

The 2008 and 2009 Excavation Seasons at the Site of the *Vicus ad Martis Tudertium* (PG)

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Introduction

The settlement of the *Vicus ad Martis Tudertium* was located on the western branch of the ancient Via Flaminia. The name is found in several ancient itineraries, including the 1st century *Itinerarium Gaditanum* (“ad Martis” or “Martis”)¹, the *Tabula Peutingeriana*, (where the text “vicus ad martis” may be seen below the “C” in “Picenum”)² and the 3rd-century *Itinerarium Antoninum*³. Despite the apparent importance of the site in antiquity, by the Middle Ages it seems to have disappeared completely. Nevertheless in 1938, based in part on several inscriptions found in the area, Giovanni Becatti proposed that the *vicus* was located in the immediate vicinity of the church of S. Maria in Pantano near the modern town of Massa Martana⁴. Since then several other inscriptions have emerged which strengthen this hypothesis⁵. The 2008 and 2009 excavation seasons at the site (fig. 1) have revealed the presence of a substantial Roman-period settlement which we identify with the *vicus*, confirming Becatti’s hypothesis⁶.



Fig. 1. Map of the excavation area.

* Stratigraphic Unit (US) will be in bold.

¹ CIL XI 3281.

² LEVI and LEVI 1967.

³ CUNTZ and WIRTH 1990.

⁴ BECATTI 1938.

⁵ BRUSCHETTI 1994.

⁶ Preliminary reports on the excavation have been delivered by the present author at the 2009 and 2010 national conferences of the Archaeological Institute of America in Philadelphia, PA, and Anaheim, CA, respectively. This paper benefited from the comments of my colleague Sarah Harvey, who was Assistant Director at the site in 2009.

The Area

The church itself (fig. 2) was built as early as the ninth century, apparently re-using an extant late-antique building⁷. Although there are several subsurface structures near the church, no other ancient ruins remain above ground⁸. The church faces east and is aligned with a modern road which branches from the SS316 in a northerly direction immediately in front of it, suggesting strongly that this road follows a medieval –and possibly earlier– orientation. Both roads lead to the modern town of Massa Martana, approximately 2 km to the north. It has been assumed at least since Becatti's publication that the road running past the church's front entrance represents the ancient Via Flaminia and this is the name the road bears today. North of the church runs a small torrent, the Tribio, which, while now usually dry, in the past often ran quite full and even flooded the area in living memory. It is perhaps due in part to this torrent that the church gained its name "in the Bog". Not far behind the church to the east, there is a noticeable rise in the land, and the Monti Martani rise up sharply within a kilometer.



Fig. 2. The Church of S. Maria in Pantano today.

The site is not far from several well known sites along the Flaminia, including, from south to north, the ancient Roman city of *Carsulae* (interestingly not on any ancient itineraries, despite its large size) ca. 13 km away, the remains under the church of San Giovanni de Butris (8 km), the viaduct of the Ponte Fonnaia (4 km), another viaduct substructure near the Massa Martana train station (nearly 3 km), and the villa of San Faustino (2 km), which boasts a church constructed with the use of numerous *spolia* from Roman-period buildings, perhaps including some from the *vicus* itself⁹.

We began our excavations in the summer of 2008 in the field immediately north of the church. While the location was chosen primarily for its proximity to the church, the presence in aerial photographs of a surface feature running north-south for at least several dozen meters to the east of the church helped us to more precisely locate our first trench. As it turned out, the first evidence of ancient structures emerged fairly close to the surface, after only partial removal of the topsoil layer (ca. 40 cm). Unsurprisingly damage to these uppermost ancient structures was significant. In 2009 we also discovered several stone-filled drainage trenches near the surface, running parallel to each other ca. 3.5 m apart. These are fairly high in elevation and, even in the absence of datable remains in the fill and no memory of their construction by local farmers, we take them to be fairly recent in date, perhaps associated with the planting of grape vines. These trenches too may be seen to have cut through ancient structures.

The Road

Although the north-south feature just mentioned was not visible to us at the start of the 2008 season in early summer, comparison of the aerial photographs with features on the ground enabled us to estimate its location with some accuracy. As a result, we were able to locate the subsurface structure responsible for the visible effect on the surface. Figure 3 shows the feature that was first uncovered in 2008 and identified as a road bed which we believe to be a Roman *via glareata* (58)¹⁰. The surface is composed of stones mainly ranging in size from 1-20 cm, and rarely up to twice that size. Like much of the site, this road lies very close to the modern surface (ca. 40 cm). It has therefore undergone significant damage from centuries of agricultural activity, but nevertheless remains a strong archaeological feature, with significant effects on soil drainage and therefore crop growth. Excavation along the western edge of this feature in 2008 revealed a cylindrical feature of ca. 14 cm diameter composed of a soil significantly darker than that of the surrounding matrix, running parallel to the road. We therefore returned to this area in 2009 and re-discovered not only this feature, but also a small triangular projection of this same darker soil exten-

⁷ PEPPUCCI 2005, for an analysis of the church and its place in a regional context.

⁸ BRUSCHETTI 1993.

⁹ ASHBY and FELL 1921, for a more detailed exploration of the entire length of the Flaminia.

¹⁰ For this and other references excavation units, readers are directed to the attached plan, realized by Intrageo - Impresa Archeologica (F. Spiganti, S. Spiganti, and C. Zoccoli).

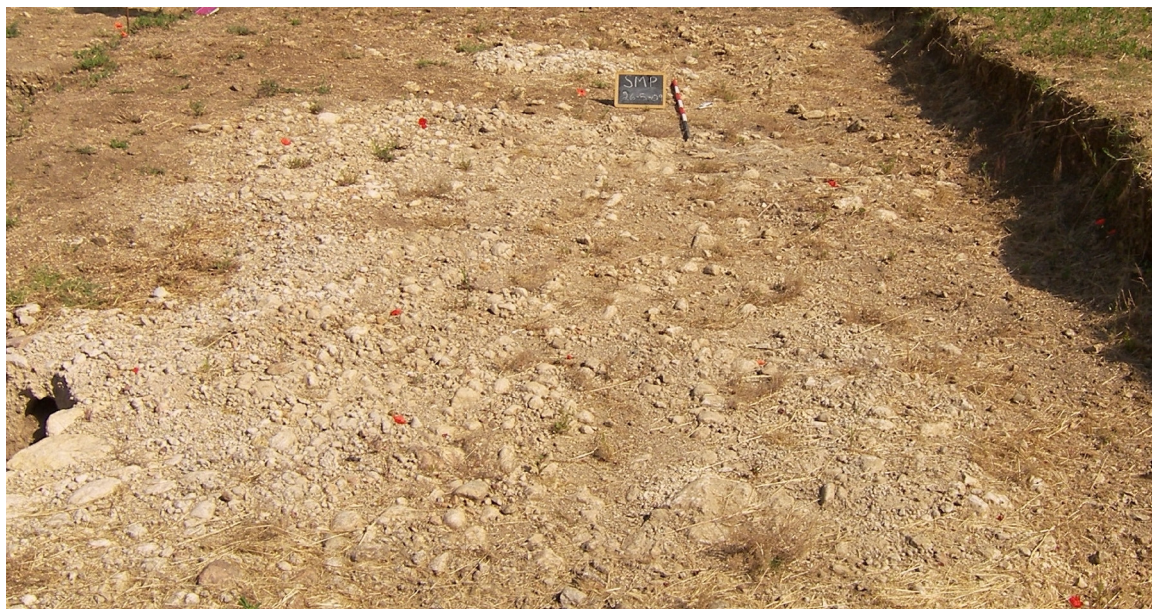


Fig. 3. Surface of excavated road (58), likely a Roman *via glareata*.



Fig. 4. Log and stake.

ding downwards in one limited area (fig. 4). We have interpreted the horizontal portion of this feature as the remains of a series of logs, laid out along the side of the road to physically confine the stones and soil making up the road surface. The vertical extension we interpret as the remains of a stake, driven into the ground next to one of the logs in order to hold it in place against the sideways force of the road bed it was meant to contain. Although we have not yet fully defined the stratigraphy of this road, preliminary examination suggests that there was more than one phase over time, and that the current surface was the last of several.

Examination of publicly available aerial photographs suggests that this road extends well north of the area of excavation. Extension of this visible line to the north brings it to the immediate west of the remains of a Roman-period mausoleum, now in a poor state of preservation. Such placement of a funerary monument alongside a road is of course consistent with widespread Roman practice, and the mausoleum itself therefore may indicate a northern limit of the extent of the *vicus*, as this burial must by Roman custom be outside the settlement's formal border.

To the south, the path of the road is cut by the modern SS316. However if we again visually extend the line of the excavated road and crop marks, it appears to intersect a house immediately on the other side of this modern road, precisely where the ground floor of the house is perforated by an archway. Furthermore the extension of the road

Fig. 5. So-called “diverticolo” of the Via Flaminia.

aligns with another extent track which follows a rise in the terrain and runs roughly parallel to the modern SS316. It is unpaved, but very straight, and has stretches that seem to have the same kind of stone surface as that found on our excavated road (fig. 5). The modern cadastral plan refers to this road as the “strada comunale Flaminia,” and signage placed on the road calls it a “diverticolo” of the ancient Via Flaminia. However given the apparent identity of this track with the road in our excavation, the resulting length of the combined road (ca. 3 km from the mausoleum to the southern end of the strada comunale), and the presence of the mausoleum at its side to the north, we suggest that this, and not the modern road which the church faces, is the ancient Via Flaminia in this area.

Lying approximately 1.5 m to the west of the road near the southern limit of our excavation is a large white stone (57), roughly squared, ca. 65 cm on a side, its top lying at approximately the same elevation as the road surface (fig. 6, left). Clearly visible on the top is a smooth circular area, approximately 50 cm in diameter (image right) likely made for the placement of an object on top of this stone. Given the location of the stone and the size of this circle, we strongly suspect that this missing object was a *milliarium*, though no remains of one have yet been discovered. The presence of a milestone would of course be consistent with our interpretation of the road as the original Via Flaminia.



Fig. 6. Possible pedestal for *milliarium* (57).

The Building

In both seasons we excavated immediately to the west of the road a structure that appears to have been worked on in at least two distinct phases. The building is aligned with the road and is separated from it by approximately 5 m. At this point we have excavated only a portion of this structure, but it is sufficient to give us some idea of its chronology and overall dimensions.

The earlier phase was constructed with carefully made walls of *opus vittatum*, primarily using squared stones with a few bricks or tiles mixed in (fig. 7). In at least one section, the exterior of the wall is constructed of bricks, again carefully laid. To date we have uncovered two sections of wall constructed in this fashion: unit 12 running EW



Fig. 7. Opus vittatum wall, north face (12).

on the south and unit 23 to the north, both with foundations ca. 1.5 m below the modern surface. It is unclear whether the walls delimit the entirety of the original structure, especially since the southern wall (12) forms a corner to the north with a short stretch of similarly constructed NS wall, unit 20 (already shown above), while in the north 23 simply comes to an end to the east, with no corner (though see below for further description of this area). If we assume a symmetric plan, we would expect a similar short NS wall to form a corner to the south of 23 at the building's northern limit. Nevertheless even if we assume 12 and 23 are the two external walls, the structure as it now has been excavated is quite large, with 7.5 m of internal space between these two walls.

The short NS wall (20) terminates to the north in a large squared block of white stone, similar to the milestone pedestal (57), though more neatly cut (25). This stone extends downward at least to the bottom of the wall and seems to have been part of the original construction. A second stone (56) may be seen at the eastern end of 12, but it lies just outside our excavation grid, so its exact measurements are still uncertain. (Another stone, 56, lies at the eastern end of 23, but that stone has very clearly been reused to create this wall and originally served quite a different function; see below).

To the west in a second trench (saggio 2 on the plan) we have been able to excavate another portion of wall (46), in line with 23. That wall extends ca. 8 m before it runs into a NS wall at its western limit. There remains an unexcavated length of just over 12 m between the two stretches of wall, though that space can be shortened to ca. 7 m if we assume a symmetry between 46 and 12 to the south: since 12 lacks an opening, so would 46. Therefore while it is possible that 23 and 46 are two distinct structures, the consistent construction method

and the alignment of both walls lead us to believe that they are in fact the same. Excavation in this western trench has not proceeded to a depth to enable us to be certain, but, based on the observation of a distinct jog to the south in the western portion of this wall (fig. 8), as well as the presence of a battuto flooring and a very damaged cocchiopesto structure (see below), both at a fairly high elevation, we suspect that this wall was extended west or significantly repaired in the second phase of construction.

The floor of this first-phase building was at least partly made of a cocchiopesto pavement which we have uncovered in two areas of the excavated floor level (37 and 80, fig. 9). The pavement does not extend undamaged



Fig. 8. Jog towards south in wall in western trench (46).

throughout the areas of excavation, though the exact nature of the damage and its cause is far from clear at this point in the project. The interior walls of this building were covered at least partly in plaster, mainly white in color, though some fragments with red are preserved. Much of it is no longer *in situ*, but some remnants are still attached to the walls.

We do not have a firm basis for dating this first phase of construction, though the style of masonry is consistent a date in the first century BC. The earliest securely datable material from the fill over the pavement is a first-triumvirate silver *quinarius* of Mark Antony, from 39 BC¹¹. Several other coins from slightly later in the first century were also discovered in 2008, along with some first-century pottery (more below on the finds).

The second phase of construction is marked by walls of a much less polished method of construction, lying over 1 m higher in elevation. In some areas these walls lie right on top of the first-phase walls, and it was from one of these areas (12) that two coins were found lying in the mortar between the two phases (fig. 10). Only one proved identifiable and it features a bust of Crispina, the wife of the emperor Commodus, who married the emperor in AD 178 and was exiled in 182. The two coins were perhaps deliberately laid during the extension of the walls. In some areas the second-phase walls were built right on top of soil which seems to have been brought in to fill the existing structure. The use of such fill is indicated by inconsistent soil composition inside the first-phase building: large apparently randomly dispersed patches of soil of a variety of types, some clayey, some rocky, and various other variations. This suggests a concerted effort to fill in the earlier building, perhaps after it was rendered unusable in some way. Although there is no significant evidence for flooding, it is possible that the nearby torrent, the Tribio, flooded, damaging the building, but other scenarios seem equally plausible. The fill contained a relatively small amount of archaeological material, most of it very worn ceramic sherds, but some coins and other material were present as well (see below for a fuller discussion). Like the first-phase walls, these interior walls were also at least partly covered with plaster.

In the area of the western trench, these second-phase walls, where we believe we can identify them, are often very similar in appearance to the first-phase construction, but they begin at a higher elevation than the first-phase walls. In the east, where we have sections showing clearly that these later walls rest on soil at a higher elevation than the earlier walls (e.g., 54, fig. 11), we can see efforts at mimicking another aspect of the earlier construction: the use of large cut stones as caps on the ends of the walls. This is very evident in unit 53, a fairly small block put to this use which does not extend very far down in section.

An exceptional example of this however—and one which we do not yet fully understand—is unit 41, the stone used to cap 23, the northern EW wall from the first phase already discussed above. Unit 41 at higher elevations ap-



Fig. 9. Cocciopesto pavement (80).

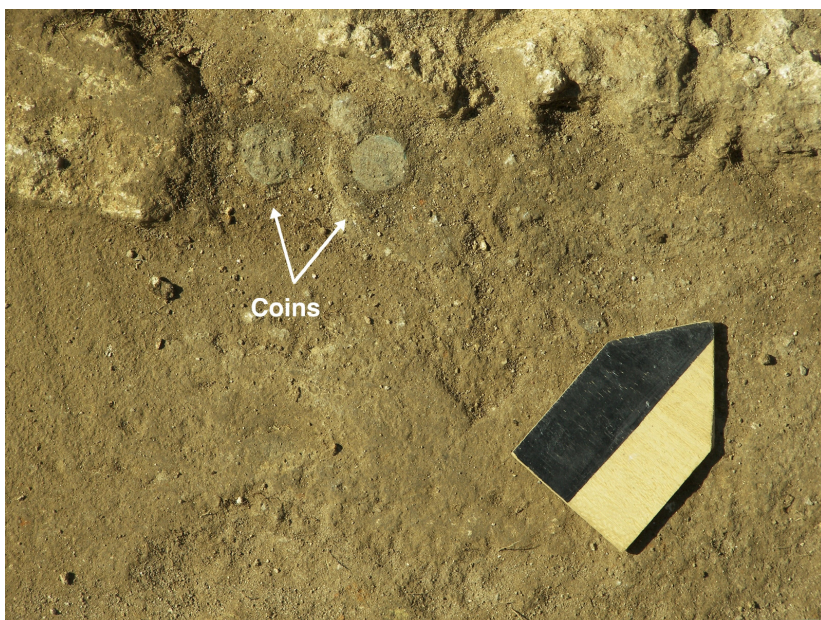


Fig. 10. Coins on layer 12.

¹¹ Cf. <http://numismatics.org/collection/1944.100.5956> in the ANS database.

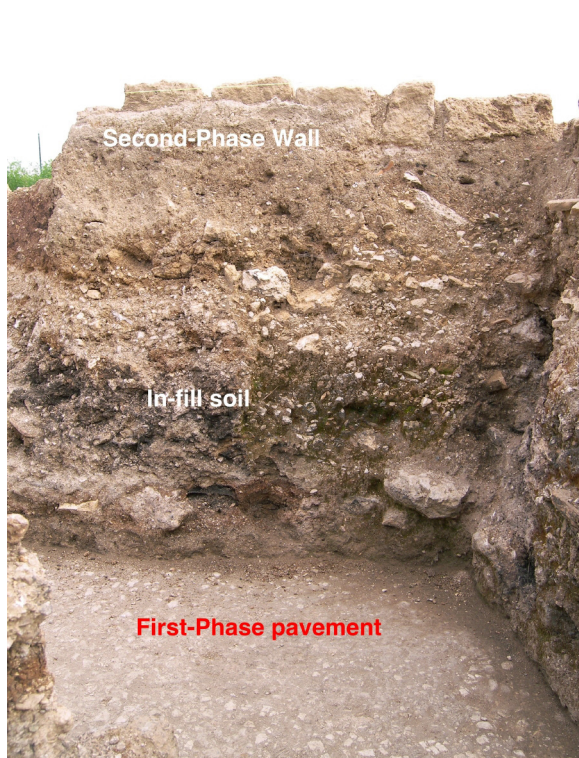


Fig. 11. Second-phase wall resting on soil (54).



Fig. 12. Reuse in wall 86.



Fig. 13. Finished corner on reused wall cap (41).

peared to be a somewhat smaller example of the wall cap, much like unit 25. However perhaps because of its location at the eastern limit of the building, which was being filled in at the same time, much more extensive construction was performed. Here a large stone that had clearly seen earlier use as an architectural element was placed up against 23, extending downward to roughly the same low elevation as that first-phase wall. Instead of being limited to the small cross-section that was initially visible at higher elevations, further down 41 extended further north to begin a turn in the wall and so began a new corner. This new NS wall (86, fig. 12) was then further extended to the north by the use of a large (>1 m) piece of *opus caementicium* (*vel sim.*) on top of another large reused stone, which has now cracked vertically. This second, lower stone also appears to have a finished side, unfortunately the one now facing upwards and therefore almost completely covered over. In image 13 a finished corner can clearly be seen carved into unit 41, despite the roughness of the current cut of the stone's face. These two stones must have been taken from one or more monuments that had been destroyed by the time of this second-phase construction. On the eastern side of this wall, outside this building, and at roughly the same level as the *cocciopesto* floor found inside (as described above), we found traces of *battuto* pavement. (The presence of this NS wall, which seems to enclose the area north of wall 23 is a further reason to suspect that even in the first-phase building 23 did not form the northernmost limit of the structure). Further exploration is clearly needed.

Another notable example of reuse may be seen in the discovery of a column base (55, fig. 14) at roughly the elevation of the second-phase wall foundations, but in an area which perhaps represents a gap in this wall. The base was found alone, resting at a slight angle, and its precise function remains unclear; it is too

large to have been casually placed. It does lie more or less in line with one of the later walls formed by unit 13 and 54, and so we are perhaps in an area of the structure which was more heavily damaged after the site was abandoned. A more definitive answer will have to await further excavation.

Several features of the western trench appear to be associated with the second phase based on their elevations. Most intriguing was what appears to be the remains of a basin of some kind, constructed of a pinkish *cocciopesto* (82, fig. 15). Not only was this feature cut off by the eastern edge of our trench, but it had been cut by one of the relatively recent drainage trenches mentioned above. Nevertheless we clearly exposed an original corner



Fig. 14. A single molded column base (55).

Fig. 15. Cocciopesto basin (82).

of this feature, as to the south and west the pavement angles upwards sharply where it runs into two walls, now extent only below this elevation, one on each side.

Burial

In the extreme west of the western trench, not only was there damage to walls from the drainage canals, but in the last week of excavation in 2009, we uncovered a tomb *a cappuccina* (96) which seems to have been placed in a trench partly cut into a narrow wall (110) which runs NS just to the west of the wall abutted by 46 (83). This was unexpected because we had not had any evidence of other burials in the area and despite the presence of the church, there was no documentary or other evidence of an abandoned cemetery nearby. Our efforts in the final days were focused on careful excavation of this burial and as a result we were unable to advance as far as hoped in understanding the stratigraphy of this area.



Fig. 16. One of the six pan tiles from the burial.

The tomb itself appeared to be a standard burial of this type. It comprised six pan tiles of approximately the same size (58 cm long by 35-41cm wide), all marked with a semicircle on top of their short side (fig. 16), which is a common feature of late-antique tiles in this region. To form the floor of the tomb, two tiles were placed upside down end to end, with the wider of their short ends abutting in an EW orientation. Four more tiles were then used to form a roof and the seam between the two sets of “roof” tiles was covered with two cover tiles (fig. 17). The entire structure lay at a high elevation relative to our other stratigraphy, barely below the level of our initial topsoil cut, and almost entirely within unit 1, our designation for the topsoil. Nevertheless we were fortunate because one of the drainage canals lay directly on top of the pan tile that comprised the southeastern “roof” of the tomb, but had not disturbed the tomb itself at all (in fact it was during the removal of the stones that filled this drainage trench that we came upon the tomb).

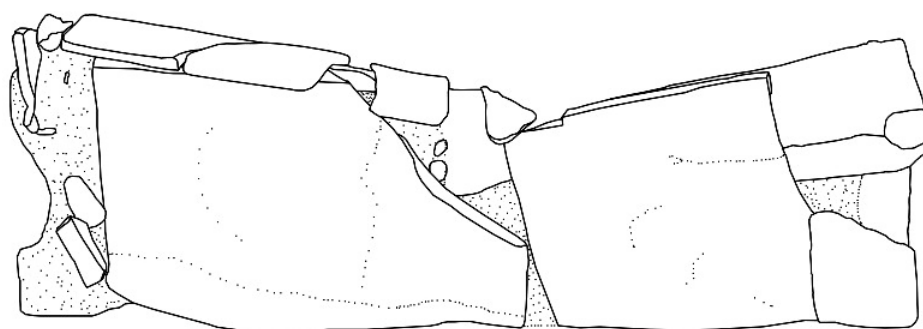


Fig. 17. Drawing of a *cappuccina* tomb (96).

When it became clear that the length of the tomb was only 1.2 m, we assumed that we had uncovered the burial of a child, and were entirely unprepared for what we did find (fig. 18): just two adult legs, feet to the east, and numerous small bones, mainly of the fingers, but with some other hand bones as well. A complete analysis of the bones has not yet been completed, but from all appearances the legs were intact and still articulated when buried. They appear to have been cut from the rest of the body: no vertebrae were present, nor an intact pelvis. Neither is there any evidence of damage from a plough or other more recent disturbance. The absence of an intact pelvis is clear evidence that the legs were buried as such, and that a more complete corpse or skeleton was not damaged after burial. There are numerous accounts of burials in which the head was given special treatment, but accounts of special treatment of other body parts are rare, and this particular arrangement unique, as far as we are aware.

Although no other objects were found inside the tomb, its elevation and placement on top of an existing wall suggests that it is later than the surrounding structures. This is consistent with the style of the pan tiles as well. We expect to clarify the stratigraphy of this area in future seasons. It remains to be seen whether it is the only burial in the area – given the presence of the later church, one might suspect that it is not – but the unusual nature of the burial clearly marks it out as out of the ordinary.

Some Finds

As mentioned above, the majority of structures are close to the surface and little remains of the elevation of the second-phase walls, much less the contents of the building. In addition most of the finds from the in-fill of the earlier phase were heavily worn, perhaps as a result of being brought in from already abandoned areas nearby, possibly even dumps, though the relatively small number of those finds argues against that. Nevertheless there were several finds that not only provide some chronological information, but are also highly suggestive of what may await future excavation.

We have already noted the presence of a number of coins which have given us dates in the second half of the first century BC. Consistent with these are several pieces of terra sigillata which bear identifiable stamps (fig. 19). Sherd *a* in the image bears a lozenge-shaped stamp with “CV” in its center. This is very similar to OCK 2275.5, dated to AD 25-50. Sherd *b* shows the last two letters of “L.N.P.” (OCK 1226.14, 15 BC - AD 5); the initial “L” seems to have been lost in the ridges of the vessel. Finally sherd *c*, reads “Surisc[us] | L. Non[i]” where the “u” and the “r” of “Surisc” run together in a “VR” ligature (OCK 1282.2, 10 BC+). The final image is the other side of sherd *c* which carries a graffito of a Roman numeral, either LIII or LIV, scratched into the finished vessel, almost surely by the potter



Fig. 18. Contents of tomb.

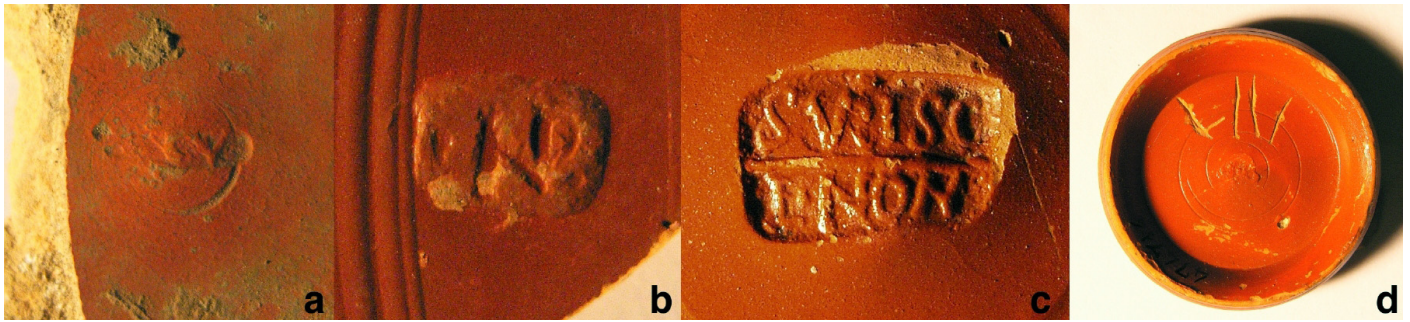


Fig. 19. Stamped terra sigillata, a-d.

or merchant. While these sherds are either from topsoil or in-fill strata, they are consistent with the dating of the first phase mentioned above.

Several classes of finds indicate the presence of more elaborate buildings than the one we are currently excavating. In particular, several small fragments of marble revetment are evidence of more expensive wall decoration than the plaster we have already found. Similarly numerous small fragments of *tubuli*, along with a few possible examples of *suspensurae* bricks suggest hypocaust systems. Fragments of molded marble are clear evidence of monumental architecture (perhaps on a smaller scale than that from which the reused stones of unit **41** and **83** were taken).

Numerous items of a personal nature have also turned up, which is not surprising in settlement such as the *vicus* seems to have been. Examples include dice, gaming pieces, an ivory hairpin, sewing needles, and loom weights. An oil lamp datable to the late fourth or early fifth c. may be our latest datable object, and is similar in kind to that found at the nearby catacombs of Villa San Faustino.

Finally we have one architectural terracotta of a kind found on Roman-period temples in central Italy from the fourth through the second centuries BC. As seen in image 20, this fragment is decorated with a portion of a trellis-like grid in the corners of which can be seen several vegetal elements: above, the bottom part of a flower stem and leaves, and below a leaf and berry or button. While our fragment is fairly small, it is nearly identical to examples found at other nearby settlements, including Vettona (modern Bettona)¹². A second terracotta with a spiral decoration is similarly suggestive of architectural decoration, though we have not yet identified suitable comparanda.



Fig. 20. Fragment of architectural terracotta plaque.

Geomagnetic Survey

For the past two seasons, we have been fortunate to have worked in collaboration with the Centro di Eccellenza - Scientific Methodologies Applied to Archaeology and History of Art (SMAArt) of the University of Perugia in a geomagnetic survey of the area in the immediate vicinity of the excavation. This research has been coordinated by Prof. Maurizio Gualtieri and directed by Dott. Tommaso Mattioli with the collaboration of Alessandro Giacobbi, all of the Dipartimento Uomo & Territorio dell'Università degli Studi di Perugia. While we are planning a fuller publication of the fruits of this research after our next season in 2010, some preliminary results may be reported here.

The magnetic survey was carried out by means of a cesium-vapor magnetometer (geometrics G-858) in gradiometric configuration. Data were acquired in a grid of ca. 5500 square meters in the bi-directional mode, that is, with the two magnetic probes set at vertical separation of about 1 m, along parallel profiles 1 m apart with a sampling rate of one measurement per 0.1 seconds. A preliminary filtering of the acquired magnetic data based on statistical criteria (median filter) was performed to remove the observed signal spikes (extreme values of normal sign due to the subsurface presence of small metallic remains of various kinds, such as rods, wires, studs or, as in our

¹² STOPPONI 2006: 240-241, 281-282, inv. 221a-c.

case, even telephone poles). Other filters were subsequently applied using MagMap, Geosoft and Surfer software.

Based on the visibility of the road in the aerial photographs mentioned above, we anticipated good results with the geomagnetic survey. We were not disappointed. One result may be seen in image 21. Here we show on the left the survey data after filtration and on the right a photograph of the same area¹³. As can easily be seen, the black vertical lines on the survey clearly correspond to the long walls uncovered during the excavation and already discussed above. In other areas of the surrounding property, the survey has corroborated the results of aerial photography, providing a much clearer picture of what lies under the surface. Survey results from an area north of the active excavation strongly suggest the presence of a large rectangular structure, including likely internal structures as well. We look forward to “ground-truthing” these survey results in future seasons, and extending the survey to more of the area in a high-resolution grid.

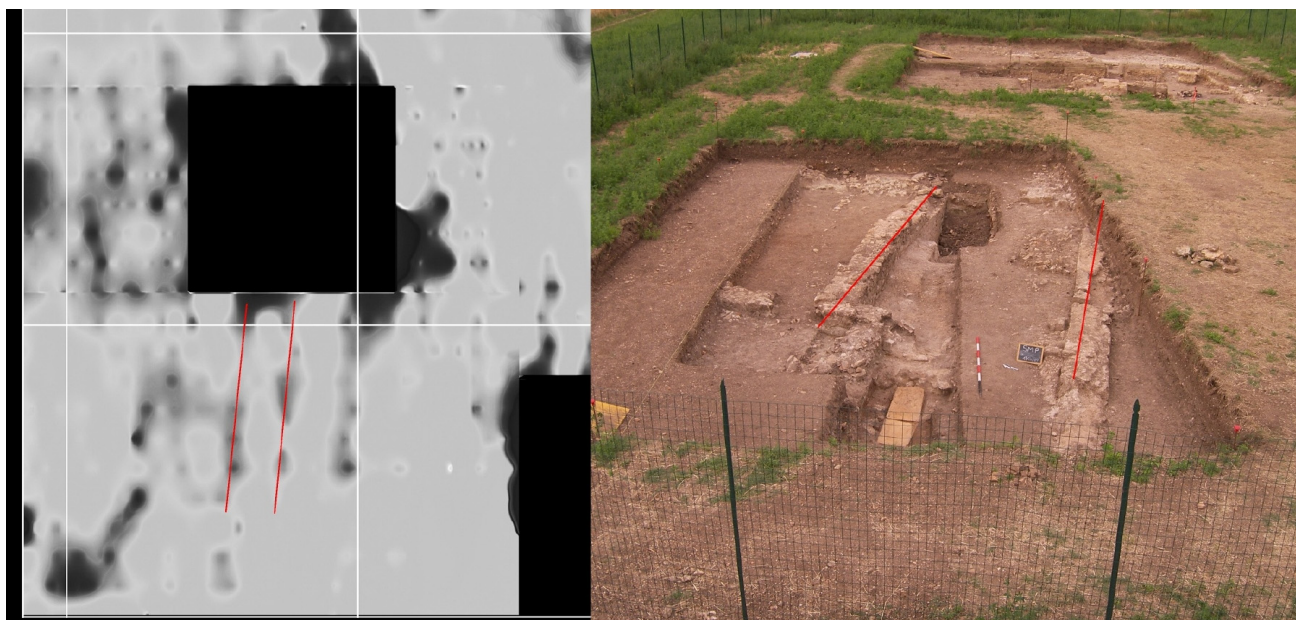


Fig. 21. Geomagnetic survey data and photograph of same area of western trench. Black rectangle indicates area of on-going excavation.

Conclusion

It is clear now that, despite the absence of visible remains above ground, there is in the vicinity of S. Maria in Pantano at least two hectares of an ancient settlement of the Roman period lying at a high elevation close to the existing ground level. Although no inscriptional evidence has been found *in situ*, the correspondence of this site with what is known of the ancient *Vicus ad Martis Tudertium*, especially as argued by Becatti¹⁴, strongly suggests that this site is indeed to be identified with the *vicus*. The first two seasons of excavation and remote survey have only begun to reveal the nature of this once important settlement along the Via Flaminia.

It remains for me to thank first our colleagues at “Intrageo - Impresa Archeologica” for introducing us to the site of the *vicus*, as well as providing active support during the excavation season and acting as our liaisons when we cannot be present. The Soprintendenza per i Beni Archeologici dell’Umbria has also been generous in its support. Former Superintendent Mariarosaria Salvatore first entrusted us with the permit for excavation, and Ispettore Dott. Paolo Bruschetti has gone above and beyond his professional responsibilities in providing enthusiastic scholarly and personal encouragement to us. The government and people of Massa Martana have been exceedingly supportive of the whole dig team, both on site and off, materially and personally.

Finally I wish to dedicate this first publication to the memory of the previous mayor of Massa Martana and friend of the project, Giampiero Gubbiotti, tragically killed only months after the end of our first season.

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¹³ The walls do not appear to be parallel in the photograph due to the angle at which it was taken.

¹⁴ BECATTI 1938.

BIBLIOGRAPHY

ASHBY T., FELL, R. A.L., 1921, "The Via Flaminia" in *Journal of Roman Studies* 11: 125-190.

BECATTI G., 1938, *Forma Italiae: Tuder-Carsulae*, Rome.

BRUSCHETTI P., 1993, *Infrastrutture della via Flaminia presso Massa Martana*, in *Strade romane, percorsi e infrastrutture*, 2: 167-172, L'Erma di Bretschneider, Rome.

BRUSCHETTI P., 1994 "Iscrizioni inedite dal Vicus Martis Tudertium sull'antica Via Flaminia", in *Mélanges de l'école française de Rome* 106(1): 15-27.

CUNTZ O., WIRTH G., 1990, *Itineraria Antonini Augusti et Burdigalense*, Stuttgart.

LEVI A.C., LEVI M., 1967, *Itineraria picta: Contributo allo studio della Tabula Peutingeriana*, Rome.

STOPPONI S., 2006, *Museo comunale di Bettona: raccolta archeologica*, Milano; Perugia.

PEPPUCCI, M., 2005, *Gli insediamenti monastici benedettini nella diocesi di Todi tra VIII e XII secolo*, tesi di dottorato, Università di Roma "La Sapienza" (2005).