

## REMAINS OF BUILDINGS AND INSTALLATIONS FROM THE LATE ABBASID–FATIMID AND MAMLUK PERIODS IN RAMLA

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### INTRODUCTION

In 2012, a salvage excavation was carried out in Azrieli Mall, Ramla, at the corner of Shimshon Ha-Gibor and Weizmann Streets (Fig. 1; map ref. 187206–315/648126–80).<sup>1</sup> The construction of a municipal pool in the 1960s severely damaged or destroyed some of the archaeological remains at the site.

The excavation was located c. 250 m southwest of the White Mosque, in the vicinity of two previous excavations that exposed building remains and installations from the Umayyad, Abbasid and Fatimid periods, from the eighth to the eleventh century CE (Avni et al. 2008a:17–20; 2008b; Torgë 2013). Avni's excavations (Avni et al. 2008a; 2008b) revealed that the area south of the White Mosque was part of an affluent neighborhood of the Umayyad–Fatimid periods that underwent many changes in its layout during that period. Its elaborate infrastructure encompassed remains of dwellings, some of them luxury mansions, industrial installations, water cisterns and channels. Similar remains were uncovered at another site, c. 100 m south of the present excavation (Torgë 2013), as well as in other small-scale excavations nearby (Toueg 2011; Torgë 2012). The high economic status of the inhabitants of this area was indicated by the finds, e.g., by the predominance of imported pottery vessels, some originating from as far away as China.

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<sup>1</sup> The excavation (Permit No. A-6378), on behalf of the Israel Antiquities Authority, was directed by Ron Toueg with the assistance of Jonatan Amrani and Eli Bachar (administration), Hagit Torgë, Yossi Elisha and Gilad Itach (area supervision), Mendel Kahan, Avraham Hajian and Mark Kunin (surveying), Irina Berin (drafting), Assaf Peretz (field photography), Elizabetta Belashov (drafting), Victoria Nosikovskiy (metallurgical laboratory), Tamar Winter (glass analysis), Adrienne Ganor (glass restoration), Carmen Hersch (glass drawing), Sari Hadas (pottery restoration), Marina Shuiskaya (pottery drawing), Clara Amit (studio photography), Dana Shtainberg Finali and Ram Bouchnick (zooarchaeology), Said Amara (metal detector), Lena Kuperschmidt (metallurgical laboratory), Robert Kool (numismatics) and Ayala Lester (metal artifact specialist).

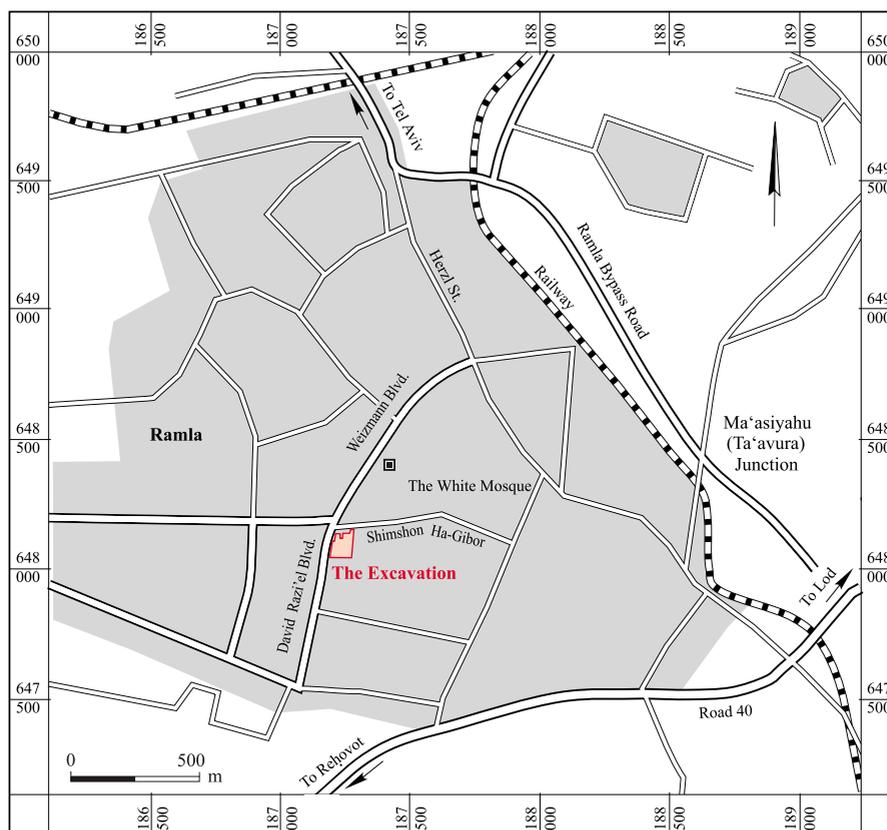
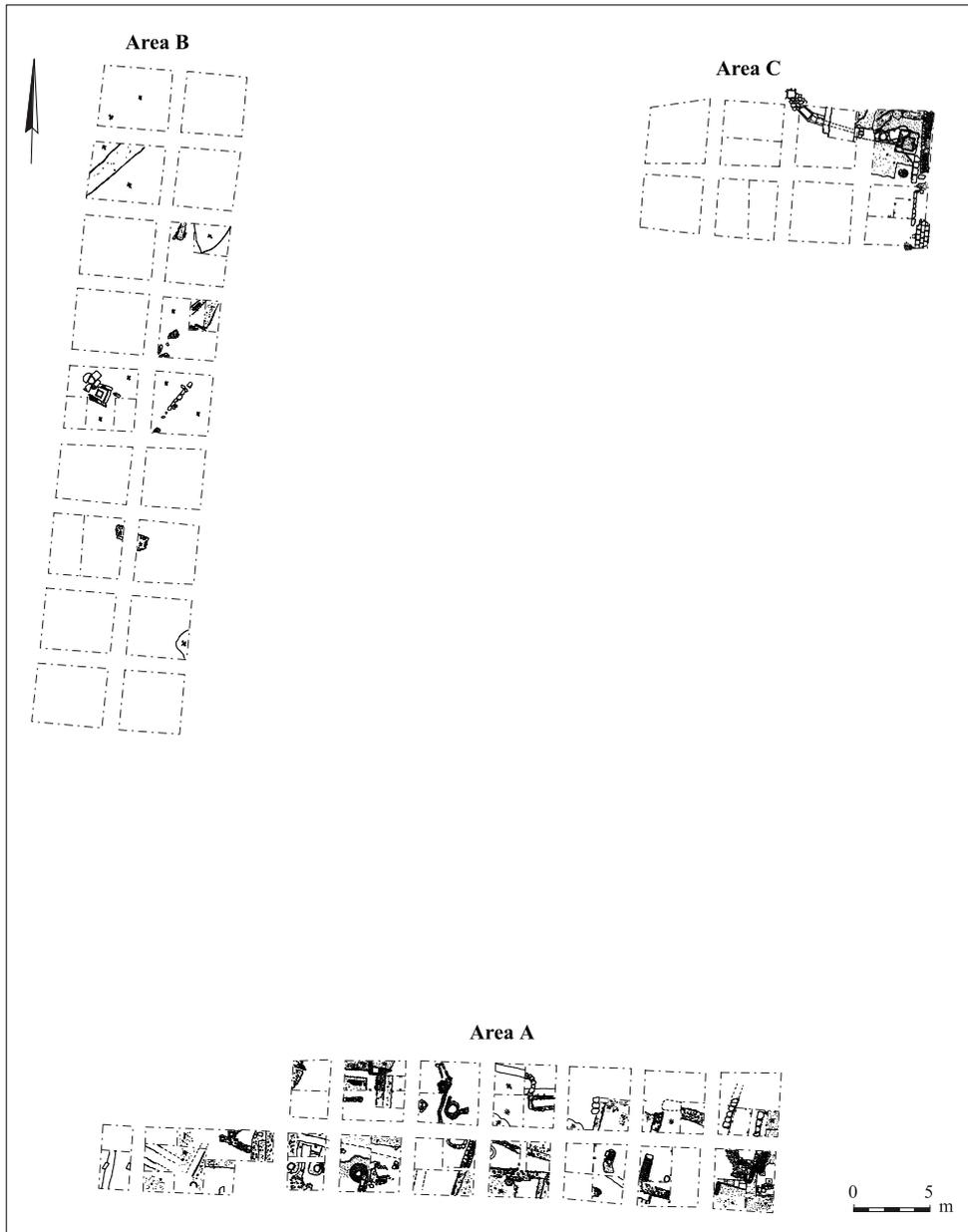


Fig. 1. Location map.

## THE EXCAVATION

A total of 42 squares were opened in three areas (A–C) surrounding the site of the old pool (Plan 1). The excavation comprised 15 squares in Area A, most of which were excavated down to the sandy parent material, and eight squares in Area C, of which only three were fully excavated; the excavation in Area B, encompassing 18 squares, was discontinued shortly after it began due to technical difficulties, and only few remains were exposed. The limited extent of the excavation made it difficult to reconstruct a coherent architectural plan and successfully trace the stratigraphy of the site in all its areas. Evidence of stone robbing that was widespread throughout the excavation area further hampered a detailed understanding of the layout and stratigraphy of the site.

Three strata were exposed in Area A (Strata III–I), comprising remains of buildings, installations, water cisterns, channels and cesspits. These remains are mainly ascribed to the late Abbasid–Fatimid periods, from the second half of the ninth through the end of the eleventh century CE. This stratigraphic attribution differs from that published in the preliminary report (Toueg and Torgë 2014), and is based on the complete analysis of the



Plan 1. The excavation areas.

small finds. Most of the architectural remains were uncovered in Strata III–II, while those of Stratum I were not as substantial and extended over a smaller part of Area A. The structures of Strata III–II revealed evidence of several repair phases, as seen in the renewal of floors, which in some cases occurred in a series of two or three overlying surfaces. The latest occupation phase in Area A (Stratum I) was interpreted as a short-term use of Fatimid-period

structures by inhabitants of the Mamluk period during the thirteenth–sixteenth centuries CE. The excavation in Area C uncovered part of a building and an adjoining courtyard from the Abbasid–Fatimid periods, with several secondary phases of construction. The few finds from Area B were generally ascribed to the Abbasid and Mamluk periods, although they could not be allotted to distinct strata or architectural phases. The following description of the remains is organized according to excavation areas, and is subdivided in each section according to strata or architectural phases.

## Area A

Fifteen squares arranged in two east–west rows were excavated in this area (Plan 2): Sqs 1–9 in the southern row and Sqs 10–17 in the northern one; the archaeological remains in the northwestern part of this area (Sqs 16–18) were severely damaged by a modern sewage pipe and were not excavated. In most cases, the excavation in each of the squares was reduced to an area of only half, and sometimes a quarter of the square, to reach virgin soil in a time-constrained schedule. Remains from the three strata identified in Area A are described below from the earliest to the latest and from east to west.

### *Stratum III*

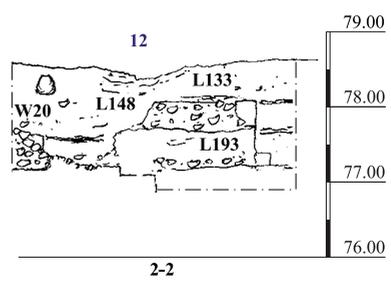
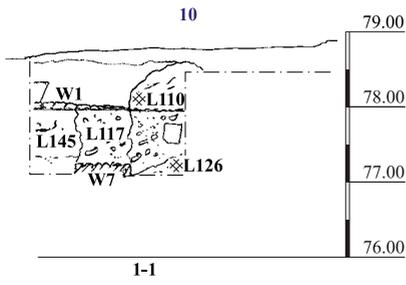
Remains from this stratum were found in all excavation squares of Area A, and seem to belong to a number of separate buildings that mostly comprise wall sections abutted by floors, often made of good-quality plaster. These units are interspersed with open areas containing installations such as water cisterns and cesspits. The remains of Stratum III were built directly upon the parent sand layer. The natural terrain was not leveled at the time of construction, and consequently, the architectural remains of this stratum were found at varying elevations. It is possible that these remains represent two distinct phases of construction, or perhaps two strata, although this possibility could not be thoroughly evaluated. The wall remains of this stratum were mostly of similar orientation, slightly right skewed relative to the cardinal compass directions. The pottery and glass vessels retrieved from Stratum III were generally dated to the Abbasid–Fatimid periods (see Torgë, this volume; Winter, this volume); most of the pottery belonged to types spanning both periods, while a few were diagnostic of one or the other.

The Stratum III architectural remains seemed to comprise parts of at least four different buildings. It should be noted that this reconstruction is tentative due to the partial exposure and preservation of the remains; extensive stone robbing of the walls of this stratum also meant that most were preserved only as robber trenches.

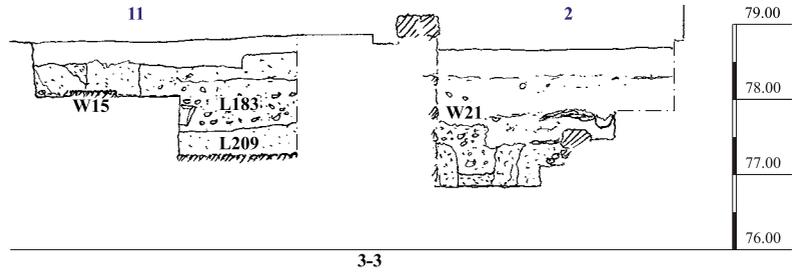
One structure was roughly delineated at the eastern end of Area A (Sqs 1, 10), its southern side comprising an area apparently used as a kitchen. Several floor patches overlaid by what appeared to be various cooking installations were uncovered in Sq 1. The remains of a furnace were found above a plaster floor (L197; thickness c. 1.5 cm; 77.51 m asl) in the southwestern corner of the square. Another plaster floor (L245; 77.68 m asl), and an



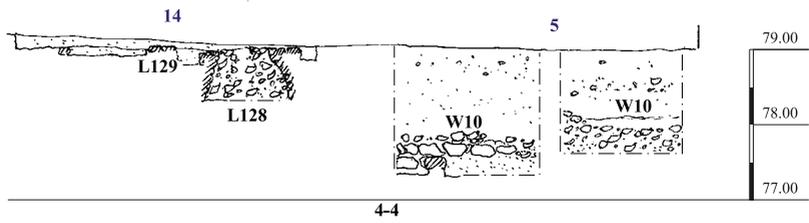
Strata II-III



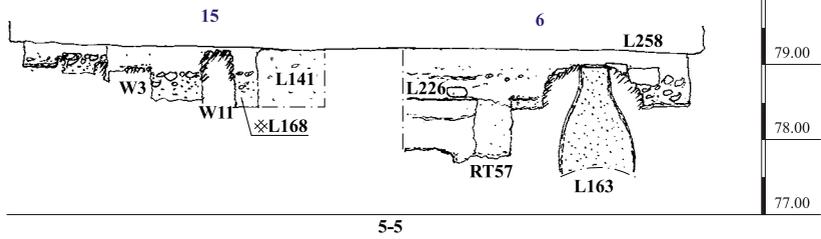
Strata I, III



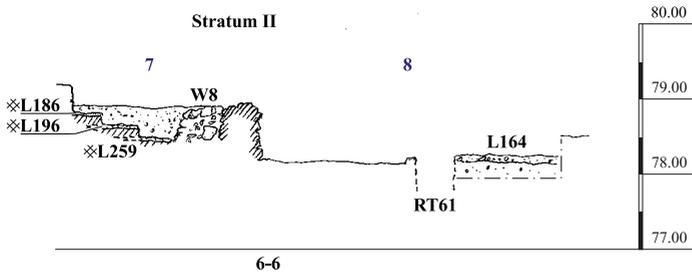
Strata I, III



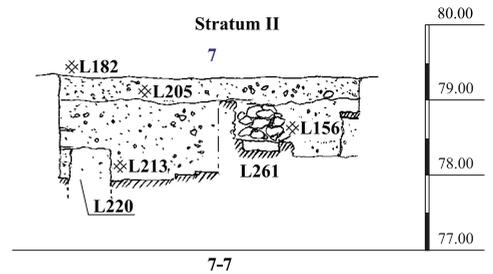
Strata I-II



Stratum II



Stratum II



Plan 2. (cont.)

earlier one below it (L257), were found north of Floor 197, at a slightly lower elevation. A drainage channel sloping to the south and three large stones arranged along its western side were found above this floor (Figs. 2, 3). This installation was built of medium-sized hewn stones laid side by side without mortar. It had an unplastered bottom and abutted a thin



Fig. 2. Area A, the cooking stove in Floor 245 (Sq 1), looking east.



Fig. 3. Area A, the cooking stove in Floor 245 (Sq 1), looking south.

partition wall (W263). Combustion marks were detected on the bottom of the channel and between the three stones next to it. On its southern edge was a steatite bowl (not illustrated) in secondary use with its base removed, functioning as a small drainage basin. A hearth composed of a circle of small stones (L216; Fig. 4) was installed in Floor 245. A circular plastered pit built of fieldstones (L151), abutted by a tiled clay floor (L211), was exposed at a lower elevation on the eastern side of W263. The finds retrieved from these loci comprised pottery and glass vessels of the Abbasid–Fatimid periods, including cooking ware, oil lamps and porcelain bowls (see Torgë, this volume: Figs. 6:2, 5, 12; 10:11, 13; 11:1, 4; 12:1, 2), as well as glass bottles and an oil lamp (see Winter, this volume: Figs. 5:13, 14; 6: 3, 7; 9:6). An Abbasid-period coin was also found in connection with Floor 245 (see Kool, this volume: Cat. No. 13), while a Fatimid-period coin was found in the same square, in L222 (see Kool, this volume: Cat. No. 15).

The foundations of W7, preserved to a height of only one course, were exposed north of the ‘kitchen’ area (Sq 10; Plan 2; Section 1–1). A sequence of two floors (L110 and



Fig. 4. Area A, the round cooking installation (L216; Sq 1), looking west.

L126), separated by a soil fill (L117), was found east of W7—the upper floor, L110, made of crushed lime; Floor 126 (thickness 1 cm) originally abutted the upper courses of W7 that had since been robbed. West of W7 were remains of a pit (L132) filled with brown alluvium. Fill 117 yielded a fragment of a *zir*-type jar (see Torgë, this volume: Fig. 7:1) and a carved bone implement that may have been used as a handle of a mirror or a comb, or perhaps as an ornament on a jewelry box (Fig. 5). A zoomorphic vessel was found above Floor 126 (see Torgë, this volume: Fig. 13:1) together with glass vessels of the Umayyad–Abbasid periods (see Winter, this volume: Figs. 1:4; 3:7). Both the *zir*-jar fragment and the zoomorphic vessel can be assigned to the Abbasid–Fatimid periods. A double-stamped handle of a *zir* jar was found in a surface locus of Stratum III (L130; see Amitai-Preiss and Cohen-Weinberger, this volume).

Remains of another structure may be identified in Sqs 2, 3, 11, 12. A plaster floor (L153) abutted a sand-filled robber trench that was exposed in the southeastern corner of Sq 11. Scattered small fieldstones interspersed with pieces of plaster and mortar may have been the remains of a foundation course of a wall (W14) and a floor that abutted it (L172). A bowl dated to the Abbasid period was embedded into the natural sand layer (L252) south of the W14 remains (see Torgë, this volume: Fig. 3:17).

Two walls (W15 and W16; preserved height 0.2 m), joining at a right angle, and of which only the core survived, were exposed in the southwestern corner of Sq 2. These walls were abutted by a sequence of plaster floors (L184, L208 and L207; thickness 1 cm) visible on either side of W15. The floors and walls were built atop a thin plaster foundation (L183) that was laid on the natural sand (L209; Plan 2: Section 3–3; Fig. 6). An Abbasid-period jar was found above Floor 208 (see Torgë, this volume: Fig. 7:11), while a Fatimid-period jug was retrieved from L209 (see Torgë, this volume: Fig. 8:18).

A continuation of W15 to the northwest, in Sq 3, was identified in a robber trench (RT60). This robber trench is joined perpendicularly from the north by W13, and both are abutted

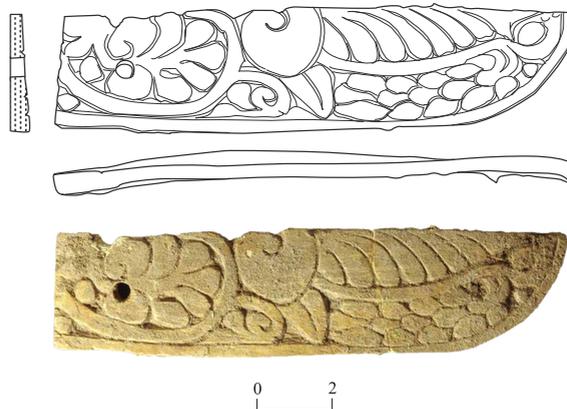


Fig. 5. Bone artifact (L117, B1133).

by a plaster floor (L173; Fig. 7), which is of a similar quality to that of Floors 207 and 208 in the adjacent Sq 2. The fill within RT60 yielded an Umayyad pre-reform coin dated to 645–670 CE (see Kool, this volume: Cat. No. 4). The foundation courses of a wall built of cut stones (W20; preserved height 0.8 m) were exposed in Sq 12, abutted by a plaster floor (L224; thickness 2 cm) that was laid on the natural sand.



Fig. 6. Area A, wall and floor remains (Sq 2), looking west.



Fig. 7. Area A, W13 and a robber trench (Sq 3), looking east.

Another structure was traced further west, in Sqs 4, 5. A southeast–northwest robber trench (RT56) in Sq 4 may have joined southwest–northeast W10 in Sq 5. Only the foundation course of W10, built of two rows of cut stones, was preserved (Plan 2: Section 4–4). A plaster floor (L111) may have originally abutted the wall in RT56, while a patch of another plaster floor (L239) abuted W10. A thin *hamra* layer (L149; thickness 2 cm) was uncovered at the bottom of and around the sides of RT56. A cesspit that cut through the *hamra* into the underlying sand was partly exposed at the bottom of the western balk of Sq 4. The fill inside the cesspit (L175) yielded an accumulation of glass production debris (see Winter, this volume: Fig. 12). Another cesspit lined with medium-sized fieldstones without mortar (L167; Fig. 8) was dug into the natural sand northwest of W10. A brass kohl stick was found in a fill west of W10 (see Lester, this volume: Fig. 2:2).

Two more cesspits were partly exposed in Sq 13, and another in Sq 14, north of the remains in Sqs 4, 5. One of the cesspits in Sq 13 (L254) was built at a higher elevation than the other (L255), and apparently was erected at a later time to replace L255 when it went out of use. It seems that the upper courses of both pits were originally abutted by a plaster floor (L218). Pit 254 was rectangular and lined with fieldstones laid on their narrow side; a very thin coat of plaster (L174) was uncovered below its bottommost course. The other cesspit in this square, L255, was round and lined with small fieldstones bonded with thin gray mortar (Fig. 9). Only the bottom courses of these two pits were preserved. They were dug into a brown fill (L135) and the underlying natural sand layer. The thin coat of plaster below L254 yielded four Umayyad-period coins: two unidentifiable *folles*, and two post-reform coins, one dated to 725–750 CE and the other, to the ninth century CE (see Kool, this volume: Cat. Nos. 7, 11). A small cesspit (L116), its bottom dug into the virgin sand, was exposed adjacent to the western balk of Sq 14.



Fig. 8. Area A, Cesspit 167 (Sq 5), looking west.



Fig. 9. Area A, Cesspit 255 (Sq 13), looking west.



Fig. 10. Area A, Robber Trench 54 (Sq 6), looking west.

The westernmost building of Stratum III, in Sqs 6, 7, seemed to comprise a long southeast–northwest robber trench (RT54 and RT52; Fig. 10), perpendicularly joining another robber trench (RT53) in Sq 7. A thin plaster floor (L251; thickness 0.5 cm) in Sq 6 that was laid on the natural sand probably abutted the robbed wall in RT54 from the south. Plaster floors were also exposed on both sides of RT53 (L159, L219), in Sq 7, both also abutting RT52.

Two Umayyad-period coins, one unidentifiable and the other a post-reform coin dated to 696–750 CE (see Kool, this volume: Cat. No. 10), were found in the fill of RT54 (L181), while the underlying sand layer yielded Abbasid-period pottery vessels (L204; see Torgë, this volume: Figs. 6:7; 7:9).

Some scattered and isolated remains were also found in Sqs 8, 9: a well-made plaster floor (L180; thickness 1 cm) in Sq 8; and a northeast–southwest robber trench (RT51) with a plaster floor (L195) laid on the sterile sand, abutting it from the east in Sq 9. A single stone found at the bottom of RT51 was probably the only remnant of the robbed wall.

### *Stratum II (Plan 3)*

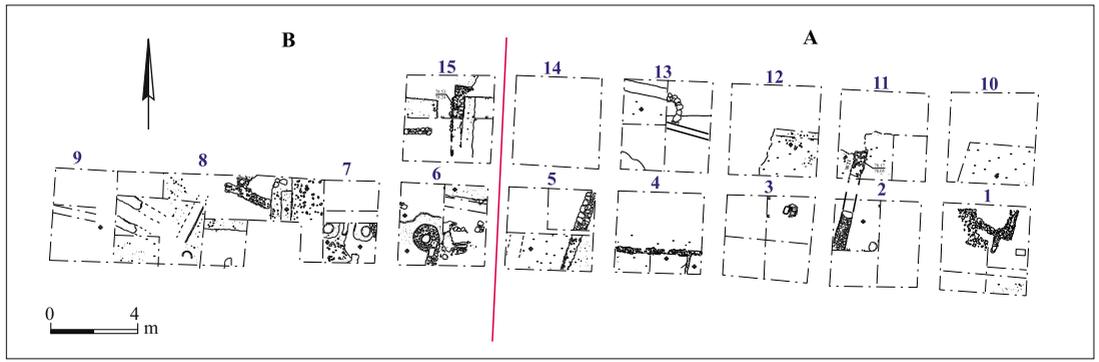
The Stratum II remains revealed that the surface of the site was elevated by at least 0.5 m in most parts of Area A, relative to the elevation of the Stratum III remains. Nonetheless, some of the Stratum III structures seem to have been reused, while new walls were built, some with the same orientation as that of the Stratum III remains and others with a slightly different orientation. It seems that the westernmost part of Area A was more densely constructed at this time, indicating the addition of yet another building.

A rectangular cesspit (W4, W5 and W6), lined with small fieldstones without mortar, was partly exposed in Sq 1, replacing the Stratum III ‘kitchen’. It was dug through two different layers of loose soil (L137, L139 and L140) and filled with soft soil (L138). The walls of the pit were built on a fill of hard soil (L230) that contained a jug dated to the Abbasid–Fatimid period (see Torgë, this volume: Fig. 8:4).

Reuse of some Stratum III wall segments can be seen in Sqs 2–5, 11–12. The foundations courses of W9, built on a brown fill (L165), were revealed in the northwestern part of Sq 2. One ashlar stone from this wall was preserved at its western end. Three plaster floors laid one atop the other (L152, L154 and L246) abutted W9 from the east. Ash concentrations found on Floor 152 probably indicate that this area contained a cooking stove. Pottery vessels associated with these floors and fills were dated to the Abbasid–Fatimid periods (see Torgë, this volume: Figs. 2:7; 4:3). A piece of glass-production debris, a ‘button’, was found in connection with Floor 154 (see Winter, this volume: Fig. 11:3). West of W9, remains of a robbed wall, comprising an accumulation of ashlars intermingled with a few small stones (L199), were found in the northeastern corner of Sq 3.

Wall 21 in Sq 11, a remnant of a Stratum III wall, is the northern continuation of W9. It is abutted by a plaster floor (L212) on the west; ash concentrations, similar to those found on Floor 152 abutting W9, were found on this floor (Fig. 11).

Three superposed plaster floors (L133, L148 and L193; see Plan 2: Section 2–2; Fig. 12) were found in the southeastern corner of Sq 12. One of these floors appears to be a continuation of Floor 212 in Sq 11 and therefore, all three may have abutted W21 from the west. A coin dated to the second half of the third century CE was found above Floor 193 (see Kool, this volume: Cat. No. 2), together with pottery dated to the Abbasid–Fatimid periods (see Torgë, this volume: Figs. 1:5; 6:9; 8:7) and glass vessels of the Umayyad–Fatimid periods (see Winter, this volume: Figs. 5:3; 6:8).



Plan 3. Area A, Stratum II (for sections, see Plan 2).



Fig. 11. Area A, W21 abutting Floor 212 and the fill below it (L223; Sq 11), looking west.

Two southeast–northwest robber trenches (RT55 and RT59) were exposed in Sq 13, one in the eastern part of the square and the other on its western side; a plaster floor (L114) was uncovered south of RT55. As no connection could be observed between these two robber trenches, it is not clear whether the original walls were part of one complex.

Two walls (W17 and W19) and a robber trench (RT64) in Sqs 4, 5 were probably part of one building. East–west W17 was preserved to a height of three foundation courses. It was abutted by a plaster floor (L200) on the north, which yielded an Umayyad-period coin (see Kool, this volume: Cat. No. 5) and overlay two other plaster floors (L233 and L248). Robber trench RT64 joined W17 perpendicularly from the south, and both were abutted by patches of plaster floors, one east of RT64 (L267) and another in the southwestern corner of Sq 4 (L192; Fig. 13).



Fig. 12. Area A, Floor 193 (Sq 12), looking north.



Fig. 13. Area A, W17 abutted by Floor 192 (Sq 4), looking east.

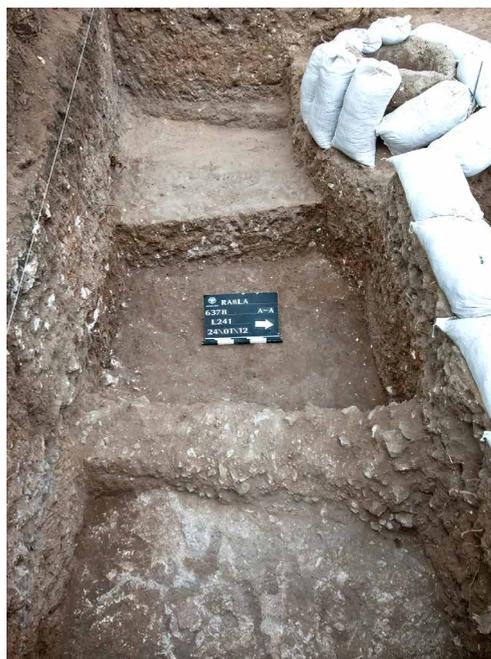


Fig. 14. Area A, Floor 241 and W19 (Sq 5), looking west.

Northeast–southwest W19 in Sq 5, a remnant of a Stratum III wall, may have been the exterior wall of a building that extended to the east; this wide wall seems to have bonded with the thin interior W17 in Sq 4. If this reconstruction is correct, a plaster floor (L240) that abutted W19 on the east was a continuation of Floor 192 in Sq 4. The northern part of W19 was better preserved than its southern part, of which only some scattered fieldstones were found in a robber trench. Another robber trench (RT58) was partly exposed in the southwestern corner of Sq 5; a plaster floor (L241; thickness 1 cm; Fig. 14) extended between it and W19.

The foundation course of a north–south wall (W11) made of medium fieldstones bonded with mortar—its eastern end robbed, was exposed in Sq 15. A thin plaster floor (L168) laid on a thin ash layer abutted W11 from the east.

South of W11, a fully preserved cistern (diam. of opening 0.2 m; L163; Fig. 15; see Plan 2: Section 5–5), lined by small fieldstones bonded with white mortar, was exposed in Sq 6. A water channel (L258) entered the cistern through an opening in its southern wall. A floor (L162; thickness 1 cm) made of crushed lime covered by thin plaster abutted the cistern. In a later phase, this floor was replaced by another floor of the same type (L143; Fig. 16). A robber trench (RT57) abutted by a plaster floor (L226) on its north was found in the northeastern corner of Sq 6 (see Plan 2: Section 5–5).

Remains of a building were partly uncovered in the westernmost part of Area A (Sqs 7–9). Two circular installations (L260 and L261; diam. 0.3 m each), made of thick white plaster and sunk into a plaster floor (L156), were unearthed in Sq 7 (see Plan 2: Section 7–7). These installations, whose function is unclear, were abutted by three partly preserved plaster floors (L182, L205 and L220; Fig. 17); Floor 220 was laid on the natural sand



Fig. 15. Area A, Cistern 163 (Sq 6), looking east.



Fig. 16. Area A, Cistern 163 abutted by Floor 143 (Sq 6), looking northeast.



Fig. 17. Area A, Installations 260 and 261 abutted by Floor L220 (Sq 7), looking north.

(L213) and separated by a fill from the above lying Floor 205. This latter floor was replaced by Floor 182 that abutted the tops of the two installations. Northwest of the installations, a similar sequence of three plaster floors (L186, L196, L259; thickness 1.0–1.5 cm each) was exposed, the lowest of which (L259) was laid on a fill above the natural sand. These floors continued west into Sq 8, and were further uncovered by removing the balk between Sqs 7 and 8.

Part of a wall (W8), of which only the core was preserved, was exposed in the northeastern corner of Sq 8; it was made of small fieldstones bonded with gray mortar. A complete but crushed large jar with four handles was found next to W8 (Fig. 18). A floor (L131) on the northern side of W8 abutted its topmost preserved course. Associated with this floor was a zoomorphic vessel, while a fragment of a steatite vessel was found in the fill below it (L144; see Torgë, this volume: Figs. 13:4; 16:4, respectively), as was a glass bowl of the Abbasid–Fatimid periods (see Winter, this volume: Fig. 2:6). Two partly preserved superposed plaster floors (L160, L164), were unearthed west of W8, in the northwestern corner of Sq 8. Faint remains of a robber trench (RT61) may represent a wall that joined W8 perpendicularly from



Fig. 18. Area A, W8 abutted by Floor 131 (Sq 8), looking east; note the jar adjacent to W8.

the south, while two other robber trenches (RT62, RT63) may have bonded with RT61 from the west. A thin coat of plaster could be seen at the edge of RT61 (L262). A floor (L165) in the southwestern corner of Sq 8 was laid upon a gray fill (L195) above the natural sand (L206). Another northwest–southeast robber trench (RT66) was partly exposed in Sq 9.

#### *Stratum I* (Plan 4)

The Stratum I architectural remains in Area A are much sparser than those of the preceding strata, and represent a marked change in the layout of this area. The excavation in the western part of Area A (Sqs 1–4, 10–13) yielded scattered patches of floors, some with associated wall segments that did not appear to join into a coherent architectural plan. A cluster of several installations was unearthed at the center of Area A (Sqs 5, 6, 14, 15), comprising several channels and a cesspit, while the area west of these remains was nearly devoid of architecture.

Remains of plaster floors without associated walls were unearthed in both the southeastern corner of Sq 1 (L147) and the northwestern corner of Sq 2 (L103). An accumulation of small fieldstones and remains of mortar above Floor 147 (L102) may be the remains of stone robbing. The rim of a cooking jug stood out at the center of Floor 103 (see Torgë, this volume: Fig. 8:32), while the fill below it (L125) yielded pottery vessels and an oil lamp of the Abbasid–Fatimid periods (see Torgë, this volume: Figs. 3:16; 4:2; 8:22; 10:6), and glass bottles of the Abbasid–Mamluk periods (see Winter, this volume: Figs. 5:15; 8:1).

A northeast–southwest wall (W1) was exposed in Sq 10; only a small part of the first foundation course of this wall, built of medium-sized cut stones, was preserved, while its



northern part was robbed and the robber trench continued north beyond the excavation boundary. Wall 1 and the robber trench were abutted by a plaster floor (L101) from the east. A fragment of an imported Fatimid-period porcelain bowl was found above Floor 101 (see Torgë, this volume: Fig. 12:3).

Two patches of a plaster floor (L103) similar to Floor 101 were exposed west of W1, in Sq 11, one in its southwestern corner and another in its southeastern corner. This floor was laid on a bedding of crushed lime above a gray fill (L217). Fill 217 yielded a waste fragment from a metal kiln (Fig. 19), possibly attesting to the presence of such a kiln in the vicinity.

The remains of a northeast–southwest wall (W12), of which only a small part of the core survived, were unearthed in Sq 12; it was made of small fieldstones bonded with mortar. Wall 12 was abutted by a plaster floor (L120) from the east.

Two superimposed plaster floors (L112 and L118) were unearthed in the southwestern corner of Sq 13. The lower of the two floors, L118, was laid on a brown fill and had its plaster repaired twice.

The foundations of a north–south channel built of small fieldstones (L129; width 0.3 m, depth 0.19 m), better preserved on its northern end, were unearthed in Sq 14. The channel continues both to the north, beyond the excavation boundary, and to the south, into Sq 5. A small round cesspit (L128; Fig. 20) lined with small fieldstones bonded with mortar was exposed near the channel's eastern wall, in Sq 14. It had a very narrow opening and was not connected to the channel in any way (see Plan 4: Section 4–4). A floor patch (L136) was exposed in the southeastern corner of Sq 5, above which a zoomorphic vessel was found (see Torgë, this volume: Fig. 13:2) alongside glass finds, including a bowl, a beaker, bottles, a lamp, and glass-production debris (see Winter, this volume: Figs. 2:2; 3:4; 5:6, 10; 9:1; 11:7–9).

The southern wall of a channel (W3) in Sq 15 bonded perpendicularly with the northern end of Stratum II W11 (see Plan 2: Section 5–5) that remained in use in Stratum I. Although W3 was mostly robbed of its stones and badly preserved, its outline could be traced in the robber trench; the bottom of the channel, north of W3, was coated with a gray hydraulic plaster (L141) and its northern wall probably lay beyond the excavation boundary. A good-



Fig. 19. Waste fragment from a metal kiln (L217, B1818).



Fig. 20. Area A, Channel 129 and Cesspit 128 (Sq 14), looking north.

quality, polished lime floor (L142), abutting the channel on the west, was laid above a bedding of small fieldstones bonded with white mortar.

A floor made of well-polished plaster above a bedding of good-quality lime (L119; thickness 1 cm) was unearthed in the northeastern corner of Sq 7.

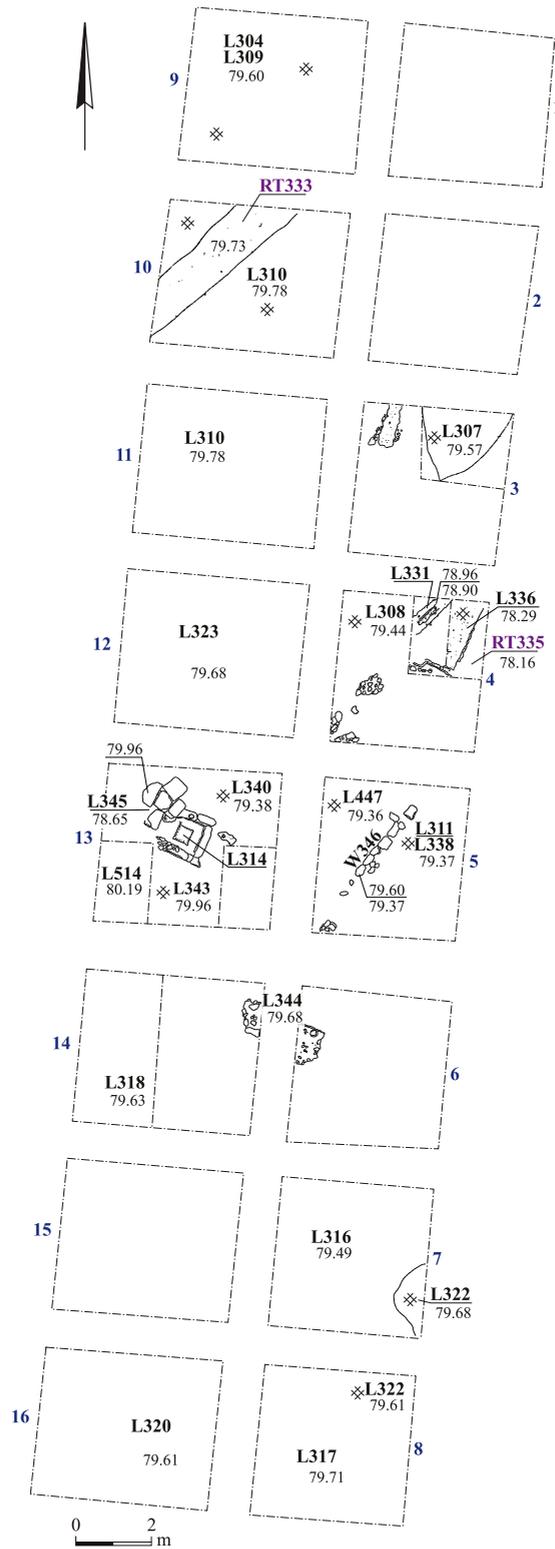
Surface accumulations of small fieldstones and pieces of plaster remaining from stone robbing were exposed in Sqs 6, 8 and 9 (L113, L187, L235, respectively).

### Area B (Plan 5)

Eighteen squares aligned in two north–south rows were partially excavated in this area, some of the squares (Sqs 1, 2, 15) remained unexcavated due to logistical reasons. Due to the limited exposure in this area, the remains are only generally ascribed to two chronological phases, the Abbasid and Mamluk periods, based largely on the coin finds. The remains are described below from north to south.

A small patch of a gray plaster floor (L307) was found in Sq 3, possibly continuing another plaster floor in Sq 4 (L308; Fig. 21). Another gray plaster floor (L309) was unearthed close to the southern balk of Sq 9, and a similar floor (L310; Fig. 22), laid on a bedding of small fieldstones, was unearthed in Sqs 10 and 11; Floor 310 was not found in Sq 12. A fill (L323) below the surface in Sq 12 yielded a coin dated to the Mamluk period (see Kool, this volume: Cat. No. 16).

A probe excavated in the northeastern corner of Sq 4 uncovered a ceramic pipe (L331), fixed in place by mortar and continuing beyond the probe boundaries in both directions.



Plan 5. Area B.



Fig. 21. Area B, Floor 308 (Sq 4), looking east.



Fig. 22. Area B, Floor 310 (Sq 11), looking north.



Fig. 23. Area B, Pipe 331 above Floor 336 (Sq 4), looking east.



Fig. 24. Area B, Cistern 314 (Sq 13), looking west.

A small patch of a white lime floor (L336; Fig. 23) abutting a robber trench (RT335) was unearthed slightly east of the pipe at a lower elevation. Remains of a poorly preserved wall (W346) and two plaster floors, one abutting the wall from the east (L338) and the other from the west (L447), were exposed in Sq 5.

The most substantial remains in Area B were unearthed in Sq 13, comprising a circular cistern with a square opening for drawing water located close to the surface. Two phases of use of this cistern were discerned. In the first phase, a square opening built of well-hewn stones was located at the center of the roof (L314; Fig. 24). The opening was abutted from the south by a gray plaster floor (L343; thickness 10 cm), of which only a small part was exposed. This floor underwent at least one repair of the plaster. In a second phase, the opening was sealed and replaced by another square opening (L345), located c. 0.5 m northwest of it and at a somewhat higher elevation. This opening was carelessly built of hewn stones, apparently in secondary use, and was abutted by a freshly-laid plaster floor (L340; Fig. 25). A gutter near this opening drained rainwater through a ceramic pipe into the cistern, and three more ceramic pipes entered the cistern through an opening on its northern side at an elevation of 1.5 m below the gutter.

Part of an installation (L344; 1.0 × 0.5 m) was unearthed in Sqs 6 and 14; a ceramic pipe entered the installation at its northeastern corner, and some hydraulic plaster was found on its southern wall.

A small patch of a plaster floor (L322) was unearthed in the southeastern corner of Sq 7 and the northeastern corner of Sq 8. A fill (L316) surrounding the floor in Sq 7 yielded a post-reform Umayyad coin dated to 696–750 CE (see Kool, this volume: Cat. No. 8).



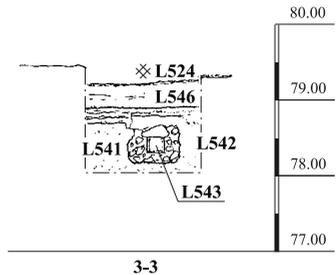
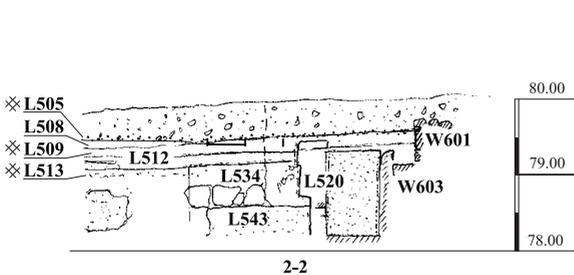
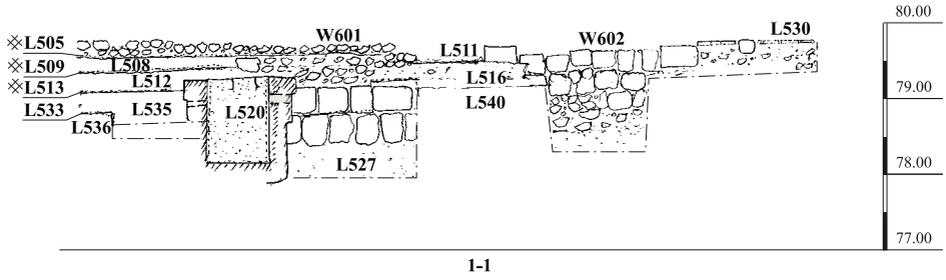
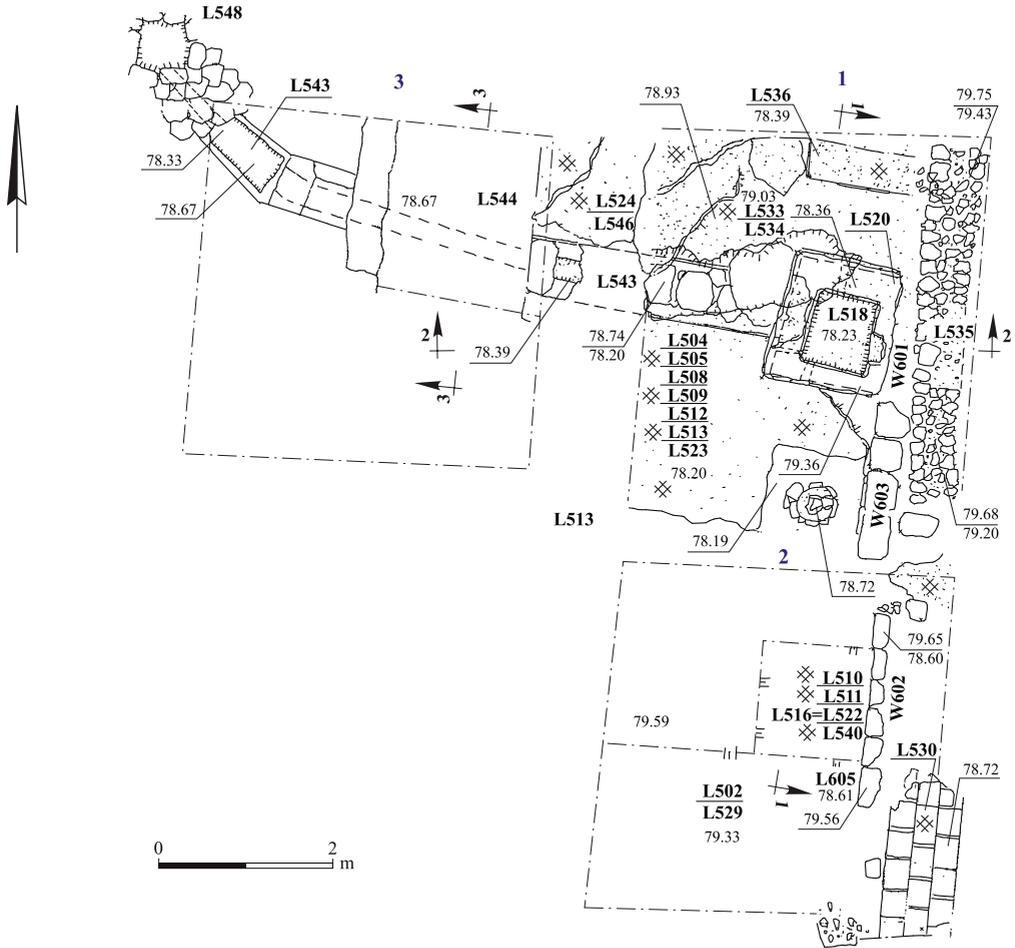
Fig. 25. Area B, the two openings in Cistern 314 (Sq 13), looking south.

A fill below the surface in Sq 8 (L317) yielded three coins: one from the second half of the third century CE, an Abbasid-period coin and a Mamluk-period coin (see Kool, this volume: Cat. Nos. 1, 12, 18, respectively). A small cover of a box made of a metal alloy was found in a fill in Sq 14 (L318; see Lester, this volume: Fig. 2:4), and a bronze weight was found in another fill, in Sq 16 (L320; see Lester, this volume: Fig. 1:9). This latter fill also yielded a Mamluk-period coin (see Kool, this volume: Cat. No. 19).

### Area C (Plan 6)

The excavation in this area exposed a courtyard with installations, a cast basin, a cistern and part of a building that mainly extended beyond the excavation boundaries. Five construction phases (A–E), all belonging to the Fatimid period, were discerned among these remains.

*Phase A.*— A north–south ashlar wall (W603) was unearthed near the eastern limit of Area C. It comprised a foundation course built of small fieldstones bonded with gray mortar, above which the wall was preserved to a height of two courses. The foundation course was laid directly on the natural sand. Wall 603 appears to have been the western wall of a building that extended to the east, outside the excavation area.



Plan 6. Area C, plan and sections.

Adjacent to and west of W603 was a cast square basin (L520; external dimensions  $1.1 \times 1.1$  m, wall thickness 0.20–0.25 m, depth 1.1 m; Figs. 26, 27), its cemented walls built of small fieldstones bonded with white mortar; the mortar, squeezing out of the gaps between the stones, extended 20 cm from the basin walls. The walls and bottom of the basin were coated with pink hydraulic plaster. Three ceramic pipes entered the basin through its southern, western and northern walls, c. 0.5 m below its brim. The pipes in the southern and northern walls were dismantled in a later phase and therefore, their direction is not clear; the ceramic pipe in the basin's western wall, c. 0.2 m above its floor, drained into a cast channel (L543; length 6.3 m, exterior: width 0.6–0.8 m, height 1.0 m, interior: width 0.2 m, height 0.2 m, inclination 3–4 cm/m; Fig. 28). The channel walls were cast in the natural sand (Fig. 29); it was covered by cut stones bonded with gray mortar and coated with hydraulic gray plaster. The channel continued to the west, curving to the northwest, and draining into a cistern (L548) in the northwestern corner of Sq 3. It narrowed to 0.12 m just before entering the cistern to fit a ceramic pipe (diam. 0.1 m), and its inclination was reduced, probably to reduce the water pressure. Part of the channel on the eastern side of Sq 3, was removed by modern disturbance. A fill (L546; thickness 0.3 m) that overlay the channel was sealed by a crushed lime and plaster floor (L524; Plan 6: Section 3–3). Floor 524, laid on a foundation of small fieldstones above the natural sand, extended to the east into Sq 1 and abutted the



Fig. 26. Area C, Basin 520, Floor L540 and W601 (Sqs 1, 2), looking south.

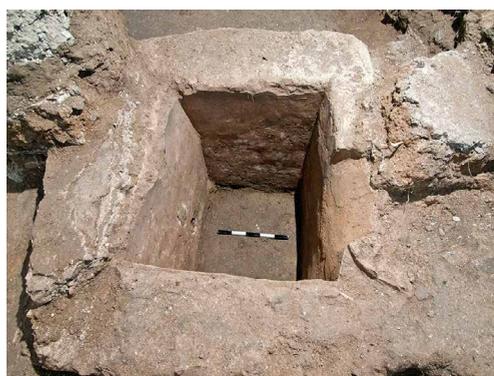


Fig. 27. Area C, Basin 520 (Sq 1), looking east.

western and southern walls of Basin 520 and W603. Its plaster was repaired at least once, when another coat of plaster was laid down. This floor abutted the basin at an elevation c. 0.5 m below its top, and slightly below the three pipes incorporated in the basin's walls. The excavation in Sq 3 and north of Basin 520 did not uncover further traces of this floor.

The bottom of another basin (L536; Fig. 30), similar in its construction to that of Basin 520, was partly unearthed to its north, in Sq 1. This basin had been mostly dismantled, probably continuing to the north beyond the excavation boundary. The bottom elevation of



Fig. 28. Area C, the point of exit of Channel 543 from Basin 520 (Sq 1), looking east.



Fig. 29. Area C, a section through Channel 543 (Sq 1), looking east.



Fig. 30. Area C, partly dismantled Basin 536 (Sq 1), looking east.

this basin was c. 0.8 m higher than that of Basin 520. The relationship between these two basins remains unclear.

Pottery of the Abbasid–Fatimid periods was retrieved from several loci: L546, the fill within Channel 543, and L534, a fill outside of Basin 520 (see Torgë, this volume: Figs. 3:4; 6:1; 9:5). An Abbasid-period coin was retrieved from a fill on the southern side of Sq 2 (L529; see Kool, this volume: Cat. No. 14).

*Phase B.*— Basin 536, in the northern side of Sq 1, was mostly dismantled, except for its floor, and overlaid by a plaster floor (L533). This floor abutted Basin 520 from the north, but did not continue on its western and southern sides.

*Phase C.*— Floor 533 and the southern part of Floor 524 were covered by a fill (L523) that was overlaid by a plaster floor (L513; Fig. 31). Floor 513 abutted the walls of Basin 520 and the lowermost course of Phase A W603 (Plan 6: Section 2–2). At this time, another coating of hydraulic plaster was applied to the interior walls of Basin 520 (Fig. 32). This plaster sealed the openings through which ceramic pipes entered the basin’s western and northern walls, indicating that these pipes went out of use. It is not clear whether the ceramic pipe entering the basin’s southern wall also ceased to function, as it was not covered by Floor 513. The walls of Basin 520 were raised using small fieldstones bonded with mortar, and this addition was preserved to a height of 0.1 m above the Phase A walls. A chute, of which only the lower part was preserved, was built in the southeastern corner of the basin, possibly



Fig. 31. Area C, Floor 513 abutting Basin 520 (Sq 1), looking north.



Fig. 32. Area C, repair of hydraulic plaster in Basin 520 (Sq 1), looking east.

to replace the ceramic pipes that formerly fed water to the basin and went out of use. These modifications were likely part of a change in the use of Basin 520, although the nature of this change remains unknown.

Locus 523 yielded pottery of the Abbasid–Fatimid periods (see Torgë, this volume: Figs. 3:11; 8:12), an Umayyad–Abbasid-period glass bottle (see Winter, this volume: Fig. 14:3) and an Umayyad-period post-reform coin dated to 696–750 CE (see Kool, this volume: Cat. No. 9). A brass weight was found above Floor 513 (see Lester, this volume: Fig. 1:7).

*Phase D.*— Significant changes took place in Area C during this phase. Basin 520 went out of use and its upper part was dismantled; it was filled with chunks of pink plaster that may have originated from the dismantling of one or more nearby basins, and a large quantity of hydraulic plaster (L518) similar to the plaster that was used to coat the basin's walls.

Floor 513 was covered by a fill (L512) overlaid by a plaster floor (L509); this floor was made of gray mortar (thickness 0.1 m; Plan 6: Sections 1–1, 2–2) above a foundation of small fieldstones. Floor 509 was repaired three times, each time by laying down a foundation of crushed lime and small fieldstones covered by a coat of plaster (thickness 1–2 cm). This floor also extended above W603 that was mostly dismantled at this time, leaving only two of its foundation courses, and continued east outside the excavation boundary.

*Phase E.*— Changes during this phase included the construction of W601 (Plan 6: Sections 1–1, 2–2) along the eastern boundary of Area C. This wall was built of two rows of fieldstones, in part overlying Phase D Floor 509, and in part the eastern edge of Phase A W603. An



Fig. 33. Area C, W601 and Floor 505 abutting it (Sq 1), looking north.

opening in W601, of which only the northern doorpost was preserved, was exposed on the southern end of the wall's extant part. Floor 509 was replaced by a low-quality crushed lime floor (L505; thickness 2 cm) abutting W601. Floor 505 was laid directly upon a fill (L508) that covered Floor 509 (Fig. 33).

Another wall (W602; Fig. 34), built of hewn slabs laid on their narrow side with a core made of small fieldstones, was uncovered south of W601. It comprised a foundation course (height 0.5 m) built of small fieldstones, above which two courses of the wall's superstructure were preserved. A plaster floor (L540) abutted W602 on the west. A poorly-preserved plaster coat (L511) laid above a thin fill (L516=L522) represented a repair of this floor. A small patch of a high-quality ceramic tile floor (L530; tile dimensions  $0.2 \times 0.2$  m each; Plan 6: Section 1–1) abutted W602 from the east. Some of the tiles were cracked, and in one place were replaced by pieces of broken marble (Fig. 35). Wall 602 was fully exposed in a probe (L546) (Plan 6: Section 1–1), in which sherds dated to the Fatimid period were found (see Torgë, this volume: Figs. 3:4; 6:1).

Surface accumulations (L503, L504, L514) above the Phase E remains yielded pottery sherds dated to the Abbasid–Fatimid periods (see Torgë, this volume: Fig. 8:6, 26), an Early Islamic-period glass bottle (see Winter, this volume: Fig. 14:4) and three coins: a Byzantine–Arab coin dated to 645–670 CE, an Umayyad post-reform coin dated to 713–717 CE, and a Mamluk-period coin (see Kool, this volume: Cat. Nos. 3, 6, 17).



Fig. 34. Area C, W602 and Floors 540 and 530 (Sqs 1, 2), looking north.



Fig. 35. Area C, tile Floor 530 (Sq 2), looking east.

## CONCLUSIONS

Numerous large- and small-scale excavations conducted at Ramla over the past 20 years have greatly contributed to our understanding of the city plan during the Early Islamic period. Although a complete and detailed urban plan of Ramla during this period is lacking due to the patchy distribution of the excavations, the finds allow us to reconstruct aspects of the city's economy and daily life. The present excavation demonstrated that the affluent neighborhood of the Abbasid–Fatimid periods extended further south than had previously been observed. It also revealed a dynamic sequence of changes in the architectural layout of the excavated area within this relatively short time span.

Major architectural changes took place throughout the three strata in Area A. It appears that entire building complexes were rebuilt in the transition between Strata III and II, broadly keeping to the spatial arrangement of the Stratum III structures and courtyards, but with a very limited reuse of walls and extensive stone robbing. Similarly, very little of the Stratum II remains survived into Stratum I. This latest stratum was interpreted as an ephemeral occupation of the Fatimid-period ruins by settlers of the Mamluk period. Although the remains are broadly dated to the late Abbasid–Fatimid periods, we speculate that the extensive modifications attested in Strata III–I took place in the Fatimid period, as a result of two successive earthquakes that may have destroyed much of the city, one in 1033 CE and the second in 1068 CE. The limited extent of the Stratum I remains indicates that little if any rebuilding took place following the Stratum II destruction. This aligns with Avni's (2014:42) argument that Ramla of the Early Islamic period suffered a considerable decline from its status as a major economic and administrative center and never recovered.

The material culture exposed in this excavation indicates a wealthy population. The only architectural evidence for the existence of luxury dwellings is the high-quality ceramic tile floor exposed in Area C. These findings reinforce those of the excavation south of the White Mosque, where part of the affluent neighborhood of Early Islamic-period Ramla was first discovered (Avni et al. 2008a). Analysis of the faunal remains, most of which were retrieved from Area A Strata III–II, indicates that the local population consumed primarily sheep and goat, and to a lesser extent cattle and fowl (see Shtainberg Finali and Bouchnick, this volume). The rare presence of pig and equid bones fits with the Muslim identity of the population. The occurrence of a few artifacts from pre-Islamic periods in the excavation, e.g., the Egyptian shabti figurine, possibly of the fifth century BCE, and Roman-period coins, is not uncommon in excavations of Early Islamic-period strata at Ramla (e.g., Toueg 2011).

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