

Excavations on the motte and the north curtain wall at Shrewsbury Castle, 2022



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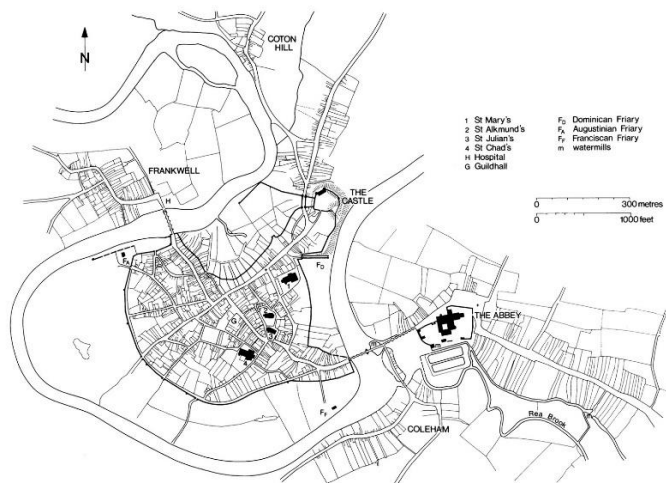
A report to the Castle Studies Trust

Summary

Excavations for the Castle Studies Trust in July 2022 took place on the motte top and outside the north curtain wall. The motte top was found to have been severely denuded of much of its archaeology, almost certainly by Thomas Telford's 'restoration of 1786-90. Nevertheless, negative features including beam-slots, post-holes and a post-pad were found to survive, cut into the motte material; some were undated, some contained sherds of medieval cooking pot; no evidence was found for the 'great tower' that collapsed in the mid-13th century. The base of the retaining walls around the south side of the motte were cleared of undergrowth and surveyed for a conservation management plan, and were found to incorporate the remains of one, possibly two, medieval buildings. A trench outside the north curtain wall gave some confirmation to the hypothesis that much of the wall in that area had been rebuilt in the 19th century and showed that only 19th-century deposits survive outside the wall.

Introduction to Shrewsbury Castle

This interim excavation report is not the context for anything more than the crudest and briefest summary of the documentary history of Shrewsbury Castle: for lengthier accounts, the reader is referred to the earlier excavation interim reports (Baker 2020, Baker 2021), to the conservation management plan (Hunns, Powell and Baker 2022), to a forthcoming article for the British Archaeological Association (Baker, forthcoming) and ultimately to the long-published *History of the King's Works* (Colvin, Brown and Taylor 1963).



I. The location of the castle within medieval Shrewsbury and its suburbs (Baker 2010)

Shrewsbury Castle is one of the urban castles recorded by Domesday Book as having been built at the cost of demolishing tax-paying tenements, in this case fifty-one in total, probably disposed along the main street, now Castle Street and Castle Gates, a section of the strategic north-south route through the Marches connecting Chester through Shrewsbury to Hereford. The same source also shows that the castle incorporated one of the town's six Domesday churches within its perimeter, but whether newly-built or of some age is not recorded. The early 12th-century history written by Orderic Vitalis, of local origin, also describes the role of the *praesidium regis* at Shrewsbury, a unique term long thought to refer to the castle, withstanding a siege by insurgents in the Marches revolt of 1069. The location of the castle across the neck of the Severn loop enclosing the Saxon town is significant in terms of its earliest role as an instrument of conquest.

The castle's fortunes follow a well-established eastern Marches trajectory: a campaign-base for expeditions into Wales, bloody involvement in the civil war of the 1130s, heavy expenditure through the later 12th and 13th centuries under Henry II and Henry III, maintained under Edward I but thereafter in steady decline following the 'pacification' of Wales. Gradual decline in the later 14th, 15th and 16th centuries resulted in ruination and dilapidation. The castle was refortified by the Royalist faction in 1643-44; it was taken by Parliamentary forces in 1645 but recent dendrochronological dating of the hall roof suggest that they continued the restoration process.

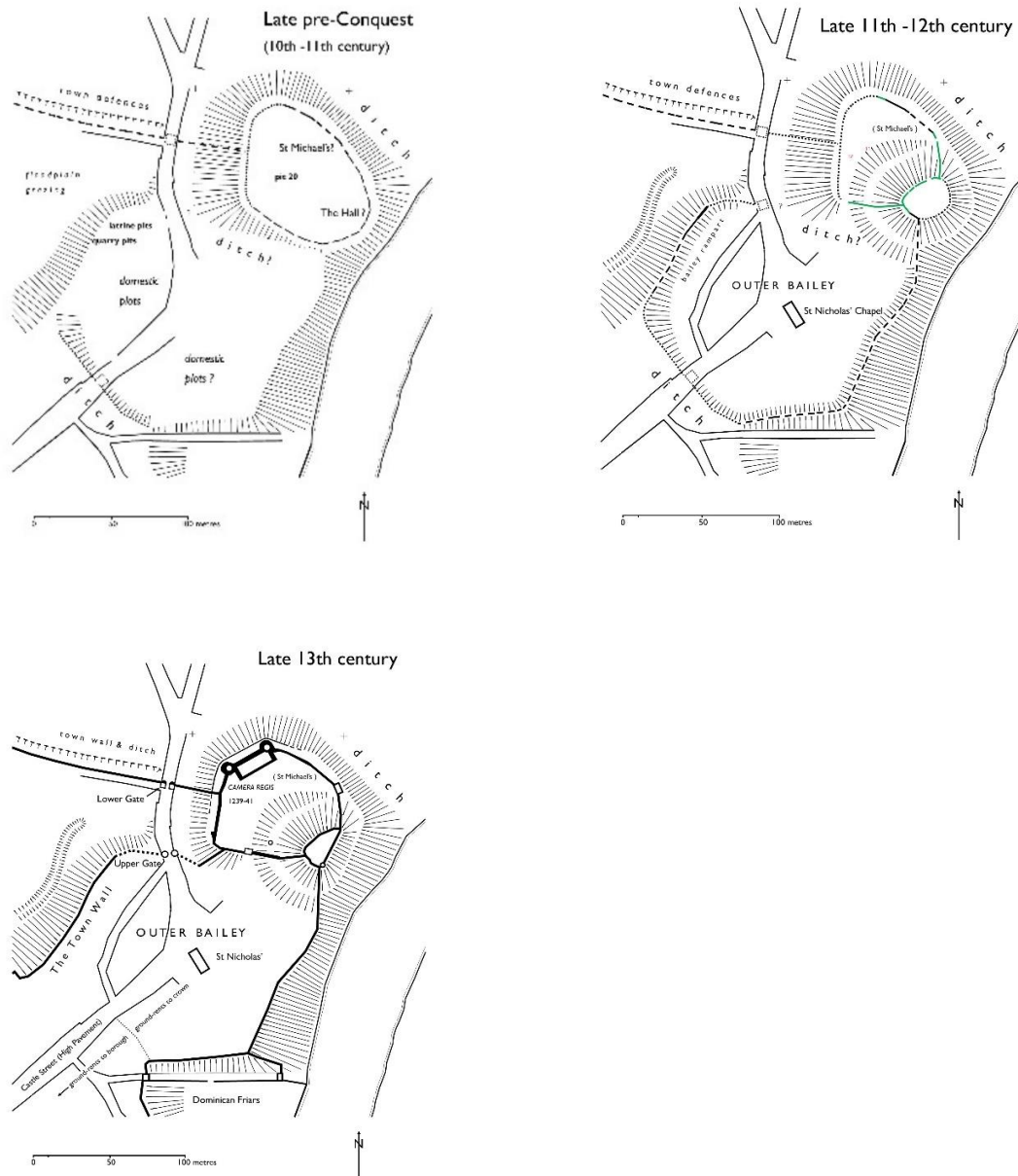
The castle was finally de-munitioned in the 1680s and began nearly three centuries of use as a private residence. The apogee of this phase was its restoration, supervised by Thomas Telford, for the town's M.P. Sir William Pulteney between 1786 and 1790. Residential use ceased with the gift of the castle to Shrewsbury Borough Council in 1925 and the conversion of its principal building into the council chamber; the gardens – basically the inner bailey and the motte – were opened to the public at that time. The hall was converted into a regimental museum in the 1980s, which use continues.

Prior to the involvement of the Castle Studies Trust in 2019, Shrewsbury Castle was archaeological *terra incognita* and understanding of it was based solely on its above-ground form and on the documentary record. However, following a season of geophysical survey and excavation in 2019, two subsequent excavation seasons in 2020 and 2022 and the compilation of the conservation management plan in 2022-23 which includes the first detailed architectural assessments of its standing fabric based on photogrammetric survey, the outlines of the physical development of the castle can now be clearly discerned for the first time.

1. There was pre-Conquest activity on the site of the castle. A pit of that date containing two different types of pottery was excavated within the inner bailey in 2019. Interpretation of its context – a natural knoll on the end of the ridge of high ground extending through the Shrewsbury loop, coinciding with the likely position of urban defences extending across the neck of the peninsula – suggest that it may well have had a military function, but could have included the Domesday church of St Michael. A speculative interpretation of the site is that it may have been the hall and household of the pre-Conquest sheriffs – after the king and the bishop, the third most important officials of Domesday-period Shrewsbury.

2. In the immediate aftermath of the Norman Conquest the site was converted into a motte-and-bailey castle. The inner bailey, lying below the west side of the motte, was of very limited extent and may have been little more than a barbican. The outer bailey was

larger, extending well into the river loop down the main axial street. The motte was surrounded by a ditch around its base; its summit was the site of a number of timber-framed buildings, apart from the documented great tower, built in the earth-fast tradition. Probably before the end of the 12th century re-fortification in stone had commenced, making use of a green friable sandstone found close at hand in the bed of the Severn. This material occurs in the north and south curtain walls, the motte wing walls and around the motte-top perimeter wall on the west side. It does not occur in the east-side motte wall, probably a late-13th-century post-collapse replacement wall, nor in the west curtain wall.



Figs. 2,3,4: Speculative reconstructions of the development of the medieval castle. Fig. 3 (top right) shows in green the occurrence in the curtain walls of the probably primary green sandstone slabby masonry. Fig.4 (above) shows the incorporation into the town of the former outer bailey

3. In the early 13th century the present castle hall was built, probably as a royal chamber block, the *camera regis* of 1239-41. At this time or possibly later the inner bailey may have been extended westwards with levels built up over the natural gradient and retained in place by a wholly new western curtain wall.

4. The late medieval decline of the castle has not so far been apparent in the archaeological record. The refortification of 1643-44 is readily apparent in the barbican outside the main (south) gate and in the postern gate. It may well be represented in the use of recycled multiple-source masonry, documented by the CMP photogrammetric surveys of the curtain walls but such repairs are not easily dateable or distinguishable from later repairs. Battle-damage probably dating to February 1645 is in the course of investigation.

5. The restoration of the castle under Thomas Telford in 1786-90 resulted in a major loss of medieval fabric and archaeological deposits: the inner bailey interior with stripped down to natural glacial deposits; the motte-top was cleared of the ruins of medieval buildings still standing to their full height; the motte top was stripped down to motte material.

6. The 19th-20th-century repairs history of the castle is only now beginning to be appreciated, research by Historic England into their Registry files showing multiple instances of curtain-wall collapses and subsequent repairs. Reconciling these records with the evidence of the standing fabric remains a major task for the future.

Introduction to the 2022 season

The third and final season of excavations for the Castle Studies Trust took place between July 17th and July 28th, with a team of volunteers composed of excavators with experience from previous seasons at the castle and in excavations for the National Trust in Attingham Park, and post-graduate students from University Centre Shrewsbury (the University of Chester) led by Dr Morn Capper; excavation supervision was by David Williams MCIfA. The programme faced immediate challenges. The planned twelve-day slot available for excavation and backfilling was reduced by external factors to ten days and the initial opening-up work on the motte top coincided precisely with the July 2022 record-breaking heatwave with temperatures well above 30 degrees.

The motte top has, since the 1990s, been surfaced with cobbles (details below). Although permission was generously given by Shropshire Council and Scheduled Monument Consent obtained for a single two-metre wide trench right across the motte, breaking through the cement-bonded cobbles with an electric road-drill, together with the manual-handling implications of excavating, bagging-up and removing the roadstone sub-base during the heatwave meant that the continuous trench had to be reduced in scope to a line of three 1.8-metre squares, designated areas 1 to 3 from east to west (fig.14). As the end of the excavation period drew near, a decision was made to leave some features (all of which were, of course, otherwise unthreatened) incompletely excavated rather than rush the excavation and recording of their lower levels. Motte material, the equivalent of natural deposits or bedrock in this situation, was nevertheless reached and recorded in all three areas and the general archaeological character of the top of the motte was established for the first time.

Trench 4, outside the north curtain wall, was an addition to the programme for which funding was first obtained and was designed, firstly, to answer doubts about the dating of the wall that had emerged from its examination during the conservation-plan process, and also to provide further excavation-training places for team members in the event that the excavation of the motte-top trench became focussed on a small number of complex negative features requiring fewer but more experienced excavators.

An introduction to the motte

The published historical evidence for the motte and its tower was summarised in the report on the 2019 excavation (Baker 2020). Briefly, the first reference to the castle in the Pipe Rolls is a payment of two marks made by the sheriff in 1164-5 to 'munition the tower of Shrewsbury'; money was spent throughout the 1160s with further work specifically on the motte in 1172-3 and payments for timber to make a palisade around 'the tower of Shrewsbury' in 1229 (Colvin, Brown and Taylor 1963, 835). The motte and its tower appear in the 13th-century documents mainly because, being built above a bend in the river, the base of the motte was subject to erosion and thus required repair. In 1255 an enquiry into the condition of the motte estimated that it had suffered damage from the river that would take 60 marks to put right; the damage was said to be of long standing but aggravated by the Abbot of Shrewsbury's mill built on the opposite bank. In 1256-7 repairs to the motte were in progress, but in 1269-71 a 'great wooden tower' fell down and was said to be totally destroyed; this has usually been assumed to have stood on the motte. The 'great palisade on the motte' was remade in 1299-1300 (Colvin, Brown and Taylor 1963, 836).

The motte as it stands today is D-shaped in plan with its flat (east) side to the river, eroded back since at least the 13th century. The motte measures around 72 metres broad at its base from north to south, with a flat summit about 30 metres across, north to south. It rises only 12 metres above the present level of the inner bailey (which is at c. 68.20m-68.50m AOD), its flat summit at about 80.70m, but is over 100 feet/31 metres above the river. Before any erosion by the river had taken place, if the profile of the east (river) side of the motte had been similar to what survives on the west side, the motte may originally have been an oval, around 65m broad east-west at its base.

The masonry visible around the top of the motte is varied in character and clearly belongs to a number of distinct builds, which can only briefly be summarised here.

The north-west and west sides of the motte are ringed by a low (c.2m) retaining wall of mixed sandstone rubble. The base courses visible on the outer faces, and the core-work exposed within the (later) parapet courses on the motte top, are of Coed-yr-Allt Beds friable green sandstone rubble slabs, which has been interpreted as the primary masonry dating to the initial conversion of the castle from an earth-and-timber castle into a stone castle (Baker 2020, and see Trench 4 and conclusions, below). The masonry is plain, without openings, and is suggestive of an encircling free-standing perimeter wall.

The east side of the motte top is retained by a high wall of white sandstone, probably Grinshill stone, with regular thin bands of red, probably Keele Beds, sandstone. This has long been speculated to be work of Edward I's masons, in the style of Caernarvon Castle,

repairing the collapsed side of the motte. At the southern end of this are the red sandstone ashlar foundations of the 'Watch Tower', the 13th-century round tower that stood until replaced by Telford's Gothic summerhouse, Laura's Tower, at the end of the 18th century.

The masonry visible on the south and south-west sides of the motte is in private ownership and has only very recently (2022) been cleared of vegetation, photogrammetrically recorded and assessed for the first time. Two features stand out and account for the irregular plan of the motte on this side. The first is a build of red, probably Keele Beds, sandstone rising from stepped footings. Above, is a horizontal chamfered plinth course, the chamfer returning upwards before continuing at a higher level and clearly representing the lower part of the wall of a substantial stone building. The ruins survived almost to wall-plate level until Thomas Telford's restoration of 1786-90 and can be seen in the Thomas Pennant/Moses Griffith watercolour made a decade earlier (see below). At the base of the wall to its west are protruding stones that appear to suggest a former projecting bastion at this point. Further study of these remains is now needed from the new photogrammetric survey.

Between 1786 and 1790, Thomas Telford completely rebuilt the top of the motte. The perimeter walls were reduced to a low (c.1m-high) parapet wall, the 13th-century 'Watch Tower' was demolished to its basal courses and a new two-storey summerhouse built more or less on top. The summerhouse, known locally as Laura's Tower after Telford's client's daughter Laura Pulteney, consists of a finely-appointed room a couple of metres above motte-top level approached via symmetrical curving staircases, framing the entrance to the plain basement room, which was probably used for service functions. The motte top itself was laid out as a garden with a lawn and flower beds, and an oval path giving access from the doorway at the head of the steps at the north end of the motte.

The motte-top garden remained until the 1990s when the present cobbles were laid, H. E. Registry files show, to provide a waterproof capping to prevent rain penetration of the motte material, which was becoming waterlogged and exerting an outward pressure on the retaining walls. The cobbles were laid with a slight slope down to the west to shed water into a French drain running along the inner face of the west retaining wall before exiting the wall and discharging down the side of the motte. The course of Telford's oval path approaching Laura's Tower was also picked out in the cobbles using stones set on edge.

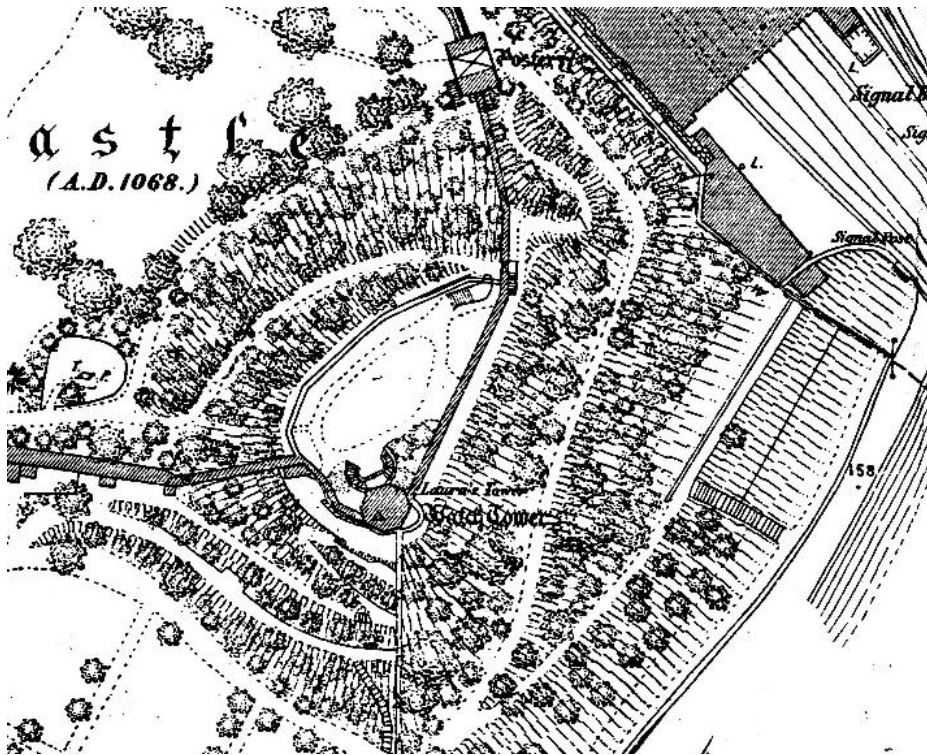
As far as is known, this work was not archaeologically monitored. The only known archaeological recording associated with the installation of the cobbles and drains is a hand-auger survey carried out by Mike Watson, the then County Archaeologist, in 1990, before the cobbles were laid. 15 hand-augered cores found 300mm of topsoil over a brown sandy soil containing pieces of brick and tile that was tentatively identified as a disturbed layer resulting from Telford's activities. There were also indications of what were interpreted as in-situ masonry footings and possible exposures of motte material. The general conclusion was that there was a safe depth of 300mm of soil, under which significant archaeology could be expected (Watson 1990).

The only other archaeological research known on the motte top is a geophysical survey undertaken by Stratascan Ltd in 2000, using ground-penetrating radar. The results were less than conclusive, showing clear evidence of deep and solid masonry around much of the perimeter and at the north end, and some activity in the centre, mostly in the 0.45m – 0.95m depth range (GPR timeslices), possibly indicative of buildings. While these results were contemporaneously celebrated as showing 'clear indications of foundation trenches up

to 2 metres in width and similar depth, forming parts of at least one large rectilinear structure' they have always appeared to this writer to be deeply ambiguous – and excavation has now shown that they bear little or no relation to the actual character of the archaeology (Stokes 2000, Stratascan Ltd, 2000).



5. The motte in 1778, before Thomas Telford's attentions. The Thomas Pennant/Moses Griffith watercolour (NLW/Wikipedia)

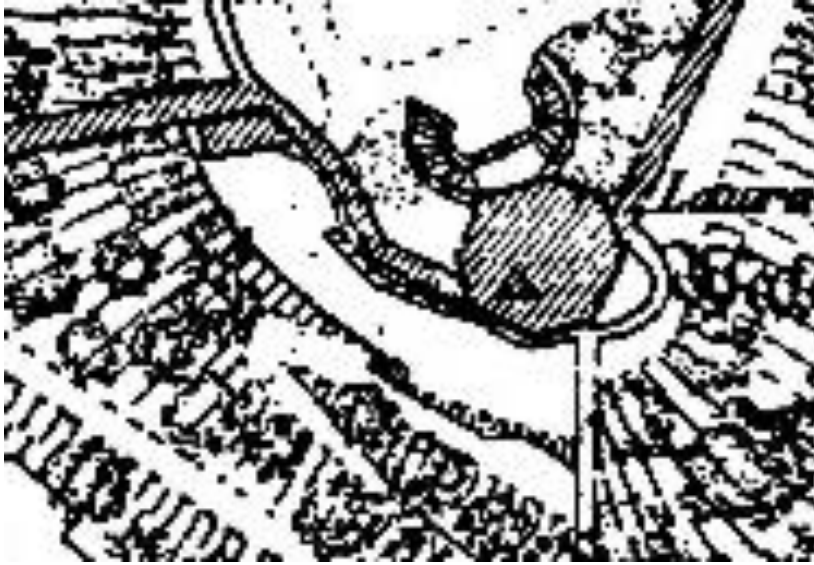


6. The motte as surveyed in 1879, from the Ordnance Survey 1882 1st edition 1:500. The garden on the motte summit is clearly depicted, with lawns, paths and shrubbery either side of Laura's Tower



7. (left) Composite vertical view off the south motte-top parapet wall looking down onto the arc of masonry that may represent part of a circular tower base. It also looks down to the top of the plinth course (a-b-c) higher up the wall face that carries on across the angled masonry face to the east (top of picture)

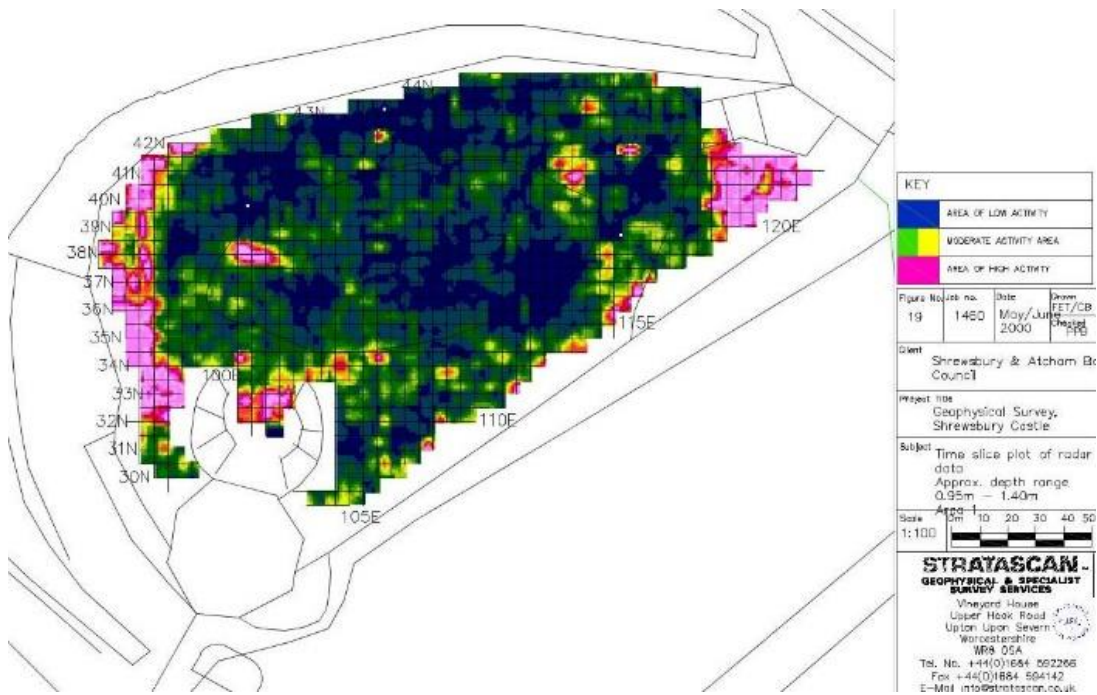
8. (right) view looking east towards the stepped masonry base under angled wall with high plinth course. In this view the plinth course can be seen stepping down from four courses below the parapet to seven/eight courses below (at 'd') and continuing horizontally around the angle beyond ('e')



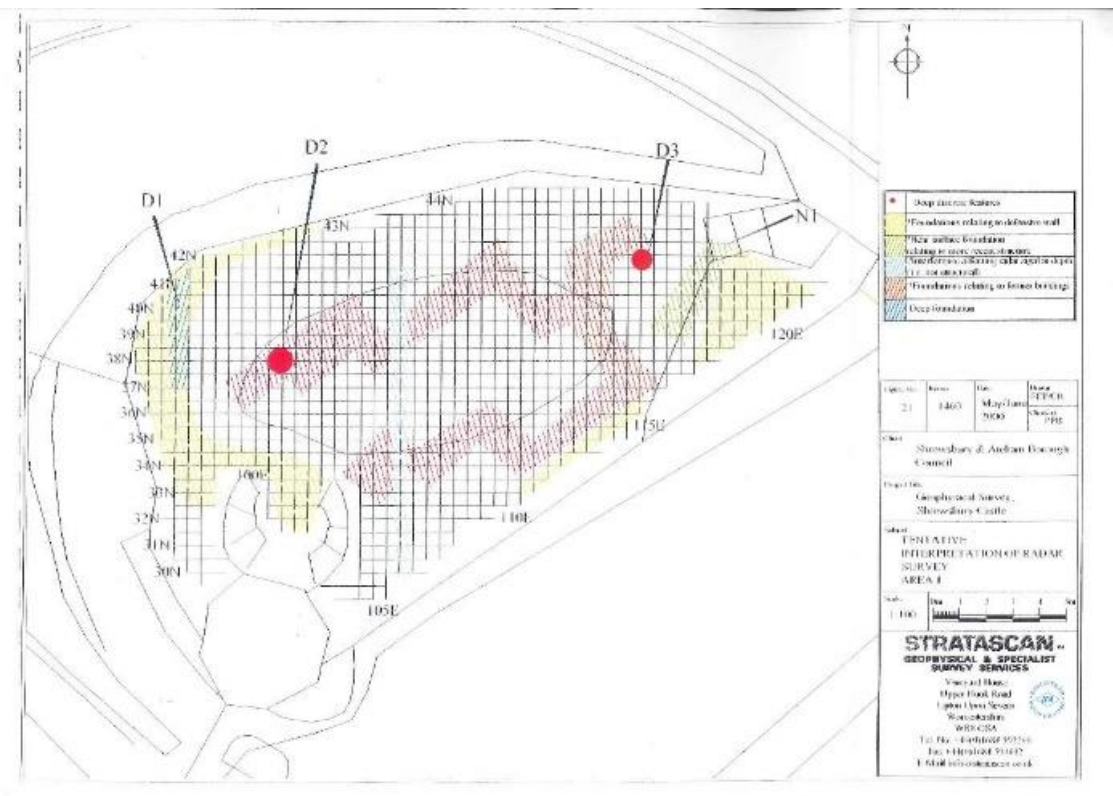
9. Enlarged extract from the 1882 O.S. showing the south side of the motte, the projecting stepped masonry footing and the outline of the watch-tower base under Laura's Tower



10. Drone shot of the motte from the south-east (James Brennan Associates). The watch tower base can be seen under Laura's Tower with the striped retaining wall beyond marking the making good of the collapsed side of the motte from the late 13th century (James Brennan Associates)



11. Motte top geophysics GPR timeslice @ 0.95m-1.40m. (Stratascan Ltd, 2000)



12. GPR interpretative plan of the motte top (Stratascan Ltd, 2000)

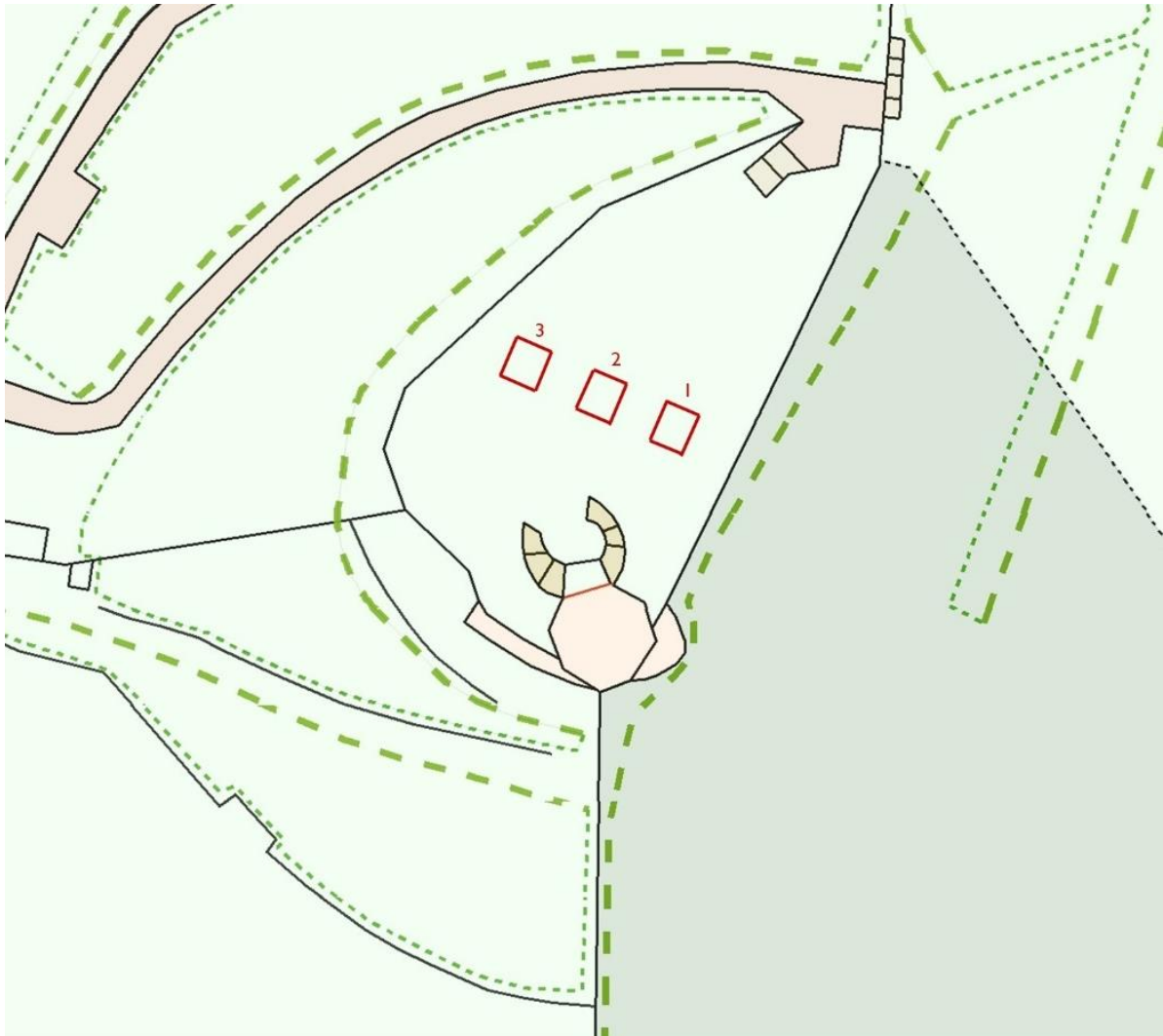
The 2022 excavations: Trench 3, the motte

20th-century deposits

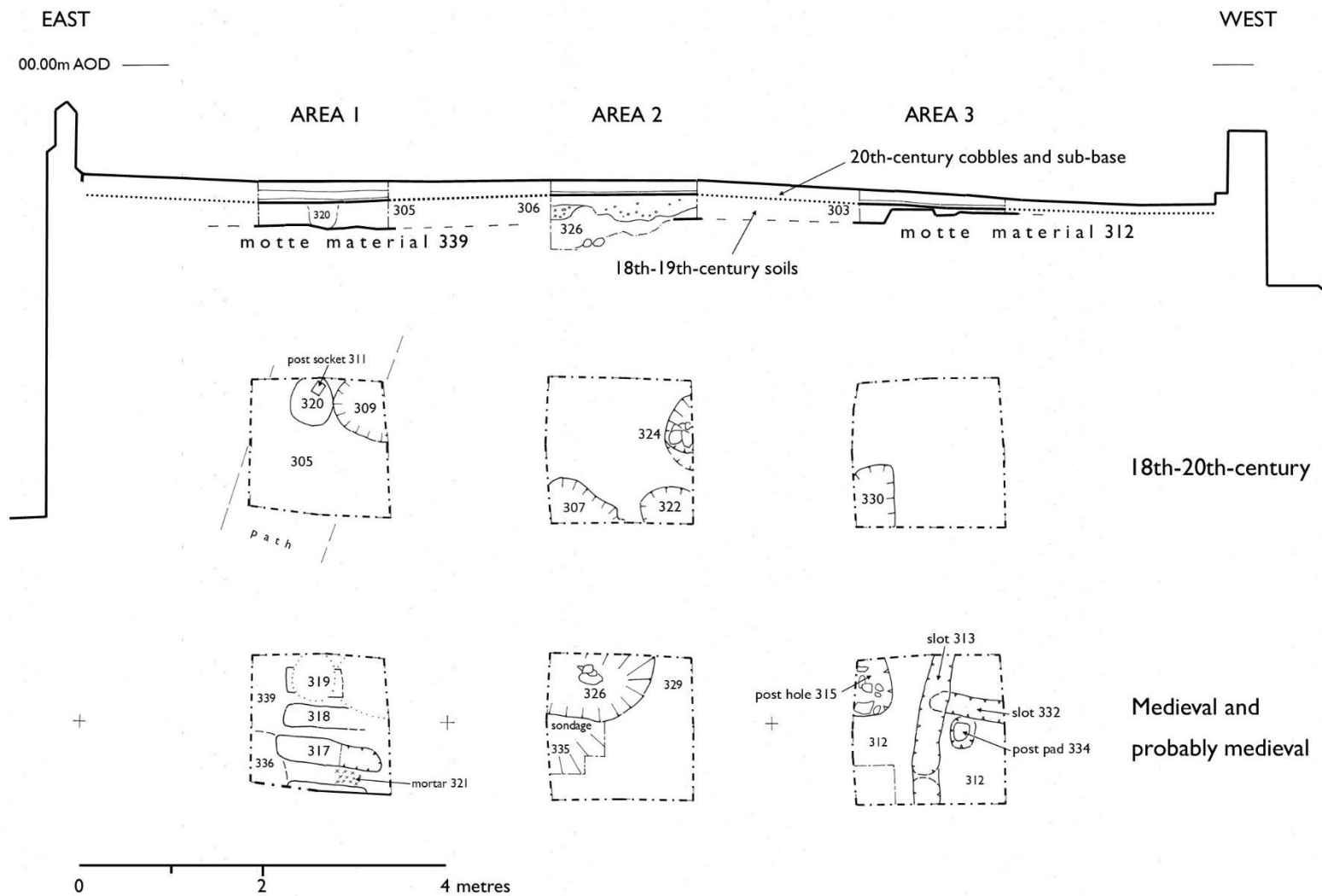
Excavation began by breaking out the 1990s cobbles set in hard cement to a depth of 10-13cms (context 301). The cobbles were found to have been laid on a bed of compacted grey roadstone or ballast (context 302) 4cms deep on the west side of the motte, 11cms deep on the east side, the difference helping to create a surface that sloped down to the west, to shed water into a French drain. Also, on the east side (area 1), similar roadstone-type material (context 304) was deposited to make good a depression 11cms deep on the line of the oval path, created by Telford's workmen in 1786-90 to give access to Laura's Tower from the doorway and steps at the north end of the motte, and commemorated in the 1990s by stones set on edge within the cobbles (fig.13, below). In the central area (Area 2) alone, a blue plastic membrane was found underneath the roadstone layer. The installation of the French drain seems not to have been recorded archaeologically at the time; neither, so far as is known at present, was the cut made for it through the thickness of the west side motte-top perimeter wall.



13. Drone photograph (James Brennan Associates) of the motte top in 2022 (north to right). The cobbled surface of the 1990s slopes down to the west (top) to shed water into the French drain running within the west perimeter wall and cutting through it at the SW angle. Telford's path to Laura's Tower is marked out in the cobbling



14. Plan of the motte showing the location of Trench 3, areas 1, 2 and 3 on the motte top



15. Plans and overall section of the motte top and Trench 3 areas

17th-19th-century deposits and features

The 30-cm depth of topsoil deposited (it is assumed) during Telford's work to create the motte-top garden and reported by the 1990 auger survey (Watson 1990) must have been completely removed when the cobbles were laid, their surface at the same level, photographs suggest, as the previous grassed surface and paths. Removal of the 20th-century roadstone revealed similar deposits in each of the three areas investigated. In Area 1 (east), a red-brown clayey soil (305) was exposed, containing brick, small pieces of sandstone and, particularly, orange sandstone, of similar colour to that used to build Laura's Tower and the wall parapets around the motte and elsewhere. The layer contained medieval and 17th-18th-century pottery. This layer was cut by two features. In the SW corner was a shallow flat-bottomed pit (309, 310) containing pieces of orange crumbly sandstone and sand. In the centre of the south side of the area, and placed within the line of the former path, and orientated to reflect it was a very small (17cm x 14cm) post-socket (311) lined with flat stone slabs. It had probably taken either one leg of a piece of garden furniture or a removable notice board post. The socket was later found to have been built within a much larger circular flat-bottomed pit or cut, 320.

In Area 2 (central) the equivalent layer exposed by removal of the cobbles was a red-brown clayey soil (306) with small stones and, again, orange sandstone pieces; it contained medieval, 18th-19th-century and 19th-century pottery. Wholly within this layer in the north-east corner of Area 2 was a flat-bottomed pit (307, fill 308) containing orange sandstone chippings and sand. Removal of 306 revealed, on the west side of the area, a steep-sided pit 324/325 containing pieces of sandstone and medieval and 17th-18th-century pottery. It may have been a post-hole but it was largely outside the excavated area and could not be identified as such.

In Area 3 (west), removal of the cobble sub-base revealed a layer of solid red-brown clay (303) containing small pieces of cbm (brick or tile), small pieces of green sandstone, degraded red sandstone and patches of dark red clay.



16. Area 1, top of 305 after removal of cobble sub-base layer



17. Area 2 top of 306 after removal of cobble sub-base layer



18. Area 3, top of 303 after removal of cobble sub-base layer



19. Area 1 showing pit 309 (left) and small post socket 311



20. Area I, post-socket 311 (detail)



21. Area I, cut 320, the construction cut for post-socket 311



22. Area 2, pit 307, after excavation



23. Area 2, pit 324, pre-excitation



24. Area 2, pit 324, after excavation

Features cut into the motte material

In each of the three areas, the equivalent of a natural sub-soil into which features had been cut was identified. In Area 3, where it was closest to the modern surface, this material, context 312, consisted of an orange to brown/buff silty clay with some charcoal flecking and occasional small (up to 3cms) pieces of green sandstone.

The occurrence of green sandstone in small pieces in the motte material, and as larger rocks, including post-packing stones, in some of the cut features, is significant. If it is the same green sandstone seen in the base of some sections of the curtain walls – Coed-yr-Allt Beds – it would add strong support to the suspicion that this masonry type was primary to the upgrading of Shrewsbury Castle from an initial earth and timber phase, and was generally 'around' on the site and able to be incorporated into archaeological deposits at the same time as medieval cooking-pots were in use, the 12th-13th centuries.

In Area 1, where motte material lay deepest and was most densely cut about by intrusive features, the equivalent context, 339, consisted of orange-brown silty sandy clay with small stones. In Area 2, the equivalent context, 329, was orange-brown silty clay with occasional small black (?) pieces of sandstone and small rounded stones – though fewer than in 339 in Area 1. These soils can all be characterised as redeposited natural glacial silty clays, sands and gravels with the addition of small quantities of extraneous material (charcoal, green sandstone pieces) and the slight variation from area to area is no surprise given the very mixed character of the natural glacial deposits firmly identified and tested in Trench 1 in the inner bailey in 2019 (Baker 2020). A 50cm x 50cm x 50cm sondage was cut through the base of pit 330 in Area 3 and established that the motte-material in that trench, context 312, lay unchanged in character through a total investigated depth of c.0.7m.

A number of negative features were found cut into this motte material, nearly all of a structural character – a post-pad, slots and post-holes – sealed by the post-medieval deposits described above. These structural negative features were not all dateable and need not all have been of medieval date. Additionally, the excavation of a large negative feature 335 on the east side of Area 2 was complicated by the observation of steep tip lines that may either have derived from the negative feature itself occupying a larger area than was recognised during the final stages of the excavation, or from the exposure in its sides of tips within the underlying motte material. Some features cut into the motte material were identified but left unexcavated.

The motte-material/negative-feature horizon was first fully exposed in the shallowest excavated area, 3, to the west.



25. Area 3 (north to top), first exposure of motte material 312 cut by negative features: slot 313 is visible pre-excitation running centrally north-south, post-hole 315 is represented at this level by the cluster of green sandstone pieces, bottom right

In **Area 3**, a shallow fairly straight-sided cut feature (313/314) was first identified running north-south, its fill of grey-brown clayey silty soil contrasting with the surrounding motte material. Excavation showed this to be a shallow flat-bottomed feature, possibly a foundation slot for a horizontal timber or possibly the very bottom of a truncated, formerly deeper, linear cut, with a very slight westwards curve, possibly dug in two separate lengths end-to-end. In the top of its fill were some small brick pieces and one clay pipe fragment suggesting either that it was of post-medieval date or that later material had been introduced into the top of its fill from later contexts immediately above and the levelling-down operations on this side of the motte.

This north-south slot was found to have cut across an earlier east-west slot 332/333, flat bottomed, with a fill of medium-brown silty-clayey soil. This was in turn found to have cut what is interpreted as a post pad, 314, a green sandstone slab forming a flat base within a slight cut into the underlying motte material. Neither the east-west slot nor the post-pad contained any artefacts, so, strictly speaking, are undated.

In the south-east corner of Area 3, a cluster of pieces of green sandstone rubble was found by excavation to be a probable post-hole, 315, with the sandstone remaining from packing around a central post. This too produced no dateable artefacts. In the north-east corner of Area 3 a steep-sided flat-bottomed small pit or post-hole 330/331 was filled with a sterile medium brown silty-clayey soil with small stones.



26. Area 3, N-S slot 313 under excavation



27. Area 3, post-hole 315 after excavation



28. Area 3 pit or post-hole 330 after excavation



29. Area 3 at the end of the excavation (north to left). Post-pad 334 is in the centre foreground cut by slot 332. A 50cm-square test sondage has been sunk through the base of pit 330 (top left)

Area I towards the east side of the motte produced the densest array of features cut into the motte material below the sandstone-filled post-medieval deposit above.



30. Area I, east-west slots cutting motte material 339, first definition. Three linear features are visible, framed by the 1m scales, top to bottom: 317, 318, 319. A later intrusive feature 320 has not yet been identified and defined (centre, bottom)

On the north side, an east-west slot 317 was found to be flat bottomed and up to c.21cm deep; it contained only early medieval (12th-13th-century) pottery. At its east end it appeared to cut an earlier negative feature 336 in the north-east corner of the area, filled with a medium brown gritty, gravelly soil 337; this was not excavated, though cleaning of its surface produced a sherd of medieval cooking pot. To the north of slot 317, right at the base of the section, another east-west-running edge was seen; this was suspected to be a further parallel slot, numbered 338, but was left unexcavated. Between this and slot 317 was a patch of mortar with pieces of sandstone, 321, cut by both 338 and 317.

South of slot 317 was another, 318, which was found to butt-end towards the east side of the excavated area while fading out to the west. In its surface was a piece of 17th-18th-century slipware, though this could have been introduced from one of the intrusive contexts immediately above it. Along the south side of the excavation was another east-west linear feature, 319, though little of this was seen as it was found to have been largely cut away by the late post-medieval post-hole 320.



31. Area 1, looking east (north to left) on the conclusion of the excavation. Left to right: mortar patch 321, cut by unexcavated feature 338 on the left, and slot 317 (half-sectioned) on its right, slot 318 diminishing in depth in centre foreground, later pit 320 cutting another slot 319



32. Area 1, looking west (north to right). Left: pit 320 cutting the remains of slot 319 (foreground), slot 318, largely unexcavated, slot 317 half-sectioned, mortar patch 321 to its right/north, cut on its right by unexcavated slot 338; the darker area bottom right resolved into (unexcavated) feature 336/7

Area 2 appeared to lack the fairly dense pattern of parallel or perpendicular and intercut structural features of the areas either side. Pit or post-hole 324/325 in its west section has already been described; it contained a piece of 17th-18th-century pottery and may well have been of post-medieval date. In the north-west corner of the area was another probable pit, 322, filled with a dirty orange-brown silty clay with pebbles and patches of black degraded

sandstone; it contained no artefacts. In the south-east corner of the area was a large, steep-sided negative feature interpreted as a pit, 326. Its upper fill, 327, consisted of dark brown and red silty soils with abundant gravel; its lower fill – as excavated – consisted of red-brown silty soil, 328, which contained a piece of medieval cooking pot of 12th-13th-century date. Large river cobbles occurred on the interface between the fills 327 and 328. As the excavation drew to a close, attempts to define a really satisfactorily certain, hard edge to this feature against the underlying motte material 329 proved unsuccessful. A small sondage excavated on its north side disclosed a definite gravel slope inclined downwards to the south-east. This may have been the ‘real’ edge of feature 326 which could not be defined in the time available at motte-surface level, but neither was it certain that the inclined stratum was not a tip-line within the motte material itself. The excavation of the sondage was numbered 335 and produced a sherd of the medieval (12th-13th-century) cooking pot. In the writer’s view, the inclusion of a piece of cooking-pot in this material suggests it was indeed part of a larger incompletely-defined early medieval negative feature rather than motte material.



33. Area 2, looking south, pit 335 after excavation



34. Area 2, looking east, pit 335 on right



35. Trench 3, looking west at end of excavation, Area I in foreground



36. Trench 3, looking east, Area 3 in foreground

The north curtain wall: trench 4

Introduction to the north curtain wall

The north curtain wall, set back a few metres from the steep slope down to Shrewsbury Station, extends from the tower at the north end of the hall on a curving course south-east to the Postern Gate. A detailed description and analysis is beyond the scope of this report but in general, the wall is ashlar-built, of large blocks of mixed origin and colour on the inside face, and much smaller and well-coursed blocks on the exterior face. The exception is the north-west end of the wall by the hall and north tower, which is (or was) characterised by rubble masonry, particularly in the lower courses (Hunns, Powell and Baker 2022, Level 3 building record). The parapet and wall walk has been rebuilt along the entire stretch, possibly either by Telford, or by the architect J P Pritchett, responsible for rebuilding the hall parapets in 1887, recorded by a datestone on the hall roof. The type of ashlar (its quarry source is unidentified) seen on much of the outer face is not of a type found elsewhere in Shrewsbury – as far as is known to this writer – moreover this part of the wall has two offset plinth courses, again this is not a feature seen elsewhere in medieval Shrewsbury. Given that there are several references to collapses of the outside face of the curtain wall in this area in the 19th and 20th centuries it had always seemed possible that much of the visible fabric could be of 19th-century date. A trench was therefore designed to explore this possibility and to test for the survival of earlier fabric at the base of the wall below the present grassed surface. The trench, which was excavated largely by UCS personnel, also offered the possibility of evaluating any archaeological deposits lying immediately outside the wall at the top of the slope and compiling a profile through the northern defences.



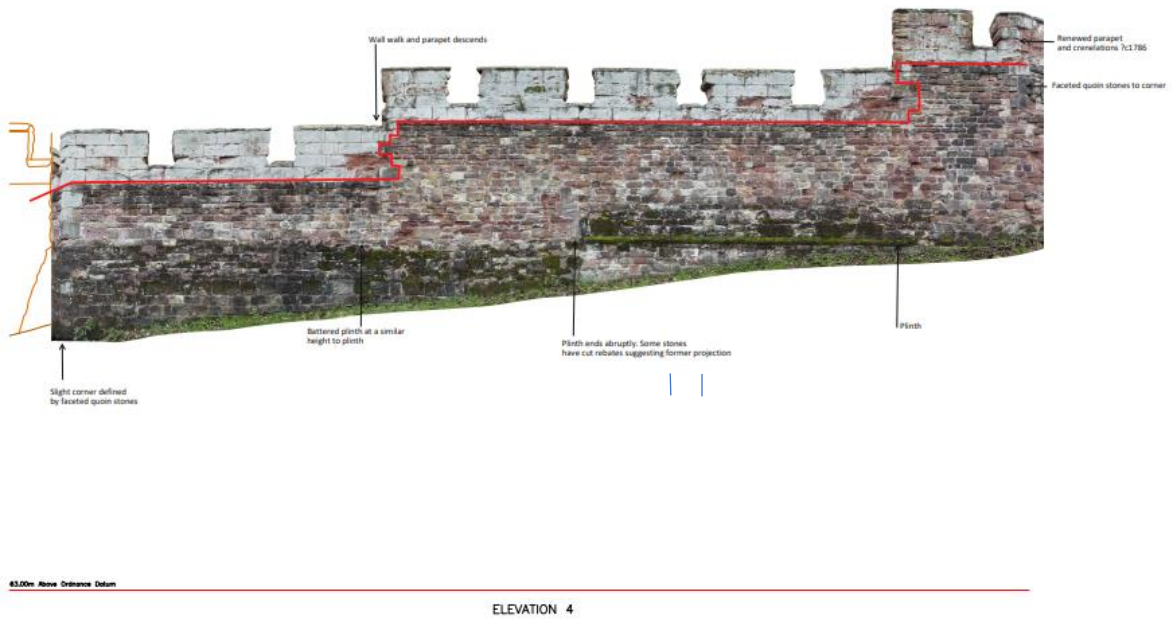
37. The north-west end of the north curtain wall, showing multiply rebuilt masonry above probable primary Green Coed-yr-Allt Beds sandstone slabby rubble



38. The central section of the north curtain wall. This marks the commencement of the sandstone rubble section with high plinth courses examined in Trench 4

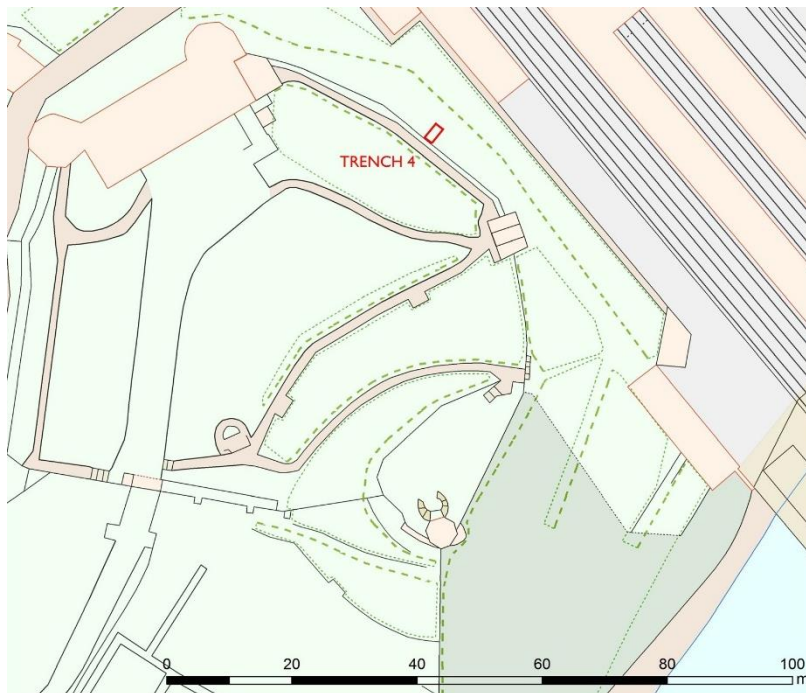


39. The east section of the north curtain running down-slope (the motte ditch profile) to the Postern Gate. Trench 4 examined this section



<p>SHREWSBURY CASTLE Wall - External Elevations</p> <p>0.00 1.00 2.00 3.00 4.00 5.00 10.00 metres</p>	<p>Surveyed & drawn by: James Brennan Associates Chartered Surveyors 10, May's Hall St. Mary's Cross Shrewsbury SY1 1EQ (01753 20111) www.jamesbrennan.co.uk</p>	<p>Architect: Arrol Architects 10, May's Hall St. Mary's Cross Shrewsbury SY1 1EQ (01753 20111) www.arrolarchitects.co.uk</p>	<p>Client:</p>
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40. Photogrammetric elevation of the north curtain wall east section from the conservation management plan (survey: James Brennan Associates; CMP interpretation: Vicky Hunns)



41. Trench 4 location plan

Trench 4 results

Excavation began with the removal of a thin layer of turf and red-brown dry dusty soil with darker mottling and orange mottling (402); it contained glass and pottery sherds and some plastic and was confined to the half of the trench nearest the wall. It in turn overlay another thin, soft, sandy layer (403) containing pieces of sandstone and mortar.

The sandy layers 402 and 403 were bounded to the east (more correctly, north-east) by a strip of white to buff cementitious sandy mortar in a grey dusty soil (404). Initially taken for the top of a wall or a wall robber-trench, excavation immediately showed it to be c.5cms deep at most; moreover, it contained pieces of orange baling twine, establishing it as a mid/late 20th-century context.

Beyond (east of) the mortar strip 404 and immediately under the turf was a much more substantial layer of dark grey-brown gritty soil (401) containing clinker and small pieces of brick, mortar and small stones, with 19th-century pottery sherds. On removal of 403 and 404 it was found to occupy the whole length of the trench, in which it was the principal topsoil equivalent. It was found to be covering a c.1-inch diameter iron pipe, running parallel to the wall, which, it was thought (pers. comm Ian Pritchard), probably contained a disused electricity cable formerly providing power to Laura's Tower on the motte. The mortar strip 404 is unexplained, though it may have formed a path or other feature bounding a flower-bed represented by the sandy soils 402/403.

Removal of the black gritty topsoil revealed a deposit of light yellow-brown or khaki clayey soil (405) with ash and charcoal derived from the overlying 401 in its surface. Just short of the eastern end of the trench, a line of stones set on edge dug into this material probably represented the edging to a path running parallel to the curtain wall with a lawn or flowerbed between it and the wall. Outside/east of this wall or edging was a darker, dirtier version (410) of the clayey soil 405. Removal of a c.15cm-depth of 405 showed that it became cleaner and inclusion-free and artefact-free with depth and it was realised that it was in all probability the top of a natural deposit. This was later confirmed by sinking a 50cm-square sondage through it, revealing a sharp transition to angular gravel in a sandy, gritty, matrix (not excavated), which was more definitely a natural deposit.

Closer to the curtain wall, removal of the black gritty topsoil revealed a deposit (406) of grey to khaki clayey soil which lay up against the topmost foundation course of the curtain wall. Removal of 406 revealed a light-brown to yellow-orange silty clay or clayey silt (407) which appeared to be a disturbed, slightly dirtier, version of the underlying 405 natural clayey soil. Excavation of 407 revealed a linear edge against the underlying 405, fairly certainly the (or a) foundation cut for the footings of the curtain wall, containing sandstone rubble and mortar (408, unexcavated). 407 was interpreted as 'builders' trample' filling and spilling out over the natural surface from the cut for the curtain wall foundations.

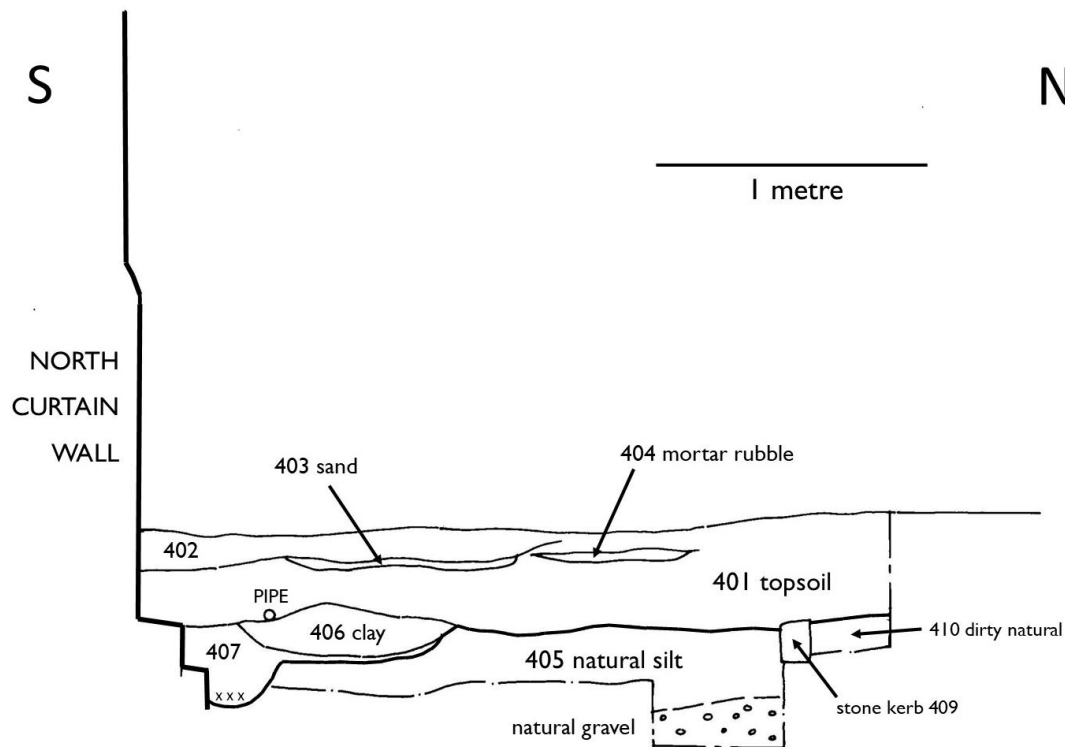
The curtain wall footings

These were found to be of the simplest type: from the level of the foundation trench, the thickness of the wall was stepped back twice to the main plane of the superstructure up to a plinth course about 0.7m above present ground level, 1.1m above the footings. This is

somewhat different to the usual early medieval practice in Shrewsbury (such as St Mary's Church, Shrewsbury Abbey church, the town wall), where the plinth course marks the transition from rough footings to ashlar superstructure and therefore is always to be found just above ground level.

Trench 4: discussion and interpretation

The excavation of Trench 4 was not able to demonstrate or prove that this section of the curtain wall was rebuilt in the 19th (or even 20th) century – but the results obtained are consistent with that interpretation. Topsoil containing 19th-century material was in direct contact with the footings; there was not a longer, deeper, accumulation of strata outside the wall. The footings themselves have no dateable characteristics: they cannot be said with certainty not to be medieval, and they seem to be – at least as far as this tiny sample exposure went – built of a single type of stone, probably Keele Beds purple-grey sandstone. They therefore contrast with the mixed-source squared rubble of the wall immediately above. While it seems possible that the footing courses are indeed medieval, it is highly unlikely that the masonry above is, as it has all the hallmarks of a wall built with re-used masonry, at least up to the high plinth course – which is not consistent with known local medieval prototypes. Above the high plinth and up to the replaced parapet, the masonry is consistent and well coursed throughout, but of a block size (small, rectangular squared rubble) that is also inconsistent with local medieval practice. It is suggestive of a long stretch of rebuilding along the curtain wall (see wall-face photographs above), though this cannot currently be dated.



42. Trench 4, extramural section



43. Trench 4, vertical view at an early stage of excavation showing, from bottom to top (west to east) sandy layers 402 and 403 bounded by the mortar strip 404, with black gritty topsoil 401 outside/beyond it. All are 19th- or 20th-century contexts



44. Trench 4, view of the completed trench looking north-west, showing the principal (dark) topsoil layer 401 covering (l-r) 405 natural clay silt, 50cm sondage through 405, sandstone edging 409 and 'dirty natural' 410



45. Trench 4, close-up of the stratigraphy overlying the curtain wall footings

An assessment of the pottery by Stephanie Rátkai

Introduction

A small collection of sherds was recovered from excavation on the castle motte.

The same pottery coding system was used as in previous years. This derives from work done by the author on various sites in Shrewsbury and includes a pottery type series (in archive) abbreviated details of which were published as part of the Barker Street report (Rátkai 2022).

The pottery was quantified by sherd weight and count, and minimum rim, base and handle count. Vessel form was noted and details of glaze, decoration and sooting were recorded in a comments field. The data were entered onto an Excel worksheet and form part of the archive. The data are presented in Table 1, below.

The Motte Top Trench 3

Area 1

There is so little pottery from this area that it is difficult to infer much from it. It is clear that much of the soil and hence the pottery has been scoured from the top of the motte. In this area the topsoil (305) contained pottery that pre-dated the second quarter of 18th century. This consisted of slip decorated ware and tin-glazed earthenware. The latter appears to differ from the standard and commonly seen Anglo-Dutch type and there is a possibility that this is Spanish or early Netherlandish. A feathered /combed slipware was found in slot 318 dating to the later 17th-mid 18th century, although this is presumably intrusive from 305.

There were two black, medieval cooking pot sherds (Fabric Cc2, Worcester-type cooking pot) dating to the 12th-13th century, one from 305 and one from the top of unexcavated feature 336 and it is possible that they were part of the same vessel originally. A medieval glazed ware (Fabric Cb2) dating to the 12th-13th century was found in slot 317.

Given the paucity of medieval pottery it does seem likely that the 12th- to 13th-century sherds were contemporary with the slots with the feathered slipware intrusive in slot 318.

Area 2

A soil layer (306) contained an 18th-19th-century trailed slipware and a 19th-century utilitarian white earthenware sherd. There were two medieval sherds, a cooking pot and a glazed ware in identical fabrics to those from soil (305).

Pit/posthole 324 contained a glazed jar rim (Fabric Ab1.1) dating to the ?13th century and a glazed body sherd from a jug or pitcher (Fabric CB3), dating to the 12th-13th century. However, the fill also contained a 96g post-medieval coarseware sherd from a jar.

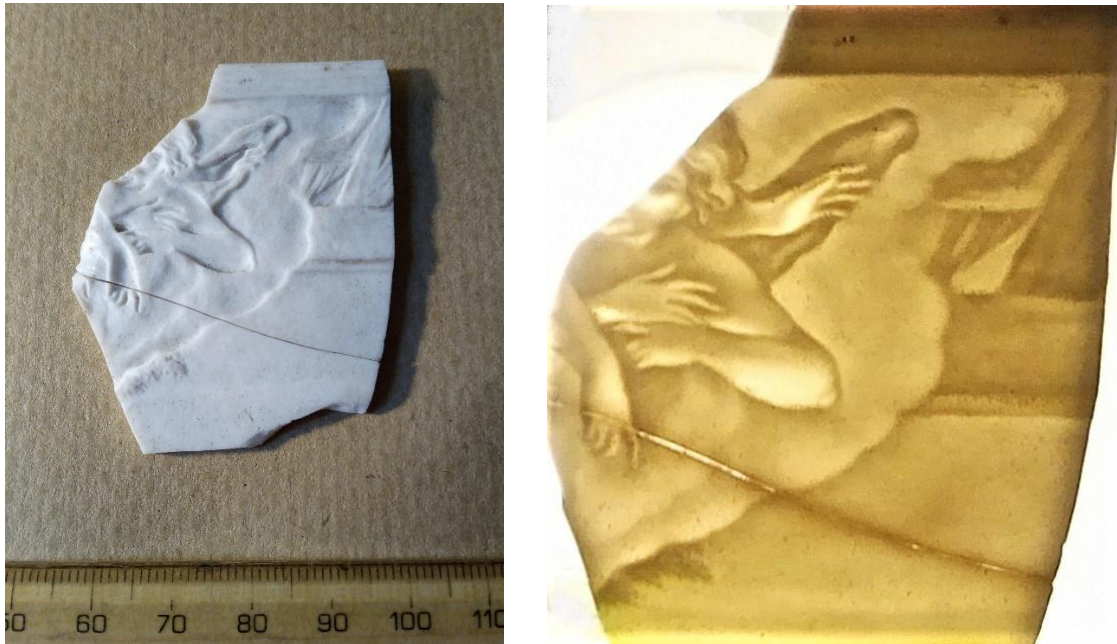
The lower fill of Pit 326 also held medieval pottery; a sherd from a glazed pitcher (Fabric Cb2, see above) dating to the 12th to early-13th century and a cooking pot (Fabric Cd2.1) dating to the 12th-13th century. There was one final medieval sherd (Fabric Cc2), found lying on the top of unexcavated feature 335.

The medieval pottery fabrics and the date ranges are largely the same as those from Trench 3 Area 1.

Extramural Trench 4

The topsoil (401) consisted of a variety of 19th century sherds for the most part. There is nothing particularly striking about them and they cover the usual spectrum of wares from the utilitarian (coarseware and buff, grey and brown stonewares) to dining and tea wares (blue transfer-printed wares, creamware and painted ware). A small number of glazed utilitarian white earthenware sherds were too small to identify to vessel form. English porcelain sherds were also found. These seemed to post-date 1850 with one sherd having applied decoration and gilding. There were residual post-medieval sherds; three blackware sherds and one yellow ware from unidentifiable hollow wares. These pre-date Telford's connection with the castle by some years.

Other ceramic items consisted of a small piece of daub or burnt clay, a marble, part of a flowerpot, and an unusual find of a broken bisque porcelain lithophane showing an angel (below).



46, 47, Image and enhanced image of the 19th-century porcelain lithophane

Lithophanes were invented in France but Germany became the main manufacturer with the peak of their popularity spanning c. 1840-1870 (Hampshire Cultural trust, undated). The lithophane needed to be lit from behind, so that the detail of the relief image carved on it could be seen. For this reason, lithophanes were made into lampshades, for example, or

hung on windows. Quite how the example from the castle came to be outside the curtain wall is a mystery.

Soil layers (402) and (403) contained a small flowerpot sherd and a sherd from a 17th-century blackware mug respectively.

Discussion

Such a small assemblage does not provide very much information that can be interpreted in a meaningful way. The medieval pottery could be matched to that found at Barker Street, Shrewsbury (Rátkai 2022) and the dating proposed here corroborated.

Two broad observations can be drawn from the Shrewsbury Castle assemblage. The first of these is that the group of medieval pottery does seem remarkably consistent and gives a *terminus ante quem* of the 12th-13th centuries for the cut features on the motte. However, given that Worcester-type cooking pots sherds predominate it is quite possible that the cut features observed are associated with the earliest phase of the castle since by the 13th century local cooking pots should be the more common type rather than those brought into the area almost certainly via the River Severn. An early occurrence of Worcester-type cooking pot was noted at Wigmore Castle for example (Rátkai 2015). In addition, there is an absence of Malvernian cooking pot which would tend to suggest an earlier rather than a later date. However, any conclusions drawn from the medieval pottery are speculative at best given how few sherds were found.

Post-medieval and later pottery was recorded more frequently but still the count is relatively small and with most sherds coming from soil layers. The effect of Telford's work on the motte can be clearly seen in the total absence of any pottery dating from the the 14th-16th centuries and the few sherds that could date from the 17th to mid-18th century.

Area	Ctxt	Ctxt Description	Fabric	Code	Qty	Wght	MR	MB	MH	Form	Date
T3 Motte top 1	305	soil layer	Trailed slipware	SLPW	3	61	1			bowl	mid 17th-early 18th c
T3 Motte top 1	305	soil layer	Trailed slipware	SLPW	1	6				bowl	mid 17th-early 18th c
T3 Motte top 1	305	soil layer	Medieval cooking pot	Cc2	1	19				cpj	12th-13th c
T3 Motte top 1	305	soil layer	Tin-glazed earthenware	TGE	1	1				bowl?	?
T3 Motte top 1	317	slot	Medieval glazed ware	Cb2	1	4				jug?	12th-13th c
T3 Motte top 1	318	slot	Feathered slipware	SLPW	1	2	1				later 17th-mid 18th c
T3 Motte top 1	336	unexcavated feature	Medieval cooking pot	Cc2	1	19				mug	12th-13th c
T3 Motte top 2	306	soil layer	Medieval cooking pot	Cc2	1	4				cpj	12th-13th c
T3 Motte top 2	306	soil layer	Medieval glazed ware	Cb2	1	9				jug?	12th-13th c
T3 Motte top 2	306	soil layer	Utilitarian whiteware	UTW	1	4		1		?	19th c
T3 Motte top 2	306	soil layer	Trailed slipware	SLPW	1	19		1		platter	mid18th-19th c
T3 Motte top 2	324	pit/ph	Coarseware	CW	1	96				jar	17th-18th c
T3 Motte top 2	324	pit/ph	Medieval glazed ware	Cb3	1	11				pitcher/jug	12th-13th c
T3 Motte top 2	324	pit/ph	Medieval glazed reduced ware	Ab4?	1	3	1			jar	13th c?
T3 Motte top 2	328	pit 326 lower fill	Medieval cooking pot	Cd2.1	1	22				cpj	12th-13th c
T3 Motte top 2	328	pit 326 lower fill	Medieval glazed ware	Cb2	1	13				pitcher	12th-13th c
T3 Motte top 2	335	unexcavated feature	Medieval cooking pot	Cc2	1	8	1			cpj	12th-13th c
T4 Extramural	401	topsoil	Painted ware	PAINTW	1	2				hollow ware	19th c
T4 Extramural	401	topsoil	Porcelain (English)	PORC(E)	1	7		1		plate	19th c
T4 Extramural	401	topsoil	Stoneware buff	STW	1	12				hollow ware	19th c
T4 Extramural	401	topsoil	Porcelain (English)	PORC(E)	1	17	1			bowl?	19th c ?late
T4 Extramural	401	topsoil	Porcelain (English)	PORC(E)	1	3	1			plate?	19th c
T4 Extramural	401	topsoil	Stoneware grey	STW	1	7				hollow ware	19th c

T4 Extramural	401	topsoil	White bisque porcelain	WBISQ	3	13					lithophane	19th c
T4 Extramural	401	topsoil	Yellow ware	YW	1	3					hollow ware	17th-early 18th c
T4 Extramural	401	topsoil	Stoneware Nottingham-type	STW	1	1					hollow ware	19th c
T4 Extramural	401	topsoil	Utilitarian whiteware	UTW	6	12					?	19th c
T4 Extramural	401	topsoil	Blackware	BLW	3	6					hollow ware	17th-early 18th c
T4 Extramural	401	topsoil	Blue transfer-printed ?	BITrans	1	2			1		plate	19th c
T4 Extramural	401	topsoil	CBM (daub?)	CBM	1	20					CBM	?
T4 Extramural	401	topsoil	Blue transfer-printed	BITrans	1	2					plate	19th c
T4 Extramural	401	topsoil	Blue transfer-printed	BITrans	1	2					plate	19th c
T4 Extramural	401	topsoil	Creamware	CRW	9	17					?	c1800
T4 Extramural	401	topsoil	Flowerpot	FPOT	18	106	3	2			flowerpot	19th-20th c
T4 Extramural	401	topsoil	Ceramic marble	MISC	1	4					marble	19th-early 20th c
T4 Extramural	401	topsoil	Misc. earthenware	MISC	1	2	1				bowl?	19th c
T4 Extramural	401	topsoil	Coarseware	CW	1	9					bowl, wide-mouthed	17th-18th c or later
T4 Extramural	402	soil layer	Flowerpot	FPOT	1	1					flowerpot	19th-20th c
T4 Extramural	403	soil layer	Blackware	BLW	1	13				1	mug	17th c
T4 Extramural	404	mortar?path	Creamware	CRW	1	2					hollow ware	1760s/70s

Table I: pottery quantification

Shrewsbury castle motte: discussion and conclusions

Final conclusions on the form and development of the motte must await final publication and, in particular, the opportunity to fully embrace the results of the 2021-2022 conservation-management plan process in terms of the photogrammetric recording and the analysis of the retaining walls. Nevertheless, some basic conclusions can begin to be drawn.

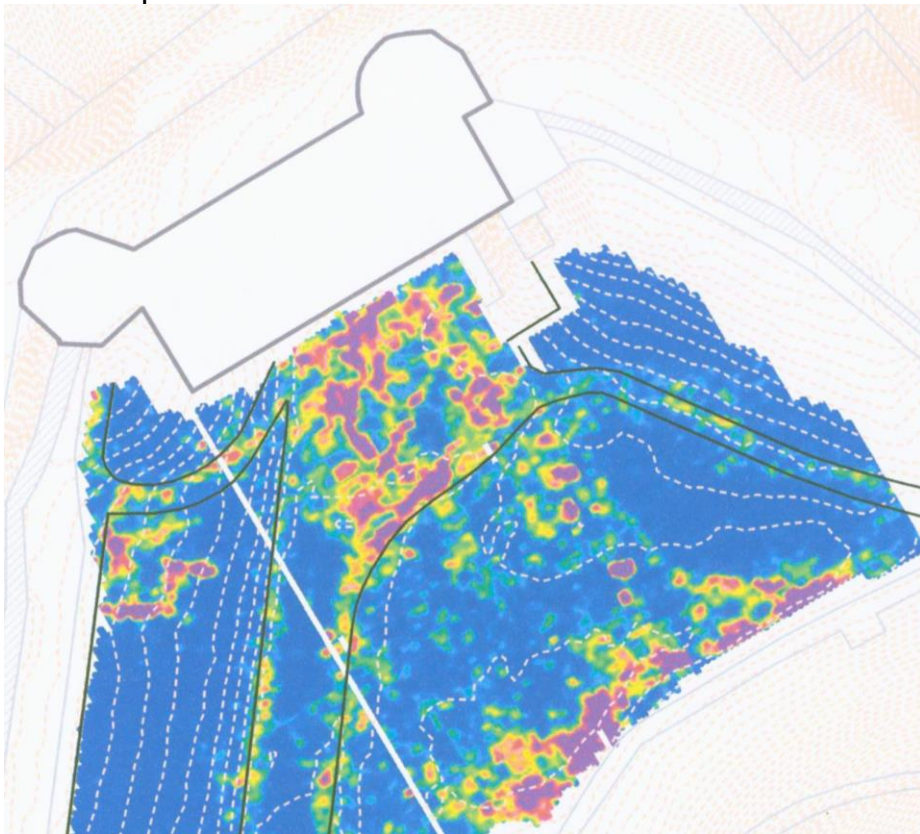
From the results of the 2022 excavation, it can now be seen that the installation of the cobbles on the motte top in the 1990s did little damage to medieval deposits and structures. Severe damage had already been done by Thomas Telford in the years between 1786 and 1790, as can be seen from intimate contact between the layers full of sandstone chippings, particularly orange, presumably Nesscliffe, sandstone (303-305-306) and the motte material and features cut into it. There was no sign of the kind of vertical stratigraphic accumulation that might be expected behind the retaining walls on the motte top; there was no sign of any floor surfaces. In short, it looks as if the motte top had been stripped bare when Laura's Tower and the parapets were being built, and any rubble from the demolition of walls that, at that date, still stood to wall-plate height, had been removed. The 1990s cobbling certainly cut into the deposits associated with Telford's work, and removed his imported garden topsoil, but it was the French drain around the west side of the motte, and its exit through the retaining wall, that will have damaged medieval archaeology, apparently without record. The cobbles were, however, a necessity, arising from water ingress into the motte material, saturating it and exerting outward pressure on the retaining walls (H.E. Registry files). In short, the section across the motte top shows a thin sandwich of strata – a collectively thick 20th-century layer of cobbling and its sub-base replacing the imported 18th-century garden soil and turf, over a layer of mixed 18th-century soil and sandstone building debris, thick on the east side and in the centre but reduced to zero on the west side to create the desired fall on the 1990s cobbled surface, over the top of the motte material.

Despite the severe damage wrought by Telford, enough archaeological evidence survives to reconstruct at least some aspects of the medieval motte. In addition to the documented great wooden tower, it is now clear there were other, lesser, buildings on the summit. In the interior there were sequential timber-framed structures: their existence is certain, their form and function are not. Additionally, the south side of the motte incorporated at least one major stone building whose substructure remains although its superstructure was destroyed at the end of the 18th century. Around the west side of the motte, overlooking the inner bailey, was a plain retaining wall whose green sandstone (Coed-yr-Allt beds) footings and core-work suggest that it was an early feature of the motte masonry. It may not be unreasonable to see Shrewsbury Castle motte as a shell-keep, with a summit perimeter wall enclosing other buildings.

One question that was raised in the 2020 interim report (Baker 2021) was the whereabouts of the king's hall, documented at various dates within the castle. The question arose, firstly, from the identification of the present 'hall' as most probably a royal chamber block (by Richard K Morriss), a storeyed residential range likely to be found in association with a ground-floor hall nearby. This identification neatly fitted with the building of the *camera regis* recorded in the accounts for 1239-41 and the dendrochronological felling dates of 1234-49 obtained from timbers that are clearly primary to the 'hall' masonry. The question of the whereabouts of the royal hall was made more pointed by the realisation that the inner bailey was, in the early life of the castle, absolutely tiny, much of its space taken up by the

motte ditch found in 2019 and pre-dating the westward expansion of the bailey suggested by the results of the 2020 excavation. It was suggested that one option for the location of the royal hall could possibly have been the top of the motte. At face value, given the motte's present form, this seems unlikely: it is simply too small. However, the north-south measurement of the motte summit is about 30 metres, and it seems possible that its original east-west measurement, before the collapse of the eastern side of the motte by riverine erosion at its base in the 13th century, was something similar. This would take the Shrewsbury motte into the same sort of league as Tamworth, whose shell keep contains its hall (in later form about 13m by 9m) on a motte summit about 30 metres by 36 metres. This is a question that needs further investigation leading up to final publication.

Was Shrewsbury motte a shell keep? In the sense that its summit was surrounded by a defensible perimeter wall enclosing a number of buildings, the answer seems to be a positive one, with the qualification that at least part of the perimeter was, at some period, a connective one, joining one or more buildings that were, or became, incorporated into the perimeter fabric, rather than a single-phase enceinte within which buildings came and went without impact.



48. GPR plot by Tiger Geo (2019) showing (1) a line of hard reflective targets running across the bailey south, perpendicular to the hall, towards the motte, possibly indicative of a flying bridge and (2) hard reflective targets around the base of the motte

Finally, two elements of the motte fabric have not been investigated but would be susceptible to excavation. How the motte top was accessed is unknown, though the 2019 CST-sponsored geophysical investigation of the inner bailey by TigerGeo did find a line of individual hard reflective targets across the bailey heading south from the present door at the north/low end of the hall that could be indicative of deep – maybe even Telford-proof –

footings for a flying bridge up the side of the motte. GPR also indicated substantial buried foundations around the base of the motte, very probably indicative of a substantial perimeter wall around the base of the motte forming the inner edge of the ditch. This is, perhaps, the most fruitful area for archaeological investigation in future generations. It presents another deep and therefore probably Telford-proof target, though one which would come with all the costs associated with the need to secure a potentially very deep excavation, and deal with the processing and conservation costs of a much larger body of artefacts, potentially with organic preservation, than the castle has so far yielded.

Further work

Attention now turns to final publication, whose form is, at the time of writing (1st August 2023) in a form still under discussion. In principle, however, final publication will be able to fully incorporate newly-available material from outside the CST-funded excavation process, in particular a Victoria County History text by Bob Cromarty, and the analysis of the standing walls and buildings undertaken as part of the 2022-3 conservation management plan. Additionally, research on the castle continues in other directions. In June 2023 initial confirmation was received that suspected musketry impacts on the woodwork of the main gate, around the postern gate, and on the north end of the hall is indeed what it had been thought to be, and an analysis of this, and of the firearms represented will, it is hoped, be included in the final publication.

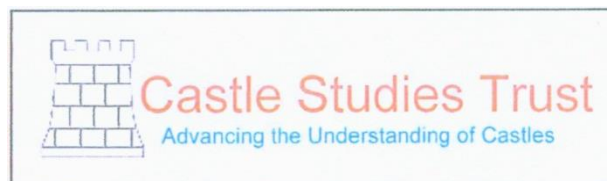
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