

## CHAPTER THREE

# EXCAVATION AREAS, PERIODS AND STRATIGRAPHY

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The excavation area in the slope of Borgo NW is surrounded in the south, east and, partly in the west by the higher tufa rock of the upper Borgo surfaces (for all names see *Fold-out plans*). The various sections of the tufa rock are in this publication abbreviated in the following way: TRs = Tufa Rock south, TRe = Tufa Rock east, TRsw = Tufa Rock south-west and TRw = Tufa Rock west. Towards the north there is a narrow rocky edge (TRn = Tufa Rock north) and a steep drop of about 5 m down to the Via Dogana and the Etruscan rock-cut tombs. In the rocky edge of TRn is the fix point, the fixed measuring point at 171.17 m above sea level (masl). The points within the excavated area vary between the highest location of 173.01 and lowest of 165.26 masl, i.e. a difference of almost 8 metres.

The excavation area is divided into three main, rather independent parts, named after the houses standing there (*Fig. 33* and *Fold-out plan 1*): from north to south: (1) House A, (2) Houses B and C, and (3) Houses D, E and F. The huge Drain L and its foundation N1, separate House A from Houses B and C (*Fig. 34*). Lane K, located between the two wall systems C4-C1-B1-B7 and K2, K3 and D3, separates Houses B and C from House D in the south. The north area is limited by the fortification wall Ma-Mb/Mc and by the rocky outcrop Na (*Figs. 35–36*). House D is located on the tufa rock TRw, with the remains of fortification wall Md and area Nc in the west. The excavation areas include a number of buildings and other constructions, which are the following, from north to south:

- (1) Terrace wall/fortification system Ma-Mb-Mc-Md-Me;
- (2) House A with rooms Aa and Ab, and work area Ac; yard Ad, cistern Ae, rock-cut niche Af, the first phase of niche Ah and the narrow alley Ai. There is also the later phase of Ah, Ag and Ak;
- (3) Drain L and foundation N1;
- (4) House B/C with rooms Ba, Bb and Bc and court Bd/Be. In the second phase House B/C separates into two: House B and House C with courtyards Bc and Cc. There are also the later constructions Ia, R1, wall K2, Well P1 and road Z;
- (5) Lane K with the late walls K2-K3-K4;
- (6) House D, the Hut, Houses E and F and *Cantina* G. Later on walls H, areas Dd and De, and the late cellars O1 and O2.

## PERIODS AND CHRONOLOGY

The Borgo NW excavation illustrates local developments within a framework of about 300 years, between the late 8th century<sup>57</sup> and the late 5th century BC and gives a few later glimpses of life, and even of death. An important event may have been when an earthquake (?), in the middle of 6th century BC, caused some destruction and change.

There are many complicated and some unresolved problems with this area. Firstly, it is situated in a slope with the resulting inclined strata and floors, which are often difficult to follow (*Fig. 37*). Secondly, the heavy autumn rains, which even today create problems in spite of a protective roof, must have disturbed the area and caused erosive movements with earth fills mixed with a lot of pottery from many different periods. This complex stratigraphy—or rather stratigraphies—of the excavated areas and of the long and steep slope with the numerous rock cuttings, walls, fills and floor levels, is explained by the two above-mentioned conditions, the slope and the rain falls (*Figs. 38–40*). Even the study of the buildings themselves and their non-canonical masonry do not always allow safe conclusions. Which variation in the masonry of the houses is due to Etruscan building traditions and which to different building periods and changes over time? It should be emphasized that minor changes in isolated rooms, floors or courtyards do not necessarily qualify as “building periods” unless it can be shown that they are part of some more general programme affecting all or most of the excavation site.

Yet, our long observation of the multitude of features on the site seems to argue for a general articulation of the area into three main “building phases”, apart from the two first, early Pre-House phases of the Hut/House F/*Cantina* G/palisade. On the other hand, it is not always easy to understand whether the changes from one “period” to another are the same and contemporaneous everywhere and thus valid for the entire Borgo or only for one particular zone. Furthermore, it should be noted that, although much pottery was found, most of it has changed little over time and thus are of only limited help for dating purposes. Another complication is that the filling material consists of earth mixed with sherds from many different periods. In addition, due to

<sup>57</sup> However, the bedrock cuttings for an oval hut could be from the Late Bronze Age Protovillanovan period, see similar huts in areas D and F; Malcus 1984, tav. II:1; *San Giovenale* IV:1, figs. 25 and 264.





Fig. 34. View towards the south with House C in the centre and House D in the background. Photograph by J. Sigurdsson.

much stone robbing, what little is now preserved of the buildings in the upper strata is rather fragmentary and uninformative. Consequently, it is difficult to be precise about later phases at the site.

In summary: by means of a combination of stratigraphical observation, of an analysis of buildings and walls and of the rich information gained from the pottery, it seems possible to establish a building sequence and a general chronology in mainly five general phases or periods. After this, there was a modest afterlife of people occasionally working but, perhaps, no longer living there, even though they may have died and been buried there. Here follows a list of the chronological phases recognized at the Borgo NW and the structures belonging to these periods:

*Pre-House Period I (late 8th century – about 675 BC)* (in Chapter Four)

Area around the oval Hut (under House D)  
Canals Q1 and Q10 for palisade wall

*Pre-House Period II (about 675 to late 7th century BC)* (in Chapter Five)

House F-Cantina G  
Canals Q5-Q6-Q7-Q8 and Q27 for palisade wall extension (around area of later House A)

*The Great Fill Project (late 7th century BC)* (in Chapter Six)

Fig. 35. Setting beds for terrace wall/fortification Ma, from below and towards the east, excavated in 1965 and 1989. Photograph by B. Blomé.





Fig. 36. Terrace wall/fortification Ma and palisade canals Q5–Q6, from above and towards the west. Photograph by B. Blomé.



Fig. 37. Early stratigraphy at area Cb–Cc in 1961. Photographic montage of two pictures by B. Blomé.



Fig. 38. Stratigraphy in room Ab, wall A7. Photograph by J. Sigurdsson.



Fig. 40a. Stratigraphy at walls C8 (to the left) and B3 (to the right). Photograph by J. Sigurdsson.



Fig. 39. Stratigraphy at niche Ag. Photograph by J. Sigurdsson.

*Period 1. The Borgo Building Programme (late 7th–about 575 BC)* (in Chapters Seven to Ten)

Terrace walls/fortification Ma-Mb-Mc-Md-Me and Drain L  
Lane K

House A, cistern Ae, niche Af, niche Ah(1), alley Ai  
House B/C and area Ia  
House D and Building E

*Period 2 (575 BC to about the middle of the 6th century BC)* (in Chapters Seven to Ten)

House A, cistern Ae, niche Af, niche Ah(2), alley Ai  
House B, House C and area Ia  
House D and Building E

*Possible earthquake (550–530 BC)* (in Chapter Eleven)

*Period 3 (late 6th century to about 400 BC)* (in Chapter Twelve)  
Niche Ah(3), niche Ag, niche Ak  
House C, walls K and Wells P1 and P2

*Period 4 (4th to 2nd centuries BC)* (in Chapter Thirteen)  
Abandonment and agriculture, possibly cellars O1 and O2

*Period 5 (late 6th/early 7th centuries AD)* (in Chapter Thirteen)  
Medieval burial in niche Ah

**GENERAL STRATIGRAPHY** (see *Table 1* and *Fig. 40b*)

*Stratum 1.* This stratum was a surface layer of unsystematic soil, blocks, stones and tile fragments. Finds of *Bucchero*, Red-slip ware and tile fragments.

*Stratum 2* (Period 3). This stratum consisted of *tuffetti*, earth and some clay. Finds of Kitchen ware, *dolia*. The stratum forms Floor 2 at Drain L and Floor 3 at yard Bd/House B.

*Stratum 3.* A significant fill stratum was created of varying thickness (0.25–0.45 m) on the top of Floor 2. Period 3. In *Cantina G* stratum 3 = Floor 4 (*uf.* 0.08–0.13 m) had a thickness of *c.* 5–10 cm, with rather closely-packed, flattish, *tuffetti*-stones and hard clay. Finds: Etrusco-Corinthian (2), *Bucchero* (2), Various slipped ware (2), Kitchen ware (1) (see n. 68).

*Stratum 4.* Small stones of tufa form a floor level, Floor 2 at House A (Floor 1 at Drain L, Floor 3 at yard B).

*Stratum 5* was a thin, hard stratum with small stones and clay.

*Stratum 6* (Period 2). This stratum had a thickness of *c.* 5 cm, with *tuffetti* and hard clay, partly very red (traces of burning?), with a thin layer of whitish clay on top. The finds reported here contain materials also from strata 4 and 5. Finds include Etrusco-

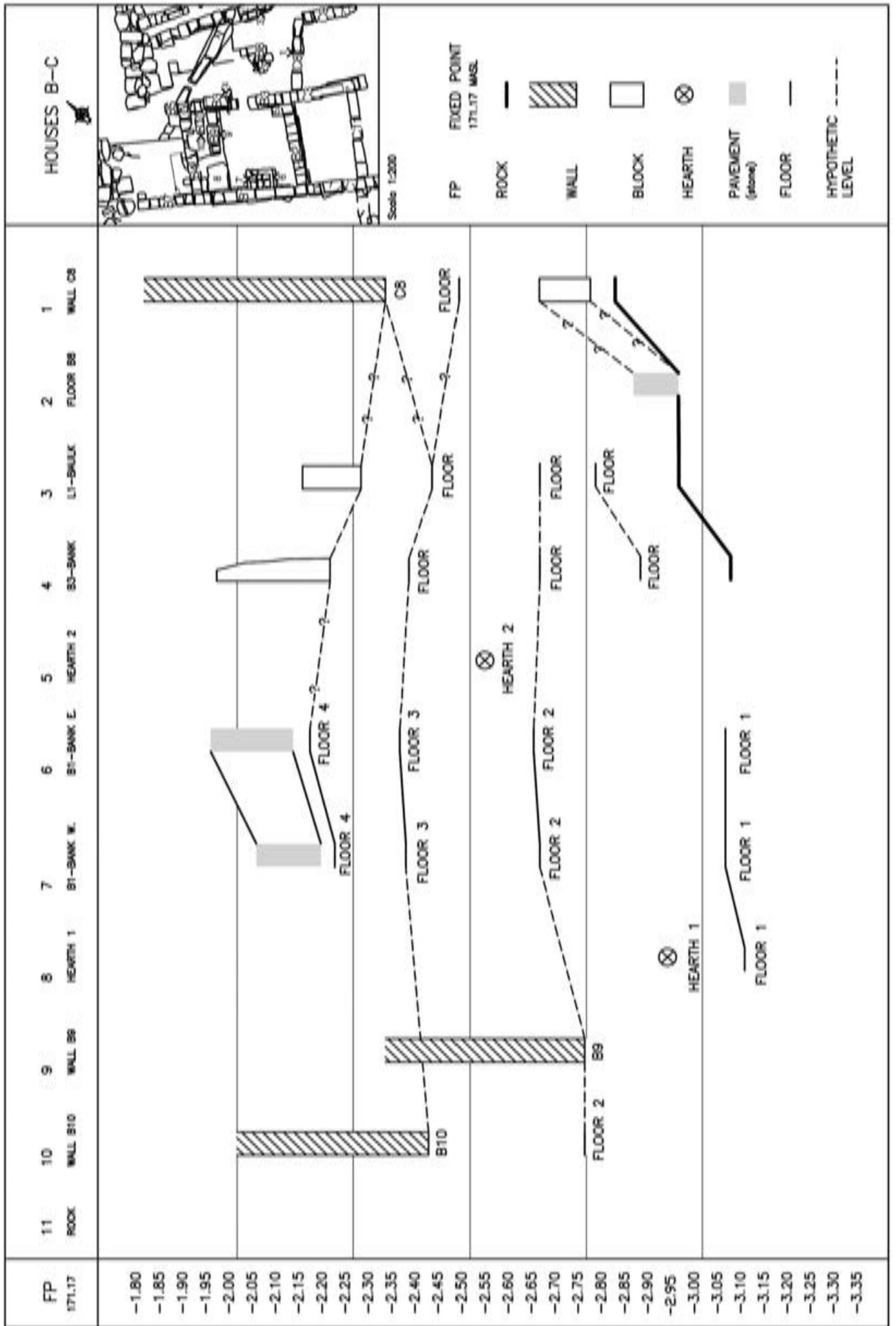


Fig. 40b. Sketch drawing of the level of the floors in different areas.

Corinthian, Painted ware, Brown Impasto, Bucchero Impasto, large amounts of Bucchero and Red-slip wares, also Late Italo-Geometric, Kitchen ware, *dolia* and tiles.<sup>58</sup> Forms Floor 1 at House A, Floor 2 at House B, Floor 3 at *Cantina G*.

In Areas A–C the following 3 strata:

*Stratum 7* = Fill C. The character of the fill material then changes, almost dramatically. In much of the area, on top of Fills A and B, follows fill C of varying thickness (max. 0.65 m, *uf.* 2.70–3.25/3.35 m). It is thin in the east, but increasing down the slope to the west. Here it is a thick, darker brown stratum, very rich in medium-sized stones and many *tuffetti* from the extensive quarrying in the eastern part of the area. Finds included 58 reported sherds or other items of Faliscan Impasto, Bucchero Impasto, Etrusco-Corinthian ware, Transitional, Ordinary and Grey Bucchero, Red-slip ware, Internal and Burnished Red-slip ware, Late Italo-Geometric ware or imitations, Buff-slip ware, Kitchen ware, large jars or *dolia*, cooking stand and roof-tile fragments.<sup>59</sup>

*Stratum 8* = Fill B. In the south-west, i.e. in the lower, western part of the later courtyard area Ad, fill B (roughly *uf.* 3.25–3.45/3.50 m) was laid above fill A. This is an easily recognizable, greyish-white fill B. It is an important link between both sides of Drain L, i.e. in courtyard Ad and in courtyard Bc. This stratum was found only in places and there were no finds recorded.

*Stratum 9* (Period 1) = Fill A. The big fill operation begins at the rock level with fill A. It is a dense, compact mass of clayish earth,

light brown and yellow, with almost no stones. It spread thinly on the uneven rock floor of the eastern part of the later courtyard Ad and then growing in thickness as the slope in the west increased (max. *uf.* 3.50–4.10/4.20 m). It has a maximum thickness of 0.70 m. Fill A is buttressed by retaining wall N1. Fill A seems to have, at least partly, a floor-like surface, Floor 1 at House B. It is partly a hard, red layer including hearth 1 (levels *uf.* 3.03–3.16 m). Finds: eleven fragments of early wares such as Bucchero Impasto spiral amphora and Faliscanizing *amphoriskos*, Brown Impasto, one sherd of Fine Bucchero with a dotted fan pattern, Red-slip ware, Hand-made Impasto Kitchen ware, and a spindle whorl.<sup>60</sup>

In Area B the following strata:

*Stratum 10* (Pohl str. 7). This was a Pre-House fill laid there to compensate for the sloping of the rock ground and held in place by the later terrace wall/fortification Mc in the lower part of the slope, west of House B. Dark, rather homogeneous stratum, rich in *pozzolana* with very few stones. A fair amount of pottery was discovered: Fine Bucchero Impasto (incl. three spiral amphoras), Fine Brown Impasto (incl. carinated cups), Faliscan Impasto, incl. an *oinochoe* (ind. no. 63-135), almost complete, and Painted Impasto, Red-slip, and Kitchen ware fragments.<sup>61</sup>

*Stratum 11*. A thin, brownish stratum just on the rock surface under the fill in the west. The sherds have been taken together with the dark fill material of stratum 10.

<sup>58</sup> Find groups 62-142, 62-142a & 142b and 62-153c; *San Giovenale* V:2, 139–187, cat. nos. 11, 12, 15, 59, 87, 94, 102, 110, 164, 201, 214, 262, 268, 329, 334, 384, 442, 443, 451, 460, 475, 478, 487, 488, 502, 509, 536, 594, 599, 623, 626, 643, 666, 690, 699, 748, 750, 785, 793–795, 810, 835, 893, 903, 915, 917, 920, 921, 925, 951, 956, 962, 976, 1015, 1018–1021, 1030, 1046, 1052, 1060, 1065, 1067, 1079, 1104, 1162, 1174, 1176, 1234, 1251, 1276, 1291, 1303, 1308, 1336, 1344, 1357, 1359, 1375, 1424, 1454, 1482, 1483, 1487, 1502, 1510, 1514, 1566, 1575, 1590, 1601, 1604, 1605, 1608, 1632, 1681, 1703, 1709, 1710, 1716, 1719, 1733 and 1742.

<sup>59</sup> Find groups 63-127 and 63-171; *San Giovenale* V:2, 28–30, cat. nos. 1–58.

<sup>60</sup> Find groups 62-186, 63-127a and ind. no. 62-136; *San Giovenale* V:2, 27f., cat. nos. 1–11.

<sup>61</sup> Find group 63-134f and ind. nos. 63-135–137; see *San Giovenale* V:2, 74f., cat. nos. 1–39 (incl. two bobbins).

Table 1. Concordance of stratigraphy.

House A Yard Ad	Work area Ac	House B Room Ba	House B Room Bb	House B Room Bc	Yard Be	House C	Yard Ce	Area I	Lane K	Carina G	House D	Drain L Found. N
S1	S1-2	S1	S1-2 Grey E+T	S1	S1	S1	S1	S1	S1	S1	S1	S1
S2-3 Lots of T <b>Per 3</b>		S2/ F3 Grey red pave- ment <b>Per 3?</b>		S2 Fill <b>Per 3</b>		S2 T+RS Gravel				S2 Fill Brown E STE		
		S3	S3 Brown grey fill	S3 Dense E		S3 C STE	S3-4 Fill T Fallen blocks			S3/ F4 FT+ HC <b>Per 3</b>		
		S4/ F2 HC	S4-5 Brown + grey E	S3 Yellow brown compact E + STE	S4/ FT Red HE		S4 T + CE					
S5 Yellow C		S4/F3 Grey HE		S5 Black grey P		S5 STE HE						
	S6/ F2 Thick C+T	S6 Dark grey P		S5 Yellow brown E + T	S6 Red green C	S5-6/ F2 Brown E <b>Per 2</b>	S2 Fill for walls I2, I5 T Dark P <b>Per 2?</b>	S2 <b>Per 2</b>	S6/ F3 T + red HC Burnt <b>Per 2</b>	S3 Fill Much T		
S4/ F2 Flat T <b>Per 2</b>	S4/ F2 <b>Per 2</b>	S7 Fill Brown grey + T <b>Per 2</b>	S7/ F2 Brown CE <b>Per 2</b>	S3 Sandy E+T C= mud- brick <b>Per 2</b>	S6/ F2 Grey HE STE <b>Per 2</b>	S7 Dark E				S7 Fill STE Yellow CE + T	S4 Brown grey Dark T + P <b>Per 2?</b>	S2/ F2 <b>Per 2</b>
S5 Fill Lots of T	S5	S8 Dark grey P	S8 White yellow dense T	S4 Dark CE	S7 Grey P		S7-8/ F1 Brown Much T on bedrock <b>Per 1</b>			S8 Grey E	S5 Similar to S4 7th c.	S3 Fill
S6/ F1 <b>Per 1</b>	S6/ F1 <b>Per 1</b>	S9/ F1 Red HE <b>Per 1</b>	S9/ F1 Red HE Pave- ment <b>Per 1</b>	S5/ F1 HE	S8/ F1 Red HE <b>Per 1</b>			S3a H Pavement of T <b>Per 1?</b>	S3 <b>Per 1</b>	S9/ F2 HC + T Tile <b>Per 1</b>	S6 On bedrock	S4/ F1
S7/ Fill C	S7/ Fill C	S10 Fill	S10-11 Dark grey fill	S6 Black- grey E on rock	S9 Brown fill + T			S3b Black E on bedrock		S10-11 Fill Dark E+T 7th c. <b>Pre-H Per II</b>		S5= Fill C Brown sandy E + T
S8/ Fill B	S8/ Fill B				S10 Dark HE Fill <b>Pre-H Per II</b>							
S9/ Fill A F"0"	S9/ Fill A F"0"				S11 Brown E on rock					S12- 13/ F1 Black E + T 7th c. <b>Pre-H Per I</b> House F		S7= Fill A STE Light brown E on rock

Abbreviations: C, clay; CE, clayish earth; E, earth/soil; FT, flat *tufetti*; HC, hard clay; HE, hard earth/soil; P, *pozzolana*; RS, river stones; S, stratum; SM, small *tufetti*; STE, sterile earth/soil; T, *tufetti*; F, floor.