

CASTLE ENVIRONS PROJECT 2010
CASTLE FRASER
ABERDEENSHIRE



- Archaeological Excavation -
CAF/10/1

Carried out 30th August - 6th September
by
Murray Archaeological Services Ltd



for
The National Trust for Scotland

Report No: MAS 2010-18
by
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CLUNY

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H K Murray and J C Murray

1. Background

1.1 In 2010 the National Trust for Scotland commissioned an excavation to be undertaken at Castle Fraser to assess the degree of survival of elements of the 17th - century garden as shown on an estate map of 1788. The area of this Privy Garden covered the flat lawns immediately east of Castle Fraser and part of the field directly to the east (known as the Events Field).

1.2 In addition to assessing the former Privy Garden the excavation was required to evaluate the site of a building shown on the 1788 estate plan just to the north of the garden. A well outwith the south eastern boundary of the garden was also to be surveyed.

1.3 It was also hoped that the results of the excavation would give the basis for an understanding of the extent and nature of any survival of garden features which would inform future decisions regarding the management of the area which is heavily used for functions and events.

1.4 Murray Archaeological Services Ltd was commissioned by the National Trust for Scotland to undertake the excavation as part of the Castle Environs Project 2010 (CAF/10/1).

1.5 Directly prior to excavation a resistance survey of the area was undertaken by Rose Geophysical Consultants (Ovenden, 2010).

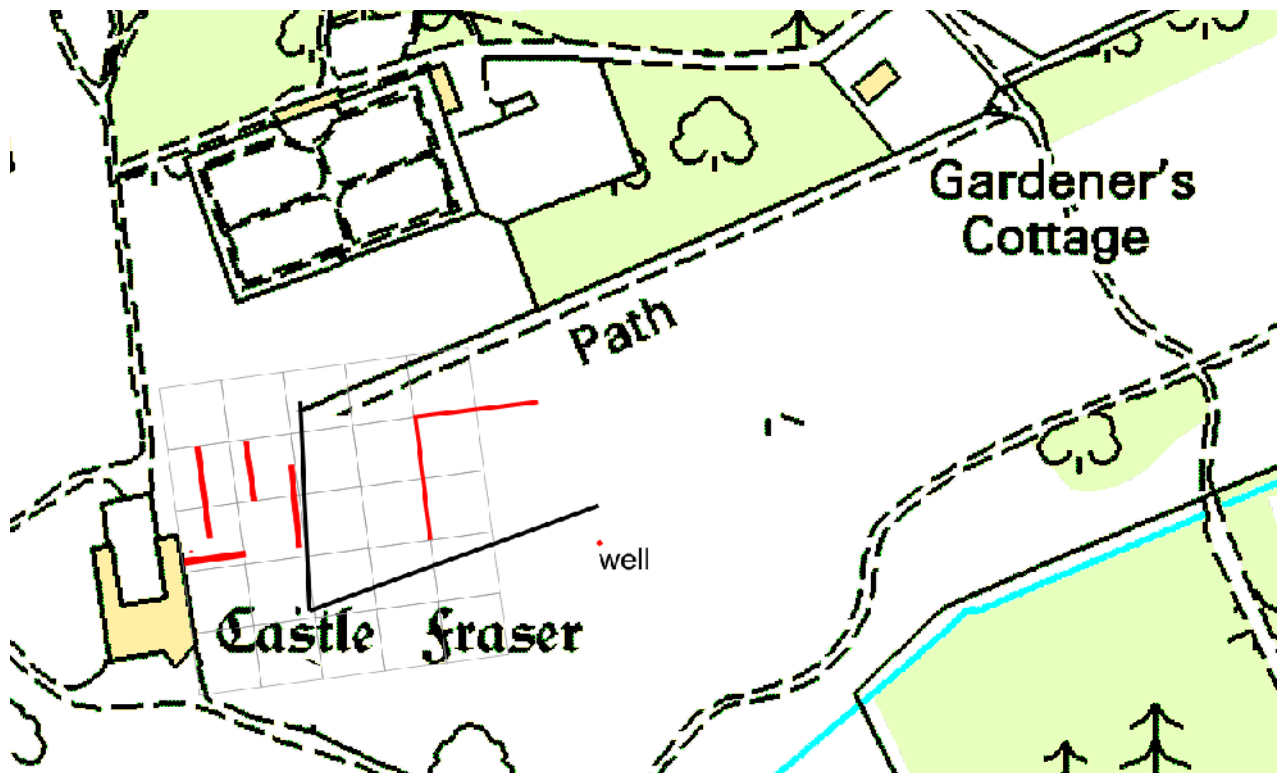
1.6 The excavation took place between the 30th August and 6th September 2010.

2. The site

2.1 The area of the former garden lies to the east of the castle and extends to c 1.1h.

Parish: Cluny NGR: NJ 72309 12581

NMRS ref: NJ71SW.6.1 Aberdeenshire SMR ref: NJ71SW0139



Illus 1 Location of the site ©Crown Copyright License No. 1000023880. Trenches in red.

2.2 Prior to the excavation the area was under grass.

3. Documentary sources

3.1 The main documentary resources for the 17th-century garden are summarised by Robert Grant (2002 and 2007). The excavators are grateful to Dr Shannon Fraser for access to this information and to the images of the estate plans and for discussions of both.

3.2 Summary of main documentary references

1788/9 The garden is shown on the earliest estate plan of Castle Fraser dating to 1788. It appears as a long rectangular enclosed garden set at a slight angle (c 10° from the perpendicular) to the east face of the castle. It is subdivided into six main compartments, the two nearest the castle being asymmetric to account for the angle against the castle wall. Each compartment is further subdivided into beds, with some differential shading possibly indicating different uses or surfaces. To the north of the garden and parallel to its north side a long narrow rectangular building is shown in the area named as the stack hill.

This garden is regarded as designed to be viewed from the gallery on the first floor of the 17th-century east wing and it has been suggested (Fraser 2010) that it was likely to have been set out shortly after the completion of the east wing in 1633/4.

1789 The *Book of Contents and Measures* that was associated with the 1788/9 estate plan (AUL MS 3470/2/4/1) refers to the 'Ducat Yard an old garden', 'Cherry Yard and Greens round the house, an old garden' and 'Ground lying South from the Garden in walks and planting'.

18th century A poem known from 18th century editions of 1742 and 1797, but possibly originally written in some form in 1655, describes the gardens as lying around the house, well fenced with 'green inclosures' including or comprising holly hedges. A fountain with water apparently running through the gardens is also mentioned.

1796 The old garden (the 17th-century Privy Garden) was dismantled and work began on the construction of the present walled garden. A Day Book (AUL MS 3470/2/3/131) recorded details of work done and throughout the entries for 1796 there are references to the 'old garden' (references transcribed by Dr Shannon Fraser). However these need to

be viewed with some caution as they may refer to any of the areas which were called 'old garden' in the 1789 *Book of Contents and Measures* - although there are specific references to the Doucat yard.

Work recorded included:

Garden general

- *Tacking down garden dick*
- *Filling stones garden dick*
- *Tacking up trees and ? chairry tree of garden*
- *Drove away old trees*

Old garden

- *Filling stons to carts in old garden*
- *Filling earth to carts in old garden*
- *Digging in old garden*
- *Tacking down south dick old g[ar]d[en]*
- *Trinshing owt old garden dick*
- *Levelling old garden dick*
- *Tacking wood out old garden*
- *Drove fruit trees from old garden to new*

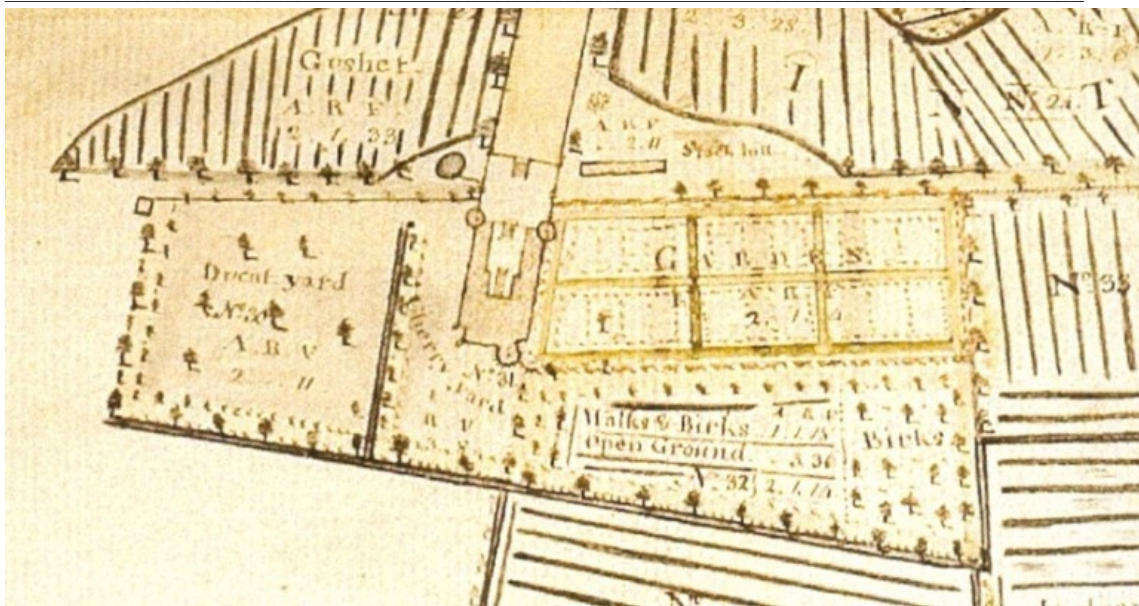
Doucat yard

- *Halling tree rottts*
- *Filling earth and levelling*
- *Tack down old ?dook/?dock*
- *Bracking claddes*

Other references record a separate team casting drains in the old garden, in the doucat yard and before the castle.

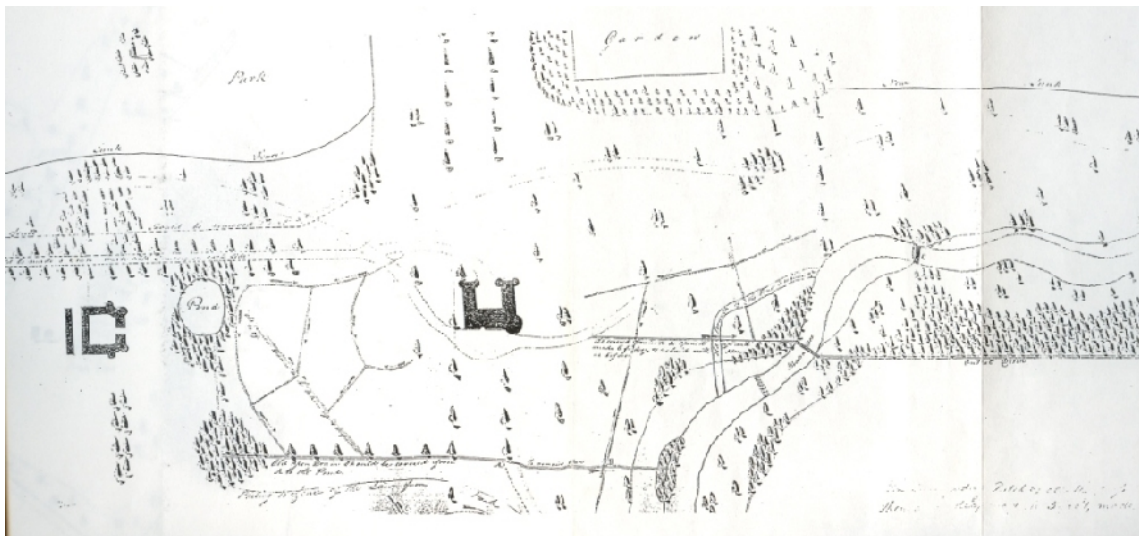
A clear impression is given of the systematic dismantling of garden walls, uprooting of trees and removal of earth and stones, followed by levelling and re-landscaping, with the insertion of new drains in the 'old garden', the doucat yard and 'before' the castle.

The interpretation of these references in regard to the archaeological evidence will be discussed below.



Illus 2 Detail of 1788/9 Estate Plan. © Copyright Aberdeen University. Reproduced with permission.

1799 J. Johnston's Estate Plan of 1799 shows the present walled garden with the area of the former Privy Garden landscaped as open grassland. Drains shown may relate to drains observed in the resistance survey (Ovenden, 2010, fig 11:12).



Illus 3 Detail of 1799 Estate Plan. © Copyright Aberdeen University. Reproduced with permission.

1816 According to the Historic Landscape Survey (McGowan 1996) the Plan of 1846 is a copy of a plan dated to 1816.

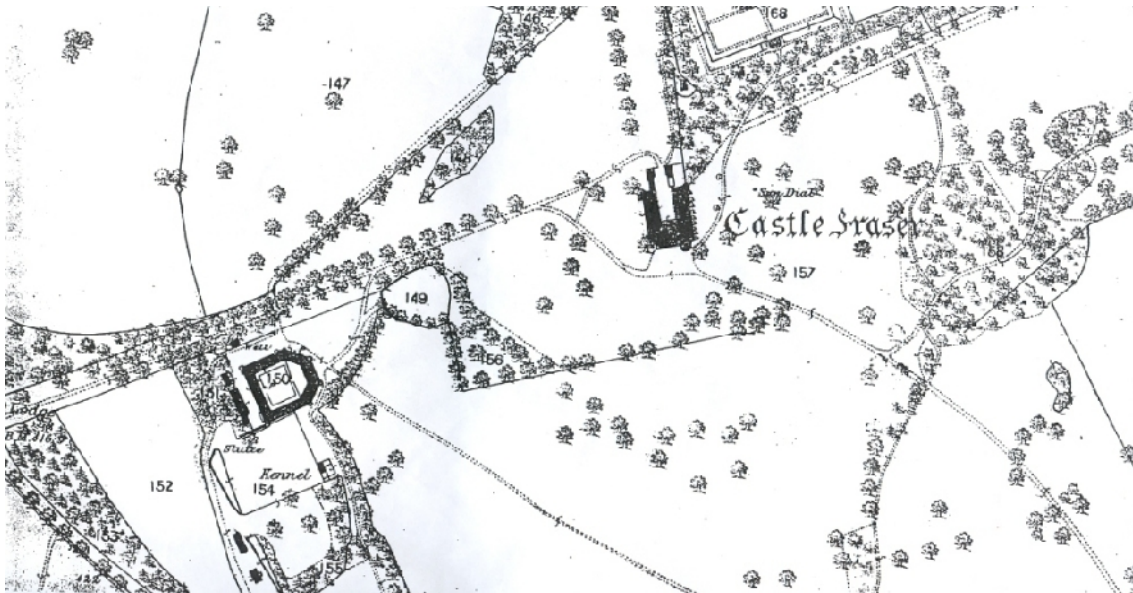
1846 The 1846 Estate Plan shows the present walled garden in more detail and by this point there is a pathway running south from the south door of the walled garden across the grass to meet the driveway to the southeast of the castle. A dotted line may indicate a lesser path across the grass and along the frontage of the east side of the castle.

Trees/shrubs are shown in the area of the former Privy Garden.



Illus 4 Detail of 1846 Estate Plan. © Copyright Aberdeen University. Reproduced with permission.

1864-7 The site of the Privy Garden is shown on the 1st edition Ordnance survey map surveyed in 1864-7, published in 1869. While this is very similar to the 1846 estate map it is notable that the path from the walled garden is shown leading to the south-eastern corner of the castle, rather than to the driveway further east. It is possible that this had been re- routed. There appears to be a border/ line of shrubs along the base of the east wall of the castle. A sundial is marked to the east of the path.



Illus 5 Detail from 1st edition Ordnance Survey map surveyed 1864-7, published 1869 (© Crown copyright Licence number (100049810))

1880s Two photographs of the east side of the castle show the path running to the south-eastern corner of the castle, but at a sharper angle than appears on the OS map. The photographs are taken when the leaves are on the trees (summer/early autumn) and the plants/shrubs along the border beside the east wall appear fairly large, reaching almost to the level of the window sills. There is some indication that there may have been an edging (? stones ? smaller plants) along the front of the border. Some of the shrubs within the lawn area appear to have been of a reasonable size and could be expected to have had considerable root spreads which would show in the excavated evidence.

1899 The site of the Privy Garden is shown on the 2nd edition Ordnance survey map of 1899. There is no change from the earlier OS map. The sundial is still shown.

1940s A photograph of the north side of the castle in the 1940s shows a Nissen hut to the north-east of the yard gateway, near the position of the long rectangular building shown on the 1788/9 estate map.

4 Methodology

4.1 The layout of the excavation trenches (Illus 21) was decided in reference to both the 1788/9 plan of the garden (Illus 28) and to the preliminary results of the resistance survey (Illus 26).

The main objectives were to determine the extent and nature of any surviving features of the 17th century garden and of the long narrow building shown to the N of the garden on the stack hill.

As the garden plan shows a fundamentally symmetric layout the main focus of excavation was in one of the six compartments near the castle with a more broad brush evaluation of the far end of the garden.

Trench 1 was laid out at right angles to the castle wall slightly to the north of the mid line of the garden, extending east/west across a large part of the north west compartment; the aim was to determine if any garden beds could be identified.

Trench 2 was laid out north/south from the mid line of the garden to its northern edge towards the east end of the north west compartment.

Trenches 3 and 4 were laid out to cross the line of the northern edge of the garden and to extend across the apparent position of the rectangular building on the 1788/9 plan. It was hoped these would show the nature of the enclosure around the garden and reveal any remaining foundations of the building. Specifically they were placed across areas of high resistance shown by the geophysical survey.

Two long trenches, 5 and 6, were laid out as an evaluation of any differential survival at the east end of the garden and to examine the parallel linear responses shown by the resistance survey across much of this area.



Illus 6 View of excavation from the tower, looking NE

4.2 All basic surveying was related to the grid set up by Rose Geophysical Consultants in order to facilitate comparison of the results. This grid is shown on the main plan Illus 21. All levels were taken relative to a temporary datum (TBM) at the top of the first foundation stone at the south corner of the east gatehouse. This TBM is shown on all sections.

4.3 A single series of context numbers were used throughout all trenches. Details of contexts are collated in the Context Data Report (Appendix 3).

4.4 The grassy sod and topsoil were removed by a mechanical mini-digger with a flat-edged ditching bucket. All further excavation was done by hand with a team of

local volunteers directed by Murray Archaeological Services Ltd. The trenches were back-filled by machine on 6th September 2010.

5 Results

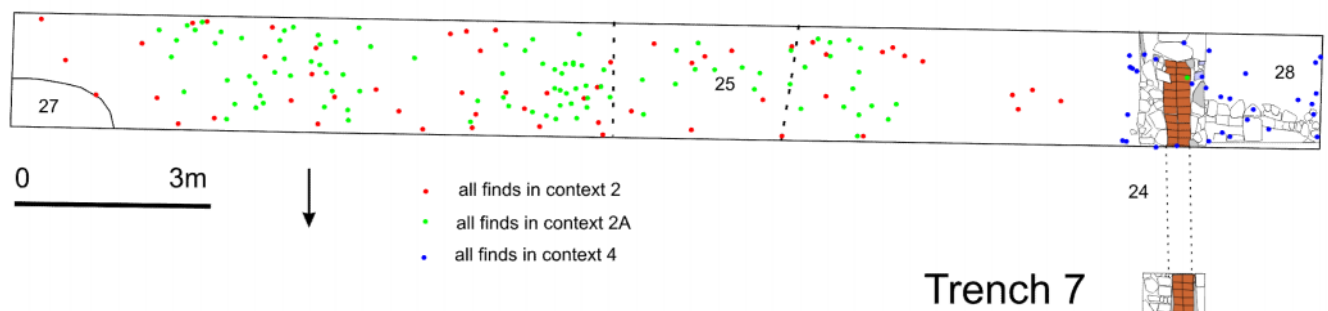
Trench 1 Plan and section Illus 22

Orientation: East / West. Length: 20m. Width: 1.75m.

Trench 7: Sondage. 0.95 x 0.60m.

A very thin layer of topsoil (1) and sod <250mm thick lay over up to 350mm of a fairly compact homogenous grey/brown gritty silt with a moderate inclusion of small stones (2). Context 2 appeared to have been cut by feature 27 and did not extend over features 24 and 28 where there was a gritty silt with fragments of clay and mortar (4). As context 2 potentially crossed the line of several of the 17th-century garden beds, it was decided to excavate in spits (2, 2A, 2B) and to individually plot the location of all artefacts and bone fragments in case any patterning of the distribution might reveal differences in the function of different areas. This was undertaken for contexts 2 and 2A but the lowest spit (2B) was not plotted as it was not excavated across the whole width of the trench.

Trench 1



Illus 7 Trench 1 plan with finds distribution shown

This procedure showed that there was a fairly even distribution of finds with the exception of a band c3m wide extending between c 4 and 7m from the castle wall. While there was no visible difference in the surface in this area it is possible that this finds differential may indicate a path or unplanted surface rather than a garden bed. Apart from that one area there was no apparent difference in the distribution of finds between the upper spit (2) to the lower spit (2A). A slight thinning of finds to the east end of the trench is less certain as there may have been a degree of disturbance from feature 27. There was also no apparent difference in the distribution of types of finds; window

glass, bottle glass and tobacco pipe fragments were fairly evenly distributed throughout the context. Many of the datable finds are of 17th-century date but with some later material, as might be expected in a garden that continued in cultivation until 1796. The evidence of the finds and the homogeneity of the context suggested a thoroughly turbated soil- either from cultivation in the garden or from deposition and levelling at its dismantling. Throughout most of the trench this context continued to the top of natural and it was very noticeable that the natural glacial deposit was pocked with small hollows; it is considered that this is the effect of spade cultivation and roots within a garden bed, although some bioturbation from worms, rodents etc is also likely.



Illus 8 Trench 1. Detail of top of natural below garden earth (2), showing cultivation marks

Within context 2, a band c 2.8m wide appeared notably more compact (25); it is possible that this was at one time a path/ trodden surface. It appears likely to equate with Trench 3 context 10.

At the west end of the trench there were two drains, contexts 24 and 28, drain 24 being the later as it blocked drain 28. Drain 28 ran roughly east/west but appeared to be curving north at the west end, the east end was cut and blocked by drain 24 but it did not extend further east so it is possible it had originally fed into an earlier version of drain 24. It was exposed for c1.8m. It was built with stone sides which had courses

overlapping so that it narrowed towards the unlined base, a single broken capstone survived. Drain 24 ran north/south and a small sondage Trench 7 was dug to the north of Trench 1 to establish its line; c 4.5m was exposed in total. This was a very well constructed drain with stone sides and a V-shaped brick lining all well set in thick grey clay. Two capstones, also clay bonded, survived; elsewhere the capstones had been removed and the drain apparently deliberately filled with mid brown gritty soil with large amounts of glass and slate. Only a very thin skim of a fine yellow silt survived at the base in one section. Unfortunately these drains did not show on the resistance survey so it is not possible to determine their extent. Levels indicate that drain 24 ran from north to south.

In the north-east corner of the trench a vertically sided pit/cut c 900mm deep (27) extended into the north and east sections. It had cut through context 2 so appears to post-date the 17th -century garden. The fill was of clean stones with no silting and the sides were not eroded, suggesting that it had been dug out and fairly rapidly filled with stones. During excavation it was considered likely that this was dug to remove a tree/shrub although a more mixed backfill could perhaps have been expected. However comparison between the excavation plan and the interpreted results of the resistance survey shows that context 27 could be the edge of a long S-shaped area of high resistance (Ovenden, 2010, fig 11:3); if this is the case then this feature may be the end of a soakaway.



Illus 9 Trench 1 Possible soakaway 27, sectioned. Looking E

Trench 2 Plan and section illus 23

Orientation: North/South. Length: 27.6m. Width: 1.75m.

When the topsoil (6) was removed Trench 2 appeared to be crossed by bands of darker soil c 2.6- 3.8m wide, separated by bands of yellow natural boulder clay 0.4 – 3m wide. However when these were sectioned, 16, 17 and 18 were shown to be part of a single roughly level terrace c 9.5m wide and cut c 250mm into the slope of the natural at its northern end. The fill was grey brown gritty soil with charcoal flecks very similar to context 2 in Trench 1. The bands of yellow natural between 16 and 17 proved to be upcast, redeposited natural (32, 33, 34) over a thin layer of fine light grey sandy silt (35) above the undisturbed natural. The band of mottled natural (36) visible in plan between 17 and 18 showed in section as a patchy mix between thin lenses of redeposited natural and the grey brown gritty soil. These bands of redeposited natural are most likely to be the remnant of natural from the base of cultivation furrows that had been turned up onto the intervening rigs but not mixed in. The undisturbed natural at the base of 16, 17 and 18 was pocked with small hollows similar to the top of natural below Trench 1, context 2 and could be the result of spade cultivation/roots and bioturbation. To the north end of the trench, 20, 21 and 23 appear to be three more shallow terraces running across the trench, each cut in slightly along its uphill (northern) edge and with intervening bands where the undisturbed natural was slightly higher. The edges of 20 and 21 were slightly angled ENE/WSE. 23 was disturbed by tree roots lines (22). These features were very denuded but can probably be interpreted as rig and furrow. This is supported by their coincidence with the linear anomalies shown by the resistance survey. The angled edges of 20 and 21 may suggest that they had been recut by the northern edge of the garden.



Illus 10 Trench 2 looking N, 15 (Fill 15/0) in foreground



Illus 11 Trench 2. Detail of E section of (15)

At the south end of the trench there was a deeper, ditch/ pit/ trench (15) < 2.05m wide and c500mm deep cut into natural. It ran ENE/WSE and extended into the south section. The upper and lower fills (15/0 and 15/1) were fine grey brown silt with small stones near the base, between was redeposited natural (15/2) that had slumped slightly as the

lower fill compacted. This feature is near the northern edge of the centre line of the garden and it is possible that this represents the dismantling/digging out of some structural element such as a hedge or wall along the central axis. It coincides with a weak anomaly noted by the resistance survey (Ovenden, 2010, para 3.7 and fig 11:8).

Trench 3 Plan and section Illus 24

Orientation: North/South. Length: 30m (3m at N not excavated because of electric cables.) Width: 1.75m.

Removal of the topsoil (9) and sod revealed a series of features in the southern 9.5m of the trench cut into the top of natural and crossing the trench on an ENE/WSW orientation – the alignment of the 17th -century garden. A ditch (12) 2.6m wide and 1.6m deep (at the uphill/northern side) with vertical sides formed the northern limit of these features. The fill was a homogenous grey/brown gritty soil with some small stones, very similar to context 2 in Trench 1; it was a single undifferentiated fill and appeared to have been backfilled into the ditch very soon after it was dug as there was no erosion of the sides. There was little conclusive evidence to indicate if this was a recutting or robbing out of an earlier feature or simply an infilling of an earlier ditch although the unsilted vertical appearance of the sides suggests that it had not been an open ditch between the establishment of the garden c 1630s and its dismantling in 1796.

This had cut close to the northern edge of an earlier pit (30) which was filled with a peaty organic layer with wood fragments in it (30/1) sealed by clean sand (30/2). Part of the fill of 12 (12/1) overlapped the edge of feature 30 (30/3) and another dump of redeposited natural (29) and a very mixed layer (37) overlapped both features and interleaved with the upper part of fill 12/1. Feature 30 may have been a planting hole just south of the original garden boundary feature 12 but it may also have been refilled before 12 was dug out/dismantled. Also south of 12 and parallel to it were a series of shallow irregular linear gullies dug into the top of natural (11A-11E) and filled with grey/brown gritty loam with occasional charcoal fragments (very similar to 12/1) which formed a band c 2.5m wide. These were 400-550mm wide and 40-70mm deep and have been interpreted as denuded planting holes/planting lines (cf Currie, 2005, 60, fig 27). Planting hole 11E overlay the backfilled pit (30). Some 2m further S there was another linear feature (10) parallel to 12, comprising an extremely hard, compact fine grey gritty soil incorporating granite (?) dust, which filled an irregular cut 150-180mm deep in the natural and spread thinly c 300mm to north of this edge, over top edge of the natural. This extended into the south section of the trench and may equate with and extend to

context 25 in Trench 1. Both could have formed one of the subdivisions within the north western garden compartment shown on the 1788/9 plan.



Illus 12 Trench 3. N edge of ditch/trench (12)



Illus 13 Trench 3 looking N. Hard surface (10) in foreground, E/W ranging rod along N side of ditch/trench (12). Darker stripes of planting lines (11) visible between. At N end of trench an area was left unexcavated because of electric and telephone cables.

To the north of these possible garden features there were no other features and the natural lay directly below the topsoil, sloping gently up to the north. There was no

evidence of any foundations or rubble associated with the narrow rectangular building shown on the 1788/9 plan which should have crossed the excavation between approximately 20m and 25m from the south end of trench 3 (and into trench 4) although there is a very slight levelling of the slope at this point. The absence of evidence may reflect the degree of landscaping and neither proves nor disproves the former existence of a building. It should perhaps be noted however that if it were simply an agricultural building associated with the stack yard it may not have been of stone construction. A further consideration at the northern end of the trench was the possibility that there might be foundations of the Nissen hut shown on a photograph of the 1940s. There was no evidence of any related foundations and it may not have extended this far to the east (See below and Illus 27).

Trench 4 Plan and section Illus 25

Orientation: North/South. Length: 20m. (2.5m at N not excavated because of electric cables.) Width: 1.75m.

Topsoil (8) lay directly on top of the natural except at the south end of the trench where it sealed the north side of a deep ditch/ trench 1.57m deep and more than 3.05m wide cut into natural. The excavated northern edge was almost vertical apart from a slight undercut where natural from uphill side had slumped down hill probably as a result of pressure during levelling. The fill was grey humic garden earth with charcoal inclusions and some small stones (14/1, 14/3) with an intervening layer of redeposited natural gravel with a few larger stones (14/4) lying up against the northern edge of the cut but not structured or revetting. A layer of redeposited natural had also been ploughed down from the uphill edge over the fill.

This ditch/trench is in line with Trench 3, context 12 and is interpreted as the same ditch or trench.

As with Trench 3 there was no evidence of any foundations or rubble associated with the narrow rectangular building shown on the 1788/9 plan which should have crossed the excavation between approximately 13m and 17m from the south end of Trench 4.

Trenches 5 and 6 Illus 21

Trenches 5 and 6 in the Event Field proved to have a considerable depth of undifferentiated topsoil (5) over a lower cultivation soil (25) and were therefore treated

as evaluation trenches with the machine sections cleaned and depths and other features recorded.

No features that could be ascribed to the 17th -century garden were observed in either Trench 5 or 6.

Trench 5

Orientation: North/South. Length: 40m. Width: 1.5m.

GPS N end: NJ 72361 12622

GPS S end: NJ 72366 12580

Distance (m) from N to S	Depth of cultivated soil	Comments
0m	420mm	
2.5m	420mm	rig?
3m	500mm	
5m	600mm	
8.6m	600mm	
10m	450mm	rig?
15m	500mm	
19.5m	350mm	rig?
25m	300mm	rig?
30m	450mm	
31.5m	270mm	rig?
35m	350mm	
37.5m	600mm	

The only differentiation between the topsoil (5) and the underlying cultivation soil (25) was that the top c 200mm (5) was slightly drier. The depth of the cultivated earth appeared to vary in bands along the trench, similar to the features recorded in Trench 2. These appear to coincide with the east/west trends in the resistance results and are likely to be the remnants of ploughed out rig and furrow cultivation. Pottery of 16th and possibly 15th-century date (see below) suggests that this rig and furrow cultivation may have been carried on for at least 100 years prior to the establishment of the garden.

Only one other feature was observed - an irregular and amorphous spread of ash (31) c 20mm thick and c 2 x 1m in extent, extending into the section between 35.5 and 36.5m from the north end of the trench. This lay at the base of the cultivated earth above natural. There was no dating evidence and it may be the ploughed in result of agricultural clearance/ burning of tree remains. It appears to coincide with resistance feature 9 (Ovenden, 2010, fig 11:3) which would suggest that the trench had caught the edge of a larger spread.



Illus 14 Trench 5 looking N. Rods mark rig and furrow

Trench 6

Orientation: East/West. Length: 40m. Width: 1.5m.

GPS W end: NJ72361 12622

GPS E end: NJ72397 12624

Distance (m) from W to E	Depth of cultivated soil	Comments
0m	450mm	
5m	550mm	
10m	400mm	
15m	300mm	
20m	300mm	
25m	280mm	

30m	250mm	
35m	300mm	
40m	300mm	

At the west end of the trench, as in the adjoining Trench 5, there was a considerable depth of cultivated soil (25) below and merging into the topsoil (5). However the ground rose towards the east end of the trench where modern plough marks were visible in the top of natural.

Although it was originally thought that this trench would potentially cross the north east end of the garden, there was no evidence of any edge line and in fact overlays suggest that it may have been slightly short of the garden edge. However the inherent difficulties of marrying modern and 18th century surveying make this at best approximate.

6 The Finds

Table 1 (Appendix 3) lists the presence of all finds by context. Small finds in the final column are described fully in Table 2.

The quantity of material found in the trenches excavated, whilst by no means large, covered a date range of possibly the late 16th century to the 19th century. The bulk of the material is accounted for by both bottle and window glass with c.107 sherds of pottery (see Table 3) and c.62 pieces and fragments of clay tobacco pipe (See Table 4).

Although animal bone occurs, it is in insignificant amounts. Ferrous material is present, mainly as nails, and extremely corroded. Most of the material is in small fragments and often very abraded which is typical of material added to a soil by midden manuring and cultivation. The experiment in plotting finds in Trench 1 context 2/2A (Illus 7), which was regarded as probable cultivation earth, was consistent with such an interpretation. The actual distribution of individual find types such as window glass and tobacco pipe within this distribution was random throughout the trench. Interestingly there was a band with reduced finds which is interpreted as having been, at some stage, a path, where manuring was not undertaken. Flints (SF 7-12) were fragmentary and possibly struck through cultivation rather than anthropogenically, none were in a context that suggested any prehistoric presence on the excavated area and they are likely to have been imported within the added soil.

The occurrence of most of the window glass and the lead window comes in Trench 1 might suggest that they derived from windows on this side of the castle but they could equally well have been in midden material and derived from any part of the building. It is interesting that they were in the same context as 17th -century material and if the appraisal of damage done to glass at the castle in 1655 is reliable (Inverallochy Papers MS 2701/198. Facsimile and transcription in Armstrong, 2005) it is possible that they derive from windows damaged at that time.

The overall impression is that most of the material derives from the known lifetime of the garden, between the 1630s and 1796.

Small Find Number	Context	Description
SF1	Trench 1, (3)	2 small strips of lead window came. 45mm and 20mm.
SF2	Trench 1, (2)	4 fragments of lead window came. < 15mm
SF3	Trench 1, (2)	2 pieces of twisted lead window came. 30mm and 28mm.
SF4	Trench 1, (4)	Piece of scrap lead. C.30mm x 25mm.
SF5	Trench 2, (17)	Curved stitching needle. Possibly a sacking needle or for leather. Incomplete. 70mm.
SF6	Trench 1, (2)	Scrap lead, possibly window came. 40mm.
SF7	Trench 1, (2)	Possible flint core
SF8	Trench 1, (2A)	Tiny fragment flint flake
SF9	Trench 1, (2B)	Small fragment flint flake
SF10	Trench 1, (24)	Fragment flint core
SF11	Trench 4, (8)	Fragment burnt flint
SF12	Trench 5, (26)	Tiny flint flake

Table 2. Small Finds (Note for post-excavation purposes a new sequence of small finds numbers has been assigned. These do not relate to numbers given on site to the planned finds in Trench 1 (2) and (2A) and shown on archive plans 2 and 3 – after analysis all those finds have been bagged by context only)

Pottery

Of the 107 sherds and fragments of pottery recovered from the site, c.52% dated to between the late 16th/17th century and c.48% to the 18th and 19th centuries. Much of the later material was in topsoil contexts (1, 5, 6, 8, 9), although there was a small amount in other contexts. 17% of the pottery was made up of tin-glazed ware dating to the 17th – century and probably of Dutch origin. The bulk of the possibly late 16th century redwares were located in the area of Trenches 5 and 6. One or two extremely abraded sherds of glazed red earthenwares may even date to the 15th century and were clearly deposited by earlier cultivation or midden dispersal, probably associated with the denuded rig and furrow noted in Trench 5.

Tr.	Layer	C16th/17 th Red & Grey Wares	C17th Tin-glazed Ware	C18th/19 th Pottery	Tile/Brick
1	1	-	-	3	-
1	2	7	6	4	-
1	2A	7	-	3	-
1	2B	-	1	-	-
1	4	1	1	-	-
1	24	4	2	2	-
2	6	1	-	5	-
2	15/3	-	-	-	1
2	15	1	-	-	-
2	17	1	-	-	3
2	18	-	-	1	-
2	19	-	-	1	-
2	20	-	1	1	-
2	21	1	-	-	2
2	23	1	-	-	-
3	9	1	-	12	-
3	11A	1	-	-	-
3	12	-	4	2	-
4	8	-	-	5	-
5	5	11	-	11	-

5	26	-	2	1	-
6		1	-	-	-
7	1	-	1	-	-

Table 3. Number of pottery sherds and fragments per context.

Clay tobacco pipe

In all some 62 pieces and fragments of pipe were recovered. Of the more diagnostic pieces, the bulk would appear to date from the mid to late 17th century and to be Dutch in origin. Two almost complete bowls, one with milling below the rim and a second with a 6-dot rose decoration, both dating from 1650-80, can be paralleled with pipes from Aberdeen (Cameron & Stones, Illus 266, no.656, and Illus. 193, no. 666 and 667). Similarly, a stem piece decorated with a four part *fleur-de-lys* can also be paralleled in Aberdeen and dated 1645-1665 (Murray, Ill.219, no.222).

Tr	Layer	Stem Frags.	Bowl	Bowl /Stem/Heel Frags	Decorated Frags.	Poss. Date & Origin
1	1	3	-	-	1	C17th Dutch
1	2	5	1	1	-	C17th Dutch & Other
1	2A	5	1	-	-	-
1	2B	1	-	-	-	-
1	3	1	-	1	-	-
1	24	1	2	-	-	-
1	15	2	-	-	-	-
2	6	2			1	C17th Dutch
2	10	3	-	-	-	-
2	17	-	-	-	1	C17th Dutch
2	20	2	-	-	-	-
3	9	4	1	-	-	C17th Dutch
3	11	1	-	1	-	-
3	12	6		1	-	Poss. C17th Dutch
4	14	4	2		2	C17th Dutch
5	5	3	-	-	-	-
5	26	1	-	1	-	-
7	1	1	-	-	-	-

Table 4. Clay Tobacco Pipe by Context

7 Interpretation

Garden

Pre- garden cultivation?

In Trenches 2 and 5 there was evidence of denuded or ploughed out rig and furrow cultivation. East/west trends in the resistance survey (Ovenden, 2010, fig 11: 1) match the excavated evidence on overlays of the plans and indicate faint traces of rig and furrow over much of the area of the 17th century garden with the exception of c 20m nearest the east wall of the castle. Rig and furrow cultivation is characteristic of agriculture between the medieval period and the agricultural improvements of the 18th and 19th centuries. Several examples survive on the Castle Fraser estate (NJ71SW. 5, NJ71SW.24, NJ71SW.27, NJ71SW.28, NJ71SW. 31, NJ71SW.64, NJ71SW. 66.) and the 1788/9 estate plan shows extensive rig and furrow throughout the estate. There was no clear instance of an identifiable garden feature cutting the rig and furrow, although this may be the explanation of the oddly ENE/WSE angled sides of features 20 and 21 in Trench 4. Although there is a reference in the 1796 Day Book to the ground of the former garden having been ploughed, this would have been a single ploughing before grass was sown and would not have produced the characteristic ridges of rig and furrow. The evidence therefore suggests that this very denuded rig and furrow pre-dates the garden and is a relict of the medieval landscape.

The 17th and 18th century garden

The garden depicted on the 1788/9 plan is likely to have been first designed and laid out soon after the east wing of the castle was completed in 1633/4 (Fraser 2010) and by the time it was dismantled in 1796 the garden had been in existence for over 160 years. It is probable that there had been processes of change within this time- not only the replacement and removal of plants and trees but also possibly changes in the hard architecture of the garden – the paths, walls etc. The 1788/9 drawing gives a glimpse of the final stages of the garden before it was systematically dismantled. The excavated evidence may include elements from diverse points in this 160 year old existence.

Orientation: A dominant element of the plan of the garden is its asymmetry in relation to the east wall of the castle as the central axis of the garden lies some 10° to the north of the perpendicular. This was probably done in order to create a level area alongside the slightly higher ridge of ground to the north. However viewed, as the garden was intended, from the first floor gallery of the 17th -century wing, this asymmetry also had

the result of visually lengthening the garden as the straight line of sight from the central window would have extended along a diagonal to the south east corner.

The asymmetric line of the design appears to be confirmed by the line of ditch/trench 12=14 in Trenches 3 and 4, by planting lines 11 in Trench 3, by the north edge of 10 in Trench 3, by the central ditch/trench 15 in Trench 2 and possibly by the angled lines of features 20 and 21 in Trench 2 – all on a ENE/WSE orientation.

The outer boundaries: It is notable that on the 1788/9 plan, the boundaries of the garden are depicted as a series of interrupted upside down U- shapes with trees along the east end of the north boundary and along the east boundary, outside this line. This is clearly different from the way most dykes are depicted- for example the double hard line to the south of the doucat yard or the single hard line depicting walls of buildings. The only parts of the garden boundary which show hard lines comparable to the stone walls are the two sections where the garden is linked on to the turrets at either end of the east wing of the castle.

There are two conflicting strands of evidence regarding the boundaries.

The 18th century poem *The Don* describes the gardens as:

‘well fenced with green inclosures all around.

The hedges we in foreign lands have seen,

In beauty vies not with the holly green.....

..Some edged with silver, some with spots like gold’

This could suggest that holly hedges were a main element of the boundaries which would perhaps explain the interrupted lines on the plan. Reid (1683, Part 2, Ch 7) describes holly as ‘the most proper for hedges of all the plants in the world’ and it is perhaps significant that the poem refers to variegated hollies as there was a fashion for variegated plants in the second half of the 17th century (Woudstra, 2006).

In contrast, the Day Book of 1796 describes the ‘taking down’, ‘trenching out’ and ‘levelling’ of the old garden *dike* and the south *dike* of the old garden and specifically mentions the carting of stones which indicates that stone dykes or walls were being dismantled. The difficulty with these references is to be sure if the actual Privy Garden or the wider gardens are being referred to.

Trenches 2, 3, 4 and 5 were laid out with the intention of revealing the nature of the external wall or boundary of the north side of the garden. Sadly this has, if anything added more confusion! In Trenches 3 and 4 there was a ditch (Trench 3, 12 = Trench 4,

14) 2.6 – 3.05m wide and c 1.6m deep on the uphill (northern) side. The ditch was cut into the natural with near vertical sides and no signs of erosion or silting of the sides and both excavated sections had apparently been backfilled in a single event with a homogenous earth very similar to the ‘garden earth’ found elsewhere in the garden. The lack of erosion of the sides makes it unlikely that this was a filled-in wet ditch and to retain water it would have needed clay lining of which there was no trace. The evidence could better be interpreted as a robber trench for a wall but the trench seems very deep in comparison to the type of wall foundations common even with major buildings. It could possibly be interpreted as a revetting wall cut on the north side into the slope behind and with lower ground in front (inside the garden) but even then the foundations appear very deep and some admix of reject stones and possibly even fragments of bonding mortar or clay could be expected. To further complicate the issue, although the line of this ditch/trench can be traced in Trench 2 as the truncated edge of context 21, yet by this point there is only a levelled band cut some 250mm into the natural - far more a denuded version of the type of foundation that might have been expected of a wall. Anomaly 5 on the resistance survey (Ovenden, 2010, fig 11:5) can probably be identified with the ditch/trench and if this is correct it suggests that the deeply cut section ended to the east of Trench 4 where there is a natural ridge – more or less on the line of the 19th century path.

Perhaps the deep section of the ditch/trench was incidental to the actual boundary- perhaps when the wall was dismantled this was a convenient place to quarry out sand for mortar for the walls of the new garden?

Internal boundaries: On the plan the garden is divided into six compartments by paths possibly edged with low walls or hedges, one along the central axis and two north/south cross paths. In Trench 2 the ENE/WSW trench/cut (15) which was < 2.05m wide and c500mm deep may be a robber trench of either a low wall or a hedge – apart from a few small stones at the base there was no evidence to suggest which but it does appear to confirm the central axis line.

Borders, beds and paths: Within each of the six compartments of the garden dotted lines indicate separate plots – four in each compartment nearest the castle and three in each of the others. Apart from a solitary tree in one plot, the only indication of functional differences is the appearance that some plots were shaded.

Trench 1 was laid out to extend east/west across some of the plots in the northwest garden compartment. The west end of the trench had been cut by the later drains but to

the east of the drains it has been argued that a relatively finds-free band may indicate the former position of a path between c 4-7m from the castle wall. To the east of this, between c 8 and 11m from the wall a harder/trodden area (25) within the garden earth (2) may indicate a difference in surface or use for a while at some point in the garden's history – possibly one of the plots within this garden compartment had for a while been trodden grass or hard surfacing. This appears to extend north to include a similar very hard surface (10) in Trench 3 which could be the northern end of the same plot. The rest of Trench 1 comprised garden earth (2) with evidence of spade cultivation and roots in the top of natural. This would appear to have been a bed that was regularly replanted or dug over. The high percentage of finds suggests regular additions of compost/manure with midden rubbish in it. Further to the east, at the east end of the northwest garden compartment, similar evidence of spade cultivation through the denuded rig and furrow suggests similar beds at this point.

Only in Trench 3 were there what appeared to be the bases of clear planting lines (11) in a band 2.5m wide and parallel to the inner edge of the ditch/trench at the edge of the garden. The planting lines form four rows c 700mm apart (centres) but may indicate successive rather than contemporaneous planting. The backfilled pit 30 may have been a tree hole that had been dug out and refilled. It appears to pre-date planting hole 11E.

Other features: No other garden features were observed in the excavation but both the 1st and 2nd edition OS maps mark a sundial that has since been moved to the present walled garden where it is situated over the blocked well. The sundial is of 17th-century type and it appears likely that it survived from the 17th-century garden. Overlays of the OS maps on to the 18th-century plan suggest that it may have stood at the crossing between the central axis of the garden and the western cross path.

The 1796 dismantling of the garden

The excavation confirmed the thorough nature of the dismantling of the garden with evidence for the digging out of the northern boundary and of a wall or hedge along the north side of the central axis line. Garden beds had been denuded of soil, leaving in general only some 200-300mm of soil beneath the topsoil. There was a visible similarity between the *in situ* garden soil (2, 11) and the soil used to backfill dug-out features (12, 14 and 15). Some spreads of clean redeposited natural over garden earth are likely to derive from both the digging out of plants and hard features and the levelling before the grass was planted in the late 18th-century redesigned landscape.

The late 18th and 19th century garden

The landscaping of the late 18th century survives fairly intact in the lawn beside the castle although the photographs and OS maps indicate a border below the castle wall and a curving path crossing the lawn from the existing walled garden towards the front of the castle. Trench 1 might be expected to have crossed the line of the border beside the wall but this area was disturbed, probably at the time when the drains were filled in and most of their capstones removed. None of the trenches crossed the line of the 19th -century path but it appears to be shown by an anomaly in the resistance survey (Ovenden, 2010, fig 11:15).

Drains- The brick-lined drain (24) in Trenches 1 and 7 could have been built before the garden was dismantled. However although the stratigraphy was very denuded, it appeared that the drain cut through context 2 and is perhaps more likely to belong to the period during or after the demolition of the garden in 1796. It is perhaps unlikely to date to after the 1830s/40s when the manufacture and use of clay drainage tiles in Scotland became common (Glendinning and Wade Martins, 2008, 76-7). It is reasonable to suggest that this may be one of the drains installed in the newly landscaped grounds in 1796 by Alexander Ririe and Petrie Co (AUL MS 3470/2/3/131/Daybook), specifically in the 'old garden, 'the doucat yard' and 'before castle'. The bricks have a distinct quartzite grit that is also visible in the old bricks in the wall of the existing, late 18th - century walled garden. Drain 24 is also of identical construction to a drain recorded within the castle yard in 2005 which may in fact have been the drain put in 'before the castle'. Finds from the backfill were mixed but included electric wire suggesting this took place fairly recently. Drain 28 was earlier than drain 24 but can not be dated more precisely.



Illus 15 Trench 1 Drain 24 looking W



Illus 16 Trench 7 drain 24 S section

Chapel/Building

The 1788/9 estate plan shows a long narrow rectangular structure or building on the edge of the stack yard (stack hill on the plan) to the north of and aligned with the north side of the garden. Scaled it appears to have been c 25m long x 3-4m wide (using the same scaling the doocot would have been 4-5m square, which is within the known size range so this appears fairly accurate). It had been suggested that this might incorporate the remains of the castle's early 17th century private chapel (Fraser 2010). No trace of any foundations were found although Trenches 3 and 4 crossed the line of the building and there was no evidence from the resistance survey (Ovenden 2010) to indicate survival elsewhere on this slope. It would appear that whatever the structure had been it was totally removed at the time of the redesigning of the garden landscape in the late 18th century.

Well Illus 29

GPS: NJ72428 12589

A well to the south east of the south-east corner of the garden was recorded. This well is not shown on the 1788/9 plan or on any subsequent estate or ordnance survey maps available in the Castle Fraser archive or on the surveyor's annotated maps held at the Regional Office at Castle Fraser. It had been located by the Head Gardener, Damon Powell some years ago and was planned and recorded as part of the present project. It was not fully excavated but was partially cleared of rubble to a depth of c700mm to show the top four courses. It was slightly irregular in shape and 900-950mm in internal diameter. The upper lining stones were mortared. An iron padlock and chain and iron bands, possibly to hold a pump mechanism were found in the rubble. Dumped vertically into the rubble fill there was a large stone over 900mm long x 500mm wide and with a semi-circular cut c400mm wide at the centre of the inner edge. By comparison with photographs of the top stones of the now covered well in the present walled garden, this is likely to have been a top stone (pers. comm. Damon Powell). A line of loose stones extending north/northwest from the well towards the Event Field was traced for c1.5m but was not sectioned; it may have drained to or from the well but this could not be

established without removal of the top stone that had been dumped into the well. It appears to line up with one of the possible drains recorded in the resistance survey (Ovenden, 2010, fig 11:12).

The iron padlock and fittings suggest that this well may have been in use or at least known and covered until relatively recently. However there is no obvious reason why a new well should have been dug at this point within the 19th/20th century landscape either for horticultural needs or for watering stock. It is possible, therefore, that it may have been constructed at some point during the life of the 17th-century garden although as it was outside the garden it would appear rather inconvenient and could perhaps have been supplementary rather than the sole or main water source for watering.



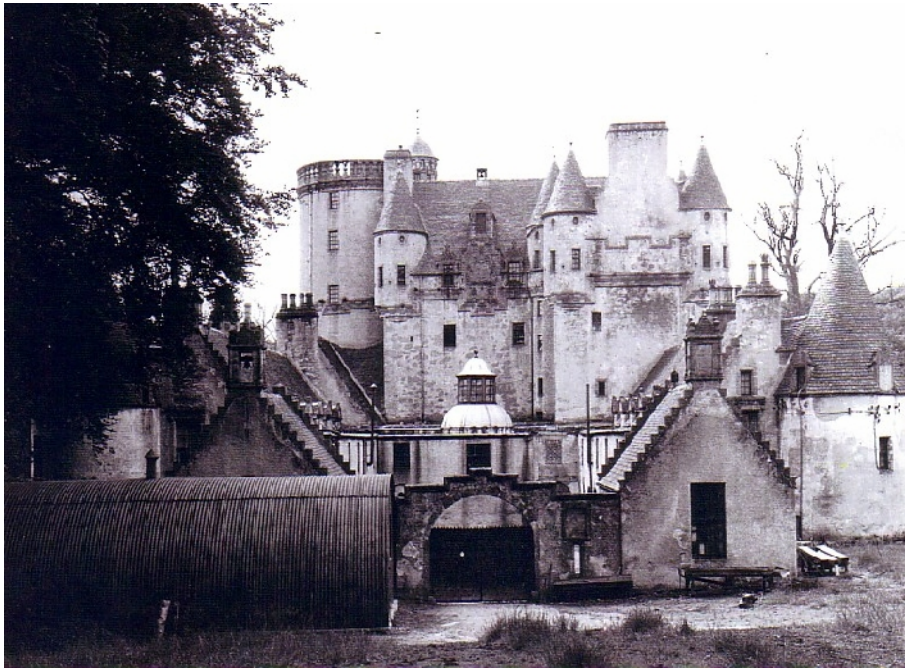
Illus 17 Well showing shaped topstone in fill.



Illus 18 Well showing stone line of possible drain or culvert to N/NW

Nissen hut Illus 27

No foundations related to the Nissen hut shown on the 1940s photograph were found on the excavation. However it is possible that in fact it did not extend this far to the east. On the photograph, the west end of the hut is shown slightly to the west of the west side of the eastern gatehouse into the courtyard. There were three standard Nissen hut widths- with internal spans of 4.9m (16') 7.3m (24') and 9.2m (30') and lengths in multiples of 1.83m (6') internally. A Nissen hut, possibly moved from the Castle Fraser site, still stands at Tillysoul in the garden of a former worker on the estate; this is 18.5 x 7.5m externally. If this had been the one in the photograph it would not quite have extended to the excavation- or indeed to the position of the building shown on the 1788/9 plan.



Illus 19 Nissen hut shown on 1940s photograph



Illus 20 Nissen hut at Tillysoul

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Acknowledgements

Murray Archaeological Services Ltd would like to thank all the volunteers who worked on the site and all the members of the National Trust for Scotland staff who helped in so

many ways – especially Damon Powell and all the gardeners for their help, encouragement and tolerance. Thanks also to Jean Jolly and Frank Armstrong for helpful discussions on site and to Sue Ovenden and Alisdair Wilson for discussion of the geophysical survey.

Special thanks are due to Dr Shannon Fraser for providing access to historical resources and for her support throughout.

7 Appendices

Appendix 1: Catalogue of digital photographic record (on CD)

Photo catalogue	
Digital frame no	Content
1-3	Tr 1 looking W towards castle
4-10	General views across excavation looking W
11-16	Tr 1 (2) tags indicate finds marking, looking W
17-20	Nissen hut at Tillysoul
21-38	Sundial in present walled garden
39-42	Tr 1 (2) and (4) looking N
43-50	Tr 1 (2) and (4) looking W
51-52	Tr 1 (2) and (4) looking N
53-57	Tr 3 looking W
58-63	Tr 3 looking SW
64-65	Tr 3 S end (12) in foreground, looking SW
66-73	Tr 3 looking N (10), (11), (12)
74-77	Tr 4 looking N (14)
78-79	Tr 4 looking S
80-81	Tr 4 Detail of section
82-83	Tr 4 (14)
84-107	well
108-109	castle and people working
110-113	Tr 2 looking N (15)
114-121	Tr 1 (24) top of drain infill, looking N

Photo catalogue	
Digital frame no	Content
122-125	Tr 1 (24) top of drain infill, looking W
126-128	School visit
129-132	Tr 1(24) looking N
133-135	Tr 1 (24) detail
136-137	Tr 1 (24) looking N
138-149	Tr 3 (12) looking N. N edge
150-151	Tr 3 (12) looking W. N edge
152-153	Tr 3 (12) looking N. general view
154-172	Tr 4 (14) looking N
173-183	Tr 4 (14) W section
184-194	Tr 1 (27)
195-196	Tr 2 (15) in foreground, looking N
197-200	Tr 2 (15) E section
201-208	Tr 2. E section
209-217	Tr 2. general views looking N
218-223	Tr 1 (24) Looking N
224-225	Tr 1 and Tr 7 (24) looking E
226-231	Tr 1 (24) looking W
232-233	Tr 7 (24) looking E
234-238	Tr 7 (24) Looking S
239-244	Tr 3 (12) S edge , (30) . Looking N
245-249	Tr 3 (12) S edge , (30) . Looking S
250-255	Tr 3. W section (12) , (30)
256-259	Tr 3 Edges of (12) and (30) marked with rods
260-289	Views of excavation from tower
290	Present walled garden from tower
291-293	Tr 1 (28) [Not 25 as marked]. Looking N
294-306	Tr 1 (28) [Not 25 as marked]. Looking E
307-309	Tr 1 (28) [Not 25 as marked]. Looking S
310-311	Tr 2. Detail W section (15)
312-316	Tr 7 (24)
317-322	Tr 1 Details of (26)

Photo catalogue	
Digital frame no	Content
323-328	Tr 1 Spade marks below (2) looking N
329-332	Tr 1 looking N
333-338	Tr 3 Details of 11. Not clear- too dried out
339-343	Tr 5 (31) looking E
344-346	Tr 5 looking N
347-353	Tr 6 looking E
354-357	Tr 6 looking W

Appendix 2: Finds Data

Tr.	Layer	C16th/17 th Pot	C18th/19 th Pot	Bottle Glass	Vessel Glass	Window Glass	Clay Pipe	Bone	Flint	Slate	Fe.	Other
1	1	-	X	X	-	-	X	X	-	-	-	-
1	2	X	X	X	-	X	X	X	X	-	-	SF 2
1	2A	X	X	X	X	X	X	X	X	-	X	SF 3
1	2B	X	-	X	X	X	X		X	-	-	-
1	3	-	-	-	-	-	X	X	-	-	-	SF 1
1	4	X	-	-	X	X	-	X	-	-	-	SF 4
1	5	-	-	-	-	-	-	-	-	-	X	-
1	24	X	X	X	X	X	X	X	X	X	X	Brick & Electric wire Stone
1	25	-	-	X	-	-	X	X	-	-	-	-
1	28	-	-	-	-	X	-	X	-	X	-	-
2	6	X	X	X	-	X	X	-	-	-	X	-
2	10	-	-	-	-	X	X	-	-	-	-	-
2	15	X	-	X	-	X	-	-	-	-	-	Burnt clay
2	17	X	-	X	-	X	X	X	-	X	X	Burnt clay
2	18	-	X	-	-	-	-	X	-	-	-	SF 5
2	19	-	X	-	-	X	-	-	-	-	-	-
2	20	X	X	X	-	-	X	X	-	-	-	-
2	20	-	X	X	-	-	X	X	-	-	-	-
2	21	X	-	X	-	-	-	X	-	-	-	Brick
2	23	X	-	-	-	-	-	-	-	-	-	-
3	9	X	X	X	-	X	X	X	-	-	X	Plastic & Marble
3	11	-	-	X	-	X	X	-	-	-	-	-
3	11A	X	-	-	-	-	-	-	-	-	-	-
3	12	X	X	X	-	X	X	-		X	-	-
4	8	-	X	X	-	X	-	X	X	X	-	-
4	14	-	-	X	-	-	X	X	-	X	X	-
5	5	X	X	X	-	X	X	-	-	-	-	-

5	26	X	X	X	-	X	X	X	X		-	-
6		X	-	-	-	-	-	-	-	-	-	-
7	1	X	-	X	X	X	X	X	-	X	X	-

Table 1. Finds by Context

Appendix 3: Context data

Context No	Trench	Description	Interpretation
01	1	Fine humic topsoil <250mm	
02	1	Fairly compact grey-brown gritty, very homogenous with moderate small (<80mm) stones	Cultivated soil. Excavated in two spits: 2 and 2A (lower)
03	1	Small loose stones in top backfill of feature 27	
04	1	Top of disturbed drain 24 gritty silt with fragments of clay and mortar	
05	5 & 6	Topsoil 300-480mm	
06	2	Fine humic topsoil	
07	1	Yellow gritty with frequent small stones and mortar fragments	Disturbed top of drain 28
08	4	Fine humic topsoil	
09	3	Fine humic topsoil	
10	3	V compact grey fine gritty with granite dust, fills irregular cut 150-180mm deep in natural and spreads thinly c 300mm to N over top edge of the natural. Width: >2m (extends into S section)	Path
11	3	Irregular E/W gullies filled with grey/brown gritty loam with occasional charcoal fragments. Bases irregular.	Planting/root line gullies
11A		W:400mm D: 70mm	

Context No	Trench	Description	Interpretation
11B		W:450mm D:40mm	
11C		W:550mm D:40-70mm	
11D		W:400-450mm D:40mm	
11E		480 x 320mm D:40mm	
12	3	Deep E/W ditch with almost vertical N edge. Top of S edge less clear due to pit 30 but base of S edge also vertical. W: c2.60m D:1.60m	=Trench 4, 14
12/1	3	Fill of 12. Homogenous grey/brown gritty soil with some small stones	This appears to be backfill into 12, possibly when garden dismantled. Sides show no weathering so unlikely to have been open for any length of time
13	3	Natural, yellow boulder clay. Slopes gently up to N with apparent flattening at N end, possibly where stack yard was situated	
14	4	N side of deep E/W trench with almost vertical N side apart from slight undercut where natural from uphill (N) side has slumped down hill. W (as excavated): 3.05m D:1.57m	= Trench 3, 12
14/1		Grey humic garden earth with charcoal inclusions and some small stones	= Trench 3, 12/1
14/2		Band of redeposited natural gravel <100mm thick stones 14/4 lie against the N edge of this, on 14/2	
14/3		Looks same as 14/1 only separated by 14/2	
14/4		Unstructured stones < 250/300mm lying in a band along N edge of 14 in and on	

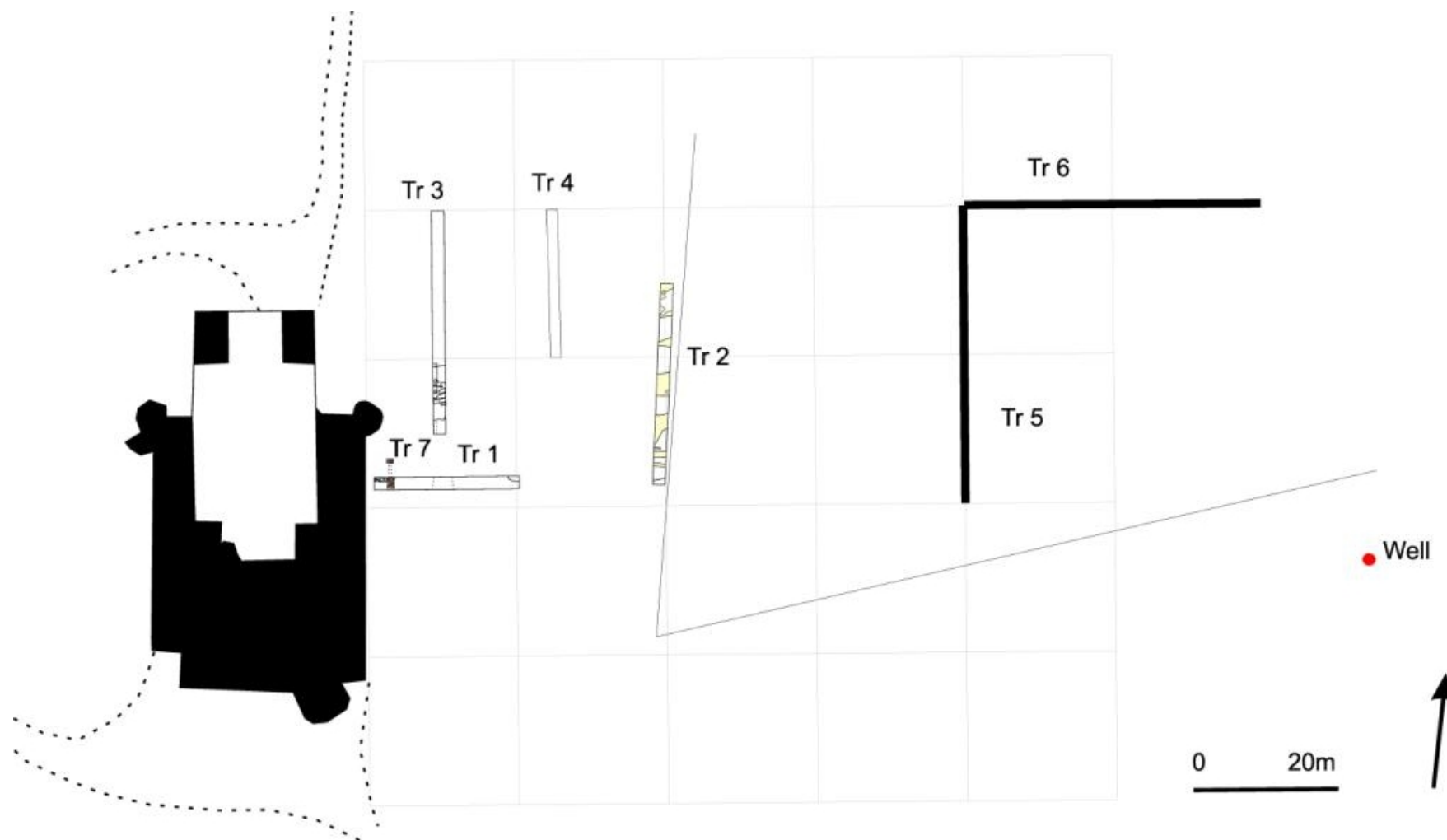
Context No	Trench	Description	Interpretation
		14/2	
15	2	Trench/cut into natural < 2.05m wide D: c500mm Extends into S section. ENE/WSE	
15/0 and 15/1		<450mm fine grey brown silty/sandy with some small stones in base of layer	Probable backfill after garden dismantled
15/2		Redeposited dirty natural in patches within the backfill 15/0 and 15/1	
16	2	Homogenous grey brown gritty with charcoal flecks through it. Bands of redeposited natural appeared to separate 16 and 17 but in section 16 and 17 merge. Base very bumpy with spade/root cultivation on surface of natural. W: 0.8m	Possible garden bed but originally thought that 16 and 17 were rig and furrow. They align with linear anomalies on resistance survey.
17	2	As 16 W: 2.7m	
18	2	Homogenous grey brown gritty with charcoal flecks through it. W: 2.6m	
19	2	Small shallow hollow 400 x 500mm Fill homogenous grey brown gritty with charcoal flecks through it	
20	2	Band of cultivated earth c 3.8m wide. Homogenous grey brown gritty with charcoal flecks through it	Rig and furrow?
21	2	Band of cultivated earth c 3.3m wide. D: 250mm. Homogenous grey brown gritty with charcoal flecks through it	
22	2	=23. Irregular patch of grey brown gritty with charcoal flecks.	May have been cultivated earth/rig but clearly tree roots through this so equally may just be tree hole.

Context No	Trench	Description	Interpretation
23	2	=22	
24	1 & 7	N/S drain. Internal W: 350mm. Base V shaped lined with bricks set in grey clay. Bricks 100m W x 200mm L x 60mm Th, red fabric with quartzite grits. Sides Clay bonded stone (=4) with stone capstones, most removed.	
24/1	1 & 7	Mid brown gritty silt with much glass and slate	Infill after drain covers taken off. Not gradual silting
25	1	V compact hard gritty with granite dust. W < 2.8m	
26	5	Dark cultivated soil	Possibly = top of rigs
27	1	Edge of stone filled pit/trench with bigger stones in fill and smaller on top fill (3). No silting Side almost vertical. > 70mm x > 1.6m extends to sections. Depth:c900mm	Appeared to cut context 2 so originally thought to be a 19 th C feature- sump or tree removal hole. However may equate with S-shaped feature (soakaway ?) on geophysical survey.
28	1	E/W drain. Sides and capstones of stones. Base unlined. D:300mm from base of capstone. W at base: 150mm, widening to c 380mm at top. Cut by drain 24	Appears to have been silted prior to drain 24 being built.
28/1		Fill of 28. Fine mid-brown sandy silt.	
29	3	Yellow redeposited natural with some small stones and some of 12/1 through it. Interleaved with 12/1 at S side of 12 and coming in from S	
30	3	Pit/cut only 500mm of the width excavated and N edge, S edge not excavated. > 980mm N/S.	Appears to have been cut by the original feature 12 but this is obscured as is definitely cut by the digging out and refilling of feature 12. A small planting pit 11E

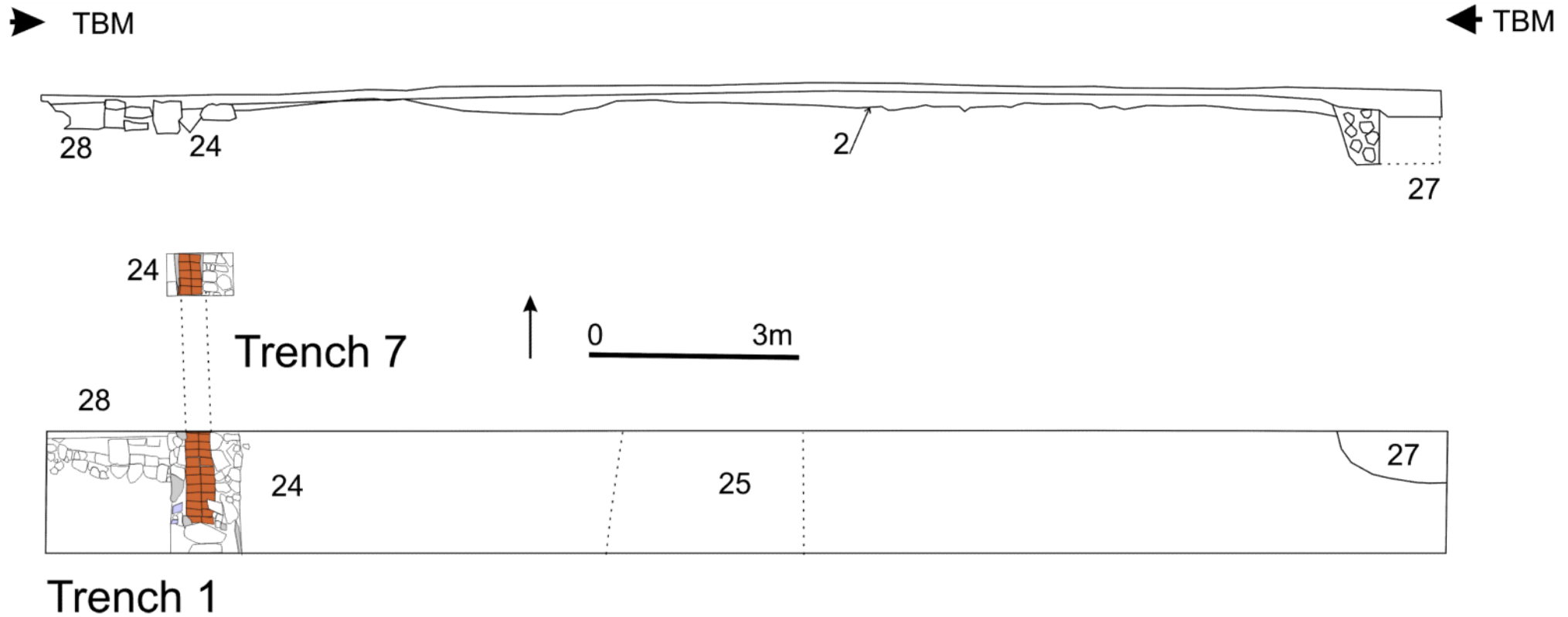
Context No	Trench	Description	Interpretation
			appeared cut into redeposited natural over 30
30/1		< 280mm original fill. Black peaty with frags of wood and bark.	
30/2		Fine light buff quite loose sand / redeposited natural	Merges to 29
30/3		Grey silt, thicker at N by edge of 12, tails off to S. Looks like 12/1 but slightly lighter grey (drier?)	
31	5	Ash spread	
32	2	Band of redeposited natural	
33	2	Band of redeposited natural	
34	2	Band of redeposited natural	
35	2	Fine light grey sandy silt	
36	2	Patches of redeposited yellow natural mixed with grey silty soil	
37	3	Patches of redeposited yellow natural mixed with grey silty soil	

Appendix 4: Levels

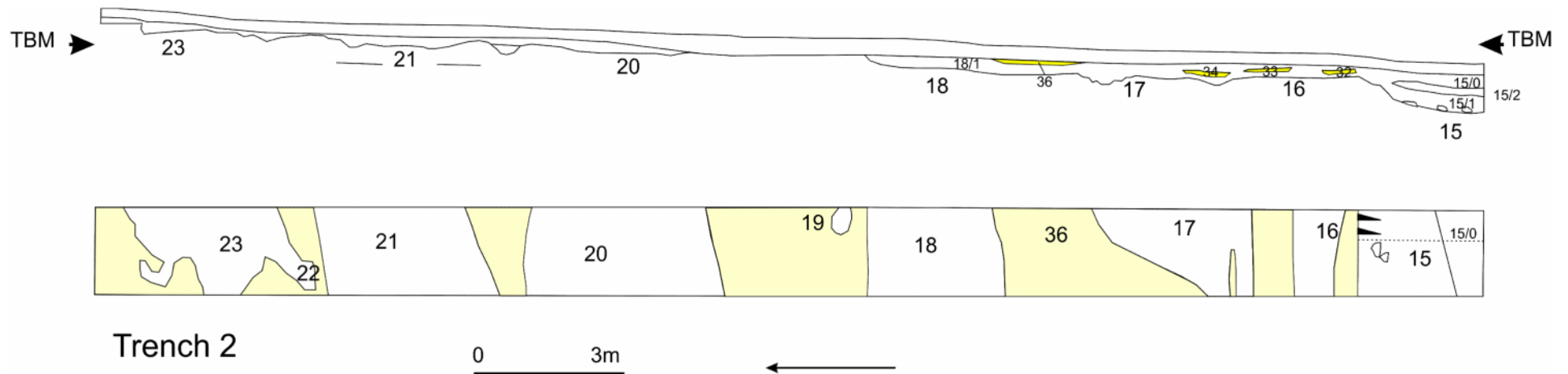
All levels for the sections were taken relative to a temporary datum (TBM) at the top of the first foundation stone at south corner of the east gatehouse. This TBM is shown on all sections.



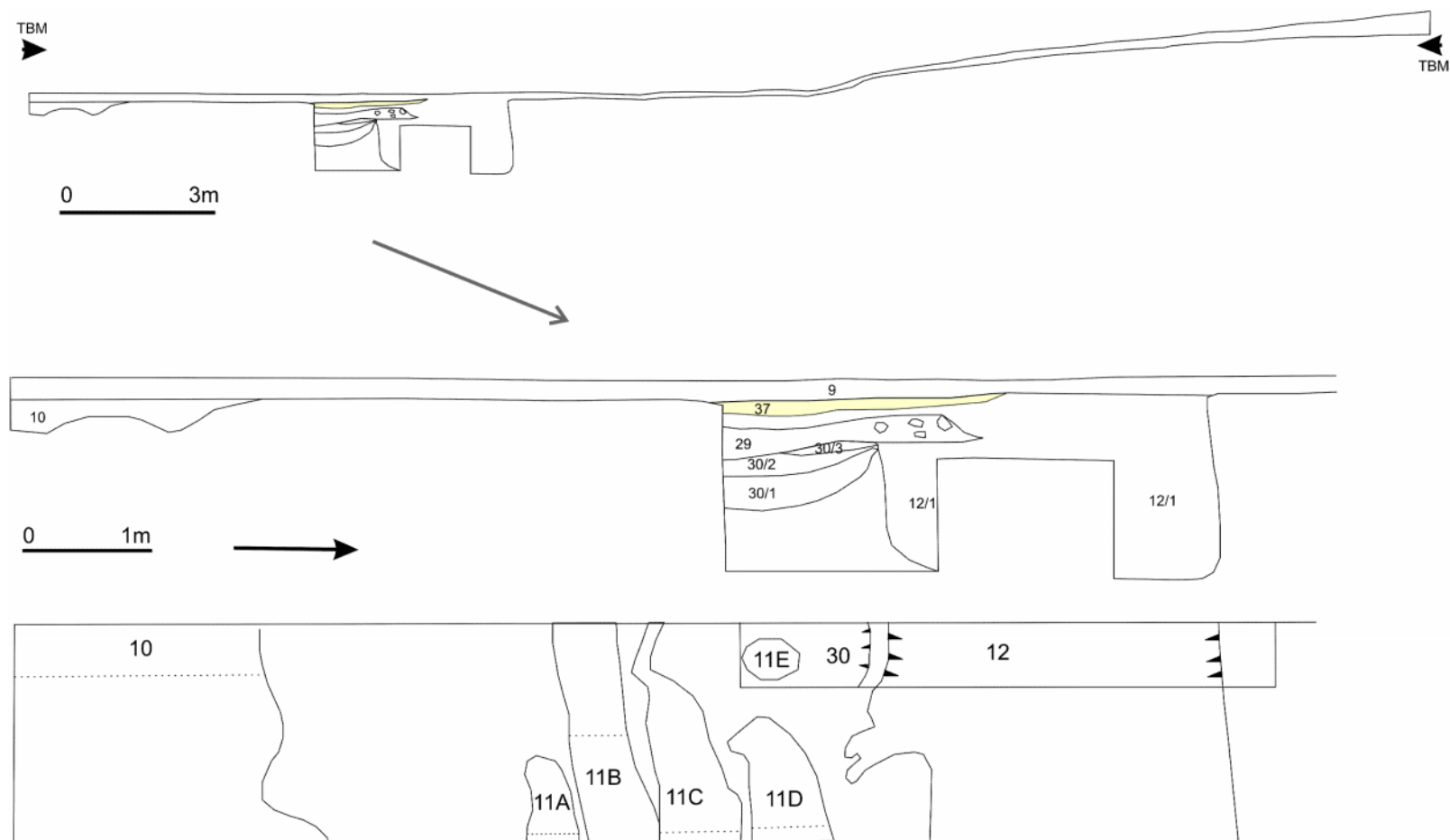
Illus 21 Main plan of trench layout with grid and fence shown



Illus 22 Plan and section Trench 1. Plan Trench 7. TBM = Temporary Datum used for all sections.

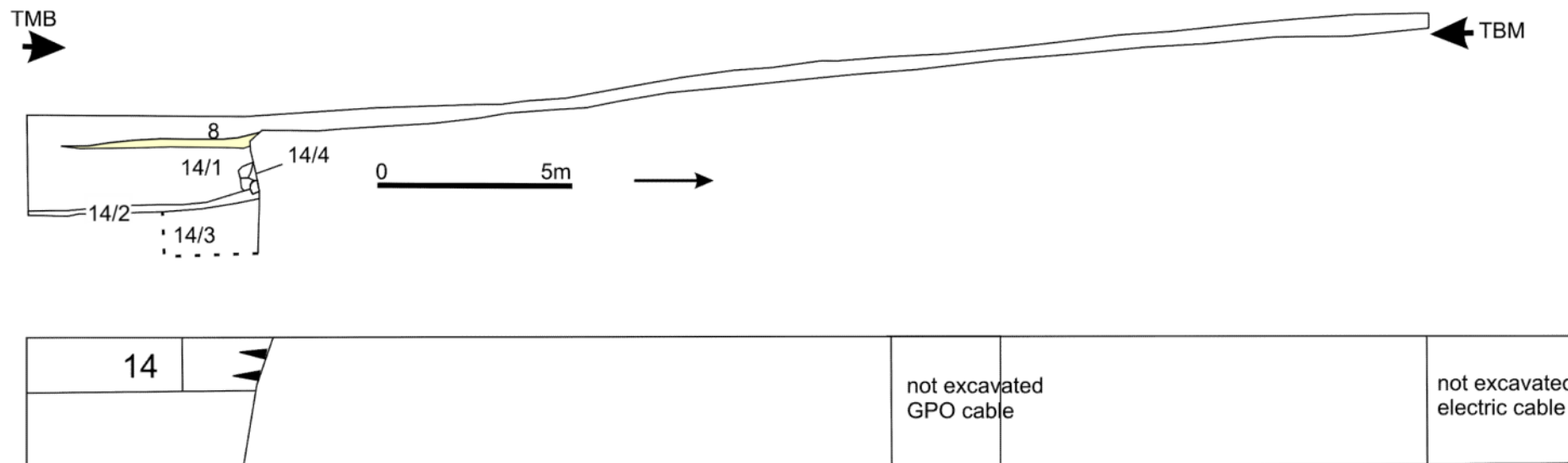


Illus 23 Plan and section Trench 2. TBM = Temporary Datum used for all sections.



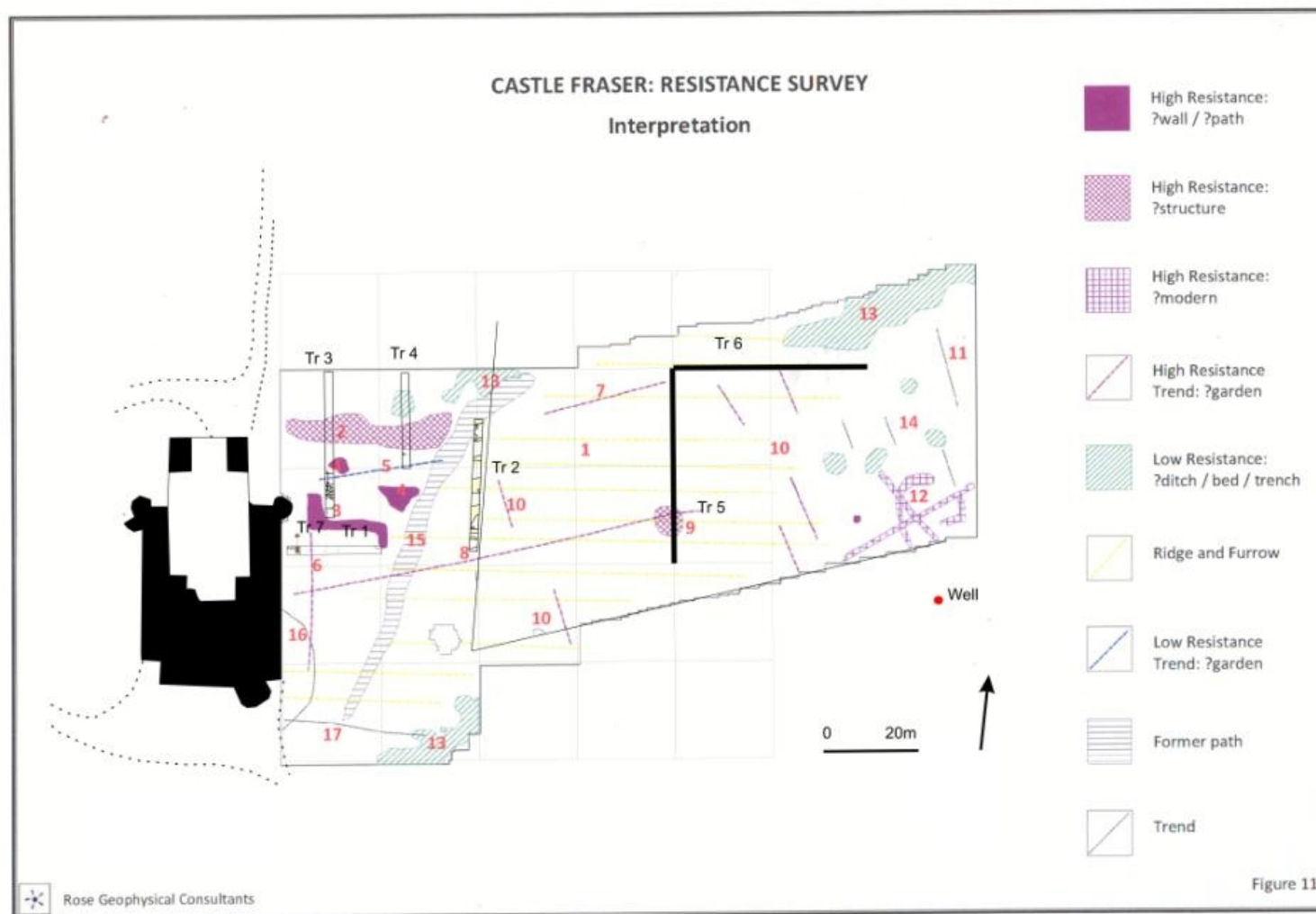
Trench 3

Illus 24 Plan and section Trench 3. TBM = Temporary Datum used for all sections.

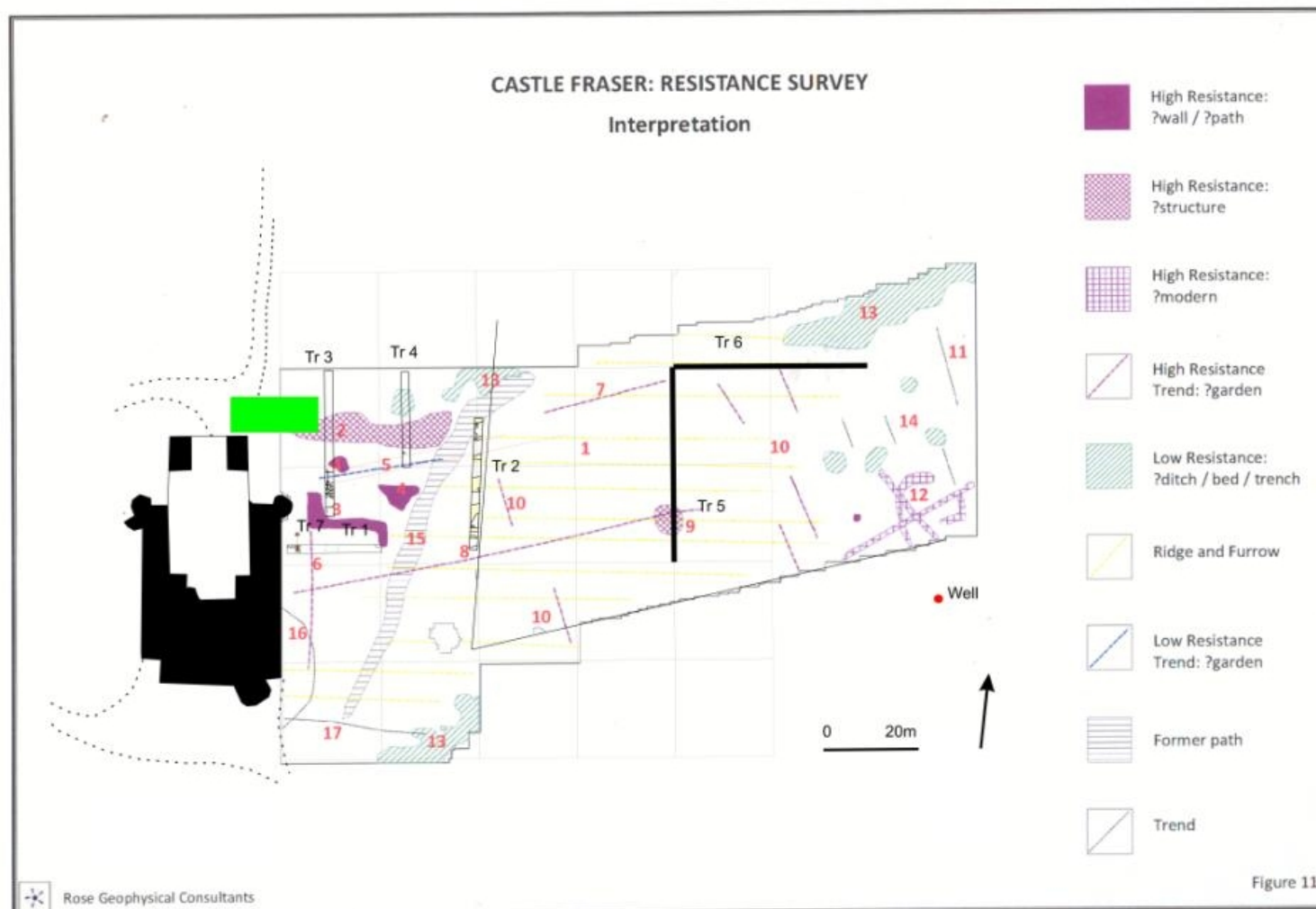


Trench 4

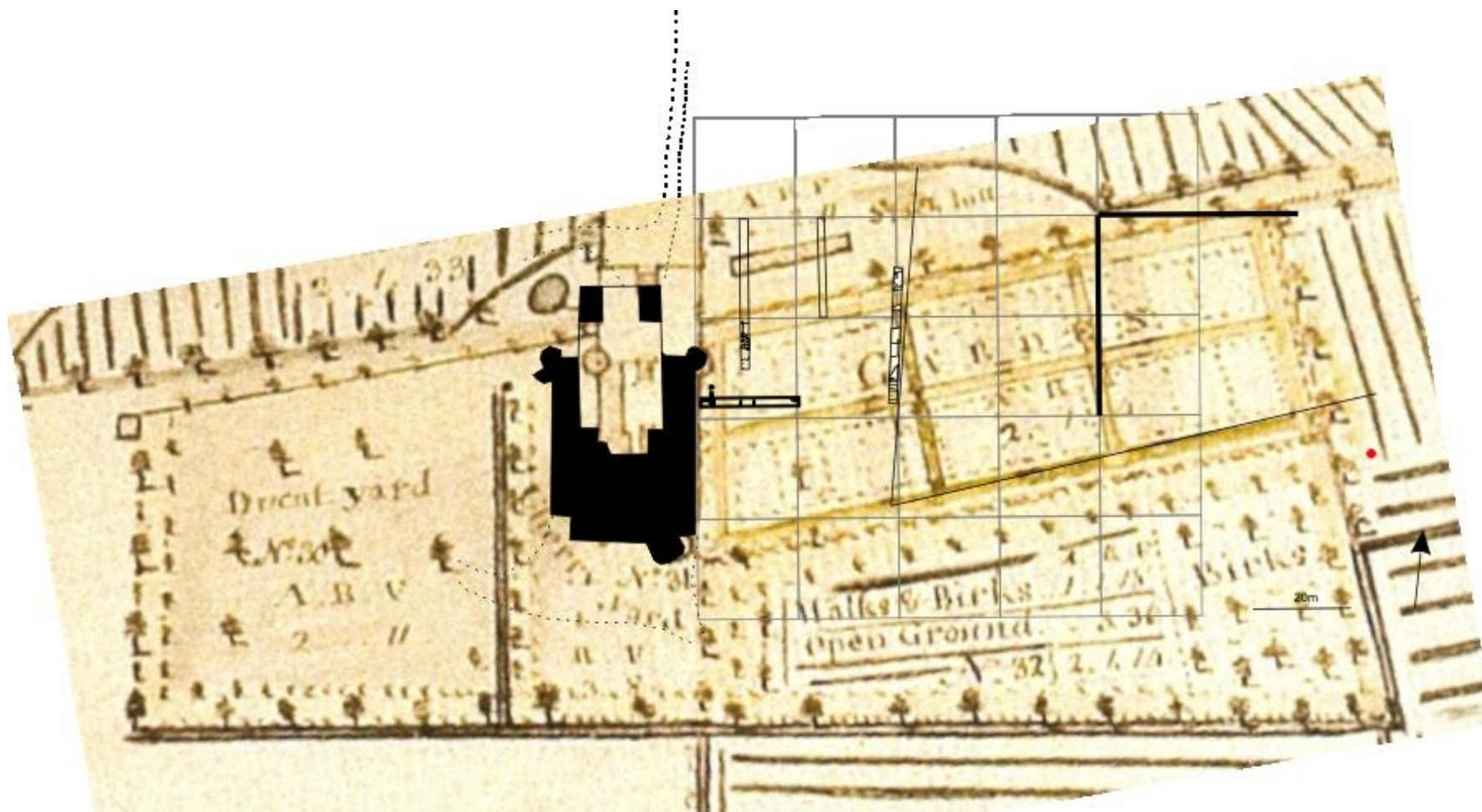
Illus 25 Plan and section Trench 4. TBM = Temporary Datum used for all sections.



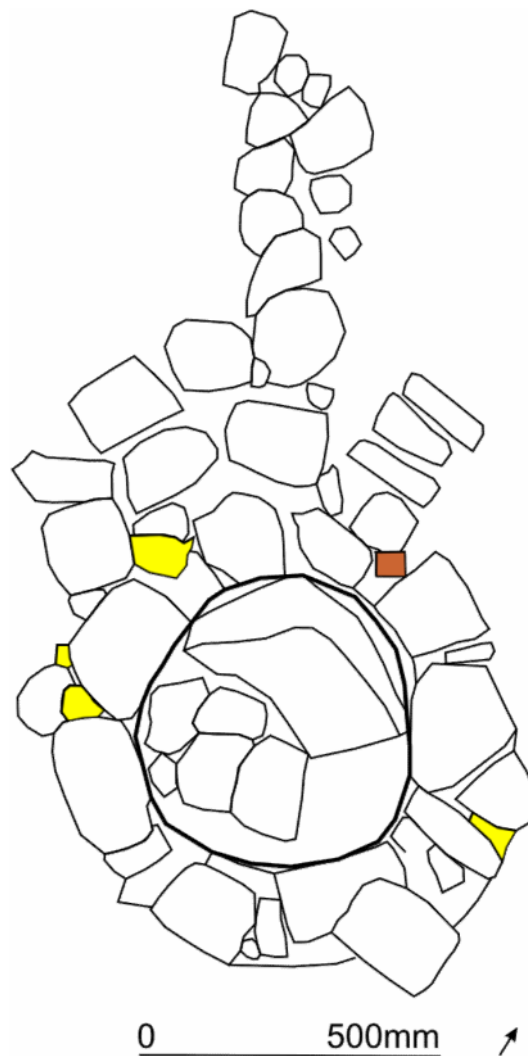
Illus 26 Main plan overlaid on geophysics plan (Ovenden 2010, fig 11)



Illus 27 Main plan overlaid on geophysics plan (Ovenden 2010, fig 11) with probable site of Nissen hut (green)



Illus 28 Main plan overlaid on 1788/9 plan. Note that the inherent difficulties of marrying modern and 18th century surveying make this at best approximate.



Illus 29 Plan of well to southeast of southeast corner of garden. (yellow=mortar. Orange=brick)