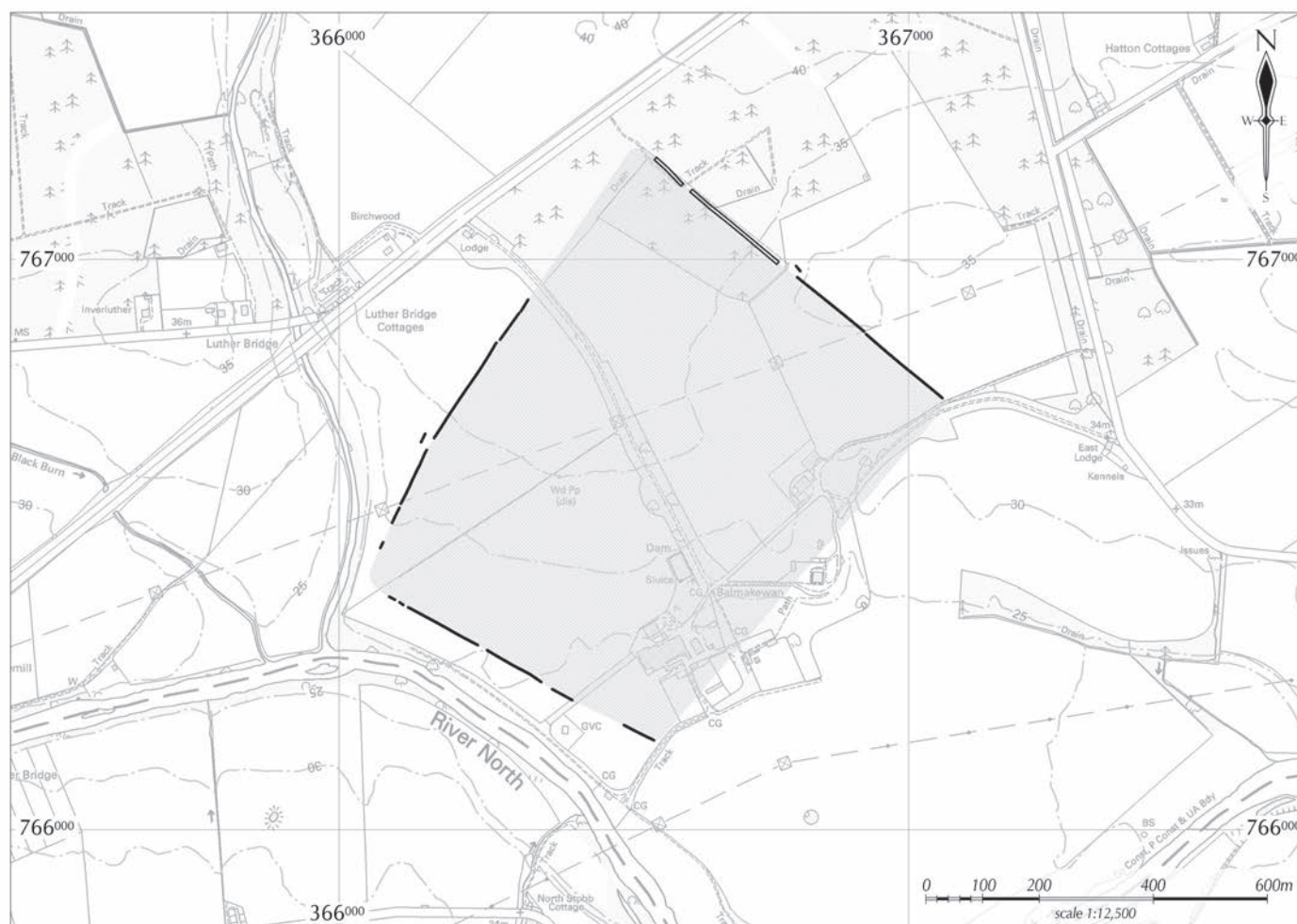


Illustration 80

Balmakewan. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Balmakewan (illus 47 & 80)

(Ad Tinam)

NO 6657 6667 NO 66 NE 5

Chalmers placed Richard of Cirencester's 'Ad Tinam' on the River North Esk, and illustrated it close to the location of Balmakewan (1807: i, 124, Map). However, thereafter it apparently disappeared from the literature and is absent from Crawford's thorough treatise on Roman Scotland (1949). St Joseph rediscovered the camp from the air in 1967 (1969: 112).

The camp is situated on the north bank of the River North Esk, close to the Luther Water, some 4.5km ENE of the Flavian fort and camp at **Stracathro**, and south-east of the modern A90. It lies on ground that slopes gently to the north, away from the river, and which comprises largely arable fields around the farm of Balmakewan, with a wood covering its northern portion. Parts of the north-east,

north-west and south-west sides are recorded as cropmarks on air photographs, and *tituli* are visible in the centre of the north-east side and in the southern part of the north-west side, suggesting that the camp probably had six entrances in total. The section of the north-west side in the wood is not visible, probably destroyed by forestry ploughing, but a small part of the north-east side survives as an earthwork, partly owing to the presence of a deep-cut forestry drainage ditch on what is presumably the line of the ditch. The rampart here survives up to 4.7m wide and 0.4m high, although the forestry has eroded parts of it in places. The camp is not quite rectangular in form, measuring about 844m from north-east to south-west by about 665m transversely, enclosing some 55.9ha (138 acres). Two small trenches were

excavated by St Joseph in 1967 and 1980 on the south-east and north-east sides respectively, confirming the location of the ditches on those sides, although probing failed to locate the southern part of the south-east side. The ditch is recorded as measuring up to 2.4m in width and 0.75m in depth (RCAHMS St Joseph Collection: Notebooks 4, 8).

St Joseph's notebooks allege that he discovered part of the south-east side in a trench dug to the west of Balmakewan House (at NO 6684 6643), and he depicted

a line on his plan (RCAHMS DC 37247). He noted that he failed to locate the ditch farther to the south by probing. No part of the south-east side is visible on air photographs, and the eastern end of the north-east and south-west sides suggest that the side lies farther to the east than depicted by St Joseph. It is possible that the ditch that he dug does not represent the south-east side of the camp, and that this side does indeed lie farther to the south-east.



Illustration 81

Balmuildy, with the Antonine Wall to the south (bottom right). Reproduced by permission of Ordnance Survey on behalf of HMSO.
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Balmuildy (illus 47 & 81)

(Buchley)

NS 5860 7220 NS 57 SE 15

The camp lies in an arable field to the north of the Antonine Wall, about 500m north of the Roman fort at Balmuildy, in a loop of the River Kelvin east of where the Wall crosses the river. It was first discovered from the air by St Joseph in 1951 (1955: 86).

The camp measures about 257m from north-east to south-west by about 187m transversely, enclosing an area of some 4.7ha (12 acres). Entrance gaps are visible in the centre of south-west and north-east sides, and there are possible gaps in the other two sides. Together these suggest that the camp probably faced south-west towards the nearby fort.

The camp is provided with a small annexe on the

eastern half of the north-east side, measuring 71m by 87m and enclosing an additional 0.62 hectares. Unusually, there appears to be a second annexe to the south-east of this, measuring 65m to the south-east by at least 98m, but only parts of the additional north-east and south-east sides have been recorded. The addition of these two annexes increases the entire area enclosed: 4.72ha + 0.62ha + 0.64ha = 5.98ha (14.8 acres).

Only two other camps on the Antonine Wall are known to have been furnished with annexes or attached camps (excepting the **Lochlands** complex), and the provision of a second annexe is currently unparalleled in Britain.

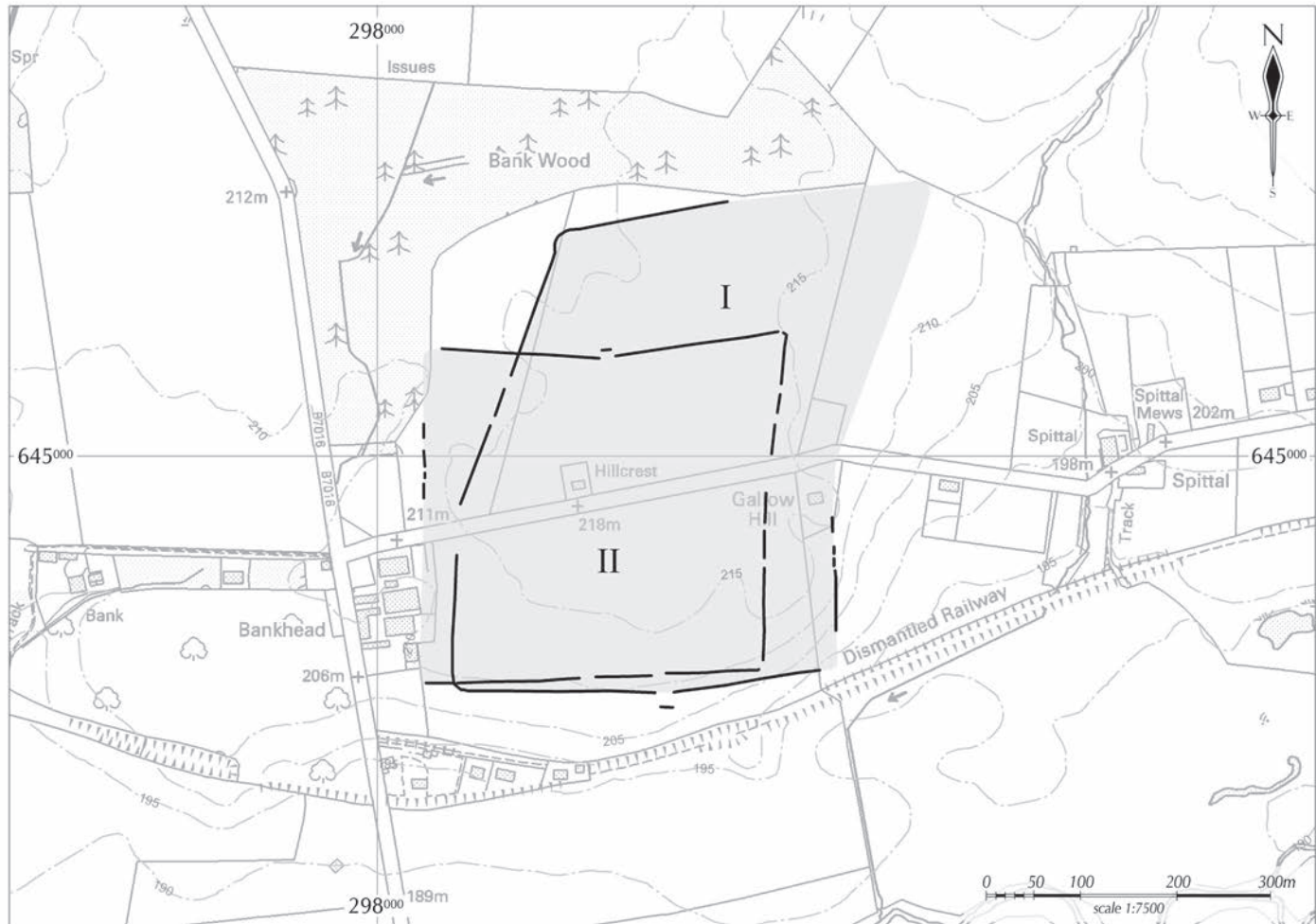


Illustration 82

Bankhead (Carnwath) I and II. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Bankhead Carnwath (illus 47 & 82)

Bankhead I: NS 9835 4515 Bankhead II: NS 9820 4490
NS 94 NE 23 NS 94 SE 26

The two camps at Bankhead Carnwath lie on a terrace above the Medwin Water, close to its confluence with the upper reaches of the River Clyde, and above a dismantled railway which ran to nearby Carstairs Junction. The fort and camps at **Castledykes** lie some 5km to the west, with the camp at **Carstairs Mains** in between, and the fortlet of Carnwath only 1km to the west. The two camps overlap one another and were first recorded from the air as cropmarks by St Joseph in 1977 (RCAHMS 1978a: 160).

Camp I is the larger of the two and measures about 511m from north to south by about 393m transversely, although there is a marked change in alignment in its western side, which may have been matched on its

eastern side. The southern part of this side runs on the line of an older plantation visible on the OS 1st edition map (Lanarkshire 1864: sheet xxvi), and the eastern part of the north side of the camp is probably represented by the edge of Bank Wood. It therefore seems likely that the plantation utilised the existing Roman earthworks for its boundary in places. The camp probably enclosed some 18ha (45 acres). The north-west corner of the camp bulges slightly in an unusual manner, reminiscent of the corner turrets found on late-Roman fortifications.

The modern road changes its alignment and exhibits a noticeable kink where it enters the east side of the camp; this may reflect the position of a gate. A *titulus* is visible in

the centre of the southern side and the eastern kink may be so positioned to avoid a *titulus* on this side.

Camp II is closer to square in form, measuring about 356m from east to west by 330m transversely, enclosing 12.2ha (30 acres). The cropmark of this camp is narrower than that of camp I, suggesting that it had a slighter ditch. As with camp I, part of the perimeter of Bank Wood appears to continue part of one side of this camp (the west). A gate with a *titulus* is visible in the centre of the north side, and there is a corresponding entrance gap in the centre of the south side.

The relationship between the two camps is unknown, but they are clearly not contemporary, and the fact that they do not share a single side might indicate a reasonable time gap between them, or a penchant by the military commanders for constructing new camps in their entirety. The quarry pits of the Roman road from **Lyne** to **Castledykes** are recorded through cropmarks between the camps and the fortlet to the west, and presumably ran through both camps, although no quarry pits have been observed in their interiors.



Illustration 83

Bar Hill and Bar Hill 'structure'. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Bar Hill (illus 83)

NS 7070 7575 NS 77 NW 32

The probable camp on Bar Hill was first recorded from the air by RCAHMS in 1979 (Maxwell & Wilson 1987: 29), and subsequently confirmed by excavation (Keppie & Walker 1990: 151–3). It lies on the same ridge as the fort on Bar Hill, in the arable field immediately to the south.

The camp was recorded as a linear cropmark running NNW to SSE near the south corner of the fort, and part of the possible SSE side could be detected. However, excavations failed to locate the SSE side, suggesting that the linear cropmark originally identified on this side might be the result of a natural hollow. The ditch on the ENE side is at least 135m long and measured about 2m in width by up to 0.7m in depth, with the corner on the north side and some 25m of the NNW side traced by

excavation. The presumed continuation of the side could not be established, owing to probable later industrial workings. Its overall size is unknown, although Keppie & Walker estimated that it could enclose 0.6ha (1.48 acres) based on the local topography (1990: 153).

The camp was initially interpreted as a possible annexe to the fort, but was demonstrated to turn west rather than join up to the fort's defences. The excavators noted that it could be the same feature (ditch) that George Macdonald recorded having been opened up in 1908 (Macdonald 1911: 199; 1934: 281).

It is perhaps curious that the camp appears to enclose ground to the south-west of the fort rather than the slight knoll immediately to the south, which appears to be slightly more suitable ground, and certainly commands a

better outlook. This choice of location to the rear of the fort adds weight to the theory that this was a construction

camp for the building of the fort (Keppie & Walker 1990: 153).

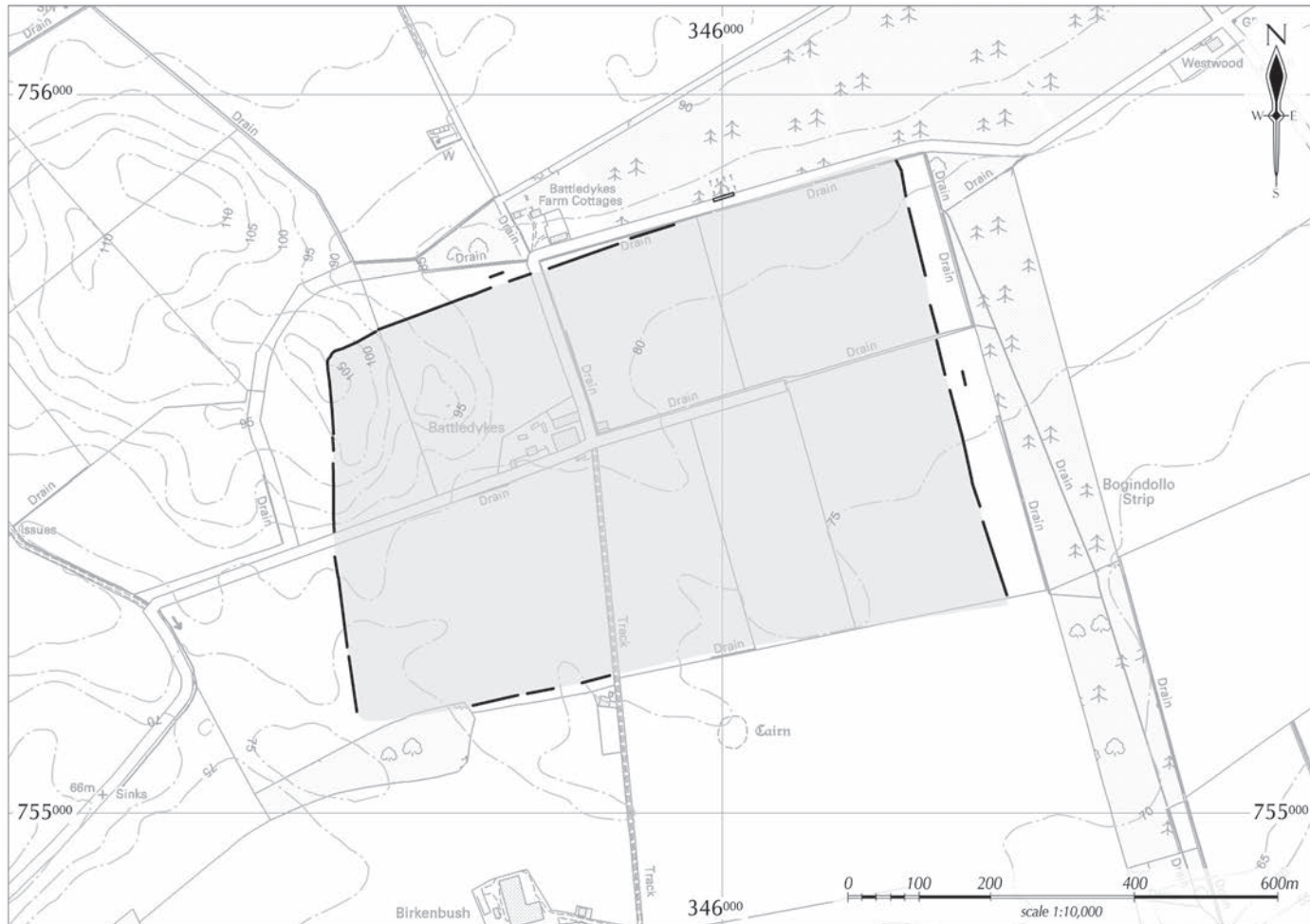


Illustration 84

Battledykes, Oathlaw. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Battledykes, Oathlaw (illus 28, 29, 47 & 84)

(Oathlaw)

NO 4580 5550 NO 45 NE 12

The camp at Battledykes, Oathlaw was one of the camps discovered by Captain Robert Melville while travelling through Strathmore in August 1754 (Balfour-Melville 1917: 123n; Jones & Maxwell 2008), and planned by Roy the following year (Roy 1793: Pl. XIII – illus 28). When Roy planned it, most of the NNW, ENE and SSE sides and part of the west were visible, along with five entrances, four of which were protected by *tituli* (Roy 1773). A later 18th-

century account by the Rev. Jameson of Forfar records an enclosure comprising a rampart of stones and earth with no ditch on the east part of the SSE side of the camp (1786: 18), and he likened this to the annexe at **Kirkbuddo** (1786: 20–1). No trace of this possible annexe has yet been detected in more recent times. Jameson also mentioned that the camp had two ramparts with a ditch in between, presumably reflecting the survival of a counterscarp mound

outside the ditch (1786: 16). By the time that the site was planned by Crawford, part of the SSE side survived as an earthwork, along with a *titulus* on the NNW side (1949: 95–7). By 1958, all that remained of the camp was the northern *titulus* (OS Recorder 1958), which still survives close to the edge of a plantation.

The camp is located about 4km north of Forfar and 3km north of the probable camp at **Lunanhead**. It lies a few hundred metres from the Lemno Burn, in relatively flat terrain, although the area slopes gently to the north-west towards Wolf Law. Parts of all four sides have now been recorded from the air (illus 29), together with the *titulus* in the centre of the ENE side and a second *titulus*

in the NNW side. It measures about 885m from ENE to WSW by 600m transversely, enclosing at least 51ha (126 acres).

The upstanding *titulus* on the north side has been partially scarped to the south by the road, and the bank marking the edge of the plantation continues as a lower bank to the east and west of the mound. The *titulus* mound is about 19.2m long, 4.2m wide and 0.4m high. The ditch to the north is slightly shorter at 16.5m, and about 2m in width by up to 0.6m in depth.

At least one probable souterrain has been recorded within the perimeter of this camp (not depicted on illus 84, but see section 7h and illus 29).

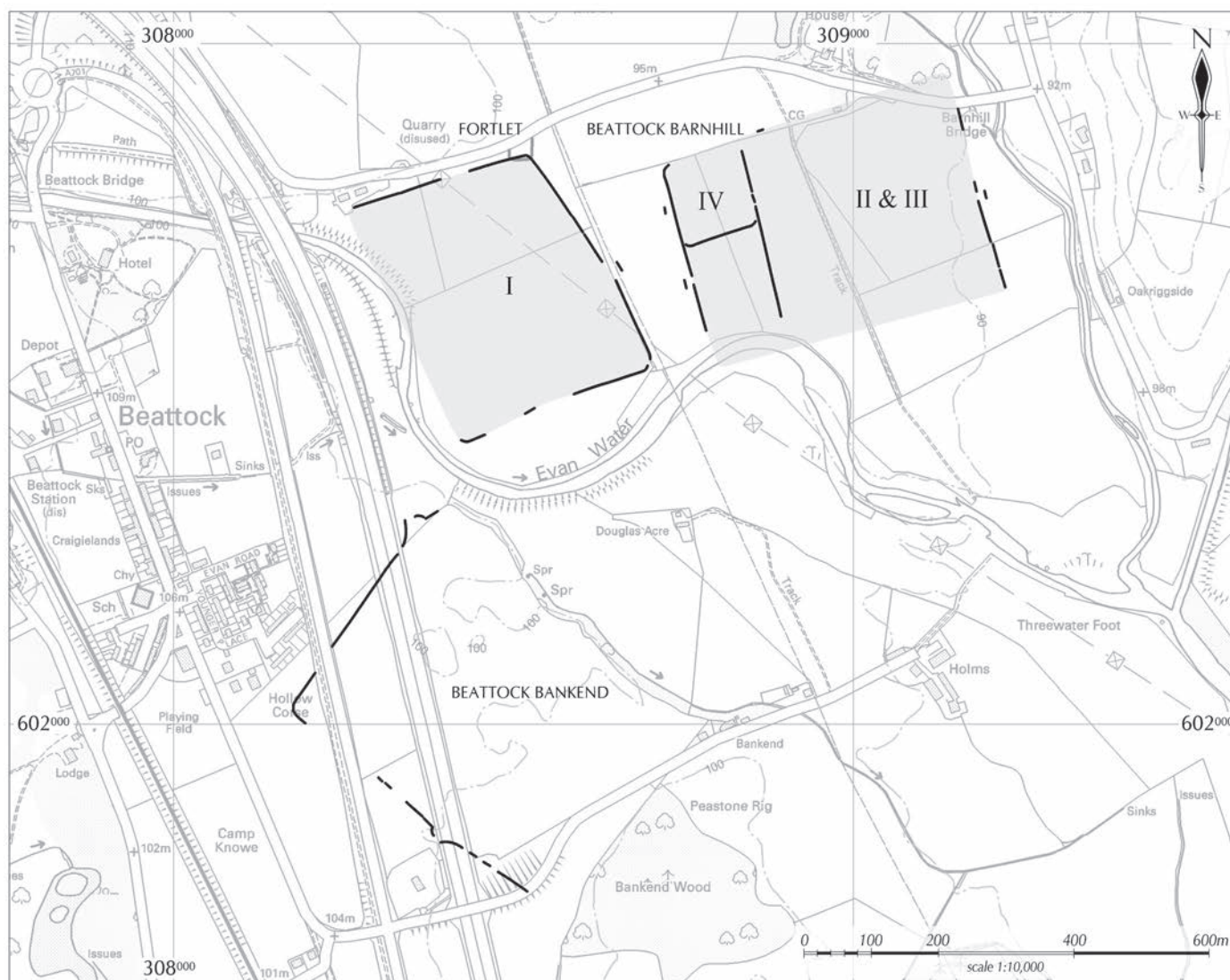


Illustration 85

Beattock Bankend and Barnhill I–IV and the Roman fortlet. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Beattock (illus 38, 47, 71 & 85)

*Beattock Bankend: NT 0840 0205
NT 00 SE 36*

*Beattock, Barnhill III: NT 0880 0270
NT 00 SE 20*

*Beattock, Barnhill I: NT 0845 0261
NT 00 SE 45*

*Beattock, Barnhill IV: NT 0878 0278
NT 00 SE 20*

*Beattock, Barnhill II: NT 0880 0270
NT 00 SE 20*

On the gravel terrace at Beattock, about 1km to the north of the fort at Milton, lie some five temporary camps, on either side of the Evan Water, close to its confluence with the River Annan.

Beattock Bankend, the single camp currently known on the south side of the Water, was first discovered in

1977 by RCAHMS from the air (Maxwell & Wilson 1987: 30–1). At least 444m of the south-west side has been recorded as a cropmark, together with a rounded corner angle and 368m of the north-west side. The area enclosed by the camp is unclear – it lies on the south-west side of the Evan Water, which has clearly moved

course over time, evidenced by cropmarks of numerous palaeo-channels. Both sides possess Stracathro-type gates; that in the north-west side lies less than 100m from the present course of the Water (but 330m from the known corner of the camp), and therefore the camp must have extended into the area now on the other (Barnhill) side of the river. If the gate on the south-west side is in the centre of that side, then the camp would have measured some 580m by at least 370m, enclosing at least 21.5ha (53 acres) and quite possibly closer to 26ha (64 acres).

Excavations revealed that the ditch was up to 2m wide and 0.9m deep (Leslie 1995: 154; Speller & Leslie 1995: 19–20). One field oven and the probable remains of two more were located in a trench placed obliquely across the camp in advance of the upgrading of the A74. In addition, the excavators suggested, on the basis of the silting, that the camp perimeter was left open for a period of time before the rampart was pushed into the ditch. There was no evidence for any reuse of the ditch (Speller & Leslie 1995: 26). Leslie has suggested that this camp may be a construction camp for the nearby fort at Milton (1995: 150–2; Speller & Leslie 1995: 26–7), but this seems unlikely given the distance between the two and the fact that there is a camp just outside that fort (**Milton I**).

On the north side of the Evan Water lie a further four camps at Beattock Barnhill. Camp I, on the west, was first recorded through cropmarks in 1957 by St Joseph from the air (1958: 89). The camp measures 363m from north-west to south-east by about 304m transversely. Although the west side of the camp has been eroded by the movement of the Evan Water, the south corner is visible, giving us an indication of the likely position of this side. The camp enclosed about 11.7ha (almost 29 acres). A *titulus* is recorded in the ENE side, at a change of alignment just south of the centre. At its northern corner the camp overlies a putative fortlet. Maxwell undertook a trial excavation to establish the relationship between the two structures and demonstrated that the camp was the later of the two (Frere 1985a: 267; Maxwell & Wilson 1987: 31, 40).

East of camp I lie camps II, III and IV, which represent successive uses of the same location with the perimeters adjusted to suit the size of the force camped within. First photographed in 1945 by St Joseph from the air (1951: 58), the camps are recorded as cropmarks with a field boundary running along their northern edge. Camp II measures 436m from WSW to ENE by at least 307m, but the south side of the camp is unknown, owing to erosion and movement of the Evan Water. *Tituli* are visible on the NNW and ENE sides, with a further two visible on

the WSW side (although it is likely that northern *titulus* on this side relates to the occupation of camp IV). If the southern of the two *tituli* on the WSW side and the corresponding *titulus* on the ENE side are in the centre of those sides, then the camp would measure c 350m by 436m and enclose some 15.4ha (38 acres).

Excavations in 1992 on the north side of the camp recorded that the ditch was up to 2m wide and 0.8m deep with a U-shaped profile. Traces of rampart material were also noted (Neighbour *et al* 1994: 10–11). The camp has been reduced twice, but the small-scale excavations on the north side did not record any evidence for a recut of the ditch (Neighbour *et al* 1994).

Camp III represents a reduction of camp II by the construction of an additional defensive ditch (and presumably also rampart) some 115m from the WSW side of that camp. As with camp II, its southern extent is unknown. The camp measured 321m from WSW to ENE by at least 307m transversely, enclosing at least 10.2ha (25 acres) and possibly 11.4ha (28 acres). (This assumes that the area enclosed by this camp was the larger area to the east, not the narrow rectangular area to the west, which would therefore represent an enclosed area of some 3.7ha (9 acres). A further use of the west rectangle is recorded (camp IV).) No additional gates of the camp are known, but it may have utilised the same entrances as those currently known on the NNW and ENE sides of camp II.

Camp IV is a reduction of camps II and III by the construction of an additional ditch (and presumably rampart) further reducing the area between the WSW sides of camps II and III. The area enclosed is almost square, measuring 124m from NNW to SSE by 118m, enclosing 1.4ha (3.6 acres). A *titulus* is visible in the centre of the WSW side but there is no corresponding break in the perimeter ditch. It is presumed that the earlier camp ditch was deliberately filled in at the entrance point, but possibly with similar material to that which later filled the rest of the ditch, thereby leaving the causeway undetectable in the cropmark record.

A study of the environmental history, fluvial deposits and river movement of the Evan Water concluded that the Stracathro-type camp at Beattock Bankend was earlier than its neighbours across the water at Beattock Barnhill. This was because the eastern Barnhill camps (II–IV) were constructed across gravel deposits and palaeo-channels that can only have been formed after the Bankend site was constructed (Tipping 1997: 25). Beattock Bankend is probably Flavian in date (see Chapter 10), and the fortlet underneath Beattock Barnhill

I has also been proposed as dating to the 1st century AD (Maxwell & Wilson 1987: 21), thereby implying that Beattock Barnhill I was Antonine or later. A sequence can therefore be identified at this complex, with Beattock Bankend representing a Flavian occupation of the area and quite probably all four camps at Beattock Barnhill

relating to campaigns in the Antonine and later periods. Their location a short distance from the fort at Milton, which demonstrated occupation in the Flavian and Antonine periods (Clarke 1951), suggests that non-proximity of camp and fort sites need not necessarily be an indicator of non-contemporaneity.

ROMAN CAMPS IN SCOTLAND



Illustration 86

Birrens II–III and Broadlea I–II showing the Roman fort and annexes at Birrens and the Neolithic henge at Broadlea II. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Birrens (illus 47, 86 & 90)

Birrens I: NY 2190 7515 *Birrens III (possible)*: NY 2165 7535
 NY 27 NW 4 NY 27 NW 4
Birrens II: NY 2245 7502
 NY 27 NW 5

There is a small cluster of camps at **Birrens** and **Broadlea**, close to the Roman fort at Birrens, on fairly level ground in a landscape dominated by Burnswark hill to the north-west. A further two camps lie about 1.5km to the north-west at **Middlebie Hill**.

One camp (I, not shown on illus 86), a 'Flavian enclosure', was recorded under the fort at Birrens during excavations in the 1960s (Robertson 1975: 73–5, fig 19). It was apparently filled in before the construction of the Hadrianic fort on the site, and finds from the ditch silting included glass and pottery, all dating to the late 1st century AD (Robertson 1975: 75). The enclosure was at least 71m by 21m and the ditch measured 2.1m in width and 0.9m in depth (Robertson 1975: 73).

Three other small camps and a possible fortlet were recorded south and east of the fort (across the Mein Water, also see **Broadlea**), along with a possible fourth camp to the north-west (camp III), although this may

be one of the annexes to the forts (St Joseph 1951: 57–8).

Camp II was discovered in 1948 as a cropmark by St Joseph from the air (1951a: 57–8) lying to the ESE of the fort across the Mein Water. It measures 341m from ENE to WSW by 245m transversely, enclosing 8.3ha (20.6 acres). A *titulus* is visible close to the centre of the WSW side but none is recorded from the other sides. A linear cropmark with a rounded corner within its interior could represent a further camp, but the evidence is inconclusive.

Camp III consists of the cropmark of a rounded corner and stretches of two adjacent sides just to the north-west of the fort, and was recorded in the 1940s by St Joseph. At least 85m of the south-west side and 25m of the north-east are known, and the site is probably either the remains of a temporary camp or of an annexe to the fort (St Joseph 1951a: 57).



Illustration 87

Blackchester. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Blackchester (illus 47 & 87)

NT 5154 5025 NT 55 SW 42

First recorded by RCAHMS from the air in 1992, the camp at Blackchester is situated just to the east of the line of Dere Street on a terrace which slopes gently eastwards towards the Leader Water. The cropmarks reveal the north-west angle together with at least 375m of the

south-west side and part of the adjacent north-west side. The presumed north-east side is located about 356m to the east; the total area enclosed is at least 14ha (35 acres). No gates are currently known.

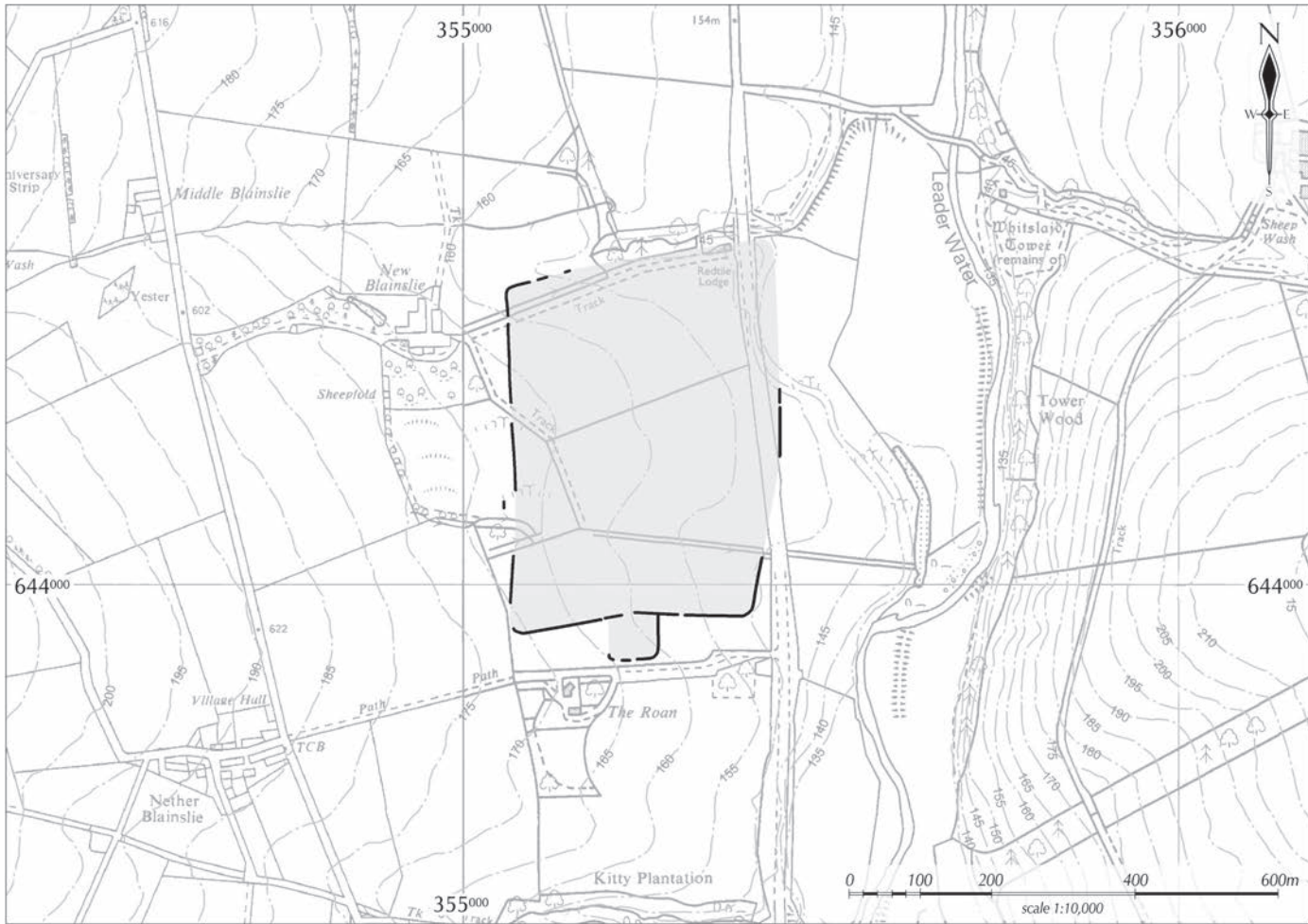


Illustration 88

Blainslie. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Blainslie (illus 47 & 88)

NT 5520 4420 NT 54 SE 18

The camp at Blainslie was first recorded in 1970 by St Joseph from the air (1973: 216) and is situated on gently sloping ground above the Leader Water, close to the presumed line of Dere Street. Parts of all four sides have been recorded, indicating that the camp measured some 493m from north to south by around 375m transversely, enclosing just over 18ha (nearly 45 acres). The camp is slightly irregular in form, with a distinct change of

alignment in the centre of the south side at an entrance gap. A second gate in the southern part of the west side is protected by a *titulus*. A small annexe or further camp is visible at the centre of the south side, enclosing the area where the entrance gap is located. It extends some 65m to the south and is possibly 70m wide, enclosing an additional c 0.45ha (1.1 acres).

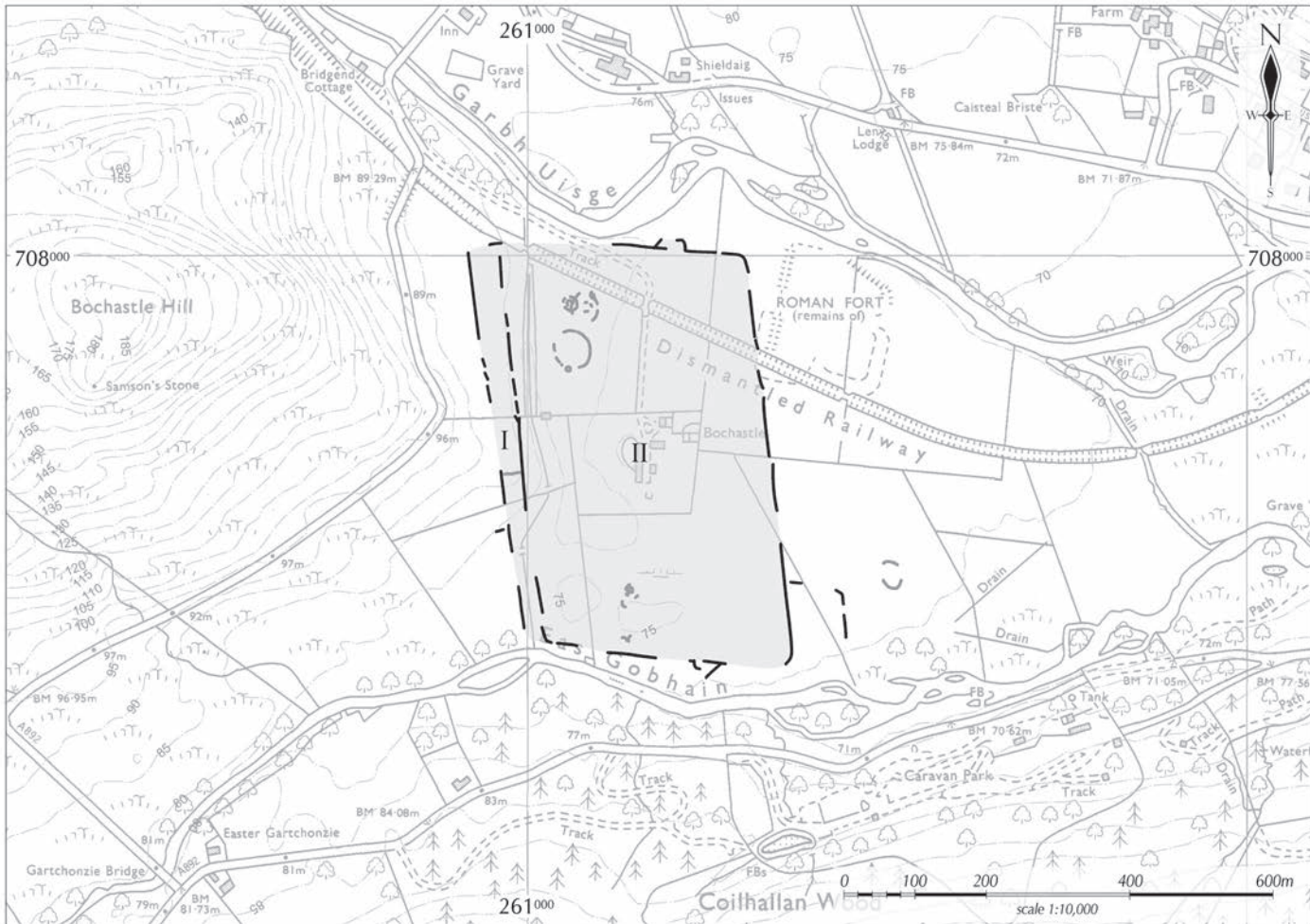


Illustration 89

Bochastle, with the Roman fort to the east and other cropmarks. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Bochastle (illus 47 & 89)

(Callander)

Bochastle I: NN 6117 0772 Bochastle II: NN 6117 0772
NN 60 NW 3 NN 60 NW 3

The camps at Bochastle, lying immediately to the west of Bochastle Roman fort, were first discovered in 1945 by St Joseph from the air. The site lies to the west of Callander on low-lying ground between the Eas Gobhain and the Garbh Uisge in the upper reaches of the River Teith. The ground rises sharply to Bochastle Hill to the west. The dimensions of the camp are some 570m in length from north to south by 384m across, enclosing some 21.4ha (almost 53 acres). An interior linear cropmark in its western sector probably represents a secondary phase of use. This reduces the width of the camp (II) to about 341m, enclosing an area of 19.5ha

(just over 48 acres). The camp has Stracathro-type gates in its north and south sides; these lie opposite one another, east of the centre. No obvious gates are recorded in the east or west sides. Excavations on the north side of the camp in 1969 by St Joseph revealed a ditch which he interpreted as not conclusively Roman, measuring up to 4.2m wide and 1.4m deep (RCAHMS St Joseph Collection: Notebook 5). A further evaluation on the north side in 1988 revealed no archaeological remains (Duffy 1998a).

A small enclosure attached to the south part of the east side of the camp, close to the corner, may represent

the remains of an annexe or attached camp, although its Roman origin is by no means confirmed. It measures 78m by at least 66m, thereby enclosing a minimum

additional 0.53ha (1.3 acres). If it were Roman in date, it could relate to either phase of occupation of the camp site.



Illustration 90

Aerial view of Broadlea II and the Neolithic henge, taken from the north-west in 1978. © Crown copyright: RCAHMS. SC342793. Licensor www.rcahms.gov.uk.

Broadlea (illus 47, 86 & 90)

(Birrens)

Broadlea I: NY 2178 7481 *Broadlea II: NY 2199 7466*
NY 27 SW 2 *NY 27 SW 3*

The two camps at Broadlea lie close to the fort and camps at **Birrens**. Camp I was first recorded in the 1940s by St Joseph as cropmarks from the air. It measures 296m from WSW to ENE by at least 127m, but its north side has not been recorded from the air (and may be obscured by the present-day course of the Mein Water and the railway from Carlisle to Lockerbie). At least 4.8ha (almost 12 acres) is known to be enclosed, and there is space for a camp of some 7.3ha (18 acres) here. An entrance gap is visible close to the centre of the south side, but no additional entrance protection is recorded.

Camp II lies immediately to the south of camp I and

was recorded as cropmarks from the air in 1945 by St Joseph. It measures 120m from north-west to south-east by at least 103m, but the railway has destroyed its eastern side. It enclosed at least 1.3ha (3 acres) and probably around 1.8ha (4.5 acres). A *titulus* is visible on the south-east side, and a probable entrance gap on the south-west side. The south-west side of the camp appears to be routed through the central area of a Neolithic henge, with a gap marking the camp gate placed at one entrance to the henge and the camp corner placed at the other (Atkinson 1952: 62–3). This may indicate that the henge was still an upstanding earthwork at the time.

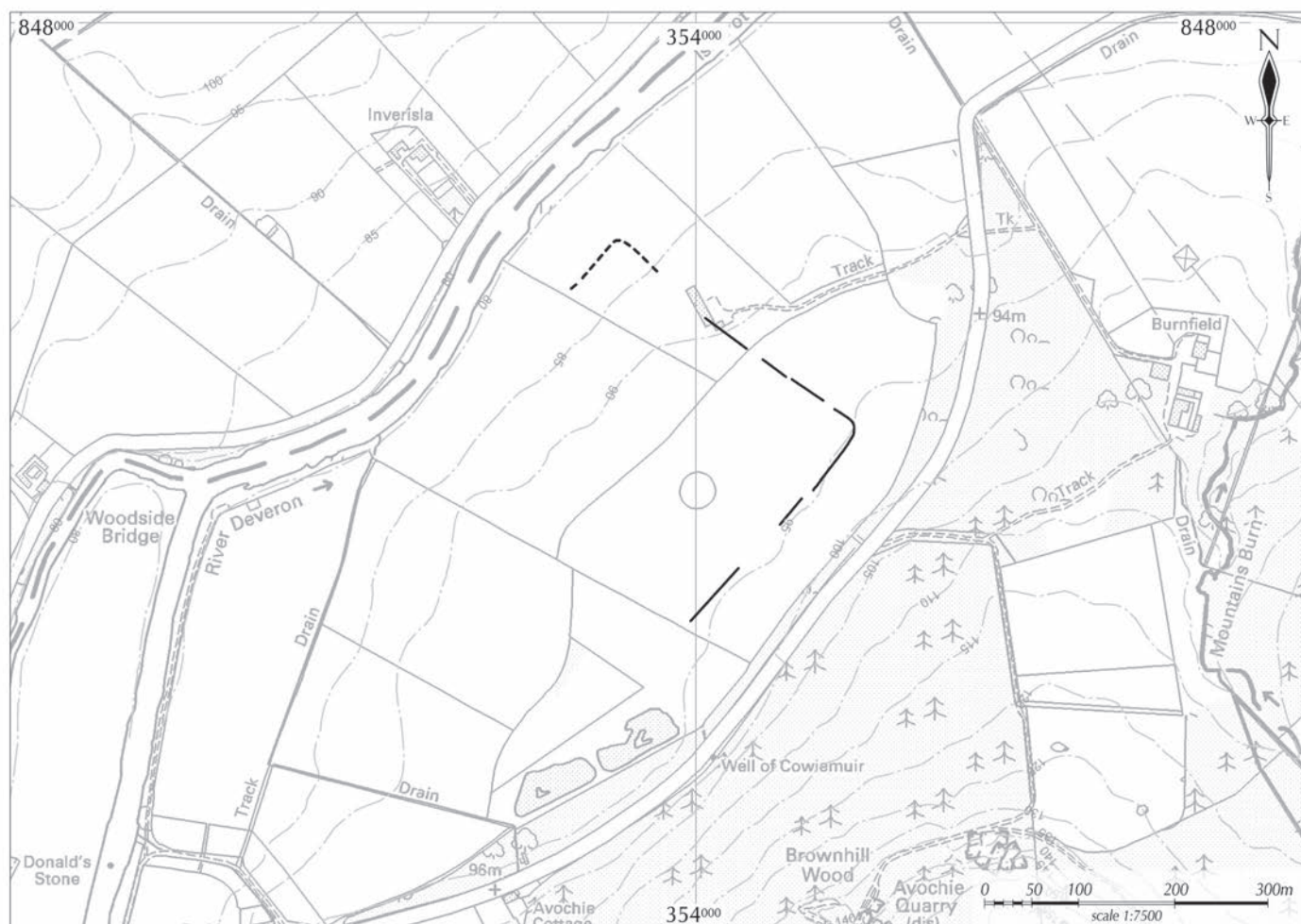


Illustration 91

Burnfield. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Burnfield (illus 91)
(Rothiemay)

NJ 5395 4757 NJ 54 NW 25

The probable camp of Burnfield was first identified from the air by Ralston in 1982, although part of the camp is visible as cropmarks on air photographs taken by Cambridge University in 1976. The site lies just to the east of the River Deveron, south-west of Milltown of Rothiemay, on a relatively flat terrace, before the ground slopes gently up to Brown Hill to the south-east. Those seeking a camp between **Ythan Wells** and **Auchinhove** had suggested Rothiemay parish as a likely location (for example, Burn 1953: 133; Henderson-Stewart 1960: 83–4). Although the camp lies within Huntly parish (Huntly lies over 7km to the south), it is close to Rothiemay. The camp currently lies in improved pasture.

Parts of the north-east and south-east sides, including the east corner, are visible on air photographs. St Joseph's

plan in the RCAHMS (DC 37267) also includes the north corner and short stretches of the adjacent north-east and north-west sides. It is presumed that these were recovered through trenching. This evidence suggests that the north-east side was about 327m in length. Information supplied to Maxwell & Wilson suggested that 360m of the south-east side had been traced (1987: 34). Thus the camp measures some 327m by possibly at least 360m, enclosing a minimum area of 11.7ha (29 acres), and St Joseph noted that it was unlikely to have exceeded 16ha (40 acres) on topographical grounds (Frere 1984: 273). The ditch was recorded as measuring 1.4m in width but only 0.5m in depth (Maxwell & Wilson 1987: 34). No obvious entrances are known, but there are various gaps in the perimeter ditch.

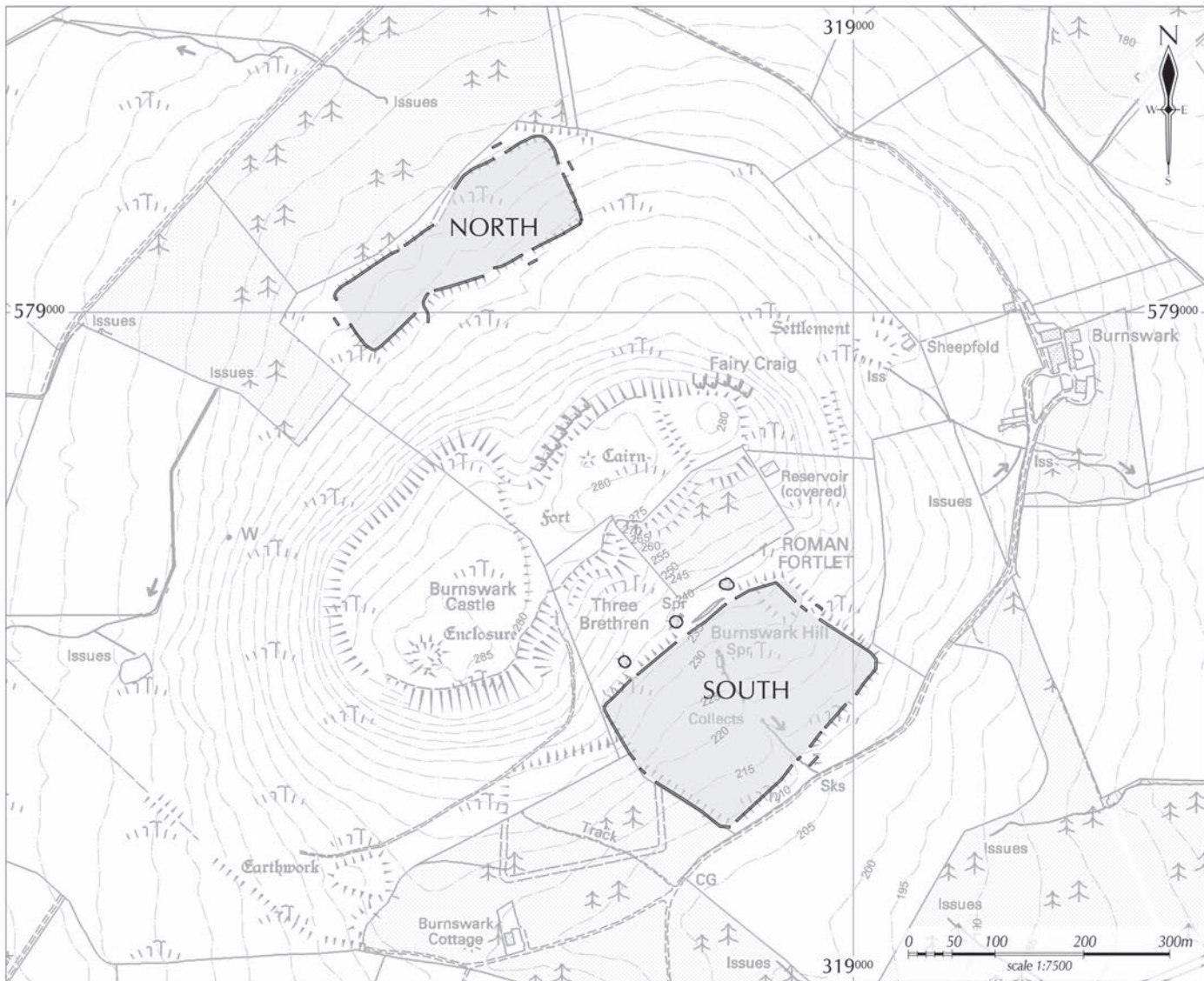


Illustration 92

Burnswark North and South. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Burnswark (illus 8, 11, 44, 47, 58 & 92)

(Birrenswark; Brunswork; Brunanburgh; Birrens-work-hill)

*Burnswark North: NY 1857 7908
NY 17 NE 2.04*

*Burnswark South: NY 1888 7854
NY 17 NE 2.04*

The flat-topped Burnswark Hill dominates the landscape of Annandale and across the Solway, and commands spectacular views from its summit. The hill is crowned by a hillfort and flanked by two earthwork camps and a presumed Roman fortlet, all of which were subject to a series of excavations in the 1890s (Barbour 1899) and then in the 1960s and 1970s (Jobey 1978).

The site has attracted considerable attention over the years since the 1720s, when Alexander Gordon recorded the two camps (1726: 16–17). This inspired a number of other antiquarians to visit (Christison 1899). The possibility that it was the site of a genuine siege gripped the imagination of many generations, although there was doubt about this for a number of years, with

the preferred interpretation being that of practice siege works (Steer 1964: 24; Davies 1972). This notion gained more credibility following excavations by Jobey, who suggested that the occupation of the hillfort was abandoned long before the Roman invasion, with the defences severely denuded by the late 1st century AD (1978: 98–9), although just because the ramparts were no longer in use does not mean that the site did not continue to be occupied as an open settlement. An alleged line of circumvallation connects the two Roman camps, but many of these appear to be field walls and tracks, and two additional earthworks on the north-east and south-west side of the hill are now interpreted as prehistoric settlements (RCAHMS 1997: 179–82). More recently, plausible attempts have been made to reinstate the two camps as the site of a genuine siege (Campbell 2002; 2003; Davies 2006: 57–60; Keppie 2009; Hodgson 2009: 187 – see above, Chapter 2.2), with the alleged circumvallation not required. Various Roman weapons including spearheads, lead sling-bullets (*glandes*, recently interpreted as catapult ammunition, Rihll 2009), iron arrowheads and stone ballista balls have been found on the hill during the various excavations and fieldwork (Anderson 1899; Cormack 1959; Jobey 1978: 86–91). Roman finds broadly date from the 1st to the 2nd century AD (Jobey 1978: 82–96).

The camp on the north side of the hill is an unusual shape and gives the impression of two separate camps that have been joined. Collingwood felt that the camp had never been completed and that the layout reflected errors by the Roman army constructing the site (1927: 49–51). Certainly, an area of boggy ground on the north-west side has resulted in a gap, which may never have been fully built (*contra* Crawford 1939: 286), but alternative means of protection were probably employed. The camp measures about 296m from ENE to WSW by up to 112m in width and enclosed around 2.6ha (6.5 acres). Entrance gaps protected by *tituli* are visible on four sides, with an apparent reverse external *clavicula* also visible on the south-east side. The wide gap at the south-west entrance is probably the result of erosion by a nearby burn.

From the morphology of this camp, it is possible that it started life with a smaller square camp at its east side, which was subsequently extended, although St Joseph tested this theory by excavation and failed to locate any evidence (1952a: 98). Excavations recorded that the ditch was rock-cut in places (Barbour 1899: 233). St Joseph's excavations in the 1940s noted that the rampart comprised some 0.3m of clean red clay standing on two or three courses of turf (1952a: 98).

The south camp is equally unusual, although the earthwork is closer in form to the more usual rectangle. It measures about 260m from north-east to south-west by around 194m, enclosing almost 4.8ha (nearly 12 acres). There is a spring bisecting the camp, known locally as 'Agricola's Well'.

This camp overlies a presumed Roman fortlet situated in its northern corner, itself cut by later round-house platforms which appear to have partly utilised its perimeter (RCAHMS 1997: 181–2). Recent reassessment of the enclosure has postulated that it may not be a fortlet but relate to Iron Age occupation (H Welfare & S P Halliday pers comm). Detailed topographic survey of the enclosure and camp identified potential earlier features, and it has been suggested that some of these may indicate an earlier camp (Maxwell 1998a: 49).

The unusual element of this camp relates to its gates: while *tituli* are visible in the north-east, south-east and south-west sides (the latter not depicted on illus 92), the north-west side possesses three entrances protected with circular platforms (known as 'The Three Brethren'). These measure some 3.5m high and are up to 15m across, and are frequently interpreted as 'ballista platforms' or '*ballistaria*' (for example, see Maxwell 1998a: 46–9). Two of these were partially excavated by Barbour, who recorded that the mound of the central one was some 3.65m above the surface of the gateway and some 3.2m above the bottom of the ditch, which dips around 0.6m into the rock and is also partially stone-faced (1899: 227). The suggestion that these apparent enlarged *tituli* housed some form of artillery machinery was challenged by Campbell, who suggested that their enlargement was due to camp protection: the deflection of 'heavy and destructive objects' rolled towards the camp (2003: 29). However, he has since accepted the possibility that they are '*ballistaria*'.

Excavations in the north corner of the camp by the enclosure/fortlet recorded that the ditch was some 5.5m wide and 1.8m deep and cut through soft bedrock. The rampart was up to 1.5m high, with a number of stones acting as a kerb, suggesting that its width was 6.5m (Jobey 1978, 81). Earlier excavations had recorded that rampart and ditch were frequently 'lipped with stones', with the ditch some 3.6m wide and 2.7m deep, and the rampart 3.3m high (Barbour 1899: 224, fig 1). Barbour also recorded pavements in the gateways and camp interior, including the remains of a building in its centre (1899: 227–8). Later excavations by Jobey failed to locate this building, although an area of paving was noted (1978: 82).

Barbour's excavations implied a level of permanency in the occupation of this camp, or certainly prolonged occupancy, with paved roads and building debris, although because some of the latter could not be located by Jobey it is possible that some of Barbour's findings may have been over-interpreted (Barbour 1899: 224–31; Jobey 1978: 79–82).

The date of the occupation of the camps is unknown. It has been assumed that the enclosure/fortlet, if Roman, is Antonine in date, like many of the fortlets in south-west Scotland. If this were the correct interpretation, then the southern camp could relate to a

practice siege, or an actual siege of the hill, possibly during the alleged troubles of AD 155–8 (Jobey 1978: 57; Hodgson 2009), during the campaigns of Ulpus Marcellus in the 180s (Frere & St Joseph 1983: 34) or perhaps even as late as Severus (Keppie 1989: 67). If an earlier camp pre-dated this postulated Antonine fortlet, then a Flavian occupation could be expected. But if the corner earthwork is an Iron Age enclosure rather than a Roman fortlet, then the date range is broader. Although the apparent *clavicula* on the north camp would favour a 1st-century date (see section 7b), its form is unlike all other *claviculae* in Scotland. Burnswark remains an enigmatic site.

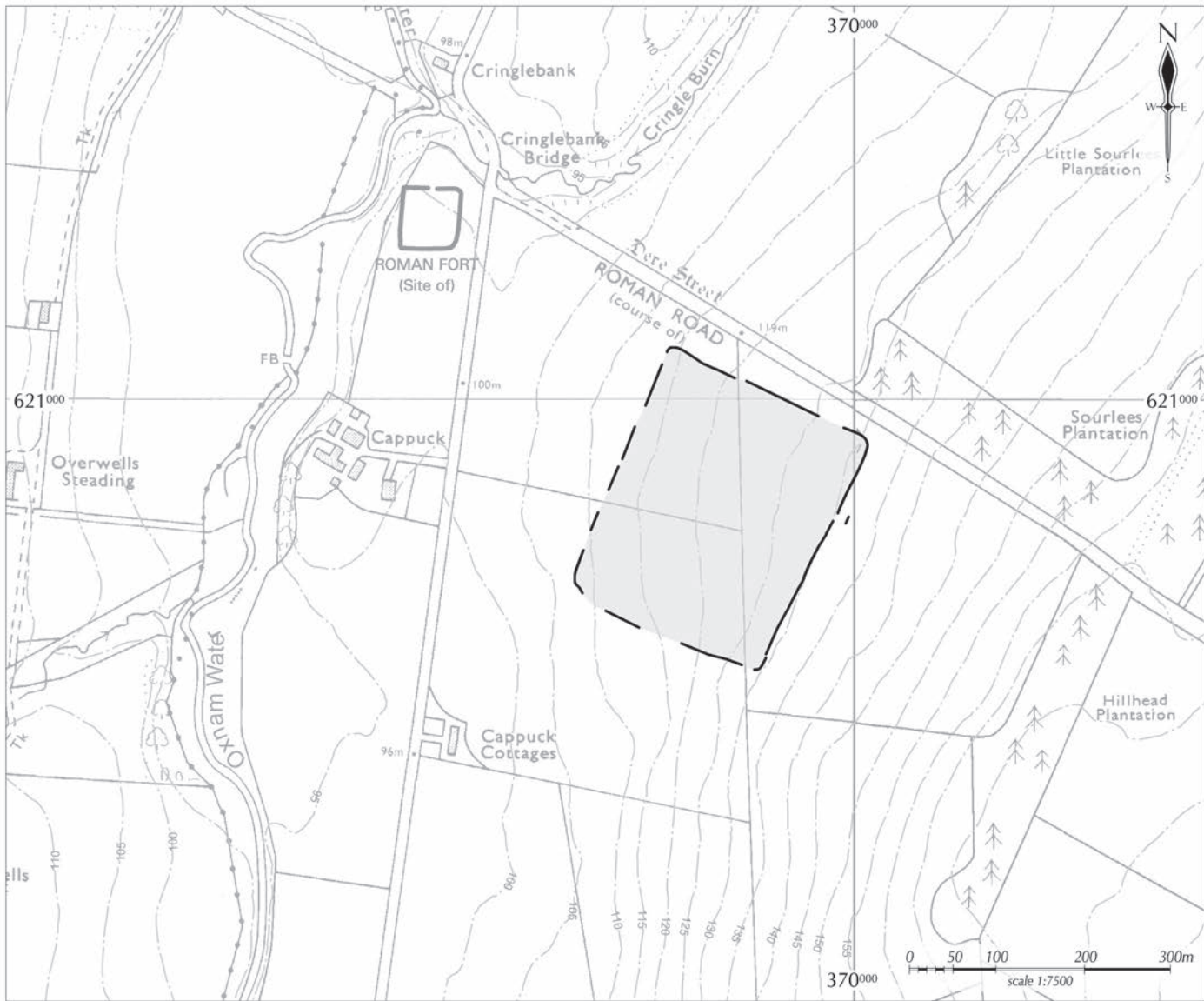


Illustration 93

Cappuck, with the Roman fort to the west. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Cappuck (illus 47 & 93)

NT 6990 2090 NT 62 SE 42

First recorded in 1958 by St Joseph as cropmarks from the air (1961: 121), this camp lies some 300m SE of the Roman fort at Cappuck, on gently sloping ground immediately south-west of Dere Street. The camps at **Millside Wood** and **Ulston Moor** lie across the Oxnam Water a short distance to the north-west. The camp measures some

303m from NNE to SSW by 245m transversely, enclosing 7.5ha (18.5 acres). A large gap in the SSW side may relate to the position of an entrance; a second possible entrance on the ESE side, towards the east corner, appears to be protected by a *titulus*.

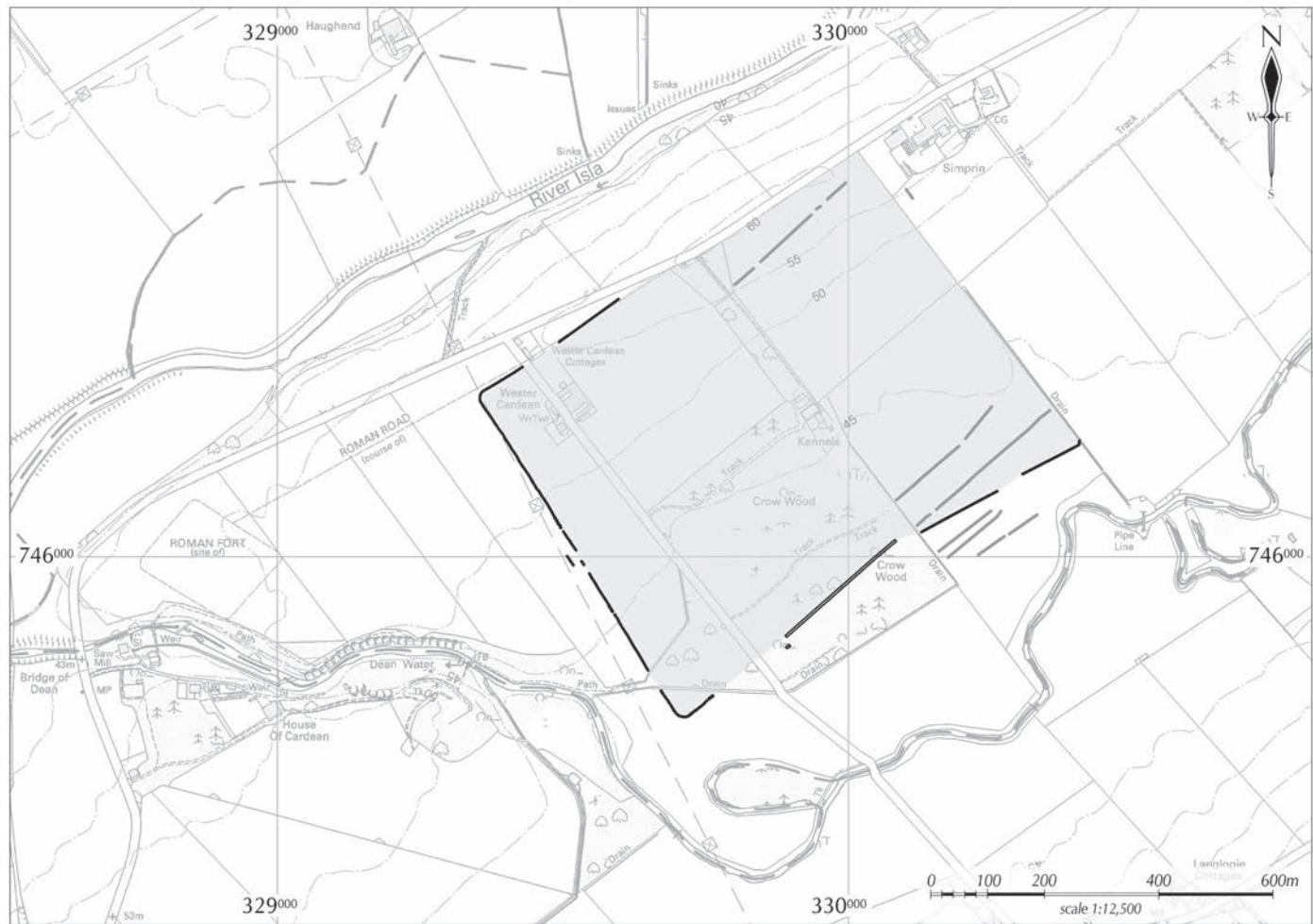


Illustration 94

Cardean I with the Roman road and Roman fort to the west. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Cardean (illus 47 & 94)

Cardean I: NO 2990 4630 NO 24 NE 15

The camp at Cardean was discovered from the air by St Joseph in the early 1950s (St Joseph 1955: 87), just to the east of the Flavian fort. Both fort and camp lie on a triangular plateau east of the confluence of the River Isla and the Dean Water. The village of Meigle lies just over 1km to the south-west.

The camp lies on ground that slopes gently to the north, with a road running along its northern perimeter. It is orientated from south-west to north-east, with the whole of the south-west side, two rounded corners and parts of the south-east and north-west sides visible as cropmarks on air photographs. Part of the south-east side survives as an upstanding earthwork in Crow Wood, accentuated by a drainage ditch. However, there are several large drainage ditches cutting through the wood, and another drainage

ditch had been mistaken for the camp in the past as a result of the south corner being assumed to lie in the field north of the western spur of the Wood (Ordnance Survey NO24NE, published 1977, from information supplied by St Joseph). St Joseph recorded that two small trenches on the south-east side in the east part of Crow Wood did not find the ditch, and he proposed that this was therefore the position of an entrance (1973: 224). The east part of the south-east side lies in a field of linear cropmarks (presumably for drainage), but can be discerned running up to the field boundary, and was confirmed in trenches by St Joseph (RCAHMS St Joseph Collection: Notebook 7). The north-east side is unclear, although there are faint traces of a linear cropmark on air photographs, and St Joseph also recorded it from the air and through trial trenches (1955:

87; 1973: 224; RCAHMS St Joseph Collection: Notebook 7). He plotted it running immediately east of the field boundary (RCAHMS DC 37284) and excavated small trenches here in 1975 (RCAHMS St Joseph Collection: Notebook 7). This gives the camp overall dimensions of some 830m from north-east to south-west by around 650m transversely, enclosing 54ha (133 acres).

An entrance gap, protected by a *titulus*, is visible in the centre of the south-west side. On the south-east side, at

the point where the drainage ditch stops and turns sharply to the south, there is a low mound, about 10m in length, 5.5m broad and a maximum of 0.4m high, which may represent the traces of a *titulus*.

Trenches by St Joseph recorded that the ditch of the camp was up to 3.6m wide and 1.75m deep. He also noted a possible second camp lying within this camp (**Cardean II**, see possible camps), with ditches recorded on the north-west and south-east sides.

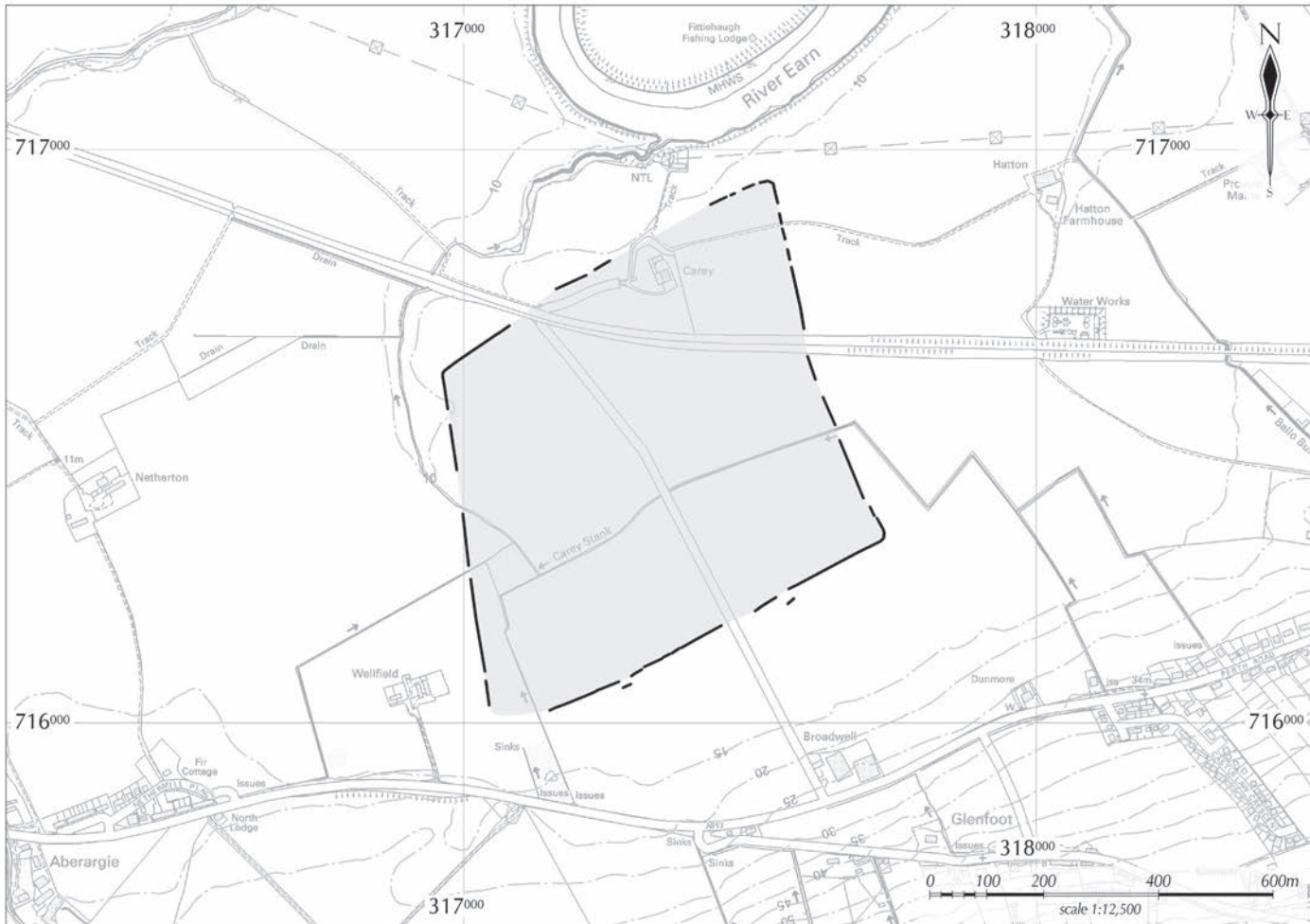


Illustration 95

Carey. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Carey (illus 47 & 95)

(Abernethy)

NO 1730 1650 NO 11 NE 27

The camp at Carey, near Abernethy, was first recorded from the air by St Joseph in 1971 (1973: 219–20). It lies on a level terrace immediately south of the River Earn, close to where it meets the River Tay. The fortress and camps at **Carpow** lie some 3km to the ENE. The embankment for the railway line from Perth to Ladybank cuts through the northern part of the camp, and the Carey Stank, a small burn now canalised, also cuts across it.

Parts of all four sides of the camp have been recorded as cropmarks. It is rhomboid in shape, measuring some 670m from WSW to ENE by around 663m transversely, enclosing 44.6ha (110 acres). A change of direction in the ENE side close to where the railway line crosses probably indicates the position of an entrance gap, and

there are two entrance gaps in the SSE side, protected by *tituli*; it probably had six in total. St Joseph placed trenches through the NNW, ENE and SSE sides in 1971 and 1972, recording that the ditch was 1.1m deep and 2.3m wide on the NNW side, but only 0.8m deep and 1.5m wide on the SSE side (RCAHMS St Joseph Collection: Notebook 6). A small fragment of samian was found in the ditch on the SSE side, identified as south Gaulish and probably late 1st century (St Joseph 1973: 220). More recent attempts to locate this sherd have proved unsuccessful (Dunwell & Keppie 1995: 60n).

Owing to its size and morphology, the camp is regularly compared with the camp at **Dunning**, some 15km to the west (St Joseph 1973: 218–20).

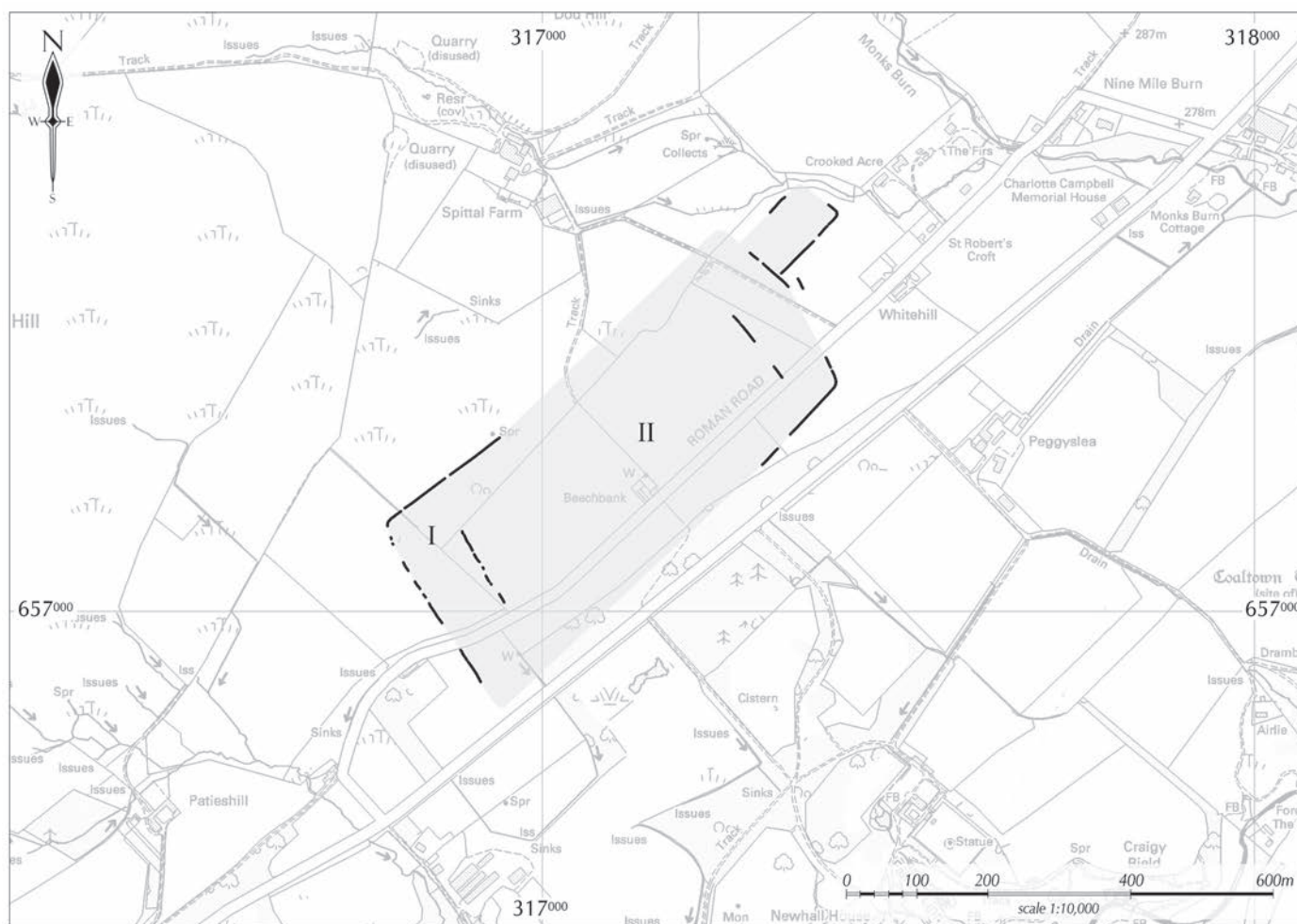


Illustration 96

Carlops Spittal I-II. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Carlops Spittal (illus 47, 70 & 96)
(Carlops)

Carlops Spittal I: NT 1715 5725
NT 15 NE 30

Carlops Spittal II: NT 1715 5725
NT 15 NE 30

First recorded in 1984 by RCAHMS from the air (Frere 1986), this camp lies on a ridge above the village of Carlops, on sloping ground on the south-east side of the Pentland Hills. The full extent of the cropmarks suggest that the camp measured about 672m from north-east to south-west by 272m transversely, enclosing 18.8ha (46 acres). There appears to be a *titulus* close to the centre of the north-east side. Excavations by Maxwell in 1985 revealed that the ditch was about 2.8m wide and about 1m deep on the lower ground (Frere 1986: 371).

An annexe was recorded in 1996, extending from the north-east part of the camp and overlapping with a settlement enclosure (not depicted on illus 96). This annexe

is elongated, measuring some 122m to the north-east by 71m, thereby enclosing an additional 0.86ha (2.1 acres).

Two linear cropmarks, located 85m from the north-east and 90m from the south-west ends suggest that the camp has been reduced on at least one occasion. These two may be contemporary with each other, or represent two phases of reduction or increase in the size of the camp. This second camp may be only 473m in length if the two linear cropmarks bisecting the first are contemporary and relate to a reduction in the size of the camp, only reusing stretches of the north-west and south-east sides. This would result in a camp of some 14ha (35 acres). No entrances are known.

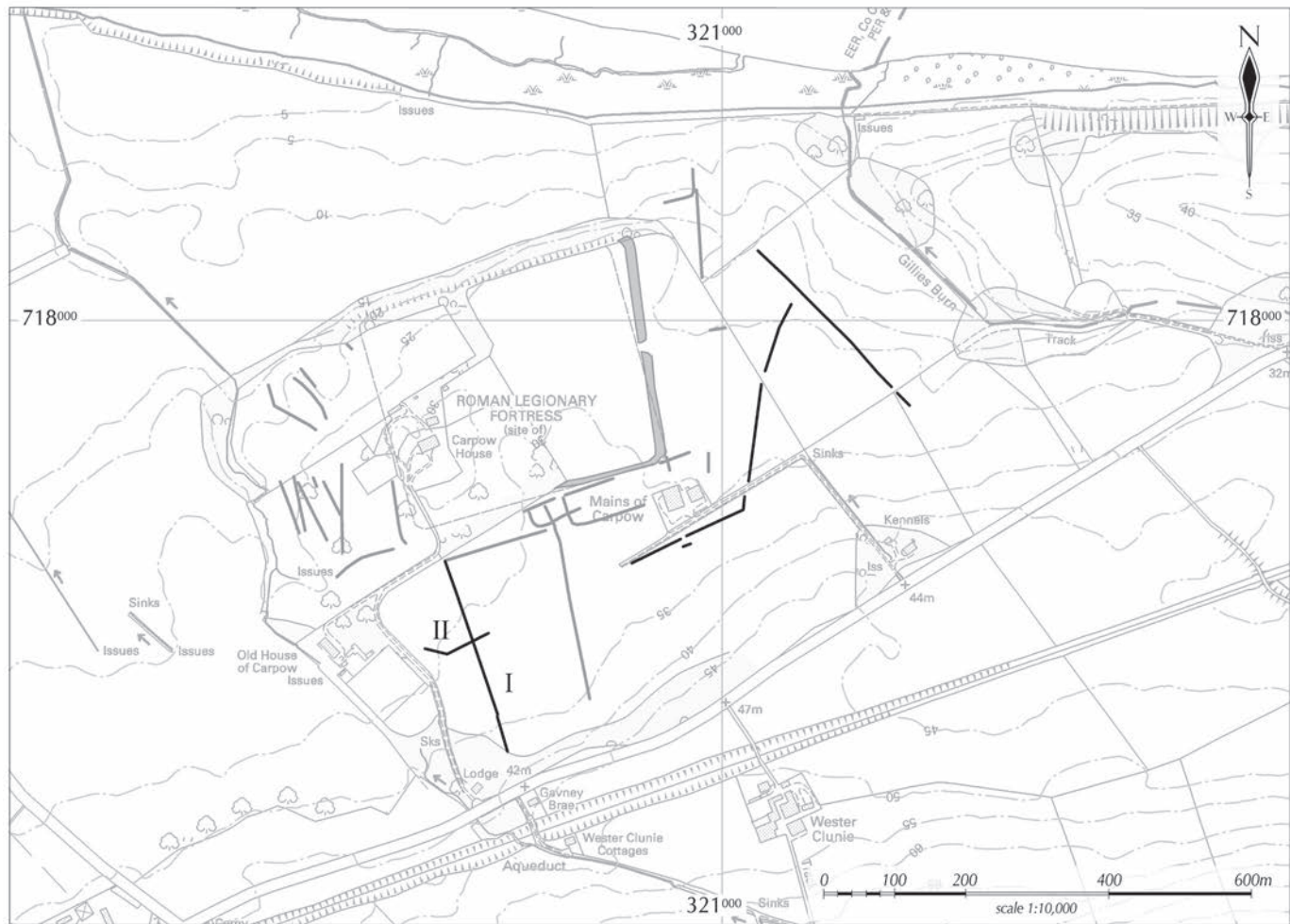


Illustration 97

Selected cropmarks at Carpow I-II thought to relate to the Roman period. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Carpow (illus 97)

Carpow I: NO 2105 1755
NO 21 NW 58

Carpow II: NO 2105 1755
NO 21 NW 58

The fortress and camps at Carpow lie on the south side of the River Tay, a short distance east of its confluence with the River Earn. The site has been identified as *Horrea Classis* (Ordnance Survey 1956); excavations have revealed that the fortress appears to date to the Severan campaigns in Scotland (Birley 1965; Dore & Wilkes 1999), although one of the inscriptions has been proposed as dating to the reign of Commodus (RIB 3512: Tomlin, Wright & Hassall 2009: 458–61).

First recorded in the early 1970s by St Joseph from the air (1973: 220–3), camp I consists of linear cropmarks representing the north-east and south-west sides. These indicate that it measured around 670m from north-east to south-west by at least 300m transversely. Excavations by St

Joseph recorded a V-shaped ditch which was 0.15m deep and 0.75m wide on the east side (RCAHMS St Joseph Collection: Notebook 6). Other trenches appear to have recorded a U-shaped ditch (sketches in Notebooks 6 & 7). Just to the south of the intersection with camp II, the ditch was drawn as *c* 2.1m wide and 0.6m deep. Other trenches on this side suggest that it was as much as 2.8m wide and 1.2m deep, and the butt end for an entrance was also noted, with a drain across the causeway (Notebook 5).

But St Joseph's notebooks are unclear as to where many of his trenches lay. Another trench is recorded as 3m in width and 0.9m in depth with a stone drain cut into the bottom (Notebook 5). He appears to suggest an entrance

causeway in the west side, but this is not depicted on his plans (1973: fig 13; RCAHMS DC 37302).

The east side of the camp is not clear from the air photographs. St Joseph recorded it running north from the plantation at Carpow kennels (1973: fig 13) and much of this evidence probably came from his excavations. A further linear cropmark of a different characteristic to the numerous drains in the area lies to the east and is some 300m in length. It is unclear whether this is part of the camp which St Joseph recorded, or potentially a further camp.

The camp potentially encloses part of the presumably later Severan fortress (Dore & Wilkes 1999), and St Joseph suggested that its north limit may be similar to that of the fortress, lying at the crest of a ridge. This would mean that the camp would measure some 670m by at least 640m and enclose at least 43ha (106 acres).

Camp II is an irregular polygonal enclosure which appears to enclose the Severan fortress. Recorded in the 1960s by St Joseph from the air (1969: 110), the south side is some 462m in length, with stretches of the two adjacent sides splaying off to the north-east (290m+) and north-west (34m+). If the camp continues on this alignment up to the north limit of the fortress, as proposed for camp I, then it could extend some 460m to the north and enclose some 26.6ha (65.9 acres). An entrance gap and *titulus* is visible in the eastern part of the SSE side. A second *titulus* to the west was recorded by St Joseph (1969: 110) but could not be corroborated from the air photographs. Excavations recorded that the ditch of this enclosure or camp measured up to 3.35m in width and 1.4m in depth, and cut through the filling of the ditch of camp I and was therefore later (St Joseph 1969: 110; 1973: 221).



Illustration 98

Carronbridge, with the Iron Age settlement to the south-east of the camp. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Carronbridge (illus 47 & 98)
 NX 8687 9779 NX 89 NE 4

First recorded in 1949 by St Joseph from the air as crop-marks (Clarke & Webster 1955: 9), the camp at Carronbridge lies not far from the fort and camps at **Drumlanrig**, on the east bank of the Carron Water, a tributary of the River Nith. It is sited next to an Iron Age/Romano-British settlement that has been extensively excavated (Clarke & Webster 1955; Johnston 1994).

Measuring 69m from north-east to south-west by at least 72m transversely (the north-west side is obscured by trees), the camp probably enclosed just over 0.5ha (1.3 acres). *Tituli* are recorded on the south-west, south-east and north-east sides.

The camp cuts across an earlier enclosure with which it is aligned. This earlier enclosure was originally thought to be a Roman fortlet (Clarke & Webster 1955: 31) but was later interpreted as a pre-Roman Iron Age enclosure

with an internal palisade whose ditch was over half full when the camp was built (Johnston 1994: 285–6).

Excavations in 1989–90 recorded that the camp ditch followed that of the earlier enclosure where the two intersected. Seven pits were located just inside the Roman camp ditch which contained charred emmer wheat. A probable oven was also excavated outside the camp and cutting the palisade trench and inner edge of the ditch of the earlier enclosure: this was presumed to belong to the camp and was radiocarbon dated to *c* AD 25–240 (Johnston 1994: 255–9). Although the earlier enclosure may be Iron Age in date, the dimensions and profile of its V-shaped ditch (2.4–3.35m in width, 1.06–1.28m in depth) together with its alignment with the camp means that the possibility of a Roman origin should not be entirely ruled out.

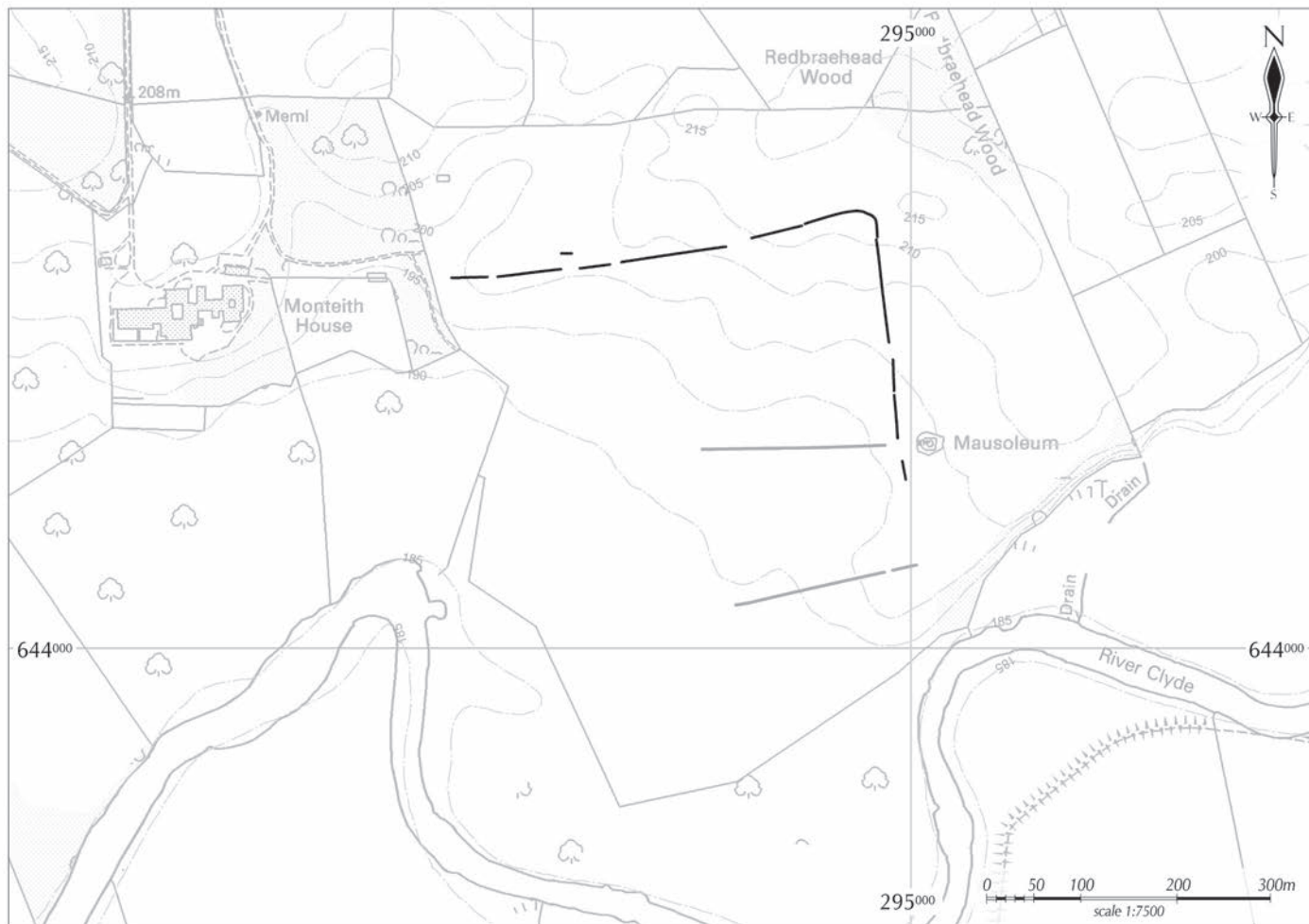


Illustration 99

Carstairs Mains. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Carstairs Mains (illus 99)

NS 9474 4430 NS 94 SW 22

First discovered in 1978 by RCAHMS from the air (Frere 1984: 276), this camp lies some 1.7km east of the fort and camps at **Castledykes**, on the north side of the River Clyde, close to the presumed line of the Roman road running towards **Lyne** and Easter Happrew.

At least 462m of the north side has been recorded through cropmarks, together with a rounded north-east angle and part of the east side. The north side exhibits an entrance gap protected by a *titulus*, together with a probable second entrance to its east, accompanied by a slight change of alignment. Maxwell & Wilson stated that two entrances with *tituli* were visible in the north side, but they did not depict the second *titulus* on their

accompanying plan (1987: 35–6, fig 11) and it could not be verified on air photographs. The south-east corner and south side of the camp depicted by Maxwell & Wilson could not be verified (1987: fig 11); their south side is almost on the same line as an avenue running from the nearby Roman fort at Castledykes to a Mausoleum, depicted on the 1st edition of the Ordnance Survey map (Lanarkshire 1864: sheet xxxii). A further linear cropmark visible to the south of this line could represent the south side of the camp. This would give transverse dimensions of some 365m, and the camp is therefore likely to have enclosed at least 16.8ha (over 41 acres).

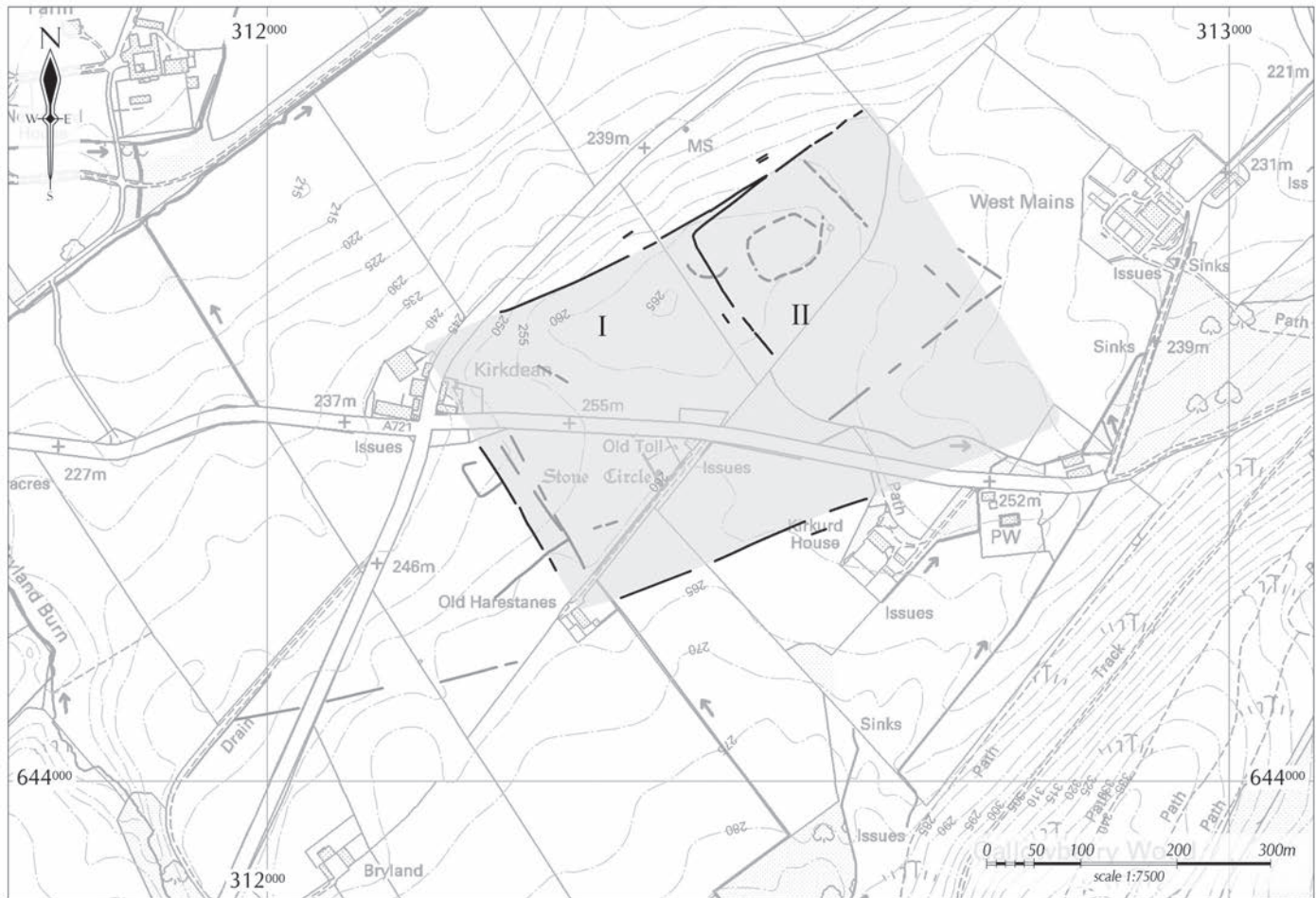


Illustration 100

Castlecraig I-II, including other cropmarks in the area. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Castlecraig (illus 47, 56 & 100)

Castlecraig I: NT 1256 4455 Castlecraig II: NT 1250 4450
NT 14 SW 46 NT 14 SW 37

The two intersecting camps at Castlecraig by Kirkurd lie close to the line of the Roman road between **Castledykes** and **Lyne**/Easter Happrew and not far from the road running up the east side of the Pentland Hills. They are sited on undulating land below Galloberry Wood. Both were discovered as cropmarks by St Joseph from the air: the first in 1964 and the second four years later (1965: 79; 1969: 108).

Only part of the perimeter of each camp is known. Camp I, the larger of the two, measures at least 525m from south-west to north-east by 332m transversely, enclosing at least 17ha (42 acres) and possibly some 21.1ha (52 acres). A *titulus* is visible in the south-east side, and two are visible in the north-west side. A number

of linear cropmarks confuse the south-west side of the camp, and no entrance is clearly discernable on this side. One cropmark has an additional enclosure attached, but this does not appear to be an annexe and does not look Roman in form.

A second camp (**Castlecraig II**) is partially recorded on a slight knoll within camp I.

The visible part of the north-west side lies at a slight angle to the that of camp I, and the two camps come together at the entrance gap, protected by two *tituli*, presumably one for each camp. Some 150m of the south-west side of this camp is visible, with an entrance gap and *titulus* two-thirds of the way along this side. Of the north-west side, 111m up to the *titulus* is known; beyond this, the

camp may have used the north-west perimeter of camp I, but this is unknown.

If the known gate on the north-west side represents the centre of that side, then the camp's cross dimension would be 220m, suggesting that it enclosed at least 3.3ha (8.2 acres), and, given the location of the other entrance and the topography, may have enclosed some 4.3ha (10.7 acres). A number of linear cropmarks are visible to the

south-east, but none can be confidently assigned to the camp.

The denuded remains of a stone circle survive within camp I's perimeter (RCAHMS 1967: 63), and the cropmark remains of a settlement are visible within both camps alongside a probable palisaded enclosure, which overlaps the perimeter of camp II.

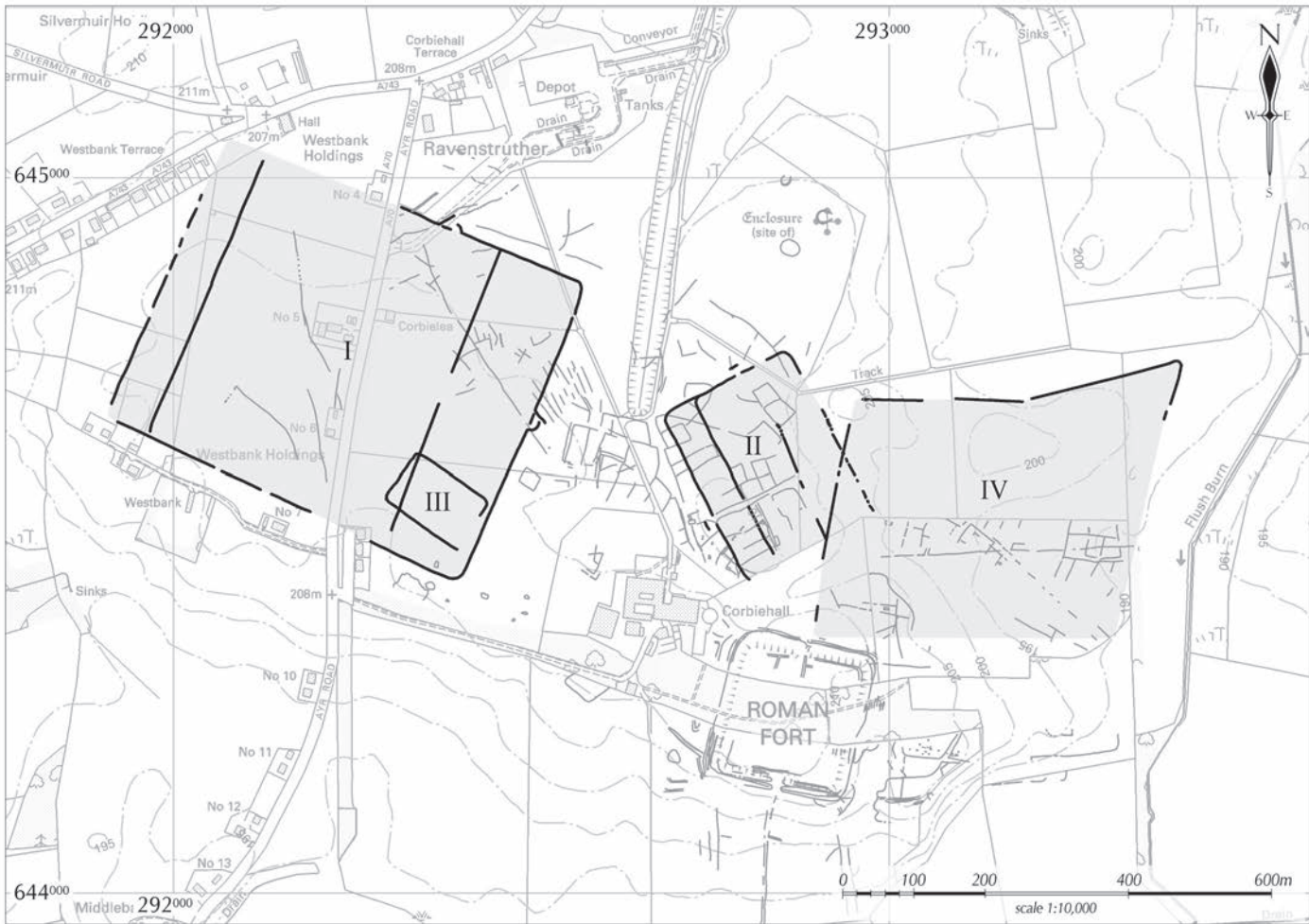


Illustration 101

Castledykes I-IV with other cropmarks in the area including the Roman fort and its annexes and the field system. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Castledykes (illus 23, 47, 59, 101)

- | | |
|--|--------------------------------------|
| <i>Castledykes IA & B: NS 9220 4475</i> | <i>Castledykes III: NS 9236 4455</i> |
| <i>NS 94 SW 7.02</i> | <i>NS 94 SW 7.04</i> |
| <i>Castledykes IIA & B: NS 9283 4460</i> | <i>Castledykes IV: NS 9315 4451</i> |
| <i>NS 94 SW 7.03</i> | <i>NS 94 SW 7.6</i> |

The fort of Castledykes lies just above the River Clyde, east of Lanark. It was extensively excavated from the 1930s to the 1950s and successive Flavian and Antonine forts were recognised (Robertson 1964a; RCAHMS 1978a: 124–7).

Annexes are visible to the south and west of the fort, and several lie to the east. One enclosure here was proposed as a labour camp for the Antonine fort, dated by its finds (Robertson 1964a: 150–1). It also appears to have been used as an annexe, possibly for an extra-mural settlement or working area (RCAHMS 1978a: 127).

Surrounding the fort, some four temporary camps have now been identified through cropmarks (two demonstrating at least two phases of occupation), with three further camps nearby, at **Cleghorn** and **Carstairs Mains**.

Camp I, lying north-west of the fort, has at least two phases of occupation (A & B), evidenced by reducing ditches on both the east and west sides of the camp. It was first discovered in 1946 by St Joseph from the air (1951a: 57), with its secondary use recognised in the 1960s. The camp measures some 548m from north-west

to south-east by 437m transversely, enclosing almost 24ha (59 acres). Additional linear cropmarks running NNE to SSW across the south-east and north-west end of the camp presumably represent a reduction in its size for a second phase, but it is unclear whether the two cropmarks relate to contemporary occupation or to successive phases of use. If contemporary, then the reduced camp measures 357m by 437m and enclosed 15.7ha (almost 39 acres).

The larger camp (IA) is equipped with Stracathro-type gates on its north-east and south-east sides. Excavations at the north-east gate in 1987 recorded that the ditch of the camp was 1.95m wide and 0.6m deep; that at the *clavicula* was 1.1m wide and about 0.5m deep; and the ditch extending across the west part of the gateway was 1.5m wide and 0.25m deep. The entrance itself was 10m wide. Three stake holes were dug into the end of the *clavicula* ditch, which were interpreted as evidence of fencing (Keppie 1996b: 81), and may relate to the field system clearly visible across the Castledykes area. It is assumed that a secondary use of the camp (IB) would have also utilised the north-eastern entrance, but there was no clear evidence of any recutting of the camp defences in the small area excavated (Keppie 1996b: 81).

Camp II lies to the north of the fort and also has two phases of occupation, with a reducing ditch on its west side. Another linear cropmark within the camp, east of centre, could indicate further phases of use. The camp was first recorded in 1952 by St Joseph from the air (1955: 85) with the secondary phases noted in the early 1960s (1965: 80). Phase one (camp IIA) measures 260m from north-west to south-east by 204m transversely, enclosing almost 5.2ha (13 acres). The reduced camp (IIB) probably measures 260m by 153m, enclosing almost 4ha (9.6 acres), but if the linear cropmark represents a further camp, then this could measure some 260m by 137m and enclose 3.5ha (8.6 acres). Entrances for the larger camp (IIA) are visible in its south-west and north-west sides, both protected

by *tituli*; that on the north-west lies in the centre of the reduced camp (IIB).

An extensive field system is visible in the vicinity, elements of which must be later than this camp, owing to the way that its defences are utilised by the fields (see above, section 7h).

Camp III lies within camp I with its perimeter intersecting a reducing ditch of camp IB, but the relationship between the two is unknown. First recorded in the mid 1950s by St Joseph from the air (1958: 89), it measures 122m from north-west to south-east by 81m transversely, enclosing almost 1ha (2.4 acres). No entrances are known.

Partially overlapping the eastern part of camp II, and possibly also the north-eastern corner of the fort, lies camp IV, the most recent discovery on the plateau (by RCAHMS in 1989; Frere 1990: 312). It is irregular in form, measuring about 440m from west to east by at least 320m, although its southern perimeter is unconfirmed. It therefore enclosed at least 14ha (35 acres). Keppie & Maxwell (1991) speculated that it could enclose in excess of 19ha (48 acres), but it seems likely on grounds of topography and its relationship to the fort location that it enclosed some 15.7ha (39 acres). An entrance gap is recorded in the north side where there is a change of alignment. Excavations on the ditch in 1991 recorded that it averaged 2.5m wide (Keppie & Maxwell 1991). The western side of the camp intersects camp II but their relative chronology is unknown.

Castledykes IA is usually interpreted as being the earliest feature on the site (St Joseph 1964: 257) owing to its Stracathro-type gates, but its relationship with camp III has not been determined. Keppie & Maxwell suggested that camp IV might be Flavian because of the potential overlap with the nearby fort (1991: 69); indeed, one of the ditches running eastwards from the north-east corner of the fort may be associated with this camp rather than one of the annexes. No dating evidence has yet been produced from any of the camps.

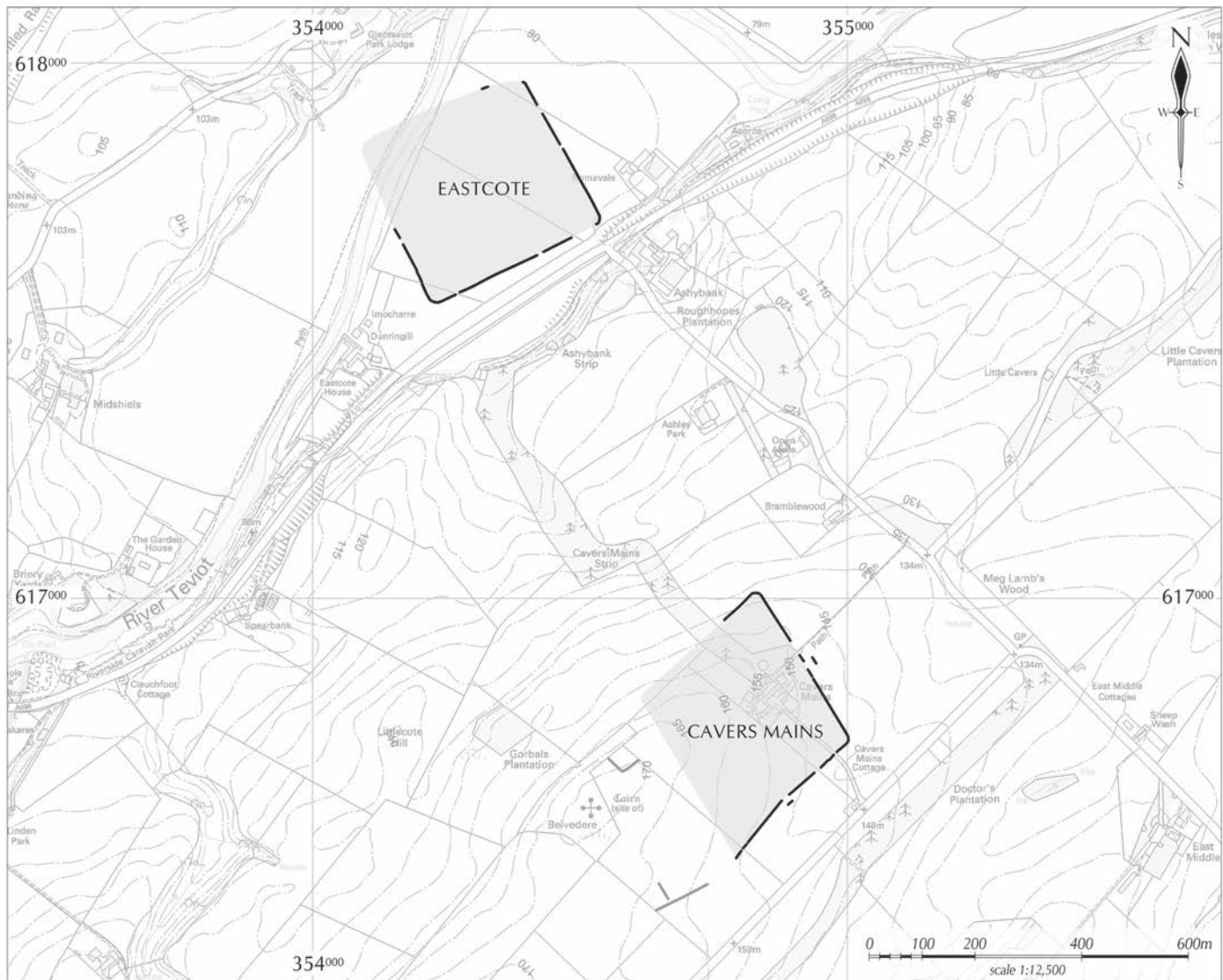


Illustration 102

Cavers Mains and Eastcote. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Cavers Mains (illus 47 & 102)

NT 5480 1675 NT 51 NW 25

First discovered from the air in 1962 by St Joseph (1965: 78), the camp at Cavers Mains lies on the eastern edge of a ridge above the River Teviot, just north-east of Hawick. The camp of **Eastcote** lies less than 1km to the north-west in a bend in the river. Parts of three sides of the camp are known through cropmarks, and it measures 328m from north-west to south-east by at least 321m transversely. Entrances protected by *tituli* are visible in the north-east and south-east sides. If that on the south-east side is close

to the centre of that side, the camp probably enclosed at least 11.5ha (28 acres).

St Joseph illustrated the possible south angle and south-west side of the camp (RCAHMS St Joseph Collection: DC 37307) but did not publish reference to additional sides being located. While some linear cropmarks are visible in this field, the south-west side of the camp could not be confirmed through air-photographic evidence.

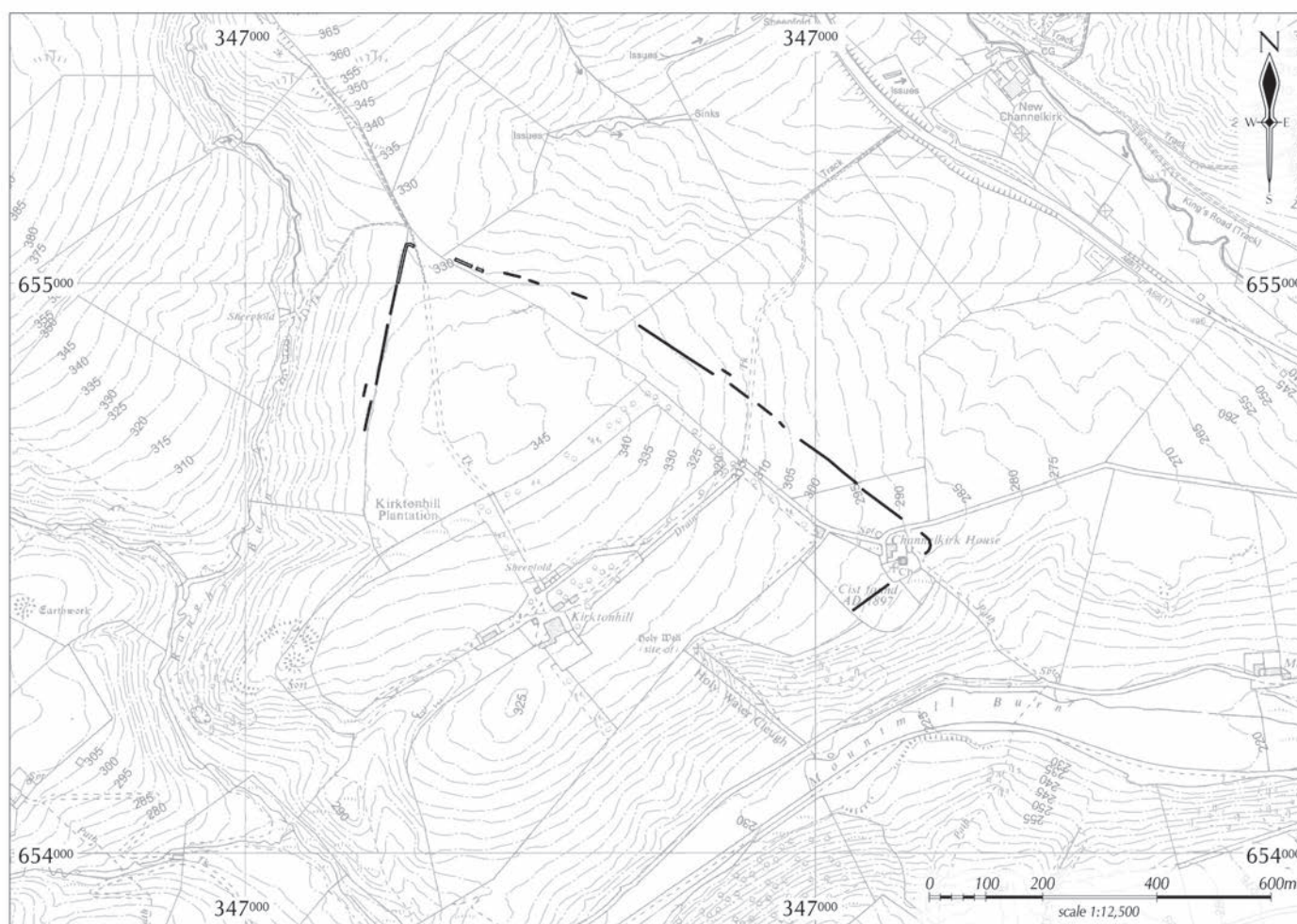


Illustration 103

Channelkirk. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Channelkirk (illus 47 & 103)
 NT 4759 5460 NT 45 SE 2

The large Roman camp at Channelkirk was spotted by Sir John Clerk in 1724 (Keppie pers comm; in prep), and later also recorded by General Melville (1755) and subsequently planned by Roy in 1769 (Roy 1793: 61, Pl.VI; Macdonald 1917: 178–9). Further information was also provided by Chalmers (1807: i, 142). It lies on the line of Dere Street, with the fortlet and camps of **Oxton** a short distance to the east. Stretches of the camp’s perimeter still survive as an earthwork, with a section of the western side surviving under a modern stone dyke. Parts of three sides have now been recorded as earthworks and cropmarks, suggesting that the camp was large but irregular in form. Its north-east side measures around 1058m and some 512m of its transverse dimension is known. Roy recorded that an additional line of earthwork connected the camp to a

‘small post, or redoubt’, now interpreted as an Iron Age fort, to the south on an extremely irregular route (1793: 61, Pl.VI). This line was excavated by Hewat-Craw, who noted that it ran in a straight line as shown by Roy, parallel to a plantation (1930: 324). However, he failed to give any dimensions that would confirm this feature as Roman, although he interpreted an earthwork across the fort as representing the Roman rampart constructed across the fort before turning to the east (1930: 324–5). There is no further information to support or deny this claim. The discovery of the east corner and a short stretch of the south-east side at Channelkirk Church confirmed the claim by Chalmers that the camp was now occupied by the ‘church, churchyard and minister’s glebe’ (1807: i, 142). It also emphasised the large size of the camp, which enclosed

at least 47ha (117 acres), probably at least 55ha (136 acres) and is generally regarded to be closer to 66ha (165 acres), owing to its location and similarity with other camps on Dere Street (St Joseph 1969, 118; see also Chapter 9).

Entrances protected by *tituli* are visible on the WNW and NNE sides of the camp. That on the WNW side was excavated in 1921 by Hewat-Craw, and its ditch was just under 1m deep (1930: 324). Excavations on the

south-east side of the camp near the church revealed a ditch which measured some 2.6m wide and 1.4m deep (RCAHMS St Joseph Collection: Notebook 2). Other excavations on the north-east side in 1897 gave no dimensions (Allan 1900: 645). St Joseph reported excavating a line of cropmarks where the ditch was cut in rock, but it is unclear exactly where his excavations took place (St Joseph 1957: 13).

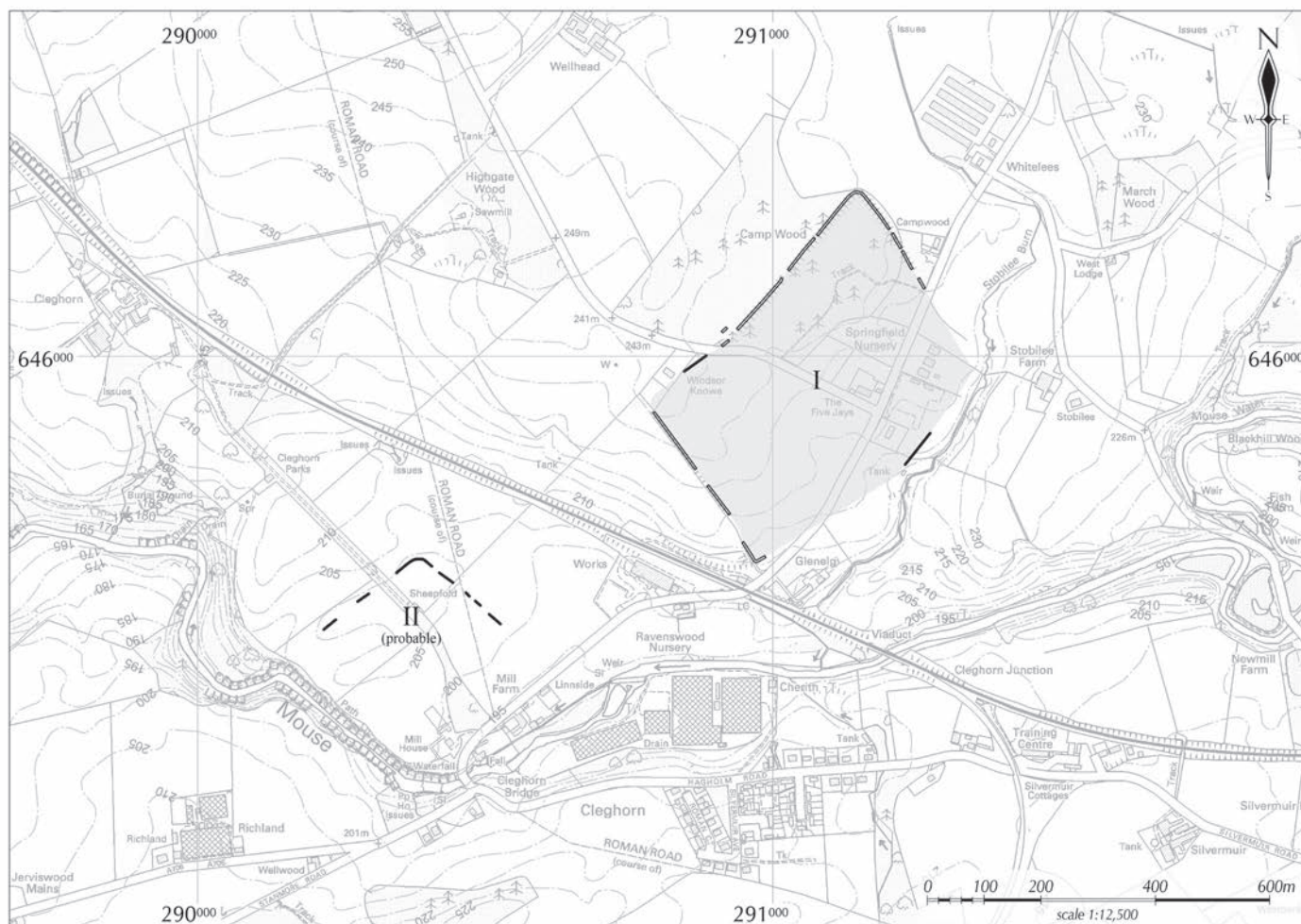


Illustration 104

Cleghorn I and probable camp Cleghorn II. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Cleghorn I (illus 47 & 104)

NS 9107 4596 NS 94 NW 2

The Roman camp at Cleghorn lies on a south-east facing slope on the north bank of the Mouse Water, close to the point where the Roman road is presumed to have crossed the river (at Cleghorn Bridge). The fort and camps at **Castledykes** lie 2km to the south-east. It was first recorded as an earthwork in 1764 by Roy (1793: Pl. IX) and stretches of three sides still survive in earthwork form.

The camp is parallelogram in form, measuring 509m from north-east to south-west by 389m transversely, enclosing 18.4ha (45.5 acres). Two *tituli* are still visible in Camp Wood on the north-west side, and Roy depicted a third on the north-east side. The upstanding rampart of the camp measures up to 0.7m in height and 4m in width, with an accompanying ditch up to 2m in width and 0.4m

in depth. Excavations in 1971 by RCAHMS recorded that the ditch was V-shaped, 2.9–3.2m in width and 0.75–0.9m in depth and was filled with natural silt (1971: 58–9). Later excavations (in 1977) by St Joseph recorded similar dimensions, with the ditch 3m in width and 1m in depth (RCAHMS St Joseph Collection: Notebook 7).

Seven Trajanic and Hadrianic coins were found at this camp after ploughing in 1986 (Bateson 1989: 167).

At Cleghorn Bridge, the presumed crossing by the Roman road, parts of a further probable camp have been identified (**Cleghorn II**), crossing the presumed line of the road (RCAHMS 1978a: 141–3). This may suggest a slightly different alignment for the road than has previously been assumed, or a significant timescale between the use of the camp and the use of the road.

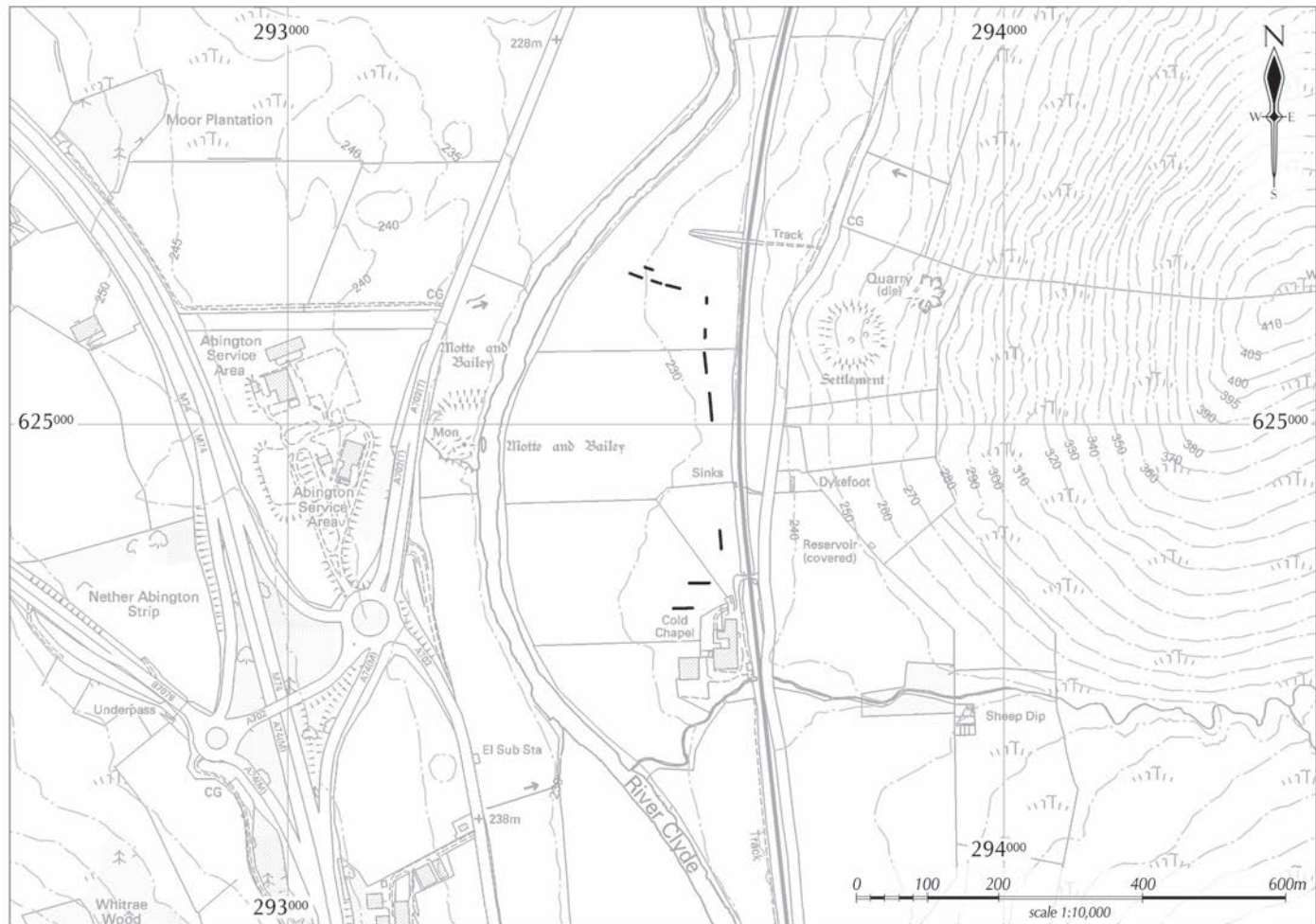


Illustration 105
Cold Chapel. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved.
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Cold Chapel (illus 105)

NS 9352 2490 NS 92 SW 38

Discovered in 1984 by RCAHMS from the air (Maxwell & Wilson 1987: 34), the camp at Cold Chapel lies on the east bank of the River Clyde, adjacent to the road which follows the presumed course of the Roman road connecting Annandale and the Upper Clyde Valley. Around 420m of the east side of the camp has been recorded together with at least 150m of the north side and a probable short stretch of the south side, although there are two possible cropmarks here; the north side

lies at an obtuse angle to the east side of the camp. An entrance gap protected by a *titulus* is visible in this northern side. If this *titulus* is central to this side, then it measures some 170m, which would take the camp right up to the modern course of the River Clyde. It would also enclose an overall area of up to 10.5ha (26 acres). There does not appear to be space for a 15ha camp as proposed by Maxwell & Wilson (1987: 34), unless the course of the Clyde has moved significantly.

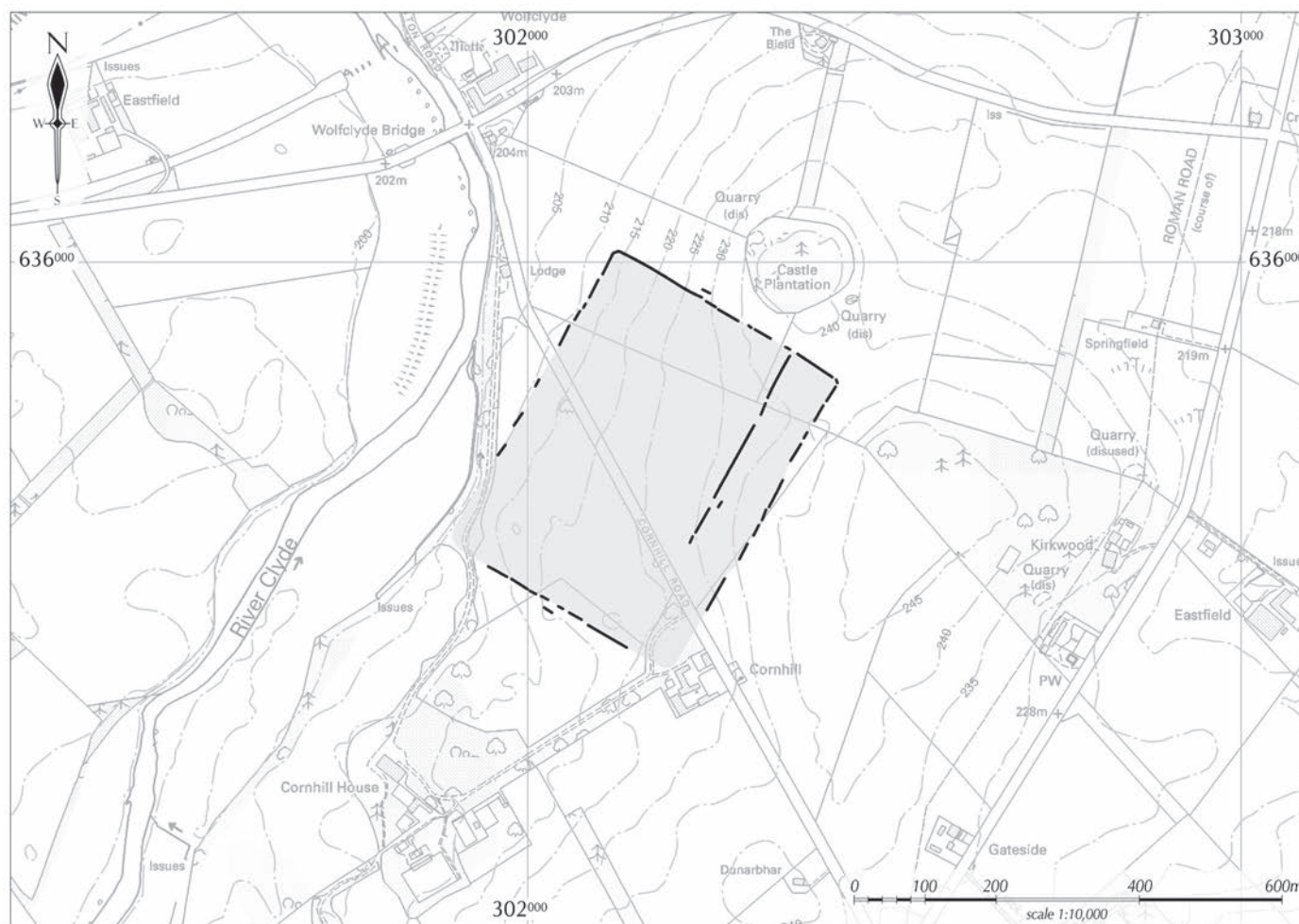


Illustration 106

Cornhill I–II. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Cornhill (illus 47 & 106)

(Coulter)

Cornhill I: NT 0215 3574 Cornhill II: NT 0215 3574
NT 03 NW 37 NT 03 NW 37

Sited on a west facing slope on the east bank of the River Clyde, the cropmark camps at Cornhill were first photographed in 1949 by St Joseph and fully recognised following further aerial survey in the 1970s (St Joseph 1976: 6–7; RCAHMS 1978a: 128). Camp I measures 474m from NNE to SSW by 365m and enclosed 17.1ha (just over 42 acres). Entrance gaps protected by *titulus* are visible in the NNE and SSW sides. The camp has

been reduced in a second phase of use, with the smaller camp measuring 474m from NNE to SSW by around 290m and enclosing 13.8ha (34 acres). An entrance gap with a *titulus* is visible in the reducing ESE earthwork, and it is likely that the camp shared the NNE and SSW entrance gaps with camp I, together with an, as yet unidentified, entrance gap in the WNW side of the camp.

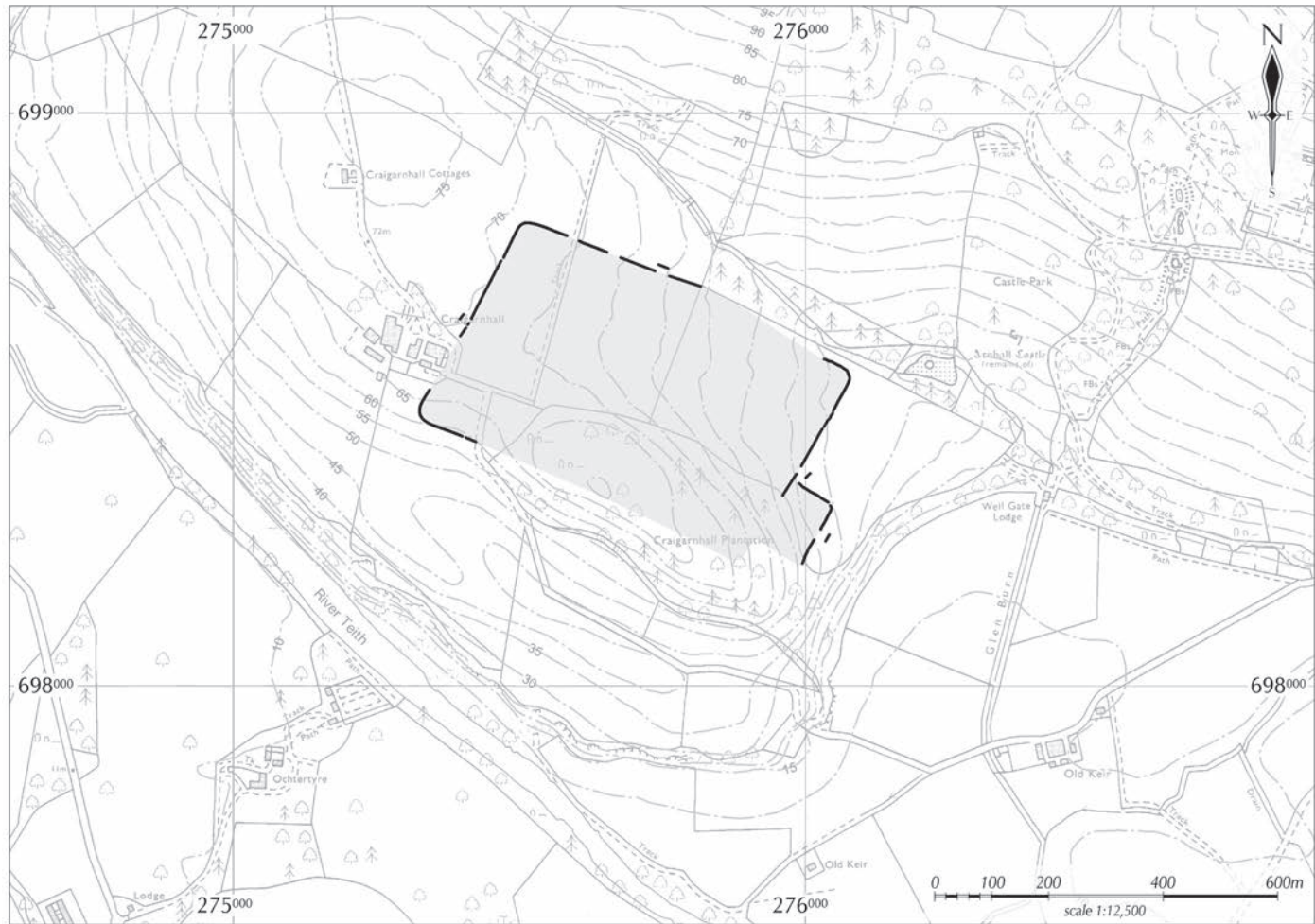


Illustration 107

Craigharnhall. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Craigharnhall (illus 47 & 107)

(Keir)

NS 7569 9852 NS 79 NE 20

Located on a north-east facing slope on the north side of the River Teith, the camp at Craigharnhall was first recorded in 1971 by St Joseph from the air (1973: 217–8). Parts of all four sides are visible through cropmarks and the camp measured about 630m from WNW to ESE by 395m transversely, enclosing almost 24.8ha (61 acres). Entrance gaps with *tituli* are visible in the centre of the WNW and ESE sides, and to the west of the centre of the NNE side. St Joseph placed numerous trenches through the camp in the 1970s, attempting to locate further stretches of ditch and recording wide variation in the ditch dimensions. On the WNW side the ditch was up to 3m in width and 1.5m in depth although at one point only measured 0.4m in depth. On the SSW side, where

it had been much ploughed away, the ditch was 1.8m in width and only 0.7m in depth. The western *titulus* ditch was 2.5m wide and 1.75m deep. In the ‘Icehouse Strip’ (which is not marked on any OS maps, but an Icehouse lies some way to the north-east of the camp) the ditch was relatively small, measuring only 1.7m in width and 0.8m in depth, but was cut into rock marl with a boulder in the east face of the ditch (RCAHMS St Joseph Collection: Notebooks 6 & 7).

There is a small annexe attached to the south part of the south-east side which measures 86m by at least 114m, thereby enclosing at least 1ha (2.5 acres). It has an entrance gap, possibly in the centre of its south-east side, protected by a *titulus*.

GAZETTEER: KNOWN ROMAN CAMPS

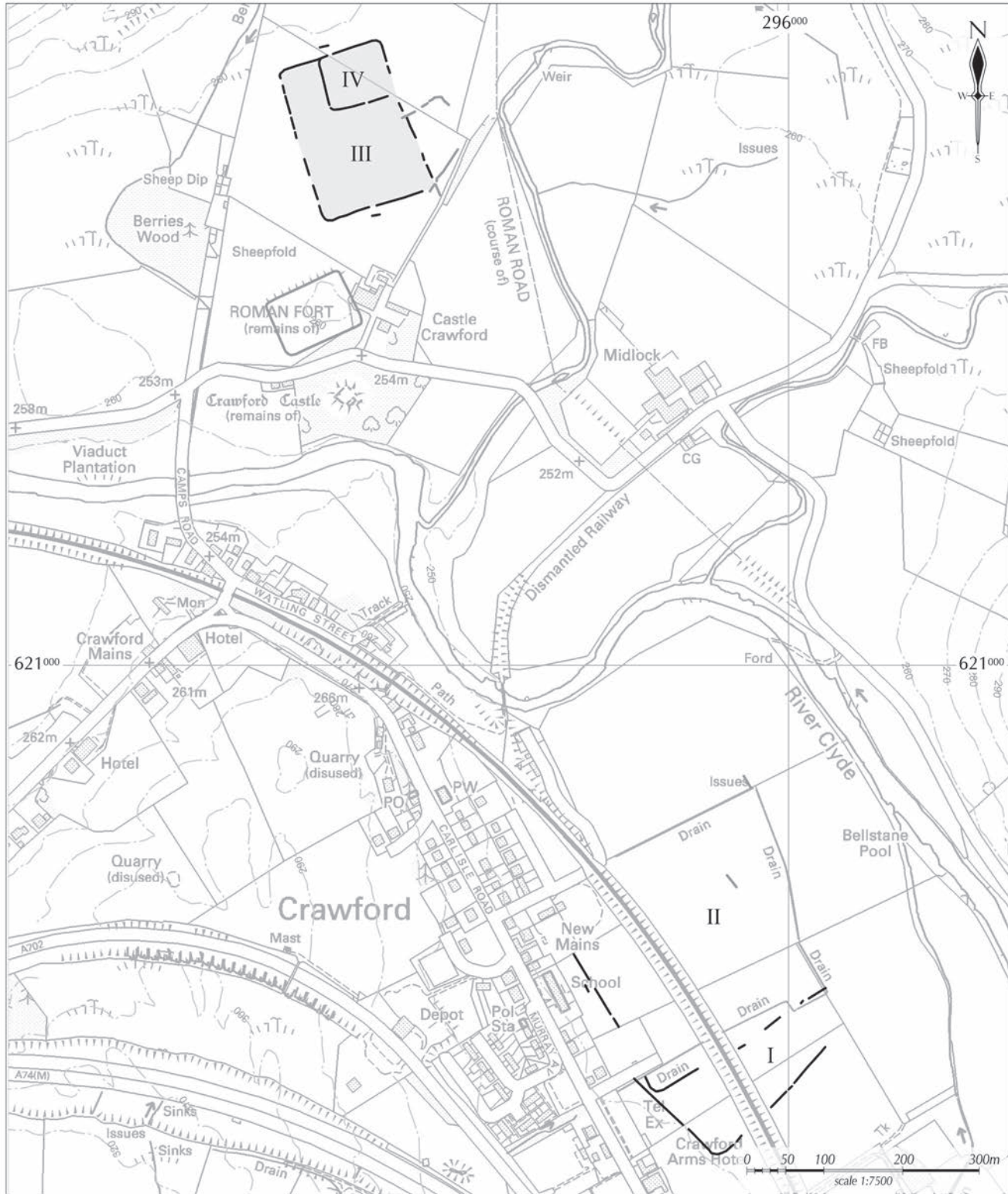


Illustration 108

Crawford I-IV and the Roman fort. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Crawford (illus 47, 72 & 108)

<i>Crawford I: NS 9592 2050</i>	<i>Crawford III: NS 9545 2170</i>
<i>NS 92 SE 14.0</i>	<i>NS 92 SE 17</i>
<i>Crawford II: NS 9584 2059</i>	<i>Crawford IV: NS 9545 2170</i>
<i>NS 92 SE 14.1</i>	<i>NS 92 SE 17</i>

Some four camps, all known from cropmarkings, lie within 1km of the Flavian and Antonine forts at Crawford, two partially overlapping one another in the village 1km to the south, and a third with a reduced phase (Crawford IV) less than 100m to the north of the fort.

Camps I and II lie on a terrace on the west bank of the River Clyde and were discovered in 1960 by St Joseph from the air (1961: 122). Some 200m of the south-east side of camp I has been recorded, together with the southern corner angle and 150m of the south-west side. A further linear cropmark lying in a field to the north of the known sectors may be part of the north-east side of this camp; this would give overall dimensions of 270m by at least 270m, enclosing at least 7.3ha (18 acres).

Just north of camp I, two stretches of a second camp have been recorded. This comprises about 260m of the SSE side together with the corner angle and 200m of the WSW side. A gate with a *titulus* is visible on the WSW side. If the *titulus* is in the centre of this side, then it would measure some 320m and the overall area enclosed could

be at least 8.3ha (20.5 acres), although there is space here for a camp of some 15ha (37 acres).

About 1km to the NNW of the camps, across the River Clyde and immediately north of the Roman fort on level ground lies a further camp with two phases of use. Recorded in 1977 and 1984 by Maxwell from the air (RCAHMS 1978a: 159; Maxwell & Wilson 1987: 40), camp III measures 200m from NNW to SSE by 143m transversely and encloses 2.85ha (7 acres). Gates with *tituli* are visible on the NNW and SSE sides. A further small camp (IV) is tucked into the north-east corner of this camp, sharing part of its NNW and ENE sides. This camp measures 84m from ENE to WSW by 73m and encloses 0.6ha (1.5 acres). The NNW entrance gap for camp III does not appear to have been closed, but this may be owing to the lack of clarity in the parchmark close to a field boundary. A linear cropmark on the east side of the camp may represent part of an irregular annexe (Maxwell & Wilson 1987: 40), although this seems unlikely.

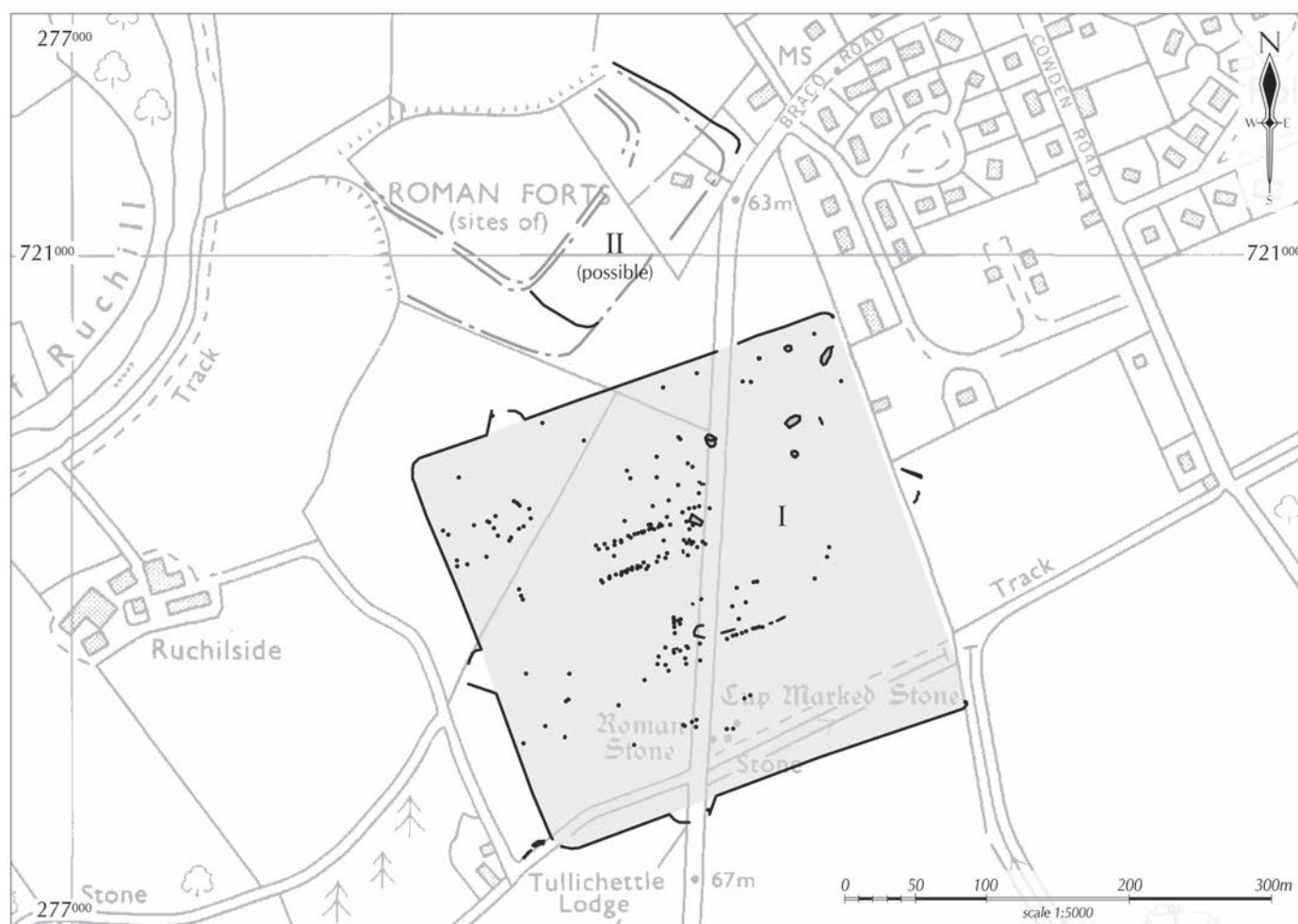


Illustration 109

Dalginross I and possible camp Dalginross II and the Roman fort and annexe. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Dalginross I (illus 13, 47, 53 & 109)

NN 7742 2078 NN 72 SE 1

The camp at Dalginross, lying on the plain to the south of the fort, was first recorded in 1755 by Roy (1793: 63–4, Pl. XI). He planned the camp as an earthwork, but it has since been ploughed and is only now known as a cropmark. It measures 318m from WSW to ENE by 293m, enclosing 9.2ha (almost 23 acres). Entrances are recorded on all four sides, all protected by Stracathro-type gates.

Excavations by St Joseph on the NNW side of the camp in 1966 recorded that the ditch was filled with silt and some large stones (RCAHMS St Joseph Collection: Notebook 4). Later excavations at the east *clavicula* recorded that the ditch was V-shaped with an ‘ankle-breaker’ and measured 1.9m in width and 1.8m in depth; it was recut to a shallower depth (1.7m wide and 0.8m deep). There

were traces of a rampart some 0.23m in height and 1.45m in width. The oblique traverse ditch was 2m wide and 0.75m deep and was recut with a U-shaped ditch, 2.55m wide and 0.9m deep (Rogers 1993: 277–86).

The excavations at the eastern gate suggested that the entrance ditches were backfilled with turves prior to recutting, signifying deliberate slighting on abandonment. There was an indeterminate period of time between the two phases of use. The excavations also recorded a single post-hole just inside the recut *clavicula*, which they suggested could have held a stake pushed into the bank (Rogers 1993: 286; see above, section 7a).

A series of pits is visible inside the camp. Some are larger pits which may represent quarrying activities, but

others run in rows within the camp and are reminiscent of the pits inside the camps at **Inchtuthil**.

Pennant noted a series of oblong hollows outside the north side of the camp, and excavations by the local schoolmaster revealed large quantities of wood-charcoal (1776: ii, 98). Crawford noted that these could be *lilia* rather than ovens because they were outside the camp (1949: 43), but ovens outside camps are not

unheard of (see **Carronbridge**, **Inchtuthil** and possibly **Drumlanrig II**).

There are numerous stray finds in the vicinity of the fort, including Antonine finds, and coins of Vespasian, Domitian and Alexander Severus (AD 222–35). A second possible camp (**Dalginross II**) lies in the annexe to the fort.

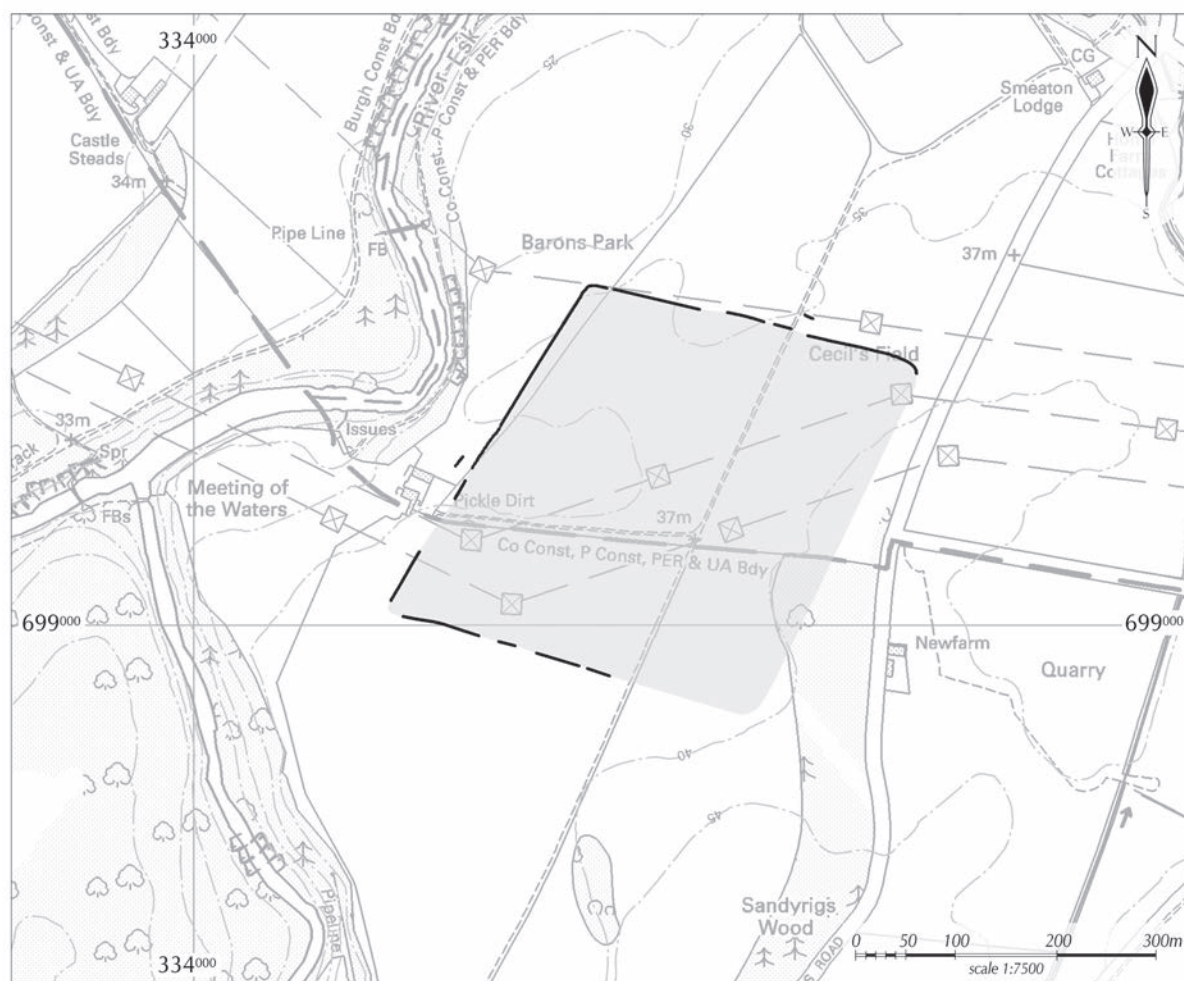


Illustration 110

Dalkeith. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Dalkeith (illus 47 & 110)

(Smeaton)

NT 3454 6916 NT 36 NW 33

First recorded in 1962 by St Joseph from the air (1965: 80), the camp at Dalkeith lies about 3km south of the fort and camps at **Inveresk** on fairly level ground east of the River Esk. Parts of three sides of the camp have been recorded through cropmarks, demonstrating that it was a parallelogram; a possible rounded corner at the eastern end of the NNE side may indicate the position of the fourth side. This suggests that it measures 385m from NNE to SSW by at least 340m transversely, enclosing a minimum of 13ha (33 acres). Entrance gaps protected by *tituli* are visible in the NNE and WNW sides. Various excavations of the camp in advance of the Dalkeith Northern Bypass have failed to locate its eastern side (Dunwell & Suddaby forthcoming), thus the

overall size of the camp remains unconfirmed, despite the identification of a ditch east of the road beside the camp; this was interpreted as probably of post-medieval origin. Elsewhere, the perimeter ditch on the WNW side measured up to 3.35m wide and up to 1.7m deep, with indications of a 'squared channel' at its base (Dunwell & Suddaby forthcoming).

Two possible field ovens were also identified during these excavations, one inside the camp, the second outside close to a further similar feature; these contained deposits of burnt cereal grain and charcoal; radiocarbon dating indicated a Roman date for the former and post-Roman dates for the latter. The presence of large quantities of cereal grain, primarily barley, was used to argue against the

oven having been used by the Roman military (Dunwell & Suddaby forthcoming), but the argument is weak given our lack of understanding of Roman ovens, particularly

from temporary camps. A piece of samian was found in the camp ditch. This was dated to the Antonine period, thereby giving a probable date for the occupation of the camp.

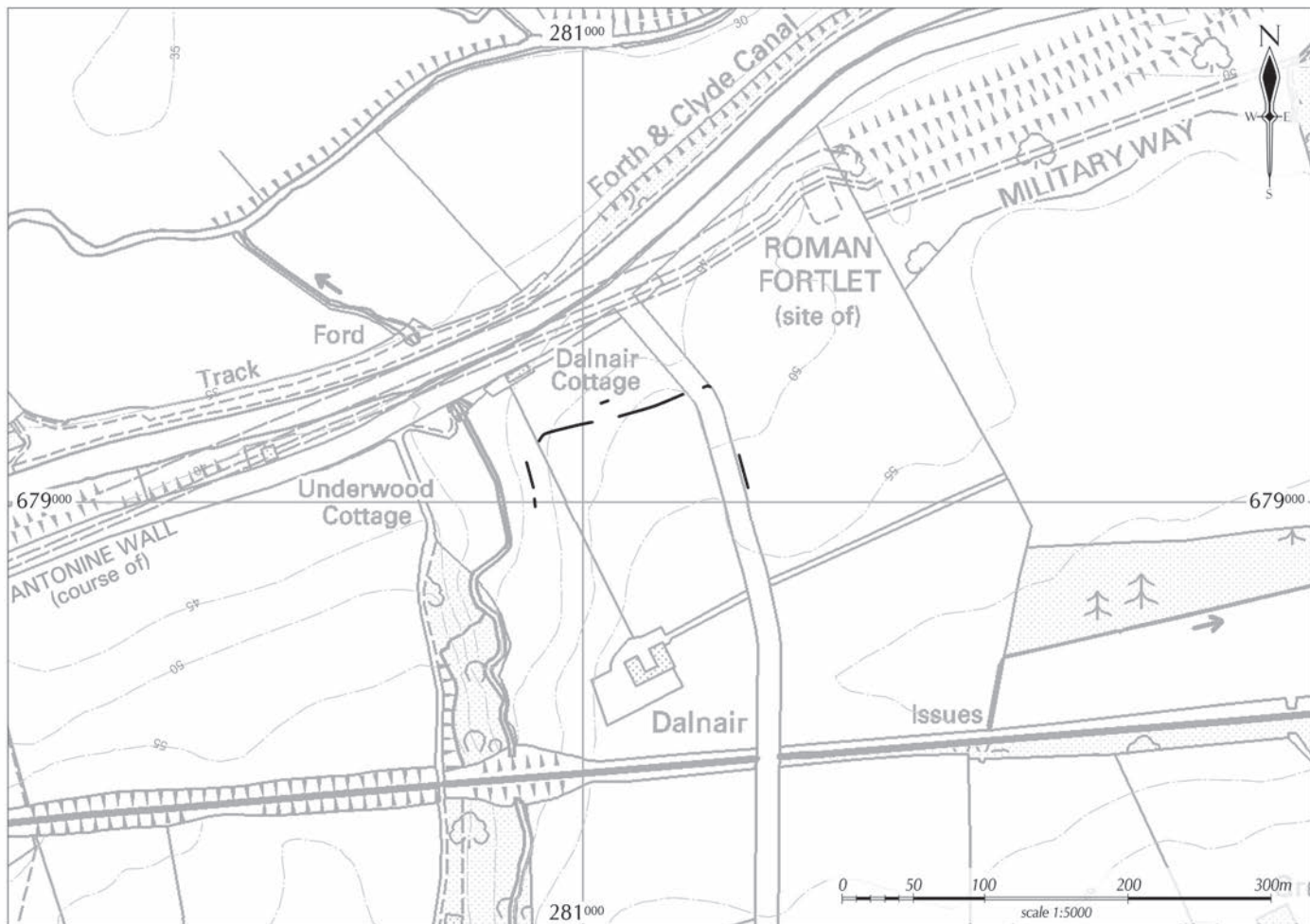


Illustration 111

Dalnair and the Antonine Wall. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Dalnair (illus 111)

NS 8104 7900 NS 87 NW 9

The camp near Dalnair farm was first recorded from the air by St Joseph in July 1957 (RCAHMS 1963: 107), lying less than 100m to the south of the Antonine Wall, some 200m south-west of the fortlet at Seabegs Wood. It is situated on ground that slopes gently down to the west to the Skipperton Burn, a tributary of the Bonny Water. The camp of **Milnquarter** lies some 1.5km to the east, and the fort of Castlecary just over 2km to the west.

The whole of the NNW side of the camp, about 145m,

has been recorded through cropmarks from the air, along with the rounded corner and a short length of the WSW side and the corner and up to 75m of the ENE side. No information on the likely position of the SSE side has been recorded, although if the camp has similar dimensions to nearby Milnquarter then part of this side could lie under Dalnair farmhouse. There is an entrance gap in the centre of the NNW side, protected by a *titulus*. The camp probably faced NNW, towards the line of the Wall.

GAZETTEER: KNOWN ROMAN CAMPS

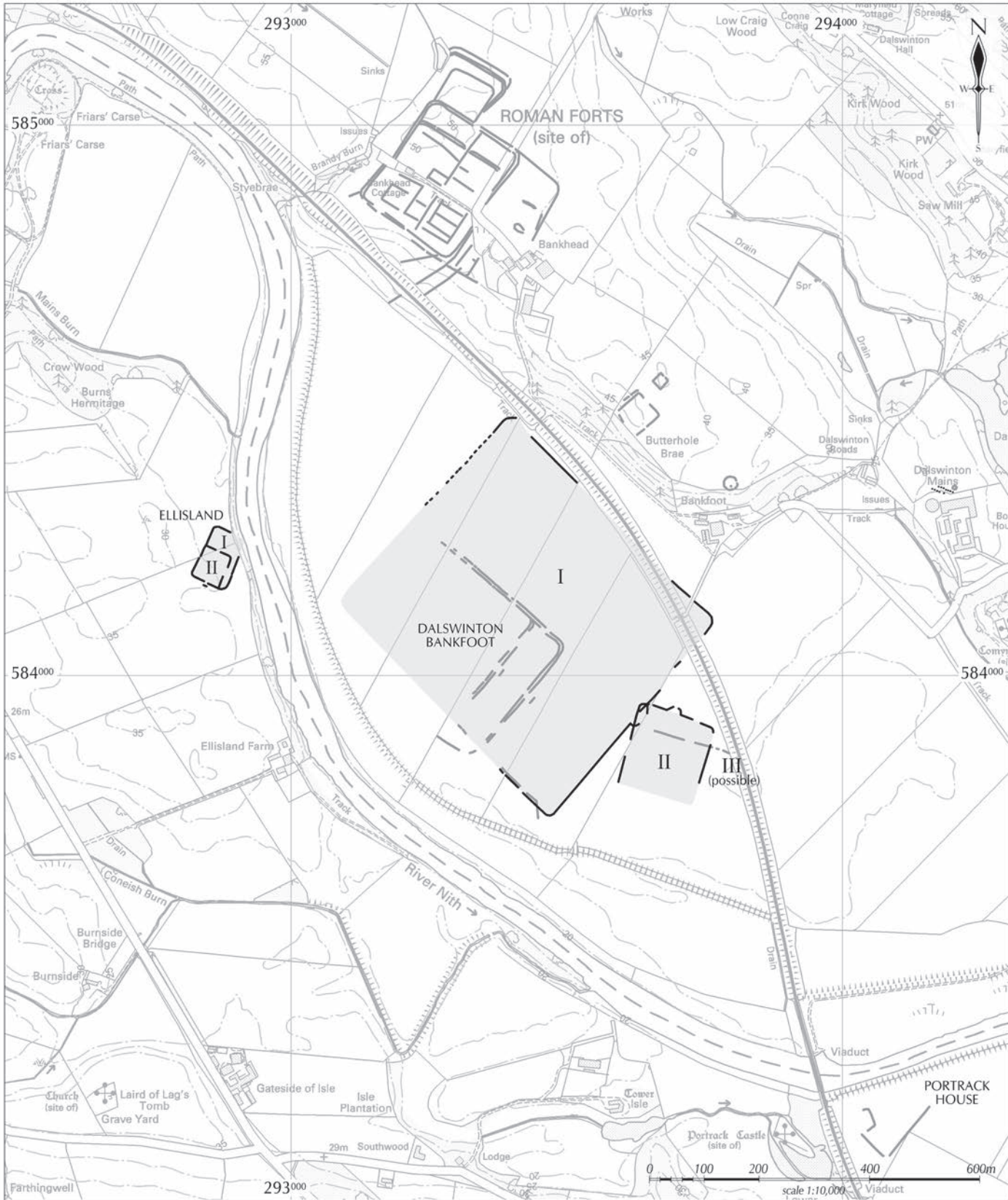


Illustration 112

Dalswinton Bankfoot I-II, possible camp III, Ellisland I-II and the possible camp at Portrack House, also showing other croppmarks in the area including the Roman fort at Dalswinton Bankhead and the possible fort at Bankfoot. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Dalswinton (illus 47 & 112)

Dalswinton Bankfoot I: NX 9340 8400
NX 98 SW 12

Dalswinton Bankfoot II: NX 9365 8381
NX 98 SW 55

On the east side of the River Nith at Dalswinton a large number of cropmarks have been recorded: a Roman fort is known next to Bankhead farm and a second fort proposed on the floodplain below, at Bankfoot. The Bankhead fort, which is surrounded by annexes, was demonstrated on excavation to have been a two-phase Flavian fort (Richmond & St Joseph 1957). A nearby small enclosure at Butterhole Brae has also been proposed as a possible fortlet (St Joseph 1951a: 59). At Bankfoot, a further two-phased double-ditched site has been identified, and also proposed as being Flavian in date, possibly earlier than the Bankhead site (St Joseph 1973: 217). The possibility that there may have been four phases of Flavian occupation at this site means that it is critical for our understanding of the 1st-century conquest and occupation of south-west Scotland. However, geophysical survey in 2009 at the Bankfoot 'fort' failed to reveal any internal structures, suggesting that it may have been more temporary in nature (Hüssen *et al* 2009a). Until more work is undertaken, this site remains unclassified, but it may have only witnessed short-term occupation, despite having two ditches, which means that it is currently unlike any other identified temporary camp in Britain, with similar structures identified from air photographs often interpreted as 'vexillation fortresses'.

The site at Bankfoot appears to be almost entirely enclosed by camp I, although the south-western corner of both has been eroded by river movement. This camp,

first recorded in 1949 by St Joseph from the air (1951a: 59), measures about 540m from north-west to south-east by 468m, enclosing some 25ha (62 acres). A single entrance protected by Stracathro-type gates is visible in the south-east side; the entrance in the north-east side would lie under a railway embankment and part of the other two sides have been eroded through river action. Geophysical survey in 2009 revealed a line of pits, possibly ovens, running just inside to the north-west perimeter of the camp, and further anomalies scattered throughout its interior may represent further remains of ovens and pits (Hüssen *et al* 2009a; not depicted on illus 112).

Camp I intersects another camp exhibiting Stracathro-type gates. (This is the only known instance of two Stracathro-type camps overlapping, unless **Lochlands II** is a Stracathro-type camp). Also recorded in 1949, this camp is far smaller in size, measuring only 142m from WNW to ESE by at least 150m, enclosing at least 2.4ha (6 acres). A Stracathro-type gate is visible on its NNE side.

A possible third camp overlaps camp II, but only a single linear cropmark has been recorded, and no entrances are known. Across the Nith to the west, lie two small camps at **Ellisland**, one inside the other, with the east angle of camp I partly eroded by the river. Farther south-east, again on the west side of the Nith, another possible camp has been recorded at **Portrack House**, close to the point at which the railway line crosses the river.

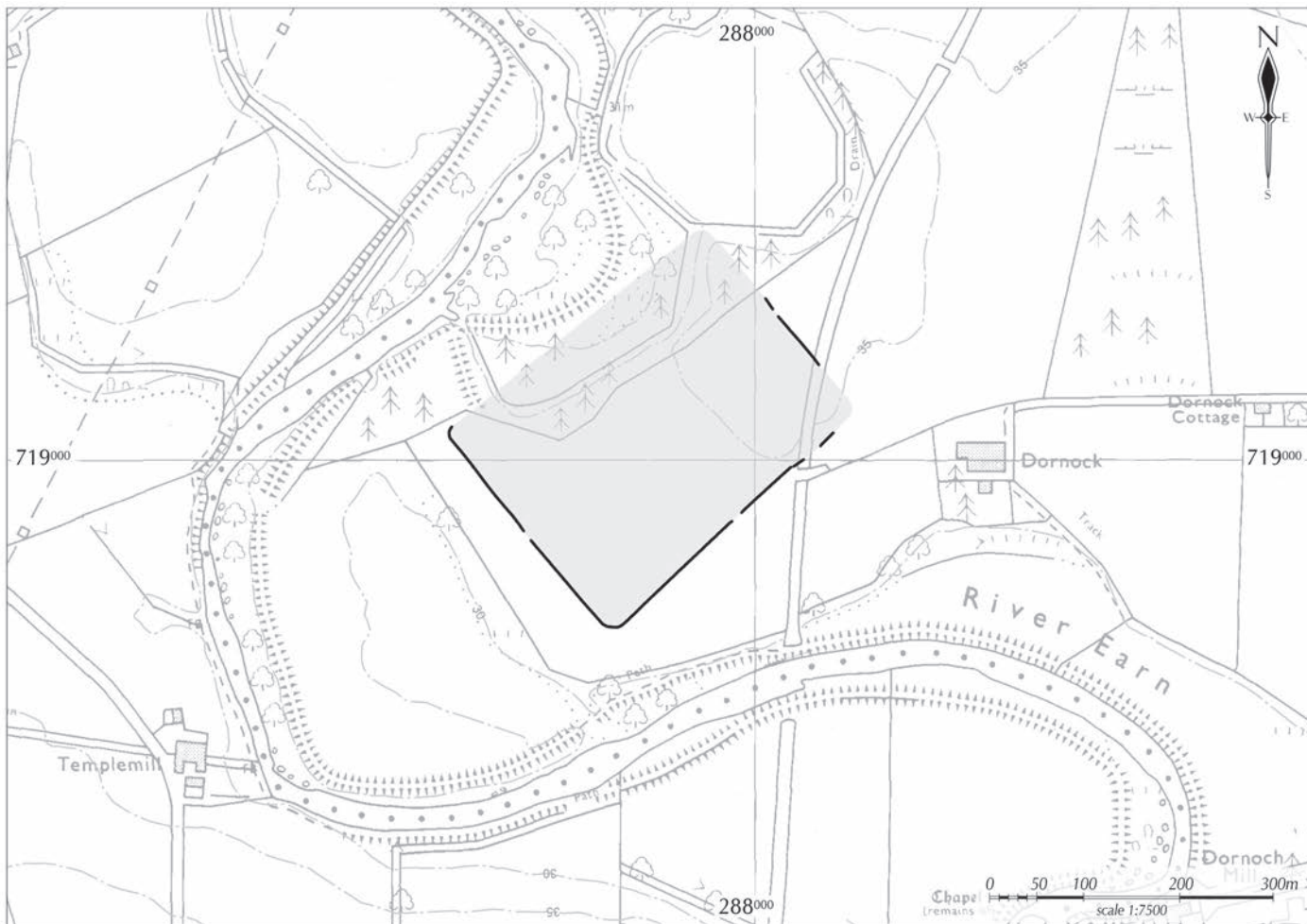


Illustration 113

Dornock. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Dornock (illus 47 & 113)

(Dornock Farm)

NN 8788 1895 NN 81 NE 14

This camp is situated some 2km north-west of the fort at Strageath, in a meander of the River Earn. First recorded in 1962 by St Joseph from the air as a cropmark (1965: 81), it sits on the axis of a ridge and measures 350m from north-east to south-west by about 274m transversely, although most of the north-west side and part of the north-

east have been removed by a steep scarp. The area enclosed is almost 9.5ha (23 acres). Entrance gaps are known in the south-east and south-west sides, with a possible further gap close to the centre of the north-east side. Excavations in 1962 recorded that the ditch was V-shaped, about 2.6m wide and 0.75m deep (St Joseph 1965: 81).

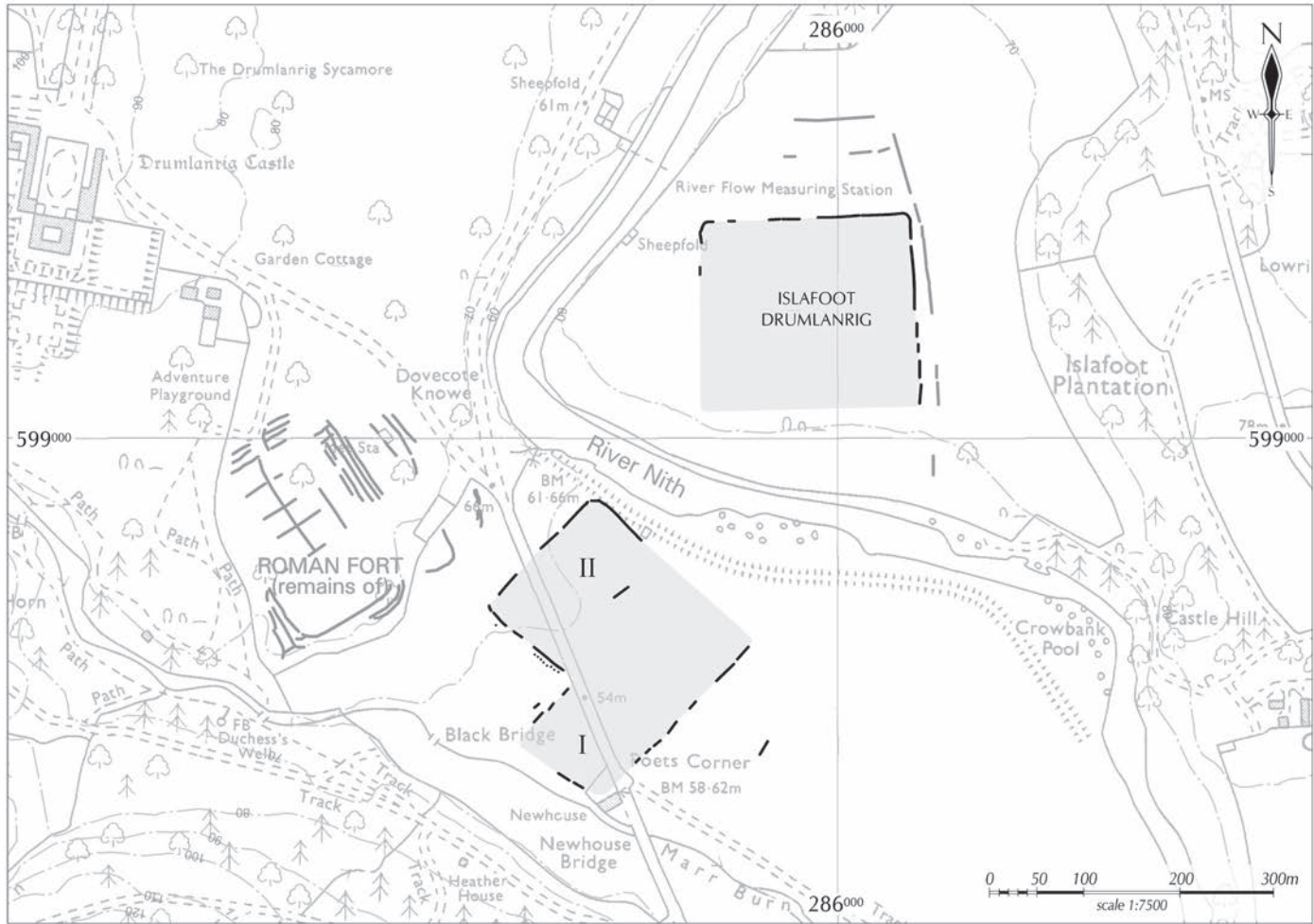


Illustration 114

Drumlanrig I-II and Islafoot Drumlanrig and the nearby Roman fort. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Drumlanrig (illus 47 & 114)

(Poets Corner)

Drumlanrig I: NX 8573 9867
NX 89 NE 62

Drumlanrig II: NX 8572 9884
NX 89 NE 66

Three camps are known close to Drumlanrig, on the River Nith, with two farther south on the east side of the river (**Carronbridge** and possibly **Waterside Mains**). Only parts of the two camps immediately south of the fort are known, with the camp at **Islafoot** lying across the river. The fort and camps I and II lie in the grounds of Drumlanrig Castle; because most of the area is in parkland, it is possible that more wait to be found. The fort is suspected to have Flavian origins (Maxwell & Wilson 1987: 19–20) and is known to have Antonine phases (Hunter 2005: 401–2; see above, Chapter 6).

Both the fort and camps were discovered in 1984 by RCAHMS as cropmarks from the air (Frere 1985a:

267). Camps I and II lie on a low terrace close to the river. Camp I measures about 105m from north-east to south-west by about 87m enclosing almost 1ha (2.4 acres). A *titulus* is visible in its north-west side. Camp II lies immediately west of this camp, and measures 229m by 159m, enclosing almost 3.5ha (8.6 acres). No entrances are known. The two camps may intersect one another, or camp I could represent an annexe to its larger neighbour.

A series of pits are visible running in a line parallel to and outside the south-west side of camp II. They have a slightly irregular appearance and may be the remains of ovens (see above, section 7f).

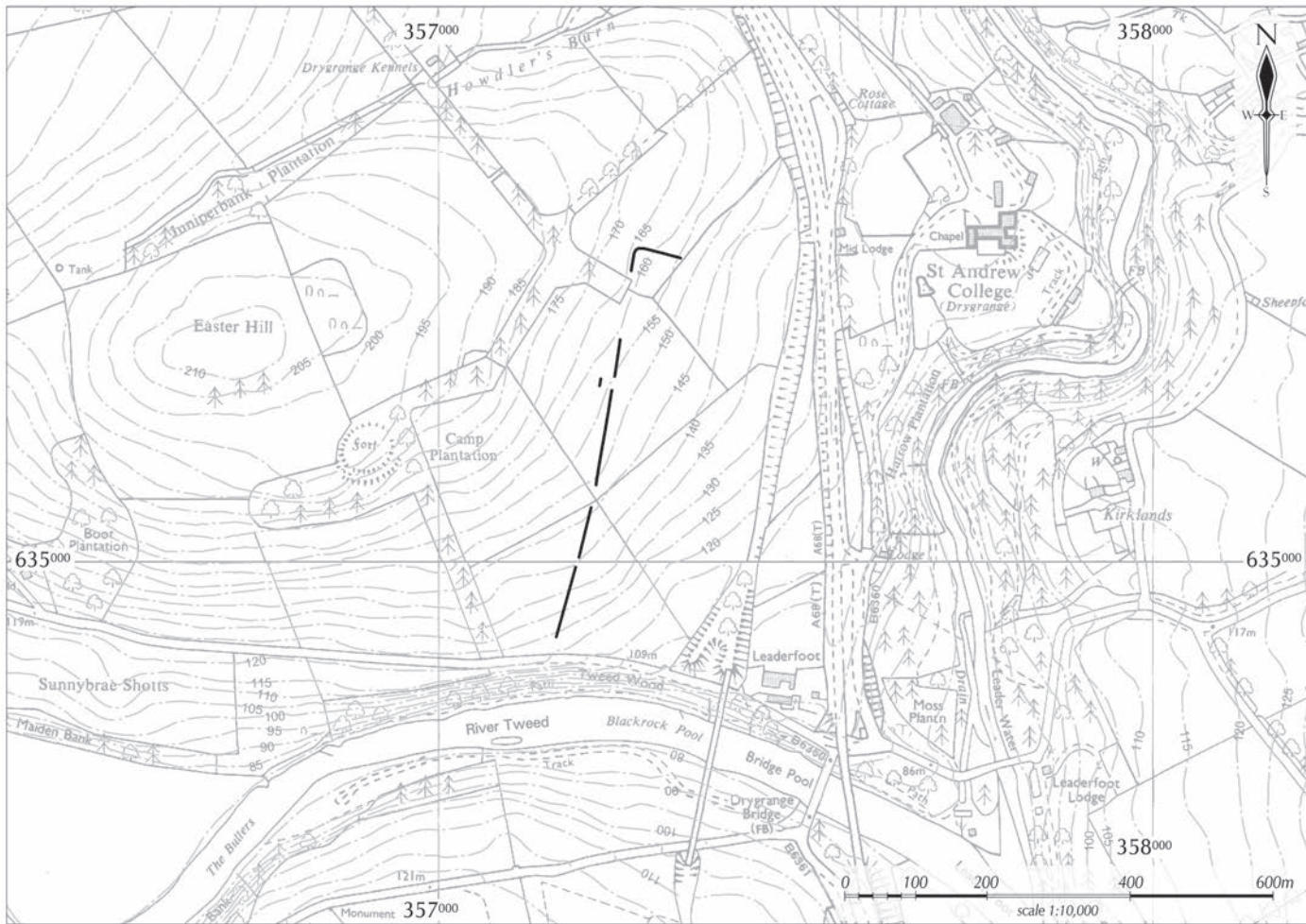


Illustration 115

Drygrange. The Roman complex at Newstead lies immediately to the south – see illustration 183. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Drygrange (illus 115)

(Newstead)

NT 5736 3520 NT 53 NE 33

First recorded in 1977 by Maxwell from the air (Maxwell & Wilson 1987: 37), the camp at Drygrange lies on the north side of the River Tweed, opposite the fort and camps at **Newstead**. Parts of two sides have been recorded as cropmarks, together with a rounded corner angle. Some 555m of the WNW side is visible, and it is unlikely to be much longer because beyond this point the ground drops away sharply to the river. Some 190m of the NNE side

is known. Maxwell & Wilson commented that its cross dimension could be more than 300m (1987: 37) and that there is room for at least 350m up to the Leader Water, although the ground drops away to east and south. If such an area is enclosed, then the camp could enclose as much as 19.6ha (48 acres). An entrance gap with *titulus* is visible on the WNW side.

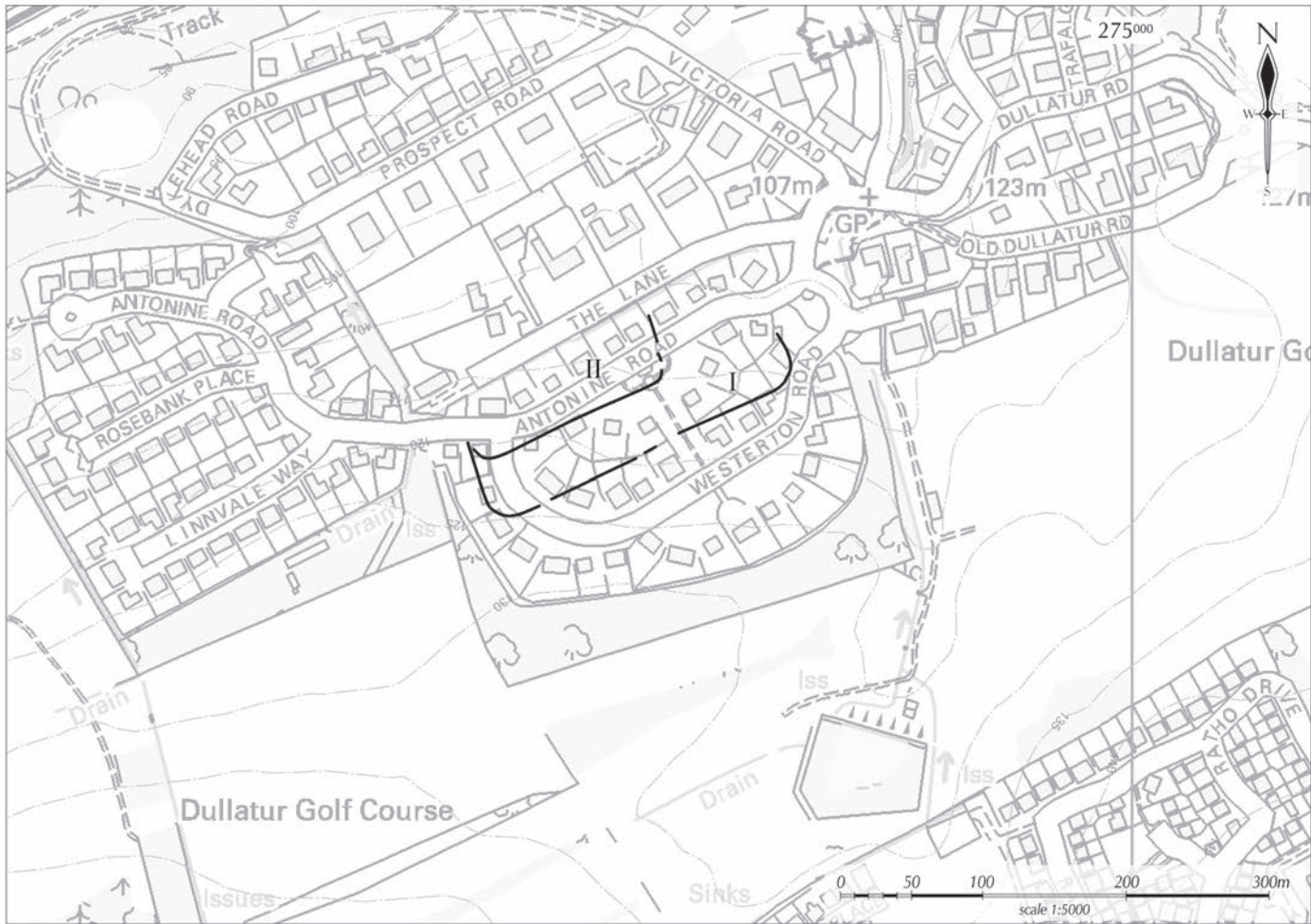


Illustration 116

Dullatur I-II. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Dullatur (illus 116)

Dullatur I: NS 7465 7670 Dullatur II: NS 7465 7670
NS 77 NW 22 NS 77 NW 22

The two Roman camps at Dullatur were first recorded from the air in 1961 as linear cropmarks by St Joseph, but it was several years later that the evidence was sufficient to classify the cropmarks as Roman (St Joseph 1969: 108–9). The camps lie on a north-facing slope, 400m south of the Antonine Wall, between Westerwood and Croy Hill. Only the south part of the two camps is known, with one inside the other, sharing part of the south-west side. The north part of the camps disappears under The Lane, a modern road.

The larger camp (I) measures about 230m along its south-east side, with over 60m of the north-east and south-west sides recorded. Of the inner camp, (II), its south-east

side measures some 146m, with 44m of its north-east side known.

The camps have been excavated on two occasions; in 1975–6 Keppie undertook trial excavations (Keppie 1978); and in 1998 a large area of the camp was excavated prior to the site being developed as a housing estate (Lowe & Moloney 2000). The 1975–6 trial excavations determined the relationship between the two camps. The smaller, inner camp (II) reuses the south-west perimeter of the outer. Keppie suggested that the area of the camps was 4ha and 1.7ha. The 1998 excavations uncovered the known perimeter of the camps, confirming their relationship, but, significantly, the entrance on the north-

east side, recorded by Keppie (1978: 9), could not be confirmed because the ditch continued unbroken. The entrance on the south-east side was reconfirmed east of the centre, and measured 6.5m in width; no traverse was located.

The ditch of the outer camp was V-shaped and measured up to 2m wide and up to 1m deep, with an 'ankle-breaker' slot, 0.3m wide, sometimes recorded at its base (Lowe & Moloney 2000). The inner camp was of similar dimensions, but its profile was more rounded and U-shaped.

Roman pottery was found in the ditch of camp I and dated to the late Hadrianic–early Antonine period, therefore suggesting that the camp dated to the time of the Antonine conquest and construction of the Wall (Swan 2000). In addition, there were two well-defined turf stabilisation horizons in some areas, suggesting fairly rapid silt formation. The outer camp appeared to have silted up to a natural point of rest before the defences of the inner camp were recut. The presence of the two turf horizons in other sectors of the camp could suggest that the minimum time lapse between the construction of the second camp after the first was abandoned could have been as little as two years. However, this argument rests on the assumption that the south-east and south-

west sectors silted up at the same rate (Lowe & Moloney 2000: 248).

The failure to relocate Keppie's north-east entrance in the later excavations led to the suggestion that it may be represented by the line of the modern road, The Lane, because this changes direction at the point at which it enters the camp from the east. This suggestion could mean that The Lane represents the centre point on this side, as the entrance gap on the south-east side was slightly towards the north-east side, and possibly, therefore, a side gate. This would mean an increase in the size proposed for the camp, now measuring about 230m from north-east to south-west by up to 200m transversely, enclosing an area of up to 4.3ha (10.6 acres) (slightly more than the 4.2ha suggested in 2000 (Lowe & Moloney 2000: 249)).

The dimensions of the inner camp are less easy to determine because, while it utilises the south-west side of the larger camp, it need not necessarily utilise its north-west side (for example, **Hillside Dunblane** – *illus* 143). However, if the location of the north-west side of the outer camp is correct, and if the inner camp did reuse it, the camp would be almost square in shape, measuring about 146m from north-east to south-west by up to 150m, enclosing a maximum area of 2.18ha (5.4 acres).

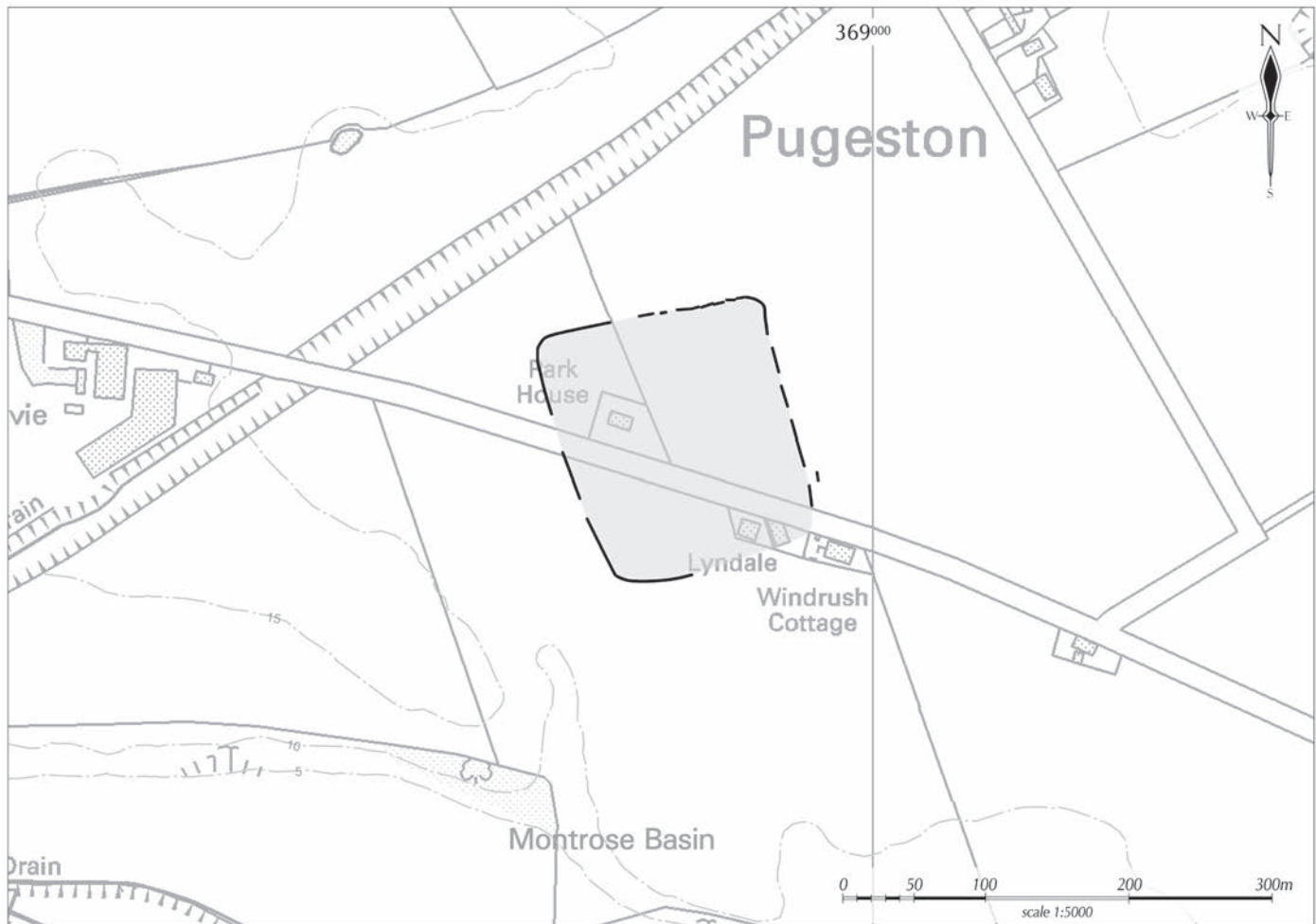


Illustration 117

Dun. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Dun (illus 47 & 117)

NO 6890 5959 NO 65 NE 21

This camp, situated on level ground on the north side of the Montrose Basin, was first discovered by St Joseph from the air through cropmarks in 1970 (1973: 225). It measures about 185m from NNW to SSE by around 160m transversely, enclosing 2.8ha (7 acres). An entrance gap protected by a *titulus* is visible towards the south end of the ENE side, and there is a corresponding break in the opposite side.

St Joseph placed trenches on the SSE and WSW

sides in 1970, recording that the ditch was 2.3m wide and 1.2m deep. A small piece of samian recovered from these excavations was dated to AD 70–90 (1973: 225). Further excavations were made by Rogers in 1990, in advance of the replacement of a gas main alongside the road. These recorded that the ditch was V-shaped, and measured up to 1.5m wide and about 1m deep. The excavators noted that the ditch had silted rapidly (Rogers 1993: 287–8).

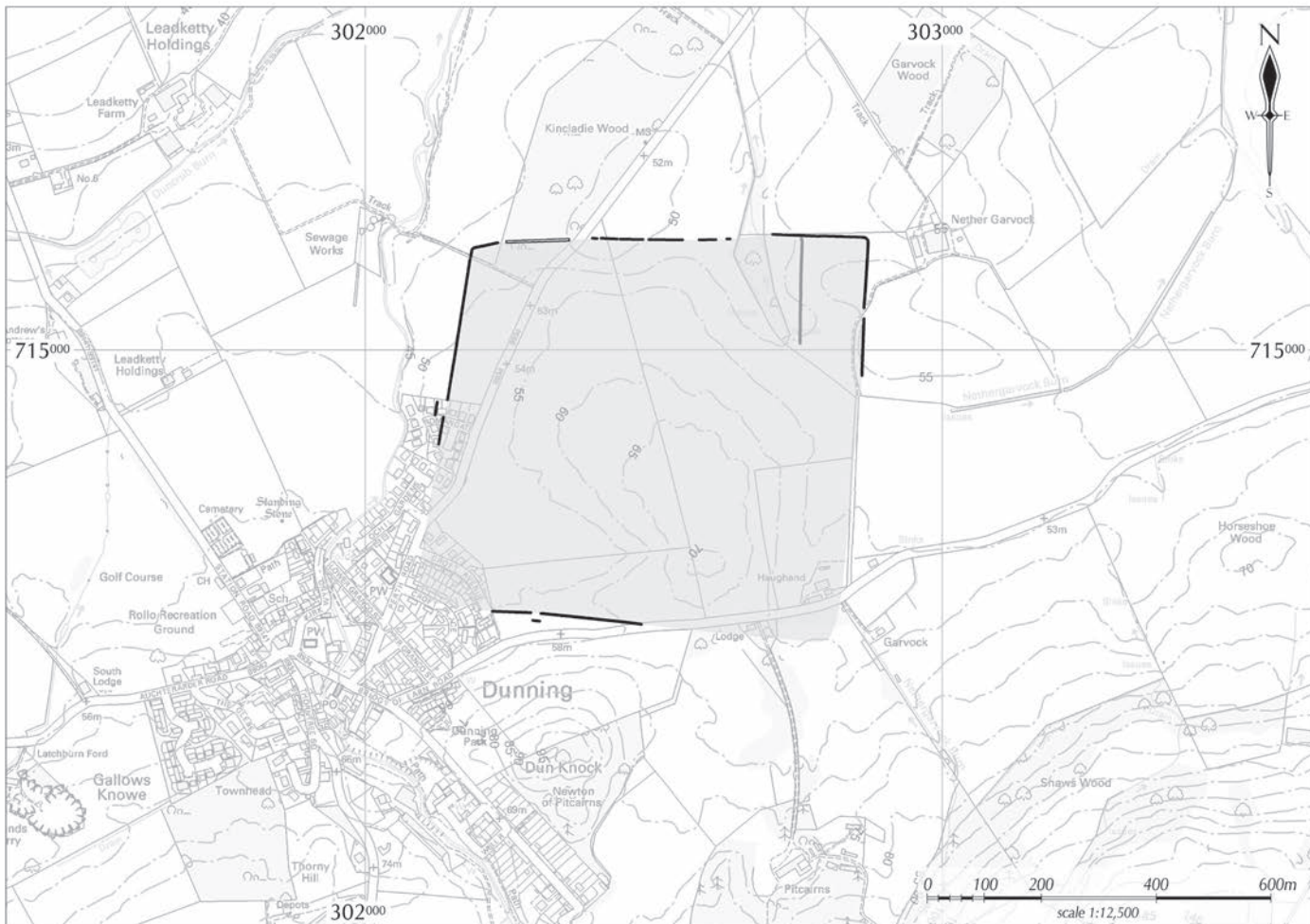


Illustration 118
 Dunning. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved.
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Dunning (illus 47 & 118)
 (Kincladie Wood; Duncrub)

NO 0249 1500 NO 01 NW 7

Macfarlane noted a 'trench capable to contain several thousands of men' just to the north-east of Dunning, which he presumed to relate to the battles in the 14th century (1726, in Mitchell 1906: 121). This was noted by Crawford, who, following Macfarlane's reference, also recorded a small stretch of upstanding bank and ditch in Kincladie Wood, commenting that it could be a fragment of a Roman camp (1949: 59). Feachem and officers of the OS archaeology division re-examined the site in 1970, and suggested that the remaining stretch in the wood was the remains of the north side of a camp of Stracathro-type (Wilson 1970: 274).

Parts of four sides of the camp were subsequently recorded as cropmarks from the air, with further information recorded through excavation (St Joseph 1973: 218–19). It lies on undulating ground immediately north-east of the village of Dunning, with housing covering the south-west angle and parts of the west side. The Dunning Burn, a tributary of the River Earn, lies immediately to the west. The camp is rhomboidal in form, measuring about 705m from west to east by 660m transversely, enclosing some 47.3ha (117 acres). The surviving stretch of rampart in Kincladie Wood on the north side of the camp is about 120m in length, and about 3m in width and up to 0.6m

in height; its accompanying ditch is about 3.4m in width and 0.3m in depth.

An additional linear cropmark is visible in the north-east corner of the camp and may also be Roman, potentially representing a reduction in the length of the camp to some 565m, reducing the overall area to about 39ha (95 acres). This may be the same linear cropmark noted by St Joseph (Dunwell & Keppie 1995: 61n).

An entrance gap protected by a *titulus* has been recorded, and excavated, in the centre of the west side, and a further *titulus* is visible in the western portion of the south side. In addition, a *titulus* has also been recorded in the west part of the north side in Kincladie Wood (RCAHMS St Joseph Collection: Notebook 6; not depicted on ill. 118).

The camp has been subject to excavations on several occasions, with St Joseph recording, in the 1970s, that the ditch measured about 2.7m in width and 1m in depth on the west side and up to 1.5m in depth on the north and east. The north *titulus* ditch was up to 0.6m in depth (RCAHMS St Joseph Collection: Notebooks 5 & 6).

Further excavations just east of the north entrance recorded a U-shaped shallow ditch, some 3m wide and 0.75m deep, that had possibly been narrowed and reused

(Dunwell & Keppie 1995: 53). Subsequent excavations at the western entrance also suggested recutting at the main camp ditch termini, although not of the *titulus* ditch. There was a further break in the ditch *c* 11.75m north of the gate. The *titulus* ditch (some 14.5m in length) was up to 3.3m in width and 1.6m in depth. Eleven sherds from a BB2 bowl, probably dating to the Antonine period, were recovered from the fill of this ditch (Dunwell & Keppie 1995).

Dunning lies close to the place named 'Duncrub', which Watson first linked with Mons Graupius (1926: 56). Feachem took this reference further, proposing the area as the site of the battle, and publishing an inaccurate plan of the site, complete with Stracathro-type gateways (1970). This argument has recently been supported by Fraser, who unfortunately fails to correct the assertion that the camp had Stracathro-type gateways and also stated that it faced the Cairnie Braes to the north (2005: 72–6) ignoring the evidence for the traverse gateways and the likelihood that the camp probably faced east or west (the latter towards Duncrub). The evidence that Fraser advances is insufficient to assert that the site related to the battle with any confidence. (For further discussion of postulated sites for Mons Graupius, see Chapter 3.)

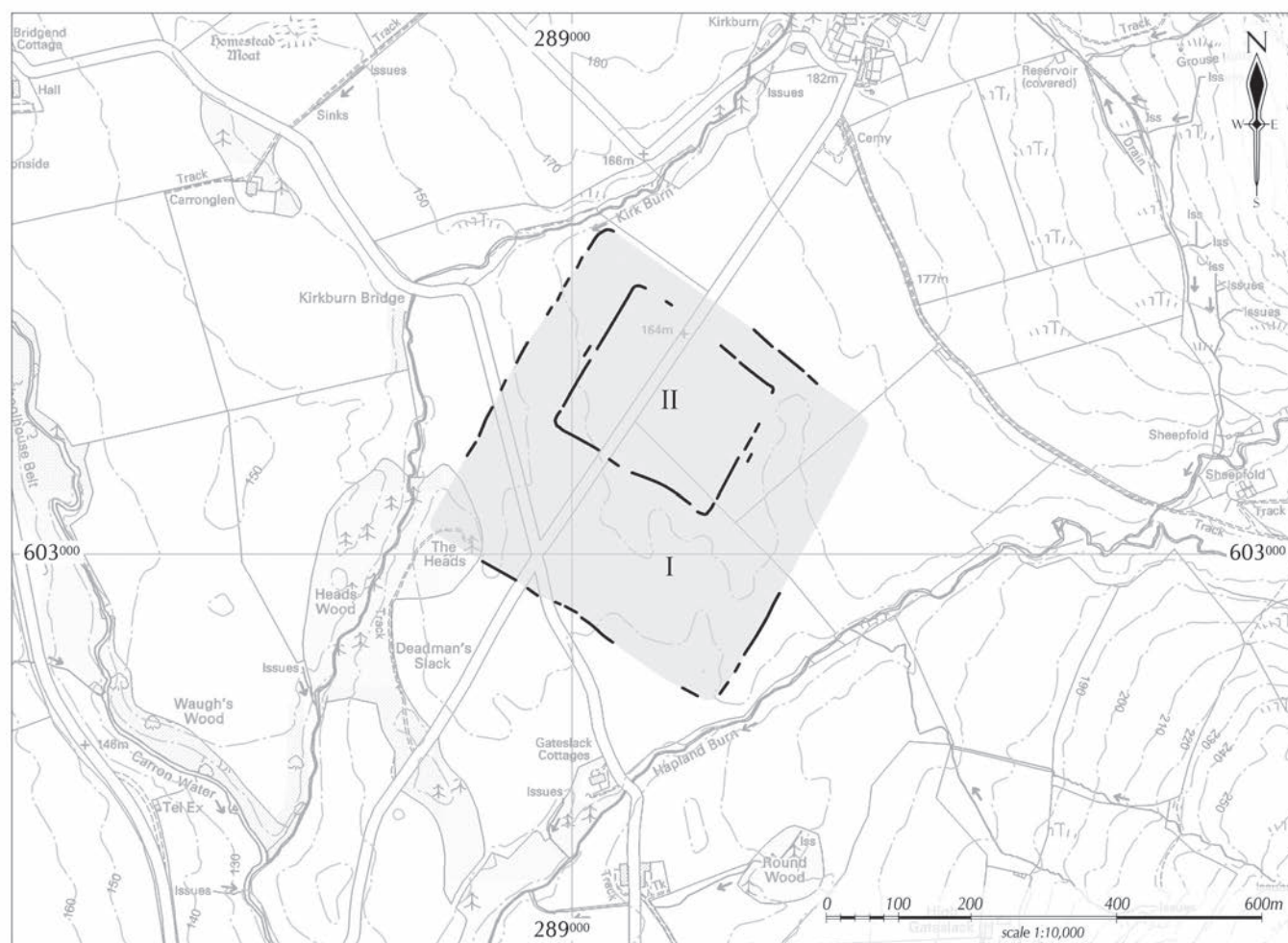


Illustration 119

Durisdeer I-II. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Durisdeer (illus 47 & 119)

Durisdeer I: NS 8917 0314
NS 80 SE 8

Durisdeer II: NS 8917 0314
NS 80 SE 8

Discovered in 1949 by St Joseph from the air, the two camps at Durisdeer lie in pasture fields on a south-west-facing slope on the south-west side of the Lowther Hills, on the Roman road running from **Drumlanrig** in Nithsdale towards **Crawford** in Annandale. An Antonine fortlet lies some 2km up the Roman road to the north-east. Camp II is wholly enclosed within camp I, and the modern road on the presumed line of the Roman road runs through both.

Camp I is almost square in form, measuring 474m from south-west to north-east by 460m enclosing 21.7ha

(53.7 acres). No entrances are known, but the cropmarks of the perimeter ditch are patchy because the camp has been recorded only in pasture.

Camp II measures 246m from north-west to south-east by about 210m transversely, although the north-west end is wider than that to the south-east. Some 5.1ha (12.7 acres) are enclosed, and entrance gaps protected by *tituli* are visible in the centre of north-west and south-east sides. A further entrance gap is visible in the centre of the south-west side.

ROMAN CAMPS IN SCOTLAND

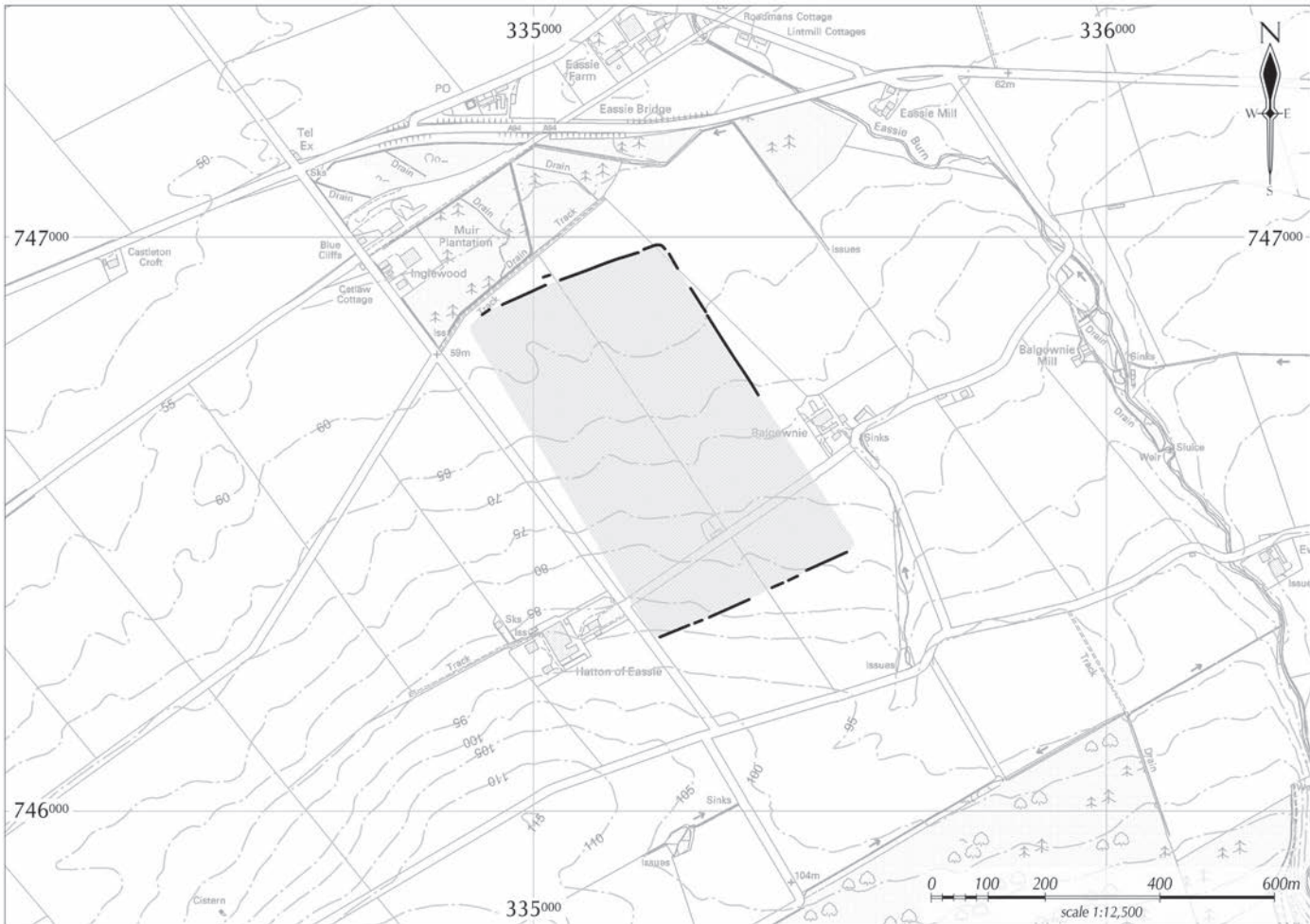


Illustration 120

Eassie. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved.
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Eassie (illus 47 & 120)

NO 3515 4665 NO 34 NE 26

The camp at Eassie was first discovered from the air by St Joseph in 1968 (St Joseph 1969: 111). It lies in Strathmore, 5km east of the camp and fort at **Cardean**, on land that slopes northwards to the Dean Water.

Parts of three sides have been recorded through cropmarks, and the camp measures about 650m from north-west to south-east by at least 365m transversely. An entrance with *titulus* is visible on the north-west side. If this is central, this would suggest that its transverse

dimension is about 400m, and the camp would enclose some 25ha (63 acres). There appears to be a corresponding entrance gap in the south-east side. St Joseph placed a trench through the north-west side in 1968, recording that the ditch was a very gentle V-shape, some 2.4m wide and 0.6m deep (RCAHMS St Joseph Collection: Notebook 5; DC 37354). Robertson also placed a trench through the camp in 1970, recording that the ditch had an irregular profile (Robertson 1970b: 4).

Eastcote (illus 47 and 102)

(Cavers; Denholm)

NT 5430 1774 NT 51 NW 23

First recorded from the air in 1960 by St Joseph (1961: 122), the camp at Eastcote lies in a bend in the River Teviot, just north-east of Hawick. The camp of **Cavers Mains** lies on a ridge less than 1km to the south-east. Parts of all four sides have been recorded through

cropmarks, but its north-west portion has been eroded by the river. The camp measured 348m from NNE to SSW by 322m transversely and enclosed just over 11ha (27 acres). Gaps in the cropmark on three of the sides may represent entrances.

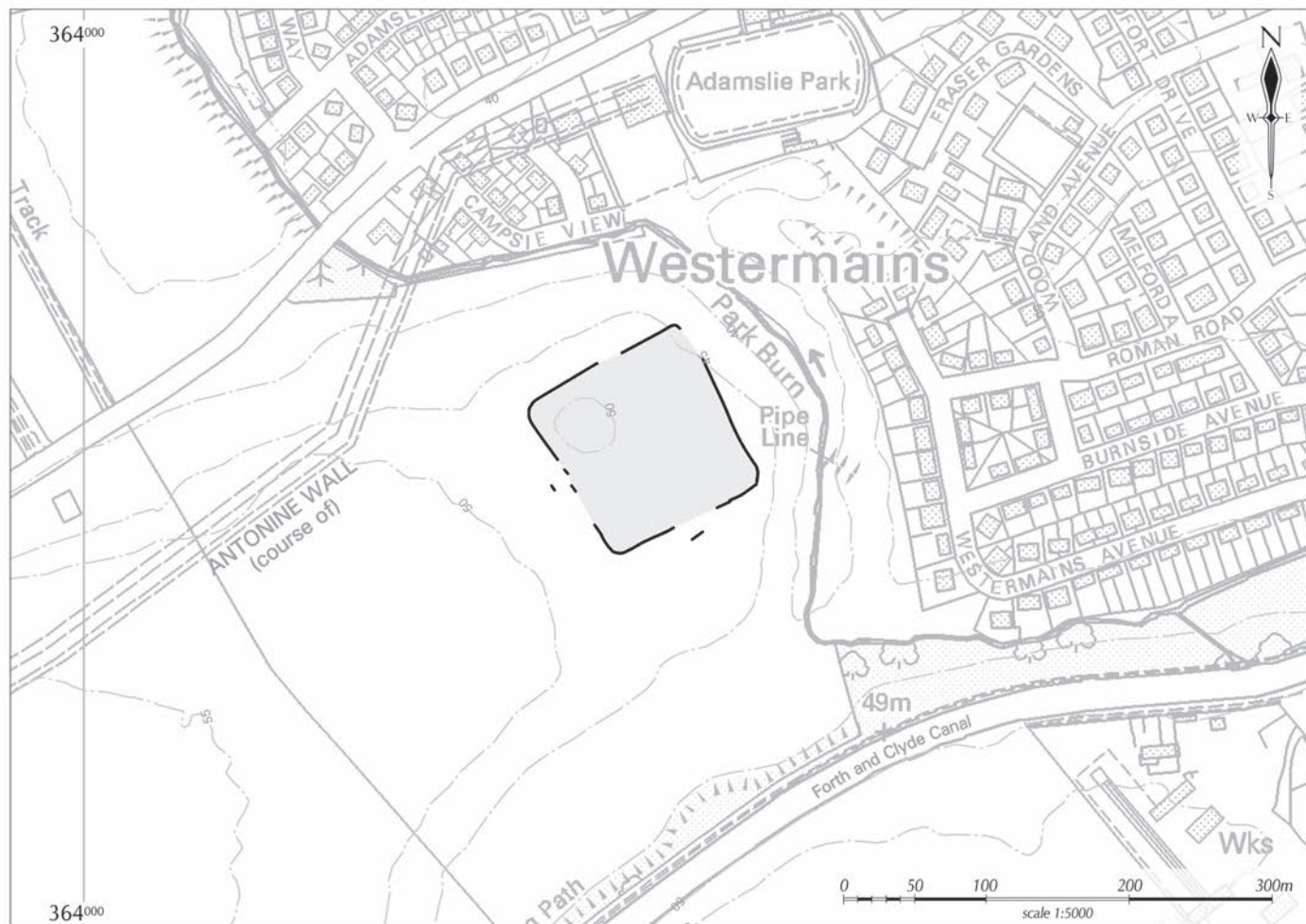


Illustration 121

Easter Cadder and the Antonine Wall. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Easter Cadder (illus 47 & 121)

(Adamslie; Adamslee)

NS 6440 7347 NS 67 SW 4

This camp lies just to the south of the Antonine Wall, midway between the fortlet at Glasgow Bridge and the

fort at Kirkintilloch. It was first discovered from the air by St Joseph in 1957 (1958: 89–90), and is situated in a

cultivated field on a low ridge to the west of the Park Burn (north of the Forth and Clyde Canal).

The camp is almost square, measuring about 125m from NNW to SSE by 120m transversely and encloses an

area of some 1.5 hectares (3.7 acres). Entrance gaps with *tituli* are visible in the centre of the WSW and SSE sides, with a further entrance gap in the NNW side. It is not possible to detect an entrance in the ENE side.

East Carmuirns (Lochlands: illus 167)

NS 8592 8065

South of the Lochlands Three Bridges area (see Lochlands, below), and now wholly under a housing estate, lies the camp of **East Carmuirns**, first recorded in 1949, prior to the construction of the houses (St Joseph 1951a: 62). It measured 163m from north to south by about 325m transversely, potentially enclosing around 5.5ha (13.6ha). It was originally believed to be small in size owing to a

NS 88 SE 22

possible slight arc on the ditch on the north side possibly suggesting the north-east corner, which would mean that the camp enclosed some 2.1ha (5.1 acres) (Feachem 1958: 336–7; RCAHMS 1963: 111–2). However, reappraisal of the air photographs suggests a continuation of the south side, implying that the camp enclosed a much larger area. A gap on the west side may represent an entrance.

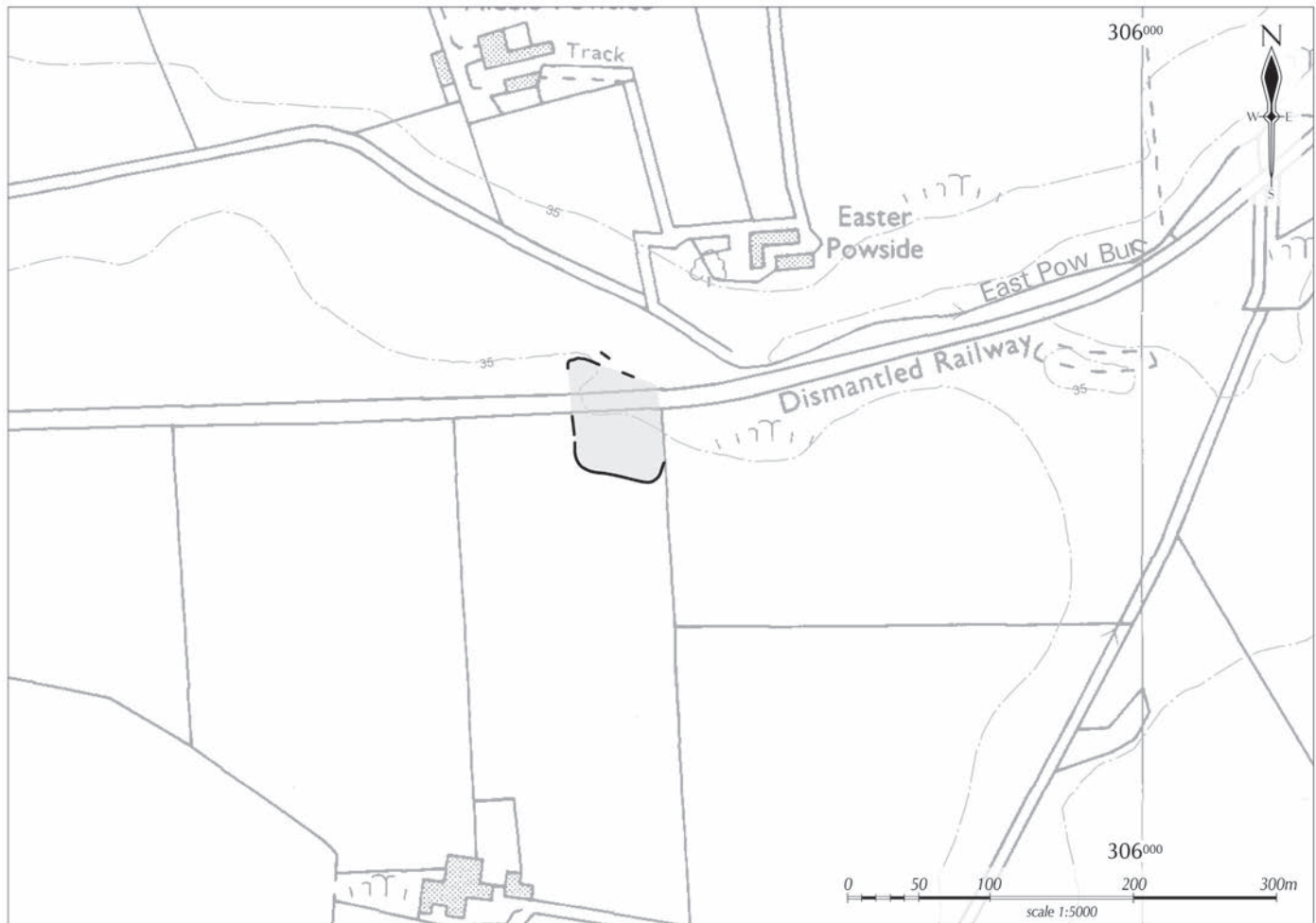


Illustration 122

Easter Powside. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Easter Powside (illus 47 & 122)

NO 0563 2457 NO 02 SE 52

The camp at Easter Powside was first discovered from the air by RCAHMS in 1979. It lies on slightly undulating ground north of Strathearn and the Gask Ridge, and just to the south of the East Pow Burn. The dismantled railway line from Perth to Crieff bisects the camp from east to west. Parts of all four sides of the camp have been recorded through cropmarks, and it is rhomboidal in form with a flattened northern side. It measures around 75m from north to south by 62m transversely, enclosing

about 0.45ha (just over 1 acre). There is a break in the north side, outside which is an apparent stretch of ditch offset at a slight angle, which may be the remains of a *titulus*. The corresponding south side continues unbroken, and the railway line has destroyed part of the other two sides. Woolliscroft placed a trench through the south-east corner in 1998, revealing a V-shaped ditch, 1.9m wide and 0.85m deep, which appears to have silted up naturally (Woolliscroft *et al* 2002: 29–31).

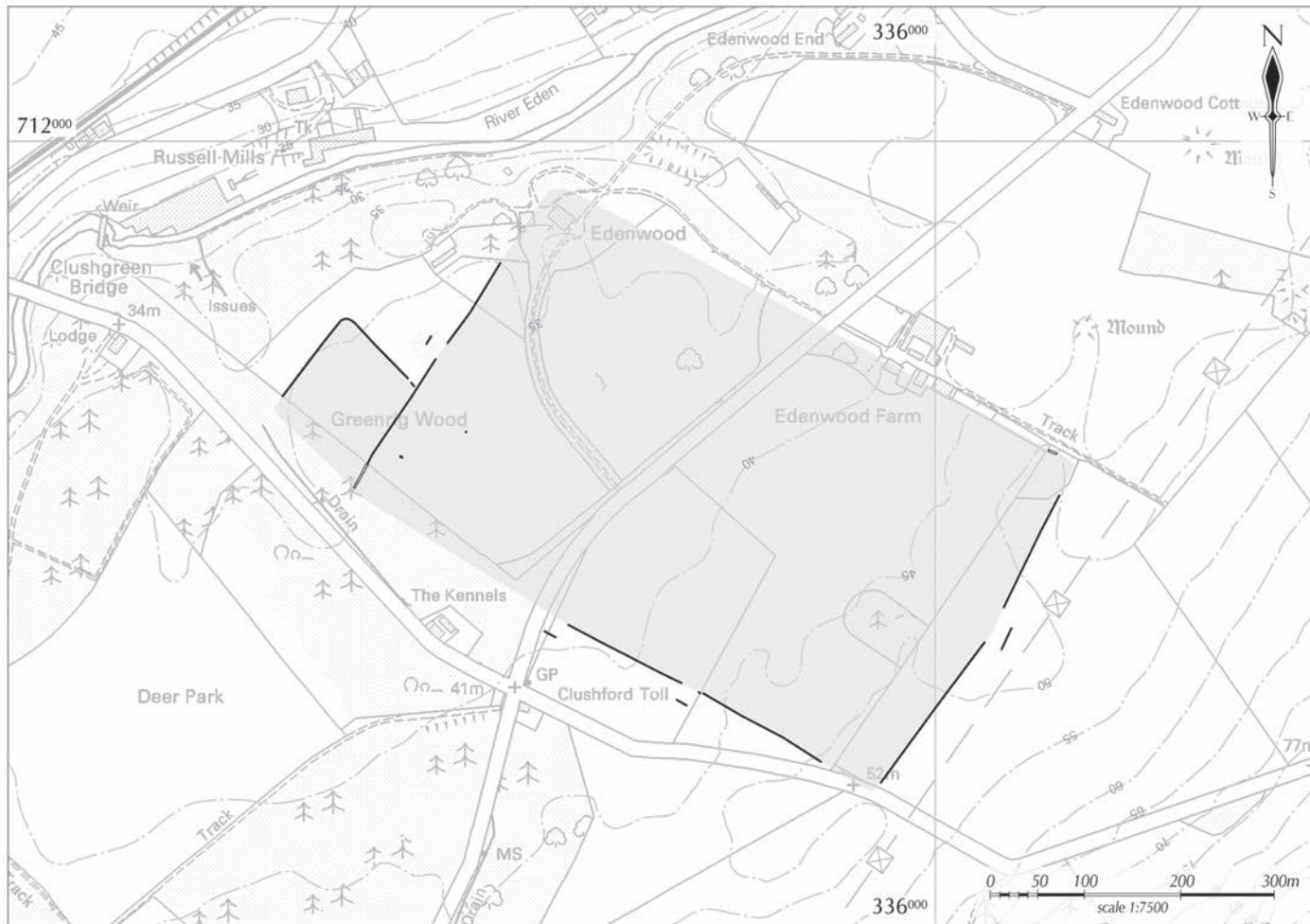


Illustration 123
 Edenwood. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved.
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Edenwood (illus 47 & 123)

(Cupar; Eden Wood)

NO 3570 1170 NO 31 SE 39

The camp at Edenwood was first discovered from the air in 1978 by both St Joseph and Maxwell independently (Goodburn 1979: 274; RCAHMS 1978b: 37). It lies some 2km south-west of Cupar on relatively flat land on the north-west side of the Hill of Tarvit, close to the River Eden.

The camp measures 635m from north-west to south-east by 400m, enclosing almost 25ha (61 acres). Entrances protected by *tituli* are known on the north-west and south-east sides, with two on the south-west side; there were probably six in total. An annexe is visible on the north-west side, measuring 106m by at least 106m enclosing a further probable 1.1ha (2.8 acres). Although the camp is mostly known from cropmark remains, two small earthwork stretches have survived in woodland: on

the north-east side close to the east corner, and on the north-west side in Greenrig Wood running towards the west angle. The rampart on the north-east side is 0.3m high and spread about 4.4m wide.

Excavations by St Joseph and Maxwell in 1978–9 recorded that the ditch was up to 3.8m wide and 2.1m deep on the north-east side, but elsewhere its depth averaged *c* 1m. The ditch of the annexe was up to 3.3m wide and 1.3m deep (RCAHMS St Joseph Collection: Notebook 8).

Excavations by MacGregor in 1995 recorded the V-shaped ditch on the south-west side measuring up to 3m wide and 0.8m deep, possibly backfilled with rampart material. However, excavations on the south-east side

close to the south corner appeared to record a natural break in the ditch. Three pits were also revealed, two of

which showed evidence of burning, although no dating evidence could be obtained (MacGregor & Leslie 1998).

Ellisland (illus 47 & 112)

Ellisland I: NX 9285 8420
NX 98 SW 6

Ellisland II: NX 9285 8420
NX 98 SW 6

Situated across the River Nith from the forts and camps at **Dalswinton**, the two camps at Ellisland were recorded as cropmarks in 1949 and 1960 by St Joseph from the air. Camp I measures 101m from NNE to SSW by 65m transversely, enclosing 0.66ha (1.6 acres), although the eastern corner of the camp has been eroded by the river. An entrance gap

protected by a *titulus* is visible in the centre of the SSW side. In the south-west portion of the camp lies camp II, which uses part of the SSW and WNW sides. This camp measures 61m from NNE to SSW by 53m and encloses 0.32ha (less than 1 acre). It may share the same entrance gap and *titulus* in its SSW side as camp I.

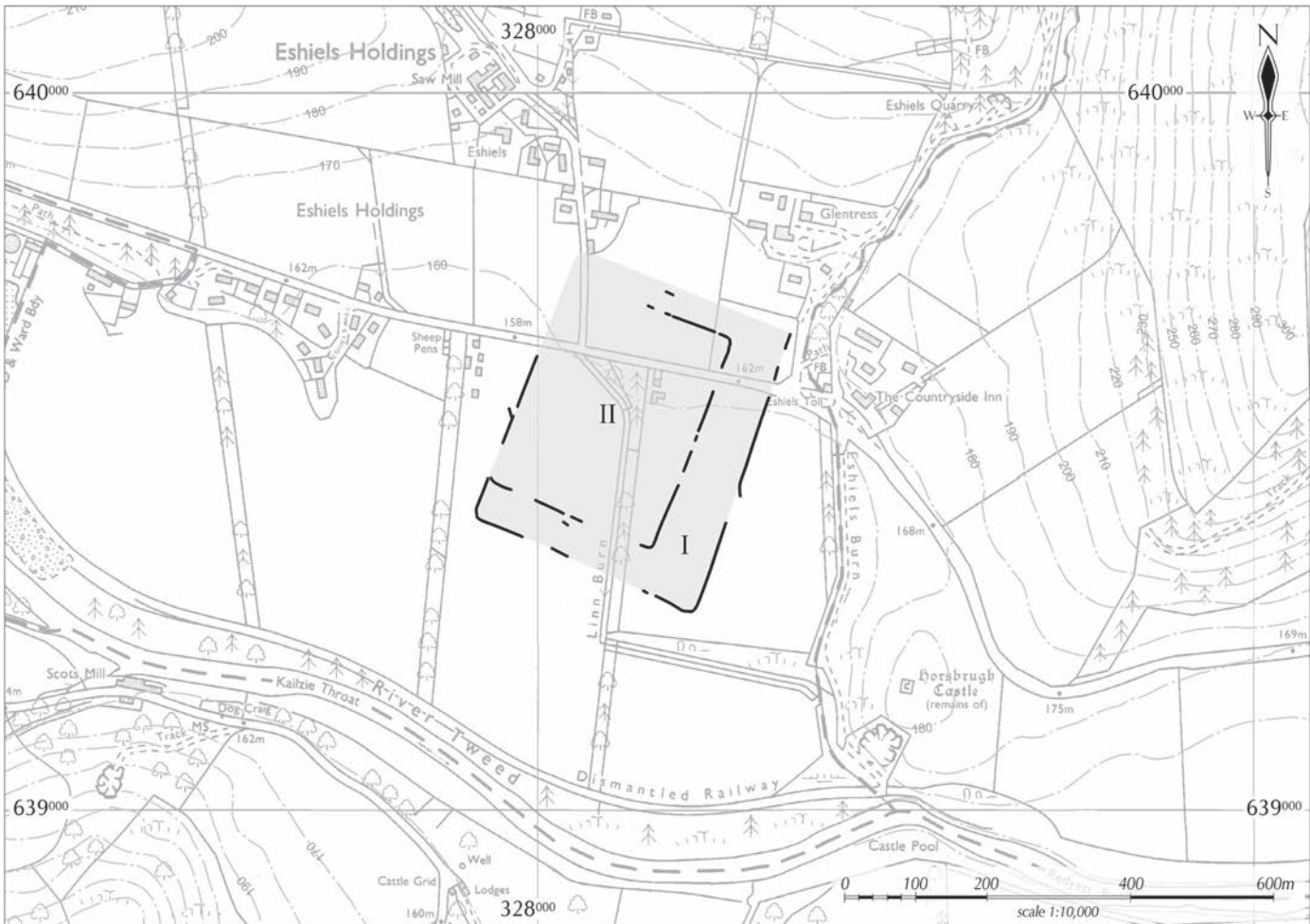


Illustration 124

Eshiels I-II. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Eshiels (illus 47 & 124)

Eshiels I: NT 2815 3953
NT 23 NE 27

Eshiels II: NT 2815 3953
NT 23 NE 27

The two camps at Eshiels lie on a level terrace on the north bank of the River Tweed. First recorded through cropmarks from the air in 1962 by St Joseph (1965: 79), the camps share part of their WNW sides. The full extent of camp I, the larger of the two, is not known, but 414m of the ESE side has been recorded, and, on topographic and morphological grounds, it is unlikely to have been much longer. It measures 327m from WNW to ESE, and it is likely that some 13.6ha were enclosed (almost 34 acres). Traces of a Stracathro-type entrance are recorded on its ESE and WNW sides: an oblique traverse is visible on the ESE side and that on the WSW may even have oblique traverses on either side of the gap; there are slight hints of an external *clavicula* on the south side (not depicted on illus 124).

Camp II, the inner camp, shares part of its WSW side with camp I. It measures 313m from NNE to SSW by 247m and enclosed 7.7ha (19 acres). Entrances in the centre of the NNE and SSW sides are visible, and both are protected by *tituli*. It is not possible to state whether it utilised the same entrance on the WNW side as camp I, because of the differing form of entrance protection.

RCAHMS probed the site in the early 1960s. It is unclear exactly where the probing took place on the camp, but a combination of probing and air photographs led them to construct much of the circuit of a camp, which by plan and dimensions must be camp II (1967: 171).

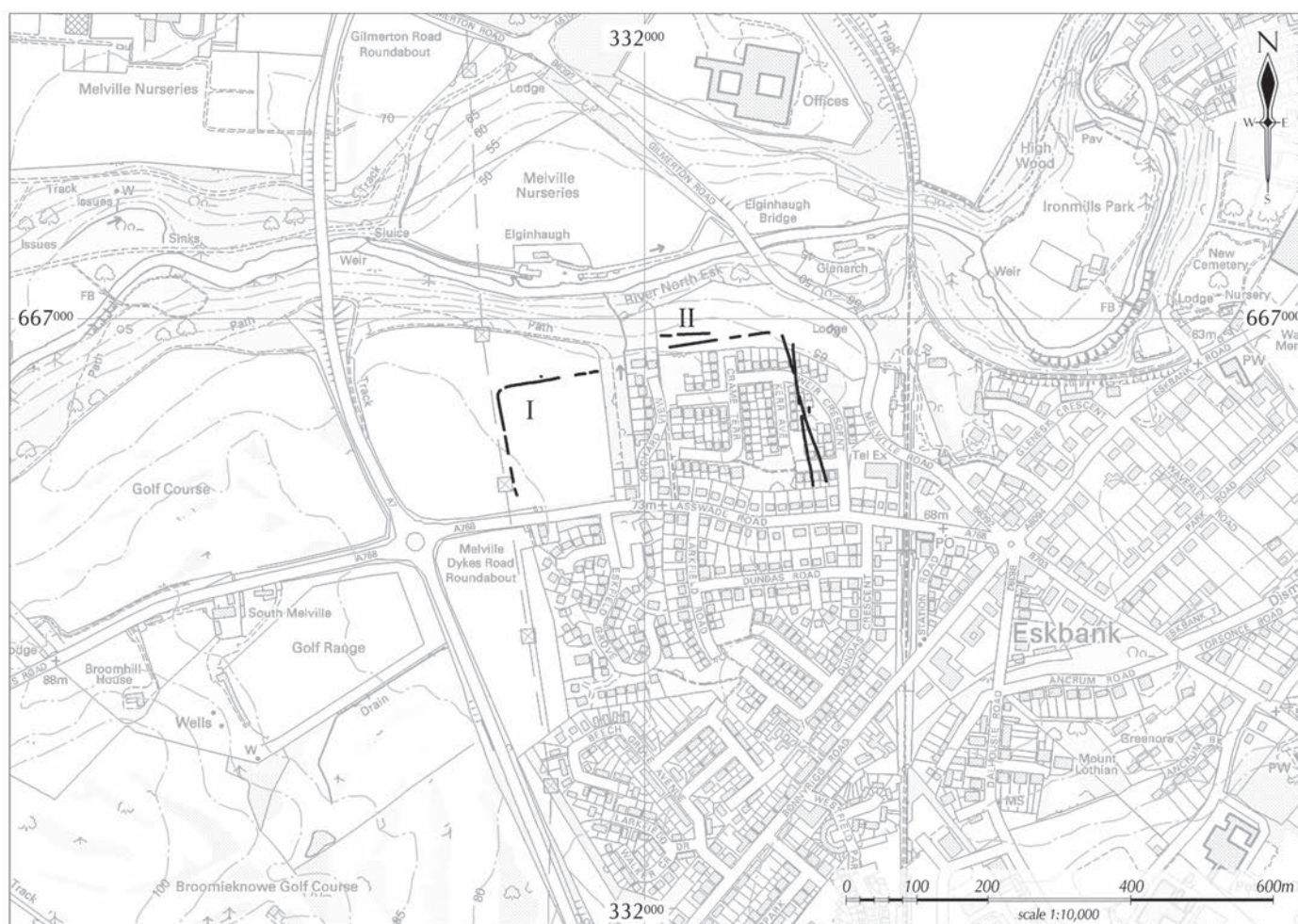


Illustration 125

Eskbank I-II. The Roman fort of Elginhaugh lay under the 'offices' to the north. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Eskbank (illus 125)

*Eskbank I (A): NT 3213 6681
NT 36 NW 34*

*Eskbank II (B): NT 3213 6681
NT 36 NW 34*

First recorded in the 1960s by St Joseph from the air (1965: 80), the overlapping camps at Eskbank lie on gently sloping land on the south side of the River North Esk, across from the Flavian fort of Elginhaugh (marked as 'Offices' on illus 125; Hanson 2007). Although originally recorded as cropmarks from the air, much of the area of the camps is now covered by a housing estate, which led to excavations on the camp ditches in 1972 (Maxfield 1975) and 1981 (Barber 1985).

The whole of the NNW side of camp I has been recorded, measuring 414m, together with stretches of the ENE and WSW sides. The southern side of the camp is unknown, but a field boundary running

parallel to the north side is visible on the 1st edition OS map (Edinburghshire 1854: sheet vii) and survives as a boundary in the modern housing estate. If this represented the south side of the camp then its north to south dimension could be 465m, suggesting that some 19ha (47 acres) were enclosed, although this is purely speculative. St Joseph undertook small-scale trenching on the WSW side of the camp in 1963, and he recorded that the ditch was V-shaped, around 2.1m wide and 1.2m deep (1965: 80). Maxfield's excavations on the ENE side revealed an irregular ditch, U- to V-shaped, measuring up to 3.1m wide and 0.9m deep (1975: 145), similar dimensions to those later recorded by Barber on the

NNW side (1985: 151). A *titulus* is visible in the ENE side of the camp; this was excavated and measured some 10.6m long, up to 3.2m wide and 0.8m deep. Running between the ditch terminals at the entrance was a 'flat-bottomed V-shaped trench', some 0.55m wide and 0.25m deep. This was interpreted as a probably belonging to the Roman occupation of the camp, and possibly to hold temporary hurdling (Maxfield 1975: 145–7; see above, section 7a).

Both excavations on the NNW and ENE side indicated fairly rapid infilling. The camp ditch is cut by the ditch of camp II and is therefore earlier in date (Maxfield 1975: 147–8). The construction of a later camp at the same location but on a slightly different alignment might explain the apparent slighting of the ditch.

Only stretches of the north and east sides of camp II have been recorded, indicating that the camp measured at least 220m by over 180m; no gates are known. Excavations by Maxfield on the eastern side recorded that the ditch was U- to V-shaped, up to 2.35m wide and 1.15m deep (1975: 147). She interpreted the cropmarks in the west field as relating to this camp, partly because of the excavated dimensions and also because of the lack of an entrance in the WSW side (1975: 147). However, gaps are visible in the cropmark evidence for this WSW side, and although none can be clearly interpreted as an entrance, it is apparent that it was not an entirely continuous line. This feature is interpreted here as belonging to Eskbank I, owing to the position of the cropmarks.

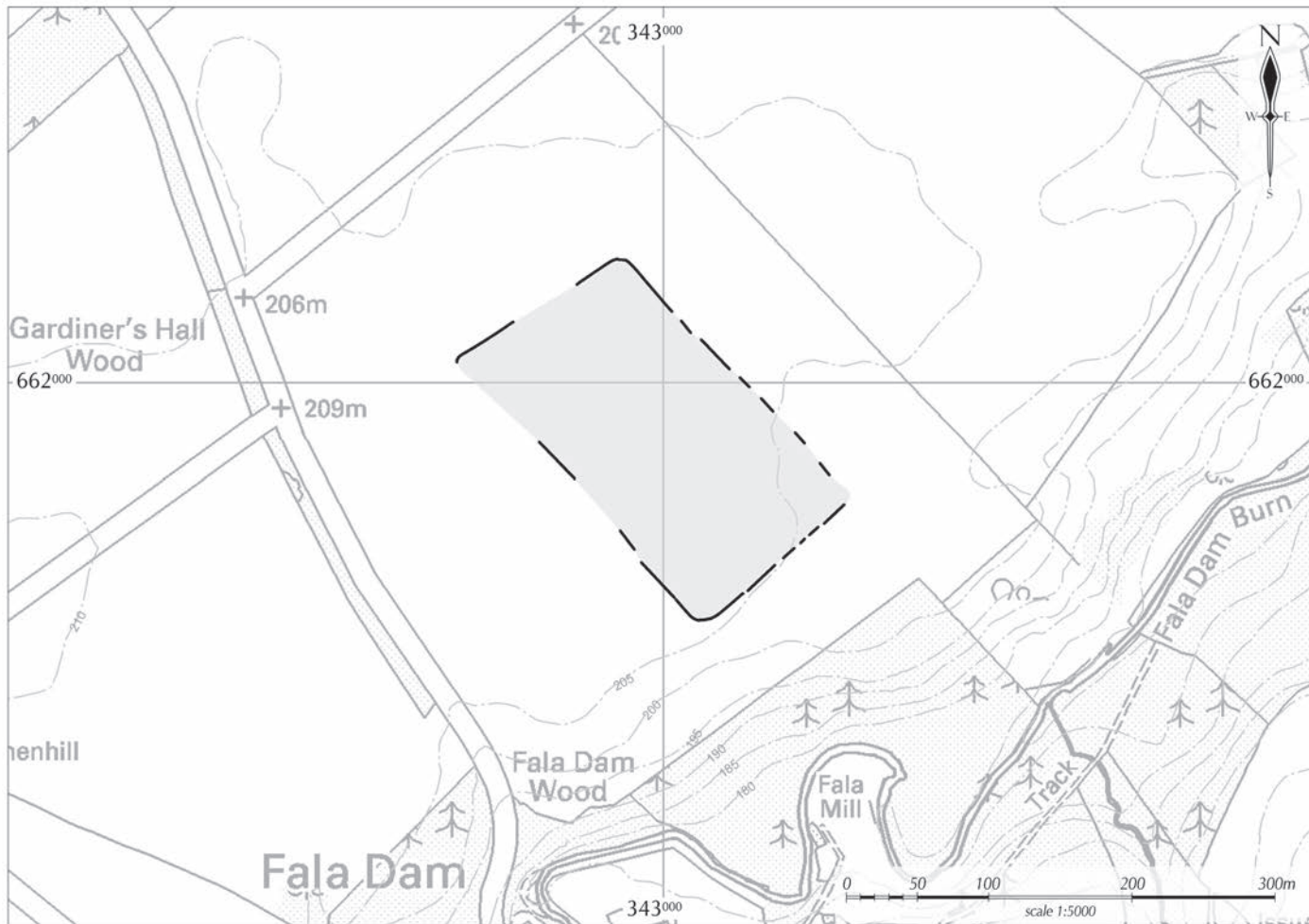


Illustration 126

Fala Mill. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Fala Mill (illus 47 & 126)

(Fala)

NT 4304 6200 NT 46 SW 28

The camp at Fala Mill was discovered from the air by Cambridge University in 1977 (Maxwell & Wilson 1987: 38). It lies about 1km north-west of the village of Fala and some 800m east of the modern A68, the presumed line of Roman Dere Street at this point. It lies on fairly level ground that slopes gently to the south-east towards the

Fala Dam Burn. Parts of all four sides have been recorded through cropmarks, and it measures about 248m from north-west to south-east by 136m transversely, enclosing an area of some 3.3ha (8.1 acres). No entrances are known.

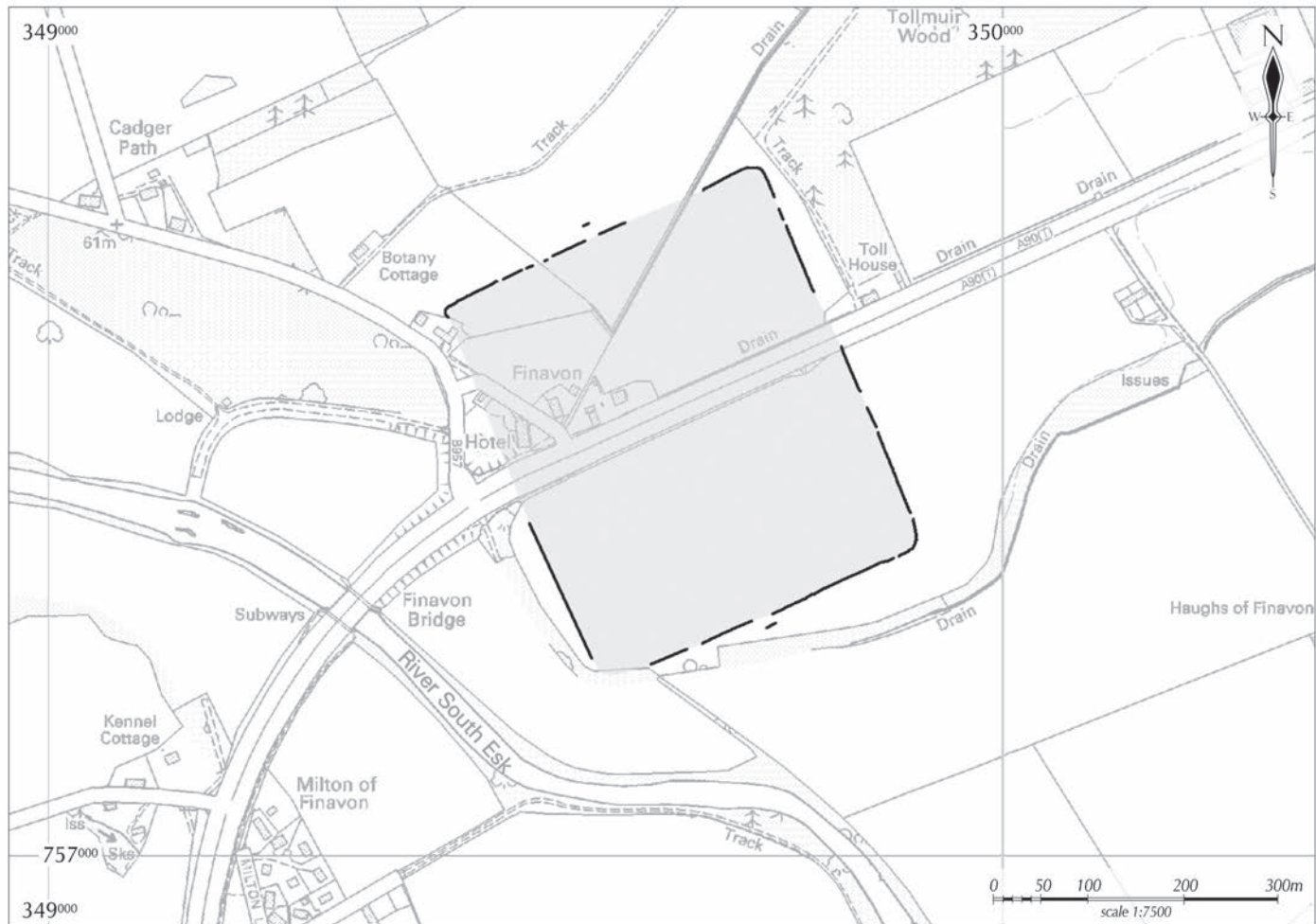


Illustration 127

Finavon. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Finavon (illus 47 & 127)

NO 4965 5745 NO 45 NE 21

The camp at Finavon was first discovered through cropmarks from the air by St Joseph in 1962 (1965: 83), lying on a terrace to the north of the River South Esk, only 1km WSW of the camp at **Marcus**.

It measures 435m from NNW to SSE by 370m transversely, enclosing an area of 16ha (39.5 acres). Entrance gaps are visible in the centre of the NNW and SSE sides, both protected by *tituli*. A further entrance gap is visible in the ENE side, south of the A90 road that crosses the camp.

St Joseph carried out several excavations on the camp, publishing that the ditch was 1.4m wide and

0.8m deep (1965: 83, although his notebooks suggest a level of variation across the sections that he excavated – RCAHMS St Joseph Collection: Notebooks 3 & 4). Further trenching on the ENE side in 1987, in advance of road widening, recorded a shallow ditch, with one steep side and flat bottom (the other side had been truncated), measuring about 2m in width and 0.3m in depth. Later features cut through the ditch, including an almost V-shaped ditch, 0.8m wide and 0.3m deep. Both ditches were believed to have been deliberately backfilled (Halpin 1992: 173–5, 178–9).

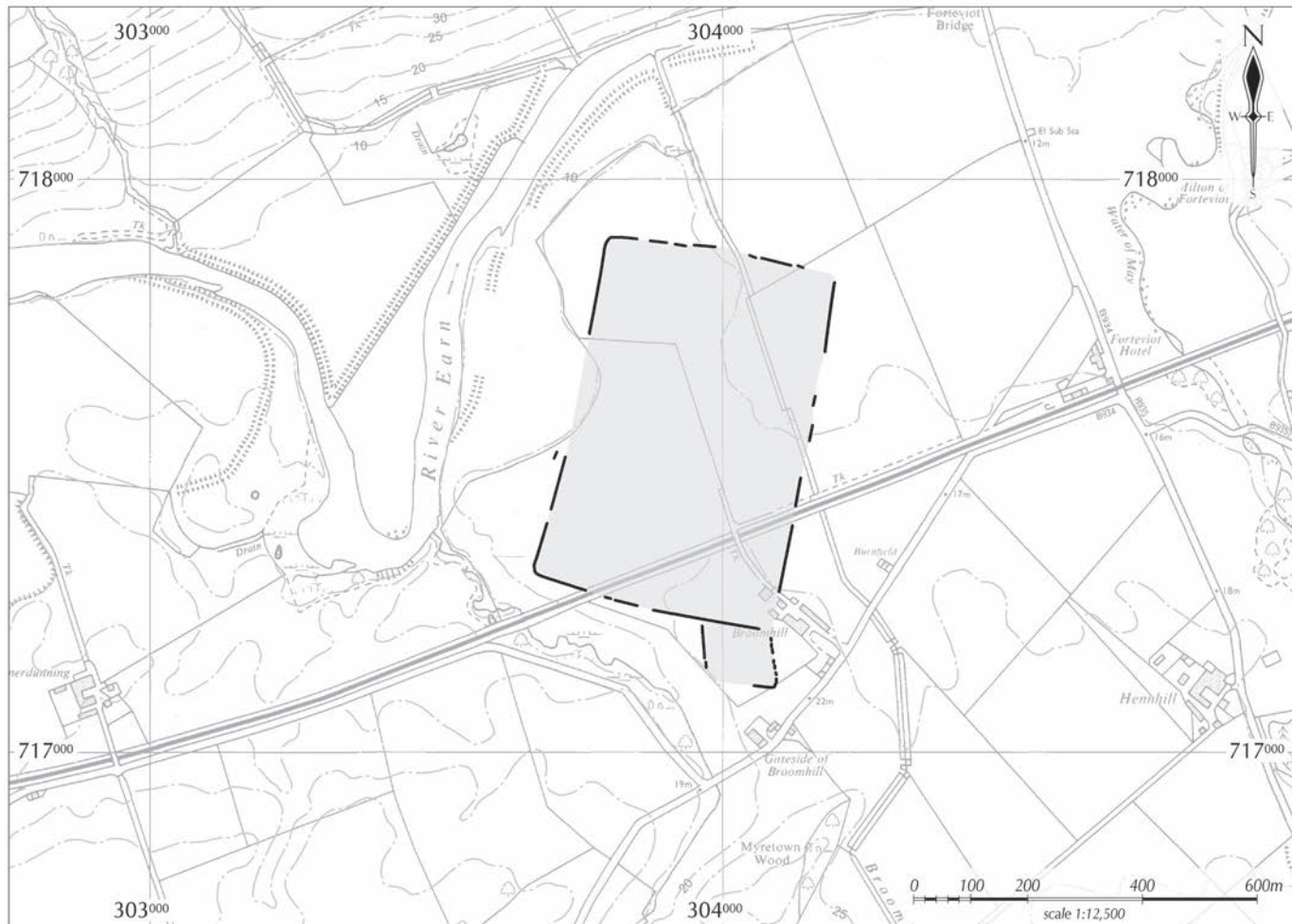


Illustration 128

Forteviot. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Forteviot (illus 47, 63, 73, 128 & 129)
(Broomhill)

NO 0394 1753 NO 01 NW 1

The camp at Broomhill Farm, Forteviot, was first discovered through cropmarks on air photographs by Feachem in 1951, with parts of the ditch confirmed by probing (1952: 217); the majority has now been recorded from the air (illus 129). It lies on a level terrace close to a

meander in the River Earn, with the camp at **Dunning** some 2.5km to the SSW, and the Gask Ridge across the Earn to the north. It measures 640m from NNE to SSW by 410m transversely, enclosing 26ha (64 acres). There is a small annexe on the eastern part of the SSW side,



Illustration 129

Aerial view of the west side of Forteviot, taken from the south in 2001. © Crown copyright: RCAHMS. SC1164180. Licensors www.rcahms.gov.uk.

measuring 98m by 120m enclosing a further 1.2ha (3 acres). Probable entrances are recorded in the centre of the NNE and SSW sides and one in the WNW side is protected by a *titulus*. The position of these entrances suggests that the camp had six gates.

Trenches were placed through the camp in 1952 by Aitken, locating the western entrance, but no further information was provided (Taylor 1953: 105–6). A gold coin of Hadrian was found on Broomhill farm in 1829 (Bateson 1989: 166).

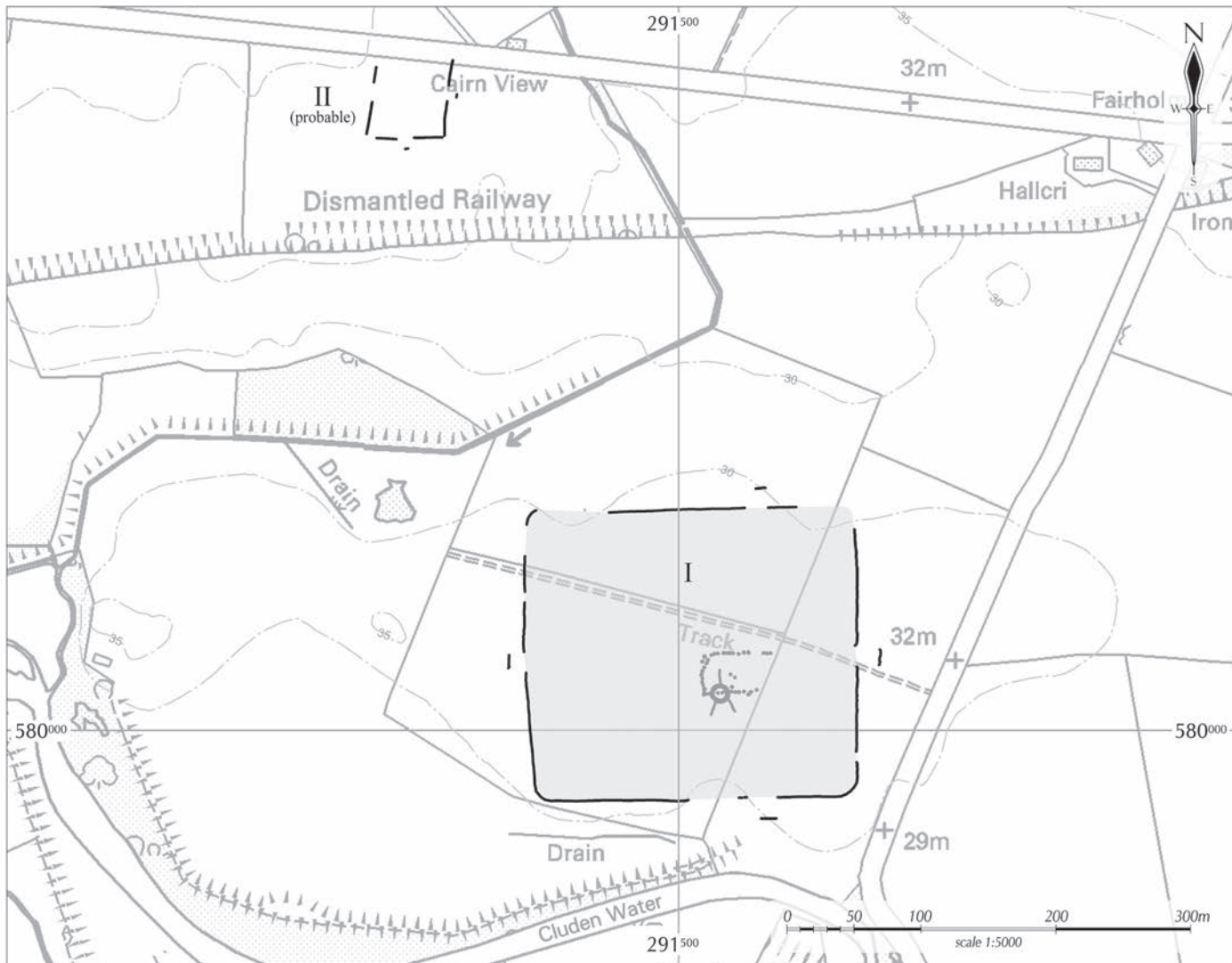


Illustration 130

Fourmerkland I and probable camp II. The Neolithic pit-defined cursus lies within camp I. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Fourmerkland I (illus 47 & 130)
(Burnside of Baltersan)

NX 9150 8005 NX 98 SW 5

Discovered in 1949 by St Joseph from the air as cropmarks (1951: 60), the camp at Fourmerkland lies on level ground above the Cluden Water, a tributary of the River Nith. The camp measures 245m from west to east by 215m transversely, enclosing 5.2ha (almost 13 acres). Entrance gaps protected by *tituli* are visible in all four sides, with

the position of the side gates suggesting that it faced in an easterly direction.

A pit-defined Neolithic cursus is visible in the interior of the camp, and a further probable camp lies just under 300m to the north (**Fourmerkland II**).

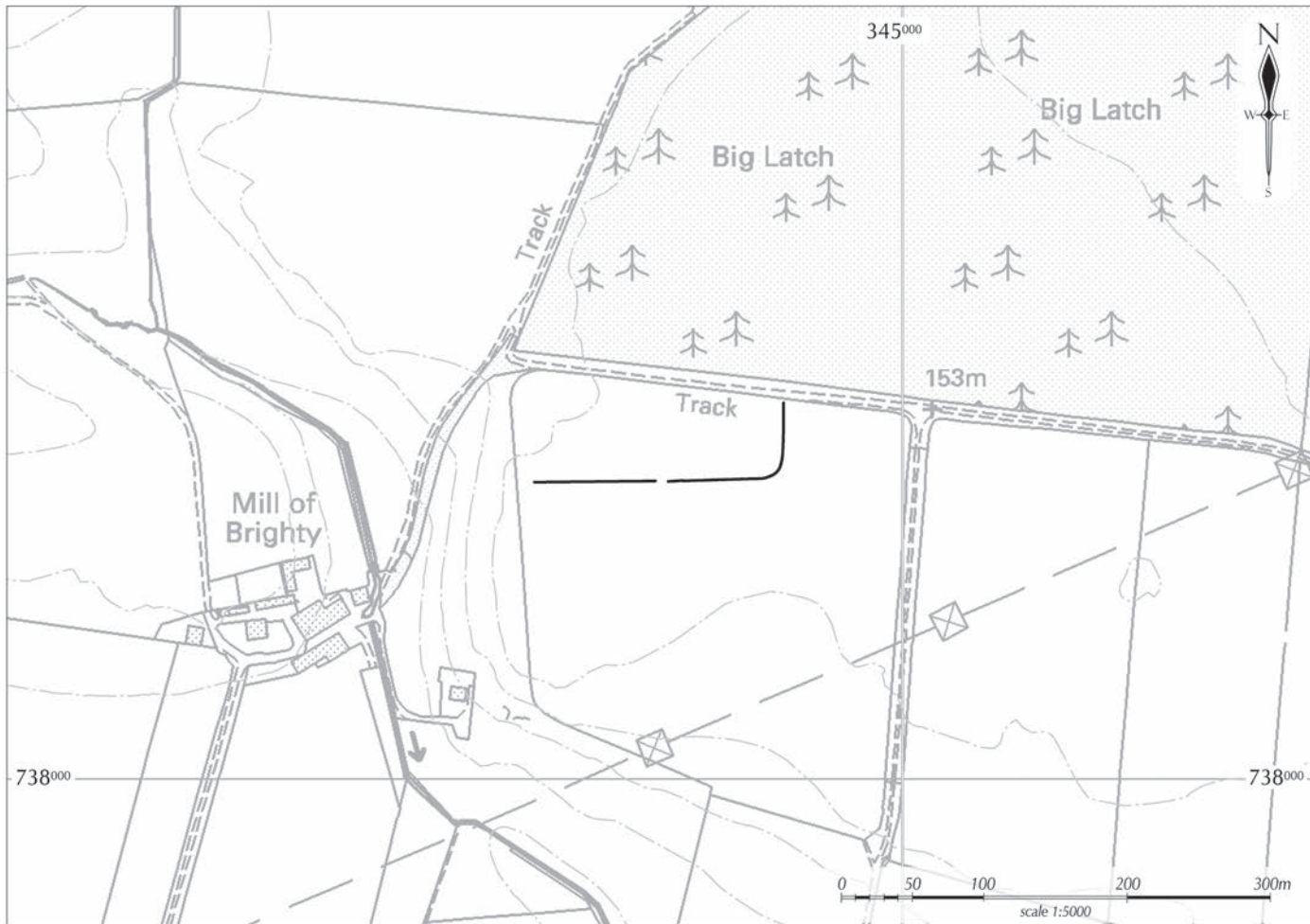


Illustration 131

Gagie. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Gagie (illus 131)

NO 4481 3830 NO 43 NW 23

The camp at Gagie was first recorded through cropmarks by St Joseph in 1970 (1973: 224). It lies on gently sloping ground north of Gagie House, with the Sweet Burn running to the south-west. Stretches of the south and east sides (173m and 53m respectively) have been recorded as cropmarks, together with the rounded south-east angle.

St Joseph conducted excavations on the east side in 1970, recording that the ditch measured up to 1.45m in width and 0.7m in depth, but was flat-bottomed at one point (1973: 224; RCAHMS St Joseph Collection: Notebook 5).

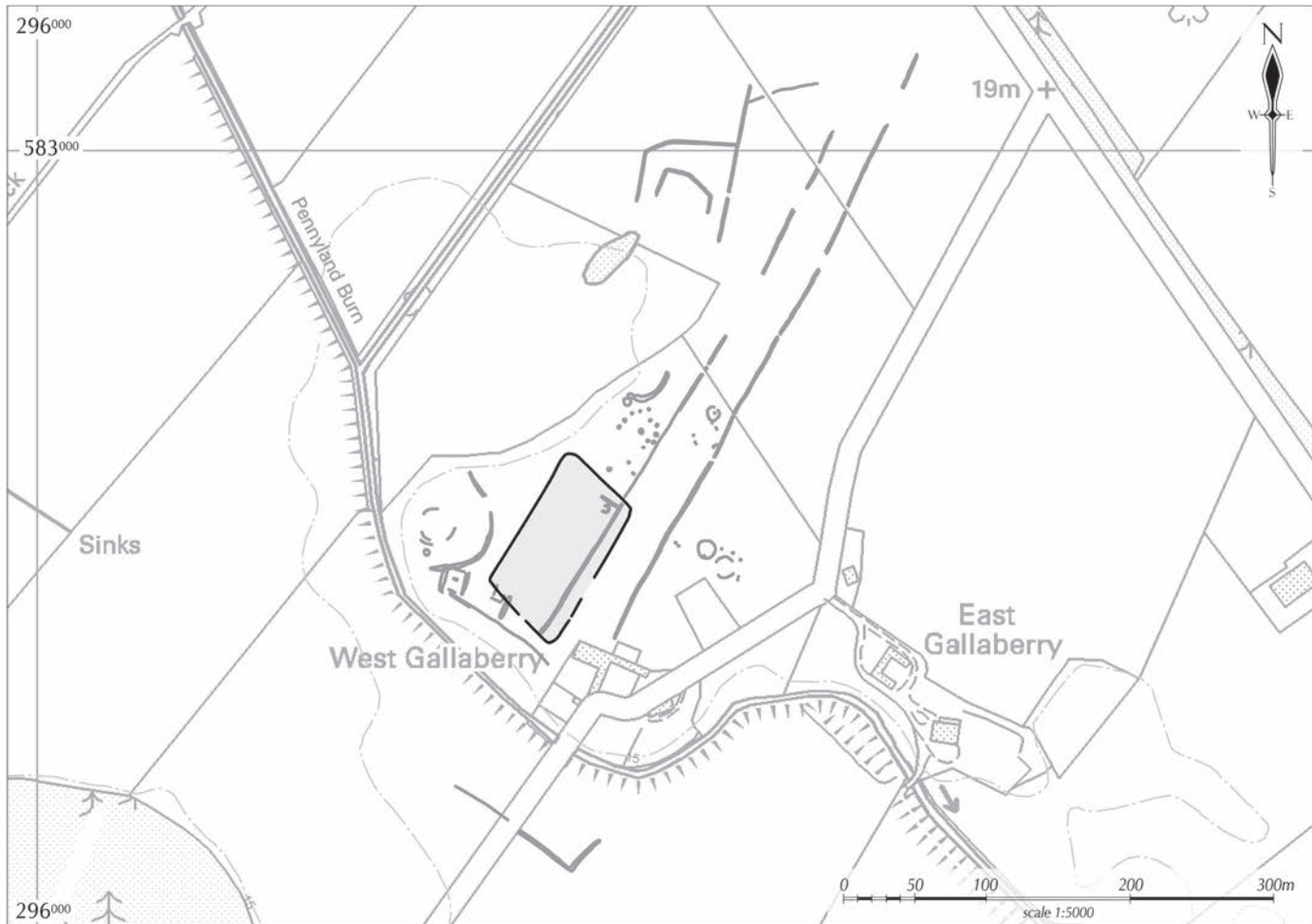


Illustration 132

Gallaberry and other cropmarks in the area. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Gallaberry (illus 14, 47 & 132)
(West Gallaberry; Galloberry)

NX 9636 8272 NX 98 SE 4

Discovered in 1939 by Crawford on one of his seminal flights into Scotland (see Chapter 4), the cropmark camp at Gallaberry lies on level ground about 1km east of the River Nith and less than 3km south-east of the fort and camps at **Dalswinton**. The camp is a parallelogram in form, measuring 109m from south-west to north-east by 61m, enclosing 0.67ha (1.7 acres). An entrance gap

is visible in the south-west side and a further break can be seen in the south-east side, but this is not clearly an entrance. Excavations in 1939 by St Joseph recorded that the ditch was V-shaped, about 3.35m wide and 1.4m deep (Taylor 1940: 162; St Joseph 1952b: 120–2). The site overlies a probable Neolithic cursus monument and is close to a small prehistoric fort.

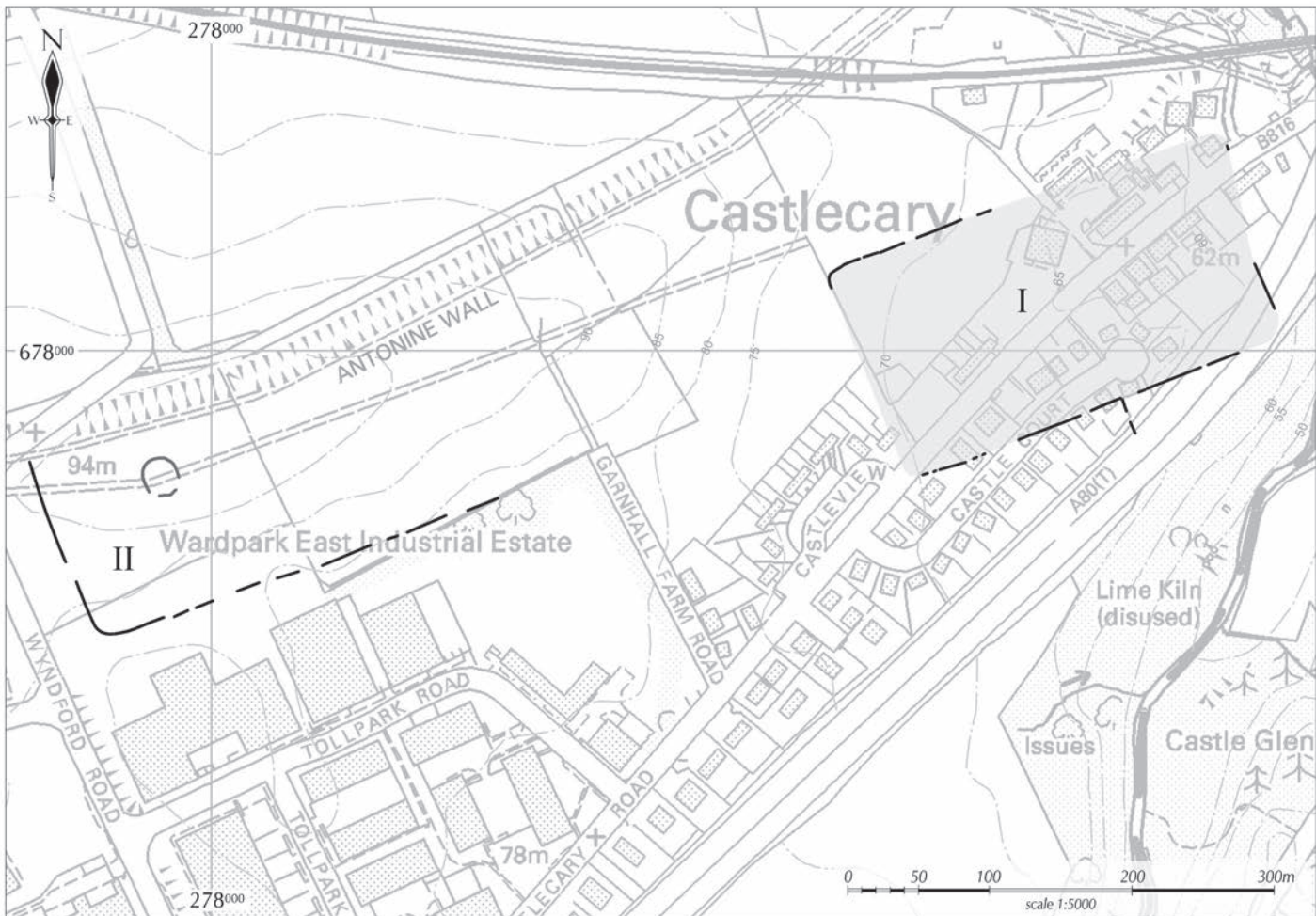


Illustration 133

Garnhall I-II and the Antonine Wall. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Garnhall (illus 47 & 133)

(Castlecary; Tollpark)

*Garnhall I: NS 7850 7803
NS 77 NE 14*

*Garnhall II: NS 7805 7791
NS 77 NE 30*

The remains of two camps at Garnhall were discovered from the air by St Joseph, the first in 1952, with a second, nearby, recognised as a camp in the early 1960s (St Joseph 1955: 86; 1965: 80). A third camp lies nearby at **Tollpark** (St Joseph 1951a: 62). The camps lie to the south of the Antonine Wall, between the forts of Castlecary and Westerwood, near the farm at Garnhall.

The ground on which both camps lie slopes gradually from west to east towards the Red Burn, across from which lies the fort of Castlecary. Both lie in areas of former agricultural fields now subject to considerable development, camp I on land formerly occupied by

Castlecary House, now the village of Castlecary; camp II in improved pasture with the Wardpark North and East Industrial Estates in the immediate vicinity. Both camps have been subject to recent excavation, the former through the gradual development of Castlecary Village; the latter in relation to a research programme looking at potential watchtowers on the Wall, because a circular enclosure is located inside the camp's perimeter (Woolliscroft 2009).

Camp I measures about 290m from ENE to WSW by around 160m transversely, enclosing an area of some 4.5ha (just over 11 acres), although the final size cannot

be determined with certainty, partly owing to problems with transcription of the cropmarks (as a result of major landscape changes since the aerial photographs were taken and the need to use less accurately geo-referenced earlier maps), and partly owing to the findings from excavations. An entrance gap has been located on the SSE side, east of centre.

Sections of the camp have been excavated on five occasions, mostly owing to the gradual development of the village. That in 1990 suggested that the south-west corner was farther west than had previously been supposed (Keppie 1990). The results of the various excavations demonstrated that the camp ditch had a fairly typical V-shaped profile, measuring, at best, 1.3m in width and up to 1m in depth (Keppie 1990) and had a single construction phase. A small ditch appears to run due SSE at right angles from the west side of the entrance gap on the SSE side. This was excavated in 1994 and appeared to be contemporary with the camp ditch, the excavator suggesting that it acted as a gully to aid drainage down the slope to the Red Burn (Speller 1994).

The rampart of the camp was not recorded in the excavations, although turves were present in an anaerobic area of ditch in 1994. This area was interpreted as being close to a springhead, causing the waterlogging. The excavator proposed that the presence of turves could be due to possible rampart repairs necessary following subsidence caused by the springhead. This hypothesis was used to argue for possible extended occupation of the camp as a construction camp (Speller 1994: 17). While this argument has much to commend it, the possibility remains that the turves could be present owing to natural erosion, and were preserved in this section because of the boggy conditions.

Camp II is situated some 500m west of camp I. Only parts of two sides, the SSE and WSW, are known of this camp, lying in the two fields west of Garnhall Farm. The SSE side measures at least 300m, and the WSW some

133m before reaching the Antonine Wall. The elongated shape of this camp and the location of shorter WSW side, running up to the Wall and crossing the Military Way, led St Joseph to suggest that the camp probably continued to the north and therefore pre-dated the Wall (1965: 80). No entrances have been located.

In the interior of the camp lies a circular enclosure, excavated in the 1990s and interpreted as a watchtower (Woolliscroft 2009). In addition, a small excavation trench was opened up on the west side of the camp ditch and demonstrated that the ditch was V-shaped, measuring 1.73m in width and 1.27m in depth with the hint of a slot at the base. A trench at the potential intersection of the camp with the Antonine Wall located a rounded butt end terminal that was stratigraphically later than a stone platform protruding south from the Wall. This stone platform itself was later than the initial building phase of the Wall, and was slightly damaged by the construction of the camp, but not then repaired, suggesting that the platform had gone out of use by the time the camp was constructed (Woolliscroft 2009). However, because the function of the platform is uncertain, it is not possible to assess whether the Wall itself was abandoned by the time the camp was constructed, and the possible intersection with the Military Way was not explored. A further trench north of the Wall failed to locate any evidence for the continuation of the camp ditch.

Therefore, camp II post-dates a feature that is secondary to the Wall construction and does not fit in with the series of construction camps for the Antonine Wall. If the camp post-dates the occupation of the Wall, then it could have utilised the rampart of the Wall as its north side although it still represents an unusually elongated shape for a camp. If it represents an enclosure for a body of troops while the Wall was in operation then this begs the question of why a ditch was required, rather than just demarcate the area necessary, because presumably the immediate vicinity south of the Wall was a secure area.

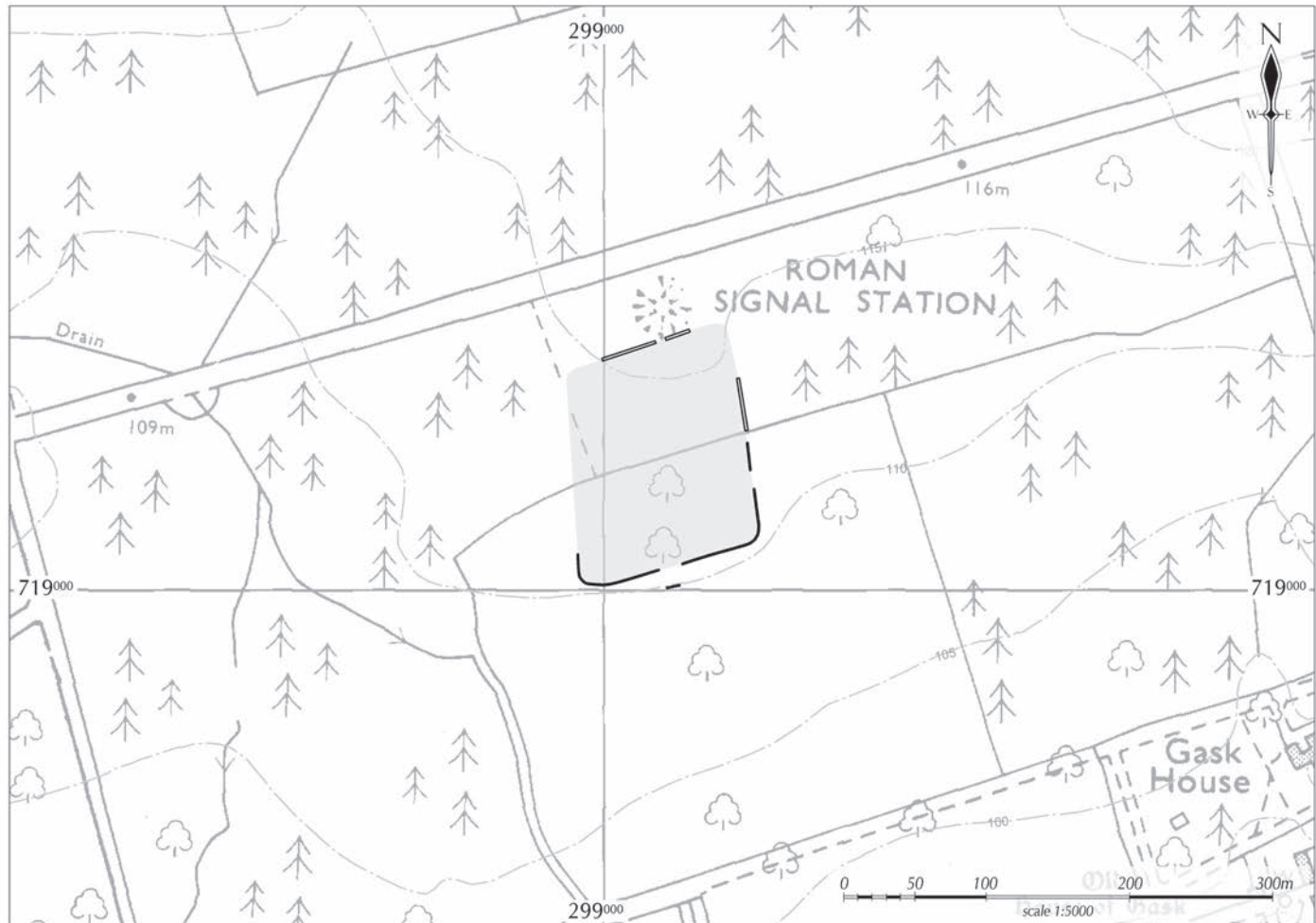


Illustration 134

Gask House and its adjacent signal station. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Gask House (illus 47 & 134)
(Gask Ridge)

NN 9905 1909 NN 91 NE 9

This camp on the Gask Ridge was first recorded in an anonymous manuscript (with plan) of 1789 (Christison 1901: 35–6). It lies immediately south of the Gask House watchtower on the Gask Roman road. Christison recorded slight traces of it on the surface, observing that the south part had been ploughed. He placed various trenches through the camp in his attempt to relocate it, noting the number of drainage ditches in the area. He recorded the ditch measuring only 0.9m in width and 0.45m in depth.

The camp was ‘rediscovered’ by St Joseph in 1960, with its northern part visible as a low earthwork in a

plantation belt, and the southern half revealed through cropmarkings (1965: 81–2). The camp measures about 152m from north to south by 129m transversely, enclosing almost 2ha (4.8 acres). The 1789 plan indicates that the camp had four entrances: in the centre of the north and south sides, and towards the north in the other two sides; all except the south are recorded with *tituli*. More recent air photographs reveal a *titulus* protecting this southern entrance. The counterscarp bank is still visible in places in the north half of the camp, measuring some 4m wide and 0.3m high.

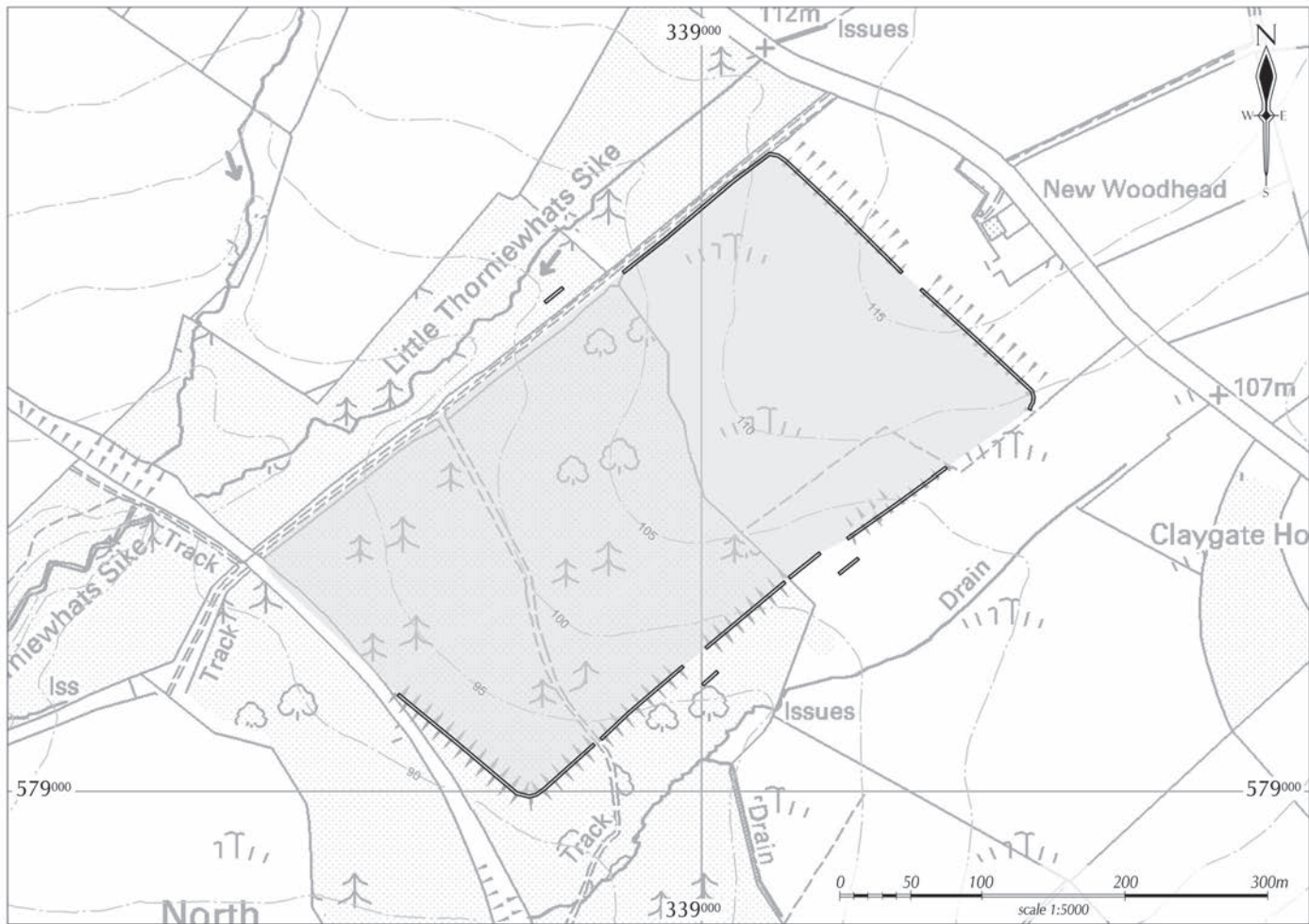


Illustration 135

Gilnockie. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Gilnockie (illus 47 & 135)

NY 3895 7922 NY 37 NE 2

This earthwork was depicted as a ‘camp’ on the 1st edition of the Ordnance Survey map (Dumfriesshire 1862: sheet liii) but was first properly recorded in 1912 by RCAHMS during field survey (1920: 27–8). It lies on a slope that faces south–west above the River Esk, about 2km south–east of the Roman fort at Broomholm. Stretches of the camp survive as an earthwork, partly in woodland, with a track occupying the line of the north–west side. A now dismantled railway line has destroyed part of its south–west side, and the camp measures 465m from south–west

to north–east by 251m transversely, enclosing 11.3ha (28 acres). Two *tituli* are visible in the south–east side and a further *titulus* in the north–west; the camp probably had six entrances.

The upstanding rampart survives to a height of about 1.1m and is spread some 6.5m wide. The accompanying ditch is shallow and about 5m wide. The *tituli* on the south–east side survive to a height of 1m above a shallow ditch, with their ramparts spread some 7m wide.

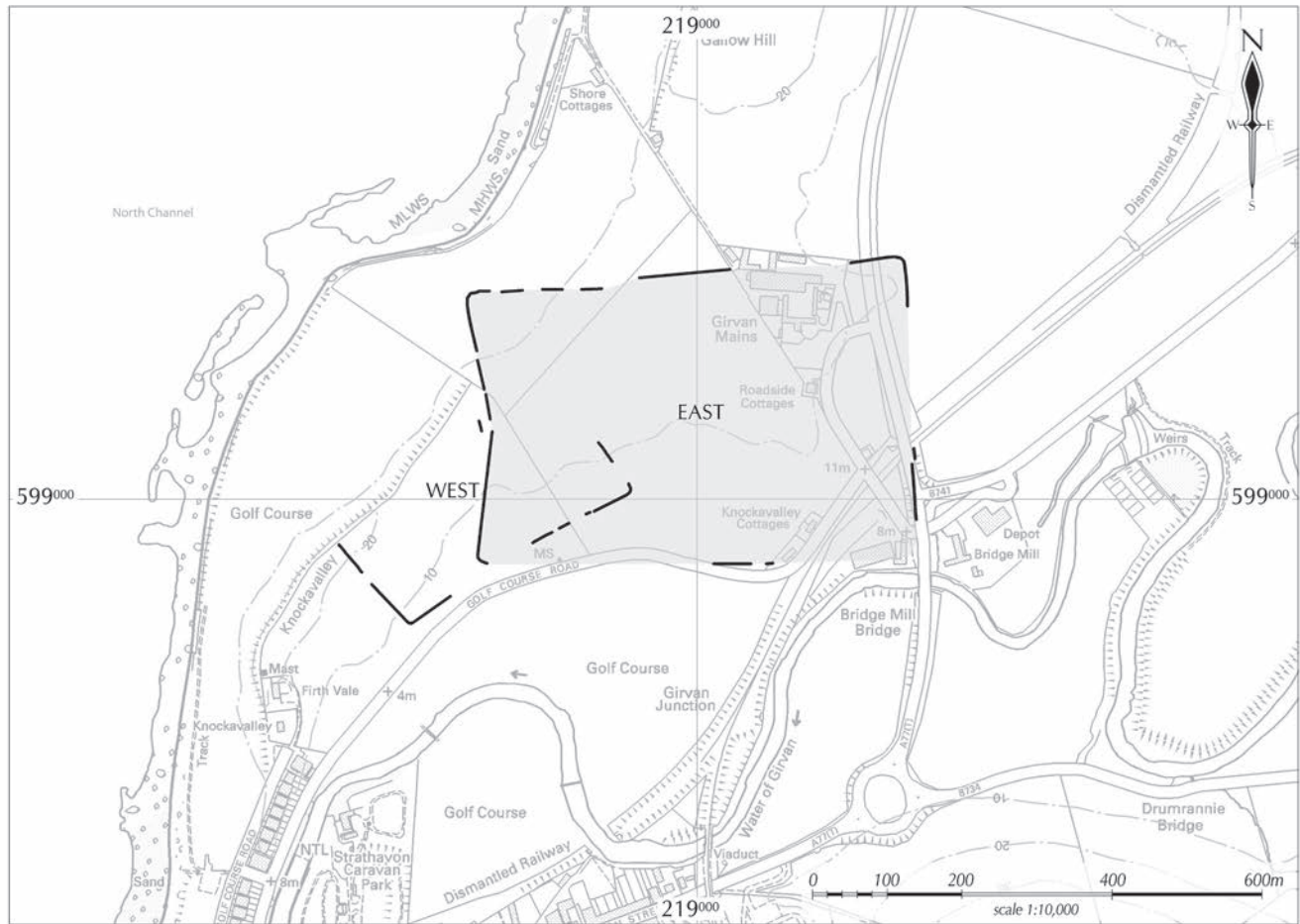


Illustration 136

Girvan Mains East and West. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Girvan Mains (illus 47 & 136)

*Girvan Mains East: NX 1900 9915
NX 19 NE 24*

*Girvan Mains West: NX 1870 9900
NX 19 NE 47*

On the north bank of the Water of Girvan, overlooking the North Channel, lie two intersecting camps recorded in the 1970s as cropmarks by Cambridge University (St Joseph 1978b; Maxwell & Wilson 1987: 34). The eastern of the two measures about 560m from west to east by 390m transversely and enclosed 22ha (54.5 acres). The western side bows inwards at its centre towards an entrance gap protected by a *titulus*. Various excavations and watching briefs have been conducted on the camp, and the ditch has been recorded as measuring up to 3.05m in width and 1.25m in depth (St Joseph 1978b: 397). St Joseph reported that he had recovered the north-west corner of the camp on excavation (Maxwell & Wilson 1987: 34–5; RCAHMS St Joseph Collection: DC37383), but this claim was

refuted when more of the camp was recorded from the air (Frere 1991: 230). It has been suggested that a gate lay at the position where the north-west corner was originally assumed to lie (Cox 1993).

West of this camp and intersecting it at its south-west corner lies a further camp, which measures 353m from south-west to north-east by at least 140m; the position of the north-west side is unknown. Alongside its neighbour, various excavations and watching briefs have been undertaken, and the excavated ditch of this camp has been recorded as measuring up to 1.37m in width and 1.06m in depth. A glass vessel dated to the late 1st century AD was recorded in the primary ditch fill of this camp (Maxwell & Wilson 1987: 34–5).



Illustration 137

Glenlochar I–V and possible camp VI and other cropmarks including the Roman fort and its annexes. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Glenlochar (illus 47, 54 & 137)

- | | |
|---|--|
| <i>Glenlochar I:</i> NX 7355 6495
NX 76 NW 3 | <i>Glenlochar IV:</i> NX 7355 6505
NX 76 NW 4 |
| <i>Glenlochar II:</i> NX 7382 6470
NX 76 SW 6 | <i>Glenlochar V:</i> NX 7390 6424
NX 76 SW 5 |
| <i>Glenlochar III:</i> NX 7360 6507
NX 76 NW 3 | |

A series of camps has been recorded outside the Roman fort at Glenlochar on the east bank of the River Dee, all discovered as cropmarks by St Joseph in 1949 (1951a:

60–1). Excavations at the fort have identified three phases: one Flavian and two Antonine, with a further earlier Flavian (Agricolan) fort suspected just to the

north of the main fort site (Richmond & St Joseph 1953).

At least five camps are known at Glenlochar, one (V) exhibiting an annexe with an internal partition. St Joseph recorded a further possible two-phase camp in the interior of camp I (Glenlochar VI, see St Joseph 1958: 89; RCAHMS St Joseph Collection: DC 37387–8; and below, possible camps), but this enclosure is probably not Roman in origin.

Camp I lies to the north of the fort and measures 260m from WSW to ENE by 238m transversely, enclosing 6ha (almost 15 acres). No clear entrance gaps have been recorded. It intersects camps III and IV and therefore could not have been contemporary with either of these camps, and is extremely close to the perimeter of camp II.

Camp II lies south-east of camp I, immediately ENE of the fort. It measures 355m from WSW to ENE by 294m, enclosing 10.2ha (25 acres). A short length of linear cropmark north of the NNW side may be the remains of a *titulus*. The course of the Roman road cuts through the northern portion of the camp and a number of quarry pits can be seen in this area. A number of other pits are visible in the interior of the camp, but they do not seem to have much regularity in their structure.

Camp III lies to the north of camp I, and intersects both this camp and camp IV, although the relationship between the three is unknown. Only parts of two sides have been recorded, at least 150m of the WSW

side, a rounded southern corner angle and at least 85m of the SSE side. Visible in the interior of the camp is a ring-ditch, which is possibly the remains of a Roman tower.

Camp IV lies to the west of camp III. Only parts of two sides of this camp are known, intersecting camps I and III, and running parallel just inside the NNW side of camp I.

Some 345m of the SSE side has been recorded, together with at least 85m of the WSW side.

To the south of the group of camps lies camp V, south-east of the fort. Measuring 434m from ENE to WSW by almost 300m, it enclosed 12.9ha (almost 32 acres). Possible entrance gaps are visible in the perimeter but none confirmed. An annexe is attached to its NNW side, measuring some 229m by 78m and enclosing an additional 1.74ha (4.3 acres). This has an internal partition, dividing the internal area to 1.2ha (3 acres) and 0.54ha (1.3 acres) areas. There are a couple of linear cropmarks within the camp but none appears to represent a reduction in the camp, and it is possible that the linear cropmark in the annexe was demarcating different activities in the annexe rather than two phases of use. Alternatively, the cropmark may not be Roman in date, and may represent later use of the annexe enclosure. This camp exhibits a considerable amount of pits in the interior (see section 7f), and more pits are visible in the area between it and the fort.

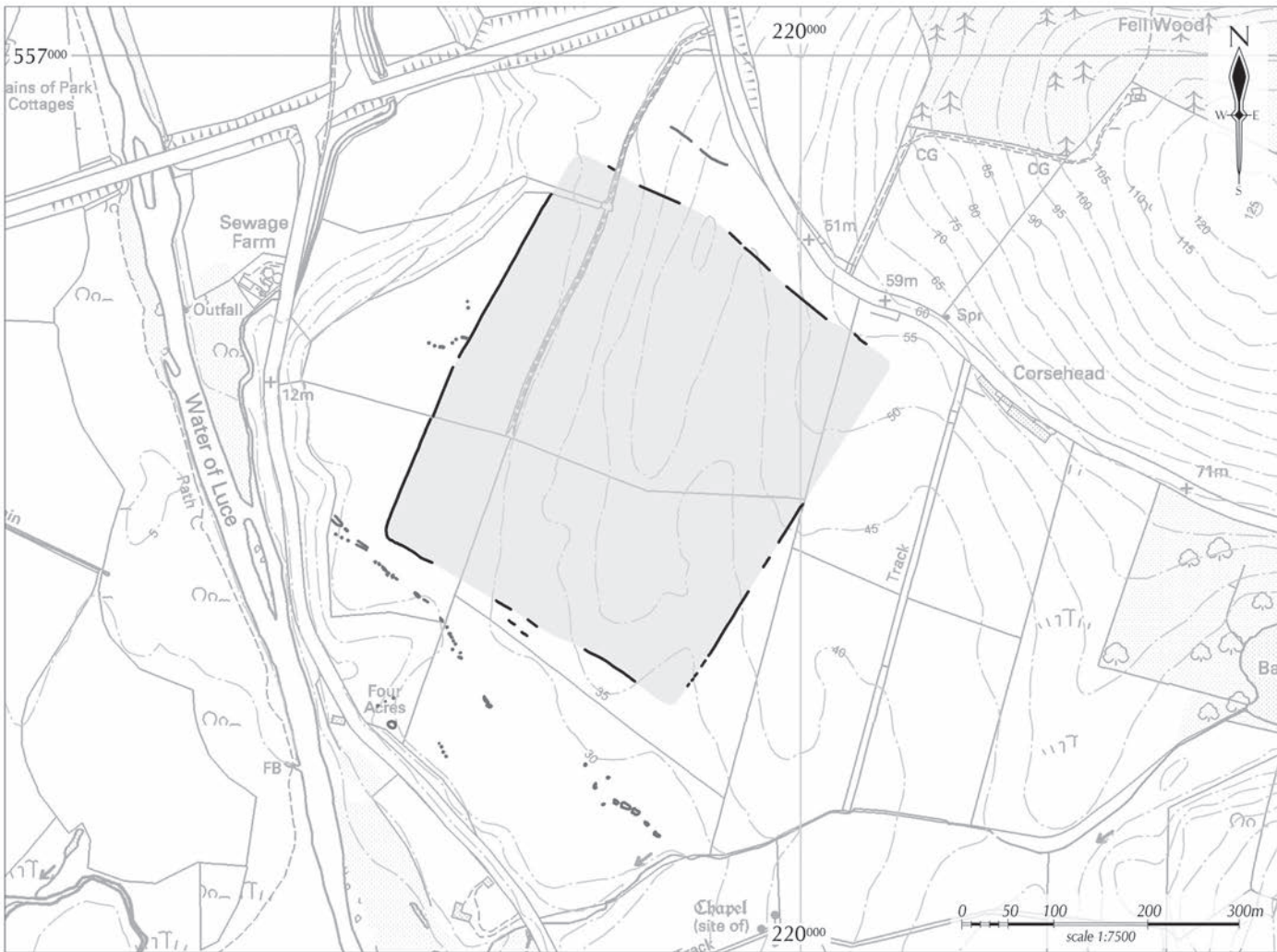


Illustration 138

Glenluce. The quarry pits of the Roman road run along the south-west side of the camp. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Glenluce (illus 20, 47 & 138)

NX 1985 5665 NX 15 NE 72

First recorded through cropmarks in 1992 by RCAHMS, the camp at Glenluce lies on sloping ground east of the Water of Luce, close to its confluence with the Solway Firth at Luce Sands. It lies immediately north of the Roman road from Glenlochar to Loch Ryan, evidenced

by the cropmarkings of quarry pits. The camp is slightly irregular in form, but measures about 465m from north-east to south-west by almost 400m transversely, enclosing 17.9ha (44 acres). An entrance gap protected by a *titulus* is visible in the south-west side.

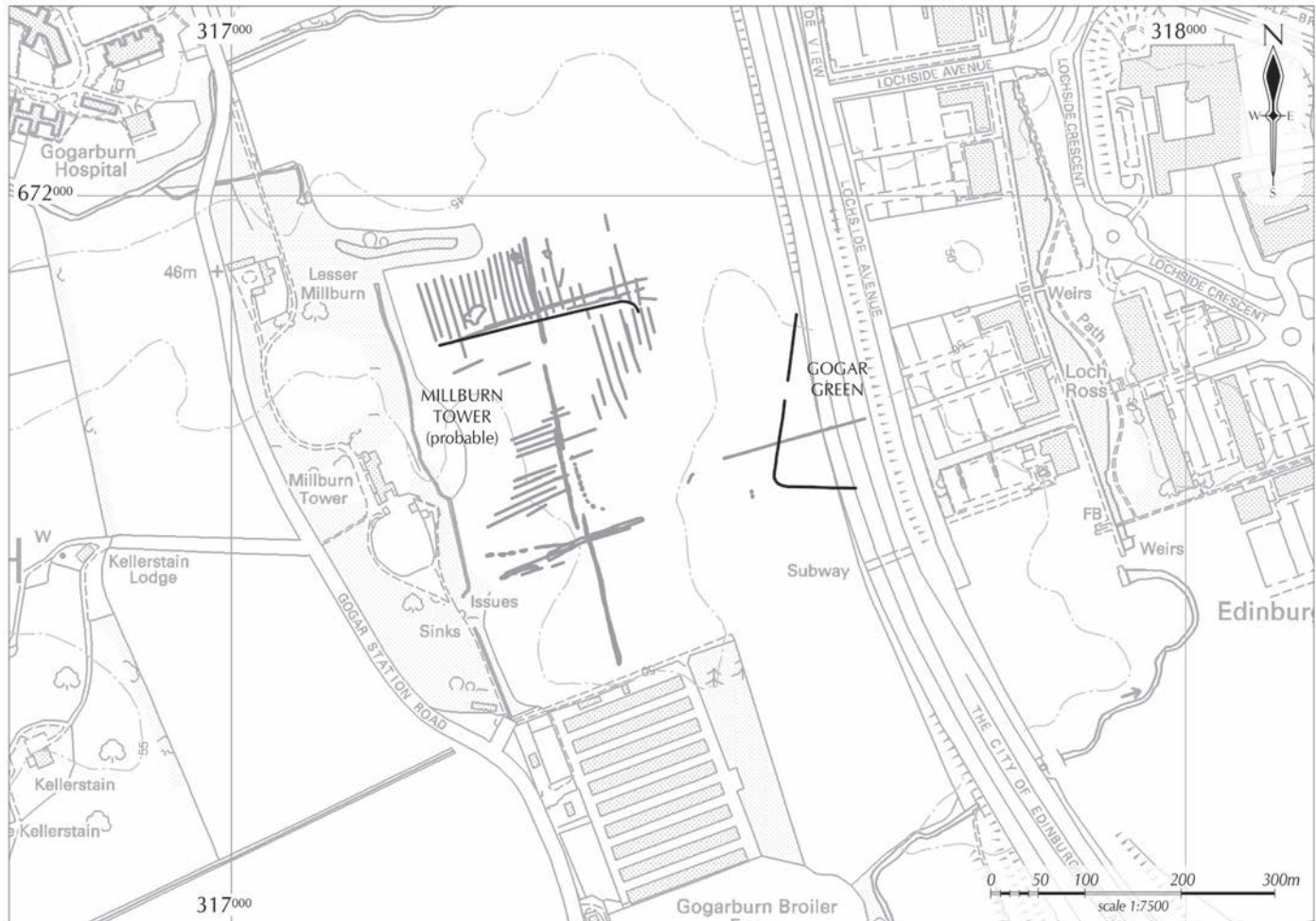


Illustration 139

Gogar Green and Millburn Tower (probable) and other cropmarks in the area. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Gogar Green (illus 139)

(Millburn Tower II)

NT 1765 7175 NT 17 SE 24

First recorded from the air in 1980, together with the probable camp at Millburn Tower (Maxwell & Wilson 1987: 38–9), only stretches of two sides of this camp have been recorded as cropmarks immediately west of the Edinburgh city bypass. The air photographs show only some 175m of the WNW side and *c* 85m of the south. Maxwell noted that more of the camp was recorded by aerial photography (Rankov 1982: 340), but this could not be confirmed through the available images. Following excavations, the camp was recorded as measuring 300m from north to south by *c* 250m (Frere 1985a: 265), thereby

suggesting that some 7.5ha (18.5 acres) were enclosed. A possible entrance gap is visible in the cropmark of the WNW side.

Maxwell recorded that the ditch was extremely slight, just over 1m wide and 0.5m deep (Maxwell & Wilson 1987: 39), although it was deeper and wider with a vertical channel at the bottom on the north side. Three small sherds of Roman coarseware were found (Maxwell 1984a; Frere 1985a: 265). Most of the camp has probably been destroyed by the A720 Edinburgh city bypass and the modern Edinburgh Park development.

GAZETTEER: KNOWN ROMAN CAMPS



Illustration 140

Grassy Walls and Scone Park. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Grassy Walls (illus 46, 47 & 140)

(Grassy Well)

NO 1050 2800 NO 12 NW 8

The camp at Grassy Walls was first planned by Roy in 1771 (1793: Pl. XII), and was also recorded and planned, not as accurately, by the Rector of Perth Grammar School (J McOmie) in 1778 (Callender 1919: 141). However, by the 1850s, the Ordnance Survey were able to record only the site location on the 1st-edition map because the surrounding landscape had changed quite dramatically and the farm of Grassy Wells had vanished (Perthshire 1867: sheet lxxxvi). Callender noted some remains of the north part of the camp in Drumshogle Wood and Donald's Bank on the ground in 1917 (Callender 1919: 138ff); Crawford also noted the upstanding remains in Drumshogle Wood (1949: 64–7), having recorded the site from the air (1930: 276).

The camp lies on undulating ground on the east side of the River Tay, north of Perth, and across the river from the Roman fort of Bertha. The camp of **Scone Park** lies only 300m to the south. The northern part of the west side of the camp lies along the mound known as Donald's Bank, and from this point the ground drops away steeply to the river. The ground also drops away through Sheriffston Wood in the southern part of the camp.

Parts of all four sides are visible as cropmarks or earthworks, and the camp measures around 790m from north to south by about 700m transversely, enclosing 55.5ha (137 acres). Gates protected by *tituli* are visible in the centre of the north side and in the northern half of the east side; at both entrances the camp bows inwards. In Drumshogle Wood, the camp rampart survives as a low mound about 6m in width and up to 0.6m in height above an external ditch, which measures some 3m in width.

Crawford produced a map of the camp from the available evidence (1949: fig. 13), including a pronounced south-east corner, south of Sheriffston Wood. This was recorded as a cropmark on a photograph taken by Bradley in 1941 (1949: Pl. XI). A similar photograph was also taken by Bradley in 1943. Although the protruding corner is not stranger than the north-east corner at **Raedykes**, other similar marks in the same field raise questions over the Roman attribution of the feature (and it is not included in illus 140).

There are no recorded excavations in the camp, but a stray Roman coin, probably Trajanic, was recovered from the interior in 1907 (Macdonald 1918: 232–3).

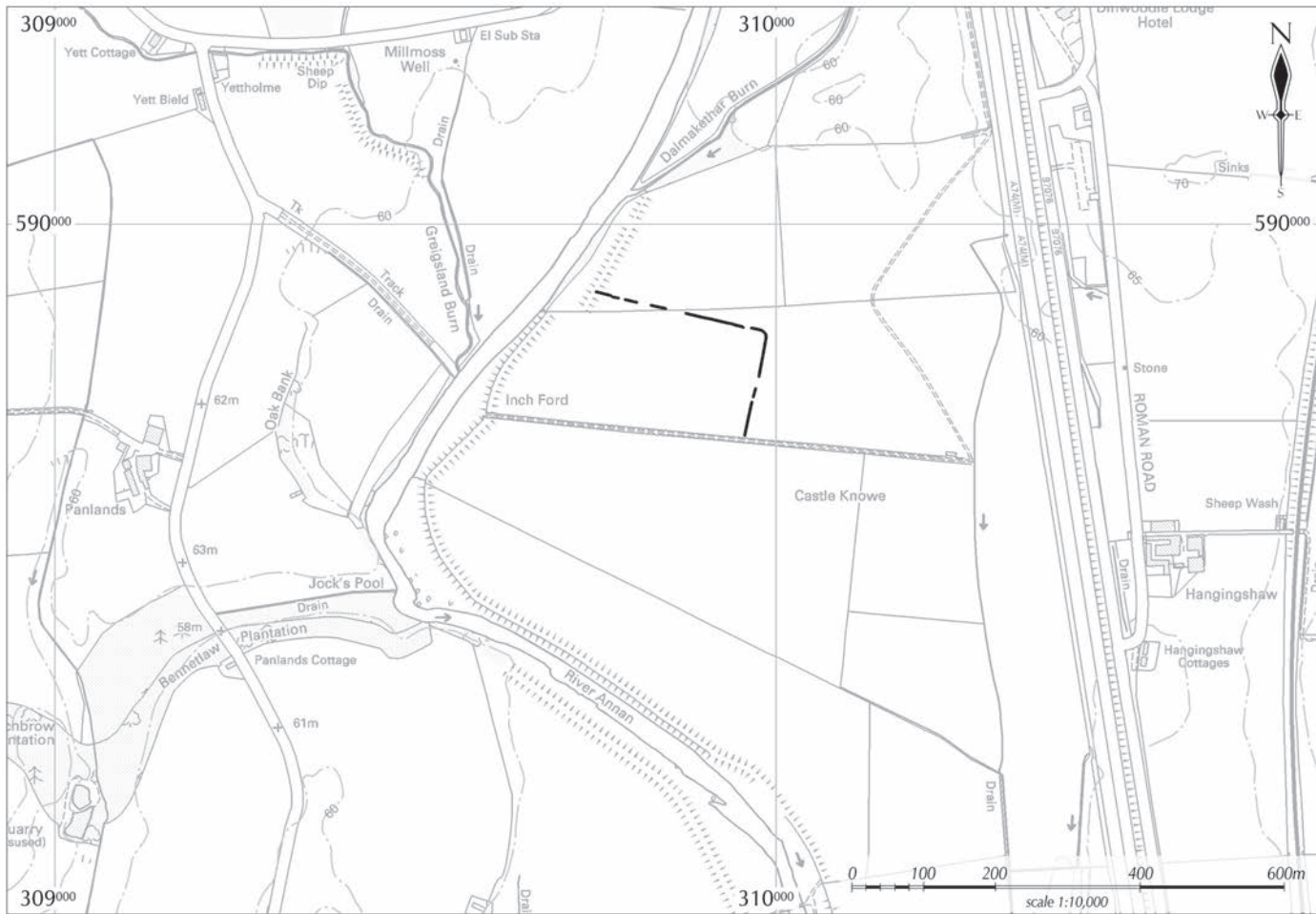


Illustration 141

Hangingshaw. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Hangingshaw (illus 141)

(Dinwoodie; Applegarth)

NY 0979 8975 NY 08 NE 12

Discovered in 1969 by St Joseph from the air on level ground on the east side of a bend in the River Annan, the camp at Hangingshaw lies close to the Annandale Roman road. Parts of two sides have been recorded through cropmarks: at least 245m of the NNE side together with

a rounded eastern angle and 150m of the ESE side. Given the position of the river, the camp is unlikely to measure more than about 250m from WNW to ESE. No entrances are known.

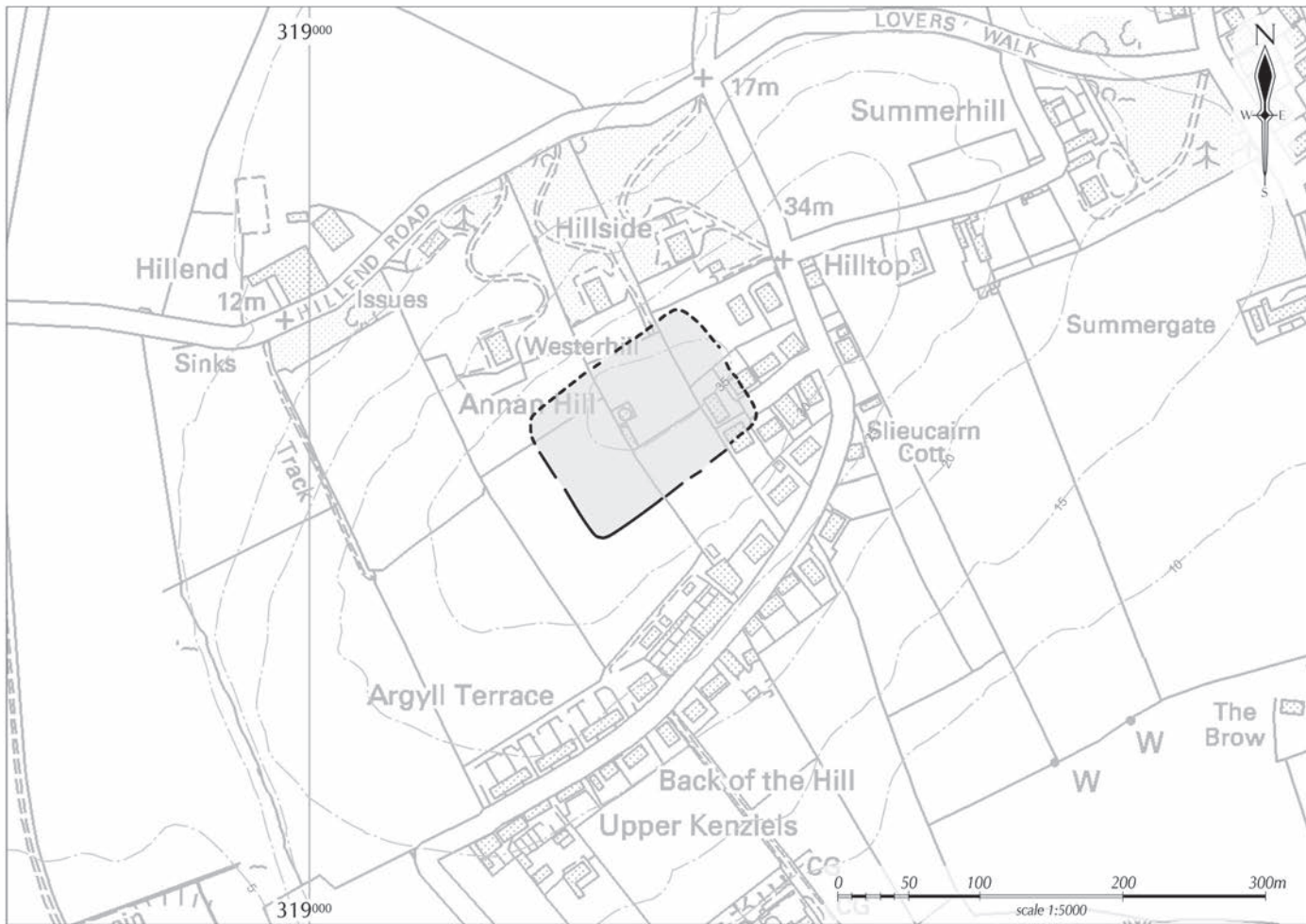


Illustration 142

Hillside Annan. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Hillside Annan (illus 47 & 142)

(Annan Hill)

NY 1925 6547 NY 16 NE 6

First recorded in 1958 by St Joseph as cropmarks, this camp lies on the summit of a small hill to the east of the River Annan, close to its confluence with the Solway Firth, just over 1km east of the camp at **Annanfoot**. Stretches of two sides of the camp have been recorded, the remainder having been located during excavations (illustration 142 takes into account these results (Keppie 1988)). It is believed to measure 146m from north-east to south-west by about 100m transversely, enclosing about 1.4ha (3.6 acres). An entrance gap in the south-west side is visible on the air photographs, and a further gap on the north-east side has been identified through

excavation. Trenches on the ditch in 1966 recorded that it was about 1.5m wide and 0.9m deep (Gibbs 1966), but later excavations revealed that it was up to 2.2m wide and 1.1m deep in places with a counterscarp bank some 1.3m wide and up to 0.3m high (Keppie 1988: 15–16). A further 18m of V-shaped ditch was recovered during a watching brief in 2002; this measured around 1.75m in width and 0.6m in depth (Brann 2002: 5; 2003). Light cobbling and post-holes/post-hole depressions were identified in the interior of the camp (Keppie 1988: 16; Brann 2003). A Roman glass-paste melon bead was recorded, unstratified, from the 1985 excavations (Keppie 1988: 16).

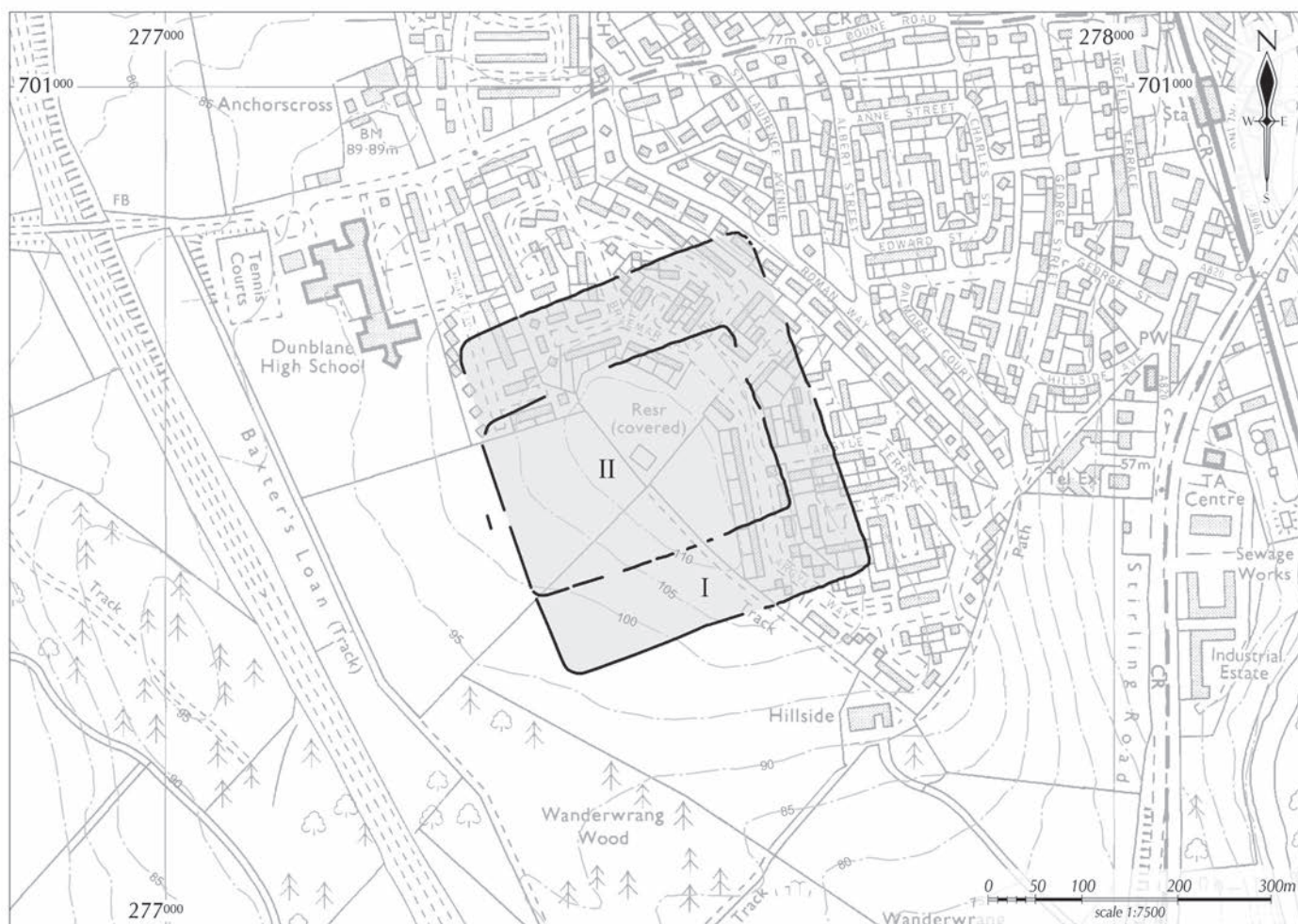


Illustration 143

Hillside Dunblane I-II. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Hillside Dunblane (illus 47 & 143)

(Hillside Farm)

*Hillside Dunblane I: NN 7755 0059
NN 70 SE 11*

*Hillside Dunblane II: NN 775 005
NN 70 SE 11*

Discovered in 1945 by St Joseph from the air (1951b), the majority of the two camps at Dunblane is now covered by housing. They are sited on the crest of a hill about 500m west of the Allan Water. Camp I, the outer and larger of the two, measures 376m from NNW to SSE by 345m transversely and enclosed 12.9ha (almost 32 acres). Probable entrance gaps have been visible in the cropmark record on all four sides; that on the WSW side is protected by a *titulus*. The second camp sits within the first, sharing part of its WSW side (and entrance with *titulus*). This camp measured 289m from ENE to WSW by 198m and enclosed 5.9ha (14.5 acres). St Joseph

recorded that this camp possessed a *titulus* on its north-east side (1951b), but this could not be confirmed on the available air photographs at Cambridge and RCAHMS, nor was it located through trenching by Robertson (1969: 35).

Excavations in the 1960s recorded that the ditch of both camps was rock-cut in places, and that of camp I measured about 0.9m deep and 1.8m wide. Later excavations recorded that the ditch on the WSW of camp I was V-shaped, and measured up to 2m in width and 0.6m in depth. The entrance on this side was probably originally 12m wide but was reduced to 5m in its second phase. The

titulus was set 10m from the entrance and measured 3.2m in length, 1.8m in width and 0.34m in depth (Mackenzie 1995; Keppie 1996a: 398).

Robertson proposed contemporary occupation of the two camps (1969: 36), but the suggestion of the later excavations that the entrance on the west side was reduced in its second phase of use argues against this theory (Mackenzie 1995; Keppie 1996a: 398). A possible

post-hole was recorded close to the south-east entrance of camp II (Robertson 1969: 36). The NNW and SSE ditches of this camp do not appear to completely join up with the WSW side of camp I, and this was confirmed by excavation (Robertson 1969: 36). While this may represent some of the space left by the presumably upstanding rampart of camp I, it is curious that the ditches do not join.

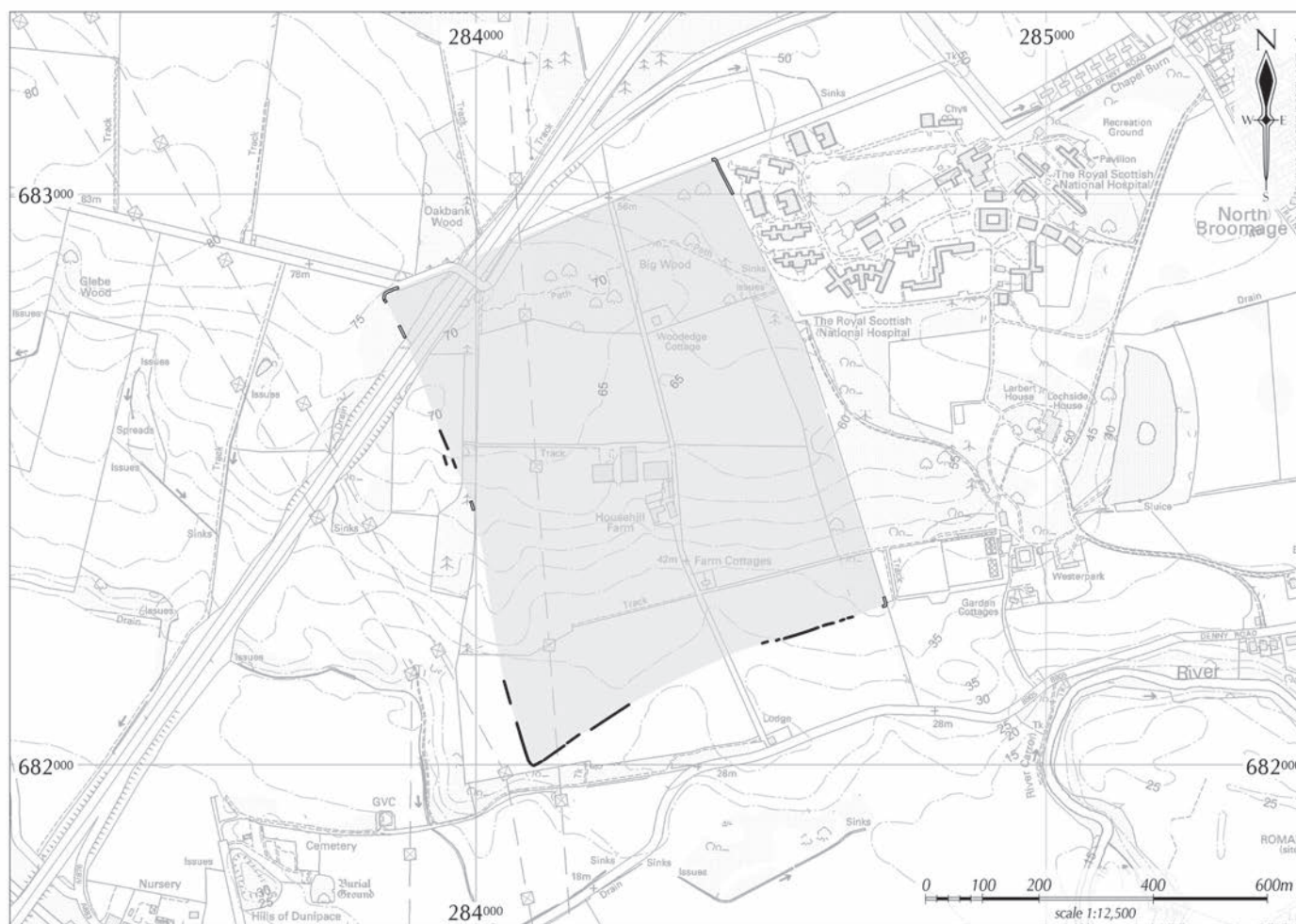


Illustration 144

Househill Dunipace. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Househill Dunipace (illus 47 & 144)

(Dunipace)

NS 8430 8252 NS 88 SW 9

The large camp at Househill Dunipace lies on undulating ground on the north side of the River Carron, some 600m north-west of the concentration of camps at **Lochlands**, just north of the Antonine Wall. Part of the camp survives in earthwork form, with further stretches of two sides recorded as cropmarks. The north-western corner was first surveyed as 'indeterminate remains' by RCAHMS in 1954 (RCAHMS 1963: 446 No. 580). Cropmarks recorded during aerial survey in the 1980s led to the various pieces being put together and interpreted as a camp by Maxwell in 1988 (Frere 1989: 312). The camp measures just over 800m from NNW to SSE by almost 650m transversely and enclosed around

54ha (134 acres). An entrance gap with *titulus* is visible in the cropmarks of the WSW side. Parts of the north-west, north-east and south-east corners survive as slight earthworks in woodland, along with a short stretch of the WSW side (Frere 1989: 271; Frere 1991: 230). The west corner rampart survives to a height of 0.9m and is spread 5.4m wide (RCAHMS 1963: 446). Its original width may have been some 5m set on a clay footing (Aitchison 1981). Excavations on the ditch by Maxwell & St Joseph recorded that it measured up to 4.5m in width and 1.5m in depth (Frere 1988: 427)

Owing to its large size, this camp is usually regarded as Severan in date (Maxwell 1991: 111–12), although

small trial trenches on the site have not produced any dating evidence. However, if the camp was struck when the nearby Flavian and Antonine forts at Camelon were

occupied, then it is curious that it was not located south of the river on the **Lochlands** promontory, closer to the fort.

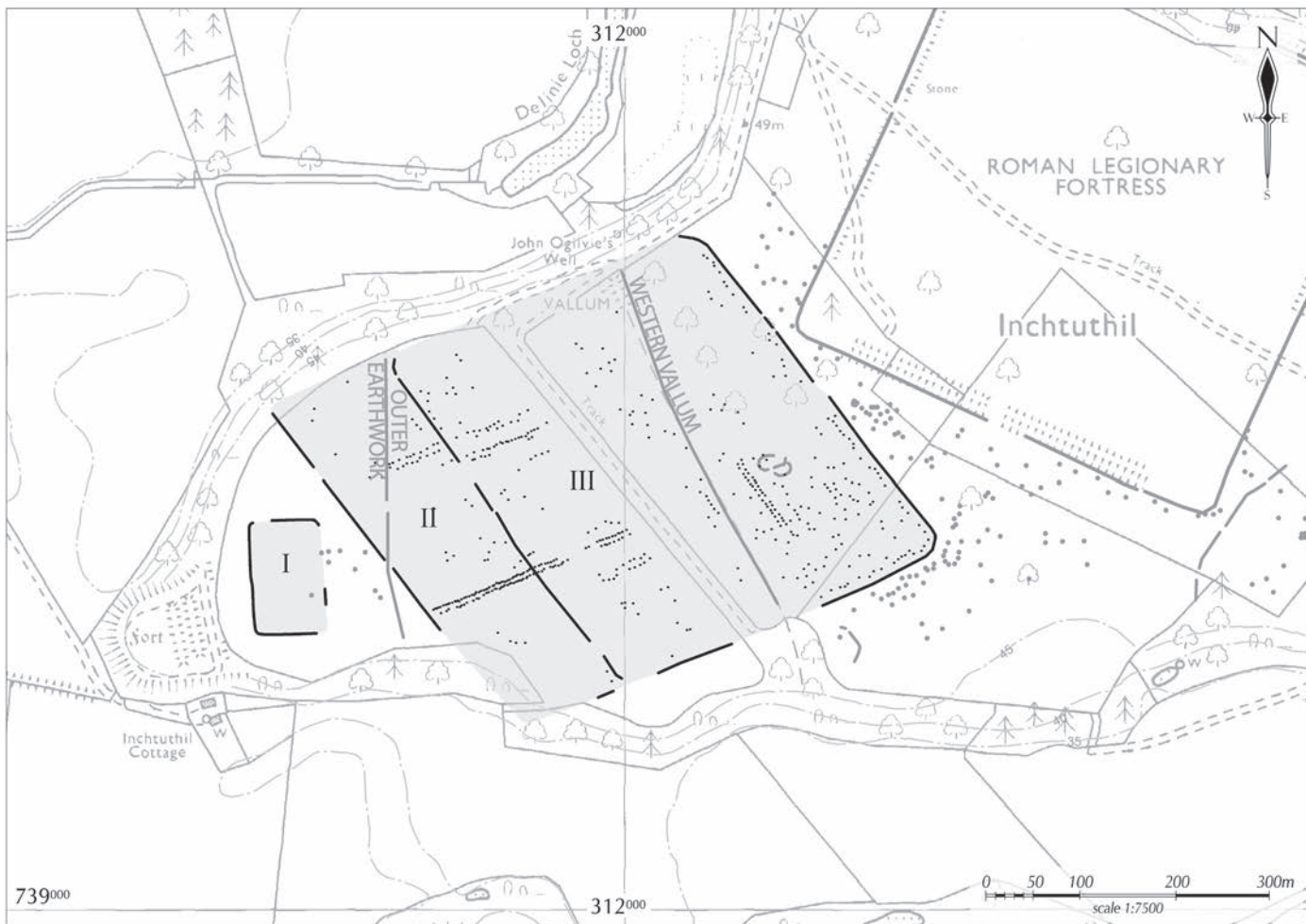


Illustration 145

Inchtuthil I-III and selected other cropmarks and earthworks in the area including the Roman fortress, the 'western vallum', the 'outer masking earthwork' and numerous pits across the plateau. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Inchtuthil (illus 52, 47, 145 & 146)
(Inchtuthill; Inchtuthil labour camp)

Inchtuthil I: NO 1165 3934 *Inchtuthil III:* NO 1198 3945
NO 13 NW 5.2 NO 13 NW 5.1

Inchtuthil II: NO 1198 3945
NO 13 NW 5.1

The Roman fortress and camps at Inchtuthil are situated on a plateau on the north side of the River Tay. The forts at Cargill lie some 4.5km to the ESE and the

camp at **Steeds Stalls** some 3km to the NNW. The Cleaven Dyke, long believed to be a Roman earthwork but now recognised as a Neolithic cursus monu-

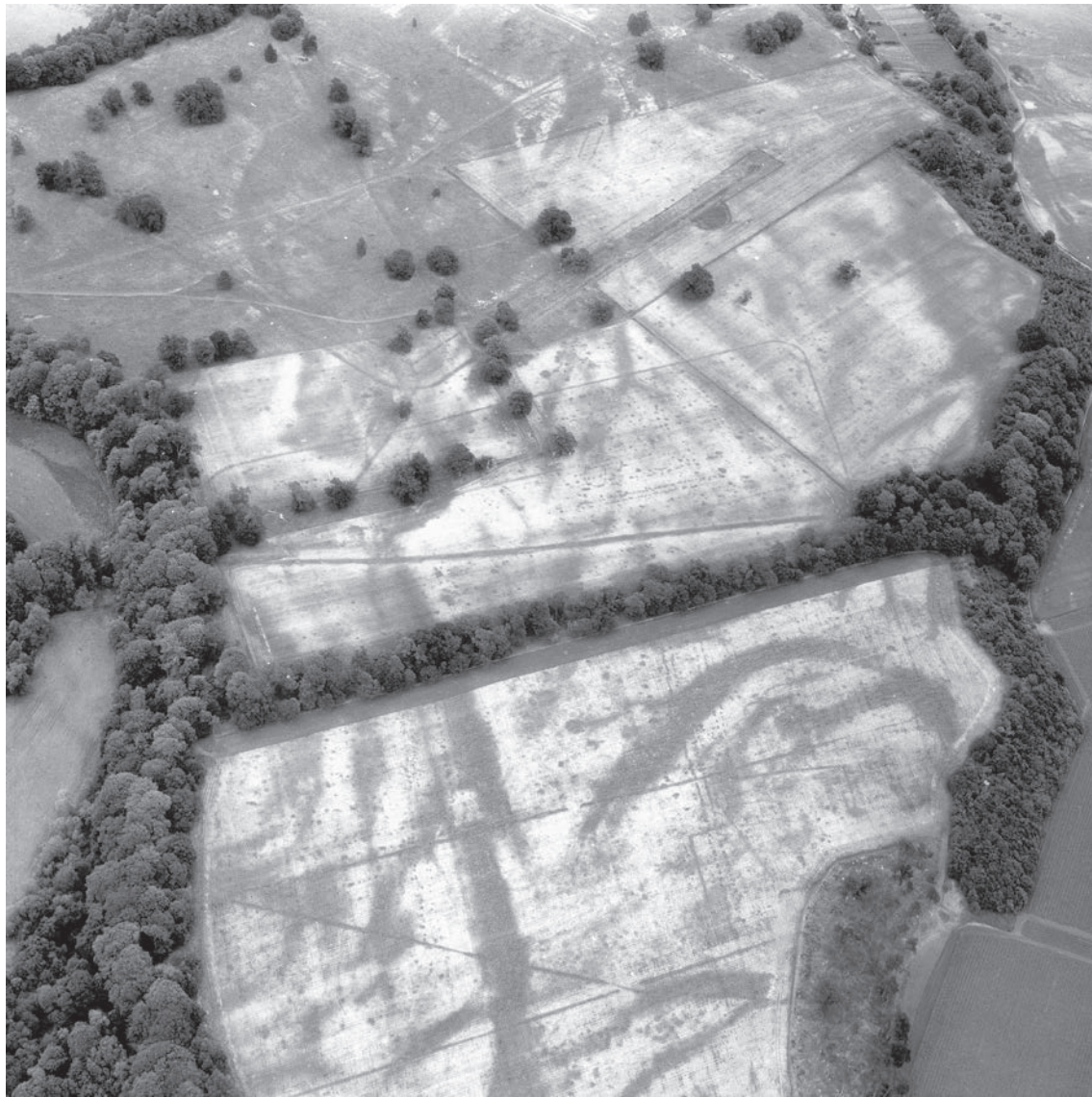


Illustration 146

Aerial view of Inchtuthil II–III with adjacent fortress, showing the ‘western vallum’ and ‘outer masking earthwork’, taken from the west in 1977.
 © Crown copyright: RCAHMS. SC958608. Licensor www.rcahms.gov.uk.

ment, lies about 4km to the east (Barclay & Maxwell 1998: 13–22).

The existence of the fortress on the plateau has long been known (eg, Roy 1793: Pl. XVIII), but the camps (II and III) known only through cropmarks on air photographs from the 1950s (St Joseph 1958: 91) (although photographs taken from 1945 onwards reveal elements of the camps (Pitts & St Joseph 1985: 223)). Camp I, situated at the western end of the plateau, was also recorded through cropmarks in the 1960s (St Joseph 1965: 82–3). The camps have more recently received attention, predominantly owing to the pits visible in the interior of ‘labour’ camps II and III (eg Hanson 1978a: 142; Maxwell

1981: 52–3; Maxwell 1982a; Wilson 1984: 55–7; Pitts & St Joseph 1985: 223–44; RCAHMS 1994: 77–82).

Camp I lies at the far west end of the plateau, immediately east of a promontory fort that has been proposed as post-Roman in date (Pitts & St Joseph 1985: 248). It has received little attention in comparison with the other two camps to the east, and it receives fairly brief mention in the *Inchtuthil* volume (Pitts & St Joseph 1985: 243, figs. 1 & 2). It measures about 119m from north to south by 75m transversely, enclosing 0.9ha (2.2 acres). No entrances are visible although only part of the east side has been recorded from the air (and recent geophysical survey failed to locate this east side, Hoffmann & Woolliscroft

pers comm). Enough survives of the north and south ends to indicate that these had no central entrance gap.

Excavations on the ditch of the camp have been recorded in two sources but with differing dimensions: in a summary article, St Joseph noted that the ditch was ‘barely 4 ft wide by 2 ft deep’ (1965, 83), but in the *Inchtuthil* monograph he records that the ditch was ‘only 5 ft wide and 2 ft. 10 in. deep’ (Pitts & St Joseph 1985: 225). It is unclear how many trenches were placed, with just a single section of the west side drawn (Pitts & St Joseph 1985: fig 70). Thus it appears that the camp ditch measured 1.2–1.5m in width and 0.6–0.86m in depth.

Camps II and III are the so-called ‘labour camps’ situated immediately west of the Roman fortress. Camp II occupies the space between camp I and the fortress, and camp III is a reduction of camp II, represented by an additional ditch on its south-west side. Camp II is almost a parallelogram in form, measuring 480m from WSW to ENE by 425m transversely, enclosing 19.8ha (49 acres). Camp III reduces the WSW to ENE dimension to 355m, with the area enclosed 14.8ha (36.6 acres). A plantation bisects the camps from north-west to south-east, and parts of the NNW side and south corner are also under trees. St Joseph placed trenches on the NNW side to determine its course through the plantation. These trenches recorded that the ditch averaged 2.7m in width and 0.76m in depth (Pitts & St Joseph 1985: 225, fig 69). Trenches determined the locations of entrance gaps in the NNW and SSE sides; an entrance gap is clearly visible close to the centre of the ENE side, and gaps are visible close to the centres of the WSW sides of both camps II and III. Further trenches were excavated on the ENE and the WSW sides (Pitts & St Joseph 1985: fig 70).

Numerous pits are visible within and outwith these camps. A series of pits runs parallel to the ENE side and the eastern part of the SSE side, and these have been interpreted as possible ovens. Rows of pits are also visible in the south-east part of the camps, and in the western part, west of the plantation strip. Nine pits in this latter area were excavated and interpreted as rubbish pits related to rows of tents. These have been used ingeniously to interpret the potential garrisons of the camps (Maxwell 1982a; Frere 1985c; Jones 2006).

Two other features are visible crossing camps II and III: the ‘Outer Masking Earthwork’ and the ‘Western Vallum’ (illus 146). The former is a line of ditch which seemingly demarcates the western part of the plateau, running almost north to south from the west corner of camp III through the entrance gap on the WSW side of camp II, at which point it turns slightly to the SSE. A trench through this feature revealed a V-shaped ditch measuring 1.93m in width and 0.63m in depth. Pitts & St Joseph believed that this was contemporary with the occupation of camp III (1985: 244–5), but RCAHMS preferred to see it as a further feature associated with the ‘Western Vallum’ (RCAHMS 1994: 81–2). This is an earthwork running NNW to SSE with a change of alignment part-way along, running through the eastern part of camps II and III, with the rampart overlying the ditch of the SSE side of the camps, and accompanying ditch running through the entrance gap on this side (Pitts & St Joseph 1985: 245). This feature was visible in Roy’s day (1793: Pl. XVIII) and is still visible as a slight earthwork. The excavated section indicated that the rampart was 0.68m in height (made of turf cheeks on a gravel core) and 6.7m in width. The ditch on the west side was V-shaped, 5.18m in width and 1.68m in depth. It is therefore later than the occupation of camps II and III (Pitts & St Joseph 1985: 245, fig 3).

There are no entrances visible in either earthwork, suggesting that the intention was to close off the plateau, either in succession (the ‘Outer Masking Earthwork’ being built before the ‘Western Vallum’) or contemporaneously. Some of the pits spread across the plateau may relate to occupation within these earthworks, which may demarcate areas for settlement and other forms of activity. Whichever scenario was the case, it is also probable that camp I predated the construction of either earthwork, because these would have blocked access from this camp to the rest of the plateau. Frere commented that the camp had the appearance of a late arrival encamped on the only available ground, possibly for a separate auxiliary force, perhaps an *ala*. He dismissed the suggestion that the camp could represent a reconnaissance force on the plateau (Frere 1985c: 243). However, it is sited on the highest point, the best location for survey, and this proposal remains entirely plausible (see above, section 7e).



Illustration 147

Innerleithen and other cropmarks in the area. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Innerleithen (illus 47 & 147)

NT 3290 3612 NT 33 NW 21

This camp, lying on a terrace on the north bank of the River Tweed and the south side of Innerleithen, was first observed through cropmarks in 1949 by St Joseph from the air (1951a: 57). Parts of three sides have been recorded, and it measured 506m from west to east by at least 245m. There is an obvious break in the west side, presumably for an entrance. If this is in the centre of the side, then the north

to south measurement could be up to 385m (assuming that the course of the Tweed may have lain further to the south in antiquity) and the camp could enclose some 19.7ha (49.7 acres). A probable double-ditched settlement intersects its eastern side. Evaluation and watching briefs at the cemetery within the camp recorded no internal features (Hastie 2002; 2003).

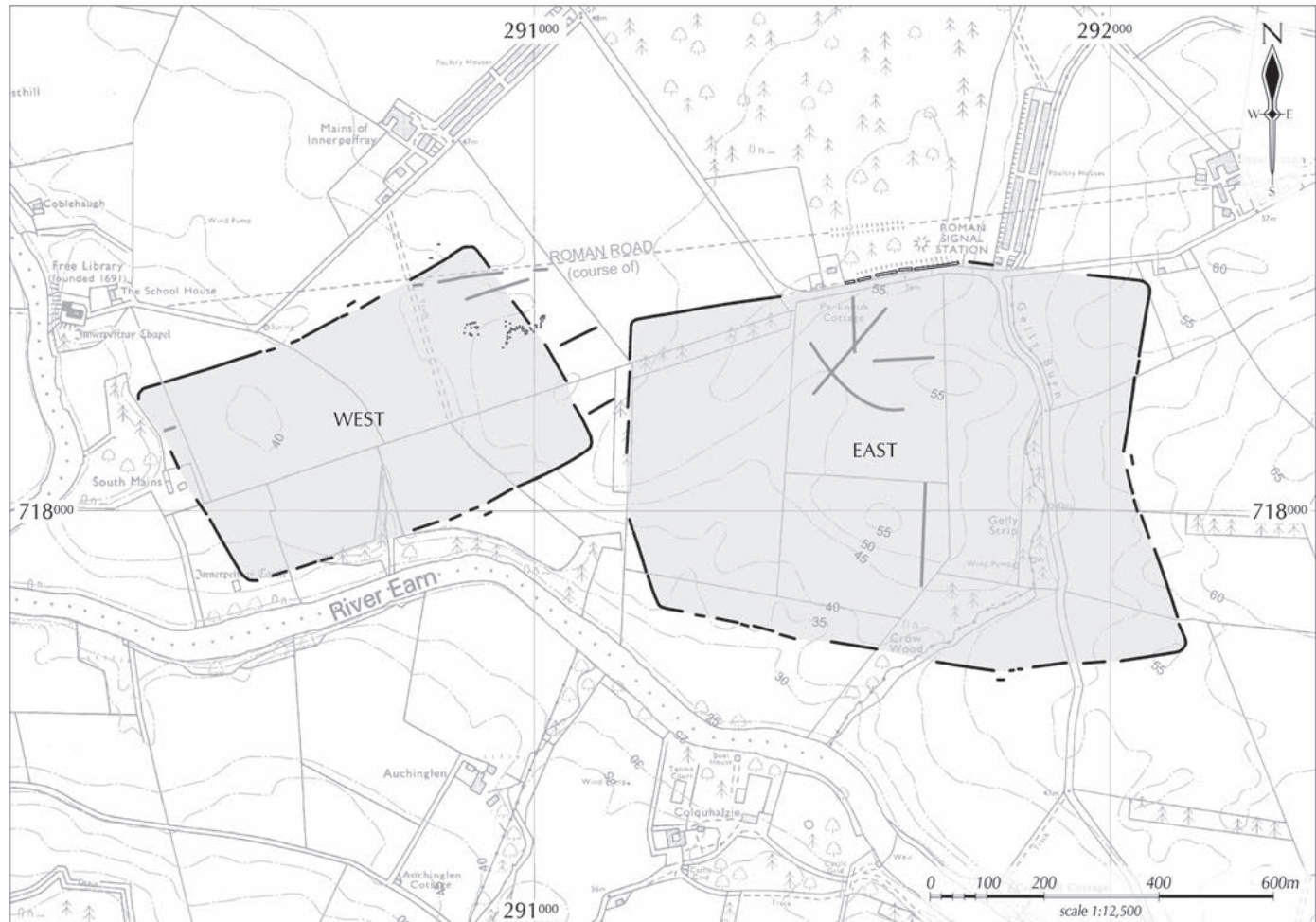


Illustration 148

Innerpefferay East and West and other cropmarks in the area. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Innerpefferay (illus 47 & 148)

(Strageath; Parkneuk Cottage)

*Innerpefferay East: NN 9156 1806
NN 91 NW 14*

*Innerpefferay West: NN 9075 1820
NN 91 NW 25*

The two camps at Innerpefferay were recorded from the air by St Joseph in 1945 (St Joseph 1951a: 63), but may have been noted earlier by Horsley, who drew a large earthwork entitled ‘Innerpefferay camp’ with a smaller camp attached to its west side (1732: opp. 44). These may well have represented the remains of the two camps now known as Innerpefferay East and West, and both now recorded through cropmarks.

The two camps lie on gently sloping ground above the River Earn, across from the fort and camps at **Strageath**. The presumed Gask Roman road runs to the north of the east camp, where it is accompanied by a watchtower

(Parkneuk), and cuts through the northern corner of the west camp.

The east camp is the larger of the two and irregular in form, measuring about 860m from east to west by about 710m (although is up to 910m in length in places and much narrower at the west end than the east); it enclosed almost 56ha (138 acres). Entrance gaps with *tituli* are visible in the centre of the east side and in the eastern part of the south side. Part of the northern rampart and ditch of the camp is visible as an upstanding earthwork in woodland. St Joseph excavated a section here in 1966 and recorded that the ditch was about 3.6m in width

and nearly 1.2m in depth with a drainage channel in the bottom. The upstanding rampart was composed of clean, fresh upcast material (RCAHMS St Joseph Collection: Notebook 4).

Innerpeffray West lies immediately to the west and is also slightly irregular in form, measuring about 660m from WSW to ENE by 400m, enclosing about 25.5ha (63 acres). Entrance gaps with *tituli* are visible on the eastern part of the SSE and NNW sides. An annexe is visible on the east side of the camp, almost intersecting with Innerpeffray East; this measures at least 92m by 125m and encloses a minimum area of 1.14ha (2.8 acres).

St Joseph rather ambiguously referred to an additional two camps at Innerpeffray, one within the camp (unspecified), attached to the south rampart, and another attached outside the east rampart (1958:90). The assumption has been that he was referring to Innerpeffray East, as he referred to the 'large camp', although this did follow a reference to Innerpeffray West, which has an annexe on its eastern side. No additional 'camps' were recorded in association with the East camp by the Ordnance Survey in 1967 (OS Recorder 1967), and none has been recorded in the literature since. St Joseph's unpublished plans of the East camp do not illustrate the location of these features (RCAHMS DC 37391). Neither is visible on the aerial

photographs of the east camp, and it therefore appears that St Joseph must have been referring to the camp at Innerpeffray West. Though there are a number of linear cropmarks within the East camp and also adjacent to its south-east corner, these do not appear to be Roman and have the appearance of more recent field boundaries. At Innerpeffray West, as well as the annexe attached to the ENE side, there are a number of linear cropmarks around the ruined Innerpeffray Castle in its south corner, which may be the remains of garden features. St Joseph restated the presence of two annexes on one of the Innerpeffray camps in 1965, and the west therefore seems the more likely candidate (St Joseph 1965: 81n).

Innerpeffray West lies astride the Roman road, indicated by a linear cropmark which continues the line through Innerpeffray Wood, and cuts across its northern corner. To the south of this line lies a further linear cropmark and some possible quarry pits. The relationship between the road and camp was tested by excavation in 2007, demonstrating that the road was the later of the two (Woolliscroft 2007). While it has not been established beyond doubt that the road recorded is Roman in date (it could represent the route of the medieval road in this area), the findings shed light on the potential dating of the western camp (see Chapter 10).

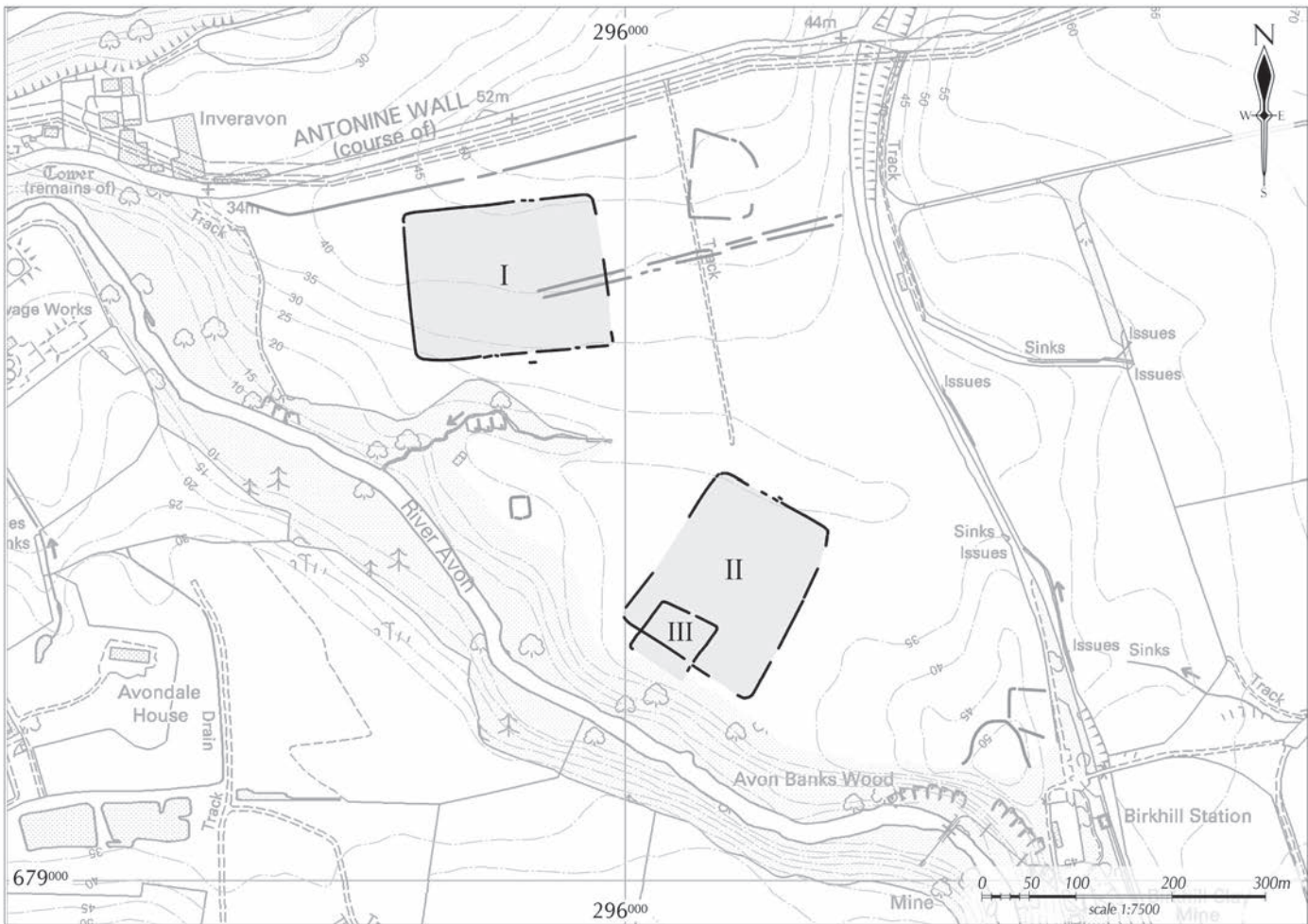


Illustration 149

Inveravon I–III, the Antonine Wall and other cropmarks. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Inveravon (illus 47 & 149)

Inveravon I: NS 9586 7963 Inveravon III: NS 9611 7933
NS 97 NE 14 NS 97 NE 23

Inveravon II: NS 9611 7933
NS 97 NE 23

The three camps at Inveravon lie in an arable field on land that slopes markedly from north to south before the steep descent to the River Avon. The Antonine Wall runs through the north side of the field, adjacent to a nearby road. All three camps were recorded from the air by St Joseph: camp I in 1955 (St Joseph 1958: 89); and the overlapping camps II and III in the early 1960s (St Joseph 1965: 80). Other cropmarks in the field include rectilinear enclosures, a ring-ditch, a trackway, and cultivation remains.

Camp I lies just over 100m to the south of the Antonine Wall. It was originally recorded as square in form (St Joseph 1965: 80), but a reappraisal of the air photographs suggests

that it is rectangular, measuring almost 210m from ENE to WSW by 160m transversely, enclosing an area of about 3.3ha (just over 8 acres). Excavations were undertaken in 1983 in advance of the laying of gas pipelines, and these recorded that the ditch on the east side was shallow and flat-bottomed with sloping sides, about 1m wide and 0.55m deep. A stone-packed post-hole and traces of a second were recorded in the interior of the camp (Keppie & Walker 1990: 143).

The north side of the camp could not be located during these excavations, although it was later visible from the air (and was recorded by RCAHMS).

Entrance gaps are visible in the NNW and SSE sides, towards the NNE end, that on the SSE being protected by a *titulus*. This suggests that the camp may have faced east rather than north directly towards the Wall.

Camp II lies some 200m south-east of camp I, on slightly flatter ground. Camp III overlaps its south-west side, close to the west angle, but the relationship between the two camps is unknown, and the south-west side of camp III is only partially recorded as it reaches the edge of the field and Avon Banks Wood. Camp II measures about 195m from north-east to south-west by 153m transversely, enclosing an area of about 2.9ha (7 acres). There is an entrance gap in the centre of the north-east side, protected by a possible *titulus*; there are further

possible entrance gaps in the north-west and south-east sides.

Camp III is much smaller than its neighbours, measuring 65m from north-west to south-east by about 63m transversely, enclosing some 0.4ha (1 acre). There is an entrance gap in the centre of the north-east side, and, curiously, the camp intersects the south-west side of camp II rather than utilise its perimeter as a fourth side (although the relationship between the two is unknown).

Field walking in the field near the camps in 1995 yielded various fragments of pottery, glass and tile, some of which may be Roman in origin (Dunwell & Ralston 1995: 12).

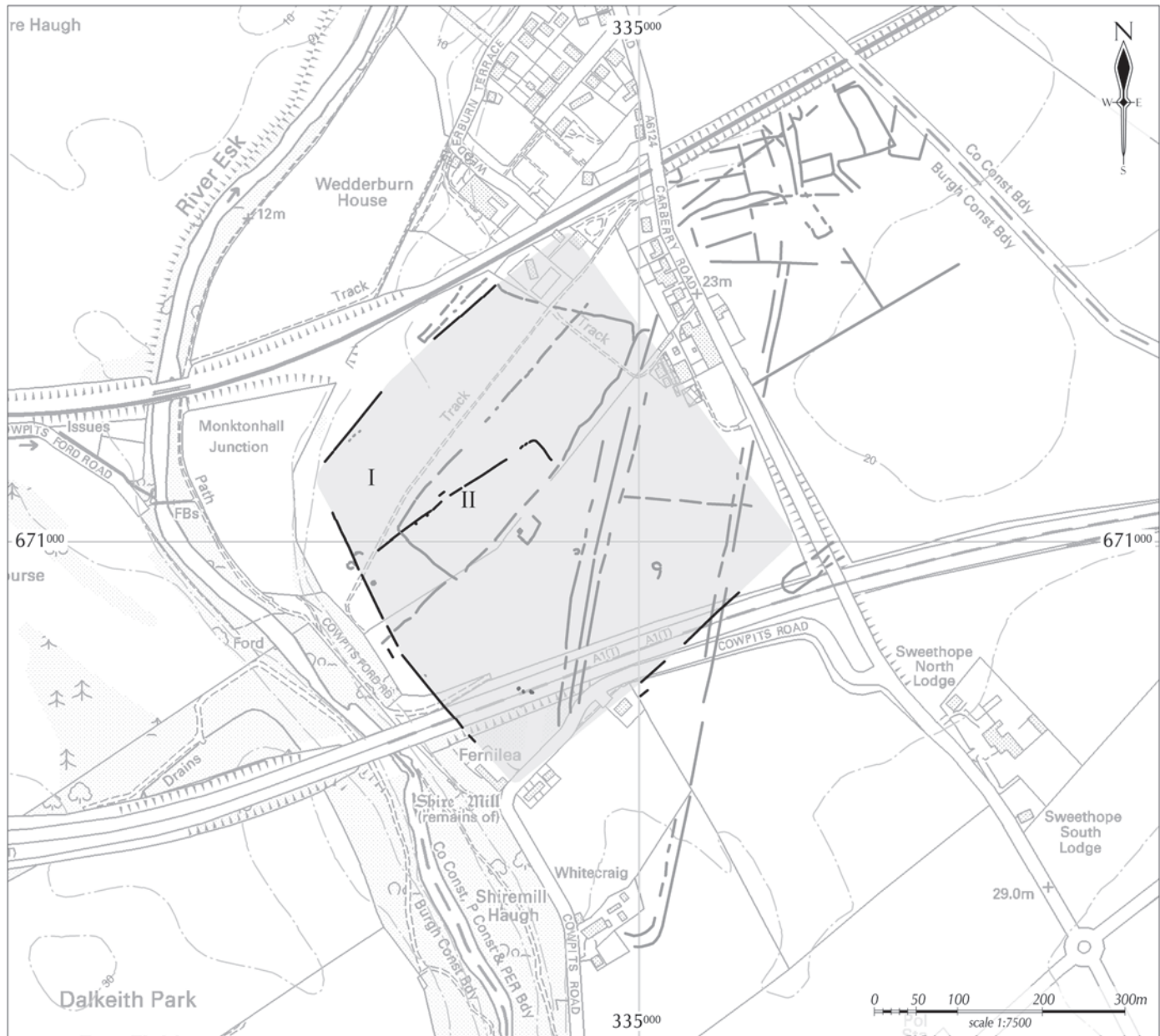


Illustration 150

Inveresk I-II and other cropmarks in the area including a probable Neolithic cursus and part of a field system. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Inveresk (illus 47 & 150)

(Monktonhall; Howe Mire)

*Inveresk I: NT 3485 7106
NT 37 SW 33*

*Inveresk II: NT 3485 7095
NT 37 SW 183*

The camps at Inveresk lie on the east side of the River Esk at Musselburgh, south-east of the Antonine fort which sits on a high plateau in a meander of the river. A

vicus sits to the east of the fort and other features in the area include a field system, a triple-ditched feature and an unusual structure interpreted as a possible amphitheatre

(Neighbour 2002a), as well as monuments of other periods (a probable Neolithic cursus monument and a possible long cist cemetery).

Both camps were recorded as cropmarks by St Joseph in the 1960s (1965: 80; 1969: 107–8). Camp II, the smaller of the two, sits within camp I and probably utilised part of its perimeter. Parts of three sides of camp I are known, demonstrating that it enclosed around 460m from north-west to south-east by at least 350m transversely; the location of the north-east side is unknown. It therefore enclosed at least 16.3ha (40 acres) and possibly close to 22ha (54 acres). Entrance gaps protected by *tituli* are visible in the south-west and south-east sides.

Various excavations have taken place on the camps and other features in the vicinity. In 1966, St Joseph excavated on the north-west side and recorded a large V-shaped ditch, 1.75m deep and 3m wide filled with silt and large stones (RCAHMS St Joseph Collection: Notebook 4). Further excavations in 1981 recorded slightly smaller dimensions, along with a small V-shaped ditch across the causeway of the gate on the south-east side, possibly indicating a secondary use (see Inveresk II (Rankov 1982: 340; RCAHMS St Joseph Collection: Notebook 8)). Hanson excavated on the south-west and south-east sides in the mid-1980s in advance of road construction, recording that the ditch was V-shaped, up to 1m deep and 2–3m wide; one section produced a fragment of Antonine samian. He suggested that the ditches may have been deliberately backfilled on the basis of the gravel in-fill (Hanson 2002: 53). Later excavations by Cook on the north-west side of Inveresk I recorded a section of that camp and two other ditches which he originally interpreted as possible camps (2002a: 66–8) but subsequently suggested that not all may relate to the Roman occupation (2005). Given that the field system

produced V-shaped ditches with apparent ‘ankle-breaker’ slots, the interpretation of features in this area as being part of temporary camps must be treated with caution.

In addition to sections of ditch, Hanson’s excavations also recorded five probable ‘dumb-bell-shaped’ ovens, up to 3m long and 1.5m wide, containing charcoal and carbonised grain (Hanson 2002: 53–5). Cook’s excavations revealed a further possible field oven (‘a bipartite pit filled with ash and charcoal’) close to the north-west side of the camp and cut by a later ditch. This produced radiocarbon dates of the late 1st and early 2nd century AD (Cook 2005: 153).

A series of pits is also visible on the air photographs close to the west part of the north-west side. It is possible that these pits represent further remains of ovens.

Some 250m of the north-west side of camp II are known, with a central entrance gap and *titulus*, together with a rounded corner angle and short stretch of the adjacent north-east side. St Joseph excavated eight trenches to establish the line of the ditch and gate on this camp in 1967, and noted that it had a small V-shaped ditch, 0.75m deep and 1.7m wide (St Joseph 1969: 108). The gate was 10.4m wide with the *titulus* ditch set some 8m from the entrance (RCAHMS St Joseph Collection: Notebook 4). The ditch of the *titulus* was interrupted by the rectangular slot of a foundation trench for a timber building. The top of this revealed a worn *dupondius*, possibly of Domitian (St Joseph 1969: 108).

If camp II utilised the southern portion of camp I, suggested by St Joseph’s excavations on the south-east entrance of this camp, then it could be almost 300m in length and enclose around 8.5ha (21 acres). Hanson’s excavations did not show any sign of recutting of the ditch of camp I, which led him to suggest that there may have been a short time-gap between the occupation of the two camps (2002a: 57).



Illustration 151

Invergowrie. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Invergowrie (illus 151)

(Bullion; Catermillie; Cater Milley; Quatuor mille)

NO 3445 2999 NO 32 NW 26 (also NO 32 SE 46)

In 1757, Maitland recorded a site ‘about 200 yards square, fortified with a high rampart and a spacious ditch’ with the south side showing ‘triple ramparts and ditches’, while noting that parts of the camp were being demolished by the plough (1757: i, 215). Jervise noted that the camp could be partially seen down to the beginning of the 19th century (1859: 445), but it had disappeared by the time Knox was working in 1831, locating it on his map at Cater Milley, Invergowrie (Knox 1850). Crawford commented on the inconsistencies in Maitland’s description, but noted that the site should be photographed from the air (1949: 138–9).

The camp was indeed rediscovered during aerial survey by Maxwell in the 1980s, and interpreted as such in 1990, lying to the west of Invergowrie and east of the Scottish Crop Research Institute (Frere 1991: 226). The camp of **Longforgan** lies just over 4km to the west. The land on which it is sited is fairly flat, with the camp lying only 300m north of the mudflats of the Firth of Tay, close to the Invergowrie Burn. Parts of two sides have been recorded from the air: 350m of the south-west side is currently projected or known, with an entrance and *titulus*, and up to 140m of the north-west side. If the *titulus* is central to the south-west side, the camp could measure

400m in length, supporting Maxwell's suggestion that it could measure about 400m by at least 300m, giving a minimum area of 12ha (30 acres) (Frere 1991: 226). Just to the north of the camp lies an alleged Roman fort, also

associated with Maitland's description. This was 'located' on an air photograph from December 1949 (Mechan 1966), but the photograph has not been found to confirm the identification.

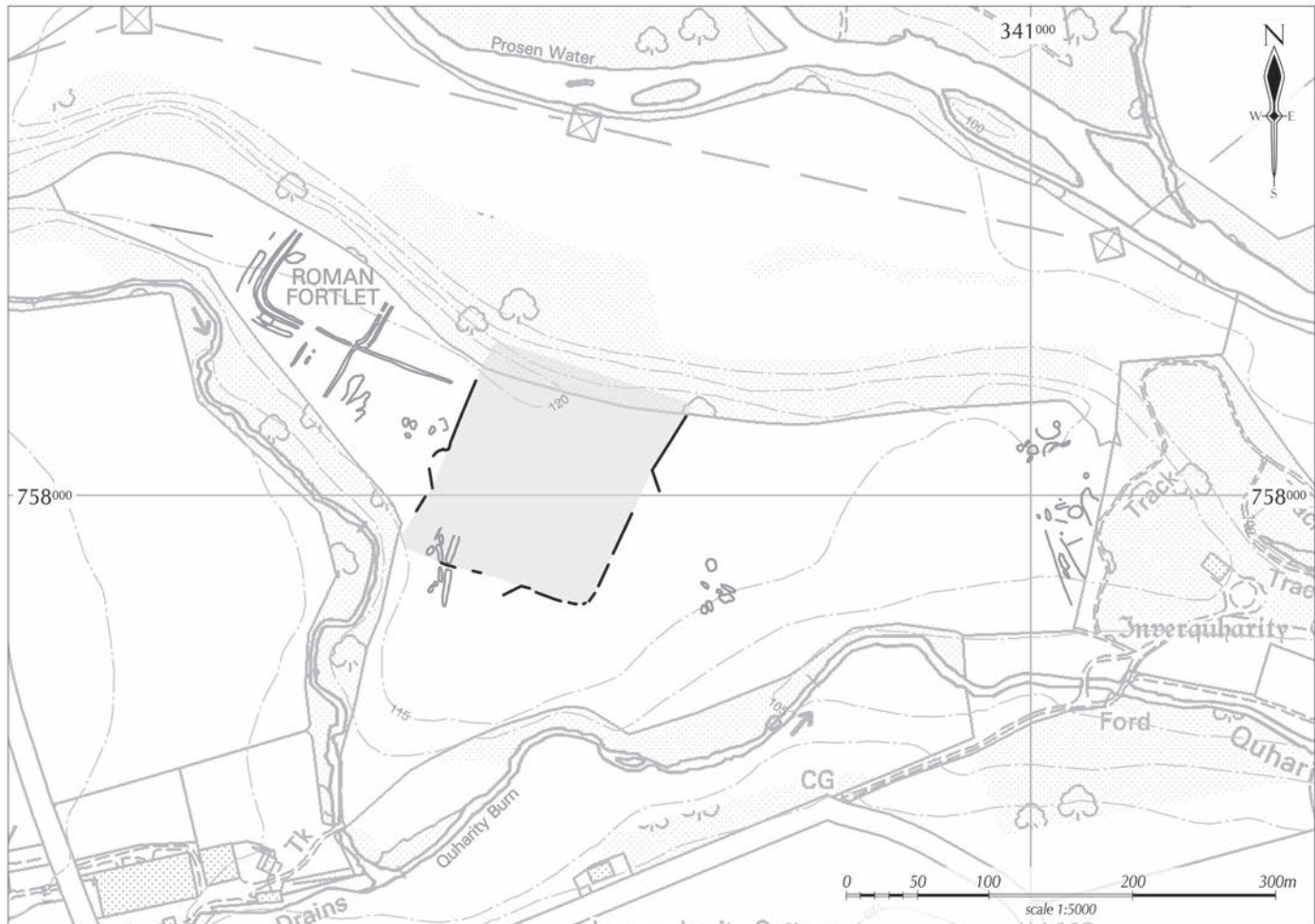


Illustration 152

Inverquharity and the nearby Roman fortlet and other cropmarks. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Inverquharity (illus 47 & 152)

NO 4066 5800 NO 45 NW 24

The camp at Inverquharity was first hinted at through cropmarks on air photographs taken by RCAHMS in 1983, and confirmed the following year (Frere 1984: 274; Frere 1985a: 263). It lies on a small promontory overlooking the confluence of the Prosen Water and the River South Esk, with the Quharity Burn running along the south side of the promontory; a small Roman fort lies 80m to the west. Sibbald had recorded that Severus had camps as far as 'Innecaritie . . . where vestiges of some appears', and this may refer to the fort or camp at Inverquharity (1707: 16).

Three sides of the camp are known from air photo-

graphs, the fourth largely lost through erosion to the north where the ground drops away steeply to the rivers, although the north-west corner was recorded through resistivity survey in 2002 (Woolliscroft 2002b). The camp measures about 150m from ENE to WSW by 136m transversely, enclosing some 2.35ha (almost 6 acres). Stracathro-type gates are recorded in the three known sides.

Maxwell & St Joseph conducted excavations on the camp in 1984, recording that the ditch on the east side was V-shaped, 1.8m in width and 0.9m in depth (Maxwell 1984b: 35).

Islafoot Drumlanrig (illus 35, 47 & 114)

(Drumlanrig)

NX 8597 9918 NX 89 NE 91

Discovered in 1997 by Maxwell from the air, the camp at Islafoot lies to the east of a bend in the River Nith, across from the fort and camps at **Drumlanrig**. Parts of three sides are known from cropmarks, and it measures 220m from west to east by at least 200m transversely, enclosing at least 4.5ha (11 acres). No entrances have been recorded.

The camp is accompanied by a series of linear cropmarks to its north and east, possibly providing additional defence for the camp within the haughland. If the south side of the camp were very close to the river, then its north-south measurement could be as much as 250m, but it is more likely that the camp was closer to square in form, enclosing some 4.8ha (11.9 acres).

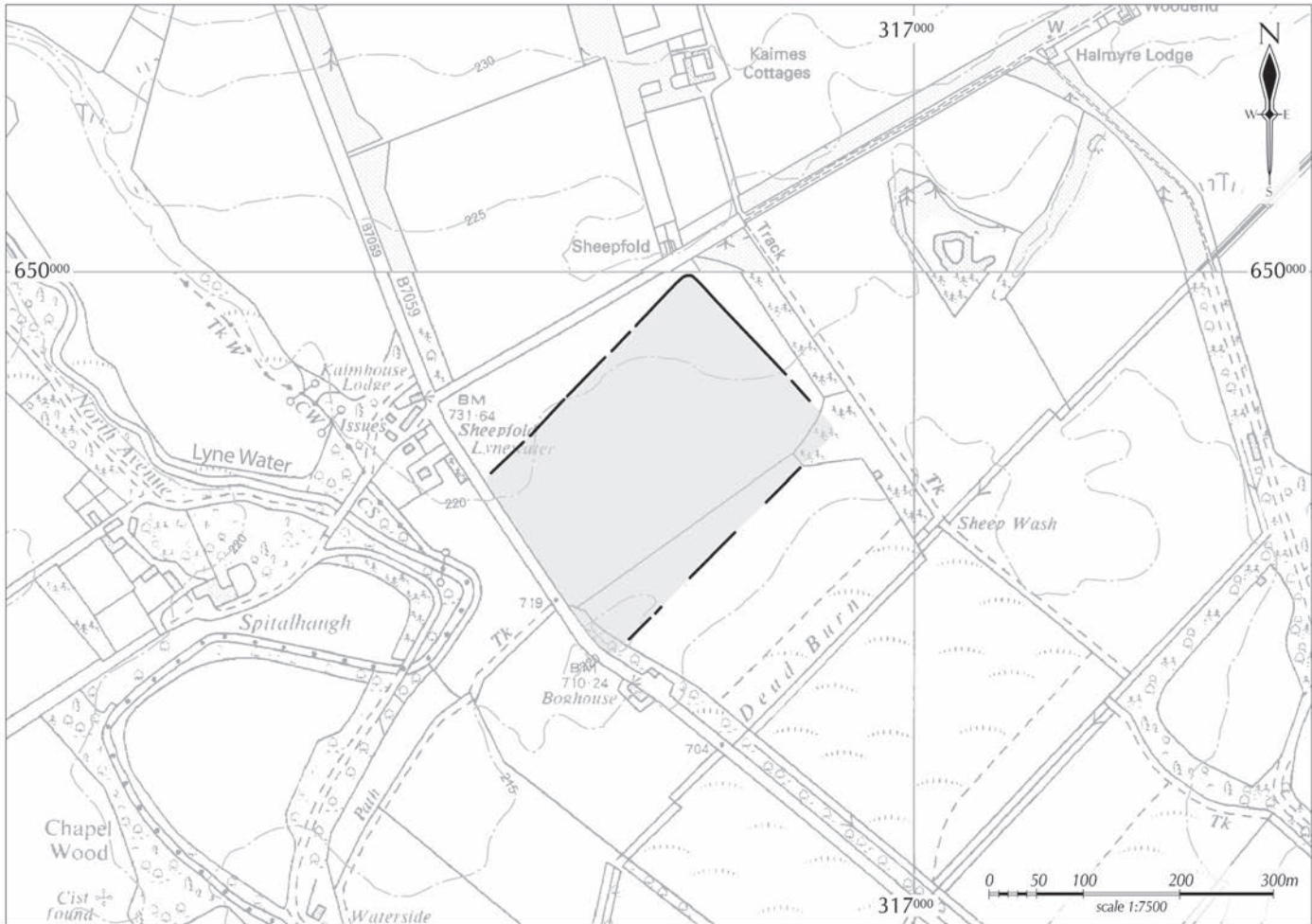


Illustration 153

Kaimhouse Lodge. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Kaimhouse Lodge (illus 47 & 153)

(Kaimhouse)

NT 1674 4982 NT 14 NE 49

First recorded during aerial survey by RCAHMS in 1992 (Keppie 1993: 284), the camp at Kaimhouse Lodge lies on level ground on the east bank of the Lyne Water. Parts of three sides have been visible in crop, and the line of the modern road (B 7059) may represent the south-west

side of the camp. It measures at least 310m from north-east to south-west by 225m and probably enclosed about 7.2ha (just under 18 acres). No obvious entrances have been recorded.

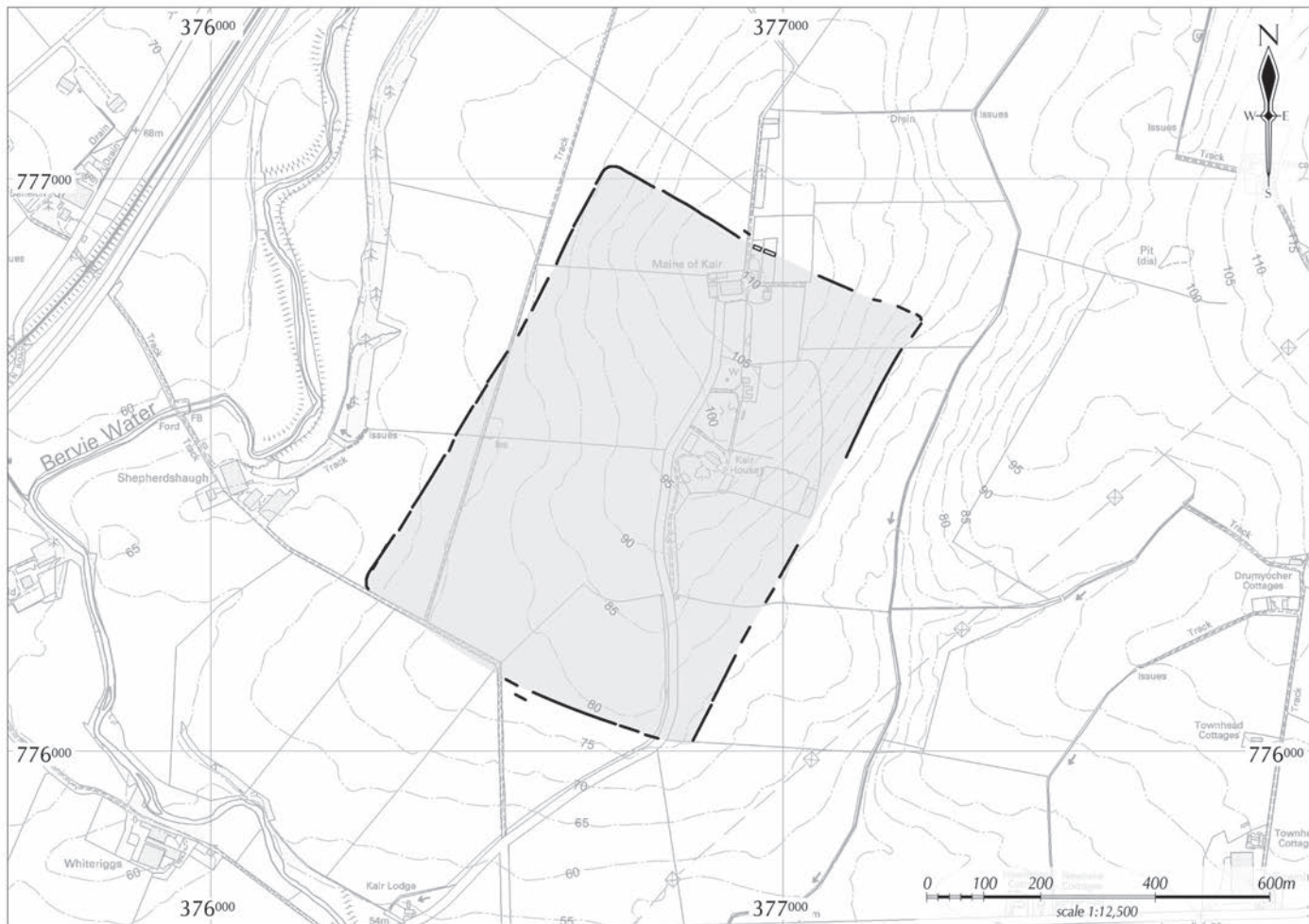


Illustration 154

Kair House. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Kair House (illus 47 & 154)

NO 7676 7653 NO 77 NE 1

The camp at Kair House in the Howe of the Mearns was first recorded from the air by St Joseph in 1945 (St Joseph 1951a: 65), although the area had been noted as a potential site for the Roman army by Roy (1793: 86–7). Subsequent aerial survey has recorded most of all four sides as cropmarks. The camp lies along the south-west part of a small hill above the Bervie Water, some 15km from the coast at Inverbervie. It is also located almost midway between the large camps of **Raedykes** and **Balmakewan**.

The camp measures around 870m from north-east to south-west by about 600m transversely, enclosing an area

of some 53.5ha (132 acres). A *titulus* is clearly visible in the centre of the south-west side, and a possible *titulus* in the north-east side, just to the west of the road. Given the size of the camp, it is assumed that it probably had six gates. Most of the camp lies in arable fields, but a small stretch of upstanding rampart survives on the north-east side: 18m survives in a small grass field and a further 11m in a conifer plantation; any accompanying ditch could not be traced. The rampart is spread about 3.7m wide and measures 0.3m high in the plantation, and is 5.4m wide and up to 1.1m high in the grass, although it is increasingly disturbed and reduced as it approaches the road.

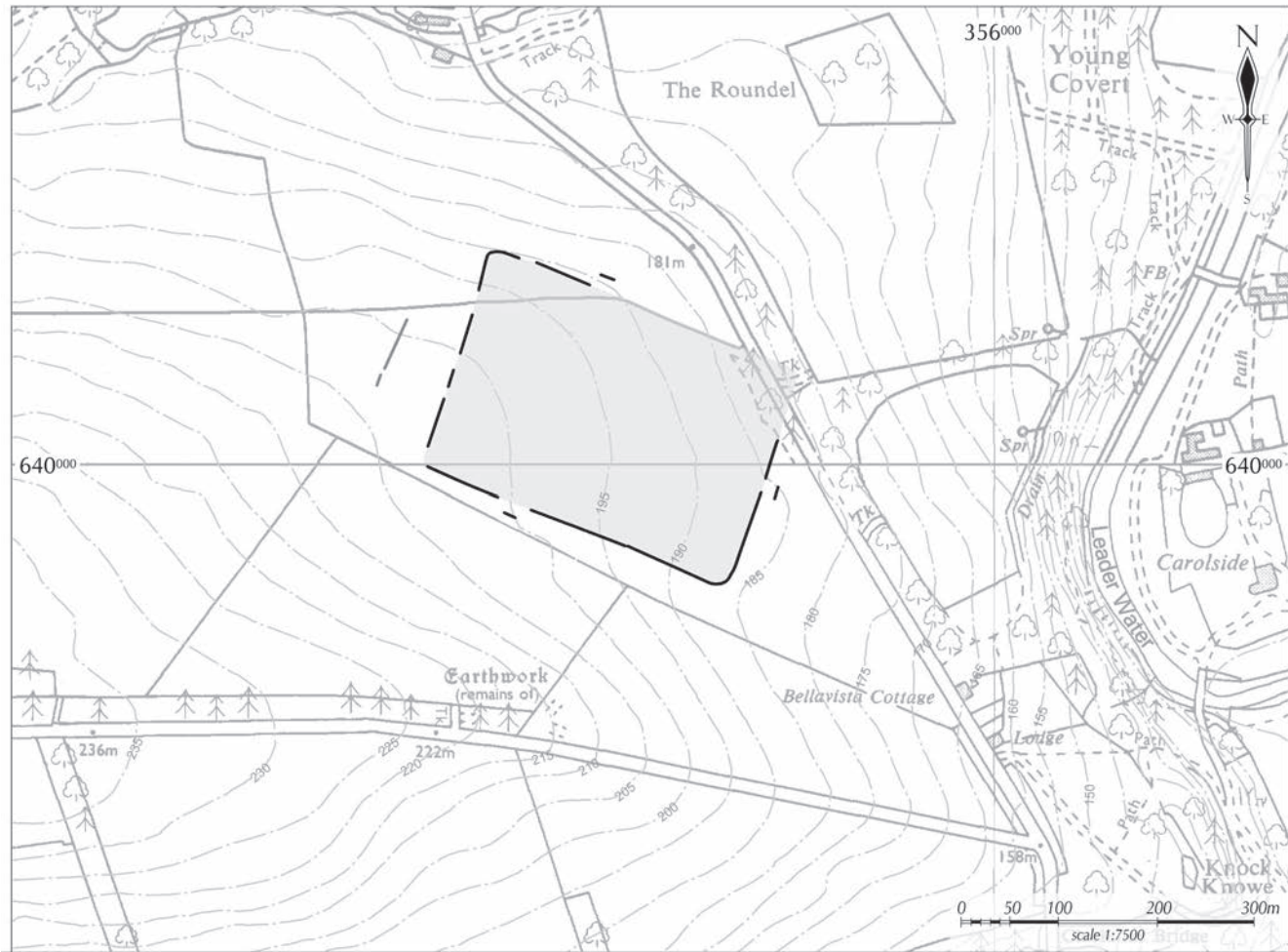


Illustration 155

Kedslie. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Kedslie (illus 47 & 155)

NT 5562 4003 NT 54 SE 20

First recorded by Cambridge University in 1976 (Maxwell & Wilson 1987: 37–8), the camp at Kedslie lies on sloping ground on the line of Dere Street. The majority of the camp has been recorded as a cropmark, but a field boundary is sited on part of the NNE side. The camp measures 335m from WNW to ESE by 232m and enclosed almost 7.8ha (19 acres). Entrance gaps protected by *tituli* are visible in

all four sides, the two side gates positioned towards the WNW end of the camp.

An additional linear cropmark is visible some 68m to the WNW, at a slight angle to that side. It is possible that this represents an earlier phase of the camp, but this is unlikely given the variant in the angle and lack of supporting cropmarkings.

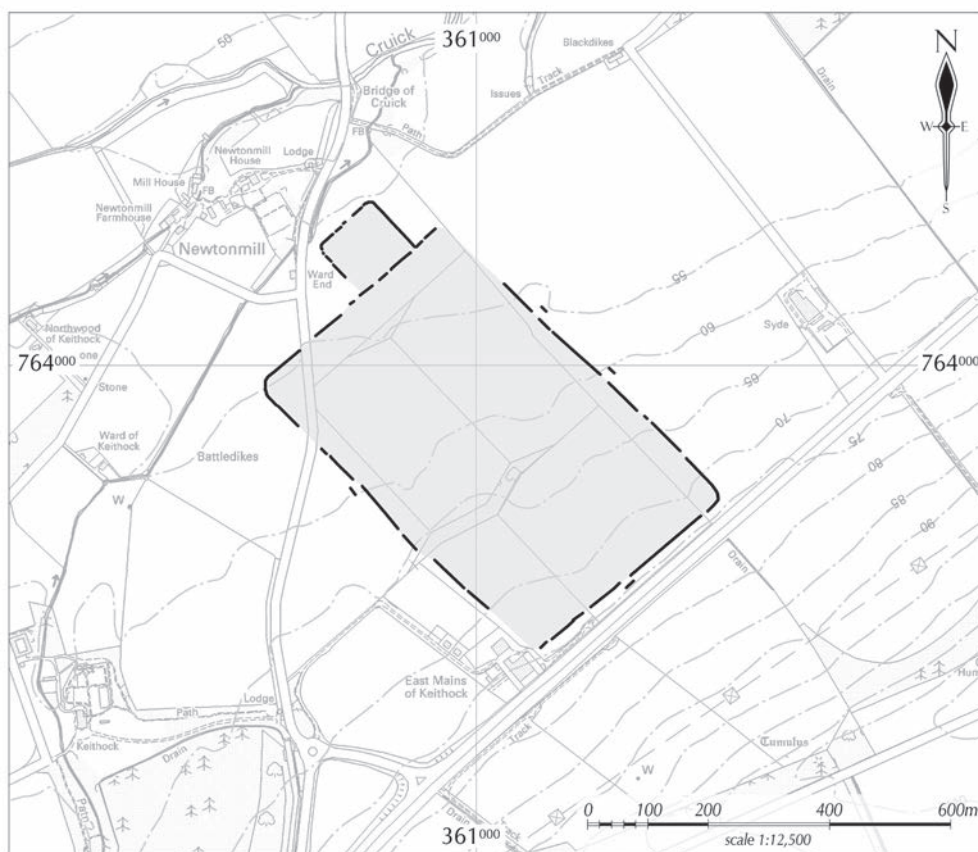


Illustration 156

Keithock. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Keithock (illus 47 & 156)
(Battledykes; Black Dykes; Kiethick; Wardykes)

NO 6103 6388 NO 66 SW 1

The camp at Keithock was one of the camps discovered by Captain Robert Melville while travelling through Strathmore in August 1754 (Balfour-Melville 1917: 123n), and planned by Roy the following year (Roy 1793: Pl. XIV; Jones & Maxwell 2008; see above, Chapter 3). It is now known only through cropmarkings on air photographs.

The camp lies just to the south of the Cruick Water, across which, about 1.5km to the NNE, lies the fort and camp at **Stracathro**. It is situated on ground that slopes gently from the south-east to the north-west. The camp measures 640m from north-east to south-west by about 410m transversely, with the south-east side longer than that on the north-east. It encloses a total area of about 26ha (64 acres).

Tituli are visible on the south-east and south-west sides, with two on the north-east side suggesting that it had six gates in total. Both Roy and St Joseph also recorded a *titulus* on the north-west side, but this could not be confirmed on the available air photographs (1793: Pl. XIV; RCAHMS DC 37458).

An annexe is visible to the north of the entrance gap on the north-west side. This measures some 117m by 109m and encloses 1.27ha (3 acres).

St Joseph conducted a small excavation on the north-east side in 1967, recording that all but the bottom 13cm of the ditch had been ploughed away, but his section drawing indicated a ditch which was about 0.9m in width at the top (RCAHMS St Joseph Collection: Notebook 4).

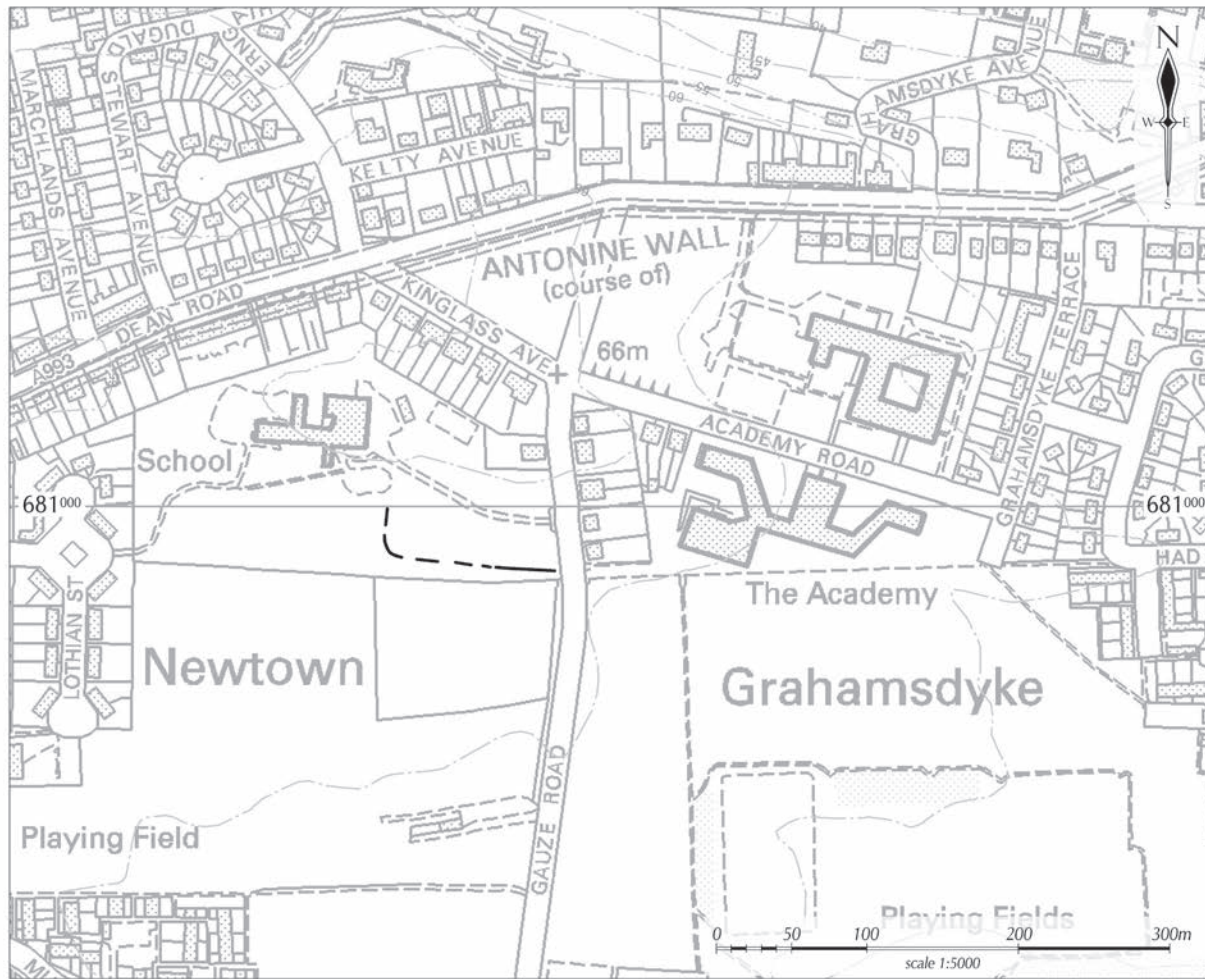


Illustration 157

Kinglass Park. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Kinglass Park (illus 157)

NT 0032 8101 NT 08 SW 10

The camp at Kinglass Park was first discovered as a cropmark from the air by St Joseph in 1948 (1951a: 62), and sits on level ground just to the south of the presumed line of the Antonine Wall along Dean Road (Grahamsdyke Road).

The air photographs reveal about 115m of the south side, a rounded south-west angle and 31m of the west side of the camp, the remainder lying under the Newtown area of Bo'ness, including a school. Feachem identified a possible *titulus* on the west side of the camp from the air photographs, but this could not be confirmed. He also

recorded part of the west and east sides and the north-east corner through probing, leading him to suggest that the camp measured about 490ft (149m) square, enclosing about 5.5 acres (2.2 acres) (1958: 334–5). However, a watching brief in 1998 on the presumed eastern side of the camp revealed no trace of ditch, and the excavator also noted the heavy terracing that had taken place around the north-east corner and questioned the results found by Feachem (Bailey 1998; Keppie 1999: 329). As a result, it is no longer possible to confirm the perimeter of the camp, beyond what has been recorded on the air photographs.

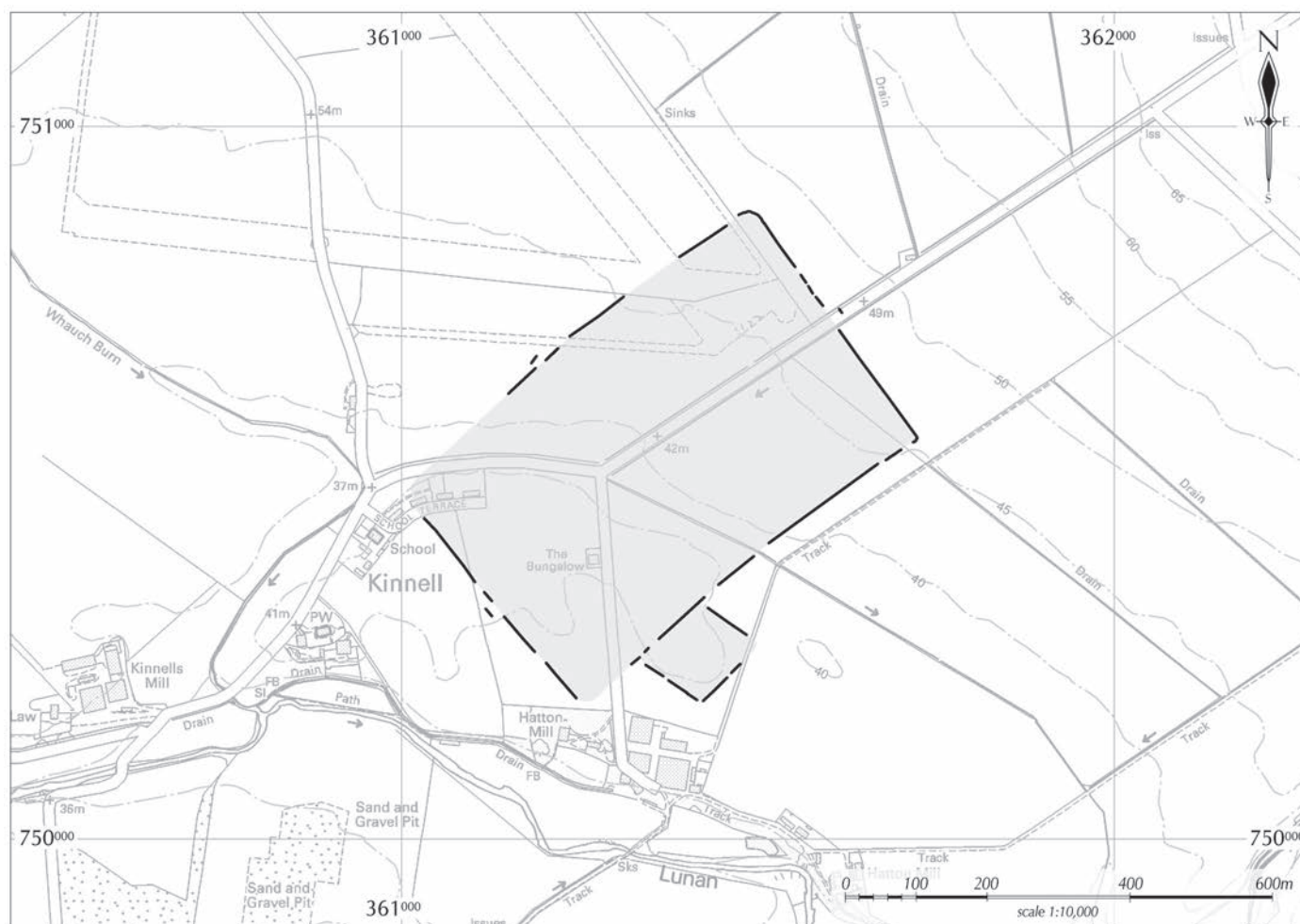


Illustration 158

Kinnell. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Kinnell (illus 47 & 158)

NO 6135 5055 NO 65 SW 26

The camp at Kinnell was first discovered as a cropmark from the air by St Joseph in 1968 (1969: 111–12), lying on fairly level ground to the east of Kinnell, on the north side of the Lunan Water. A disused Second World War airfield lies immediately to the north, covering part of the north-west side of the camp.

Most of all four sides of the camp are now known, and it measures 620m from north-east to south-west by 400m, enclosing 24.7ha (61 acres). Gates protected by *tituli* are visible in north-west, north-east and south-west sides. Gaps in the south-east side may be entrances on this side;

a slight change in alignment at one probably indicates the position of an entrance. Just to the south-west of this lie two linear cropmarks representing part of an annexe. This measures 116m by 106m, enclosing some 1.2ha (3 acres).

St Joseph placed trenches through the north-east and south-west sides of the camp in 1968, recording that the ditch measured up to 2.6m in width and up to 0.7m in depth (RCAHMS St Joseph Collection: Notebook 5). Further trenching by Robertson in 1970 recorded that the ditch was V-shaped, and about 1m deep and 2.4m wide where best preserved (Robertson 1970a: 4).

ROMAN CAMPS IN SCOTLAND

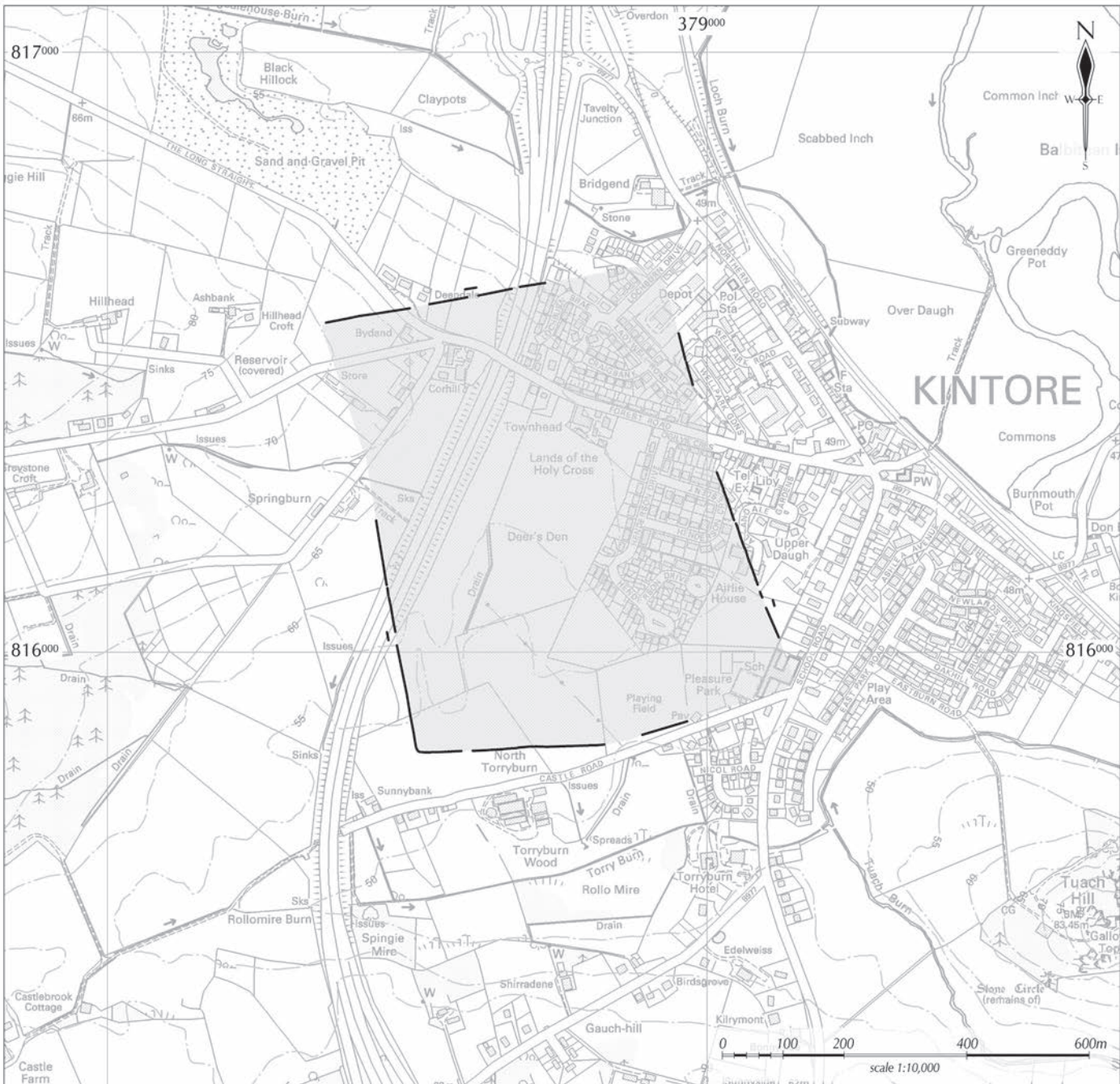


Illustration 159

Kintore. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Kintore (illus 18, 31, 47, 51 & 159)

(Deer's Den)

NJ 7869 1619 NJ 71 NE 28

The camp at Kintore was first recorded by Captain E H Courtney of the Royal Engineers in 1867, following receipt of a pamphlet by Mr Alexander Watt of Kintore

entitled *The Early History of Kintore* (Watt 1865). The publication by Watt dates to 1865, but his notes about the Deer's Den had been made some years before, probably

in the 1810s (Courtney 1870: 389), although possibly slightly earlier. Courtney commented that the camp had been much reduced since Watt's observations, noting that Watt's measurements recorded the rampart at least 5.5m in width and up to 2.4m in height with a ditch some 3m in width. The potential accuracy of Watt's measurements is indicated in the note that states that Watt recorded the west side as 800 yards long and Courtney as 809 yards (1870: 391n). Courtney also noted that the Aberdeenshire Canal passed through the east side of the camp (1870: 392), and this was also confirmed by excavation on the north side in 1984, indicating that it cut across the camp from north-west to south-east (Shepherd 1987: 205–6). The plan that Courtney produced of the north side, presumably derived from Watt, is fairly complete, which may suggest that Watt's notes were made prior to the cutting of the Canal (from Aberdeen to Port Elphinstone, just south of Inverurie), which opened in 1805 and closed in 1854 (Graham 1968: 172–3). The loss of the earthworks of the camp continued, and by 1943 no trace of it could be seen on the ground (Crawford 1949: 114–15), although it has been recorded through cropmarkings since 1945.

The camp is located on the west side of the village of Kintore, on relatively flat land to the west of the River Don. The landscape covered by the camp has been under improved pasture and arable for a number of years, but this has been gradually converting to housing as Kintore has expanded, and the A96 road also cuts across it. The camp measures about 776m from NNW to SSE by about 600m transversely, enclosing 44.6ha (110 acres). Courtney did not record any gates, but entrance gaps with *tituli* have now been recorded in the centre of the NNW side and in the southern part of the WSW and ENE sides.

The latter two have both been excavated (Alexander 2000; Dunbar & Cook 2004). There is a change of direction in the northern part of the WSW side where the camp is crossed by the road to Springburn according to Courtney's plan (1870), and this probably represents a further entrance on that side; there is also a slight change of direction in the centre of the south side at the probable entrance gap.

The result of the expansion and development of Kintore in recent years has been a series of excavations of the majority of the camp (perimeter and interior). The widespread nature of the excavations has resulted in a wealth of material being uncovered. Over 200 features including ovens and pits have now been recorded in the interior of the camp from various excavations (Shepherd 1987; Alexander 2000; Glendinning 1998a; Hamilton & McGill 1997; Cook 2001; Cook 2002b; Dunbar 2003; Dunbar & Cook 2004; Cook & Dunbar 2008; Cook *et al* forthcoming). Radiocarbon dates obtained thus far indicate both Roman and post-Roman dates (Alexander 2000; Cook & Dunbar 2008), but cluster in the late 1st century AD. The first phase of the recent large-scale excavations at Forest Road has now been published (Cook & Dunbar 2008).

Excavations of the perimeter ditch have recorded that it measured up to 3.35m in width and 1.4m in depth in the north-east corner (Rees 1996), and around 3m in width and 1.5m in depth in the south-west corner (Cook & Dunbar 2008: 128–30). The site is currently unique in the Roman Empire; the wealth of internal features and finds from the camp are starting to provide valuable insights about the activities of the Roman army in the field (Cook & Dunbar 2008; Cook *et al* forthcoming; Cook in prep; see above, section 7f).

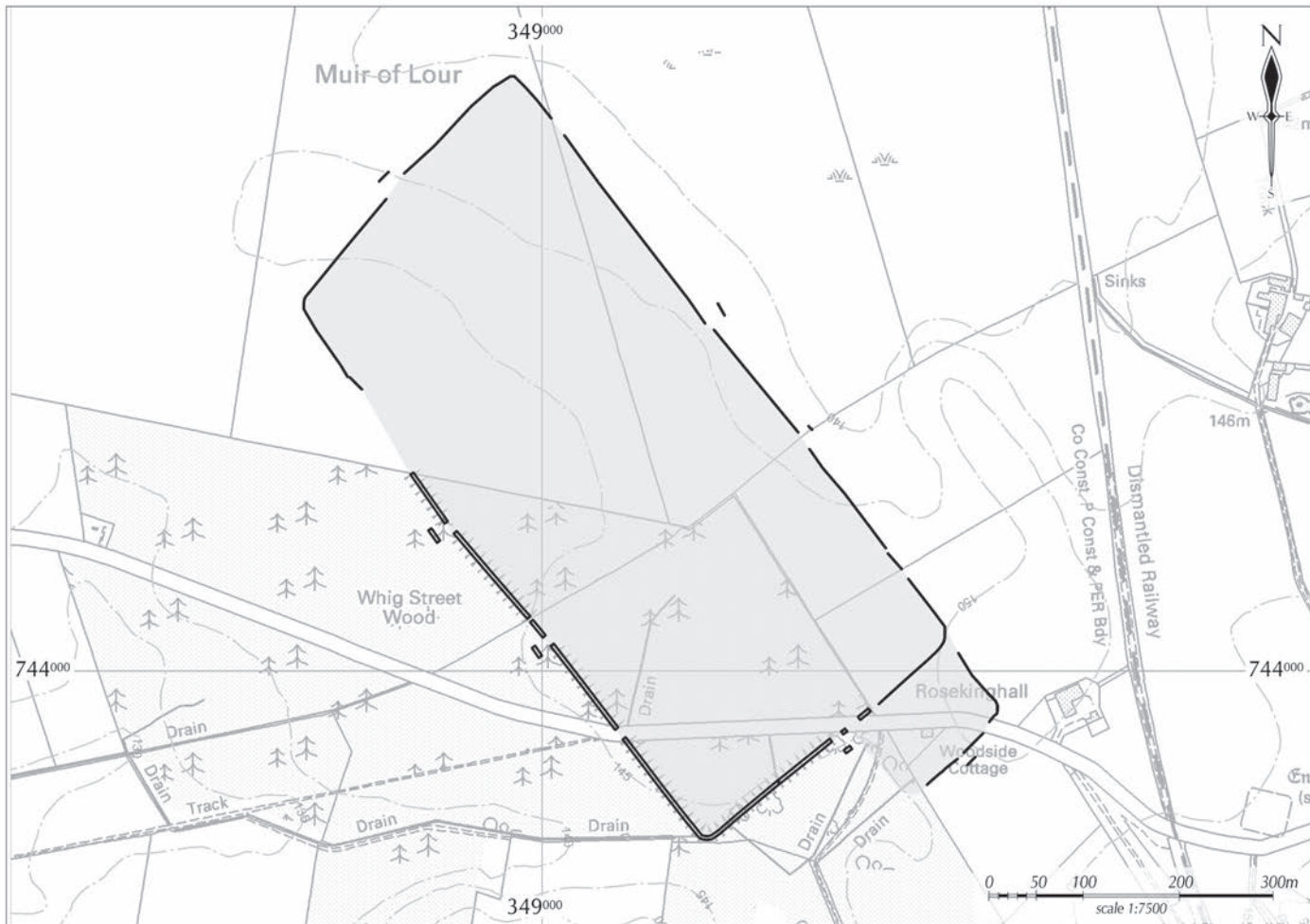


Illustration 160

Kirkbuddo. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Kirkbuddo (illus 25, 47 & 160)

(Harefaulds; Haerfauds; Norway Dikes; Karboddo; Kirkboddo)

NO 4905 4425 NO 44 SE 15

The camp at Kirkbuddo was one of the camps discovered by Captain Robert Melville while travelling through Strathmore in August 1754 (Balfour-Melville 1917: 123n; Jones & Maxwell 2008) and planned by Roy the following year (Roy 1793: Pl. XIV). When Roy planned it, most of the camp was upstanding, including six gates protected by *tituli* and an annexe on the south-east side, with only small portions of the north-east and south-west sides not visible. It is also depicted as a rectangle labelled 'Roman camp' on Ainslie's map of Forfar and Angus (1794).

Writing in the late 18th century, Jameson noted that the local vulgar term for the site was Haerfauds, which means 'the ditches, trenches or folds of the "strangers"' (1786: 20). Gordon, quoting Commissary Maul (who was

writing in 1606–12), refers to 'Karboddo' as the vestiges of a Danish camp known as 'Norway Dikes' near the village of Panbride (1726: 33, 154). Crawford notes this source, commenting on its significance of this as one of the earliest topographical accounts of Scottish antiquities (1949: 97n), although Panbride lies some 11km to the south-east. Visiting the camp in 1925, Crawford noted that much of the camp could still be seen, with the south part in the wood well preserved, and the north-west side visible in ploughed fields. By the time of his later visit in 1939, the north-west side could not be detected; most of the north-east side could be traced on both dates (1949: 98–9).

The camp lies in the Muir of Lour, some 7km SSE of Forfar and east of the Sidlaw Hills. The southern part of

the camp is still extremely well preserved, lying in Whig Street Wood, while the rest of the camp is visible through cropmarks. The camp is oblong in shape, measuring 740m from north-west to south-east by 343m transversely, enclosing some 24.7ha (61 acres). The annexe planned by Roy is visible on air photographs attached to the east part of the south-east side, and measuring 91m to the south-east by at least 117m, enclosing at least 1ha (2.5 acres). There is no upstanding trace of the annexe in the wood, suggesting that the south-west side of the annexe lay in the ploughed field behind Woodside Cottage.

Part of the south-west side, immediately north of the wood, has been lost in boggy ground (this part was also lost in Roy's day), and there is a clear change of direction in this area which indicates that the camp deviated around

this ground, because there does not appear to have been a deviation at the point of an entrance.

In Whig Street Wood, the rampart survives up to a height of 1m and is spread some 4.6m, with the ditch at least 0.5m deep in places, and 1.5m wide. The best-preserved *titulus* is that on the south part of the south-west side, some 14m from the camp, and it measures 13.5m in length. The *titulus* mound is 0.7m high, 5m wide, with the ditch about 1m deep and 2.5m wide. The corresponding entrance gap in the camp appears to narrow at the entrance (both rampart and ditch narrow), and the gap is 9m wide.

Excavations on the camp were conducted in 1955 and 1959, to obtain soil profiles beneath the upstanding rampart (Romans 1962).

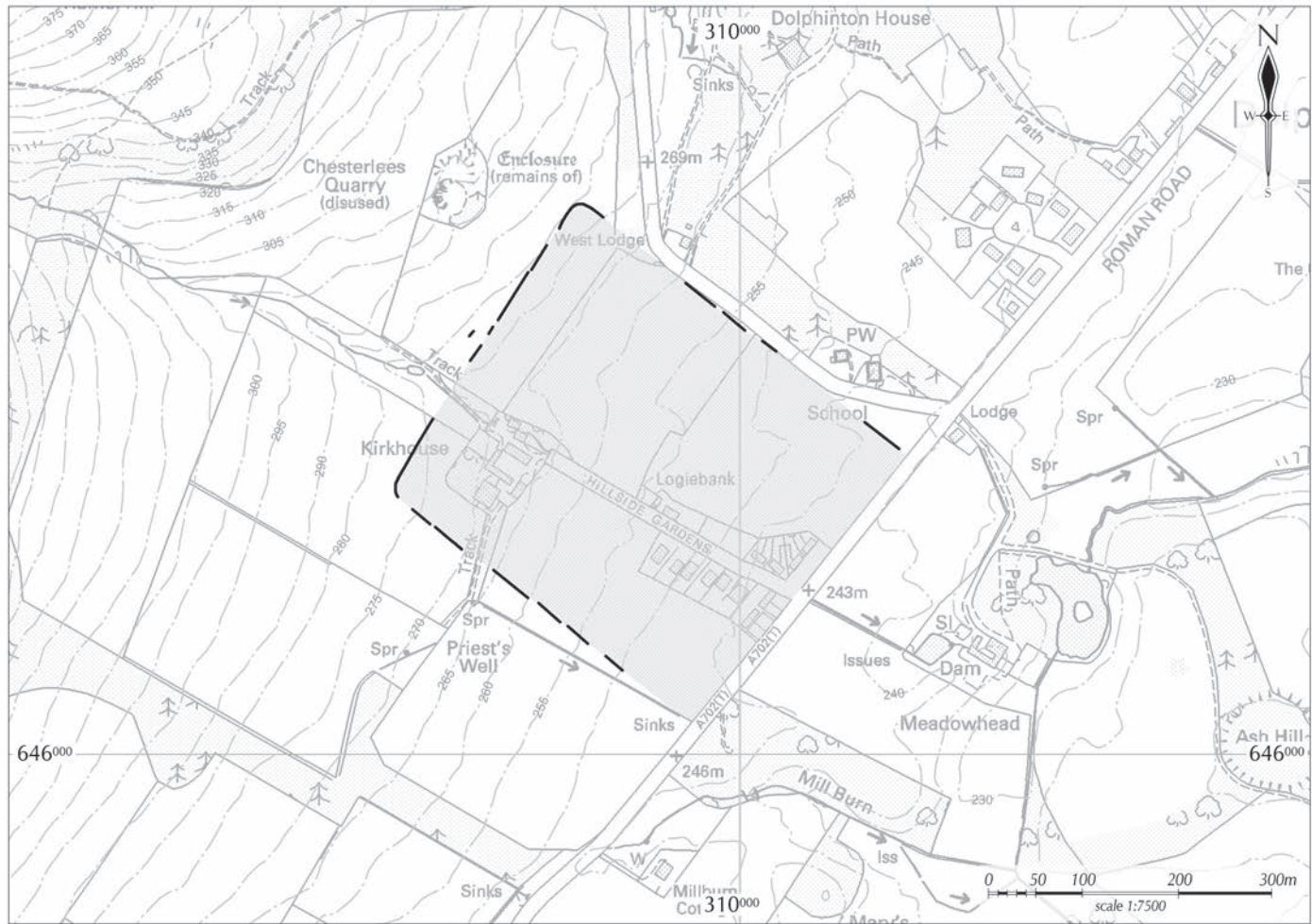


Illustration 161

Kirkhouse. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Kirkhouse (illus 47 & 161)

NT 0980 4620 NT 04 NE 47

First recorded in 1983 by RCAHMS from the air (Frere 1984: 276), the camp at Kirkhouse lies on a slope facing south-east and on the Roman road which runs up the east side of the Pentland Hills. Three sides of the camp have been visible through cropmarks, and it measures at least 435m from north-west to south-east by 360m, enclosing at least 16ha (almost 40 acres). A gap is visible in the centre of the north-west side, protected by a *titulus*.

Excavations on the ditch in 1985 by Maxwell recorded that it varied from 2.4m to 3.25m in width and from 0.8m to 1m in depth (Frere 1986: 371–4). In addition, his excavations demonstrated that the line of the camp continued into the field south-east of the road. Therefore this camp is believed to pre-date the presumed line of the Roman road on the modern road line.

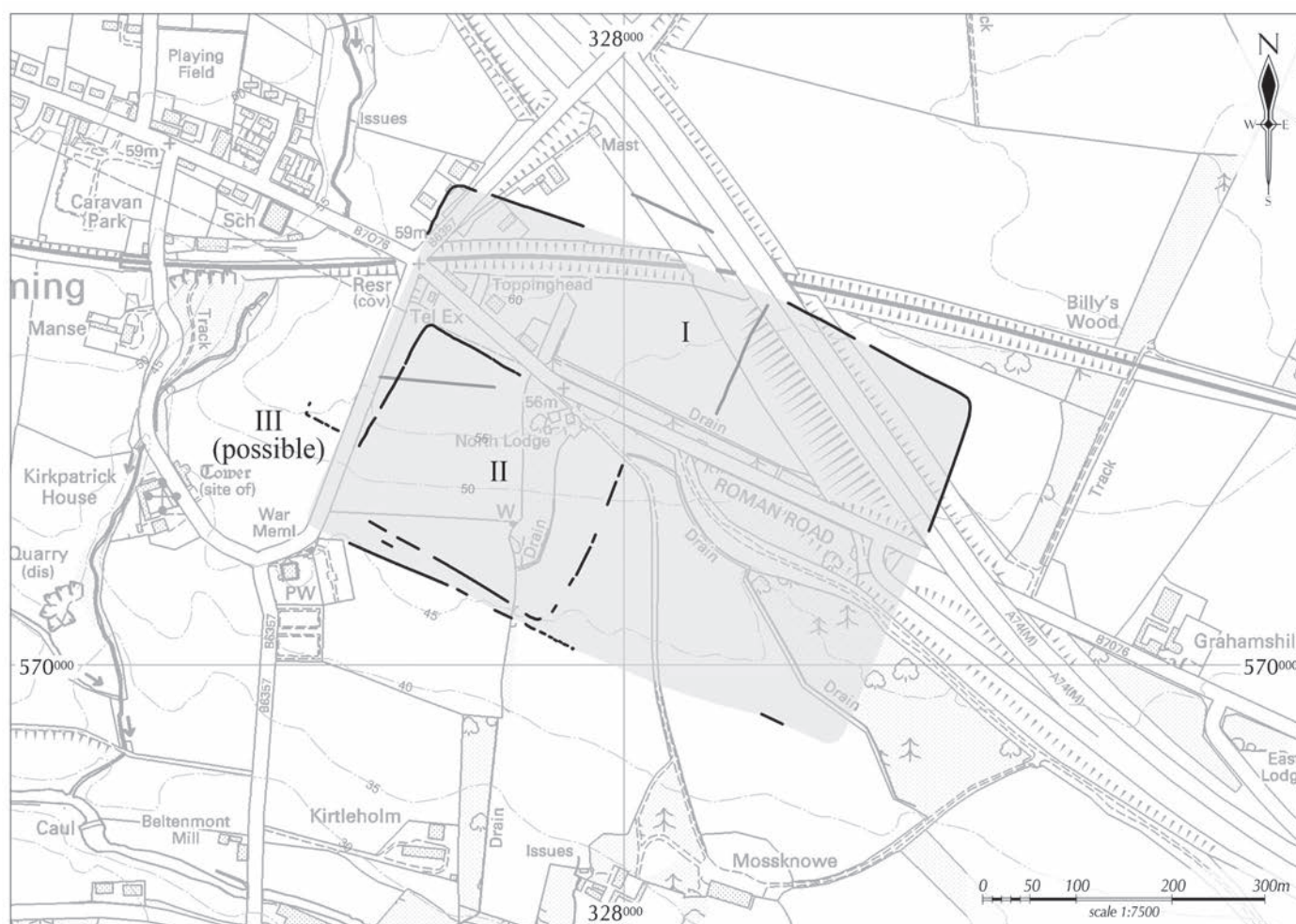


Illustration 162

Kirkpatrick-Fleming I–II and III (possible) and other cropmarks in the area. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Kirkpatrick-Fleming (illus 47 & 162)

Kirkpatrick-Fleming I: NY 2806 7020
NY 27 SE 7

Kirkpatrick-Fleming III (possible): NY 2768 7026
NY 27 SE 7

Kirkpatrick-Fleming II: NY 2806 7020
NY 27 SE 7

The two (possibly three) camps at Kirkpatrick-Fleming lie on a low rise on the Roman road into south-west Scotland and are now cut by the main road (A74(M)) and railway lines into this area. The first was discovered in 1949 through cropmarks by St Joseph from the air (1951a: 57); the second, which lies wholly within the western part of the first at an oblique angle, was subsequently recorded in 1958 (St Joseph 1961: 122).

Camp I measures just over 600m from WNW to ESE by 420m transversely, enclosing 24.5ha (just over 60 acres). An entrance gap has been excavated on the NNE side, but no accompanying entrance protection has been recorded.

Various excavations, watching briefs and a geophysical survey have been carried out on parts of the camp in advance of the upgrade of the A74 road to motorway status. These have recorded that the ditch of the camp measured up to 2.9m in width and 0.75m in depth in places (Leslie 1991; Keppie 1996a: 402). The excavations revealed the remains of a possible road, also suggested by a snow line, which may be Roman, although insufficient dating evidence was recovered. In addition, parts of a possible annexe or third camp were located to the west of camp I (Kirkpatrick-Fleming III) (Leslie forthcoming). This structure runs to the north-west of camp I for about

55m before turning to the north in a slightly rounded corner angle. The ditch was V-shaped, measuring up to 1.7m in width and 0.7m in depth in places. One section contained five sherds of pottery from the same Roman grey coarseware in the silt at the bottom of the ditch (Leslie 1991). This pottery has been dated to AD 100–150 (A Leslie pers comm). If this is indeed an annexe, as seems likely, it would have met the putative Roman road some 45m to the north. If its dimensions were 55m by 45m

then it would have been very small, at 0.25ha (0.6 acres), but its relationship with the possible road is unknown.

Camp II lies within camp I, but the two do not appear to share any common sides. It measures 265m from north-west to south-east by 211m, enclosing almost 5.5ha (13.5 acres). An entrance gap protected by a *titulus* is visible on the south-west side, towards its western end. Unlike camp I, this camp has not been subject to excavations, lying a short distance away from the main road.

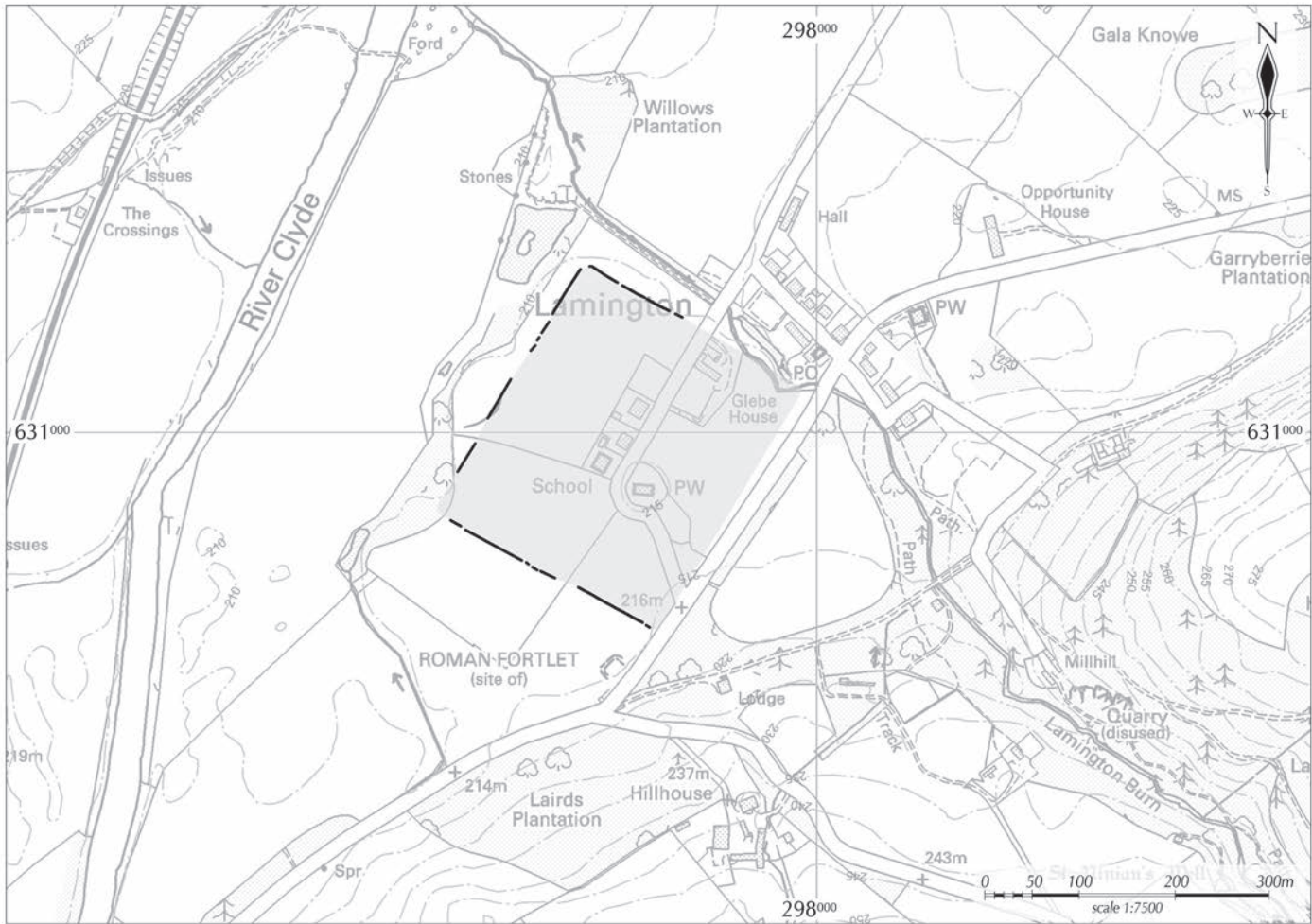


Illustration 163

Lamington, and other cropmarks including the Roman fortlet. Reproduced by permission of Ordnance Survey on behalf of HMSO.
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Lamington (illus 47 & 163)

NS 9779 3099 NS 93 SE 26

The camp at Lamington lies on level ground on the east bank of the River Clyde, on the line of the Roman road running up the east side of the Pentland Hills and 50m north of a Roman fortlet; it also intersects a fort of probable Iron Age date, but the relationship between the two is not known. It was first recorded in 1976 by

Maxwell as a cropmark from the air (RCAHMS 1978a: 160); parts of its three sides are known, indicating that it measured 304m from north-east to south-west by at least 260m. If the line of the Roman road and modern A702 mark its south-eastern extent, then it enclosed some 8.2ha (20 acres).

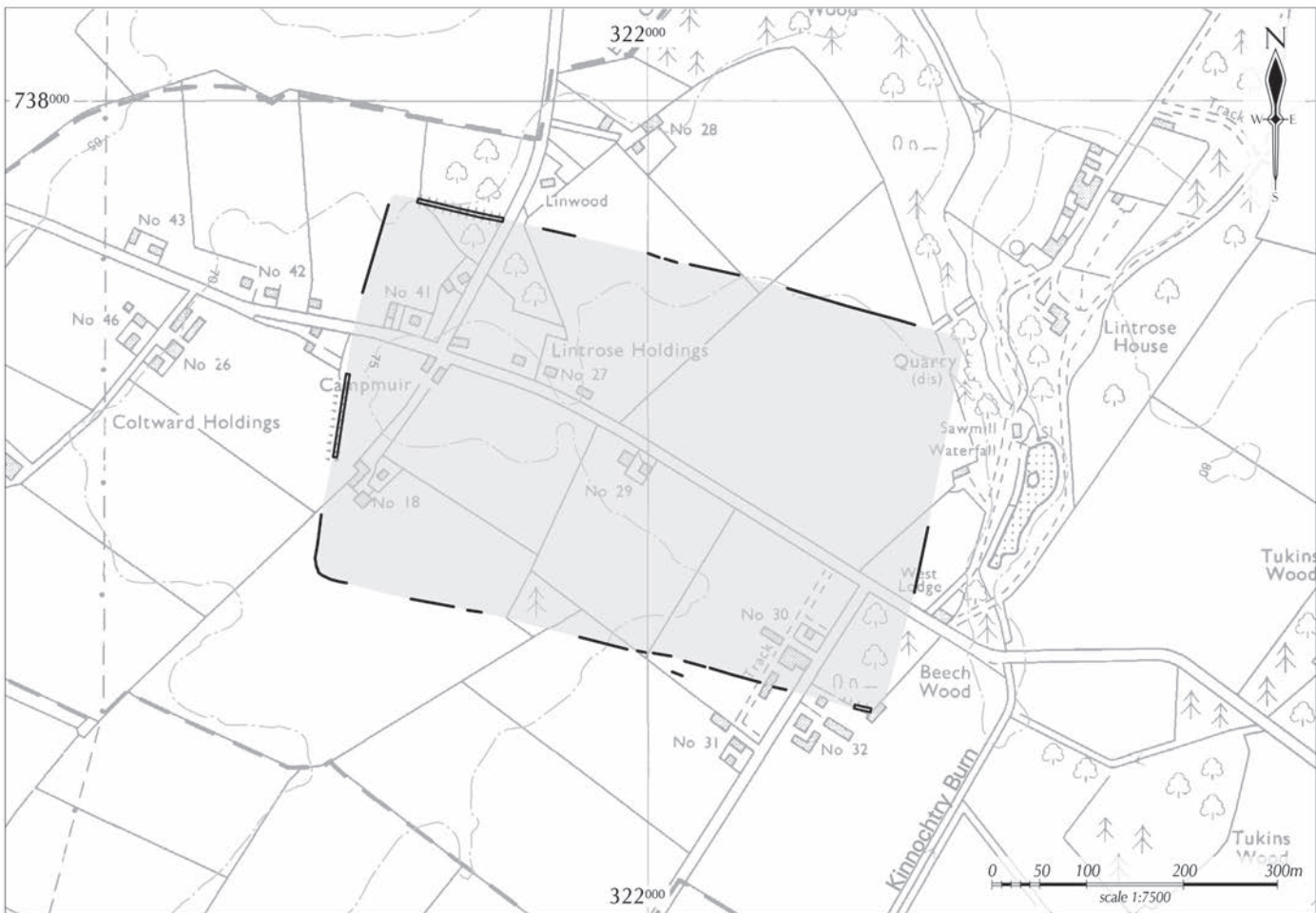


Illustration 164

Lintrose. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Lintrose (illus 47 & 164)

(Campmuir)

NO 2200 3760 NO 23 NW 5

The camp at Lintrose was discovered by Captain Robert Melville in August 1754 (Balfour-Melville 1917: 123n; Jones & Maxwell 2008), and planned by Roy the following year (Roy 1793: Pl. XIV). When Roy planned it, the whole of the WNW side, most of the SSW side and parts of the other two sides were upstanding, including a *titulus* in the WNW side. When Crawford visited the site in 1925, small stretches of the WNW and NNE sides were visible, along with two short stretches adjacent to the south-east corner (1949: 85–6). Today, only the small stretches of upstanding rampart close to the south-east corner and a stretch of the NNE side close to the north-west angle can be detected. The stretch of the WSW side south of the main road through the camp

is barely visible as an earthwork. Much of the remainder of the camp is now known through cropmarks on air photographs.

The camp lies about 2km south of Coupar Angus, on level ground west of Lintrose House at the village of Campmuir; the Kinnochtry Burn runs along its east side. It measures about 624m from WNW to ESE by about 404m transversely, enclosing 25ha (62 acres). The *titulus* that Roy recorded in the WNW side is no longer detectable, but there is an entrance gap and *titulus* in the SSW side, towards the eastern part of that side. The size and layout of the two recorded entrances suggest that the camp originally had six gates. The rampart of the camp survives in a few stretches up to a maximum

of 6m in width and 0.7m in height. Excavations in 2004 recorded that the ditch was V-shaped, measuring 2.3m in width and 0.75m in depth. These also noted a hearth feature of unknown date within the camp (Hunter 2005: 393, fig 6).

The OS noted that an earthwork in Packmanley Wood, on the ESE side of the camp, had been proposed as its north-east corner by General Sir Riddell-Webster of Lintrose, but that it could be the remains of a track (OS Recorder 1958).

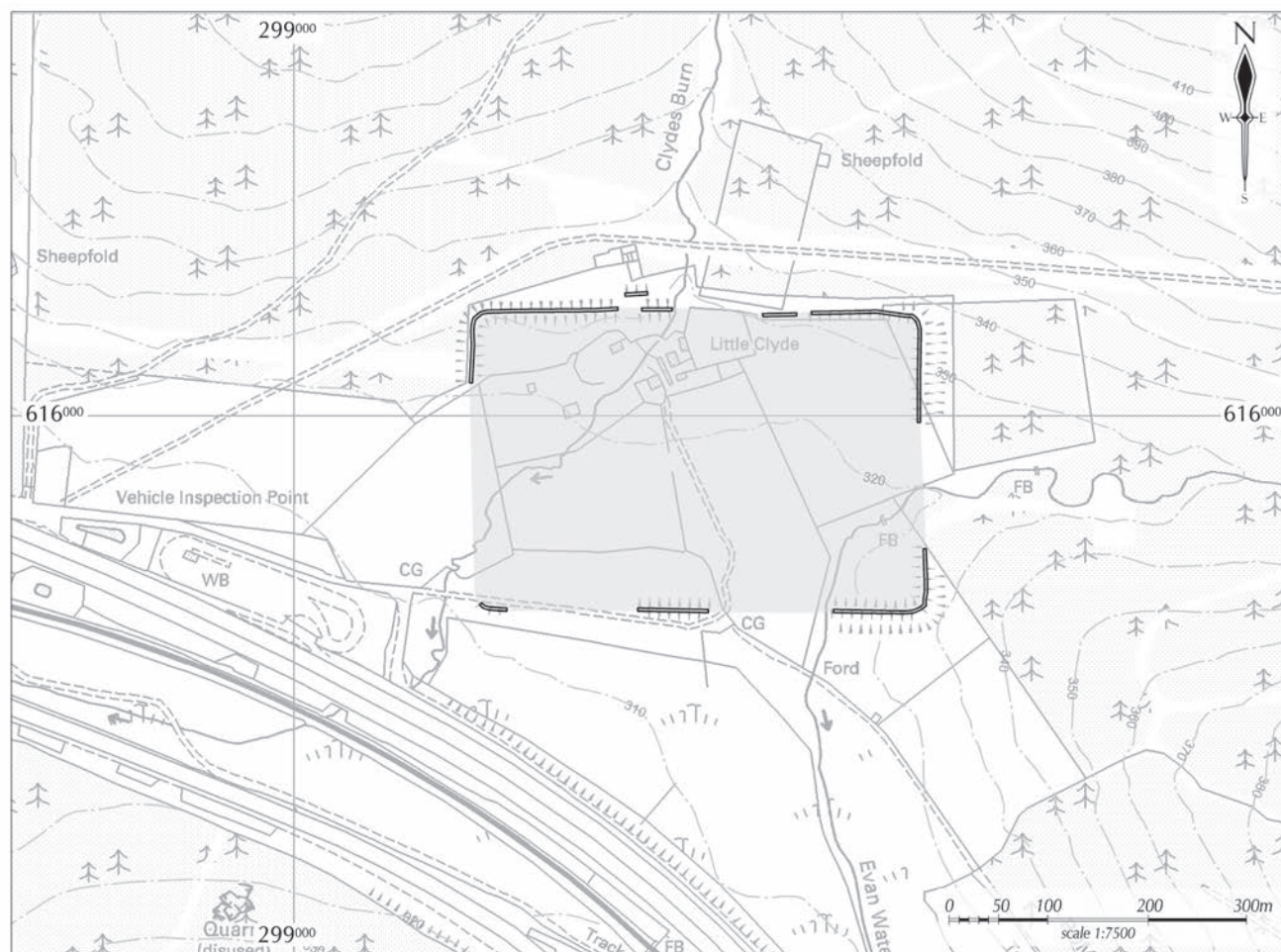


Illustration 165

Little Clyde. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Little Clyde (illus 47 & 165)

NS 9940 1595 NS 91 NE 7

First recorded through ground survey by Crawford in 1924 (Collingwood & Taylor 1924: 207), the camp at Little Clyde still survives as an upstanding earthwork on the line of the Roman road between Annandale and the Upper Clyde. It measures 434m from east to west by 288m and enclosed 12.5ha (almost 31 acres). An upstanding *titulus* is visible in the north side, and Crawford reported a second

titulus on this side (Collingwood & Taylor 1924: 207), but this one can no longer be discerned on the ground. The upstanding rampart of the camp survives to a height of some 0.7m and is spread some 3m wide, with the accompanying ditch 0.3m in depth and 2.1m in width. RCAHMS recorded that the ditch may have been rock-cut in places (1978a: 134).

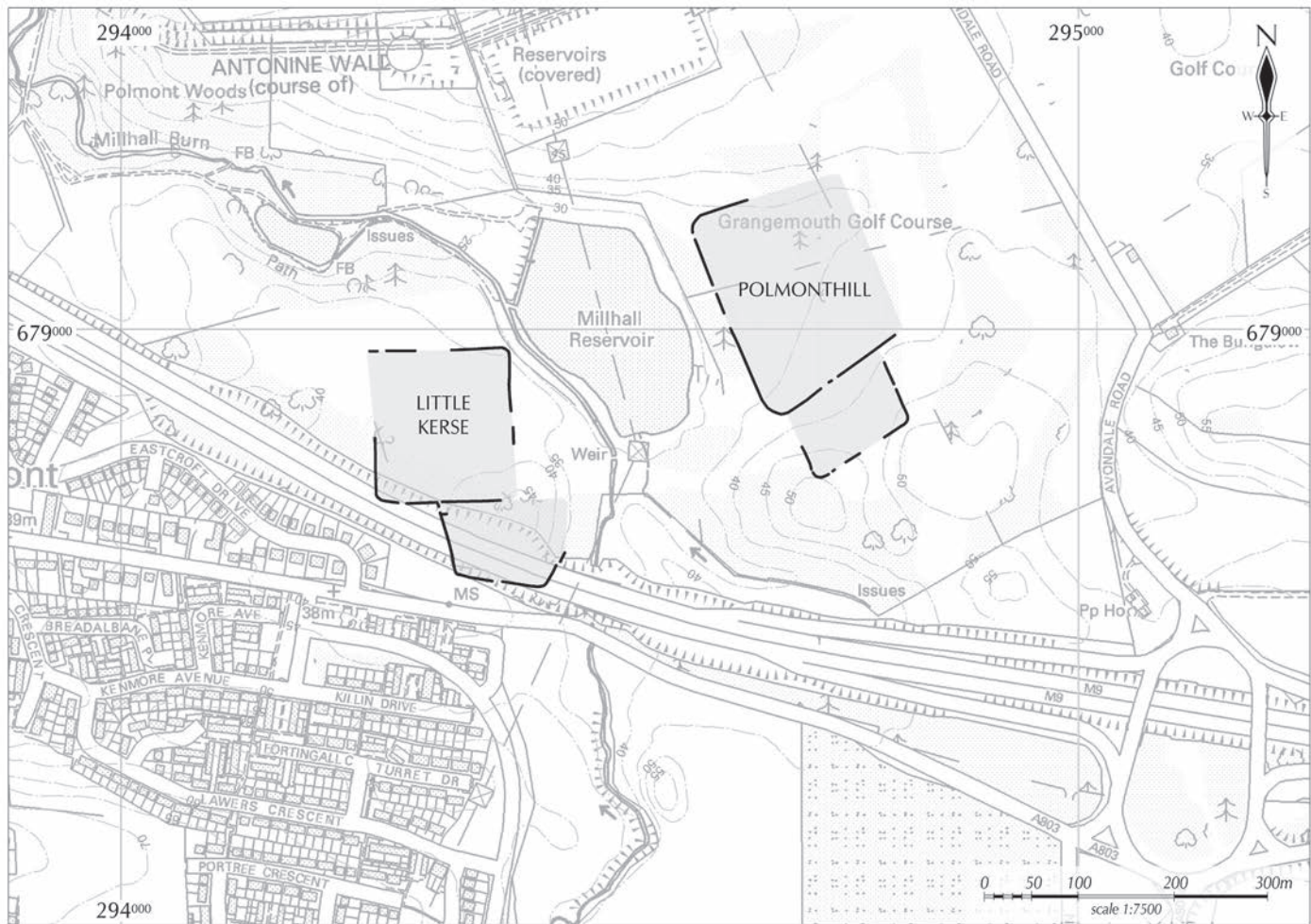


Illustration 166

Little Kerse and Polmonthill with the Antonine Wall to the north. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Little Kerse (illus 47 & 166)

NS 9433 7888 NS 97 NW 12

The camp at Little Kerse was first recorded as a crop-mark from the air by St Joseph in 1946, alongside its neighbour at **Polmonthill** (St Joseph 1951a: 62). It is situated about 350m south of the Antonine Wall between the forts of Inveravon and Mumrills, just over 1km west of the former (across the River Avon) and some 2.5km east of the latter.

When originally discovered, the site lay in arable fields, but it now lies on Grangemouth Golf Course, and the construction of the M9 from Edinburgh to Stirling has destroyed its southern portion.

The camp is almost rectangular in form, measuring 158m from north to south by 143m transversely, enclosing an area of about 2.3ha (5.6 acres). It is provided with an annexe on its south-east corner, enclosing an additional

1ha or so and incorporating what was a substantial knoll, now largely destroyed by the M9. Probable entrance gaps are visible in the north, east and west sides; RCAHMS recorded *tituli* on the east, west and south sides by probing (1963: 107).

The provision of an annexe is unusual, as these have only been recorded at two other camps on the Antonine Wall: **Balmuildy** and nearby **Polmonthill**. Feachem suggested that the annexe was provided on higher ground in order to signal and observe in an area that may have been wooded in antiquity (Feachem 1958: 334, following Macdonald 1934: 87), but this seems unlikely.

The annexe was subject to excavation in 1963, revealing a V-shaped ditch in places, but was less regular on the east side, running down a steep slope and gradually

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diminishing to a very small trench as it ran to the north (McCord & Tait 1980).

Pottery fragments of early Antonine date were recorded in the ditch of the annexe, suggesting that the camp

related to the construction of the Wall (also see **Dullatur** I and II). A number of long cists were uncovered in the interior, of probable post-Roman date (McCord & Tait 1980).

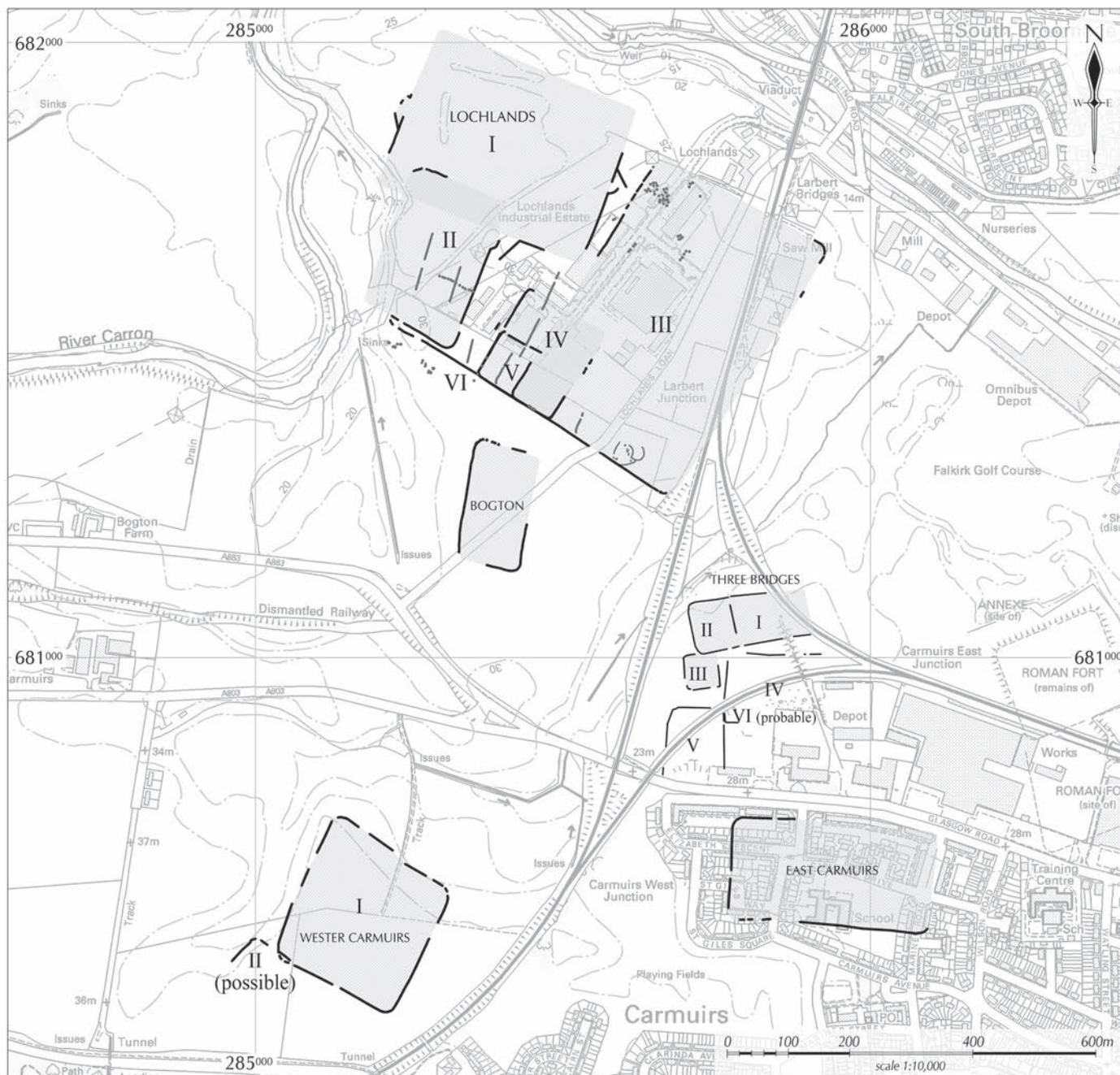


Illustration 167

Lochlands I–VI, Bogton, Three Bridges I–VI, East Carmuirns and Wester Carmuirns I–II and other cropmarks in the area. The Roman fort at Camelon lies to the east of the Three Bridges area. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Lochlands (illus 22, 47, 167)

<i>Lochlands I: NS 8540 8190</i>	<i>Lochlands V: NS 8540 8148</i>
<i>NS 88 SE 96</i>	<i>NS 88 SE 7</i>
<i>Lochlands II: NS 8530 8168</i>	<i>Lochlands VI: NS 8534 8148</i>
<i>NS 88 SE 66</i>	<i>NS 88 SE 7</i>
<i>Lochlands III: NS 8568 8160</i>	<i>Lochlands Bogton: NS 8540 8125</i>
<i>NS 88 SE 7</i>	<i>NS 88 SE 67</i>
<i>Lochlands IV: NS 8545 8153</i>	
<i>NS 88 SE 7</i>	

The Roman fort at Camelon lies to the north of the fortlet of Watling Lodge on the Antonine Wall, some 1km from the Wall. Excavations on the fort have shown that it was occupied in the Flavian and Antonine periods. On the plain to the west of the forts lies the largest concentration of temporary camps recorded in Britain, almost all recorded through cropmarks. The location is of key importance on the isthmus and is also close to the Roman road northwards to Stirling and Ardoch. A further large camp lies across the River Carron at **Househill Dunipace**.

The camps can be divided into five areas (the first and third representing the main clusters): **Lochlands**, the main complex of camps west of the railway to Stirling, now situated largely under an Industrial Estate; **Bogton**, lying between Wester Carmuir and Lochlands; **Three Bridges/Carmuir**, the grouping of camps around the merging of the railway lines, west of Camelon fort; **Wester Carmuir**, which is usually regarded as one of the construction camps for the Antonine Wall; and the large camp at **Househill Dunipace**, across the River Carron.

Some of the camps at **Lochlands Three Bridges** have been interpreted as work and storage depots, possibly relating to a nearby port on the River Carron (Bailey 2000: 476; Tatton-Brown 1980). There have been numerous excavation trenches placed through the various camps at Lochlands, and several plans of the complex have been prepared over the years (for example, RCAHMS 1963: fig 46; Maxfield 1981: fig 1; Maxwell 1991: fig 18.1; Leslie 1995: fig 15; Bailey 2000: illus 1; Jones 2005c: fig 3; Jones 2006: fig 106; RCAHMS St Joseph Collection DC 37270). The area has been partially destroyed by quarrying, with an industrial estate and housing lying over some of the features. These cropmarks demonstrate use and reuse of the promontory, with numerous overlapping camps, some clearly revealing more than one phase of use on excavation.

The complexity of both the cropmark record (with camps recorded since the 1940s) and the multiplicity of

excavated evidence gathered piecemeal over more than 50 years render it almost impossible to be certain of the number of camps on the isthmus, and interpretations differ on the number of camps represented at the main Lochlands site. An interpretation of each camp on the basis of air photographs and known excavated evidence is presented here.

Camp I is the northernmost of the group, lying on a bend in the River Carron, and was first recorded in 1957 by St Joseph from the air (Maxwell & Wilson 1987: 29). Part of the camp has been destroyed by quarrying, and a further part lies under the Lochlands Industrial Estate. But enough was photographed from the air prior to quarrying and development to record that it measured 355m from WNW to ESE by at least 200m, enclosing at least 7.1ha (17.6 acres), possibly some 9.5ha (over 23 acres) if the known entrances on the WNW and ESE sides are central. These two have Stracathro-type gates, and a further oblique traverse has been recorded on the SSW side. Excavations in 1980–1 on the ditch on the ESE side by St Joseph & Maxwell recorded that it was a shallow V-shape, just over 2m wide and 0.5m deep (RCAHMS St Joseph Collection: Notebook 8; DC 37273); at the gate on the SSW side it had a stepped profile, some 2.1m wide and 0.9m deep (RCAHMS St Joseph Collection: Notebook 8; DC 37274).

Camp II lies immediately to the south of camp I, with which it probably intersects, but the relationship between the two was not determined by St Joseph & Maxwell's excavations because of the presence of (probably later) rubbish pits. Some 190m of the ESE side towards a gate with an external *clavicula* has been recorded, together with the rounded southern corner angle and over 115m of the SSW side. The west portion of the camp may have been eroded by the River Carron, but if the ditch continues its course to the Carron, the camp could measure at least 145m in width. If the gate in the ESE side is in the centre of that side, the transverse measurement could be as much as 380m, and the camp would enclose at least

5.5ha (13.6 acres). Excavations by St Joseph & Maxwell recorded that the ditch on the ESE side was just under 2m wide and 0.5m deep (RCAHMS St Joseph Collection: Notebook 8; DC 37276); at the *clavicula* its profile stepped down to a small U-shape, which measured some 0.8m in width and 0.4m in depth within a ditch up to 2.3m in width and 0.9m in depth; it had burnt material in its fill (RCAHMS St Joseph Collection: Notebook 8; DC 37275). They also recorded that the camp ditch exhibited single-phase use.

Two linear cropmarks lie within this camp, almost parallel to its ESE side. A further linear cropmark (the ditch of camp VI) lies immediately south of this camp and may well enclose the entire promontory on which camps I and II lie.

Camp III was the earliest recorded camp of the group (in 1949 by St Joseph from the air (1951a: 62)), but the majority of this camp now lies under the Industrial Estate. It measures 473m from north-east to south-west by 310m transversely, enclosing 14.6ha (36 acres). It has been subjected to repeated excavations since the 1950s, when probing by Feachem failed to locate the north corner (1958: 336–7). But he was almost certainly probing in the incorrect place owing to an inaccurate plan caused by confusion of the cropmarks for camps III and IV (Feachem 1958: fig 7; RCAHMS 1963: fig 46‘C’). However, his probing did give more information about the location of the south-east side (Feachem 1958: 337; RCAHMS 1963: 111). In the 1960s, Thomson also reported that his attempts to locate the north-west angle (presumably the same north angle as Feachem) were unsuccessful. He stated that enough of the north and west sides could be seen of the camp, but produced no overall plan, quoting the incorrect plans from RCAHMS 1963 and Feachem 1958 (Thomson 1968: 259–60). He also excavated on the south-west side of the camp but failed to locate the ditch here, reporting a few sherds of amphorae and post-medieval pottery (1968: 261). However, excavations in the 1980s by St Joseph & Maxwell recorded that the ditch on the north-west side was V-shaped, 1.5m in width and 1.15m in depth. After silting it was recut with a gentler profile and squared drainage channel (Frere 1983: 287–8). Further trenches in the south part of the north-west side suggested that the ditch was recut twice (Frere 1984: 275). The excavators interpreted these as follows: the first-phase ditch was V-shaped with iron pan and turf in the fill, one layer of turf possibly from the rampart of phase two or three which lay outside it. The second-phase ditch had a narrow square channel

in some sections, but was V-shaped in the south section. The third-phase ditch, which was V-shaped, was dug on almost the same alignment as the second phase, only 0.45m away (Maxwell & Wilson 1987: 39). In the south section, the outer ditch (phase three) cut through an earlier pit, which may be Roman in date (RCAHMS St Joseph Collection: Notebook 8; DC 37279).

Numerous pits are visible in the northern part of the camp, close to its north corner, and at least one was cut by the camp ditch (Frere 1983: 287–8). The pits were full of charred wood, ashes and burnt earth and, although there was no secure Roman dating, the excavators thought that they might be Roman in date (Maxwell & Wilson 1987: 39).

Later excavations in 1998 on the eastern part of the south-east side close to the corner revealed at least two phases of Roman ditch, with the possibility of an earlier ditch which may also be Roman. This early ditch had a flat base and was 0.95m in width and appeared to have silted up naturally. The next phase of ditch was V-shaped with an ankle breaker in places, and was up to 1.5m in width and 0.9m in depth. It had also silted up naturally. The third phase was V-shaped with a flat base, measuring up to 1.9m in width and 0.9m in depth. Again, this had silted up naturally. A field oven was recorded just inside the interior, with a surface fill of burnt clay, charcoal and ash (Glendinning 1998b & c). More recently, excavations by Bailey on a short stretch of the north-west side recorded two parallel V-shaped ditches and field ovens (Bailey 2007; EAFS 2009).

The intricacy of the ditches uncovered goes some way to explaining the complexity of the cropmark record, particularly in the southern part of the camp, which probably had a relationship with camps IV, V and possibly VI (assuming that IV and V are camps and not annexes of some sort). In the instances where a second ditch was dug through the existing ditch, the excavators have reported that there was considerable silting before the second ditch was dug. However, Bailey’s excavations on the parallel ditches led him to suggest that they were contemporary with one another (2007).

Camp IV protrudes from the western corner of camp III, and part of the north-west side at the entrance and *titulus* was excavated by Thomson, who thought that he was excavating camp III (1968). The intersection between camps III and IV has not been excavated, and therefore it is not possible to assess their relative chronology. The majority of the camp now lies under the industrial estate, but it measures 166m from north-east to south-west; an entrance gap with *titulus* lies in the centre of the north-

west side. Its transverse dimension is assumed to be about 142m, if one of the linear cropmarks within camp III represents the south-east side of this camp; other lines presumably represent other occupations of the site (such as camp V). This would result in a camp enclosing some 2.4ha (6 acres).

The excavations by Thomson in 1965–6 (on camp IV) recorded that the camp ditch was V-shaped, measuring some 3m in width and 0.6m in depth. The *titulus* was about 12.5m in length and situated some 7.6m from the entrance; its ditch was V-shaped, measuring 2m in width and 0.5m in depth. On the south side of the entrance gap, the camp ditch turned inwards at right angles to the camp and was V-shaped although less regular (here numbered camp V, and visible on the air photographs). This ditch is crossed by another ditch, some 18m from the entrance, also V-shaped and measuring about 1.4m in width and 0.5m in depth. This ditch is not visible on the air photographs of the area and its course is unknown (Thomson 1968). Maxwell & St Joseph also excavated trenches on the south-west and (probable) south-east sides of this camp; all the trenches appear to have been single phase (RCAHMS St Joseph Collection: DC 37272, DC 37277). The ditch measured up to 2.15m in depth (Frere 1984: 275). They also recovered an *as* of Vespasian in the upper filling of the ditch (Frere 1984: 275). In 2004, further excavations took place, probably on this camp, recording that the ditch was U-shaped, some 2.4m in width and up to 0.7m in depth. Finds from this excavation recorded amphorae, mortaria, and metal artefacts including nails, bar fragments and a conical ferrule used for the protection of spear butts. The pottery was given a broad Flavian date (Engl forthcoming). No recutting of this ditch was observed in either excavation, and micromorphological examination suggested that the ditch was deliberately and rapidly back-filled (Engl forthcoming). Two probable ovens were also recorded, one of which cut the ditch, both of which produced radiocarbon dates from the 1st century AD (Engl forthcoming).

Thomson's excavations on the ditch of the *titulus* recorded the presence of a *denarius* of Hadrian, but, as noted by Thomson, its presence in the upper filling reduces its validity (Thomson 1968: 262).

Excavations in 2002 by Bailey in the vicinity of camps III and IV recorded three ditch sections and a field oven (Hunter 2003: 302).

A linear cropmark some 30m inside the north-west side of camp IV (therefore between III and IV) was recorded as 1.6m wide and 0.8m deep; it also demonstrated evidence for deliberate filling with rampart material

(RCAHMS St Joseph Collection: DC 37277; Frere 1984: 275). This suggests that it was earlier than camps IV and V, and it may relate to camp VI, or another camp (as yet unidentified).

Camp V appears to be a reduction of camp IV, but the location of the south-east side of both camps is unclear. If they shared the same south-east side, then the camp probably measured about 142m from north-west to south-east by 82m, enclosing 1.2ha (3 acres), but the ditch showed no sign of recutting, so they may not have shared this side, unless the timescale between the two was very short. Thomson's excavations recorded the 'inturn' from camp IV, which presumably represents the north-east side of camp V. The ditch was V-shaped but inconsistent, and flat-bottomed at one point (1968: 262). But his excavations did not demonstrate a clear separation between the north-west side of camp IV and the 'inturn' (which is presumed to represent camp V) so the evidence defining this camp is not conclusive.

Immediately south of camp II lies a further slight cropmark which continues the line of the south-west side of camp III farther to the north-west. This camp (VI) could enclose the entire promontory on which camps I and II lie (and possibly camp III), although its south-east side could be one of the linear cropmarks visible in camp III. The camp is likely to measure at least 305m, and possibly as much as 640m, on its south-west side by possibly 470m, suggesting a camp which could be as large as 25.4ha (63 acres). Excavations in 1988 by Maxwell & St Joseph on the slight cropmark on its south-west side recorded a sharp V-shaped ditch of a single phase, some 1m in width and 0.5m in depth (Frere 1989: 271). It was demonstrated to be earlier than camps III and IV (and therefore probably V), and Maxwell has suggested that it may also be earlier than I and II owing to its location (Frere 1989: 271). The excavated ditch lying 30m within camp IV (above) may relate to this camp.

A series of pits are visible almost in a line some 30m south of the south-west side of this camp. Excavation revealed one to be 1m by 1.5m in width and 0.75m in depth with vertical sides and a fill of sand and gravel and carbon flecks, similar to the pits excavated in Lochlands III. These may indicate the presence of a larger camp on the plateau (Frere 1989: 271), although pits need not necessarily be located within the camp perimeter (see **Inchtuthil** and **Drumlanrig II**).

South of the complex of camps at the industrial estate, and bisected by the small Lochlands Loan road, lies the camp of **Bogton**, recorded in 1975 by St Joseph from the

air (1977: 135; Maxwell & Wilson 1987: 39). It measures 194m from NNE to SSW by 106m and enclosed just over 2ha (5 acres). No excavations have been conducted on this camp.

The general lack of excavation on the intersections of the cropmarks at Lochlands, (despite the attempt on camps I and II), means that it is difficult to assign any meaningful chronology to the group. However, camp VI was earlier than camps III, IV and V, and camp V is almost certainly later than camp IV. The ditch of camp III was recut on at least one occasion, and this camp appears to have been deliberately sited to avoid camps I and II. From the recutting of the ditch of camp III, it is not

possible to determine if it was deliberately filled for camp IV, but it is likely that at least the final phase of use of camp III was later than camp IV. Maxwell postulated that camp VI could be earlier than camps I and II (Frere 1989: 271), but this was largely owing to its location. It appears to be the only camp that uses the same ground as camps I and II, and as both demonstrated evidence for deliberate in-filling, this might suggest that camp VI was later than camps I and II. Thus it appears that camps I and II may have been the earliest on the Lochlands site with the area immediately to the east representing the main occupation site that was used and reused on several occasions.

Lochlands, Three Bridges (illus 47 & 167)

Lochlands, Three Bridges I: NS 8581 8106
NS 88 SE 22

Lochlands, Three Bridges II: NS 8573 8105
NS 88 SE 22

Lochlands, Three Bridges III: NS 8572 8097
NS 88 SE 22

Lochlands, Three Bridges IV: NS 8580 8096
NS 88 SE 22

Lochlands, Three Bridges V: NS 8570 8088
NS 88 SE 22

In the area to the south of Lochlands, west of Camelon, lies a further series of camps known as ‘Three Bridges’; the majority lie in a triangular zone within three converging railway lines and have been recorded since the 1950s (RCAHMS 1963: 111). The area to the south of this triangle has been subject to several excavations in recent years by Bailey (Bailey 2000; Hunter 2003: 302). In addition, Price has recorded the ditches of possible camps just east of the railway triangle, north-west of the fort of Camelon, and these are probably the eastern part of one or more camps at Three Bridges, although some may relate to out-works for the fort (Price 1974; 1977). Camp fires were also found (Price & Price 1973), and one of the proposed camp ditches was up to 2.6m in width and up to 1.2m in depth (information in RCAHMS).

The results of Bailey’s excavations and the cropmark evidence suggests that at least six camps of varying shapes, sizes (and probably functions) have been recorded, along with the camp known as **East Carmuir**, which is probably larger than has previously been suspected (*contra* Feachem 1958: fig 6; RCAHMS 1963: fig 46 ‘F’).

Bailey’s excavations at Three Bridges have significantly expanded our knowledge of the camps in this area. Some of the camps excavated tied up with the known evidence

from cropmarks; others represented new features. At least two of the camps may have been backfilled, one (probable camp VI) possibly to make way for a new camp in pretty much the same location (IV). Another showed evidence for recutting and therefore more than one phase of use (V). Potential annexes were also identified, and a series of pits excavated, identified as ovens and possibly kilns. Some of the ‘camps’ appeared to be 1st century AD in origin, owing to the identification of Flavian pottery in the ditch of camp IV. Bailey suggested that many of the ‘camps’ were probably work and stores depots, owing to the presence of pits indicating industrial activity at the site (2000). This also fits with the report of a series of ‘fire pits’ to the east of the railway, east of camp I, originally proposed as cremation pits (Breeze & Rich-Gray 1980). Presumably some of the Three Bridges camps may have related to the Antonine occupation of the area, but there is no datable evidence to confirm this at present.

Camp I is the north-eastern of the group between the three railway lines, and measures 80m by probably at least 115m, although the location of the east side is unknown and no entrances are visible. Camp II, to the west, may be an annexe to this small camp, or alternatively one of the two may represent a reduction of an existing camp. This second camp measures 83m by 70m, therefore enclosing

almost 0.6ha (1.4 acres), although if the area of camp I is included then it measures about 82m by at least 180m. There are hints of a possible *titulus* on the north side, close to the ditch separating camps I and II.

Camp III lies immediately SSW of camp II and is almost square in form, measuring 57m by 56m, enclosing 0.3ha (0.8 acres). No gates have been recorded. To its east lies camp IV, now partially under an industrial estate. About 170m of its west side and 150m of the north have been recorded as cropmarks. The west side of this camp is often illustrated as running farther to the south (down to the west of the **East Carmuir**s camp, for example, Bailey 2000: illus. 1), but this could not be confirmed through the available air photographic evidence. Excavations by Bailey in 1987 and 1993 on the west ditch recorded that it was flat-bottomed, 0.63m wide and 0.16m deep and was heavily plough-truncated in one sector (Frere 1988: 426–7). In another, it was some 0.8m wide and 0.5m deep and may have been recut. An entrance gap was identified, with a narrow shallow ditch between, and some 8.2m to the west a truncated pit was located which was interpreted as the possible remnants of a *titulus* (Bailey 2000: 473–4). Flavian pottery was found in the ditch of this camp, and on the ground surface nearby (Bailey 2000: 487).

South of camp III and west of IV lie two sides of a further camp (V), again now partially under an industrial estate and housing. Some 65m of the north side, the rounded north-west corner angle and at least 140m of the west side have been recorded, the majority through aerial survey with excavations by Bailey recording a further stretch of the ditch to the south. He suggested, on topographical grounds, that the camp could measure some 420m in length, but also commented that it could represent part of an annexe or fort (2000: 483). The excavated ditch

was up to 3.9m in width and 1.2m in depth and may have been deliberately backfilled. It also showed evidence for a recut (Keppie 1994: 257; Bailey 2000: 475–8). A series of pit groups were recovered, which produced artefacts and a radiocarbon date in the Flavian period. The excavator suggested that some may be ovens or kilns (Bailey 2000: 484–5).

LOCHLANDS: DISCUSSION

It is clear from the aerial and excavated evidence that the promontory represented not only a major gathering ground for troops on the march northwards, but also was a strategic location for the Antonine Wall. The presence of Flavian finds at both concentrations of camps on the promontory (including a Flavian radiocarbon date from charcoal in a pit group at Three Bridges: Bailey 2000: 483) attests to a certain amount of 1st century AD activity in the area, and is supported by the likely dating of the two camps at Lochlands with Stracathro-type gates. The denarius of Hadrian from Lochlands IV, while not comfortably stratified, also attests to a later presence, possibly relating to the Antonine Wall and the fort of Camelon. Lying beyond the frontier, the area would have provided a greater level of security than many sites north of the Wall. While the finds assemblage is small, it is significant, particularly when placed in the context of artefacts from Roman camps (Hunter forthcoming).

The Lochlands area was clearly important in Roman times, probably both in terms of supplying the army and industrial activity, as well as being a nodal point for campaigns. It was clearly a major gathering ground for troops on the march northwards. The use of the Three Bridges area as a potential industrial zone may relate to a nearby port on the River Carron serving the fort at Camelon (Bailey 2000; Tatton-Brown 1980).

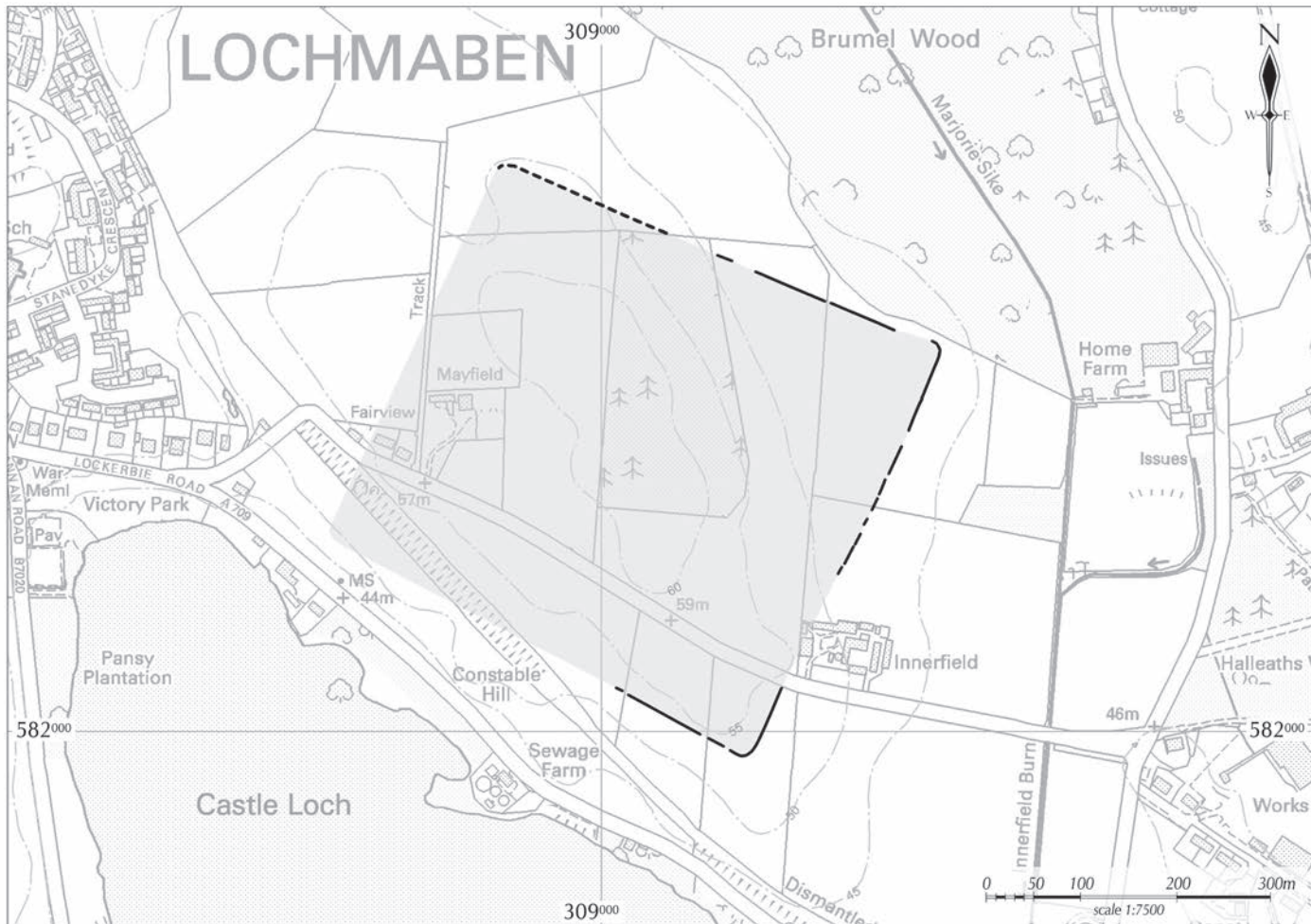


Illustration 168

Lochmaben. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Lochmaben (illus 47 & 168)

(Innerfield)

NY 0905 8227 NY 08 SE 28

Discovered in 1967 by St Joseph from the air, this camp lies on level ground above Castle Loch, just west of the River Annan, some 2km west of the Roman fort at Ladyward and close to the line of the Roman road from Annandale towards the River Nith. Parts of three sides have been recorded through cropmarks, with trenching by St Joseph in 1985 recording the remainder of the north-east side together with the north corner angle (RCAHMS St Joseph Collection: DC 39372;

depicted as a dashed line on illus 168). These reveal that the camp measured just over 500m from north-west to south-east by 465m transversely and enclosed 22.8ha (just over 56 acres). Possible entrance gaps are visible in the north-east and south-east sides. Drawings of sections of excavated ditch held by RCAHMS indicate that on the north side it was V-shaped, about 1.5m wide and 0.6m deep (RCAHMS St Joseph Collection: DC 39373).

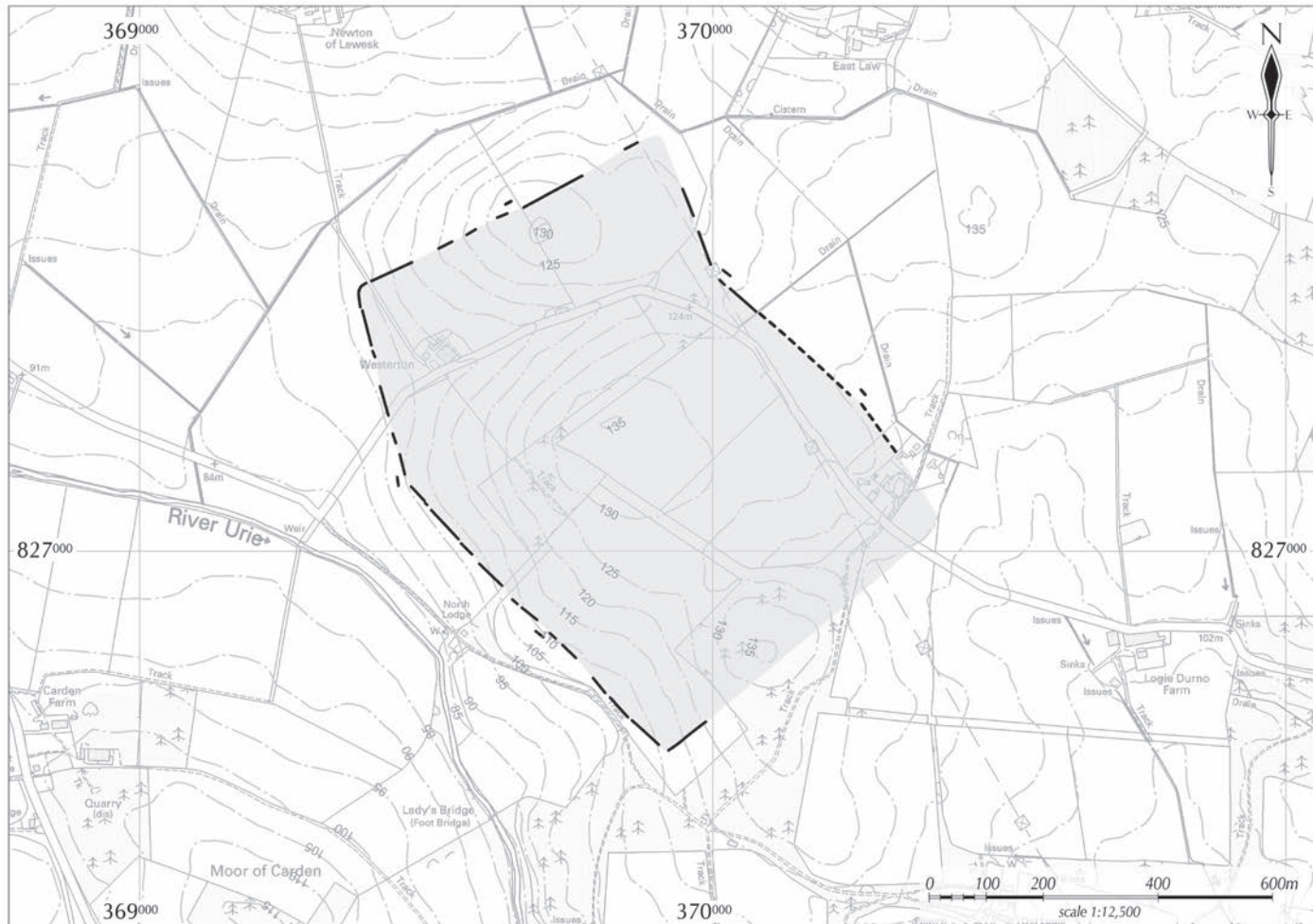


Illustration 169
 Logie Durno. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved.
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Logie Durno (illus 47, 169)

(Durno; Bennachie)

NJ 6980 2720 NJ 62 NE 31

The camp at Logie Durno was discovered from the air by St Joseph in 1975 (St Joseph 1977: 141), just to the east of the River Urie, some 5km from Mither Tap of Bennachie, which dominates the surrounding landscape. It lies on ground that slopes quite significantly, with a 35m height-difference between the highest and lowest points within the camp; its perimeter is slightly irregular in form. The farms of Easterton and Westerton lie within the camp, which is now under arable and improved pasture. Nothing appears to survive of the camp above ground, although a very low swelling on the north-east side (not depicted on illus 169) may represent the ploughed out remains of a rampart.

Part of the camp has been visible as cropmarks, with much of the rest of the perimeter established by excavations between 1975 and 1977 and depicted as a dashed line on illus 169 (St Joseph 1978a). It measures about 959m from north-west to south-east by about 653m transversely, enclosing an area of some 58.6ha (almost 145 acres), and is the largest camp north of the Forth–Clyde isthmus. The excavated ditch was usually V-shaped, up to 3.65m in width and 1.4m in depth (St Joseph 1978a: 273). Three *tituli* are clearly visible on the air photographs, two in the south-west side (where there is a significant change of angle at the northern gate) and one on the northern part of the north-east side, also at a change of angle. Two

further *tituli* were recorded through excavation, in the southern part of the north-east side and the centre of the north-west side. That on the north-west side had a shallow ditch, some 0.5m in depth and set about 15m from the entrance. Illustration 169 includes the results from St Joseph's excavations (1978a).

St Joseph used the evidence of Logie Durno's size and location to build up an argument for the area as the location of Tacitus' famed battle of Mons Graupius, with nearby Bennachie as the titular hill (1978a).

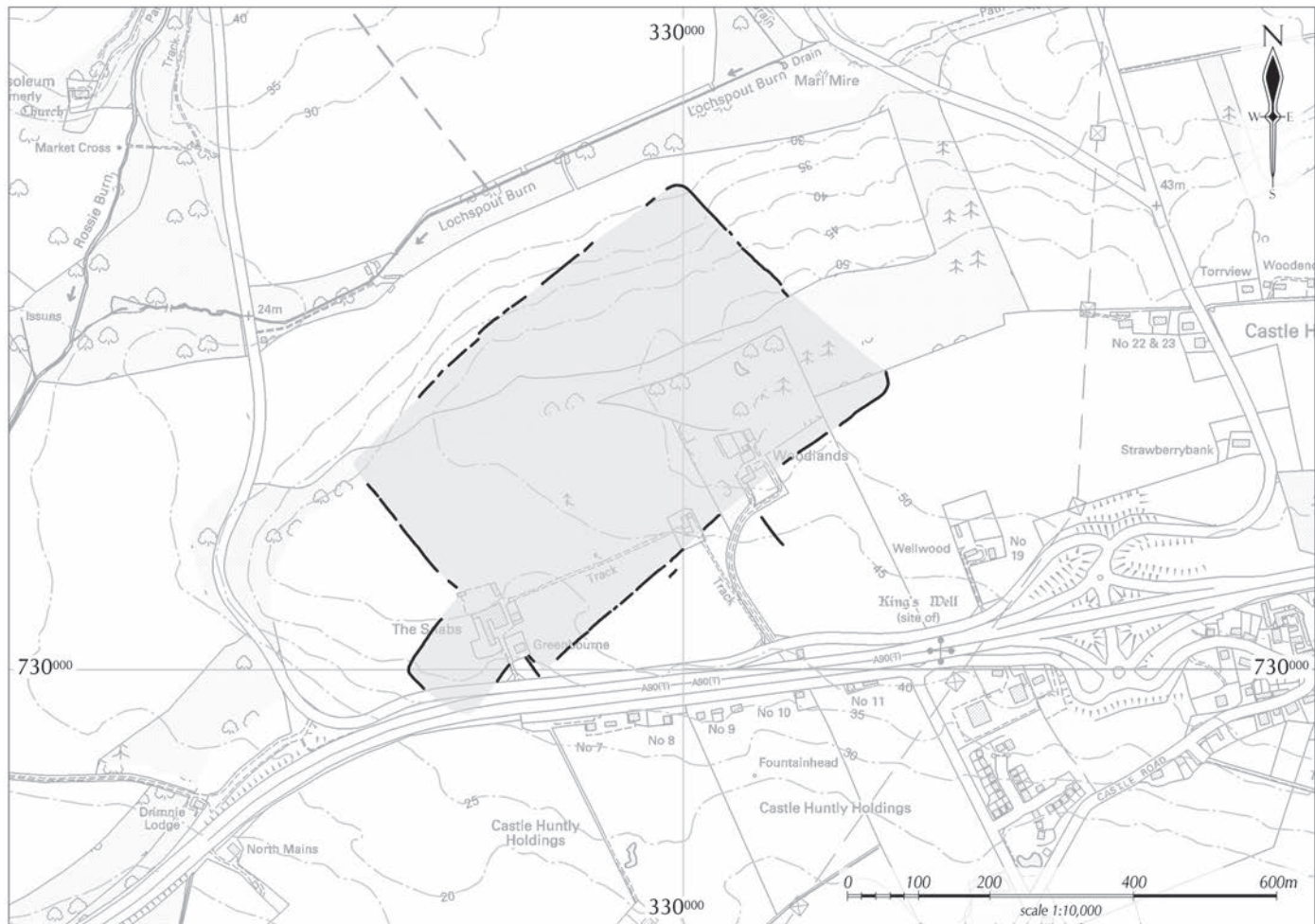


Illustration 170

Longforgan. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Longforgan (illus 47 & 170)
(Greenbourne; The Snabs)

NO 2988 3042 NO 23 SE 18

The camp at Longforgan was discovered from the air by St Joseph in the late 1960s (St Joseph 1969: 111), sited on a low ridge on the south side of the Sidlaw Hills, west of the village of Longforgan. The camp at **Invergowrie** lies just over 4km to the east, and the Firth of Tay some 3km to the south. The ground on which the camp lies drops away to the Lochsprout Burn to the north.

Parts of all four sides are known through the crop-mark record, and the camp measures 622m from north-east to south-west by 408m transversely, enclosing 25ha (62 acres). An annexe is visible on the south-west side, measuring some 136m by 114m and enclosing a further 1.5ha (3.7 acres). Entrance gaps are visible in the cropmark on the north-east and south-west sides;

on the south-east side a gap is protected by a *titulus*, and a second was identified by excavation on the north-east side.

Excavations have been conducted on various occasions by St Joseph. On the north-east side, the ditch was V-shaped, measuring up to 3m in width and 1.3m in depth with a drainage channel in the bottom. A later drain cut through the ditch. The entrance gap was about 16m in width, and a *titulus* was recorded 13m from the camp with a V-shaped ditch 2.4m in width and 0.9m in depth (RCAHMS St Joseph Collection: Notebook 4). Elsewhere, the ditch was up to 3m wide and 1.4m deep (RCAHMS St Joseph Collection: Notebooks 5 & 8; St Joseph 1970b: 38).

Later excavations in 1994 by Neighbour recorded that the ditch of the annexe was up to 0.6m in depth and up to 1m in width (Keppie 1995: 332). Analysis of particle size within the fill suggested that the ditch was backfilled fairly quickly, although it was not possible to say whether this

was owing to deliberate backfilling or rapid weathering. A small circular scoop of uncertain date or function was recorded in the interior of the annexe, but no datable material was recovered (Neighbour 1998).

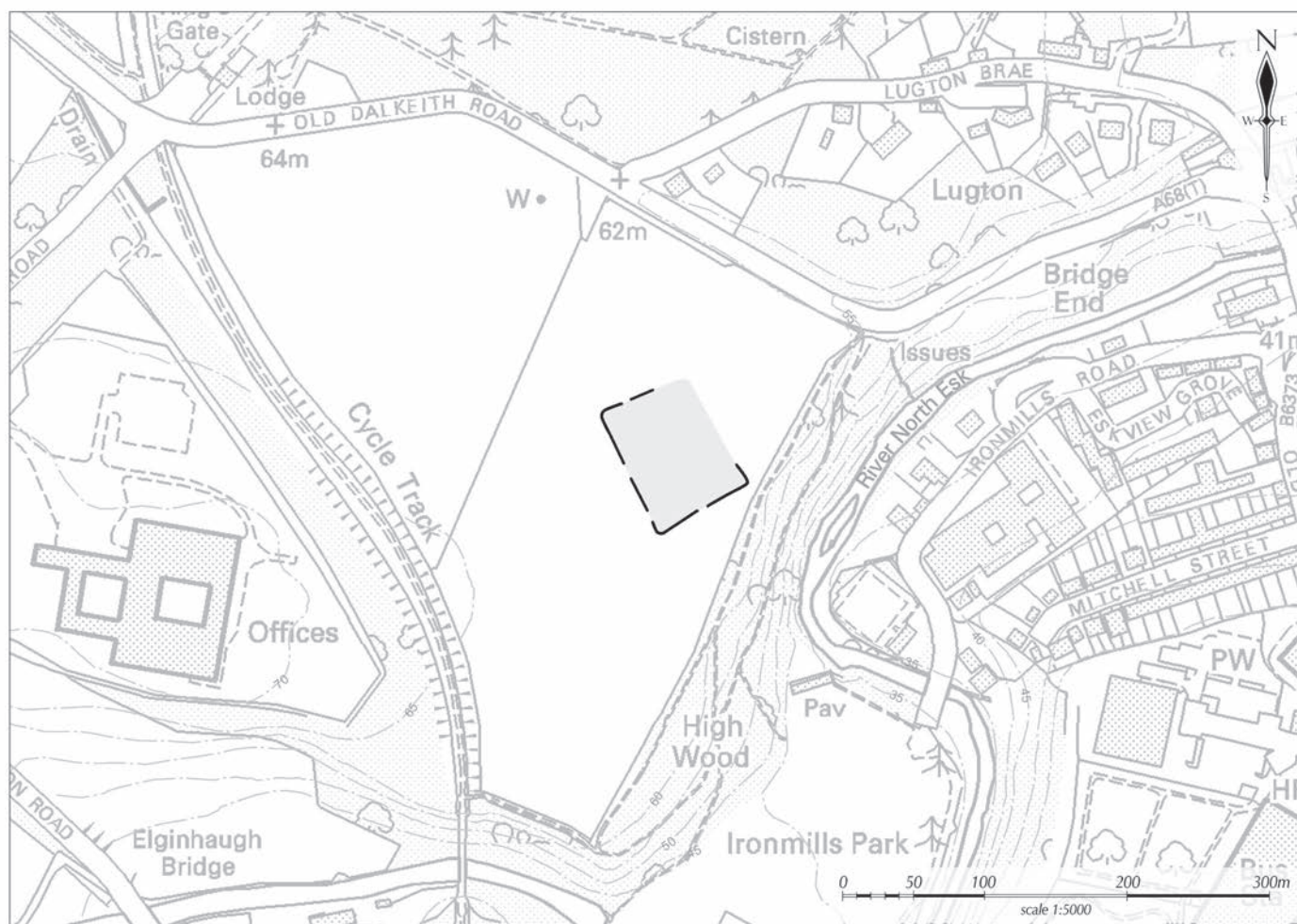


Illustration 171

Lugton. The Roman fort at Elginhaugh lay under the 'Offices' to the west. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Lugton (illus 47 & 171)

(Elginhaugh)

NT 3253 6745 NT 36 NW 97

The camp at Lugton was discovered from the air by Maxwell in 1984 (Frere 1985a: 265), lying on a plateau above a loop of the River North Esk on the west side of Dalkeith, about 250m east of the Flavian fort of Elginhaugh (now lying under the 'Offices' on illustration 171; Hanson 2007). The camps at **Eskbank** lie some 600m to the south-west across the River North Esk.

The camp lies in a pasture field and parts of all four sides are visible as cropmarks. It measures about 90m from NNW to SSE by 72m transversely, enclosing an area of some 0.6ha (1.5 acres). No clear entrances are known although there are possible candidates in the south-west and south-east sides.

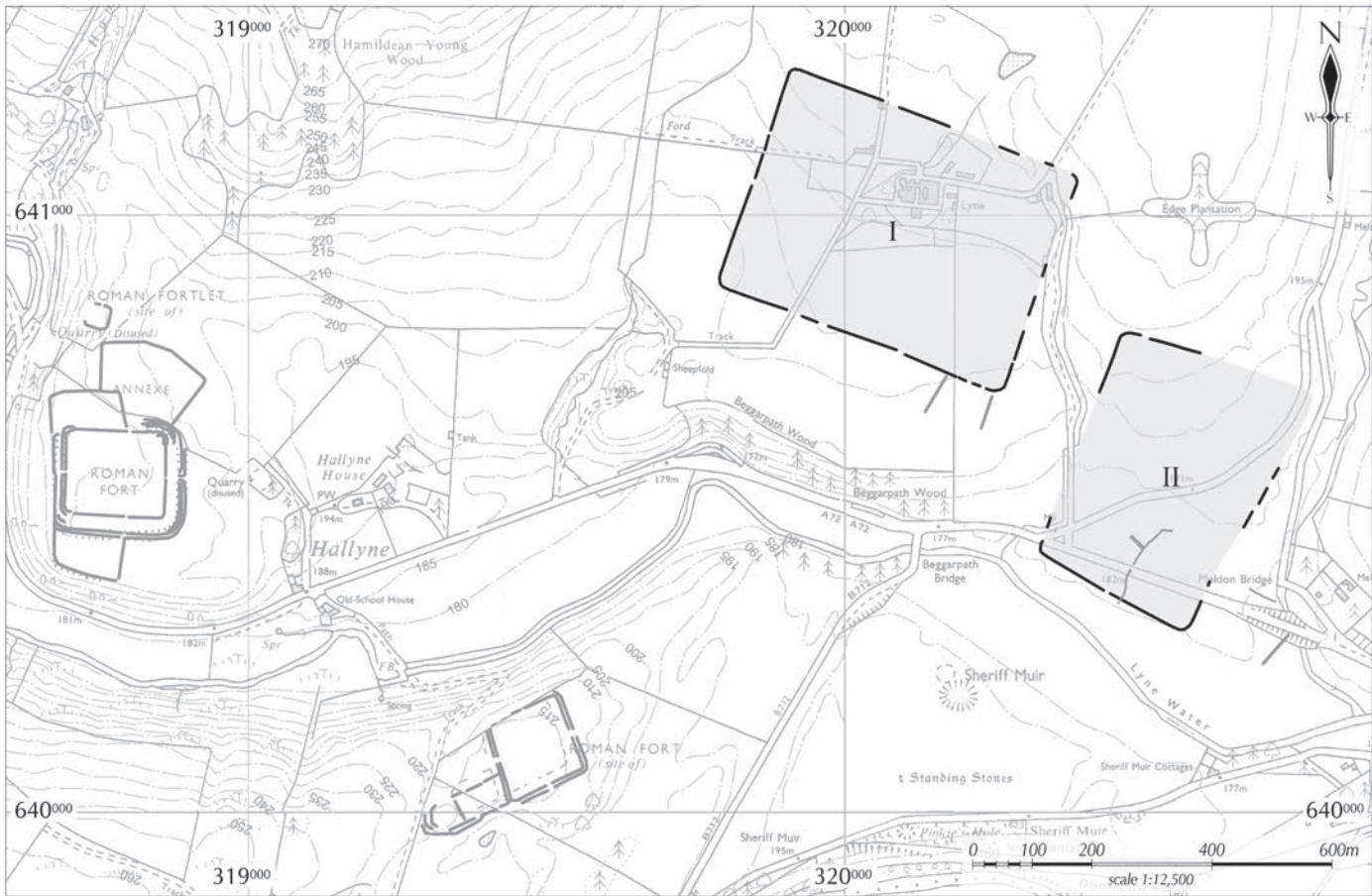


Illustration 172

Lyne I–II and other cropmarks in the area including the Roman forts at Lyne and Easter Happrew and the Meldon Bridge pit-enclosure (within Lyne II). Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Lyne (illus 47 & 172)
(Meldon Bridge)

Lyne I: NT 2005 4090 Lyne II: NT 2053 4050
NT 24 SW 20 NT 24 SW 50

Two camps have been recorded through cropmarks east of the Antonine fort at Lyne, across the Lyne Water from the Flavian fort at Easter Happrew. The western of the two, camp I, was discovered in 1949 by St Joseph from the air (1951a: 57) and is sited on a gentle south-facing slope about 1km east of the fort. It measures 509m from WNW to ESE by 385m transversely and enclosed 19.7ha (almost 49 acres). Entrance gaps are clearly visible in all four sides, with a slight change of angle at one of the gaps in the SSW side. The gates are depicted as being protected by *tituli* by RCAHMS (1967: 175, fig 186) but none is visible on the air photographs.

Two linear cropmarks are visible protruding from the east part of the south side of the camp, but are not parallel and do not appear to form part of an annexe.

Camp II lies about 150m south-east of camp I, a little lower down the same south-facing slope; its SSW side lies less than 50m from the Lyne Water. First recorded in 1971 by St Joseph from the air (1973: 216–17), it measures about 431m from NNE to SSW by about 288m (but the sides are not parallel to one another) and encloses around 13.3ha (33 acres). An entrance gap is visible in the centre of the SSW side, but not enough of the complete perimeter of the camp is visible to enable

the identification of further gates. The camp overlies a late Neolithic pit-defined enclosure, and sections of the camp ditch were examined during excavations of the enclosure in 1974–7 (Speak & Burgess 1999). These recorded that the ditch of the camp on the south side was severely eroded and only 0.2m deep. On the east side it was up to 1m wide and 0.5m deep (Hodgson 1999: 47–9). The camp ditch also cut through the ditch of the

Roman road, and was therefore later in date. A cooking pit with two phases of firing was identified, 0.35m deep and 2.4m by 1.1m across (Hodgson 1999). Amphora sherds were found in the ditch and cooking pit, one of which was dated to the late 1st through the 2nd century AD (Greene 1999), but a recent reassessment indicates a Flavian date (Wallace pers comm).

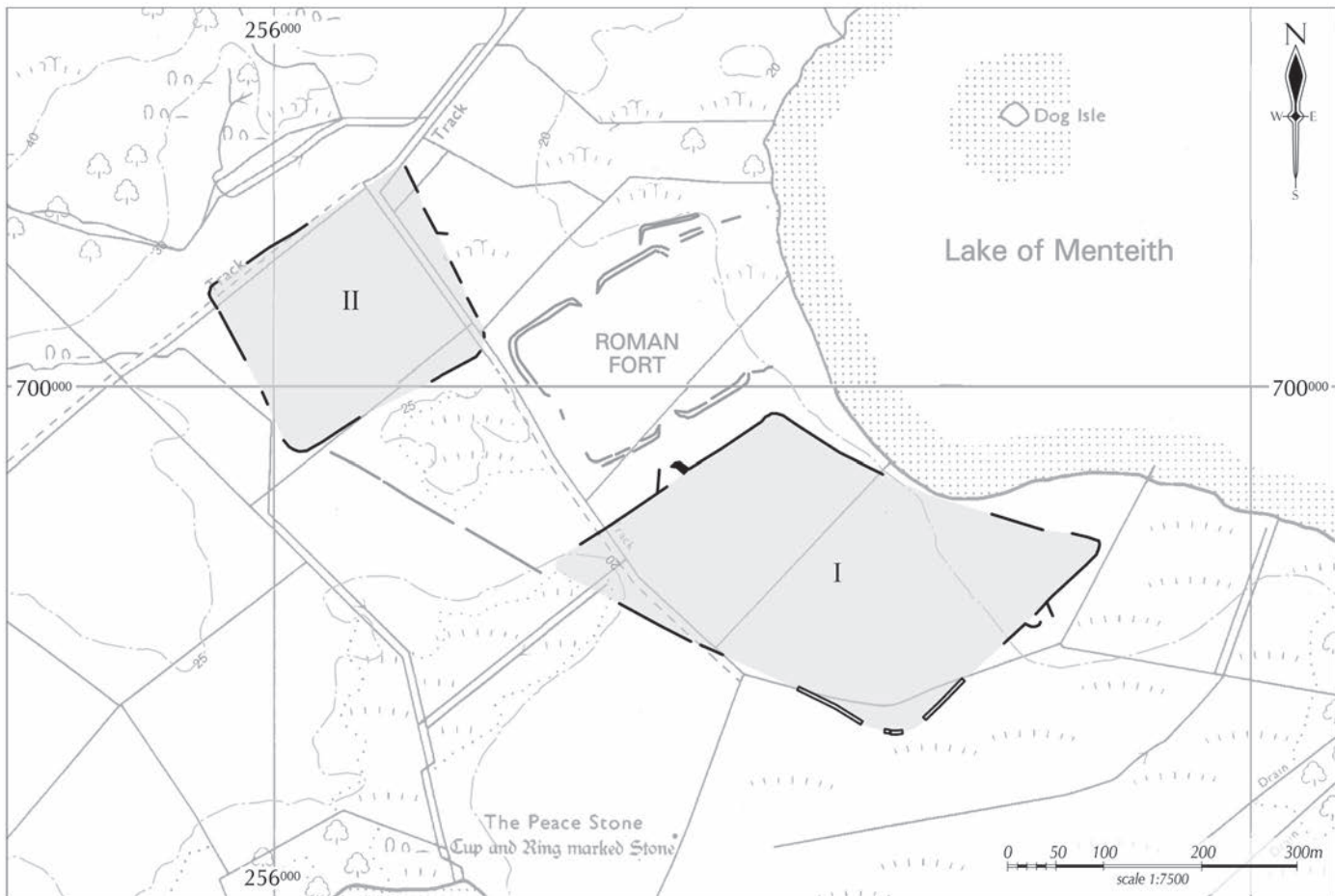


Illustration 173

Malling I-II, the Roman fort and annexe and outer linear cropmark. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Malling (illus 36, 47 & 173)

(Lake of Menteith)

*Malling I: NS 5656 9980
NS 59 NE 13*

*Malling II: NN 5606 0008
NN 50 SE 16*

On the west side of the Lake of Menteith lies a Roman fort and two camps at Malling, all revealed through cropmarks. The fort was discovered from the air by Wilson in 1968 (Wilson 2005: 67–8; St Joseph 1969) with camp I discovered during reconnaissance by Cambridge the following year (St Joseph 1969: 223–4) and camp II by Maxwell in 1981. The two camps sandwich the fort, and an outer work with an entrance gap runs for some 250m connecting the two and probably controlling access to the fort.

Camp I lies immediately south-east of the fort and is an irregular parallelogram in form, measuring about 370m from north-west to south-east by 260m, enclosing 8.9ha (22 acres). Stracathro-type gates are visible in its north-west and south-east sides. Stretches of the south-

west and south-east sides survive in woodland, where the rampart is up to 0.6m high and 3.5m wide, accompanied by a ditch some 2m wide and 0.4m deep. St Joseph placed a section through the south-west side of the camp in 1969 and recorded that the ditch was small, accompanied by a rampart some 0.45m high and 0.3m wide (RCAHMS St Joseph Collection: Notebook 5).

Camp II lies immediately west of the fort and measures about 235m from north-east to south-west by 195m, enclosing 4.7ha (11.7 acres). An oblique traverse is visible at the entrance on the north-east side of this camp, suggesting that it may have also had Stracathro-type gates. There is a further hint of an oblique traverse on its north-west side (not depicted on illus 173).

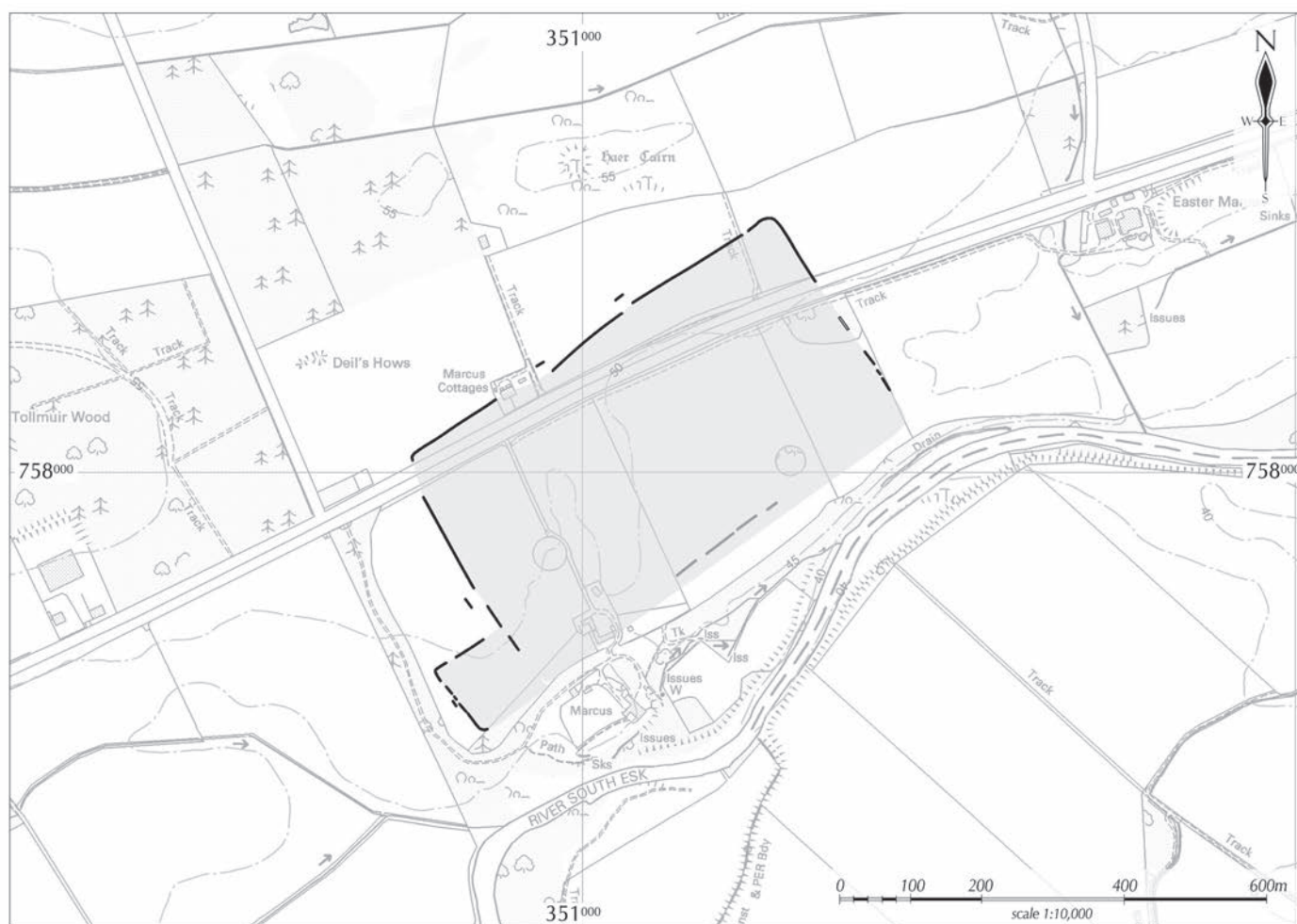


Illustration 174

Marcus. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Marcus (illus 47, 48, 174)

NO 5110 5800 NO 55 NW 37

The camp at Marcus was first discovered as a cropmark from the air by St Joseph in 1967 (1969: 111), lying on undulating ground to the north of the River South Esk. Just below the south side of the camp the land drops away sharply to the river. The camp at **Finavon** lies 1km to the WSW.

St Joseph noted that the south side of the camp had been eroded by the river (1969: 111). A linear cropmark is visible on air photographs taken in 1977, but this does not appear to represent the south side of the camp, which is probably closer to the edge of the plateau. The camp measures around 635m from south-west to north-east by about 400m transversely, enclosing an area of some 24.6ha (61 acres). There is a small annexe attached to the south part of the south-west side,

measuring 112m by 110m, which encloses an additional 1.11ha (2.7 acres) and has a *titulus* in the centre of its south-west side.

An entrance gap is visible in the centre of the south-west side, protected by a *titulus*, and two more are visible, also protected by *tituli*, in the north-west side.

There is an earthwork in the small plantation on the east side, to the south of the A90(T) (formerly the A94), which may represent the denuded remains of the rampart on this side, although rig and furrow also survives in the plantation which is almost parallel to this earthwork. It is only about 15m in length, is spread about 6m in width and is up to 0.5m in height. There are the traces of a low depression, possibly a ditch, on the east side of the rampart. The plantation

lies on ground above the surrounding fields, possibly indicating the level of truncation of the site by the plough.

Excavations in 1982 on the northern part of the north-east side recorded a U-shaped ditch which was 1.3m wide, surviving to a depth of 0.8m below the surface of the plough soil (Sherriff 1982: 31; information in the RCAHMS). Later excavations in 1987 recorded that the ditch on the north side was about 3.15m in width and 1.2m in depth. The ditch of the west *titulus* on the north

side was V-shaped, measuring about 3.4m in width and 1.4m in depth (Halpin 1992: 177–8).

Halpin also observed a low bank to the west of the excavated *titulus* by Marcus Cottage, 15m south of the *titulus* ditch, measuring about 18m in length, 10m in width and 0.35m in height. The implication is that this bank could also represent the denuded remains of part of the rampart of the camp (Halpin 1992). It therefore appears likely that two small stretches of the rampart of this camp have survived.

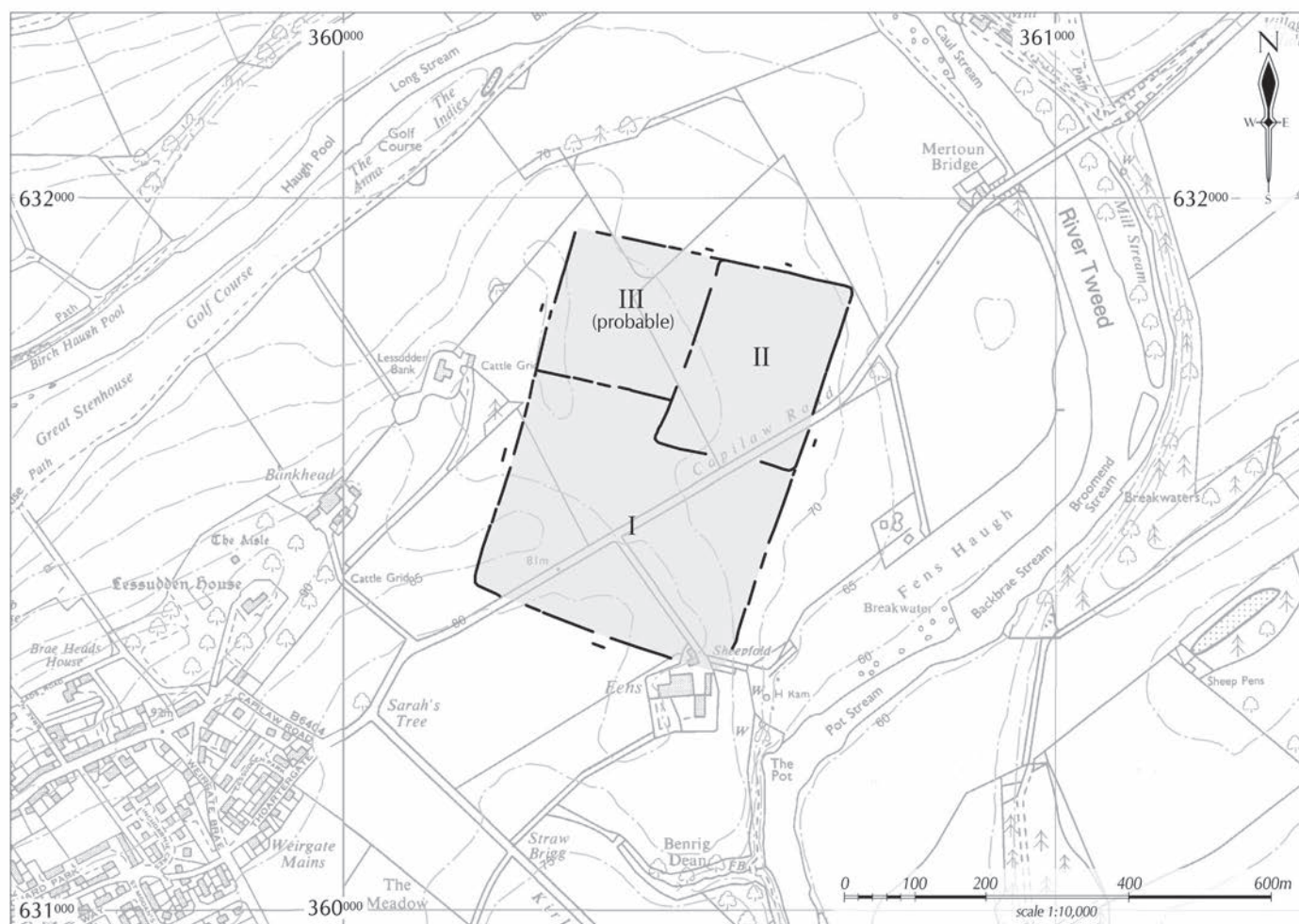


Illustration 175

Mertoun Bridge I–III. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Mertoun Bridge (illus 47 & 175)
(St Boswells)

Mertoun Bridge I: NT 6045 3166 *Mertoun Bridge III (probable)*: NT 6040 3185
NT 63 SW 29 NT 63 SW 29

Mertoun Bridge II: NT 6057 3175
NT 63 SW 29

The camps at Mertoun Bridge lie on gently sloping ground in a loop of the River Tweed about 3.5km south-east of the fort and camps at **Newstead**. First discovered through cropmarks from the air in the 1960s by St Joseph (1965: 78; 1969: 107), two camps are clearly visible, the second occupying the corner of the first. An additional linear cropmark between camp II and camp I may represent a third use of the location.

Camp I measures 552m from NNE to SSW by 387m and encloses almost 21.2ha (52 acres). Entrance

gaps protected by *tituli* are visible on all four sides, with two on the WNW, suggesting that the camp had six in total. A second *titulus* is visible in the eastern part of the NNE side, in the area occupied by camp II, but no corresponding break in ditch can be detected. It is likely that this *titulus* relates to this second camp, which, using part of the NNE and ESE sides of camp I, measures 272m from NNE to SSW by 191m and encloses 5.2ha (almost 13 acres). It seems probable that camp I is the earlier of the two, and that part of

its ditch was filled in to create an entrance for the smaller camp when it was constructed, but this is not visible in the cropmark remains. A further *titulus* on the ESE side is close to the south corner of camp II and probably relates to camp I, although the ditch is also filled in at this point, possibly also for the occupation of camp II.

An additional linear cropmark is visible running from the west side of camp II to the west side of camp I, and this may represent a further occupation. This may have been contemporary with the occupation of camp II, or it could represent a third reuse of the interior of camp I. The area enclosed (4.2ha – 10.4 acres) is almost square (207m by 204m). It may share gates with camps I and II.



Illustration 176

Middlebie Hill I-II. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Middlebie Hill (illus 47 & 176)

Middlebie Hill I: NY 2075 7645
NY 27 NW 3

Middlebie Hill II: NY 2080 7648
NY 27 NW 3

These two camps lie astride Middlebie Hill close to the Annandale Roman road and about 1.5km north-west of the fort and camps at **Birrens**. Camp I was discovered in 1949 by St Joseph from the air as a cropmark; camp II, which lies within the first, was discovered several years later, in 1966 (St Joseph 1973: 217). Camp I measures 503m from north-east to south-west by 345m transversely

and enclosed almost 17.3ha (nearly 43 acres). An entrance gap protected by a *titulus* is visible on its south-east side, towards the north-eastern end. The second camp lies at an oblique angle to the first, but only 290m of the SSE side, the eastern corner angle and about 45m of the ENE side have been recorded so it is not known if and where it intersects its neighbour. No clear entrances are known.



Illustration 177

Millside Wood I-II and Ulston Moor I-II. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Millside Wood (illus 47 & 177)

(Ulston Moor)

Millside Wood I: NT 6910 2210
NT 62 SE 44

Millside Wood II: NT 6906 2207
NT 62 SE 44

The two cropmark camps at Millside Wood lie on the north-east side of Dere Street, opposite the camps of **Ulston Moor** and a little way from the fort and camp at **Cappuck**. Camp I was first discovered in 1971 by St Joseph from the air (1973: 216) and measures at least 510m from south-west to north-east by 384m. It enclosed at least 19.4ha, and an assessment of the topography together with the morphology of the camp suggests that it may have enclosed just over 20ha (50 acres). Probable entrance gaps are recorded in the north-west, south-west and south-east sides; that on the south-east side also possesses a *titulus*. A second camp (II), recorded in 1976 by

Maxwell from the air (RCAHMS 1976: 84), lies wholly within camp I, but does not reuse any part of its perimeter. This small camp measures 174m from NNE to SSW by 138m and encloses almost 2.4ha (nearly 6 acres). Part of the perimeter of the ESE and NNE sides is reflected in the edge of the Millside Wood plantation (also see above, section 7h). A further small camp or annexe is attached to its north-west side, but the relationship between these two cannot be determined beyond the reuse of one side. The annexe measures approximately 60m by *c* 40m, enclosing an additional 0.24ha (0.6 acres).

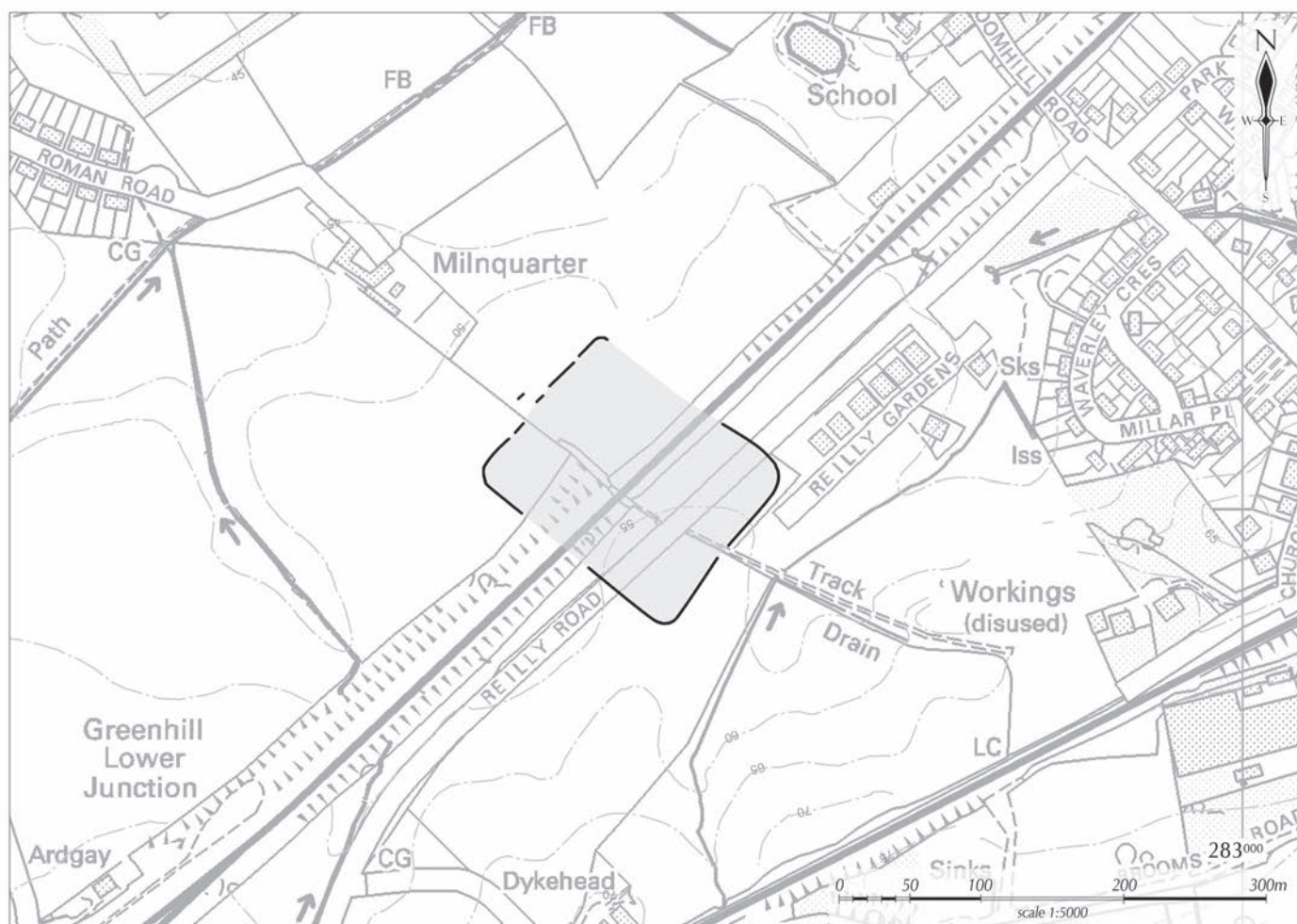


Illustration 178

Milnquarter. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Milnquarter (illus 47 & 178)

(Bonnybridge)

NS 8257 7935 NS 87 NW 5

The camp at Milnquarter lies in a flat area of ground bisected by the Stirling-to-Glasgow railway line, and also by a disused connecting line that ran to an industrial complex just to the north. It lies about 400m south of the Antonine Wall, at a point where the Wall kinks between the fort at Rough Castle and the fortlet at Seabegs Wood. A further fortlet has been postulated in this area (Hanson & Maxwell 1986: 122), but no trace has yet been found.

The camp was first recorded by St Joseph in 1953, with further information gleaned from RAF air photographs (Feachem 1958: 330; RCAHMS 1963: 107). All four

corners and parts of all four sides of the camp have been recorded through cropmarks, and it measures 168m from north-west to south-east by 138m, enclosing an area of almost 2.3ha (5.6 acres). A *titulus* is visible in the centre of the north-west side, and Feachem recorded other *tituli* on the north-east and south-east sides through probing (Feachem 1958: 331–2) thus suggesting that the camp faced north-west towards the Wall.

A small excavation was undertaken in the interior of the camp in 1995 owing to the removal of an electricity tower, but no Roman features were recorded (Dunwell & Finlayson 1995).

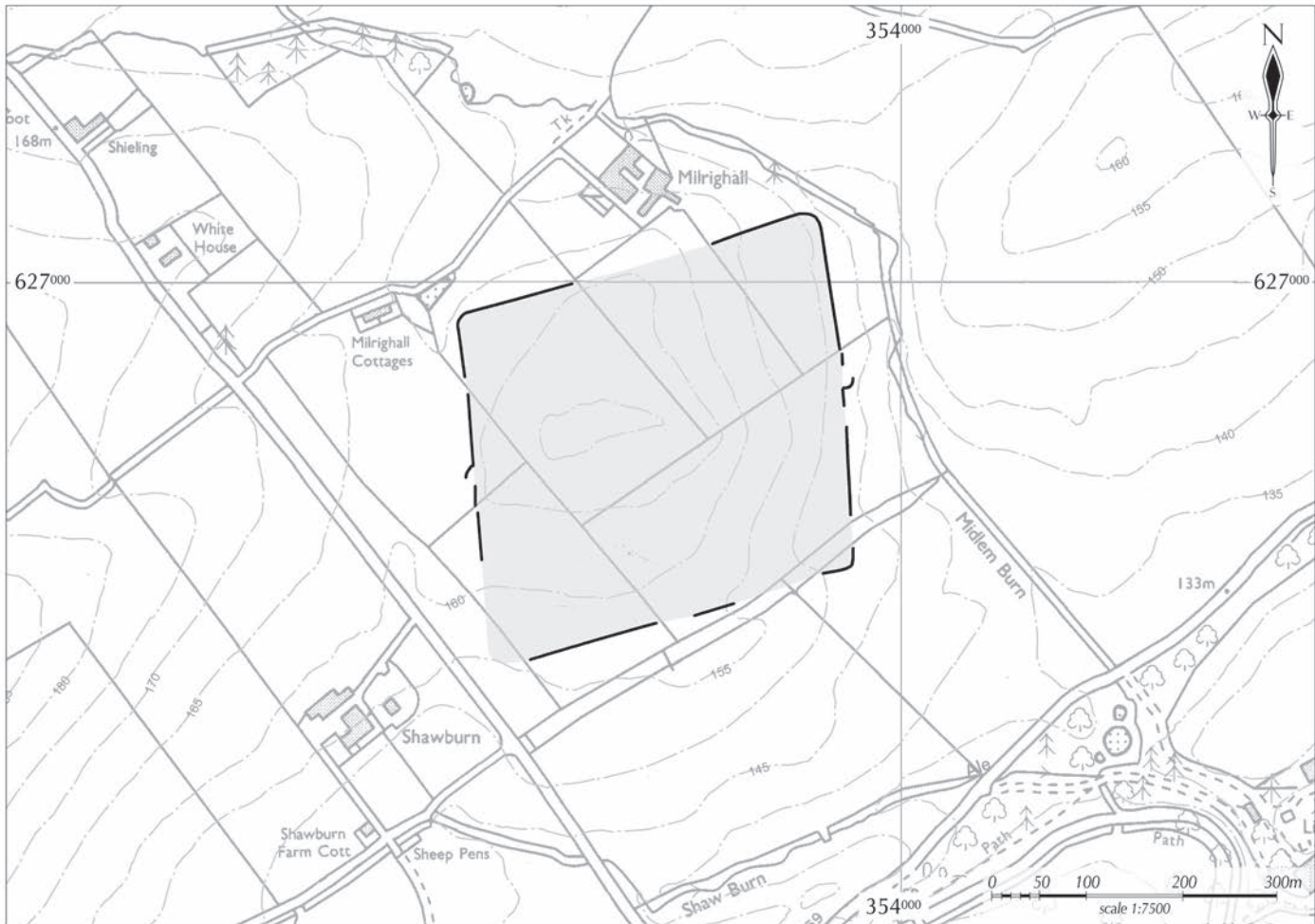


Illustration 179

Milrighall. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Milrighall (illus 41, 47 & 179)

NT 5375 2684 NT 52 NW 15

First observed from the air by Maxwell in 1977 (Maxwell & Wilson 1987: 32), the camp at Milrighall lies in arable fields astride a low ridge above the Ale Water. Measuring 397m from ENE to WSW by 370m, it enclosed 14.5ha (almost 36 acres). Entrances are visible just north of centre in the ENE and WSW sides, both accompanied by external *claviculae*. The provision of purely external *claviculae* (with no accompanying oblique traverse) is extremely rare, the only other example in Scotland being **Lochlands II**

(which may yet have an oblique traverse and therefore Stracathro-type gate). Cawthorn C in North Yorkshire also exhibits only external *claviculae* as a form of gate protection, and that camp is unusual in form for various reasons (Welfare & Swan 1995: 137–42). The camp of **Oakwood**, with surviving internal and external *claviculae*, lies 11km to the west, and it is possible that Milrighall also had internal and external *claviculae* ramparts which have since been levelled by the plough.



Illustration 180

Milton I and the nearby Roman fort, its annexes, Roman fortlet and other cropmarks. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Milton (illus 10, 47 & 180)

(Tassiesholm)

NT 0925 0100 NT 00 SE 22

The forts, fortlet and camp at Milton lie in the upper reaches of the River Annan, close to its confluence with the Evan Water and Moffat Water. The site, recorded by Roy as ‘Tassiesholm’ (1793: Pl. VIII), sits on a low ridge and comprises a Flavian fort of two phases with annexes,

and an Antonine fortlet with probably two phases enclosed by a trapezoidal palisaded enclosure (Clarke 1951). To the south of the fortlet lies a small camp (**Milton I**), and a possible camp may lie under the forts (**Milton II**, see probable camps below – Clarke 1951:

199). Some 700m north-west of the fort and on the valley floor of the Evan Water, lies a series of large camps at **Beattock**.

The camp was discovered in 1949 by St Joseph as a cropmark from the air, lying around 300m south of the fort. It measures 174m from ENE to WSW by 138m and

enclosed 2.2ha (5.4 acres). Entrance gaps protected by *tituli* are visible in the WSW, SSE and ENE sides. Two small trenches excavated in 1950 revealed that the ditch was some 2.1m in width, inside which was a 0.9m trench assumed to be for a palisade (Clarke 1951: 214).

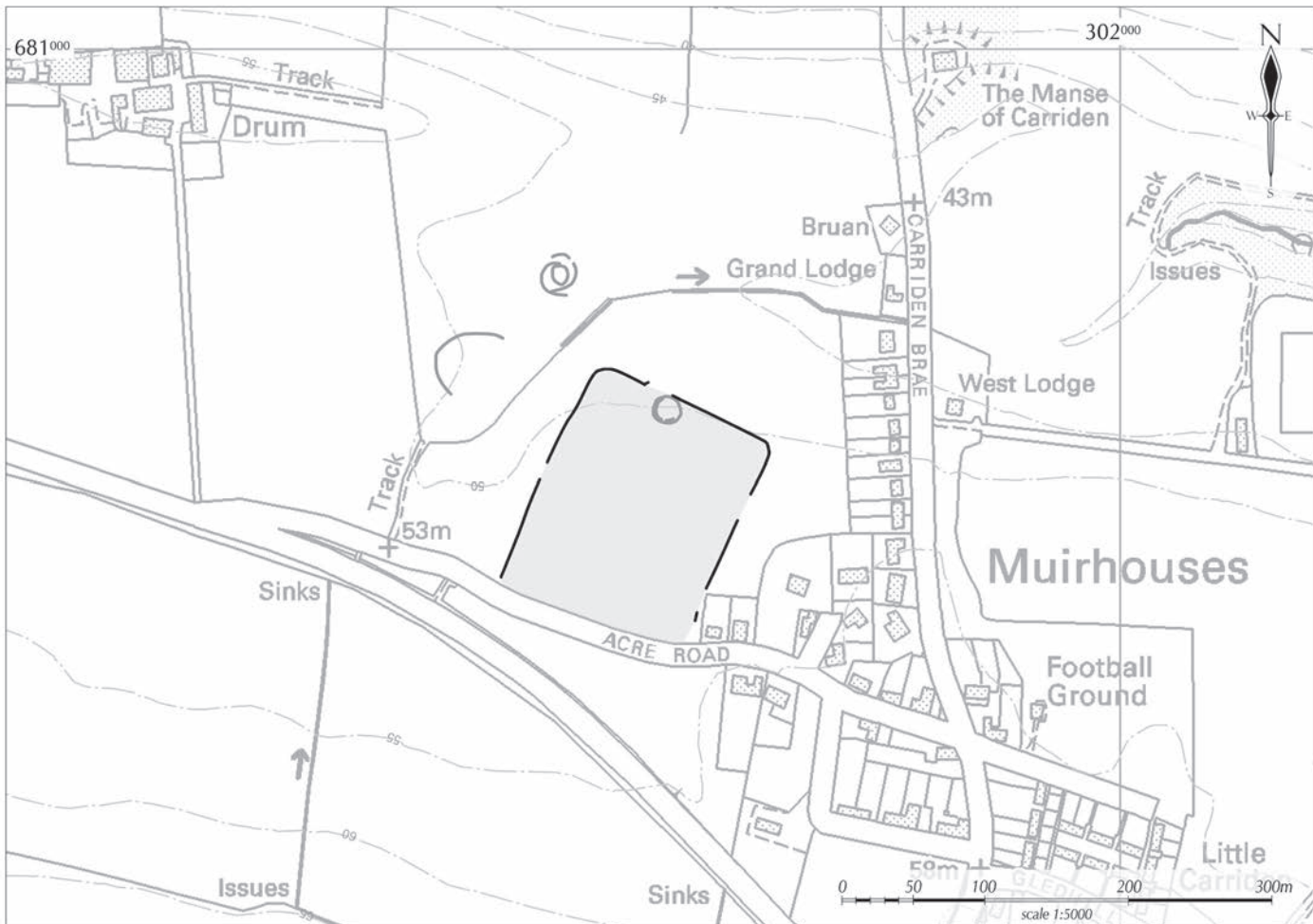


Illustration 181

Muirhouses and other cropmarks in the area. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Muirhouses (illus 47 & 181)

(Drum)

NT 0166 8067 NT 08 SW 12

The camp at Muirhouses was first recorded from the air by St Joseph in 1960 (St Joseph 1961: 122), on fairly level ground just west of the village of Muirhouses. The Antonine Wall runs somewhere to the north of this camp, but its exact course here is unknown. The Roman fort of Carriden lies about 900m to the east.

The NNE side and parts of the WNW and ESE sides have been recorded through cropmarks. Although the SSW side has not been recorded, it is likely that Acre Road represents the perimeter on this side, as the road bends slightly to take in both likely corner angles. The camp measures around 162m from NNE to SSW by 137m transversely, enclosing

an area of almost 2.2ha (5.4 acres). There is no definite trace of an entrance on the NNE side, but a possible entrance gap is located just north of the centre of the NNW side. St Joseph recorded a *titulus* in the centre of the NNE side

in his plan of the camp (RCAHMS St Joseph Collection: DC 39398), but this could not be confirmed on the air photographs.

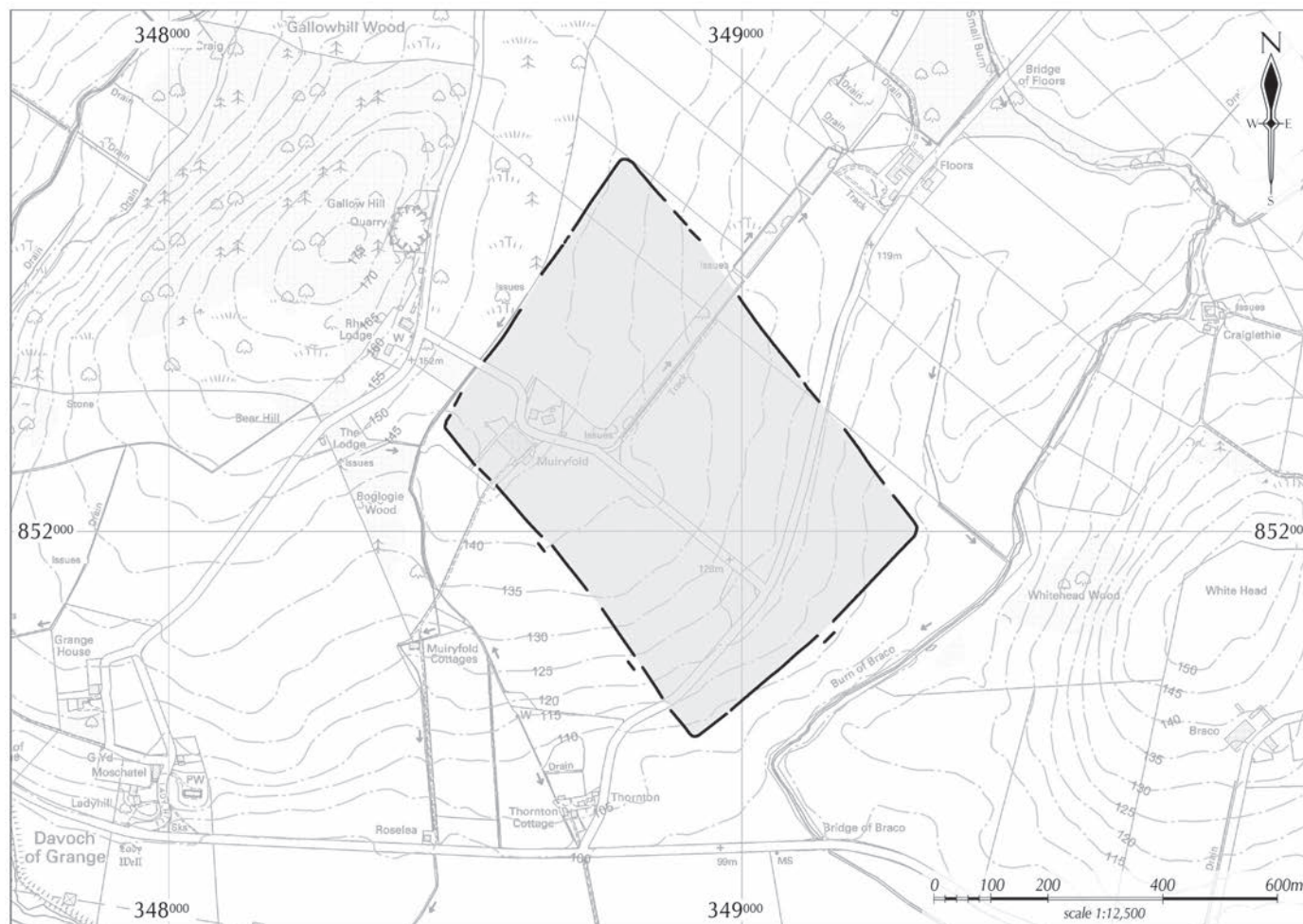


Illustration 182

Muiryfold. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Muiryfold (illus 47 & 182)

(Grange; Pass of Grange)

NJ 4890 5208 NJ 45 SE 2

The camp at Muiryfold was first recorded from the air by St Joseph in 1959 (1961: 123), lying to the east of Keith, north of the River Isla close to the Pass of Grange, and about 2.5km east of **Auchinhove**. It is situated on land that slopes gently from Gallow Hill to the north-west to the Burn of Braco to the south-east, a tributary of the River Isla. It lies in a series of improved pasture and arable

fields surrounding the farm of Muiryfold, and no trace is visible on the ground.

It is not quite rectangular in form, measuring about 768m from north-west to south-east by 522m transversely and encloses just over 41ha (102 acres). Entrance gaps protected by *tituli* are visible in the centre of the south-east side (where the camp bows out) and at two

ROMAN CAMPS IN SCOTLAND

points in the south-west side, suggesting that the camp had six gates. St Joseph excavated two small trenches in 1959, in the north-west and south-east sides, and he

recorded that the ditch measured up to 3.3m in width and about 1.3m in depth (RCAHMS St Joseph Collection: Notebook 2).

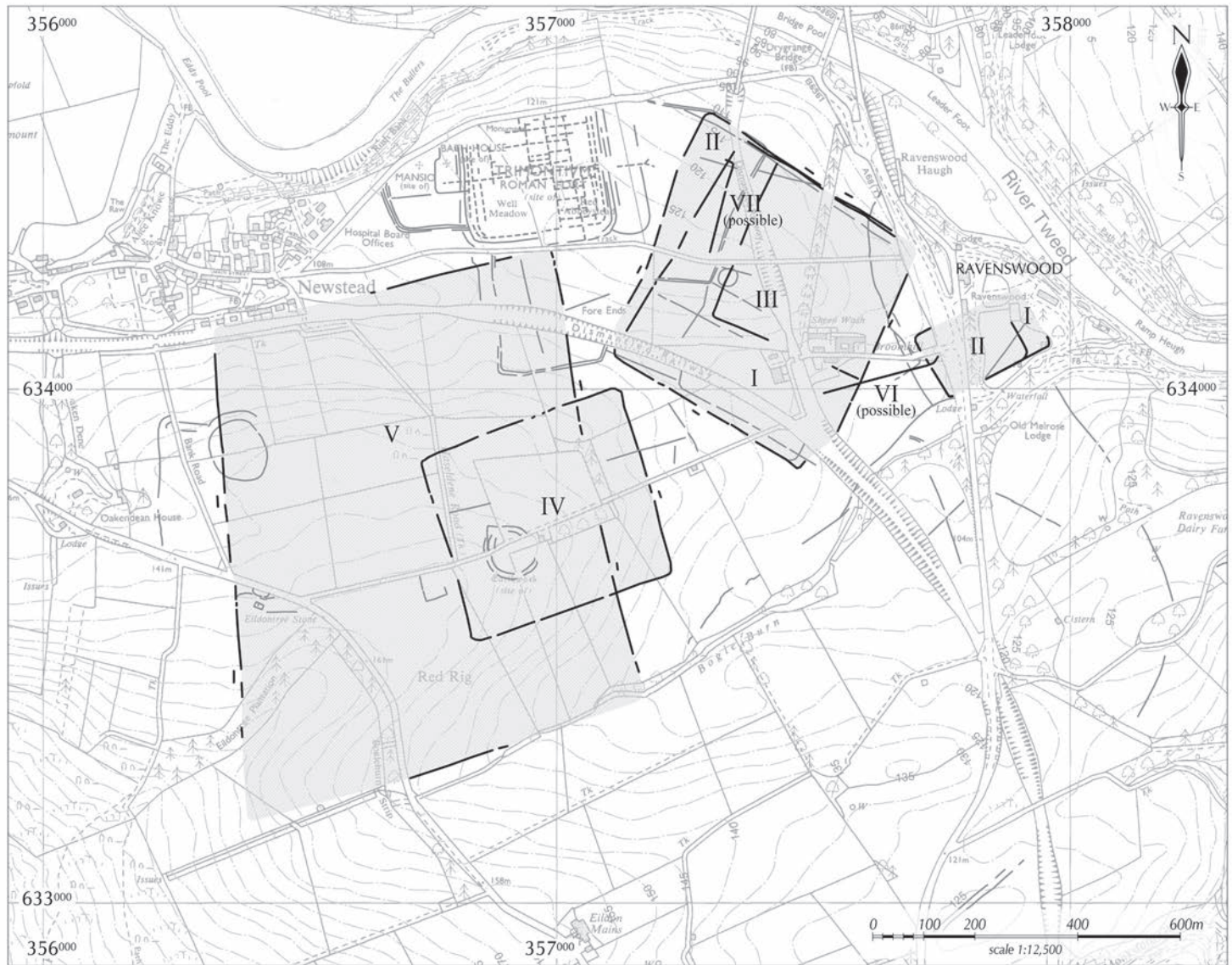


Illustration 183

Newstead I–VII and Ravenswood I–II and the Roman fort and annexes and other cropmarks in the area. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Newstead (illus 47, 68, 183, 184)

(Great Camps)

- | | |
|-----------------------------------|----------------------------------|
| <i>Newstead I: NT 5740 3415</i> | <i>Newstead IV: NT 5700 3376</i> |
| <i>NT 53 SE 20.5</i> | <i>NT 53 SE 20.6</i> |
| <i>Newstead II: NT 5740 3420</i> | <i>Newstead V: NT 5670 3375</i> |
| <i>NT 53 SE 20.5</i> | <i>NT 53 SE 20.7</i> |
| <i>Newstead III: NT 5748 3422</i> | |
| <i>NT 53 SE 20.5</i> | |

The Roman fort and camps at Newstead lie at the point where Dere Street crosses the River Tweed, just to the north of the three peaks of the Eildon Hills, from which the site gets its Roman name, *Trimontium*. A branch line from the North British Railway and the A68 both also cross the Tweed at this point.

Some seven camps are now known in the vicinity of the fort at Newstead through cropmarks, including two at **Ravenswood**, with further possible camps in the immediate area as well as at **Millmount** (see below, possible camps), some 700m west of the fort on low-lying ground by the Tweed. Across the Tweed, between Leaderfoot and

Drygrange, another camp has been recorded, lying just west of the now dismantled railway line.

Close to the fort itself, the first camps recorded lie on the ridge to its east (Curle 1911; St Joseph 1958: 87–8). Camp I, originally referred to as ‘The Great Camp’, was subjected to trenching by Curle in 1906–7 and 1909. He recorded a single camp, which he postulated belonged to the 1st century AD, and he did not imply that more than one phase had been found. Since Curle’s excavations, aerial photographs taken since the 1940s have revealed at least three and possibly as many as five camps in this area (Jones forthcoming 2011b – illus 184). At attempt to entangle



Illustration 184

Aerial view of the ‘great camps’ area at Newstead, showing parts of camps I, II & III. Taken from the north in 1984.
© Crown copyright: RCAHMS. SC1164738. Licensor www.rcahms.gov.uk.

the cropmarks from air photographs is made here. Camp I measures 485m by about 435m and enclosed about 21ha (almost 52 acres). Curle recorded four entrances with *tituli*, three of which can be seen on the air photographs (north-east, south-east and south-west sides). He recorded that the ditch was of varying dimensions, but on average measured some 2.3m in width and 1.5m in depth (Curle 1911: 16). Later excavations in the 1990s recorded a ditch, some 3m in width and 1.8m in depth, which had two phases of use (R F J Jones pers comm). In addition, two Roman cremation burials were found deposited in the south ditch of the camp, which had almost entirely filled up before the burials were cut through, demonstrating that they were therefore later (Curle 1911: 19–20). Three circular hearths were also located in the western part of the camp, but these may be associated with an annexe to the fort because they are within the area where the two overlap (Curle 1911: 18).

Camp II overlaps camp I and the eastern annexes to the fort, but the relationship between these structures is unknown. The north-eastern side of the camp is in almost the same location as that of camp I, but on a slightly different alignment. The camp measured at least 425m from north-west to south-east by at least 405m, enclosing a minimum of 17ha (42 acres). A probable *titulus* is visible in its north-east side.

Camp III is probably a reduced form of camp I, with a reduction in its north-west and south-west sides. This suggests that it measured around 323m from north-west to south-east by 313m transversely, but is slightly irregular in form. Around 9.6ha (almost 24 acres) is likely to have been enclosed. No entrances are known, but it may have utilised some of the gates of camp I. A further two possible camps are recorded in this area (camps VI and VII).

Recent excavations by Bradford University has suggested that none of the camps in the 'Great Camps' complex appears to be earlier than the fort, and at least one has two phases (R F J Jones pers comm).

Camp IV lies to the south of the fort, and measures 409m from ENE to WSW by 378m transversely, enclosing 15.5ha (38 acres). A *titulus* is visible on the ENE side, south of the centre, with possible entrance gaps in the other

sides. The eastern sector of the camp is bisected by a linear cropmark representing the east side of camp V, although the relationship between the two is unknown. This camp (V) has been gradually pieced together from different air photographs since the 1950s, with parts of all four sides now identified. It measures some 925m from north to south by around 710m, although appears to be wider at its southern extent than at its northern, and enclosed around 67ha (166 acres). Two entrances protected by *tituli* are visible on both the east and west sides, and it is assumed that the camp had further gates in the shorter sides adding up to six in total.

The northern part of this camp intersects the southern annexes of the fort. Excavations by Bradford University recorded a V-shaped east-west ditch, measuring 2m in depth and 6m in width (Clarke & Jones 1994), which was not believed to be related to the large camp (R F J Jones pers comm). While these dimensions would make this the largest Roman-camp ditch so far excavated in Scotland, it is not that much larger than the ditches at **Burnswark South** and **Raedykes** (1.8m by 5.5m and 2.1m by 4.5m respectively). A single abraded amphora sherd was found in the ditch (Clarke & Jones 1994), and although its location makes it a possible candidate for a further annexe to the fort, the supporting evidence from air photographs does not corroborate this suggestion. Furthermore, a bread oven was also located within this camp. Excavations in the area where the northern part of the east side is believed to run recorded a ditch; it measured 1.5m wide and was 1m deep with steep sides and a flat bottom, which had been cleaned out several times. The excavators interpreted this as having been a large drain (Jones *et al* 1992: 14). Further excavations in this area recorded a V-shaped ditch just over 1.5m in width and 1m in depth, but less than halfway across the trench it petered out rather than turn a corner, as would be expected if this were the camp ditch. The ditch was later extended to the north and again had a flat-bottomed steep profile. The excavators believed that these ditches related to land demarcation rather than to this large camp (Jones *et al* 1993: 18–19). However, an appraisal of the air photographic evidence suggests that some of the excavated ditches are on the line of this large camp.

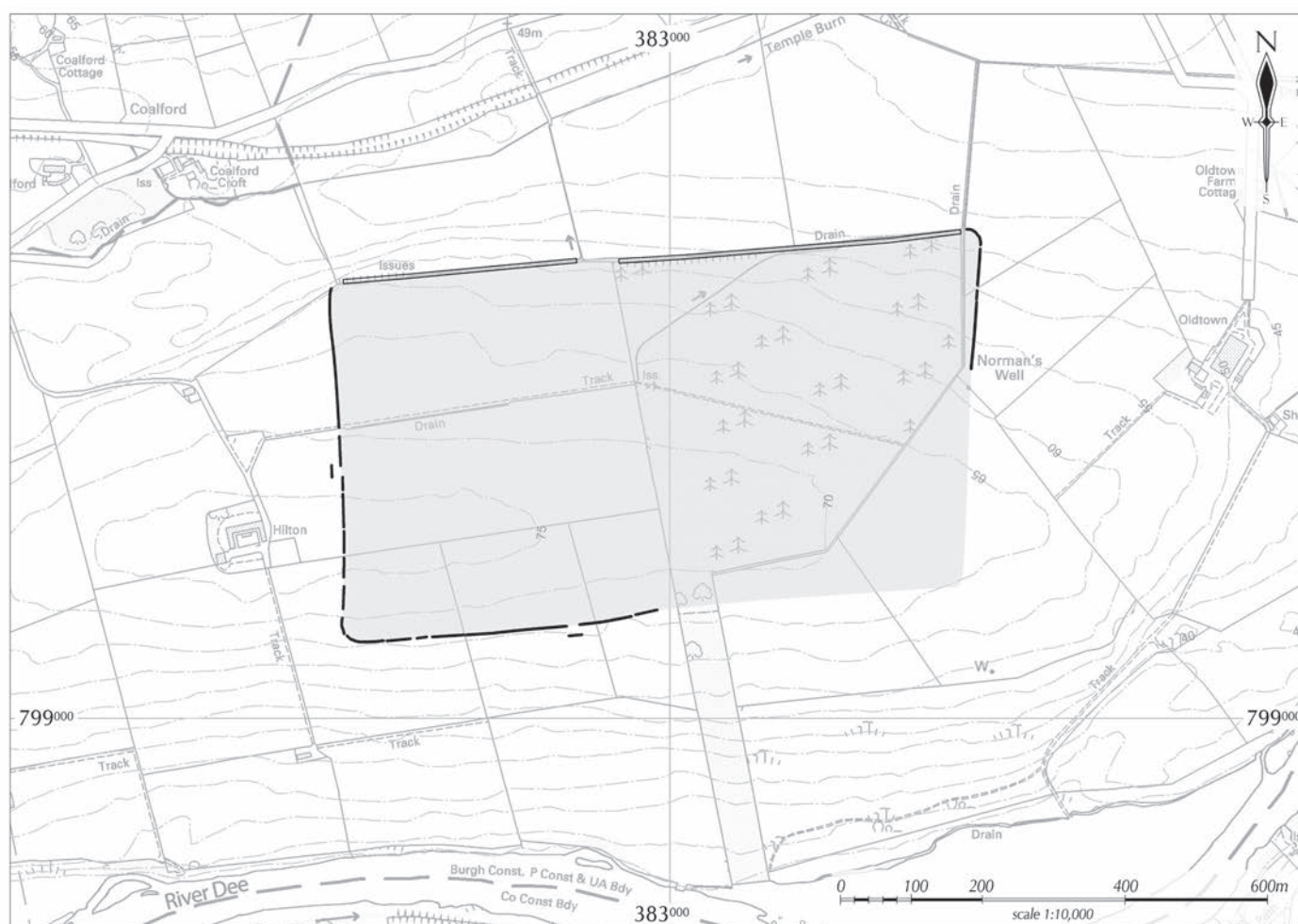


Illustration 185

Normandykes. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Normandykes (illus 30, 47 & 185)

(Peterculter)

NO 8297 9938 NO 89 NW 1

In 1801, Colonel Shand appears to have been the first to interpret Normandykes as Roman in date (Chalmers 1807: i, 125). The Statistical Account of 1795 refers to the 'Norman's Dyke' as a Danish camp, noting that some people also believed that it dated to the time of William the Conqueror (Sinclair 1795b: xvi, 380–1). This view was corrected for the New Statistical Account of 1845, noting that the work of Shand and others had confirmed that the camp was Roman in date, probably belonging to the campaigns of Lollius Urbicus (NSA 1845: xii, 108). Captain Henderson produced a plan of the camp which was reproduced in Chalmers' *Caledonia* (1807: i, opp. 125).

The camp lies just to the south of the village of Peterculter, on a low ridge on the north side of the River Dee. It measures about 895m from east to west by about 510m, enclosing an area of some 44.3ha (109 acres). The majority of the camp lies in arable fields, and much of the perimeter has been recorded as cropmarks from the air, but the eastern part of the north rampart and ditch survives as the north side of a plantation, accentuated by the superimposition of a plantation bank. This 'rampart' appears to be up to 6.3m in width and 1.4m in height, with a probable drain cut along the original line of the ditch. The western part of the north side lies under a stone wall. In addition, the rampart is detectable on the east side

at the point where it is crossed by a field boundary, where it is almost 10m wide and 0.3m high.

No entrance is visible in the upstanding sector of the camp, but the presence of *tituli* in the western part of the south side and in the centre of the west suggests that the camp had six gates. In addition, Captain Henderson also illustrated a *titulus* in the centre of the east side (Chalmers 1807: i, opp 125).

The site was subject to excavations by Richmond & McIntyre in 1935, who ‘verified with the spade the Roman origin’ of the camp, and intended to return (Taylor 1936: 237). Further details are not provided, but Simpson records a trial excavation conducted in October 1936 with Richmond & McIntyre near the north-west corner under the stone dyke of the field wall (Simpson

1943: 57–8; Crawford 1949: 112). Further excavations were undertaken in 1971 by St Joseph in a field on the north side of the camp, revealing a small ditch measuring 0.5m in width and 0.15m in depth (RCAHMS St Joseph Collection: Notebook 6). Small-scale excavations along a forest track through the camp in 2006 recovered at least three probable ovens and many more features interpreted as hearths (Scotia Archaeology 2006).

The camp bends in the south side, just to the east of the *titulus*. There may be a corresponding slight bend opposite in the north side if the ditch follows the field boundary for its west sector (as illustrated in Simpson 1943: 57–8), and the plantation bank in the wood for its east sector (see above, section 7a).

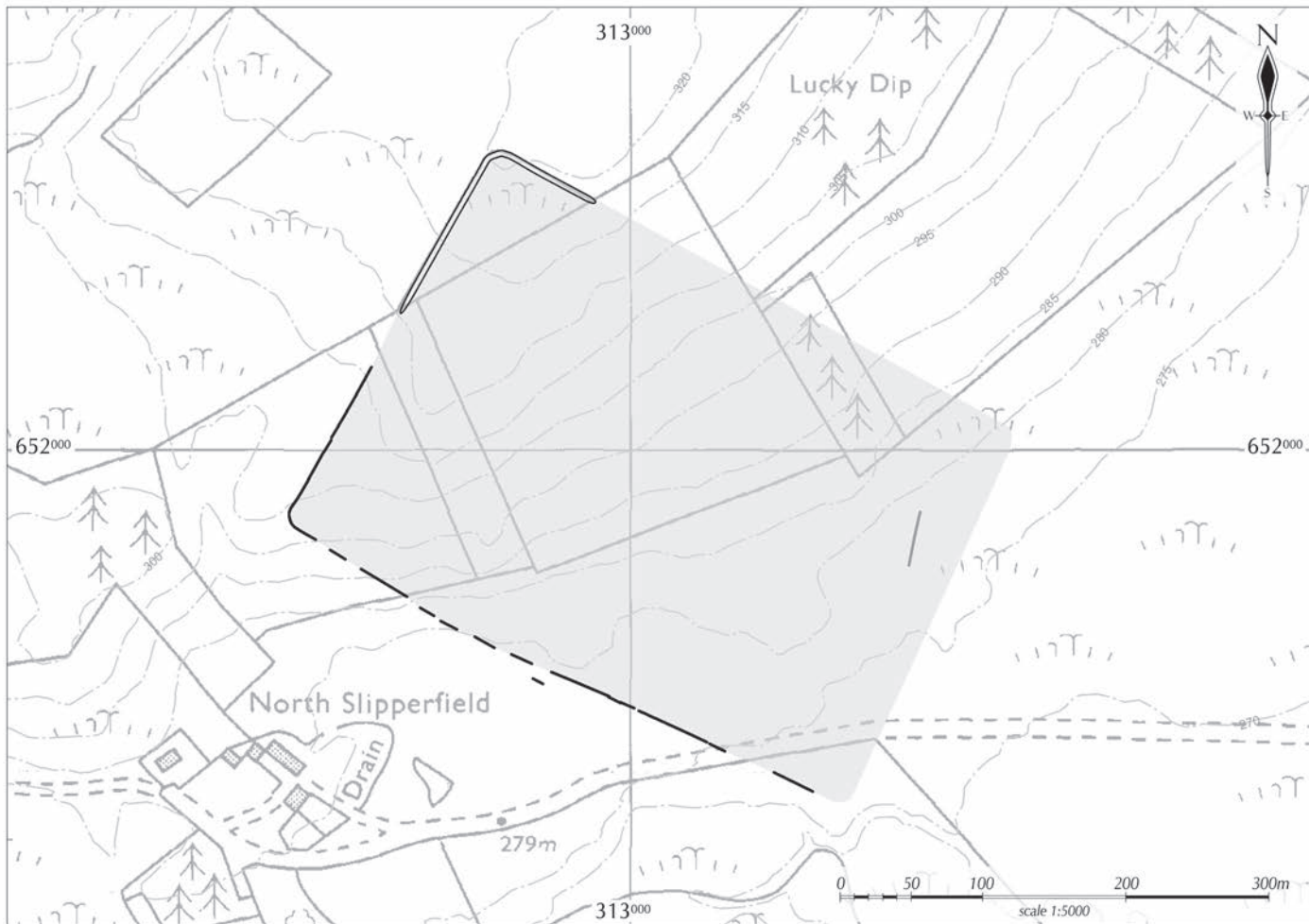


Illustration 186

North Slipperfield. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

North Slipperfield (illus 47, 60 & 186)

(Lucky Dip)

NT 1300 5200 NT 15 SW 45

First recorded in 1995 by RCAHMS from the air (Keppie 1996a: 404), this camp lies on sloping ground 500m north of the course of the Roman road which runs up the eastern side of the Pentland Hills. Part of the perimeter of the camp, the rounded north corner-angle and stretches of the adjacent sides are visible as an upstanding earthwork preserved through a later plantation bank (illus 60). Most of the remainder of the camp lies under a golf course and has been recorded only through parch marks. The north-

west side of the camp measures 301m, and over 400m of the south-west side has been observed. This bends out at an entrance gap with a *titulus*.

There is a faint linear cropmark to the south-east which might represent the south-east side of the camp, although it is at an oblique angle. If this is the south-east side of the camp, then it enclosed some 12ha (30 acres), but it does seem unlikely that this is part of the camp perimeter.

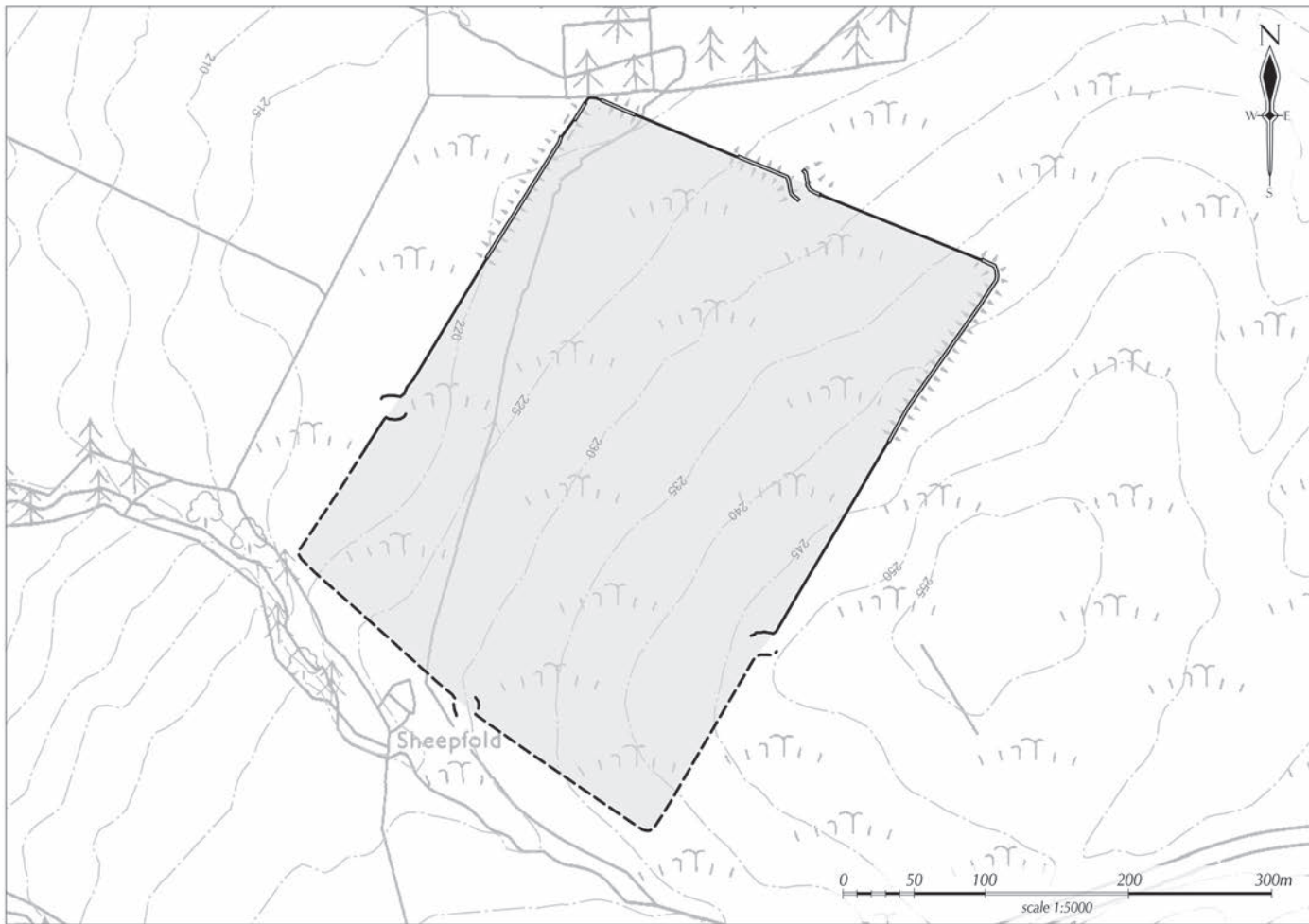


Illustration 187

Oakwood. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Oakwood (illus 15, 47 & 187)

NT 4248 2544 NT 42 NW 12

The camp and nearby fort at Oakwood were first discovered in 1949 during routine assessment of recent Royal Air Force photographic coverage of Selkirkshire by Feachem at RCAHMS (Steer & Feachem 1954: 81; RCAHMS 1957). The camp lies on uneven ground above the Ettrick Water, with the Roman fort located 150m to the south. The north-eastern part of the camp survives as a low-lying earthwork, up to 0.4m high; the remainder was traced through a series of small-scale excavation trenches in 1951–2 (Steer & Feachem 1954).

The camp measures 427m from north-east to south-west by 308m transversely and enclosed 13.2ha (almost 33

acres). Internal and external *claviculae*, known as cusped gates (see section 7b), are visible in the north-east and north-west sides, and an internal *clavicula* in the south-east, and it is assumed that the camp possessed four cusped gates (Steer & Feachem 1954: fig 2). Excavations revealed that the rampart was some 4.6m wide, with the ditch 1.8m wide and 0.6m deep (Steer & Feachem 1954: 85). The excavators recorded that part of the rampart was kept in place by a clay cheek, presumably to stop it from slumping into the ditch.

Illustration 187 includes information gathered from Steer & Feachem's excavations (1954: fig 2).



Illustration 188

Ochtertyre. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Ochtertyre (illus 188)

NS 7465 9820 NS 79 NW 51

The camp at Ochtertyre lies on level ground on the south side of the River Teith, across from the camp at **Craigarnhall**. Only part of the camp has been recorded by Maxwell from the air as a cropmark in 1982. Over 160m of the WSW side is known together with a rounded southern corner angle and hint of the SSE side. But an entrance gap and *titulus* is visible in the WSW side,

enabling its identification as a Roman camp. This gate lies 119m from the south corner. If centrally positioned, this south-west side would be around 238m in length, and if the camp occupied all the available space to the River Teith, then its overall dimensions could be in the region of 240m by 350m, thereby enclosing up to 8.4ha (20.7 acres).

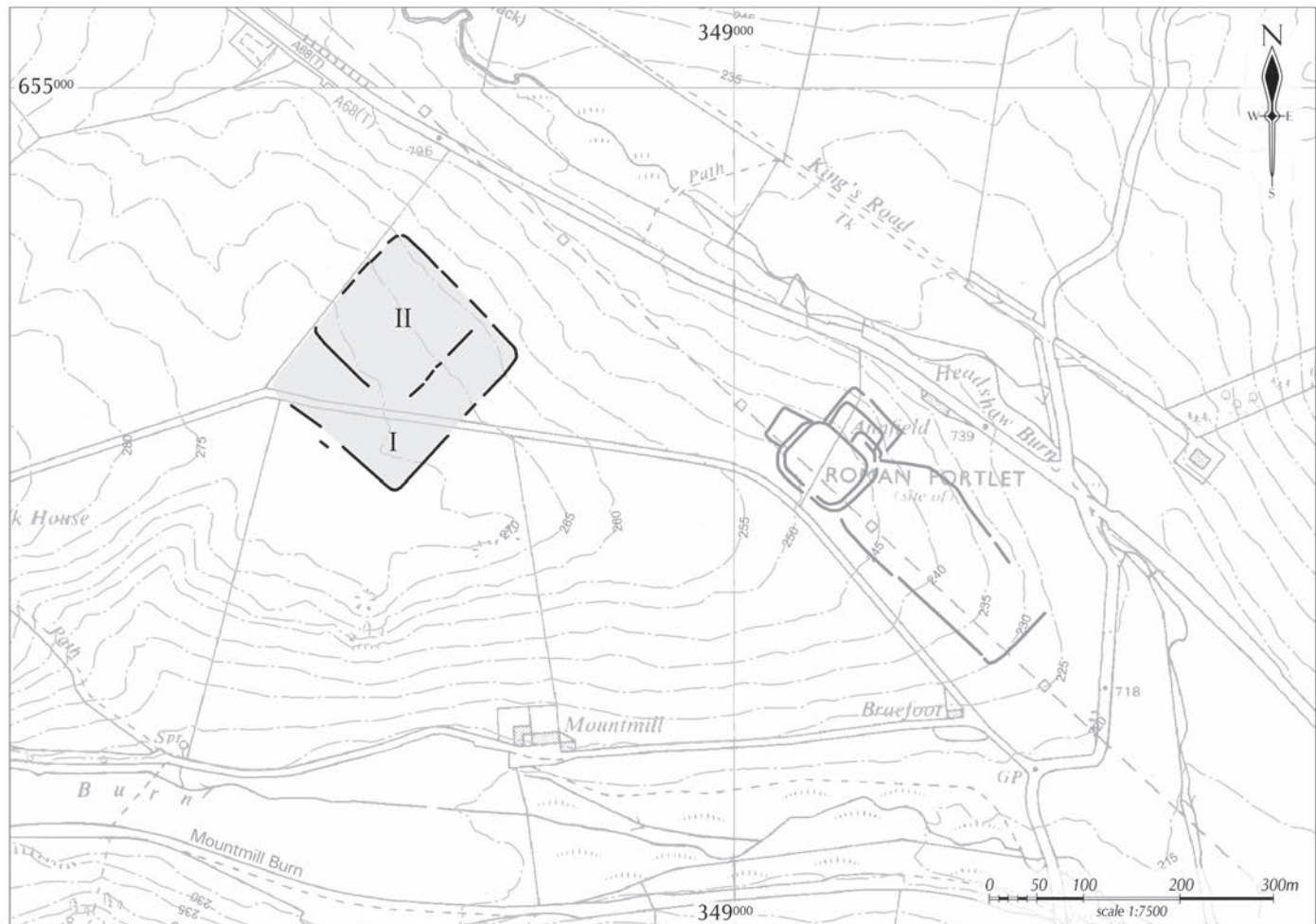


Illustration 189

Oxton I-II and the nearby Roman fortlet and its annexes. Reproduced by permission of Ordnance Survey on behalf of HMSO.
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Oxton (illus 47, 55 & 189)
(Channelkirk)

Oxton I: NT 4865 5473 Oxton II: NT 4865 5476
NT 45 SE 27 NT 45 SE 27

The two cropmark camps at Oxton lie on the eastern part of a ridge next to the fortlet at Oxton, just to the east of the large camp at **Channelkirk**. They share part of their north-west and north-east sides. The first camp was initially recorded in 1969 by St Joseph from the air (1973: 216); the second camp was observed during further aerial reconnaissance in 1979 (Maxwell & Wilson 1987: 38). Camp I, the larger of the two, measures 206m from north-

east to south-west by 181m, enclosing 3.7ha (9 acres). An entrance gap protected by a *titulus* is visible in the south-west side.

Camp II represents a reduction in size of camp I, although the chronological relationship between the two is unknown. It measures 140m from north-east to south-west by 125m and enclosed 1.7ha (just over 4 acres). No entrances are known.

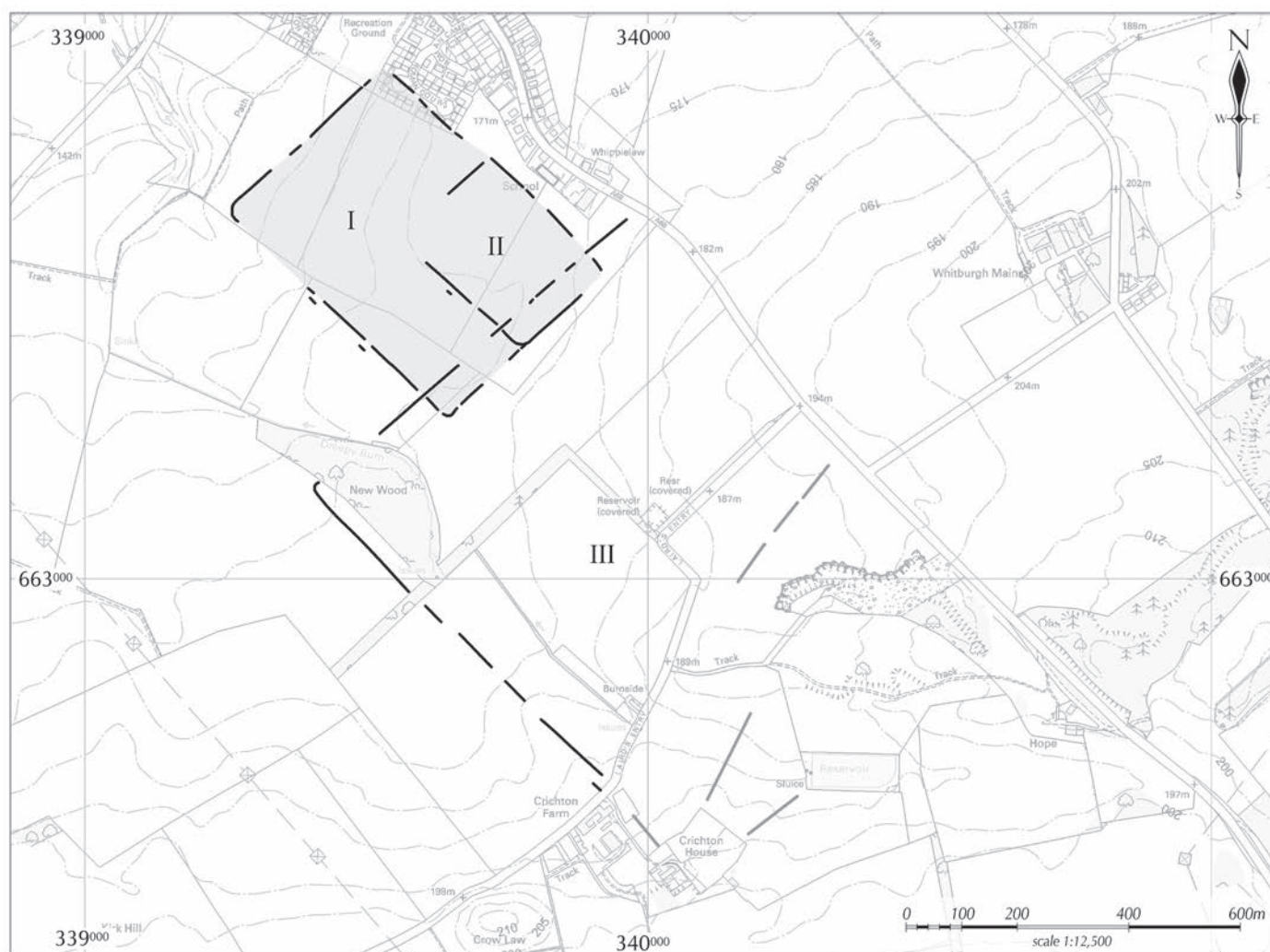


Illustration 190

Pathhead I-III and other cropmarks in the area. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Pathhead (illus 47 & 190)

Pathhead I: NT 3960 6359 Pathhead III: NT 3990 6320
NT 36 SE 3 NT 36 SE 17

Pathhead II: NT 3975 6358
NT 36 SE 3

The three camps at Pathhead lie on gently sloping ground just to the west of the A68, on the line of Dere Street. The two camps at **Woodhead** lie 1km to the north-west. The three intersect one another, with camp II tucked into the corner of camp I, utilising parts of its north-east and south-east sides. These two were first recorded as cropmarks in 1956 by St Joseph (1958: 88).

Camp I measures 530m from north-west to south-east by 390m transversely, enclosing 20.5ha (just over 50 acres). Two entrance gaps are visible on the south-

west side protected by *tituli*; a probable entrance gap can be observed in the north-west side. St Joseph excavated on the camp in 1956, and although he recorded that the ditch measured up to 1.3m wide and 0.6m deep, it is not clear where his trenches were located (RCAHMS St Joseph Collection: Notebook 1). He also recorded a *titulus* in the north-west side (RCAHMS St Joseph Collection: DC 39405), but this could not be confirmed during appraisal of the available air photographs.

Some 160m of the ditch on the north-east side was excavated in 1997, recording that it was V-shaped with an irregular ‘ankle-breaker’ slot, up to 2.75m wide (3.8m wide in one trench) and up to 1.1m deep (Leslie & Will 1998). In places it appears to have been deliberately filled in, whereas elsewhere the ditch appears to have silted up naturally. Some 5–6m inside the camp, four figure-of-eight features were recorded and identified as Roman field ovens or hearths. The camp overlaps two probable settlement enclosures (not depicted on illus 190), but the relationship between these and the camp was not established by excavation (Leslie & Will 1998).

Camp II, occupying the east corner of camp I and sharing part of the adjacent north-east and south-east sides, measures almost 300m from north-west to south-east by almost 130m, enclosing 3.9ha (9.7 acres). A *titulus* is visible on the south-west side of the camp, but there is no apparent break in the ditch at this point, suggesting that the camp may have had more than one phase of use, or that there may have been a ditched feature across the entrance which would blur the cropmarks (similar to that found through excavation at **Eskbank**). Another possibility is that a later field drain may have been inserted into the ditch, as was the case with parts of the excavated ditch of Pathhead I on its north-east side (Leslie & Will 1998).

Camp III lies to the south of the other two, with its north-west side intersecting their south-eastern portion. It was discovered a few years later (St Joseph 1969: 107), and parts of only two sides have been recorded as cropmarks: 720m of the north-west side and 735m of the south-west with the rounded western corner between them. Nothing has been recorded east of the A68, but it is noteworthy that the road here bends where it meets the north-west side of this camp. This may be for an entrance or corner, although this is speculation. The length of the two known sides suggests an extremely large camp of at least 55ha (135 acres), and it has been grouped with the so-called ‘165-acre’ series on Dere Street. No clear entrances have been recorded; a possible *titulus* is visible on the south-west side, but this may relate to other cropmarks close to the side of the field where the Laird’s Entry road runs south-west from Crichton Farm. Other linear cropmarks are visible to the south-east, but none can be confidently ascribed to this camp. The cropmark to the south of the Laird’s Entry is on a slightly different alignment, but this could be due to a change at the possible gate. If the camp is 165 acres (66ha) in size (as proposed by St Joseph, 1969: 107; see above, Chapter 9), then the south-west side could measure some 900m and the *titulus* would be located less than 200m from the south corner. Excavations on the north-west side in 1969 revealed a ditch which was V-shaped, up to 3.6m wide and 1.5m deep (St Joseph 1973: 216).

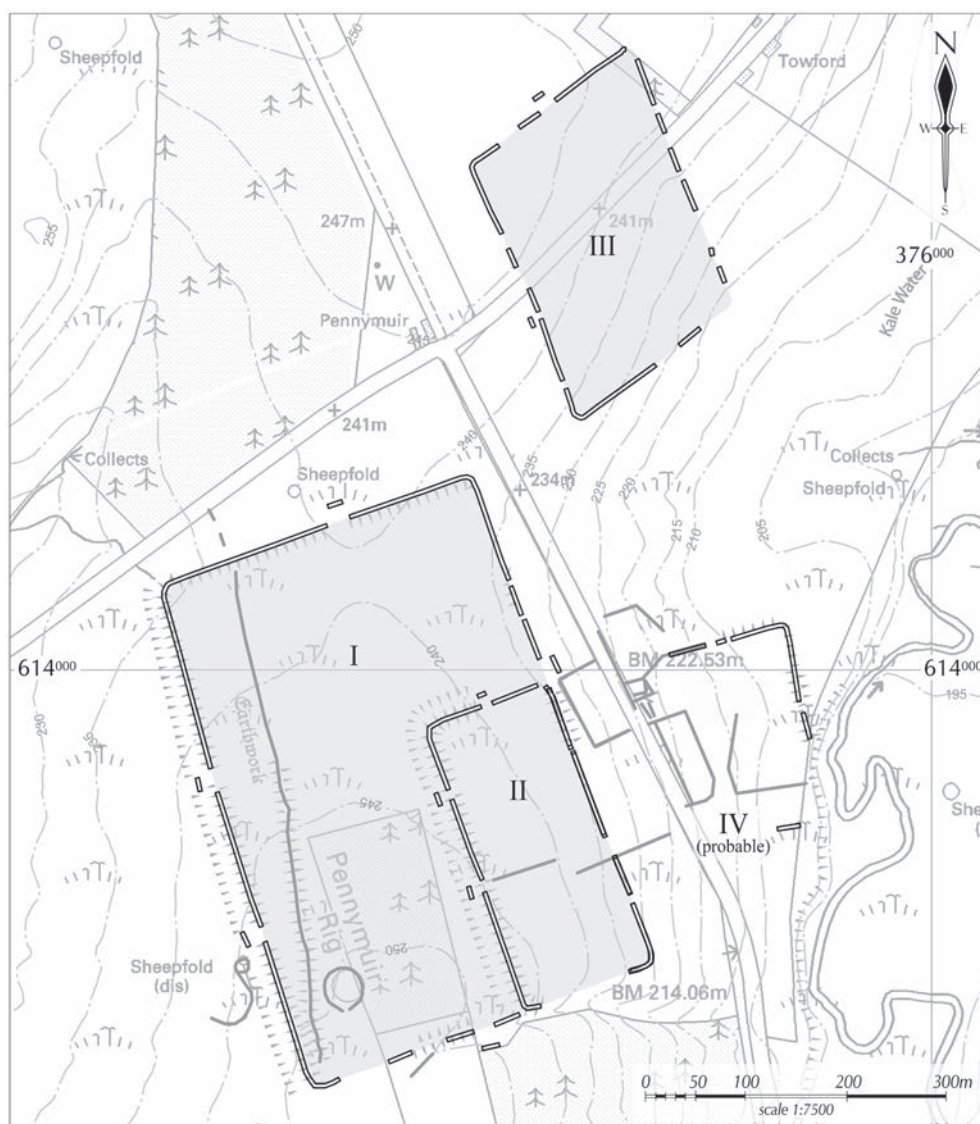


Illustration 191

Pennymuir I-IV and other earthworks in the area. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Pennymuir (illus 37, 47 & 191)

(Towford)

*Pennymuir I: NT 7545 1390
NT 71 SE 5.1*

*Pennymuir III: NT 7568 1442
NT 71 SE 5.3*

*Pennymuir II: NT 7564 1380
NT 71 SE 5.2*

*Pennymuir IV (probable): NT 7580 1395
NT 71 SE 5.4*

The three, possibly four, camps at Pennymuir lie on rough moorland in the Cheviot Hill beside Dere Street, close to its descent from Woden Law and on the north bank of the Kale Water. All four are recorded as earthworks in rough moorland, with camps I and II amongst the best preserved in Scotland. These two were first recorded in 1774 by William Roy (1793: Pl.

XXII), with camp II occupying the south-east corner of camp I. The larger camp measures 520m from NNW to SSE by 343m transversely and enclosed almost 18ha (44 acres). Entrance gaps protected by *tituli* are visible on all four sides, with two on the WSW side, and the camp probably had six gates in total. The upstanding rampart of the camp measures up to 4.6m wide and 1.2m high,

with the ditch some 4.6m wide and up to 1.2m deep in places.

Camp II, which utilises part of the ESE and SSE sides of camp I, measures 299m from NNW to SSE by 129m, enclosing 3.9ha (9.7 acres). Its defences are of similar dimensions to camp I. Entrance gaps protected by *tituli* are visible on the WSW (two) and NNW sides, and the camp also probably had six in total. Detailed field survey by RCAHMS noted that the more northerly of the two gates in the south-west side had been narrowed, which they argued might represent a reoccupation of the camp in Roman times (1956: 376).

Camp III is situated just to the north-east of camps I and II, on the east side of Dere Street and, although recorded as an earthwork, has been partially obliterated by drainage and a plantation. It was recorded during scrutiny of RAF air photographs by RCAHMS in 1947 (Taylor 1948: 83; RCAHMS 1956: 375–7). It is a parallelogram in form, measuring 279 from north-west to south-east by 186m, and enclosed 5.1ha (almost 13 acres). The rampart survives in places as a low mound, some 2m wide and 0.2m

high. Drainage ditches observed in 1949 showed that the ditch was about 1m wide and up to 0.5m deep, while the rampart was 2.1m wide and 0.3m high (RCAHMS 1956: 375–7). Entrance gaps with *tituli* are visible in the north-west and south-west sides. A section was cut through the *titulus* on the south-west side in 1949 (by Sir W. Aitchison – RCAHMS 1956: 377) but no further information is available.

A probable fourth camp at Pennymuir was located during the study of the RAF air photographs (RCAHMS 1956: 375–7) lying on the east side of Dere Street across from camps I and II. Only part of the camp has been recorded, measuring 192m from NNW to SSE by at least 120m, suggesting that at least 2.3ha (5.6 acres) was enclosed. The rampart is visible as a low spread mound, recorded in 1949 as measuring 4m wide and 0.3m high, with a ditch 3m wide and 0.3m deep outside (RCAHMS 1956, 377). Cultivation remains and drainage ditches cut through the camp, and RCAHMS used this evidence and the dimensions of its perimeter defences to argue for a Roman date (1956: 377).

Polmonthill (illus 47 & 166)

(Polmont)

NS 9473 7898 NS 97 NW 11

This camp is situated some 400m south of the Antonine Wall between the forts of Inveravon and Mumrills, about 800m west of the former (across the River Avon) and some 3km east of the latter.

It was first recorded through cropmarks by St Joseph in 1945–6, alongside its neighbour **Little Kerse**, which lies about 300m to the west, separated by the Gilston Burn, now the Millhall Reservoir (St Joseph 1951a: 62). When originally discovered, the site lay in arable fields just to the north of the Falkirk to Linlithgow road, south-west of the farm of Polmonthill, but it now lies in land occupied by the Grangemouth Golf Course.

Additional photographs taken from the air by St Joseph in 1964 led him to state that parts of all four sides had been recorded (St Joseph 1965: 80). However, as the north-east

side has not been recorded, but an annexe is known, it is likely that he is referring to the annexe lying on the south-east side of the camp.

The whole of the south-west side has been recorded, together with stretches of the south-east and north-west, suggesting that the camp measured around 220m from north-west to south-east by at least 150m, enclosing a minimum area of some 3.2ha (7.8 acres). There is a possible entrance gap on the south-west side. The annexe measures about 79m from north-west to south-east by 122m transversely, enclosing an additional 0.9ha. As with nearby **Little Kerse**, the provision of an annexe is unusual, as these have only been recorded at these two camps and at **Balmuildy** along the Antonine Wall.

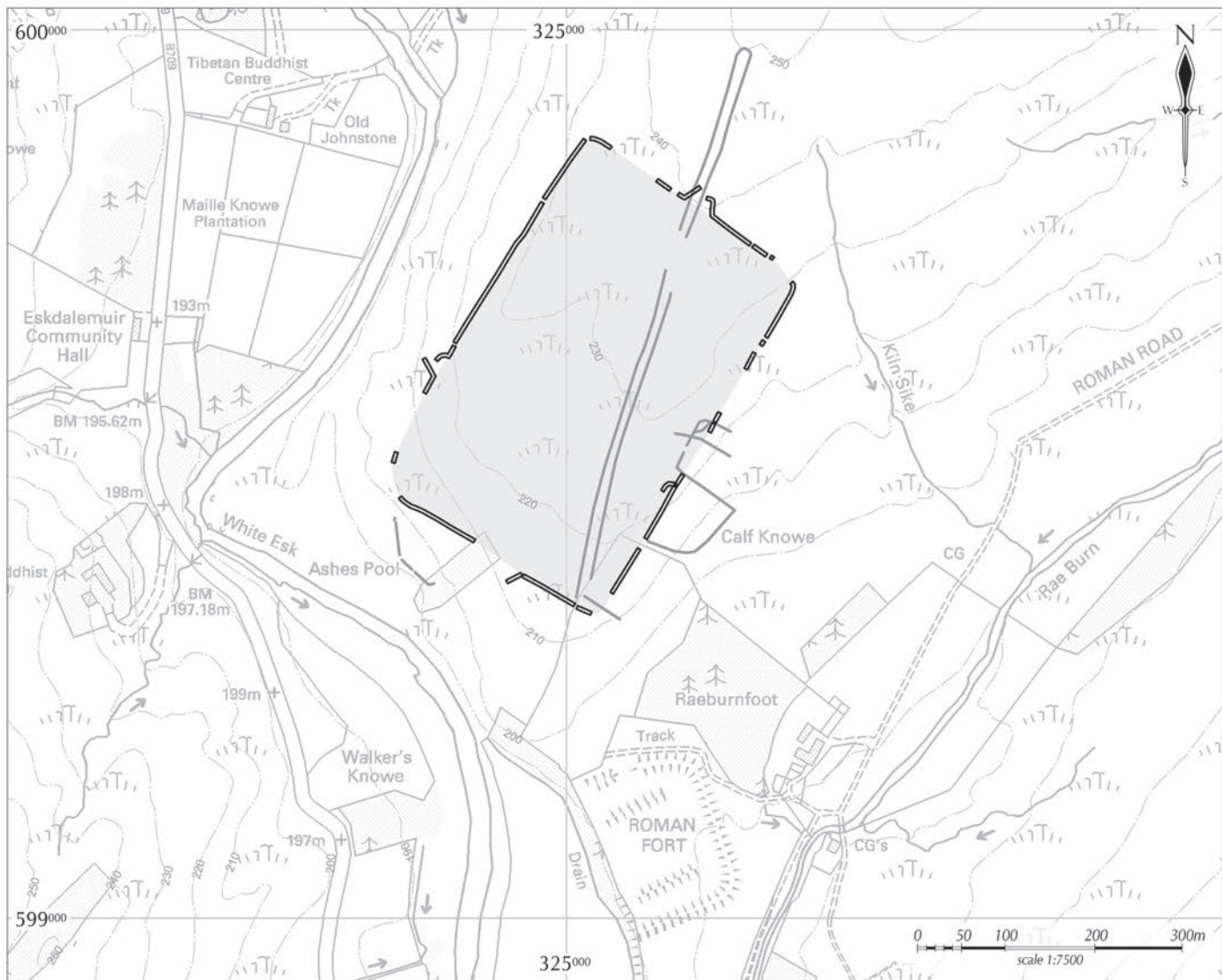


Illustration 192

Raeburnfoot and other earthworks in the area including the bank barrow and Roman fort. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Raeburnfoot (illus 43, 47 & 192)

(Eskdalemuir)

NY 2514 9978 NY 29 NE 101

First discovered during analysis of air photographs by McKeague (RCAHMS) in 2004, this camp was confirmed through ground survey in 2005 (Jones & McKeague 2009). It survives as an earthwork but is in an extremely degraded condition, with the counterscarp bank the only element to survive in places. The maximum height of the counterscarp or rampart above the ditch is 0.3m. The Roman fort of Raeburnfoot lies on lower ground, some 250m to the south (see above, section 7d).

The camp measures 452m from north-east to south-west by 295m transversely and enclosed 13.2ha (32.7

acres). Stracathro-type gates are visible on the north-west and north-east sides, with an oblique traverse on the south-west and a possible internal *clavicula* on the south-east. A long bank barrow runs through the centre of this camp, and the north-eastern gateway has been deliberately sited on the higher ground represented by the barrow.

An additional bank extends to the south-west of this camp, but it is a much larger earthwork and may be a later feature relating to the control of the River White Esk below the camp.

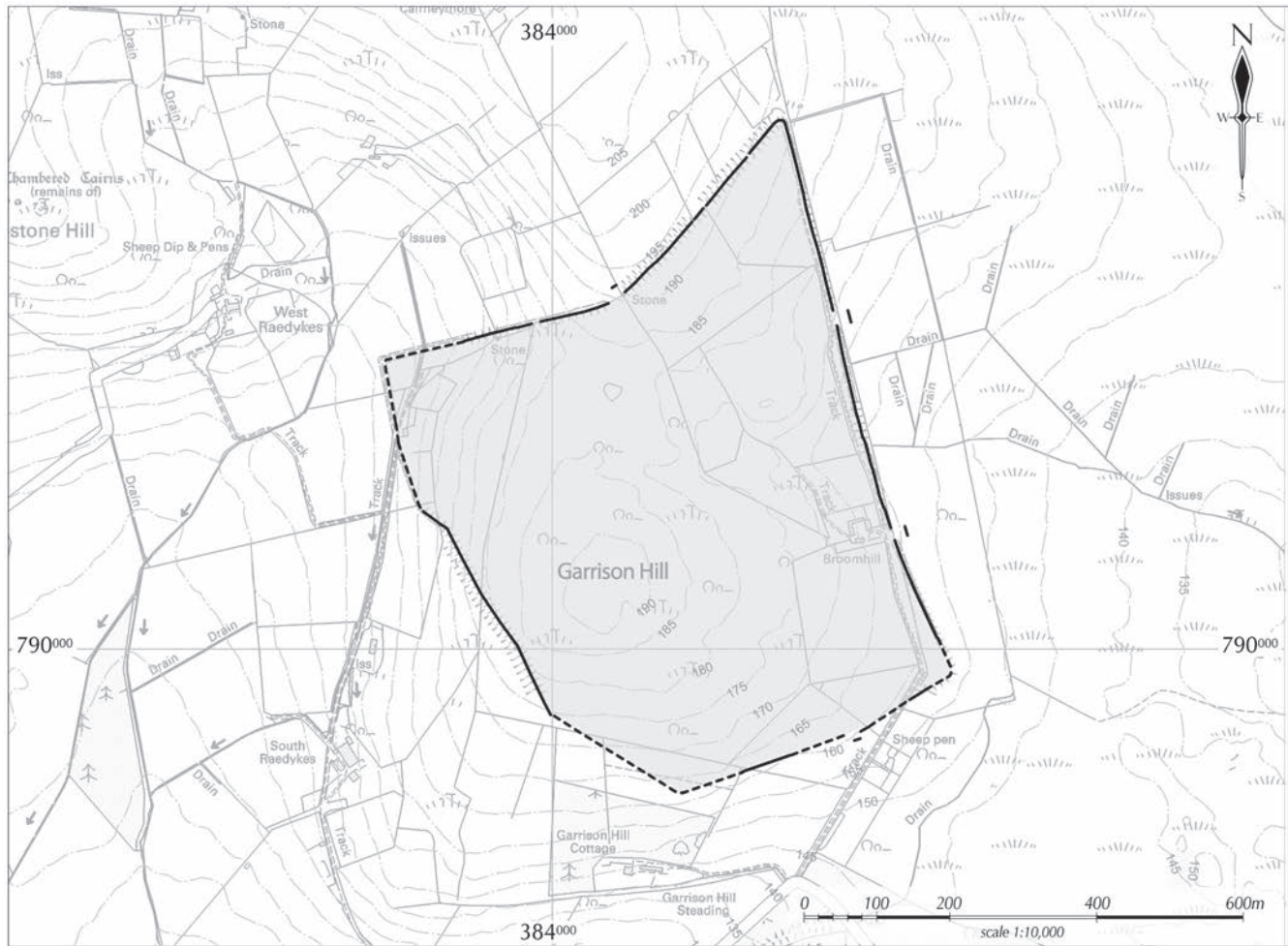


Illustration 193

Raedykes. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Raedykes (illus 16, 47 & 193)

(Re-dykes; Raedikes; Ridykes; Readykes; Rhé Dykes; Ury-hill; Garrison Hill; King's Dykes; Newbigging; Garnca-hill; Garney Hill)

NO 8415 9020 NO 89 SW 2

The camp of Raedykes was first recorded by Maitland (1757: 202) and planned by George Brown and Barclay of Urie in 1778 (Barclay 1792; Roy 1793: Pl. L). It was the most northerly known for some time, and became a favoured site for the battle of Mons Graupius, with Kempstone Hill, 4km to the east, one potential location of the battle (Barclay 1792). Melville, however, did not favour the site for the battle (Gough's edition of Camden's *Britannia* 1790: iii, 416; Macdonald 1916: 319). It is worth noting that John Stuart thought that the camp was the Caledonian camp before the battle, being 'an awkward imitation' of the Roman one (1831:

300). Douglas notes that the tradition of the country was that a Scottish army lay in the camp, to oppose a Danish one encamped on the Links of Arduthie (1792: 261). Macdonald 1916 provides a useful summary of the historical sources for the site.

The camp is irregular in shape, and encloses Garrison Hill, with height-differences of over 40m between the highest and lowest points enclosed. It commands good views of the surrounding countryside, particularly to the sea at Stonehaven some 5km to the south-east, and is sited on the north side of the Cowton Burn, a tributary of the Cowie Water.

The camp measures around 663m from NNW to SSE by a maximum of 590m transversely and encloses 38.9ha (96 acres), if the projected line of the north-west corner is correct (having been taken from earlier sources).

The camp remains in a remarkable state of preservation, with the rampart and ditch clearly visible for much of the perimeter, owing to the site lying mostly under rough and improved pasture. At various points, the rampart measures up to 5.1m in width and 0.8m in height, with a 0.9m berm before the ditch, which measures up to 4.3m in width and 1.3m in depth. Tumbled stone in the ditch on the ENE side has led to suggestions that it may have been rock-cut in places, but this has not been confirmed. Entrance gaps with *tituli* (surviving as low swellings) are visible in the centre of the NNW side where the rampart angle changes – two on the ENE side and another in the SSE side; a further entrance gap is visible at a change of alignment in the southern part of the west side.

Excavations by Macdonald in 1914 identified that the ditch was V-shaped, about 4.5m in width and 2.1m in

depth, faced with puddled clay up to 5cm in thickness, although was smaller elsewhere on the perimeter (Macdonald 1916: 332–4). He also suggested that where the ditch was smaller, the rampart was also smaller. Two of the *tituli* were recorded, the ditch of one measuring 18.6m in length by 3.4m in width and 1.5m in depth, the ditch of the other only 11.6m in length by 3.8m in width and 1.4m in depth (1916: 337). Historical finds from Raedykes include two Roman *hastae* (Douglas 1782: 261), a small hoop or ring of iron (Stuart 1831: 301) and a complete wheel (NSA 1845: xi Kincardine, 249–50).

A linear earthwork located some 230m south of the camp has been presumed to also be Roman in date and is associated with the camp as an additional defensive earthwork (Crawford 1949: 108–10; RCAHMS: NO 88 NW 23). However, this earthwork is of a rather different character and much larger in scale. It is also questionable whether the camp would have needed an additional outwork at this point. A medieval or post-medieval date for this feature seems more likely.

Ravenswood (illus 47 & 183)

(Broomhill; Newstead)

Ravenswood I: NT 5780 3410
NT 53 SE 142

Ravenswood II: NT 5780 3410
NT 53 SE 142

East of the fort and camps at **Newstead** lies a further two-phase camp, recorded through aerial and geophysical survey. St Joseph first recorded part of this camp in 1991 and put small trenches through its WSW and SSE sides (Keppie 1994: 261). However, given that he stated its size to be about 1.62ha it seems likely that he had identified elements of the smaller camp (II) which represents a reduction of the larger one (I), identified by Bradford University during geophysical survey as part of a project centred on the **Newstead** area (Keppie 1996a: 403–4). Camp I, the larger, measures 225m from ENE to WSW by 130m and enclosed 3.1ha (7.7 acres). This was reduced

on its ENE side to 180m to enclose 2.5ha (6 acres). There is a possible entrance gap on the shared WSW side of the two camps, and a further linear cropmark from the Newstead complex (**Newstead VI**, see possible camps) runs through this entrance. Excavations on the ditch by St Joseph recorded that it was 0.83m deep on the west side and 1.44m deep on the south; a fragment of pottery was recorded but no more information was provided about this (Keppie 1994: 261). Another linear cropmark running obliquely through the eastern part of the camps may also relate to part of the ‘Great Camps’ complex to the west.

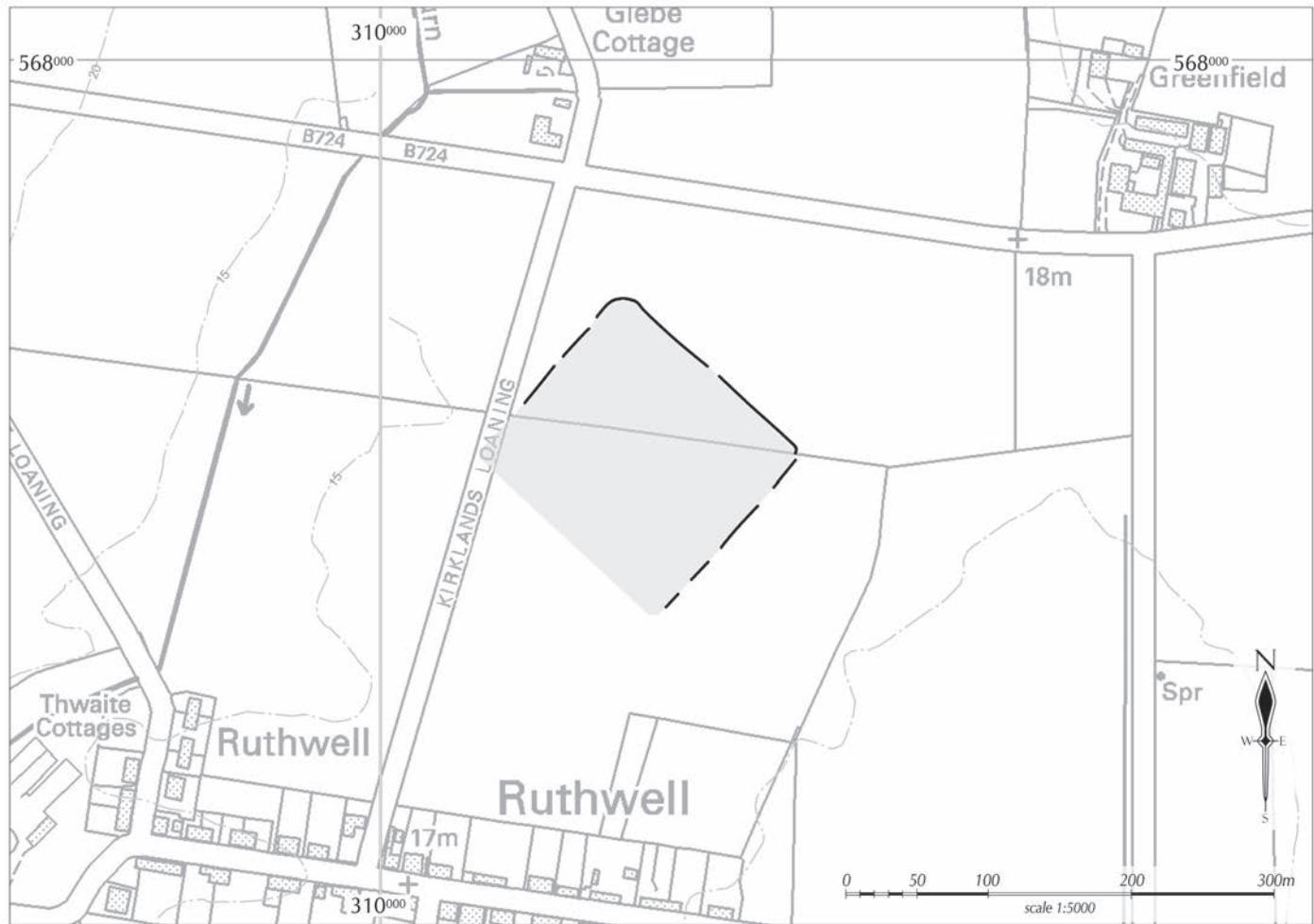


Illustration 194

Ruthwell. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Ruthwell (illus 47 & 194)

(Summerfield; Horseclose)

NY 1020 6773 NY 16 NW 16

The camp at **Ruthwell** lies on level ground close to the confluence of the Lochar Water with the Solway Firth. It was discovered as a cropmark in 1978 by Cambridge University (Maxwell & Wilson 1987: 40) and measures

170m from north-west to south-east by at least 145m; the south-west side has not been located. Therefore at least 2.5ha (6.3 acres) has been enclosed, possibly more. An entrance gap is visible in the north-east side.

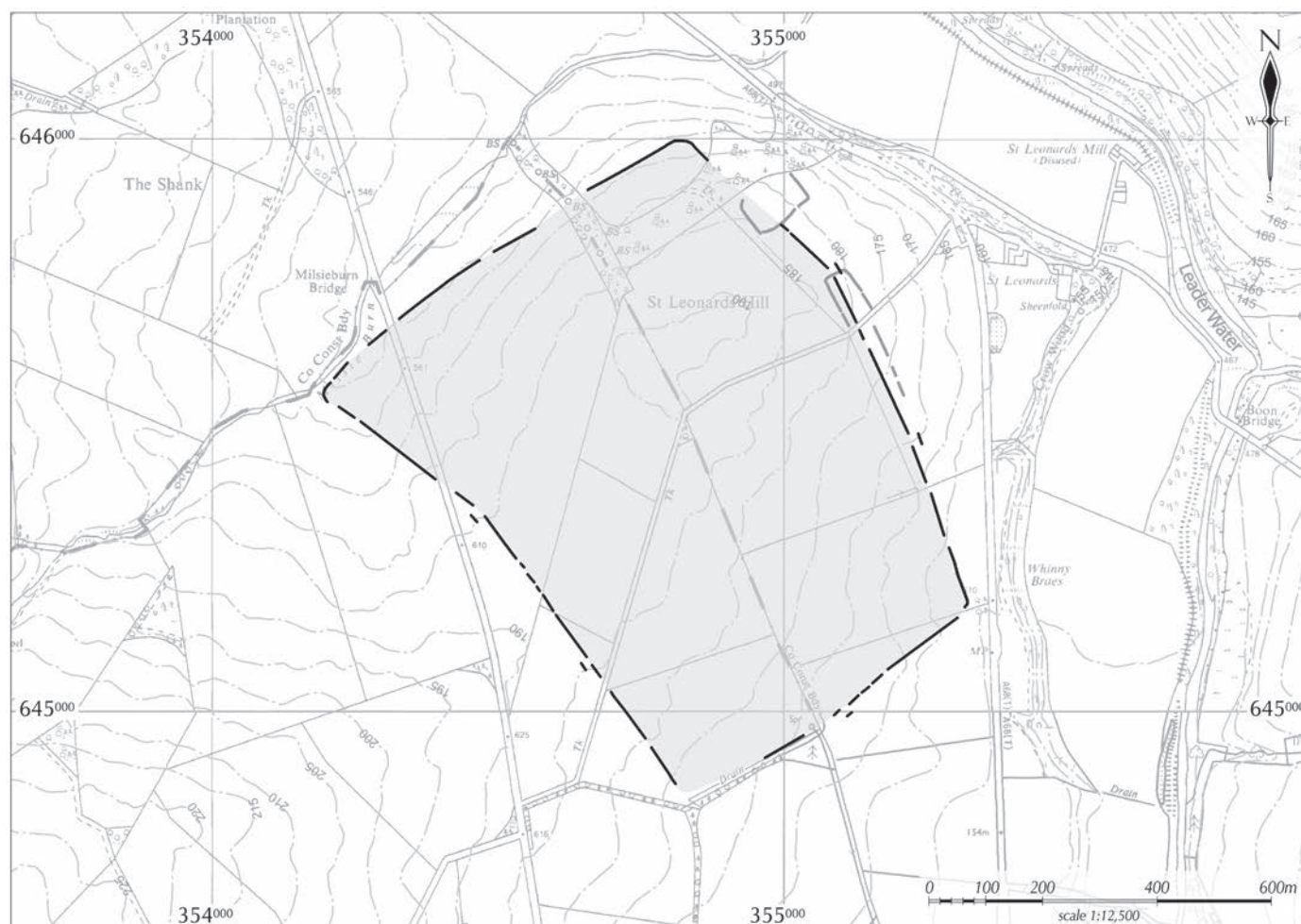


Illustration 195

St Leonards and other cropmarks in the area. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

St Leonards (illus 47, 195 & 196)

(St Leonard's Hill)

NT 5470 4552 NT 54 NW 14

This camp encloses the gently undulating ground of St Leonards Hill, above the Leader Water, on the line of Dere Street. It was first recorded as a cropmark from the air by St Joseph in 1948 (1951a: 57) and is slightly irregular in form, measuring around 1000m from north-west to south-east by about 738m. It enclosed 70ha (173 acres), making it the largest camp so far recorded in the Roman Empire. The need to enclose such a large area of ground with its concomitant topographic constraints led to the shape of the camp, which was wider at the north-west end (which measured 747m) than the south-east (624m). There is a change of alignment towards the north-west end at the northern gates on both the north-east (illus 196)

and south-west sides; it also bows out slightly at the south-east gate. *Tituli* are recorded at five of these gates (only an entrance gap is so far known in the north-west side).

The camp intersects a possible prehistoric settlement on its north-east side and a further enclosure which has been claimed as a Neolithic cursus, although this is now regarded as unlikely (Mudie 2002: 101 – illus 196). Geophysical survey on this side of the camp recorded some 'small, high magnetic anomalies which may be the remains of Roman field ovens or latrines' (Neighbour 2000); a subsequent evaluation recorded the line of the ditch on this side but it was not excavated (Mudie 2002: 101).

ROMAN CAMPS IN SCOTLAND



Illustration 196

Aerial view of part of the north-east side and one of the entrances of the camp at St Leonards, showing a settlement and enclosure which intersect the camp's perimeter. Taken from the north-west in 1993. © Crown copyright: RCAHMS. SC882008. Licensor www.rcahms.gov.uk.

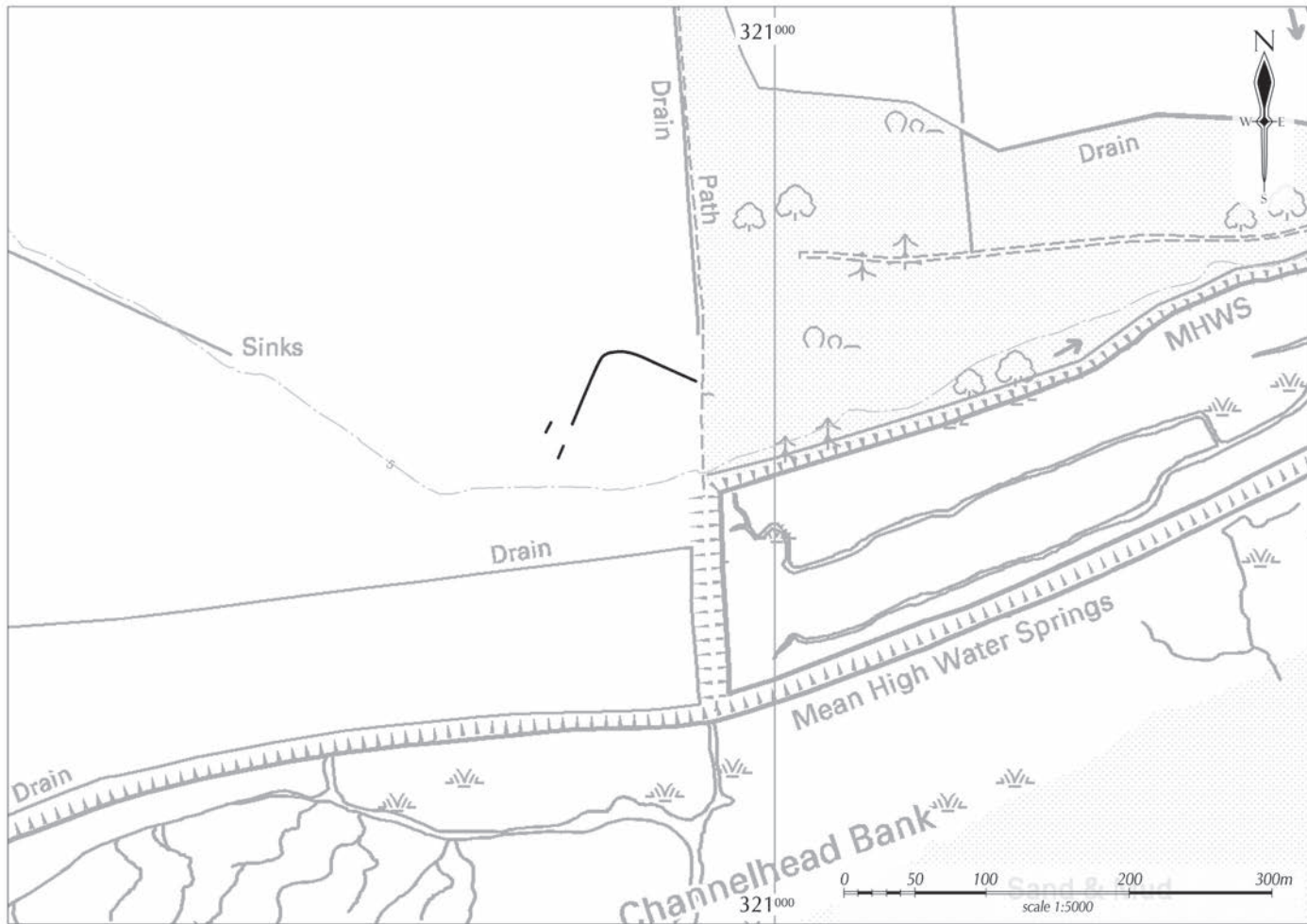


Illustration 197

St Madoes. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

St Madoes (illus 197)

(Nether Mains)

NO 2093 1955 NO 21 NW 39

The camp at Nether Mains, St Madoes, was first recorded as a cropmark from the air by St Joseph in 1967 (1969: 111). It lies on a level terrace immediately north of Channelhead sandbank on the River Tay. The Roman fortress and camps at **Carpow** lie across the Tay to the south.

Parts of two sides (at least 70m of the north-east and 85m of the north-west) have been recorded with a

rounded angle between them. There is an entrance gap and *titulus* in the north-west side. It is likely that the camp was small, owing to the position of the north-west *titulus* only 70m from the north corner. If the entrance gap is central, then the camp could measure about 140m and, if square, would enclose some 2ha (4.8 acres).

Scone Park (illus 47 & 140)

(Scone Palace Policies; Scone; Perth Hunt Race Course)

NO 1044 2715 NO 12 NW 14

This camp was first discovered from the air by St Joseph in 1952 (St Joseph 1955: 87), lying on an area of flat ground east of the River Tay and now occupied by Perth Hunt Race Course. The camp of **Grassy Walls** lies about 300m to the north and the Roman fort of Bertha is situated across the Tay. Parts of three sides have been visible through cropmarks, and the camp measures at least 540m from WNW to ESE by 401m transversely, enclosing a minimum of 21.6ha (53 acres), and possibly some 25ha

(63 acres). An entrance gap protected by a *titulus* is visible in the NNE side, and St Joseph recorded another in the SSW side (1969: 111), but this could not be identified from air photographs.

St Joseph placed a series of trenches through the SSW and NNE sides in 1968 and 1969, recording that the ditch was some 2.4m in width and about 1m in depth (RCAHMS St Joseph Collection: Notebook 5).



Illustration 198

Steeds Stalls, Gourdie. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Steeds Stalls, Gourdie (illus 47, 50 & 198)

(Hill of Gourdie; Gourdie)

NO 1155 4266 NO 14 SW 15

The site of Steeds Stalls has long been associated with the Romans, owing to the upstanding remains of some 'stalls' in its interior, with these interpreted as the advance guard of the Caledonian army, sent to watch the Romans in nearby Inchtuthil (Sinclair 1793: ix, 258–9; NSA 1845: x, 1025). Elsewhere, they are recorded as relating to the Picts (Wilson 1851: 86–7). The presence of a camp surrounding the stalls was first recorded by Flight Lieutenant Bradley from the air in 1941 (Richmond 1943: 47–9, fig 9; Crawford 1949: 76; St Joseph 1951a: 64).

The camp is situated on the eastern part of the Hill of Gourdie, some 3km NNW of the fortress and camps at **Inchtuthil**. A Roman quarry has been recorded some 700m to the south-west (Pitts & St Joseph 1985: 61), and

parts of a Roman road, possibly running from Inchtuthil to the quarry and Steeds Stalls, have also been identified (Maxwell & Wilson 1987: 27). The camp is almost square, measuring about 149m from NNW to SSE by 142m transversely, enclosing just over 2ha (5.1 acres). An internal ditch is visible separating the NNW and SSE parts of the camp, halfway through the camp, some 74m from the NNW side; an entrance gap is visible in the centre of this dividing ditch and in the centre of the SSE side.

Most of the site is under the plough, except for six or seven upstanding stalls. These are accompanied by a further five or six stalls visible as cropmarks. They have a tadpole-like appearance, with a round head some 4.5m in diameter and a tail some 6m in length leading out

towards the camp perimeter. Similar ‘tails’ are also visible as cropmarks at the back of the upstanding stalls, and with nine such tails visible, this suggests some fourteen stalls in total. The cropmarks are slightly confused where the inner ditch meets the eastern side of the camp, but there appears to be a further stall here, taking the total to potentially

fifteen such features. These features have been proposed as possible lime-kilns relating to the construction of the nearby fortress (RCAHMS 1994: 83). An alternative explanation that they formed a base for stone vaulting for a victory monument (Woolliscroft & Hoffmann 2006, 71–2) seems unlikely (see above, section 7f).



Illustration 199
Stonypath. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved.
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Stonypath (illus 199)

(Siller Holes)

NT 1446 5324 NT 15 SW 26

Formerly recorded as ‘earthworks’ during aerial survey in 1979 by RCAHMS, this camp lies adjacent to the remains of a silver mine known as the ‘Siller Holes’. In 1994, reinterpretation through field survey by RCAHMS led to the recognition of two sides of a Roman camp. Some 110m of the east side together with over 80m of the north side is

currently known. The upstanding rampart measures about 3.5m in width and up to 0.9m in height above the bottom of the ditch, which measures 2.4m in width. No gates have been recorded. The line of the Roman road running up the east side of the Pentlands probably cuts through the camp, but the relationship between the two is unknown.

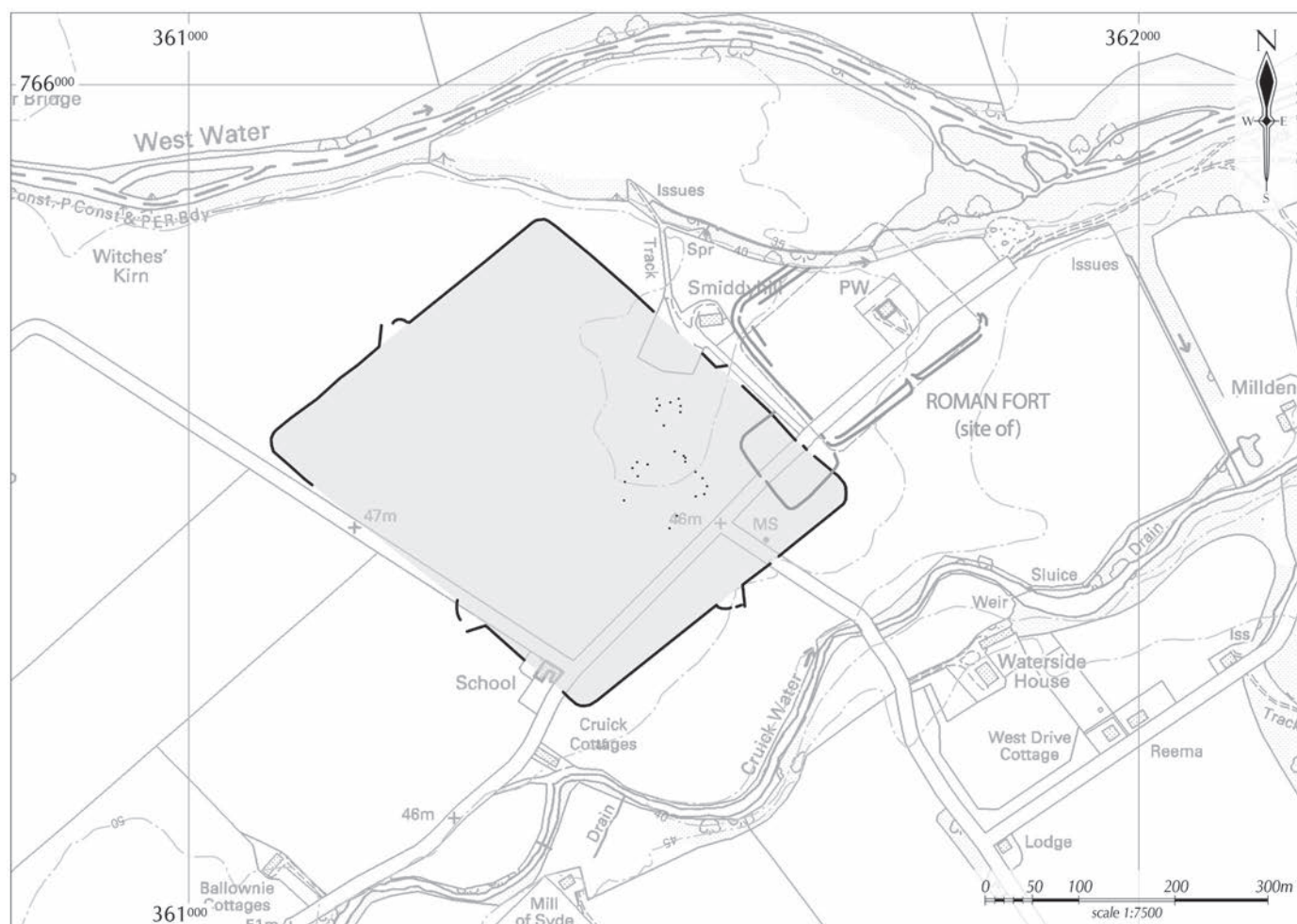


Illustration 200

Stracathro and other cropmarks in the area including the Roman fort and its annexe. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Stracathro (illus 42, 47 & 200)

(Inchbare)

NO 6137 6561 NO 66 NW 13

The camp at Stracathro was discovered from the air by St Joseph in 1955 (1955: 87), the neighbouring Roman fort being discovered two years later (St Joseph 1958: 91). It lies on level ground on a triangular spur between the West Water to the north and the Cruick Water to the east (both tributaries of the River North Esk). Stracathro Church lies immediately to the east, within the Roman fort, the annexe of which intersects the south part of the north-east side of the camp.

All four sides of the camp have been recorded through cropmarks, and it measures 442m from north-west to south-east by 370m transversely, enclosing 16.2ha (40 acres). All four gateways are recorded, in the centre of the north-west and south-east sides, and towards the south-east end of the other two sides. The entrances are protected by

an external *clavicula* ditch and oblique traverse, giving rise to the expression 'Stracathro-type' for the particular gate arrangement (despite the fact that St Joseph noticed the similarity of the gates to the camp at **Dalginross** (1955: 87), recorded two centuries earlier by Roy; see above, section 7b).

St Joseph excavated a series of trenches in 1967, recording that the ditch was up to 2.9m in width and up to 1.2m in depth (RCAHMS St Joseph Collection: Notebook 4). The *clavicula* on the north-west side was also sectioned, revealing a shallow V-shaped ditch, measuring about 2.4m in width and 1m in depth (St Joseph 1970a: 171–5). A number of pits are visible within the camp, but these are of limited regularity and their association with the camp is unknown.



Illustration 201

Strageath Cottage and the nearby Roman fort of Strageath. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Strageath Cottage (illus 47 & 201)

(Strageath)

NN 8904 1803 NN 81 NE 16

This camp is situated on fairly level ground less than 500m west of the Roman fort at Strageath. It was first recorded as a cropmark from the air in 1969 by Cambridge University, and confirmed through further aerial survey by RCAHMS and excavations by St Joseph (Maxwell 1981: 41). However, a Roman camp is clearly marked in this location to the west of Strageath fort and annexes, with four *tituli*, on Knox's *Map of the Basin of the Tay* in 1850. In addition, Maitland refers to a large camp occupying

upwards of 30 acres at Strageath (1757: 196), and this could also be this camp.

The camp measures about 470m from WNW to ESE by 292m, enclosing about 13.7ha (34 acres). No obvious entrances are known. Excavations by St Joseph in 1979 recorded that the ditch on the south side was V-shaped, measuring about 1.3m in width and 0.6m in depth (RCAHMS St Joseph Collection: Notebook 8).

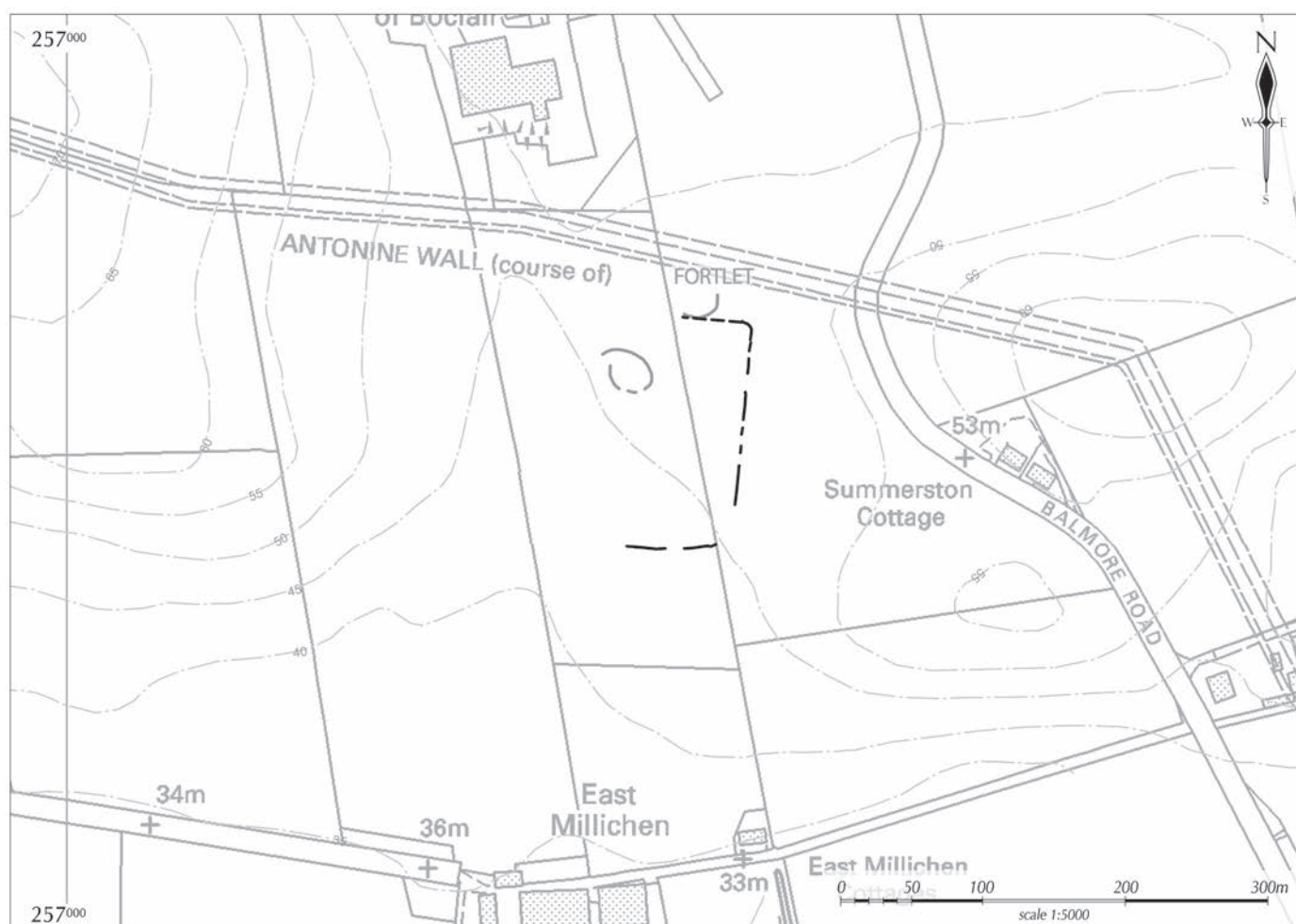


Illustration 202

Summerston and the Antonine Wall and adjacent Roman fortlet. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Summerston (illus 47 & 202)

(Temple of Boclair)

NS 5742 7237 NS 57 SE 18

The camp at Summerston lies immediately south of the Antonine Wall, next to a nearby fortlet, the ditch of which was aligned to deliberately avoid the camp. It was first discovered from the air by Maxwell in 1977 (Goodburn 1978: 413). Parts of three sides of the camp have been visible as cropmarks, and the camp measures about 162m from north to south by at least 75m transversely and possibly 140m, enclosing an area of some 2.3ha (5.9 acres). It has not been possible to detect any entrances in the sides – there are breaks in the east and south sides, but

these may be due to partial cropmarks rather than obvious entrance gaps. Excavation in 1980 has dated the camp to the Antonine period, as it is of a single construction phase and slightly pre-dated the adjacent fortlet (Hanson & Maxwell 1986: 118–19). They also recorded that the ditch was up to 1.6m in width and 0.75m in depth (Maxwell & Hanson n.d.).

Illustration 202 includes information on the north side from Maxwell & Hanson's excavations (Maxwell & Hanson n.d.).

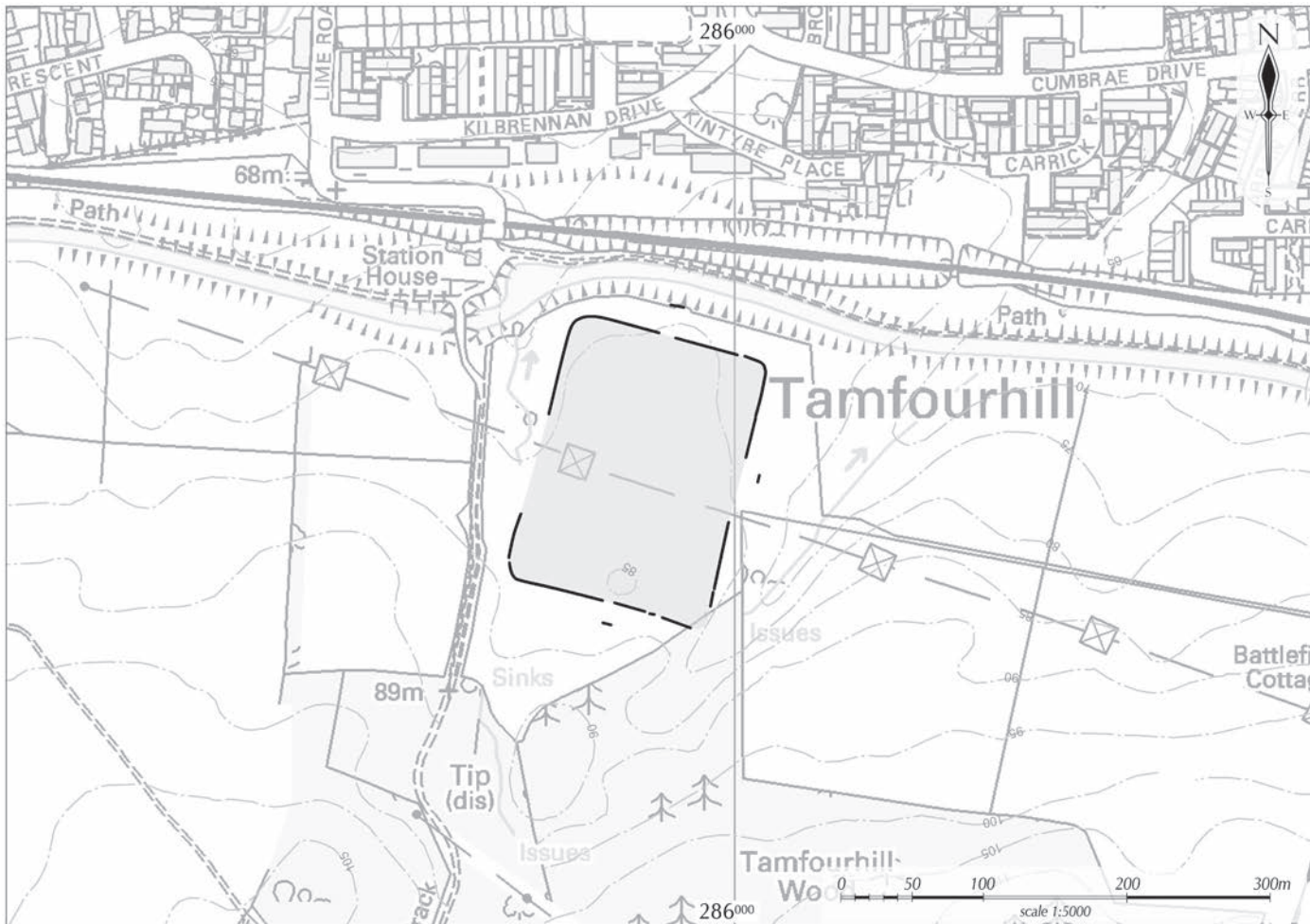


Illustration 203

Tamfourhill. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Tamfourhill (illus 45, 47 & 203)

NS 8594 7946 NS 87 NE 13

The camp at Tamfourhill was discovered as a cropmark from the air by Maxwell in 1977 (Maxwell & Wilson 1987: 29), lying in a field just to the south of the village of Tamfourhill, between the Edinburgh to Glasgow railway line and Tamfourhill Wood. The field slopes gently downwards towards the north with the camp lying about 300m south of the Antonine Wall, and about 400m south-west of the fortlet at Watling Lodge.

The camp measures about 190m from NNE to SSW by 140m transversely, enclosing an area of some 2.7ha (6.7

acres). Entrance gaps with *tituli* have been recorded in the centre of the NNE and SSW sides, and to the north of centre on the ESE side, suggesting that the camp faced NNE towards Watling Lodge.

The new canal extension for the Falkirk Millennium Link Project, linking the Union Canal with the Forth and Clyde Canal, skirts around the north side of the camp. The *titulus* on the NNE side was recorded during the construction works, but not excavated (Gooder & Duffy 2000).

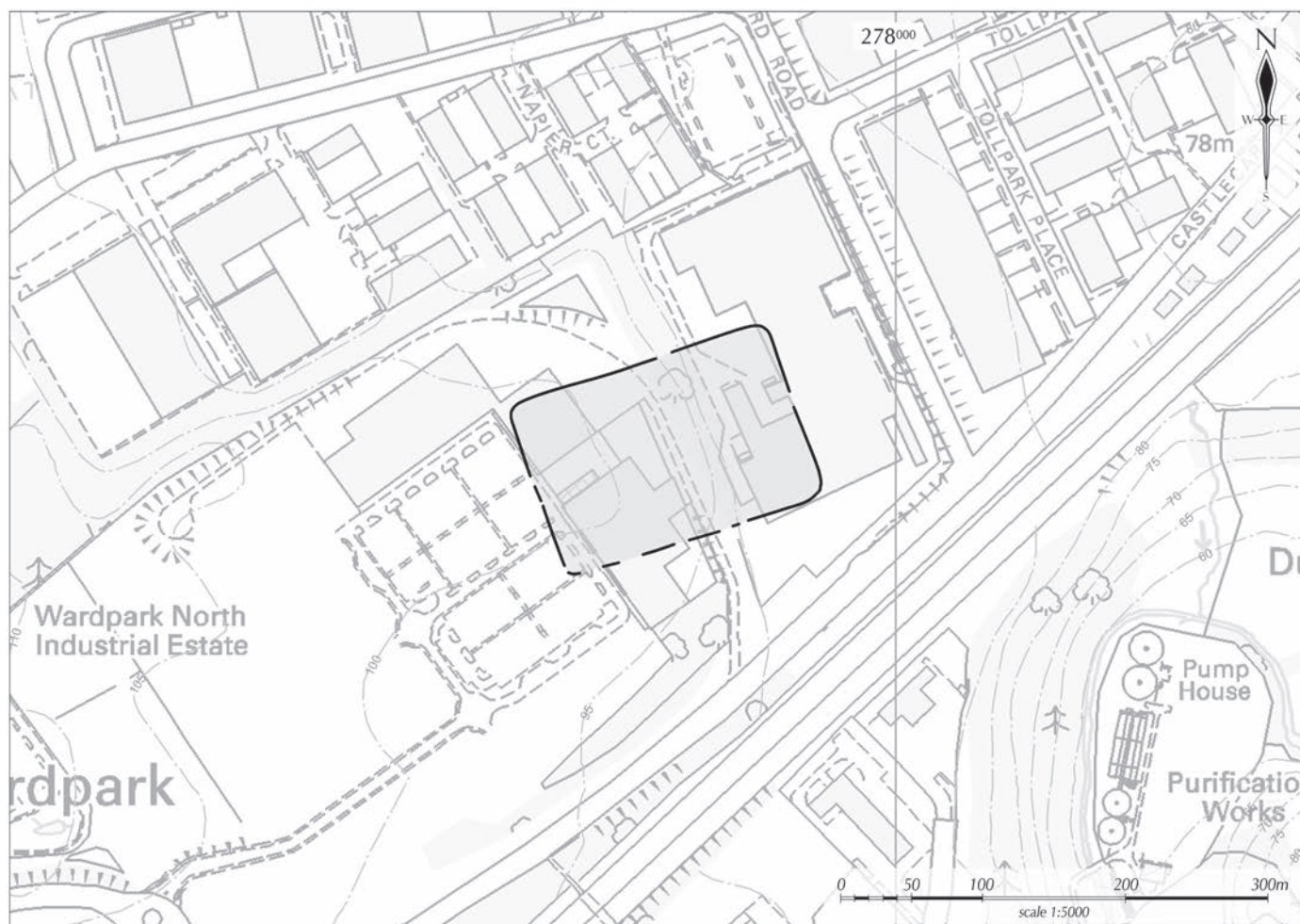


Illustration 204

Tollpark. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Tollpark (illus 47 & 204)

(Garnhall)

NS 7783 7742 NS 77 NE 13

The remains of the camp at Tollpark were first discovered through cropmarks by St Joseph in July 1949 (St Joseph 1951a: 62). It is situated some 410m south of the Antonine Wall, approximately midway between the forts of Castlecary and Westerwood. The two camps at **Garnhall** lie a short distance away to the north-east.

The site lies on ground which slopes gently from west to east, about 400m south-east of the former farm of Tollpark, but the entire area is now covered by the Wardpark North Industrial Estate. Early editions of the Ordnance Survey map (Dunbartonshire 1864: sheet xxv) show that the area lay under agricultural fields, bisected by a trackway that ran NNW to SSE through the camp to Faulds Cottage to the south.

The camp measures about 186m from WSW to ENE by about 130m transversely, although it is slightly wider at the west than the east by some 10m. It encloses an area of about 2.5ha (just over 6 acres). The majority of the perimeter has been recorded from the air (in 1949 and 1951) but could not be detected through probing by Feachem in 1956 (Feachem 1958: 329). A probable entrance gap was recorded in the ENE sides, and two apparent entrances recorded in the WSW side during excavations (see below), but no additional gate protection, such as *tituli*, were noted (White forthcoming); there are also slight gaps in the cropmarks on the two longer sides (although these are not necessarily due to the presence of entrances). It is possible that the track that crosses the

camp represents the location of the entrance on one side as the track kinks in the centre. Evaluation and trial trenching in 1998 could not locate any remains of the camp and suggested that previous development work had removed all trace of archaeological deposits through scarping into the side of the slope on which the camp lay (Duffy 1998b: 11).

However, excavations in 2005 and 2006, following the removal of the OKI factory, recorded significant survival of the ditch (228m of which was excavated),

although no other features associated with the camp were identified. The ditch was generally V-shaped, and varied in width from 1.4m to 4m and was up to 1.4m in depth. It did not appear to be deliberately in-filled but seemed to have gradually filled up owing to the slumping of the rampart material. A large boulder in part of the ditch appeared to have been modified to continue the ditch's profile. Later recuts of the ditch were thought to be related to agricultural drainage (White forthcoming).

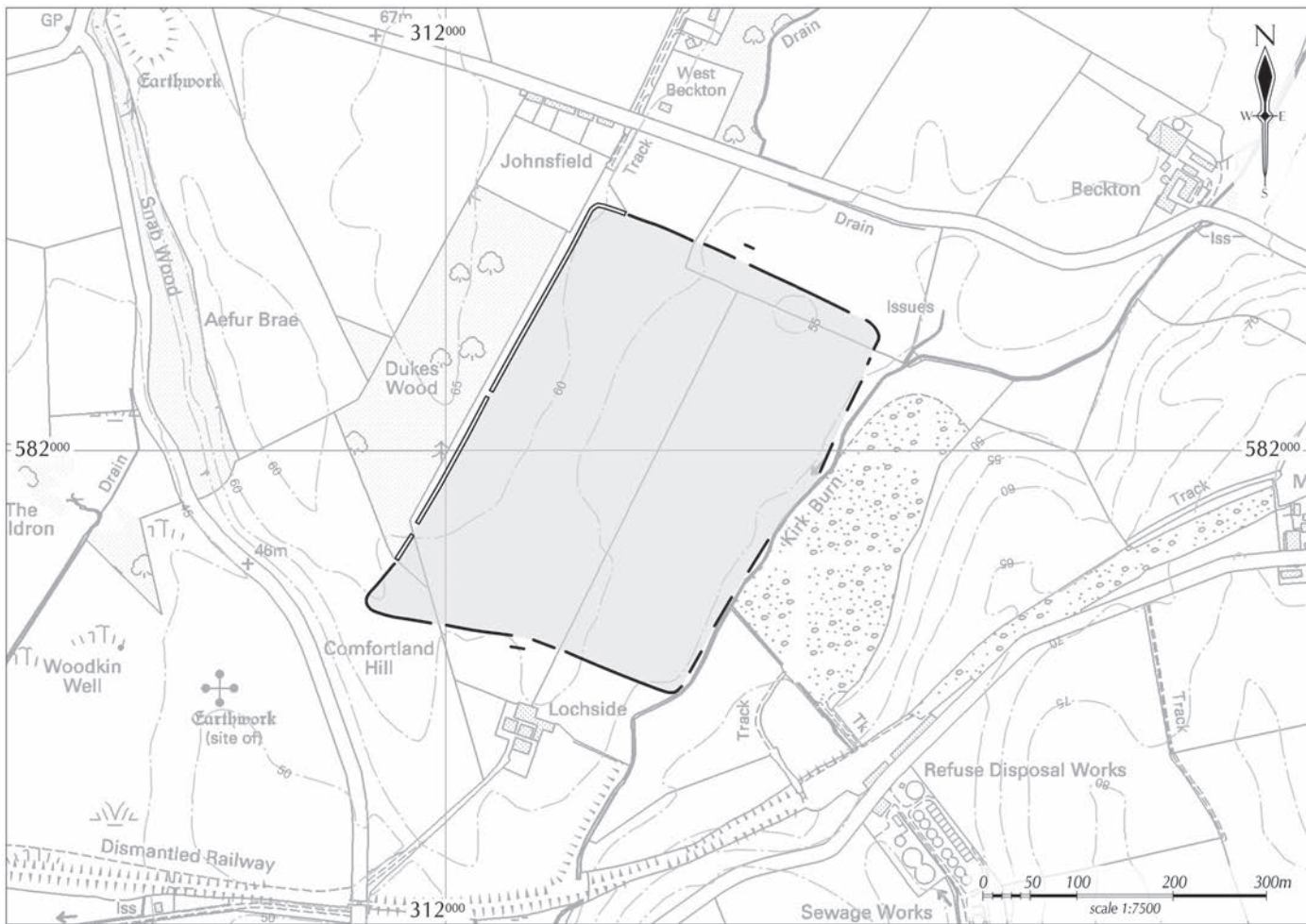


Illustration 205

Torwood. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Torwood (illus 47 & 205)

(Lochside; Torwood Moor)

NY 1220 8198 NY 18 SW 11

The camp at Torwood, Lochside, lies on gently sloping ground east of the Dryfe Water close to its confluence with the River Annan; the Roman fort of Ladyward is sited some 600m to the west. First recorded in 1769 by Roy (1793: Pl.VII), a small part of the camp survives as an upstanding earthwork, with most of the remainder revealed through cropmarkings on aerial photographs.

The camp measures about 452m from north-east to south-west, although it has a pronounced corner extension

to its western angle; its transverse dimension is 330m, and the camp enclosed 15.3ha (almost 38 acres). Entrance gaps protected by *tituli* are visible in the north-east and south-west sides; two *tituli* were recorded on the north-west side in Dukes Wood in 1956 (RCAHMS St Joseph Collection: Notebook 1). These were recorded as measuring up to 11m long, 3.3m wide with a ditch 1.8m wide (RCAHMS St Joseph Collection: Notebook 1) but are no longer visible today.

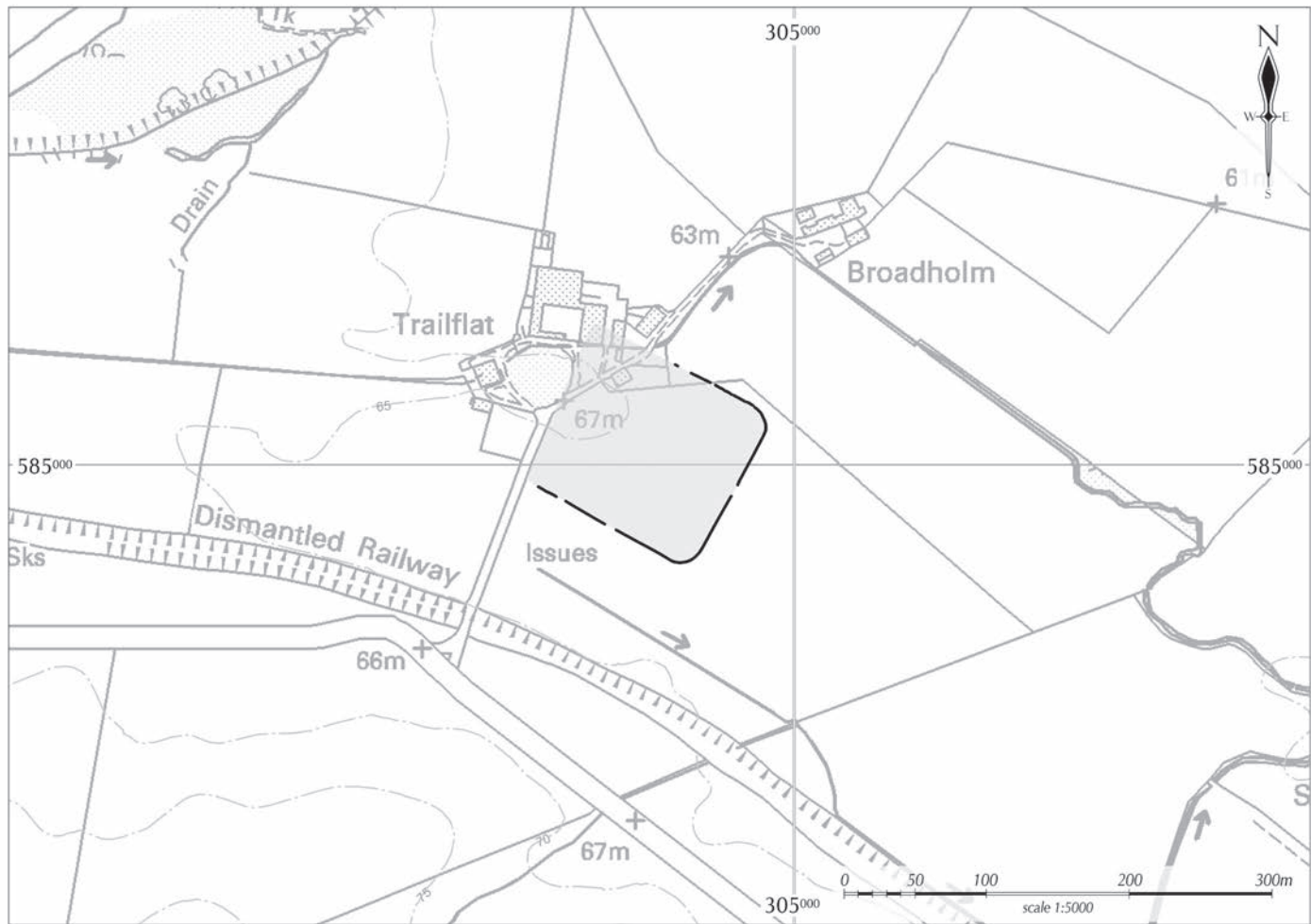


Illustration 206

Trailflat. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Trailflat (illus 47 & 206)

NY 0488 8501 NY 08 NW 11

The camp at Trailflat was recorded in 1983 by RCAHMS from the air, on level ground above the Water of Ae, about 1.8km ESE of the fortlet at Murder Loch, close to the presumed line of the Roman road from Annandale to Nithsdale. The whole of the south-east side, some 120m,

has been recorded through cropmarks, together with up to 123m of the adjacent sides; the north-west side has not been recorded but probably lies under the farm buildings. The camp enclosed at least 1.4ha (3.5 acres) and probably not much more. An entrance gap is visible in the centre of the south-east side.

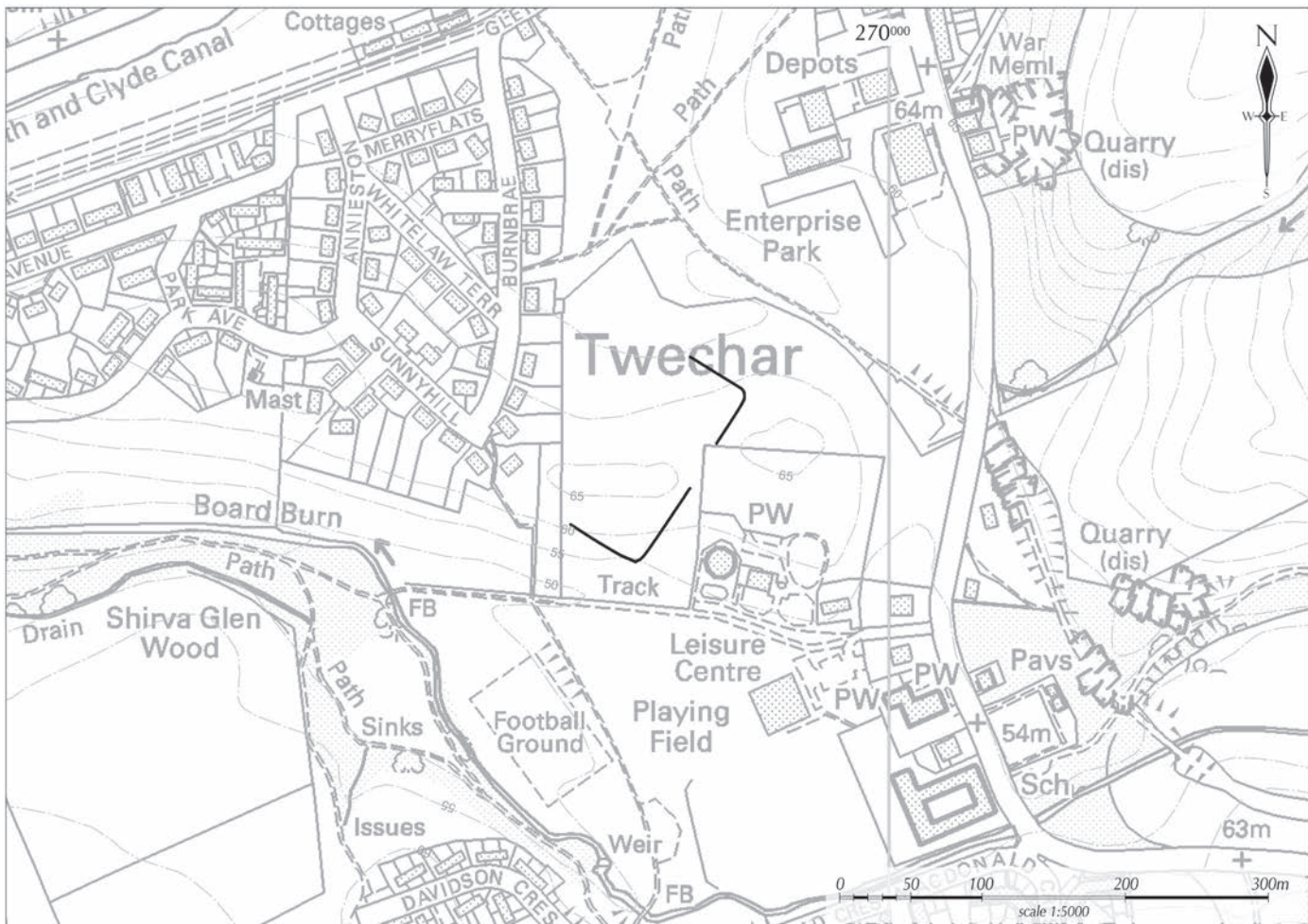


Illustration 207

Twechar. (The Antonine Wall runs to the north.) Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Twechar (illus 47 & 207)

NS 6980 7544 NS 67 NE 11

This camp lies immediately east of the village of Twechar, in the field between the houses and the church and leisure centre. It is situated on a ridge in the valley about 1km to the west of Bar Hill fort, and about 300m south of the Antonine Wall. It was first discovered from the air by Maxwell in 1976 (Goodburn 1978: 416), and parts of three sides have been visible, including most of the south-east side, 144m long, with a possible central entrance gap (although the cropmark has been interrupted by the corner of the enclosure around the church). Up to 60m of the

north-east and south-west sides have also been recorded before the cropmark is lost under the houses of Twechar village. If the camp were square in form, it would enclose some 2.1ha (5.2 acres).

The camp probably relates to the construction of the Antonine Wall barrier. It is unlikely that it is a construction camp for the fort at Bar Hill because another camp has been recorded there to the rear of the fort (and given the climb required to reach the fort when there was ample space on the Hill).

Ulston Moor (illus 47 & 177)

Ulston Moor I: NT 6873 2165 *Ulston Moor II: NT 6873 2165*
NT 62 SE 41 *NT 62 SE 41*

First recorded in the 1950s by St Joseph from the air (1955: 81; 1958: 87; 1961: 121), the two-phase cropmark camp at Ulston Moor lies on the south-west side of Dere Street, opposite the camps of **Milside Wood** and a little way from the fort and camp at **Cappuck**. The two camps share part of at least two sides, with the north-east side unknown, but it may be located close to the road which sits on Dere Street. At least 324m, south-west to north-east, of the length of the larger camp (I) are known, and 253m

transversely; the camp probably enclosed a little over 9ha (22 acres). Entrance gaps protected by *tituli* are visible in the north-west and south-east sides, with an entrance gap in the centre of the south-west. The reduced camp (II) has a length of at least 262m and probably enclosed around 7.5ha (over 18 acres). It appears to share the north-west and south-east entrance gaps with camp I, and a further entrance gap with *titulus* is visible in the centre of its south-west side.



Illustration 208

Wandel and the nearby Roman fortlet and stretch of Roman road. Reproduced by permission of Ordnance Survey on behalf of HMSO.
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Wandel (illus 208)

NS 9440 2675 NS 92 NW 16

Discovered in 1961 by St Joseph from the air, the camp at Wandel lies on gently sloping ground on the Roman road on the east bank of the River Clyde. Parts of two sides have been recorded. It encloses a small fortlet of presumed but unconfirmed Antonine date (RCAHMS 1978a: 37) and probably crosses the Roman road, possibly suggesting that it may be earlier than both. Some 390m of the ESE side have been recorded, together with the south-eastern

corner angle and 45m of the SSW side. The southern stretches of camp defence survive as an upstanding earthwork, the northern parts as cropmarks. Excavations by RCAHMS on an upstanding section revealed that the rampart survived 2.3m in width and 0.5m in height, above a ditch that was 3.4m in width and 1.1m in depth (RCAHMS 1978a: 136).



Illustration 209

Ward Law and the cropmark leading up to the hillfort. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Ward Law (illus 39, 47 & 209)

NY 0240 6687 NY 06 NW 4

First recorded in 1772 as a Roman fort by Pennant (1776), this camp is now known only as a cropmark lying just north of the hillfort which crowns the summit of Ward Law hill. The fortlet at Lantonside lies just over 1km to the WSW, the two overlooking the confluence of the River Nith with the Solway Firth.

The camp measures 225m from WSW to ENE by 171m transversely and enclosed 3.8ha (9.4 acres). Excavations on the ditch have suggested that it was rock-cut in places, up to 2.4m in depth (cut through 1.8m of rock) and 4.5m in width, with a gutter measuring some 0.3m wide and 0.15m deep (Truckell 1952: 142).

A *titulus* is visible in the WSW side, but there is no entrance gap at this point, suggesting either that this was

reused at some point and the entrance either opened or closed, or that there was an additional ditch through the entrance obscuring the cropmark, which does appear to narrow slightly at this point. These observations were confirmed by geophysical survey in 2009 (Hüssen *et al* 2009b). However, the earlier excavations on the site, while revealing evidence for the ditch cutting through the natural rock, were not recorded as demonstrating evidence for recutting of the ditch. The cutting of a 'temporary' camp ditch through rock demonstrates a significant expense of manpower.

On the NNW side, there is a break in the ditch for an entrance which is protected by four *tituli*. It was this discovery which led to the reclassification of the site as a

camp rather than a fort (Maxwell & Wilson 1987: 23–4). Indeed, no such complex arrangement is known from other forts or camps in Britain.

Immediately south of the camp, running from its SSE side close to the south corner, there is a further linear cropmark running to the hillfort which is sited less than 50m away. This linear cropmark has a clear entrance gap, protected by a *titulus* to its west. G D B Jones suggested that the hillfort was incorporated as a defensive feature for a period (Goodburn 1978: 419), and Truckell postulated that a signal station may have been built on the hillfort (information from RCAHMS). The site is

also proposed as a 15th-century beacon height (Hewison 1912: 99). While the cropmarks are clearly visible, the ‘signal station’ on the hillfort has not been confirmed. The presence of this outwork, if Roman in date, the rock-cut ditch and the additional *tituli* confirm the site as one of the more unusual camps in Scotland, and suggests perhaps a longevity in its occupation. No internal features were recorded during geophysical survey in 2009, although an underlying geological anomaly meant that only limited evidence could be recorded (Hüssen *et al* 2009b).

Wester Carmuir (illus 47 & 167)

(Lochlands)

NS 8515 8055 NS 88 SE 27

To the west of **Lochlands Three Bridges**, south of the main Lochlands complex and only 500m north of the Antonine Wall, lies the cropmark camp at **Wester Carmuir**, first recorded in 1957 by St Joseph from the air (1958: 89). This camp is slightly irregular, but measures about 245m from NNE to WSW by 225m, enclosing almost 5.3ha (13 acres). Gaps, some of which may be for entrances, are visible on all four sides. There have been no excavations on the camp and no dating evidence is available. A further rounded corner visible to the west suggests that there may be another in this vicinity (see

Wester Carmuir II, possible camps). Owing to the similarity of the size of this camp with some of the presumed construction camps for the Wall (**Garnhall I**, **Balmuildy**, and possibly **Dullatur I**) it is usually associated with the Wall, although the camps do have slightly differing morphology. It is also suggested that it may equally have been a construction camp for the fort of Camelton (Hanson & Maxwell 1986: 118), although it had earlier been tentatively suggested that it may be Agricola in date (Maxwell 1981: 42). A construction camp for the Wall seems the most likely on current evidence.

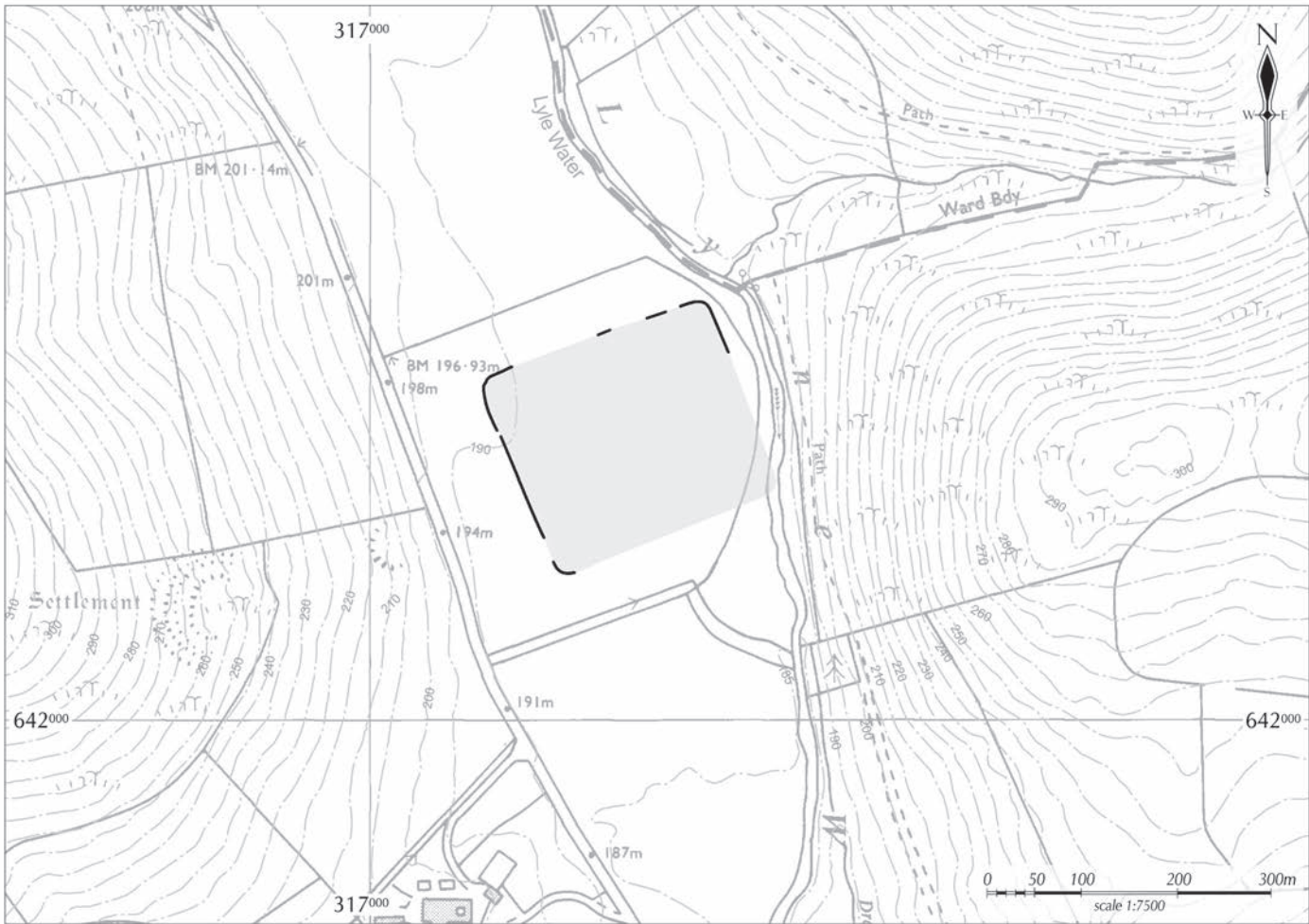


Illustration 210

Wester Happlew. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Wester Happlew (illus 47 & 210)

NT 1727 4230 NT 14 SE 48

First recorded in 1992 by RCAHMS through cropmarks from the air, the camp at Wester Happlew lies just to the east of the A72, the presumed line of the Roman road north-west of **Lyne**, and on level ground on the west

bank of the Lyle Water. Measuring 256m from ENE to WSW by 223m, it enclosed just over 5.6ha (14 acres). No obvious entrances are known.

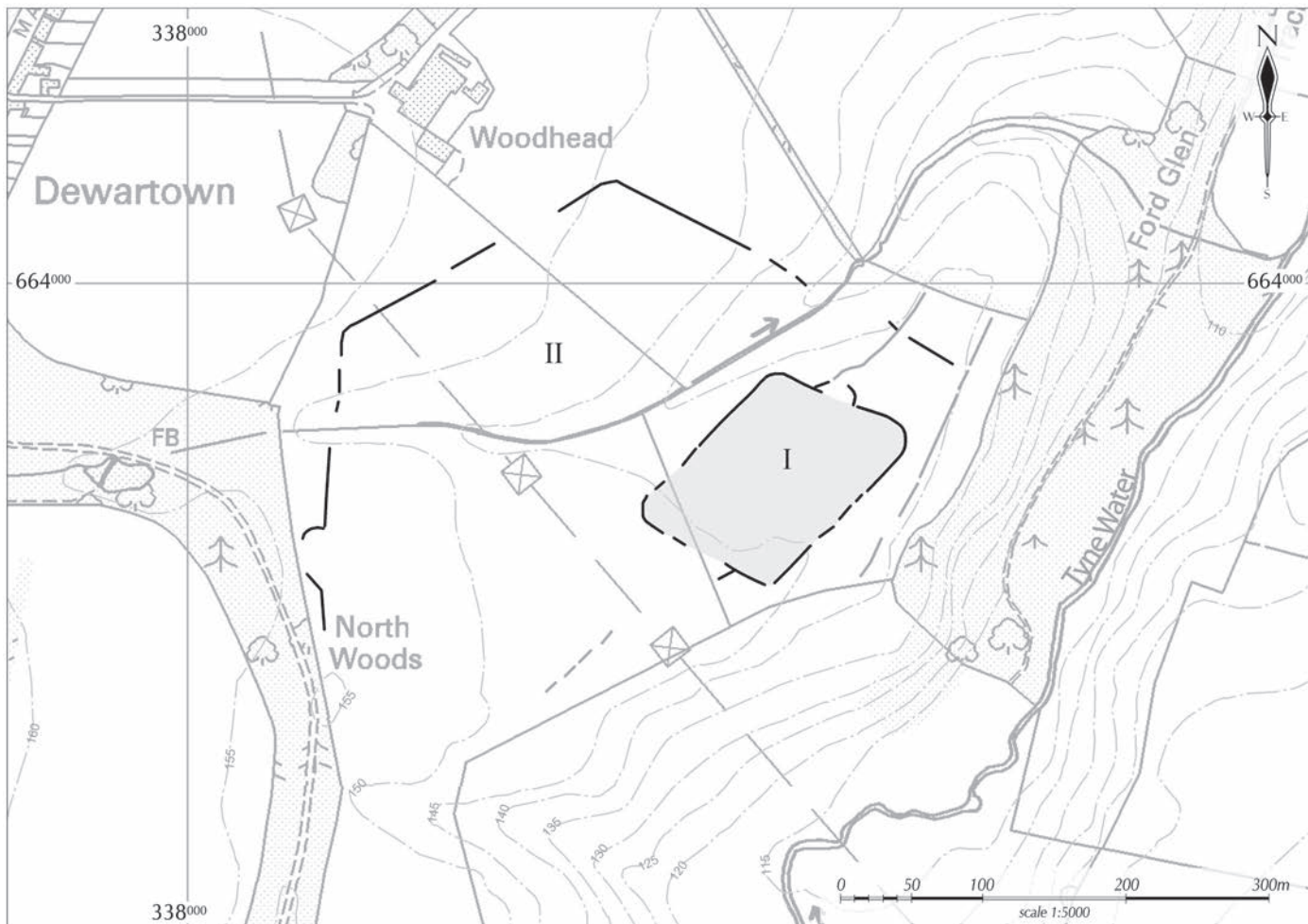


Illustration 212

Woodhead I-II and other cropmarks in the area. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Woodhead (illus 9, 47 & 212)
(Ford)

Woodhead I: NT 3840 6385
NT 36 SE 18

Woodhead II: NT 3827 6388
NT 36 SE 18

The two cropmark camps at Woodhead lie about 1km to the north-west of the three camps at **Pathhead**, on a ridge above the Tyne Water. Both were recorded in 1976 by Maxwell from the air, with camp II irregular in form and acting as a possible additional enclosure surrounding camp I. This smaller camp measures 140m from north-east to south-west by 111m transversely, enclosing 1.5ha (3.8 acres). Entrance gaps with Stracathro-type gates are visible in its south-west and north-east sides. Excavations in 1983 revealed that the ditch on the north-west side was V-shaped, 2.1m wide and 1m deep. There were traces of turf, which may represent the remains of a rampart.

The oblique traverse on the south-west gate was much shallower at 0.5m wide and 0.6m deep, and the external *clavicula* on the north-east side was V-shaped, 2.1m wide and 1m deep (Maxwell 1983: 177–8).

A larger polygonal enclosure (camp II) appears to enclose camp I. Of this enclosure, the whole of the north-west side (217m) plus parts of the adjacent north-east (at least 272m) and west sides (at least 198m) are known, with a Stracathro-type gate on the west side. The maximum distance between the known west and north-east sides is 472m, and it would have enclosed at least 8ha (19.8 acres) and possibly some 12ha (29.6 acres).

A series of linear cropmarks are visible in the fields, with one apparently extending the oblique traverse of the north-east gate of camp I. Maxwell postulated that the two camps at Woodhead may represent a compound for

timber logging, perhaps connected with the construction of the Flavian fort at Elginhaugh, lying 7km to the north (1981: 44–5; 1983: 180–1; see above, Chapter 2.2).

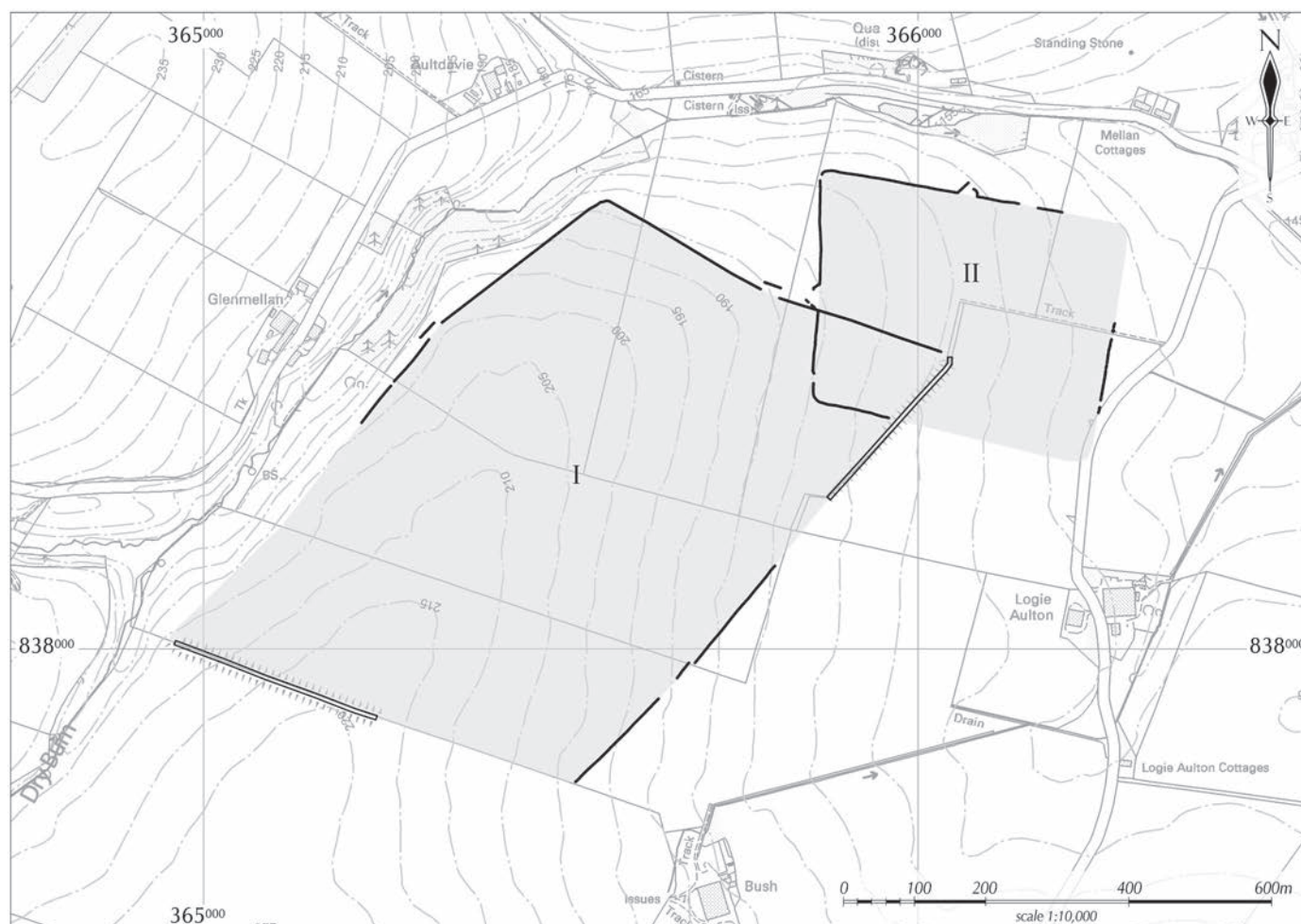


Illustration 213

Ythan Wells I and II. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright 2010. All rights reserved. Ordnance Survey Licence number 100020548.

Ythan Wells (illus 17, 47 & 213)

(Glenmailen; Glenmellan; Re-dykes; Rae-dykes; Ithan)

Ythan Wells I: NJ 6551 3818

NJ 63 NE 2

Ythan Wells II: NJ 6603 3847

NJ 63 NE 2

Two camps are now known at Ythan Wells, close to the source of the River Ythan in Strathbogie. The camps, which overlap one another, lie on a fairly level plateau with good views in all directions, and are approximately midway between the camps of **Logie Durno** and **Burnfield**.

Camp I was recorded by Captain (later Colonel) Shand in 1785, and planned by T McRonal in 1789 (Newte 1791: 301–2; Stuart 1868: 28); his plan was published by Roy (1793: Pl. LI; also see Crawford 1949: Pl. XX). It is perhaps surprising that, as it was the most northerly camp known for a considerable time

(**Auchinhove** was discovered in 1949, and also see the possible camp at **Bellie**), it did not become a favoured location of the battle of Mons Graupius, although Haverfield did state that ‘the site agrees ill with the description of the battle of Mons Graupius’ (1914: 9). Macdonald (1916) provides a useful summary of the historical sources for the camp.

The camp lies in arable and improved pasture fields, with parts of its south-west and south-east sides still preserved in field boundaries. Here, the rampart measures some 3.7m in width and up to 0.7m in height. Parts of the north-west, north-east and south-east sides are visible as cropmarks on air photographs. Crawford reported that the whole of the north-west side could be traced on the ground as a stony mound (1949: 120), but little trace of this side survives today beyond a very slight terrace at one point. The camp measures about 805m from north-east to south-west by 590m, enclosing an area of some 45.3ha (112 acres). Two of the presumed six *tituli* are clearly visible as cropmarks: in the northern part of the north-west side and in the centre of the north-east side. The ditches change alignment slightly at both points.

Haverfield & Macdonald carried out excavations at the site in 1913, and recorded that the ditch was at least 2.7m wide and at least 1.2m deep on the south-west side, noting that the accompanying rampart must have been

some 6m wide, constructed of loose earth and stones, on a bed of clay some 7cm thick. They also recorded that the rampart was still up to 2.3m high in places (on the outside) and probably 5.5m wide. Elsewhere the maximum width of the rampart was 3.6m. They also sectioned one of the *tituli* on the north-west side and opened up exploratory trenches in the interior (Macdonald 1916: 357–8).

Further excavations were conducted on the camp in 1968 by St Joseph, largely to determine the relationship between it and a second, overlapping camp, discovered from the air that year to the east (1969: 112–13). The ditch of camp I on the north-east side was recorded as V-shaped, measuring about 3.4m in width and almost 1.2m in depth (St Joseph 1970a: 175).

Parts of all four sides of camp II are recorded as cropmarks and the camp measures about 412m from WNW to ESE by about 323m transversely, enclosing some 13.5ha (33 acres). Stracathro-type gates are visible in the north and west sides.

The 1968 excavations established that camp II was earlier than its larger neighbour. The dimensions of the ditch of camp II were very small, measuring some 1.2m in width and barely 0.6m in depth (St Joseph 1970a: 175–7). St Joseph excavated a further fourteen trenches to establish the north ditch of the camp in 1971 (RCAHMS St Joseph Collection: Notebook 6).

ADDENDUM

Lochrutton (not illustrated)

NX 8934 7316 *NX 87 SE 38*

At least one camp at Lochrutton was discovered as a cropmark during analysis of Cambridge University air photographs by Cowley (RCAHMS) in early 2010, with further aerial survey (by RCAHMS) in June 2010 providing additional information. It lies on the west side of Lochrutton Loch, south of a Roman fortlet (Hunter 2005: 402) and close to the presumed line of the Roman road from Dalswinton to Glenlochar (Wilson 1989: 8).

Around 290m of the ESE side of the camp have been recorded, together with adjacent rounded corners and a possible entrance gap south of centre; 180m of the NNE side are known, with a possible entrance gap, before the side turns into a rounded angle to the south. The camp then appears to continue this same trajectory of the NNE side, but located some 25m to the south of the original line, for a further 135m before a further corner angle

is recorded. The WSW side is visible (measuring some 240m) leading to the south-west corner angle. A similar scenario seems to exist for the SSW side, suggesting that the camp may have been two-phase or have an annexe, there is a hint of a dividing cropmark in the northern part of the camp but no comparable cropmark to the south. This would suggest that the eastern segment of the camp enclosed around 5.2ha (nearly 13 acres) and the western, 3.3ha (just over 8 acres), enclosing around 8.5ha (21 acres) in total.

Immediately south-west of the camp lies a rectangular enclosure measuring at least 100m from NNE to SSW by around 65m transversely with a smaller enclosure, some 65m by 65m attached to its SW end. These structures are reminiscent of some of the small Roman camps recorded at **Lochlands Three Bridges**.