

AREA D

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Just a few small operations remained at the end of the 1974 season for us to complete work in Area D. Since these entailed little that was new they will simply be incorporated into the following summary.¹

We have been able to separate the Area D materials into nineteen strata, some clearer and more extensive than others.² The expansion from the sixteen listed in the 1974 report³ is due to the subdivision of the Early Byzantine plaza layers extending into Area D from Area B, formerly designated as only one stratum.

Stratum 19⁴ (Fig. 9): Probably Iron I A⁵

Cistern D.1:63, coated with one layer of thick, hard, tan plaster, was dug into bedrock like a misshapen egg ca. 3.75 m. long x 2.30 m. wide x 1.75 m. deep. The original circular opening, though partially

¹ This report is intended to be a concise summary of the stratigraphy of Area D, partially excavated and interpreted by this writer, with an attempt to integrate *all* loci encountered during the past five seasons of work. Ceramics, objects, and ecological data, fully incorporated into the stratigraphy, must await the final publication. (For Square D.4, see Area B report, above.)

Editor's Note: This report does not conform to the general format for Area reports in that 1) description and interpretation are mixed, and 2) an independent sequence of strata is used and its order is reversed.

² For the overall goals and approaches to the Area see the Area D reports for the preceding four seasons: Phyllis A. Bird, "Heshbon 1968: Area D," *AUSS* 7 (1969): 165-217; Lawrence T. Geraty, "Heshbon 1971: Area D," *AUSS* 11 (1973): 89-112; id., "Heshbon 1973: Area D," *AUSS* 13 (1975): 183-202; Larry G. Herr, "Heshbon 1974: Area D," *AUSS* 14 (1976): 79-99. These are hereafter referred to under the abbreviated title of each year's excavation report, *H68*, *H71*, *H73*, *H74*.

³ *H74*, p. 82.

⁴ Stratum 16 in 1974 (see *H74*, p. 99). In the Area D independent sequence of strata, each is designated by "stratum" with an Arabic number, and is here presented from earliest to latest in time of deposit. The equivalent designation in the sitewide sequence is "Stratum" with a Roman numeral. This is Stratum XXIV.

⁵ Chronological terminology and dates follow those outlined by James Sauer in *Heshbon Pottery 1971*, AUM, vol. 7 (Berrien Springs, Mich., 1973), pp. 3 and 4, as applicable to the pottery found on the tell.

cut away in stratum 17, must have been ca. 0.60 m. in diameter with a neck only ca. 0.40 m. deep (as preserved) when it opened into the cistern ceiling. Just above the plaster bottom (D.1:63H) was a thin (0.06 m.) layer of dark gray, water-laid silt (D.1:63G = 101) containing a few pieces of Iron I pottery. At the end of its use it seemed the cistern was sealed off and forgotten until stratum 17. No other related features or layers were found above or near the cistern; hence a more precise relationship with the other Iron I A features at Hesbân was impossible. The paucity of the remains made it difficult to give a date more than pre-stratum 17, probably Iron I A.

Post-Stratum 19 Gap

Though Iron II deposits appeared elsewhere on the mound,⁶ nothing of the sort appeared to have been preserved in Area D, even in later debris layers. If it did exist at one time, it must have been carried away by the extensive bedrock modification of stratum 17.

Stratum 18:⁷ Iron II/Persian (7th-6th Century B.C.)

Many of the soil layers from later periods contained the Iron II/Persian pottery of stratum 18, but not one can be said to have contained nothing later than Iron II/Persian. Thus, though a stratum 18 must have existed, in Area D as well as the contemporary stratum on the rest of the acropolis, we have no structural evidence for it. Again we must blame the stratum 17 clearing operations for our loss.

Post-Stratum 18 Gap

Nothing from the Late Persian or Early Hellenistic periods was found in Area D.

Stratum 17⁸ (Fig. 9): Late Hellenistic (ca. 198-63 B.C.)

Along the south balk of D.1 a straight east-west cut was made into the existing bedrock that brought the bedrock level down vertically 1.20 m. In the process of making this cut the stratum 19 cistern (D.1:63) was discovered and filled (with Loci D.1:63C, D, E, I, J; 67, 68, 69, 100, 105, 106), and Wall D.1:104, a one-row wall surviving four courses high (Pl. IX:A), was erected to block the cistern cavity and continue the line of the bedrock cut. How far the cut went to the east and west outside our excavation limits is unknown. The opposite side of the cut (preserved only in the east) was made in D.2 ca. 3.25 m. from the north cut where, before it was robbed out in

⁶ See the reports of Areas A, B, and C above.

⁷ Stratum 15 of H74, p. 99. This is sitewide Stratum XXII.

⁸ Strata 14A and 14B of H74, pp. 96-98. This is sitewide Stratum XX.

Early Roman times, it probably also extended completely across D.2 to the west. However, it was only 0.35 m. deep here so that between the two vertical cuts the bedrock was made into a level surface.

Cut into the bottom of this large bedrock trough were three bottle-shaped, unplastered silos, two of which (D.2:77 and 95) have already been described.⁹ The third one (D.2:80), excavated this season, was smaller (1.10 m. deep x 1.85 m. in diameter) than the other two, which were ca. 2.15 m. deep x 2.50-3.00 m. in diameter at the bottom. All three had a thin but even layer of decomposed chaff or straw (D.2:77B, 95E bottom, 80E) covering the complete bottom including only Late Hellenistic pottery. One of the silos (D.2:77) contained a number of unfired clay objects, perhaps loom weights,¹⁰ while another (D.2:80) preserved a complete black, long-nozzled, Late Hellenistic lamp. Above the silos, covering the bottom of the bedrock trough, was a 0.10 m. thick series of very thin (0.002-0.005 m.) multi-colored (red, yellow, tan, and gray) surface layers, several composed of decomposed chaff with loess. The upper layers (D.2:76, 82, 86) sealed over Silo D.2:77, putting it out of use.¹¹ The other two silos were cut into by Early Roman bedrock operations. Thus the layers which originally sealed them over were removed, but a similarity with D.2:77 may be assumed.

The function of this complex was still uncertain. The presence of chaff or, less likely, straw and the orientation of the trough in perfect line with the strong west winds would suggest some kind of winnowing activity. Though it was chaff and not grain¹² in the silos, which would at first sight discourage a storage interpretation, it should be noted that the modern villagers at Hesbân have been observed storing their retrievable chaff in burlap bags at the winnowing site. The chaff could feasibly have been used also for packing of bulky storage items such as jars, but no complete vessels or even concentrations of sherds were found; nor would this explain the chaff-covered surfaces outside the silos. The weights may attest to yet another function, though more detailed speculation about their association with bedrock pits would be fruitless. An entirely different suggestion was that the bedrock cut was a moat for the acropolis perimeter Wall D.1:4, excavated with the wall and only secondarily used as a winnowing area. But no corresponding moat has been found outside the western perimeter wall in Area A.

⁹ Ibid., p. 97.

¹⁰ Ibid., Pl. VIII:B.

¹¹ This was the reason for subdividing 1974's stratum 14 into two.

¹² No grain or seeds were found in the flotation samples.

Possibly related to the above trough was another bedrock cut ca. 1.00 m. farther south which leveled out 0.45 m. lower and ran into D.3 where its opposite side (if it had one) was cut off by the Early Roman bedrock operations. The exposed portion of this cut was too small to ascertain whether there were any storage installations associated with it, but the absence of thin chaff layers just above bedrock broke down the comparison with the trough to the north. In any case, a solid *huwwar* layer (D.2:109) just above the cut's bedrock bottom contained only Late Hellenistic sherds.

Three other bottle-shaped silos were found in Area D which might also have had a function similar to those mentioned above. D.3:57, just inside the north balk, had no chaff in the bottom, but its dimensions were similar to those of the D.2 installations. Though stratigraphic connections had been cut by Roman builders it should probably be considered part of stratum 17. The remaining two silos were found in D.6¹³ (D.6:47, 48) where an east-west wall (D.6:75) ran parallel to the openings and parallel with the west winds. If our favored interpretation of these installations as storage silos for winnowed chaff is correct, this may have been all that remained of another winnowing "trough" in D.6.¹⁴

This stratum saw the construction of the massive acropolis wall (D.1:4) which was used until and through stratum 3. It was founded upon bedrock on a line exactly parallel to the bedrock trough,¹⁵ but all soil connections between the wall and the trough have disappeared, except for the deep (ca. 1.25 m. near the wall to 2.45 m. in the trough) gray soil fill with Late Hellenistic pottery that closed out stratum 17 and sealed against the perimeter wall (Locs D.1:56H, 59, 60, 64, 66; D.2:74, 92, 109). Thus wall D.1:4 is certainly to be ascribed to stratum 17, but whether it was built at the beginning or near the end of that stratum's life is not clear.

Ceramic indications put stratum 17 into the Late Hellenistic period between ca. 198 and 63 B.C.

Stratum 16:¹⁶ Early Roman I (63-31 B.C.)

Only a very few fragments remained of features that must have followed stratum 17 but preceded the remains of stratum 15. Wall

¹³ See H71, p. 102 (Fig. 6) and pp. 107-108.

¹⁴ Similar shaped and dated silos in Areas A and B may all have been utilized in a similar way.

¹⁵ For a full discussion of the phasing and description of the wall see H68, pp. 170-177, 197-200; H73, p. 200.

¹⁶ Stratum 13 of H74, pp. 95-96. This is sitewide Stratum XIX.

D.1:4 certainly continued in use, while to the south the stratum 17 debris was cut into and tamped down into a gray dirt surface (D.2:74) ca. 0.55 m. above the stratum 17 bedrock trough. Lying upon this surface, and running parallel with the north balk, was a rock tumble (D.2:78) of watermelon-sized boulders which brought an end to stratum 16 and which must have originated from a wall, now almost totally disappeared, more or less in the position of Wall D.2:26 of stratum 15 and battered against the previous stratum 17 fill. Traces of this wall have appeared, beneath Wall D.2:26 (stratum 15) and aligned slightly farther north. Hence, our designation of it was Wall D.2:26B. Unfortunately, later constructions had wiped out any other means of tracing the extent of the stratum within the limits of our excavation.

North of Wall D.1:4 it was possible that the chalky *huwwar* surface (D.1:51) 0.02-0.05 m. thick just above bedrock belonged to stratum 16, though Wall D.1:4 cut any connection with the southern sector of the Area where our evidence for the existence of the stratum lay.

The rock tumble which closed Stratum 16 may have been caused by the earthquake of 31 B.C. which seemed to have wreaked such havoc elsewhere, especially in Area B.

Stratum 15¹⁷ (Fig. 9): Early Roman II-III/IV
(31 B.C. - A.D. 70?)

Wall D.1:4 again effectively broke our stratigraphy into two zones with the southern one being the chief determinant for a distinction of strata. Upon the rock tumble of stratum 16 a new east-west wall (D.2:26A) was laid with very rough, head-sized stones. Only one to two courses of the two-row wall remained, but it was high enough to have the brown, compact soil of Surface D.2:67 = 66 run up to it. Wall D.2:26 could be traced westward to within 2.00 m. of the west balk and may have run out of our excavated limits. South of and parallel to it, but constructed of much larger and better-hewn boulders, with a nicely cut threshold stone near the east balk, was Wall D.2:64, also in use with Surface D.2:67. Like Wall D.2:26A this wall may have extended farther to the west, but it was robbed out by the builders of stratum 14. As in *H74* we would again suggest a possible north-south wall roughly on the line of Wall D.2:55B of stratum 14 to account for the extensive rock tumble (loci D.2:49, 50, 59, 70 —

¹⁷ Stratum 12 of *H74*, pp. 94-95. This is sitewide Stratum XVIII.

all about head-size) which seemed to have fallen from the west and which closed stratum 15.

South of Wall D.2:64 a leveling layer (D.2:108) was deposited to bring up the level for Surface D.2:102 which was made of very hard *huwwar* plaster about 0.35 m. below the D.2:64 threshold. This probably continued (sloping down to the south) into the next Square as Surface D.3:85 (with its occupation buildup D.3:90) which ran up to a probable door jamb in Wall D.3:70. The corresponding north jamb may have been in the balk separating D.2 and D.3 while its wall may have run north to Wall D.2:64 and possibly as far as Wall D.2:26 beneath our D.2 access stairs. This proposed wall, together with Wall D.3:70, probably did not form a house, but more likely an enclosure fence for a property since it was very flimsy (four courses high survived, built one row wide of crudely carved stones except at the door-jamb where they were well-cut) and even tilted slightly westward in spite of the existence of a buttress (D.3:87).

Otherwise it may have been used to surround a large cave complex of which Area D has only a small part. Wall D.3:70 was founded on a thin shelf of bedrock which covered a deep cave (D.3:83) that extended at least 2.00 m. farther to the east. Massive slabs of bedrock (Pl. IX:B) fallen from the roof of the cave canceled our attempts to dig the cave, but the pottery beneath a few of the slabs (in loci D.3:107, 108, 109) showed that it was at the end of this stratum (not stratum 16) that the collapse had occurred. It is probable that some carved bedrock steps (D.3:103) in the southern central portion of D.3 leading down northward represented the entrance to the cave, but unfortunately, the presence of Wall D.3:16 of stratum 14 separated any connection. Other caves in D.3, D.4, and Area B may have been part of this underground system.

Beside the rock tumble and cave collapse heralding the end of stratum 15, various soil layers also covered the remains: Loci D.1:53, 55, loose, gray-brown to red soil; D.2:63, brown, rubbly soil; D.2:62, 71, 75, 79, mostly brown to gray colors with crumbly to fairly compact textures; D.3:54, 55, 61, 62, all tumbled around toppled bedrock slabs in the west; and D.3:99, 101 — tumble above the steps. This destruction seemed to have been caused by an earthquake or a violent destruction strong enough to cause the collapse of the cave in D.3.¹⁸

¹⁸ The Jewish raids during the early years of the first revolt (see *JW* 2.18.1) could have been the cause of the destruction, though the collapsed bedrock of the cave ceilings would favor an earthquake. Unfortunately none are recorded between A.D. 48 and 130 (see D. H. Kallner-Amiran, "A Revised Earthquake-Catalogue of Palestine," *IEJ*, 1 [1950-51]: 225). The latter date could

North of Wall D.1:4 certain connections with the southern zone were impossible, but Surface D.1:49, made up of plaster including limestone chips, may have belonged to stratum 15. The equivalent surface in D.6 was the white plaster Surface D.6:45 which sealed silos D.6:47 and 48 and thus their original fill (though later contaminated by stratum 4 see below) seemed to belong to the beginning of stratum 15.¹⁹ The same surface sealed against Wall D.6:46 — an east-west wall 0.85 m. wide in the northern limits of Area D — which may have extended farther to the east and west than preserved. Like Wall D.3:70 it may have only been a fence wall.

Stratum 14²⁰ (Fig. 9): Early Roman IV (A.D. 70²¹-135)

With stratum 14 we had the first significant architectural remains south of Wall D.1:4, when a completely new city was rebuilt, this time wholly above ground. Along with the construction of Wall D.3:16 = D.2:55A = D.4:32²¹ a massive fill containing Early Roman II-IV ceramics was deposited to the east covering the remains of stratum 15 (Loci D.3:66, 71, 73, 78, 79, 80, 82, 86, 88, 89, 91, 93, 102, 105; D.2:23, 27). There were no surfaces among these layers; rather pockets of loose rubble and soil were characteristic for a depth of up to 4.25 m. in the northeast of D.3 where the bedrock collapse of stratum 15 was covered. The top 0.30 m. of this fill was multi-layered with sifted soil and pebbles as if each layer had been exposed for a short time, but never allowed to become a *bona fide* surface. Perhaps this was the result of off-and-on seasonal rains during the final stages of the filling operations. This season a black three-spouted lamp, exposed by erosion since 1974, was found within the fill. On top of this

be remotely possible since some Early Roman IV pottery (considered post-A.D. 70 in date by Sauer in his monograph *Heshbon Pottery 1971*) appeared surrounding some of the collapsed bedrock slabs and in the makeup for the stratum 14 ramp (see below), here interpreted as gathered from the destroyed stratum 15 debris. This left us already in Early Roman IV by the end of stratum 15. However, the late date of A.D. 130 left us a very short time span for the Early Roman IV, stratum 14, even though in Area D, as elsewhere, this stratum was the thinnest (by a considerable margin) of all similar strata which followed. It may be possible as well that stratum 14 extended slightly into the Late Roman period by a number of years. Yet another possibility is that an unrecorded earthquake occurred at some time toward the end of the first century A.D. and may have been the one responsible for our destruction.

¹⁹ See H71, pp. 92-94.

²⁰ Stratum 11 of H74, pp. 92-94. This is sitewide Stratum XVII.

²¹ Two phases were noted for this wall, especially in D.3; D.3:16A belonged to stratum 13 and was a rebuild of stratum 14's D.3:16B, slightly farther to the west so that it overhung 16B.

earthen buildup a hard white plaster layer (similar to those in Area B) was laid sloping upward (D.2:22 = D.3:19 = D.3:67). The 1974 interpretation²² of this as a ramp was further supported this season by the discoveries in D.4,²³ which, though not conclusive, tended strongly in this direction. The partial removal of the east end of the D.3-D.4 balk saw the ramp's plaster layers run up to Wall D.4:31-D.3:117, which was a retaining wall (faced on the south, unfaced on the north) for the south end of the ramp. Presumably the entrance to the ramp would have been east of our excavation limits.

Wall D.3:16B = D.2:55A was formed of large boulders only slightly worked perhaps because it was only an inside retaining wall not meant to be exposed to the eye.²⁴ Much better worked were the ashlar stones making up the lowest course of Wall D.3:47 = D.2:104 = D.4:83, which was parallel to and in use with Wall D.3:16B, but which faced the plaza of Area B.

Since this stratum has been described in the 1974 report, here we will add only a few refinements and corrections. It would seem that in the sector which had the rooms in D.2 and D.3 the silos, originally cut in stratum 17, were filled (D.2:80C, D; D.2:95C, D, E; D.3:57A, B, C, D, E, F),²⁵ since their ceramics were identical to those of the ramp buildup. Possibly to fortify the fill above Silo D.3:57 for the surface of the room above, Wall D.3:63 was constructed, probably of large stones robbed from an earlier structure.

Above the foundation trenches for Wall D.3:47 (D.3:53, 56) Surface D.3:52 (dark gray to light gray compact soil) was laid which ran between and up to Walls D.3:16B and 47. The stratum 14 surfaces in D.2 seem to have been removed by the stratum 13 occupants. Indeed, there was little evidence that the D.2 room existed in stratum 14 since all soil layers and walls, except Walls D.2:21 and D.2:111 (which blocked Silo D.2:80 for use with the room and which had the stratum 14 soil Layer D.2:80C seal up against it) were no earlier than stratum 13. It may have been that the stratum 14 room if it existed was not cut into bedrock as deeply as that of stratum 13.

²² *H74*, pp. 92-93.

²³ See the Area B report, above.

²⁴ Compare the levels of the ramp in the north of D.3 (889.08 m.) with the corresponding floor west of Wall D.3:16 (886.90 m.).

²⁵ It should be mentioned that these layers (containing head-size and smaller stones with loose dirt) seemed to have been the result of rapid fill at one time and do not support the conclusions of LaBianca and LaBianca, "Domestic Animals of the Early Roman Period," *AUSS* 14 (1976): 205-216, where quite indistinct layers in Silo D.3:57 were overemphasized as distinct strata. The best interpretation for the fill of D.3:57 is that of a garbage dump.

North of the rooms but south of Wall D.1:4 only fill debris was encountered (D.1:53, 55, 56A — brown to gray, loose layers) into which the crude Drain D.1:61 = 80 was laid.²⁶ North of Wall D.1:4 the drain continued, probably in use with, or built from, a rather indistinct dirt surface (D.1:82 and D.1:81 = 46) laid atop ca. 0.60 m. of leveling debris (D.1:47, 48, 86, 87, 88, 92 — all varying degrees of rubble and loose dirt) and the foundation trenches for Drain D.1:61-80 (D.1:84, 85). The soil within the drain (D.1:89) did not seem to have been water-laid, but rather sifted down through the capping stones.

Stratum 14 probably saw the first digging of Cistern D.6:33 since its foundation trench (D.6:73) was sealed by the dirt Surface D.6:44, which may be considered part of stratum 14.

Very little indication remained as to what brought about the close of stratum 14, but some debris was found (Layers D.1:79 and D.6:71). The destruction or renovation may have been due to the A.D. 132-135 Bar Kochba revolt which closed the Early Roman and began the Late Roman period.

Stratum 13²⁷ (Fig. 9): Late Roman I-II (ca. A.D. 135-235)

The stratum 14 walls had been destroyed or dismantled to ground surface level and were now rebuilt along the same lines. Wall D.3:47 was again built of ashlar stones, but a new set of foundation cobbles was laid above the stratum 14 courses. It was to stratum 13 that the well-worn thresholds in Wall D.3:47 belonged. Wall D.3:16A was constructed of large, poorly-worked boulders, but was founded ca. 0.10 m. farther to the west than Wall D.3:16B. Its foundation trench into the stratum 14 ramp buildup was clear (D.2:68 and D.3:75, 77, 104). After a layer of leveling debris was laid down to cover the stratum 14 destruction (D.3:97) Surface D.3:49 = 95 was laid connecting both walls (D.3:47 and D.3:16). In a possible second room in the north of D.3, Surface D.3:60 was laid, again running up against both walls.

It is probable that a more thorough renovation occurred in the room in D.2 where the stratum 14 surface (if one existed) was completely removed and Surface D.2:89 (= D.2:94, 98, 101, 112) was laid directly above bedrock and on top of leveling debris in Silo D.2:95 (D.2:95A, B) and the southern Wall D.2:85's foundation trench (D.2:91), indicating that this wall may have belonged completely

²⁶ See H74, p. 92 and Pl. VIII:A for a description.

²⁷ Stratum 10 of H74, pp. 87-91. This is sitewide Stratum XVI.

within stratum 13. The skin Wall D.2:21A was partially dismantled this season revealing pottery of stratum 13²⁸ while nothing earlier than the same ceramics could be found running up to the west wall (D.2:81). Further, the eastern wall, D.2:55B, though containing stratum 14 pottery, appeared to have abutted against skin Wall D.2:21A of stratum 13. Thus it seemed that all four walls of the D.2 room, from their founding on, belonged to stratum 13. The somewhat disjointed relationship of the D.2 room to the D.3 walls (where the stratum 13 walls carefully followed stratum 14 lines) may indicate its secondary nature as well.

East of the rooms another white plaster layer (D.3:18), very hard and compact ca. 0.11 m. thick, was laid to resurface the ramp, into which at least one pit had been dug (D.3:76). It was used as in stratum 14, but with a few changes to its approach in D.4.²⁹ This was probably soon resurfaced with another white layer (D.3:8).

The end of the stratum saw a massive destruction, preserved beneath the stratum 12 stairway in D.2 to a depth of up to 3.25 m. (including rubble and rock tumble loci: D.2:31, 42, 43, 58, 69, 72, 73, 88, 90, 100, 107; D.3:96, 116). The distinct layering (Pl. X:A) of the rock tumbles on top of each other within the D.2 room may have been an indication of a roof and/or a second story. Rock Tumble D.3:48 = 94 represented the destruction of Wall D.3:16.

We were again uncertain of connections to the north of Wall D.1:4, but it was possible that the earliest Late Roman remains there dated to stratum 13. In D.1 leveling debris was brought in to prepare for dirt Surface D.1:44, better preserved in the east than in the west, while an enigmatic stone construction, D.1:45 (buttress for Wall D.1:4?), was used in conjunction with Surface D.1:44. Cistern D.6:33 also seemed to have continued in use.

The earliest Late Roman pottery was found in and just beneath the surfaces of stratum 13, dating its beginning to the mid-2d century A.D., while the very substantial debris which closed out the stratum was dated to the late 2d century.

Stratum 12³⁰ (Fig. 9): Late Roman III-IV (ca. A.D. 235-324)

Since this stratum south of Wall D.1:4 has been described in the 1973 and 1974 reports,³¹ little will be said here beside a listing of the

²⁸ Wall D.2:111, built to wall up Silo D.2:80 and in line with skin Wall D.2:21A, also contained pottery of stratum 13.

²⁹ See the Area B report above.

³⁰ Stratum 9 of *H74*. This is sitewide Stratum XV.

³¹ *H73*, pp. 196-199 and Fig. 8; *H74*, pp. 85-87.

loci involved. The monumental Stairway D.2:32 = D.3:39 (for its westward continuation in B.7, see the Area B report, above) had a very substantial makeup (Loci D.2:24, sub-32, 36, 40; D.3:43, 50, 51, 58, 59; D.1:57 — well-packed dirt with hewn and/or unhewn stone-tumble layers) above the debris from the stratum 13 destruction.

Wall D.2:21 was probably the northern limit of the stairway whence a platform (destroyed at a later date) ran to the gateway in Wall D.1:4, perhaps larger than now apparent. The stairway reused Walls D.3:16A and D.2:55A (and probably B) as its eastern boundary while a succession of plaster surfaces from the Area B plaza ran up to the bottom steps (Surfaces D.3:40, 44, 45, 46 = 92). The sector east of the stairway seems to have been abandoned except for a small pit along the east balk (D.3:114, 115) that cut into the ramp layers of strata 14 and 13.

The material was still scanty north of Wall D.1:4 but leveling debris (D.1:76, 93) was probably preparation for clayey Surface D.1:35 = 75 which included a *ṭabun* indicating its possible function as an open courtyard. East-west Wall D.6:19, at least a meter wide, founded on bedrock, and Late Roman in date, may have been built at this time as well as the two one-row, two-course, north-south walls (D.6:39 and 41) abutting D.6:19 on the north. These may have been used only to structure the fill (Loci D.6:40, 42, 69) which surrounded them for a surface above no longer extant.

The Late Roman Layer D.5:49 (compact, dark brown soil just above bedrock) may have belonged to stratum 12. If so, this was the earliest evidence for Cistern D.5:5³² (which continued until stratum 3), since it ran up to the cistern's vaulting. Along with Cistern D.6:33, we could thus envisage two large cisterns on the southeast side of the acropolis in stratum 12.

Though lacking in the rest of Area D because of later robbing, there seemed to have been quite a massive destruction at the end of stratum 12 since the tumble from Wall D.3:16A was 1.25 m. deep near the wall, thinning out to 0.40 m. near the west balk.

Stratum 11:³³ Early Byzantine I (ca. A.D. 324-340)

The only evidence for this stratum was the resurfacing of the Area B/D plaza layers in use with Stairway D.3:39. A white plaster surface (D.3:38) was laid atop the stratum 12 destruction debris and ran up

³² See H71, pp. 97-99 and Fig. 5.

³³ Included within stratum 9 of H74. This is sitewide Stratum XIV.

to the fourth course of Stairway D.3:39. The evidence for any attempt to rebuild Wall D.3:16, at least in the north, was removed by a large stratum 3 pit. South of the stairs the stratum 11 surface seemed to have continued up and over the remains of Wall D.3:16 running out of our excavations to the east.

There was no evidence for any change of activity elsewhere in Area D, except perhaps a small pit in the southeast corner of D.3 (D.3:113) which cut through the strata 13-14 ramp layers. Cisterns D.5:5 and D.6:33 probably continued in use, but no soil layers within the cisterns positively attested that supposition.

There was a lack of any real destruction in Area D for bringing stratum 11 to an end. Perhaps it occurred elsewhere: the 0.50 m. of soil (part of D.3:33) between the strata 11 and 10 plaza surfaces was too great to be considered a simple resurfacing. We followed the breakdown of the Early Byzantine dating of this stratum and the next three worked out for Area B.³⁴

Stratum 10:³⁵ Early Byzantine I (ca. A.D. 340-350)

Again, the information for this stratum came only from D.3 south of Stairway D.3:39, where another plaza surface (D.3:33) was laid, which could not be traced up to the stairway in D.3 because of the stratum 8 pit, but which did run up to the stairway in B.7.³⁶ A tendency for the surfaces to rise up from the south toward the stairs began here and continued into stratum 9. At the end of stratum 10 several layers of debris accumulated (D.3:24, 25, 36 — all reddish-brown soil with *nari* chips), though the accumulation seems to have been rapid since no exposure surfaces were found. The pottery was solidly Early Byzantine, and following the dating of Area B, was placed in the mid-4th century A.D.

Stratum 9:³⁷ Early Byzantine I (ca. A.D. 350-365)

Like strata 10 and 11 this stratum was basically a plaza surface, again using Stairway D.3:39, though our only connection with the stairway was in B.7 where, though cut by the stratum 8 (Area D) pit, the probability of its connection with the stairway was deduced.³⁸ A makeup layer of reddish brown soil was spread over the uneven

³⁴ See James Sauer, on Area B strata 9-5, in *H71*, pp. 57-61.

³⁵ Included within stratum 9 of *H74*. This is sitewide Stratum XIII.

³⁶ See the 1976 Area B report in this issue.

³⁷ Included within stratum 9 of *H74*. This is sitewide Stratum XII.

³⁸ See the Area B report in this issue.

soil (D.3:11) and then a plaster surface (D.3:10) laid over it. A very extensive rock tumble (D.3:13) covering most of Area B as well as D.3, and ascribed by Sauer³⁹ to an earthquake in A.D. 365, put an end to the stratum.

Stratum 8⁴⁰ (Fig. 9): Early Byzantine II-IV (ca. A.D. 365-450)

The destruction from the A.D. 365 earthquake demanded a large-scale rebuilding operation. A large pit was dug to excavate the well-cut stones from the strata 12-9 stairway for re-use in another stairway (Pl. X:B) encountered in Area D as D.2:34. The pit was then filled (Loci D.3:26, 27, 28, 29, 30, 31, 32, 34, 35, 41, 42 — a series of thin, interlacing fill layers tipped down from north to south and composed of tan soil with *nari* chips) and Surface D.3:12 = 3 = D.2:18 was laid on top and ran up to the bottom step of the D.2:34 stairway.

It was at this period that the well chiseled Byzantine courses on Wall D.1:4 were probably added, though no surviving soil relationships made this certain.⁴¹

North of Wall D.1:4 it is probable that the earliest construction of the Area A church was begun.⁴² In Area D this included the south wall of the church (Wall D.5:12 = D.6:55) and the room south of the apse (made up by Walls D.6:3C and 19C), as well as Wall D.6:56C, thus possibly forming a room with Wall D.6:3C to protect Cistern D.6:33, which continued in use probably along with Cistern D.5:5. All stratum 8 surfaces seemed to have vanished in the rebuilding of the church and associated structures in stratum 7.

Stratum 7 (Fig. 9): Byzantine (ca. A.D. 450-614)

This stratum has been completely described in the 1973 and 1974 reports;⁴³ so this summary will be very brief. With stratum 7 it is possible to connect the loci north and south of Wall D.1:4 by Drain D.1:58/77 = D.2:30 (the drain walls were labeled D.1:78, 83), which ran along the west balk and beneath Wall D.1:4. South of Wall D.1:4 it was capped by Wall D.1:37 = D.2:25 as it cut through the top courses of Stairway D.2:34, still in use from stratum 8. Surfaces D.1:31 = D.2:13B/20/33 were laid up against it atop a slight makeup

³⁹ See Sauer on Area B in *H71*, pp. 58-60.

⁴⁰ See *H73*, pp. 191-196, where our strata 7 and 8 are combined. These are Strata IX-XI.

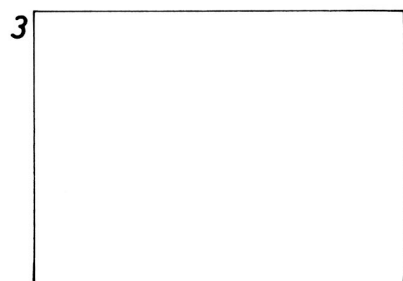
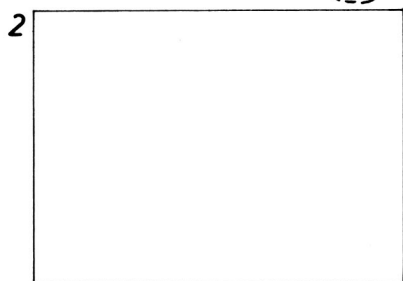
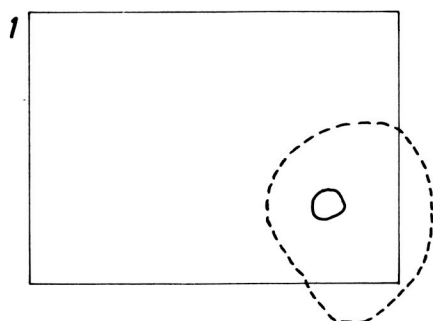
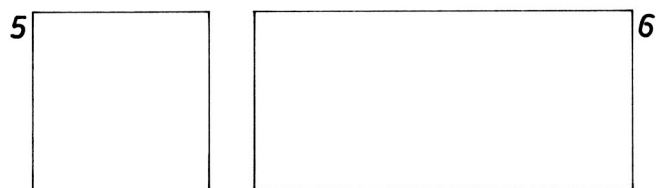
⁴¹ See *H68*, p. 170.

⁴² All wall and foundation-trench phases (Loci D.5:29 = 47; D.6:76) are described in *H73*, pp. 191-192; *H74*, pp. 84-85.

⁴³ *H73*, pp. 191-196 and Fig. 7; *H74*, pp. 84-85. This is sitewide Stratum VIII.

AREA D

STRATUM 19



HESHBON 1976
AREA D STRATA

DRAWN BY LARRY HERR & BERT
DEVRIES

KEY:







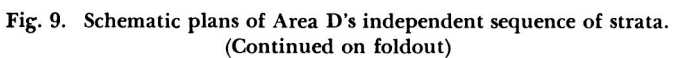
-  WALL
-  INSTALLATION
-  SURFACE
-  DEBRIS ABOVE SURFACE
-  DEBRIS BELOW SURFACE
(leveling)
-  HIDDEN OR RECONSTRUCTED



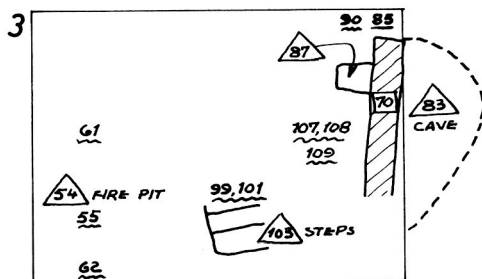
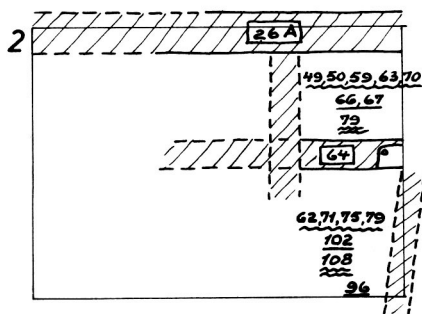
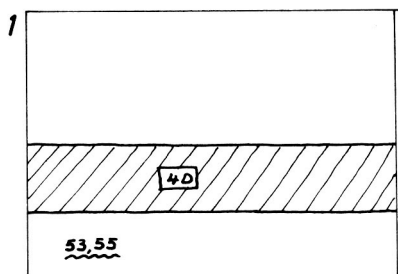
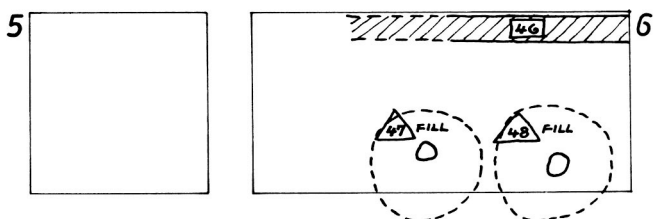
Fig. 9. Schematic plans of Area D's independent sequence of strata.
(Continued on foldout)

STRATUM 17



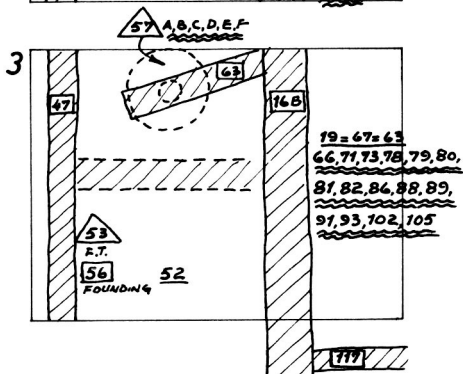
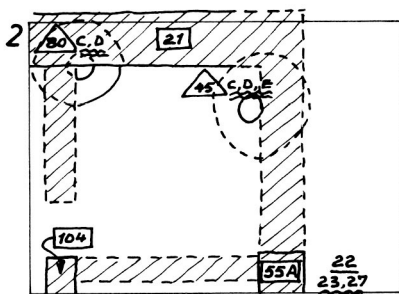
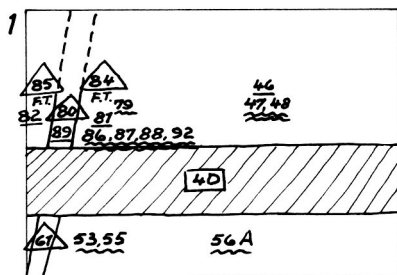
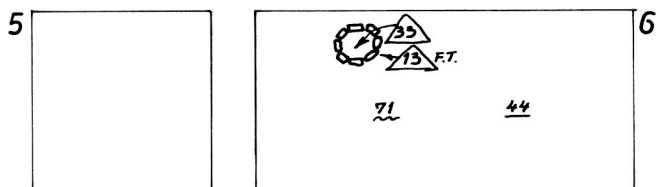
AREA D

STRATUM 15



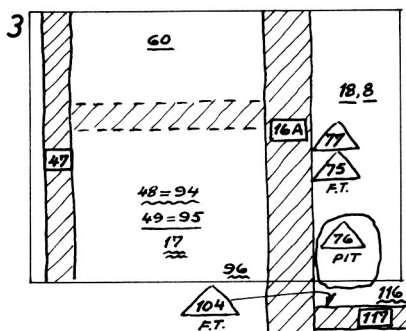
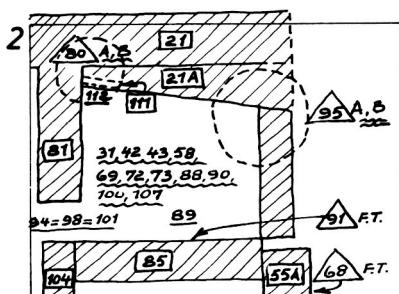
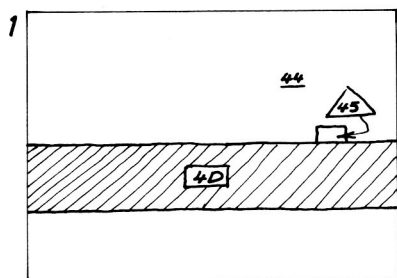
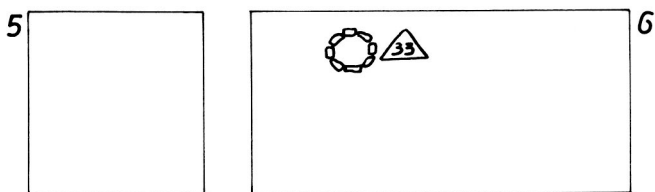
AREA D

STRATUM 14



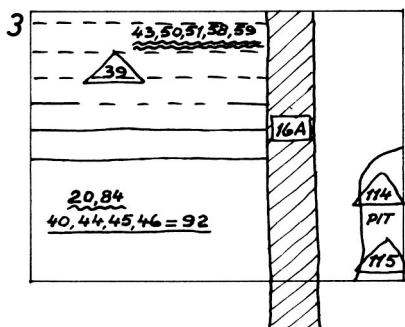
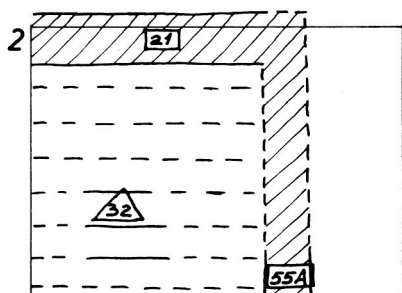
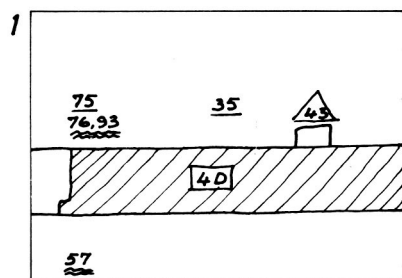
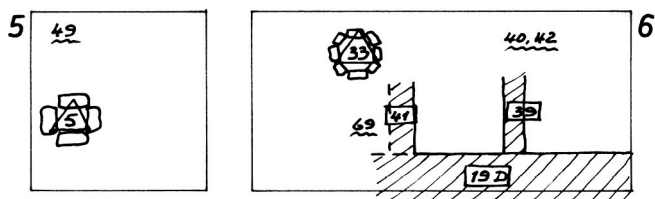
AREA D

STRATUM 13



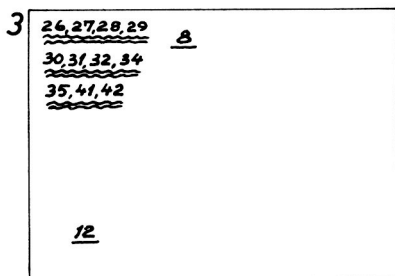
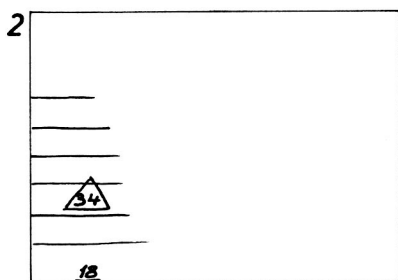
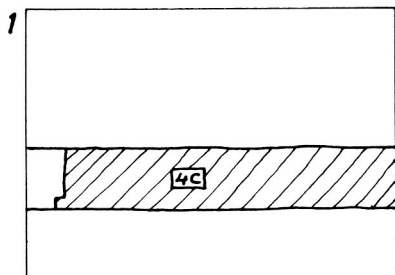
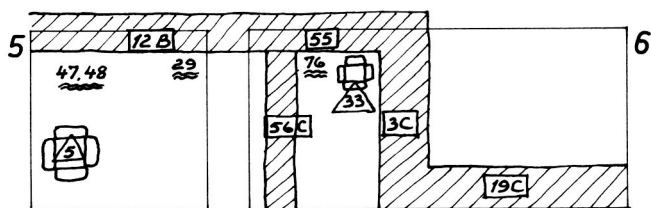
AREA D

STRATUM 12



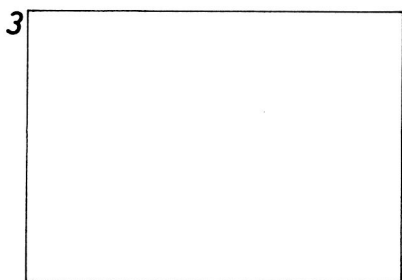
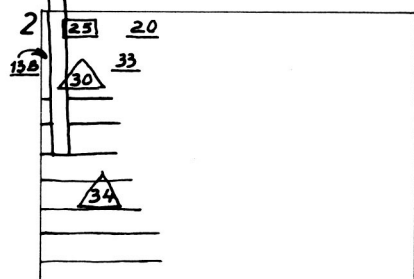
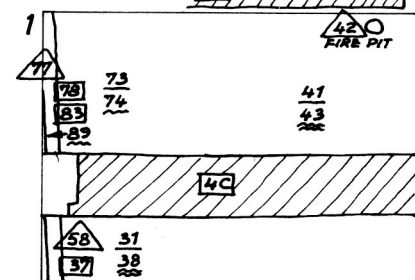
AREA D

STRATUM 8



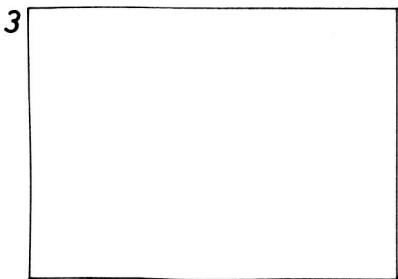
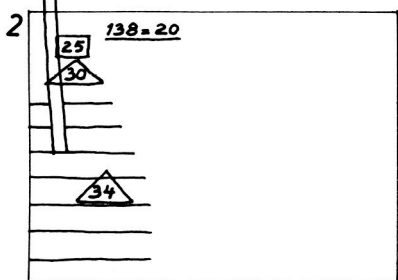
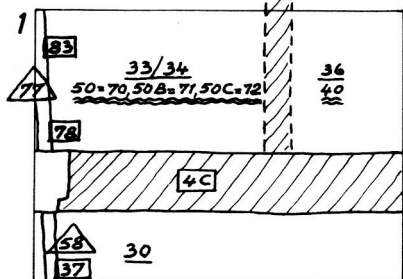
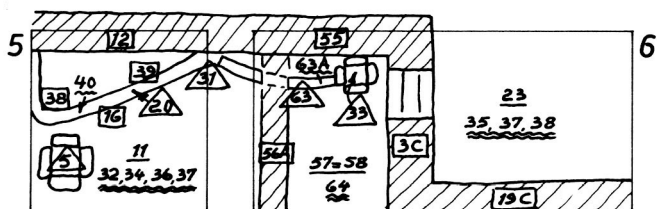
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STRATUM 7



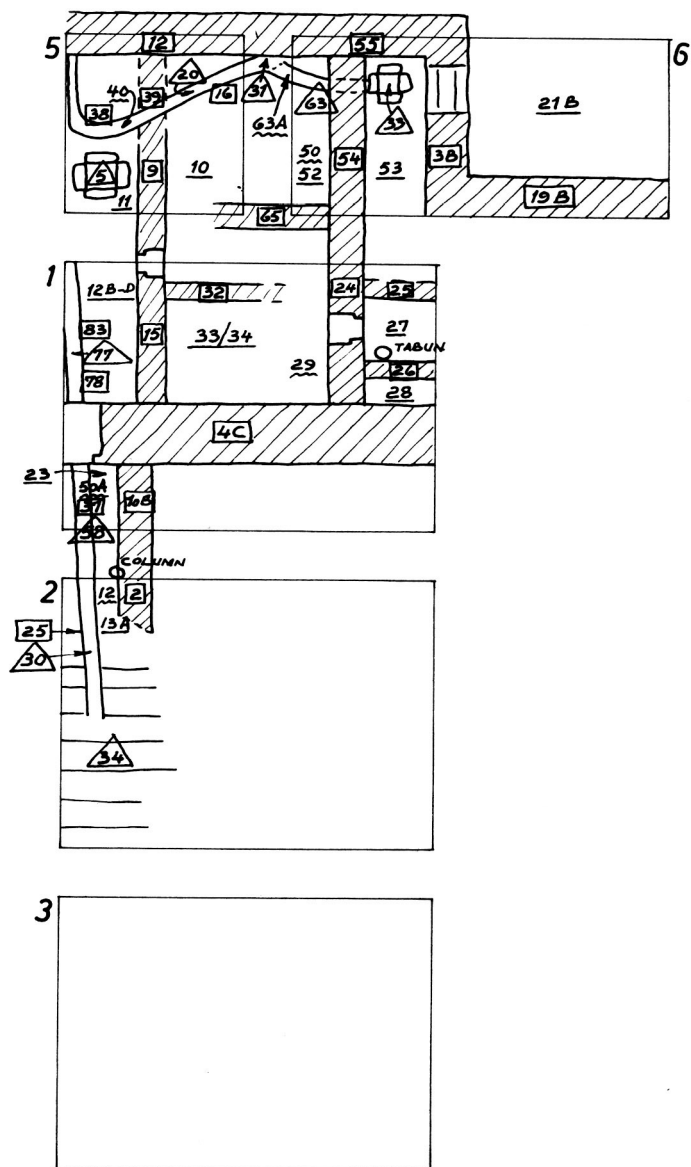
AREA D

STRATUM 6



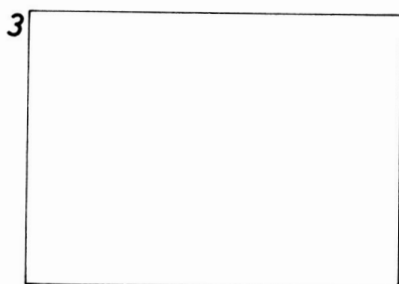
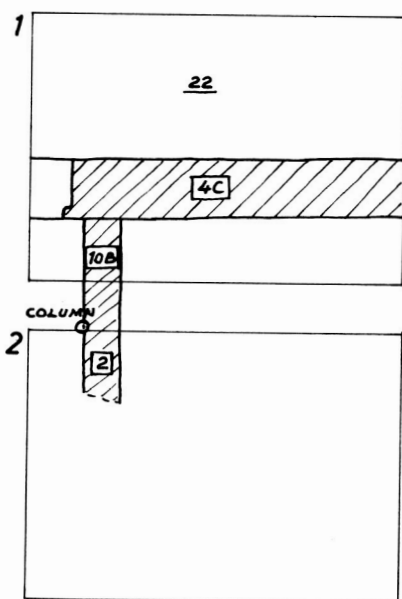
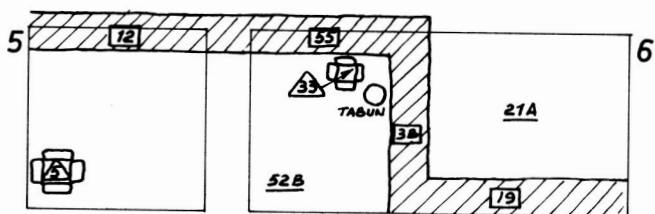
AREA D

STRATUM 5



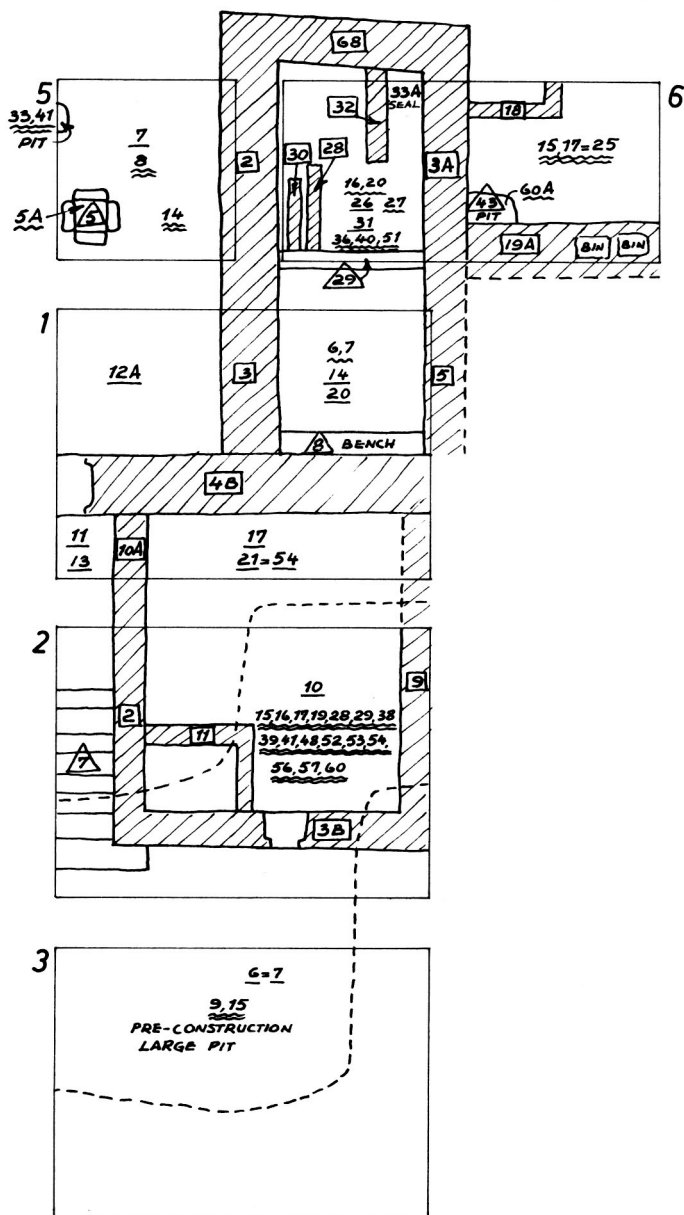
AREA D

STRATUM 4



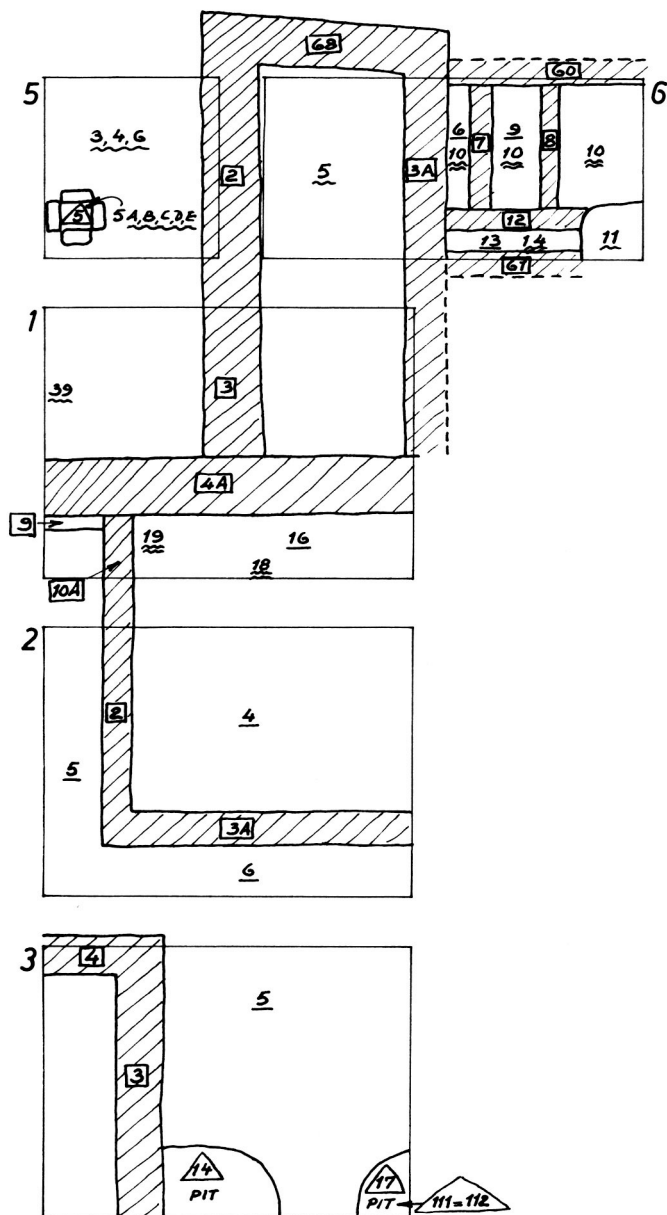
AREA D

STRATUM 3



AREA D

STRATUM 2



layer (D.1:38). North of the perimeter wall the fine dolomitic limestone tile Surface D.1:41 = 73 was laid atop a red, compact leveling layer (D.1:43 = 74). This floor ran up to east-west Wall D.5:27 = D.6:70, which in turn was contemporary with Walls D.5:12 = D.6:55, D.6:56B, D.6:3C, and D.6:19C.

The western room formed by these walls had a combination flagstone (D.5:42) and hard plaster floor (D.5:13 = 17 = 35) laid atop various compact makeup layers and pockets: D.5:18, 19, 21, 23, 25, 26, 28, 29, 43, 44, 46, the latter five of which made up the foundation trench (replete with tesserae and fresco fragments, probably from the stratum 8 church) for the second phase of the south church wall, D.5:12. Also beneath this room's surface was the western foundation trench for Wall D.6:56B (D.6:66). Embedded in and below the pavement floor was the drain (D.5:20; side walls: D.5:16, 38, 39; soil inside: D.5:40) which apparently led from two downspouts along the church wall to Cistern D.5:5.

The eastern room had Surface D.6:61A laid atop a hard, reddish leveling layer (D.6:62) and the east foundation trench for Wall D.6:56B (D.6:67) as well as the foundation trench for Wall D.6:70 (D.6:74). Drain D.6:63 (interior soil: D.6:63A, B) led from the church's eastern downspout into Cistern D.6:33. Surfaces east of Wall D.6:3C were probably destroyed in preparing the stratum 6 tessellated floor.

The function of the rooms north of Wall D.1:4 was not indicated by any of the finds. Perhaps they were rooms associated with the church. A dating span from ca. A.D. 450 to 614, though long, would seem defensible.⁴⁴

Stratum 6⁴⁵ (Fig. 9): Late Byzantine (A.D. 614-661)

The only major difference between strata 6 and 7 was the construction of the flagstone Pavement D.1:33/34 = D.5:11 along with its several, thin layers of makeup (D.1:50 = 70, 50B = 71, 50C = 72; D.5:24, 32, 34, 36, 37) above the floors of stratum 7. Wall D.5:27 = D.6:70 was dismantled and paved over, forming a large open court bounded by Walls D.1:4, D.5:12 = D.6:55, and D.6:56A, in which Cistern D.5:5 was reused and still fed by the stratum 7 drains.

⁴⁴ See H74, p. 84, for the reasoning behind the closing date given here. The beginning date was not more specific than the possible connection of the B.1 kiln, ca. A.D. 450 (see Sauer, "Area B," H71, pp. 44-48), with the construction of the church.

⁴⁵ See H73, pp. 189-191; H74, pp. 83-84 for a more detailed discussion. This is sitewide Stratum VII.

East of Wall D.6:56A a new surface (D.1:36 = D.6:57 = 58) was laid in the small room housing Cistern D.6:33. East of Wall D.6:3C the tessellated floor D.6:23 was laid atop three thin makeup layers (D.6:35, 37, 38).

South of Wall D.1:4 the platform at the top of the stairway was resurfaced (D.1:30) just in front of the gate through Wall D.1:4, while the drain and stairway continued in use from stratum 7.

The end date of stratum 6 was difficult to pinpoint since the changes to stratum 5 did not seem to have been violent: no overlying debris or destruction could be found; the stratum 5 surfaces seemed to have reused (or been laid immediately above) those of stratum 6. The change to the Umayyad period seems to have been peaceful. Indeed, if it were not for a few definite architectural changes there would hardly be a cause to change strata. Stratum 6 could then have carried over into the Umayyad period.

Stratum 5⁴⁶ (Fig. 9): Umayyad (ca. A.D. 661-750)

The flagstone pavement of stratum 6 seems to have been reused in the Umayyad period since a few Umayyad sherds were found in the flagstone joints. The silt inside some of the stratum 7 drains had one or two Umayyad sherds, indicating their continual use into stratum 5.

Two north-south walls (D.1:15 = D.5:9 and D.1:24 = D.6:54) effectively divided the sector north of Wall D.1:4 into three separate zones. West of Wall D.1:15 = D.5:9 Pavement D.5:11 was reused in the north, while in the south, near the gate, occupational deposits (Surfaces D.1:12B, C, D) accumulated on top of the pavement. In this sector Cistern D.5:5 was still in use along with Drain D.5:20.

Between Walls D.1:15 = D.5:9 to the west and D.1:24 = D.6:54 on the east, two east-west walls seemed to have subdivided this central portion into three parts. North of Wall D.6:65 was Surface D.5:10 = D.6:52, partially atop pavement D.5:11, connecting Walls D.5:12 = D.6:55, D.5:9, D.6:54, and D.6:65. The southern part had Surface D.1:33/34 used with Walls D.1:32, 15 and 4, but was cut off before it reached Wall D.1:24 by the foundation trench for Wall D.1:3 of stratum 3. The central sector was probably two rooms of unknown use with a central hallway. To the east, Surface D.6:53 ran up to Walls D.6:54, 55, 3B and D.1:25 as well as Cistern D.6:33 and its drain (D.6:63). South of the small (one row, one surviving course) Wall D.1:25 was Surface D.1:27, which ran against Wall D.1:26 (similar to D.1:25). In the small room thus formed was a small *ṭabun* indicat-

⁴⁶ See H73, pp. 188-189 and Fig. 6. This is sitewide Stratum VI.

ing domestic use. South of Wall D.1:26 was a very small room floored by Surface D.1:28. East of Wall D.6:3B and north of Wall D.6:19B was Surface D.6:21B, probably an outdoor surface. The general picture one got was of a domestic space, possibly entered from the east through Wall D.6:3B and from the west through Wall D.1:15 = D.5:9. The front entrance was probably on the west, facing the flagstone pavement. The central sector probably consisted of living rooms while the portion to the east was most likely used for household work (the cistern and the *ṭabun*).

South of Wall D.1:4, the stratum 8 stairway seemed still to have been in use along with Drain D.1:37 = D.2:30. Wall D.1:10B = D.2:2 was erected just east of the drain, incorporating a column (from the Byzantine church?), possibly to make a boundary for the stairway. Surface D.1:23 = D.2:13A spanned the gap from the top of the stairway to the gate through Wall D.1:4.

The stratum 5 city seemed to have been abandoned, since no destruction was evident, unless the debris was denuded in the post-stratum 5 gap. Only a few soil layers (D.1:39, 50A; D.2:12; D.6:50) separated the stratum 5 surfaces from the stratum 4 surfaces. It is possible that the abandonment occurred when the Umayyad period ended, as the wealth and influence surrounding the Caliph moved to Baghdad. A good date for the end of stratum 5 would thus be ca. A.D. 750.

Post-Stratum 5 Gap

Though sprinklings of 'Abbāsīd pottery were found, nowhere in Area D was it isolated as a distinct layer or phase. Likewise, nothing was found of the Fatimid, Seljuk, or Crusader periods.

Stratum 4⁴⁷ (Fig. 9): Ayyūbid (ca. A.D. 1200-1260)

No significant occupation took place in stratum 4, though a few pre-stratum 3 surfaces (D.1:22, D.6:52, 21A) existed north of Wall D.1:4 and sealed against Walls D.5:12 = D.6:3B, and D.6:19. It seemed that these surfaces were used around the ruins of the stratum 5 walls when water was drawn from the newly cleaned Cisterns D.5:5 and D.6:33, though no channels or drains were observed leading into them. Perhaps the stratum 7 to 5 drains were reused, but no indication of such has come down to us. A *ṭabun* next to Cistern D.6:33 indicated slight domestic use.

South of Wall D.1:4 it seemed that Wall D.1:10B = D.2:2 still was

⁴⁷ H73, p. 187. This is sitewide Stratum IV.

visible. All other stratum 5 walls seemed to have been covered by debris and were not visible during stratum 4.

The picture one got of stratum 4 was that of very light use, perhaps semi-nomadic. By the pottery from the earliest fill layers in Cistern D.6:33 (D.6:33G, H, I) it seemed to date to the Ayyūbid period, the first half of the 13th century A.D.

Stratum 3 (Fig. 9): Early Mamlūk (ca. A.D. 1260-1400)

Stratum 3 has been almost completely reported elsewhere,⁴⁸ but its character covered in three different seasonal reports could be understood better through a brief overview of all the loci involved. South of Wall D.1:4 Walls D.1:10A = D.2:3B (with a threshold roughly in the center), D.2:9, and D.1:4 formed the boundary of a probable courtyard surfaced by *huwwar* (D.1:17, 21 = 54; D.2:10). It lay atop a large robber pit (fill loci: D.2:15, 16, 17, 19, 28, 29, 38, 39, 41, 48, 52, 53, 54, 56, 57, 60) dug to gain building materials from the strata 13-9 walls and stairways. In the southwest corner of this courtyard was a small enclosure (ca. 2.00 x 1.50 m.) surrounded by the one row, one surviving course Wall D.2:11 forming a possible storage zone. South of the courtyard and also covering the large pit (fill Loci D.3:9, 15) was *huwwar* Surface D.2:8 = 14 = D.3:6 = 7.

To the west, Stairway D.2:7 (Pl. X:B), built atop the previous stairways, ascended from the D.3 surface to a plaster platform (D.1:11, 13) outside the gate through Wall D.1:4. Just inside the gate to the north was an open space with a reddish dirt surface (D.1:12A = D.5:7) topping some leveling debris (D.5:8, 14) and small pits (D.5:33, 41).

Inside the vaulted room formed by Walls D.1:4, D.1:3 = D.5:2, D.6:3A = D.1:5 were two phases of surfaces: Laid atop some leveling debris (D.6:3B, 49, 51) was a hard-packed, brown earth surface (D.6:31); built upon this surface were three ephemeral (one course, one row) north-south walls (D.6:28, 30, 32) that may have been benches, cupboards (a bowl was found between two of them), or simply a retention of the leveling debris (D.6:27) for the black, ashy surface above (D.6:26). The southern part of the floor of the vaulted room seemed to have been slightly lower (ca. 0.20 m.) than the north during the first phase (Surfaces D.6:31 and D.1:14). Thus Step D.6:29 was needed to communicate between the two parts. With the laying of the second phase (Surfaces D.1:20 and D.6:26) the southern part was only 0.10 m. lower and no step was needed. It was probably with

⁴⁸ See *H68*, pp. 197-203 and Pl. XX:A; *H71*, pp. 94-110; *H73*, pp. 184-187 and Fig. 6; *H74*, pp. 81-83. This is sitewide Stratum III.

this second phase that Cistern D.6:33 was filled (D.6:33A, B, C, D, E, F) and closed, since the latest coins found inside were from the mid-14th century. Lining this room on the south and built against Wall D.1:4 was Bench D.1:8. The north wall, D.6:68, probably rose no higher than the inner surfaces, making the north side of the room open.

East of Wall D.6:3A no surface could be found, but Pit D.6:43, possible Bin D.6:18, and the bins built into Wall D.6:19 attested possible storage use.

Wall D.1:4 with its gate was probably the outer wall of a Mamlūk caravanserai. Inside the gate was a courtyard, including Cistern D.5:5, with a vaulted room,⁴⁹ and a probable storage zone to the east. South of Wall D.1:4 were outlying buildings and the approach to the gateway.

At the end of its active use, stratum 3 did not appear to have been destroyed. Stratum 2 seemed to have been laid on top of very little accumulation (D.1:6, 7; D.6:16, 20). A good reason for the abandonment still eludes us.

Stratum 2⁵⁰ (Fig. 9): Late Mamlūk (ca. A.D. 1400-1456)

The discoveries from this stratum, spread over the reports of various seasons, will also receive a brief summary of the loci involved. In the eastern part of D.6 a series of terraces included east-west Wall D.6:61 holding back layers D.6:13 and 14 (Terrace III) and east-west Wall D.6:12 (which ran into a cobble pocket, D.6:11, on the east) which held back a series of two terraces going from east to west: Layer D.6:10 was below them and to the east; Wall D.6:8 held back Layers D.6:9 and 10 (Terrace II); Wall D.6:7 retained Layers D.6:6 and 10 (Terrace I). On the north side of these terraces was Wall D.6:60 running along the north balk. All terrace walls were one surviving course high and one row wide; all soil layers were loose and sandy except for D.6:10, the layer upon which the terraces were built.

The vaulted room of stratum 3 seemed to have continued; but no surfaces were found, only debris layers D.1:39 and D.5:3, 4, 6, possibly from the end of the stratum. At this time Cistern D.5:5 was filled (D.5:5A, B, C, D, E) and abandoned.

The gate through Wall D.1:4 was blocked (D.1:9) while south of the perimeter wall it was possible that the courtyard continued in

⁴⁹ See the Area A report in this issue for much more material from this Stratum.

⁵⁰ See *H68*, pp. 212-216; *H71*, pp. 104-105; *H73*, p. 184. This is sitewide Stratum II.

light use as a terrace with Wall D.2:3A retaining Surface D.2:4 = D.1:16 atop leveling debris (D.1:19). West of the courtyard was an exposure (non-occupation) Surface D.2:5 = 6 = D.3:5. In the west of D.3 was an "L"-shaped wall (D.3:3, 4), perhaps another terrace, field enclosure, or house, while a series of pits disturbed the south portion of D.3 (D.3:14, 17 = 111 = 112).

The picture we got of stratum 2 was that of a village of irregularly spaced houses along with their gardens and open zones, much like parts of the modern village of Ḥesḅân.

At the end of stratum 2 occupation, the vaulted building and the other various walls began to fall down (Tumble D.6:5; D.5:3, 4, 6; D.1:39). The appearance of the debris was one of gradual disintegration and buildup after abandonment rather than the sudden accumulation of a deliberate destruction. The half-preserved vaulted room suggested this. Stratum 2 was in the Late Mamlūk period, perhaps ca. A.D. 1400-1456.

Post-Stratum 2 Gap

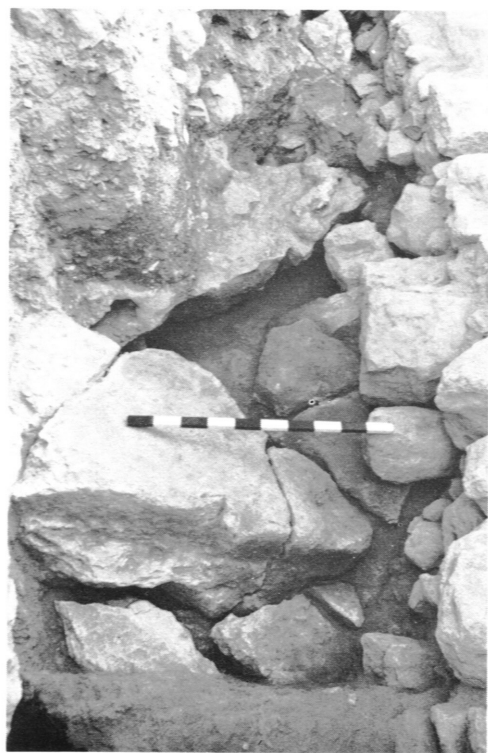
Nothing in Area D was found to hint of any Ottoman occupation, ca. A.D. 1456 to 1870.

Stratum 1: Modern (1870-Present)

With the modern village of Ḥesḅân largely ignoring the acropolis region of the site, all that we have found from the Modern period were a few objects in topsoil, but no architecture or stratified remains.



A. Square D.1. View to south. Looking down on the Hellenistic bedrock cut of Stratum XX (Area D stratum 17) which exposed and filled Iron I Cistern D.1:63. Note Wall D.1:104 parallel and below the meter stick. Photo: Paul H. Denton and T. Paul Bonney.



B. Square D.3. View to south. Slabs of collapsed bedrock blocking Cave D.3:88 in Stratum XVIII (Area D stratum 15) to east of Wall D.3:16. Photo: Paul H. Denton and Kaye Barton.



A. Square D.2. View to east. Layering D.2:43 south of Wall D.2:21 and west of Wall D.2:55 from destruction of Stratum XVI (Area D stratum 13). Photo: Paul H. Denton and Henry Lamberton.



B. Square D.2. View to west. Stairway D.2:34 (3 courses to left) and Stairway D.2:32 (3 courses to right)—both overlaid by covered Channel D.2:30. Remnants of Stairway D.2:7 of Stratum III may be seen in balk. Photo: Avery Dick.