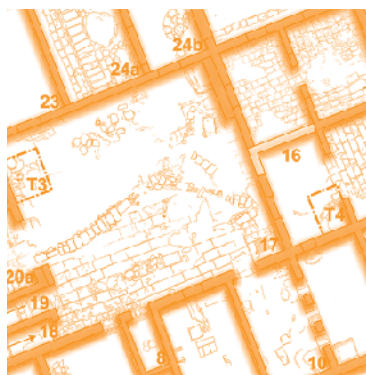


# Excavations next to House H1 in 'Marea' (Egypt) in 2017



**Abstract:** Archaeological excavations in the 2017 season continued the investigation of the early Byzantine and early Islamic House H1 in the northeastern part of 'Marea'. The building had already been excavated, but required further study to identify the type and function of structures in its immediate vicinity. Five stratigraphic trenches were excavated, exploring a well shaft, one of the wall abutments, a small cell added to the building, a sewer and streets with an accumulation of debris and rubbish. This also enhanced a better view of the house surroundings as well as their development in the course of the 6th century and later. A range of Roman ceramics from layers underlying the house was also discovered in the deepest of the trenches.

**Keywords:** early Byzantine, early Islamic, house, streets, pottery, 'Marea', Egypt

The 'Marea' site is located on the southern shore of Lake Mareotis, near the modern village of Hawwariyah and about 40 km southwest of Alexandria. The identification of the ancient name of the settlement has long been disputed (Rodziewicz 2003: 27–38; Wipszycka 2012), even so most researchers continue to refer to the place as 'Marea'. Intermittent excavations since 2011 have focused on the uncovering of a house designated as H1, a feat finally completed in 2016 (Kościuk 2012: 29–32; Babraj, Drzymuchowska, and Willburger 2014: 48; Wielgosz-Rondolino and Gwiazda 2016) [Fig. 1].

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The house with its series of rooms aligned around a central courtyard [Fig. 2] was constructed apparently not earlier than the 6th century, as indicated by the archaeological data, and continued to function in modified form through at

least the mid 8th century. It is the only residential building excavated in ‘Marea’. Other buildings in its vicinity include an early Byzantine church just across the road, a port warehouse, quay and latrine [see Fig. 1].

### EXCAVATION AROUND HOUSE H1

In 2017, an architectural examination of the exposed parts of House H1 was coupled with documentation of ceramic vessels and coins discovered in earlier years. Continued excavations helped to improve

the understanding of structures partly uncovered in earlier seasons (T1) and four more trenches, T6 to T9, were dug on the southern side with the aim of exploring the immediate surroundings of the house.



Fig. 1. Satellite image of the northeastern part of ‘Marea’ with the indication of the position of House H1 (University of Warsaw Marea Archaeological Project | processing M. Gwiazda)

**TRENCH T1**

Clearing the space adjoining Room 22 on the north in 2016 uncovered a room designated then as T1. It had a stone floor and two unidentified installations, located by the south and north walls respectively. These rectangular enclosures were filled with earth. The northern installation was excavated. Some 2 m of deposits were re-

moved (before stopping because of a high groundwater table) from a shaft measuring 1.00 m by 0.80 m [Fig. 3 bottom]. One of the inside faces of the well was documented [Fig. 3 top]. The well (cistern?) was built of limestone ashlars covered with pink waterproof plaster and furnished with typical openings in the walls enabling climbing up and down inside the shafts.

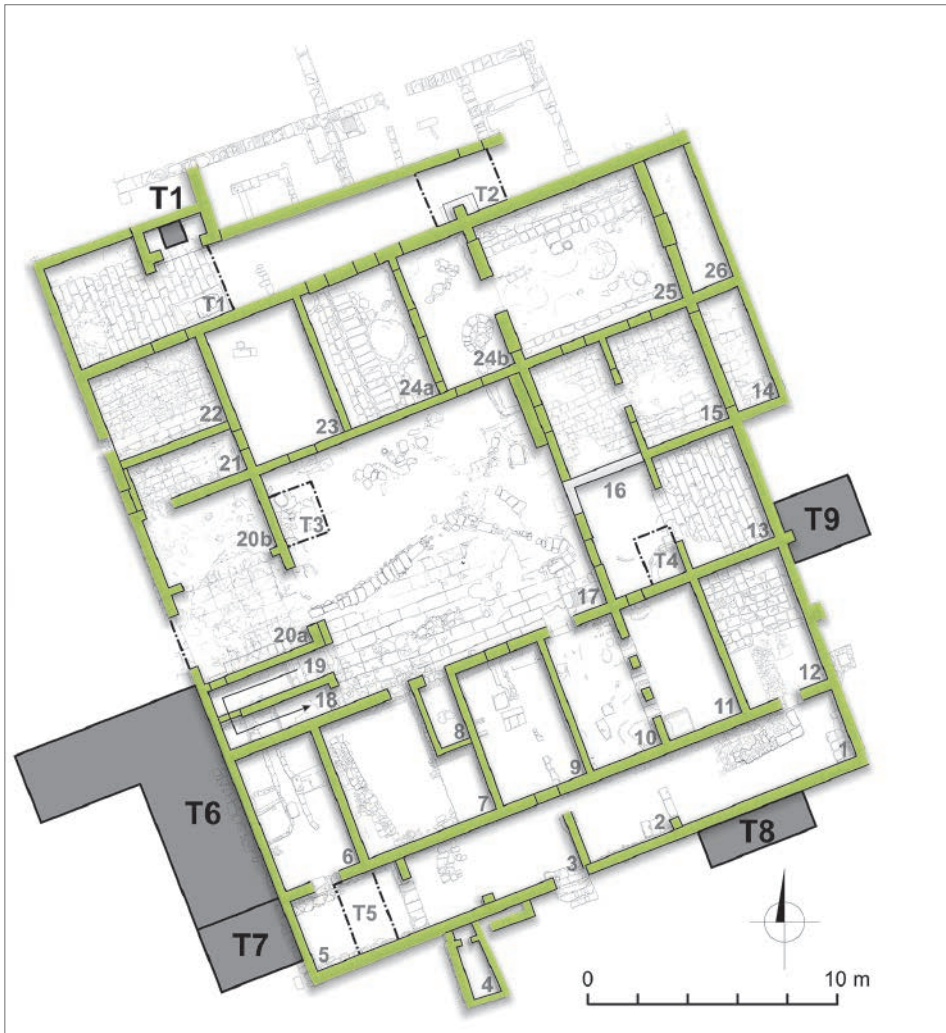
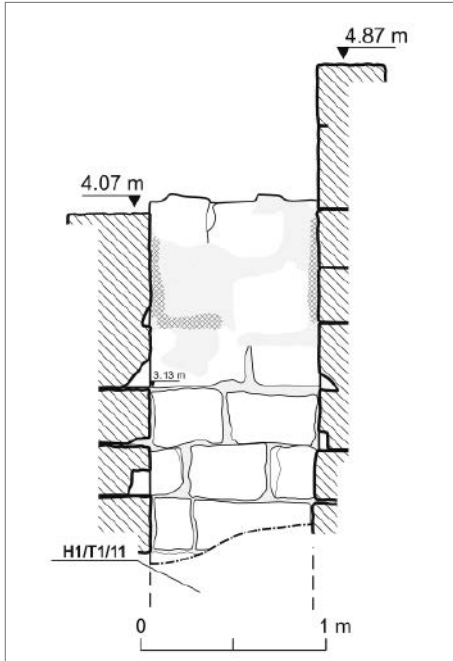


Fig. 2. Plan of house H1 with the location of trenches dug in 2017 (University of Warsaw Marea Archaeological Project | drawing D. Tarara, A.B. Kutiak, M. Gwiazda)



The fill contained burnt bricks, fragments of amphorae (AE 3, LRA 1, LRA 5/6, LRA 7) and cooking pots (Pieri 2005: 77–84, 114–131; Dixneuf 2011: 97–111, 154–173; see Engemann 2016: 31, Pl. 12, Form C 54) [Figs 4, 5:1–5].<sup>1</sup> There was also a fragment of a porphyry slab with rounded edge and coins from the 5th and 6th centuries. Judging by the dating of the ceramics, the installation may have gone out of use by the end of the 6th or in the 7th century.

**TRENCH T6 AND T7**

The L-shaped trench T6 was traced west of rooms 6, 18 and 19 of the house, the objective being to trace the stone structures observed on the ground. The maximum length of the trench



Fig. 3. Well (cistern?) in trench T1: bottom, view of the enclosure looking north; top, west wall of the shaft (University of Warsaw Marea Archaeological Project | photo M. Gwiazda; drawing A. Pawlikowska-Gwiazda, digitizing M. Gwiazda)

<sup>1</sup> The calcium residue on the inside wall of the cooking pot below the rim suggests that it was used to boil water.

explored was 9.20 m, the width 8.20 m. The top of the collapsed west wall of House H1 was cleared and found to extend a maximum of 6 m westward [Fig. 6 top]. It consisted of practically nothing but limestone pseudo-ashlars with a large amount of mortar. The small number of pottery vessels included some covered with mortar, sug-

gesting they had been mixed in with the binding mortar before the wall collapsed. Single fragments of LRA 5/6 amphorae [see Fig. 5:6] were found in the top of the layer; lower down, numerous fragments of LRA 1 and LRA 5/6 containers were found along with fragments of tableware (Egyptian Red Slip Ware A) and kitchenware.



Fig. 4. Selected finds from the well/cistern shaft filling: top, fragments of LRA 1, LRA 5/6, LRA 7 amphorae and a cooking vessel; bottom, fragments of bricks and AE3 and AE4 residual amphorae (University of Warsaw Marea Archaeological Project | photo A. Pawlikowska-Gwiazda)

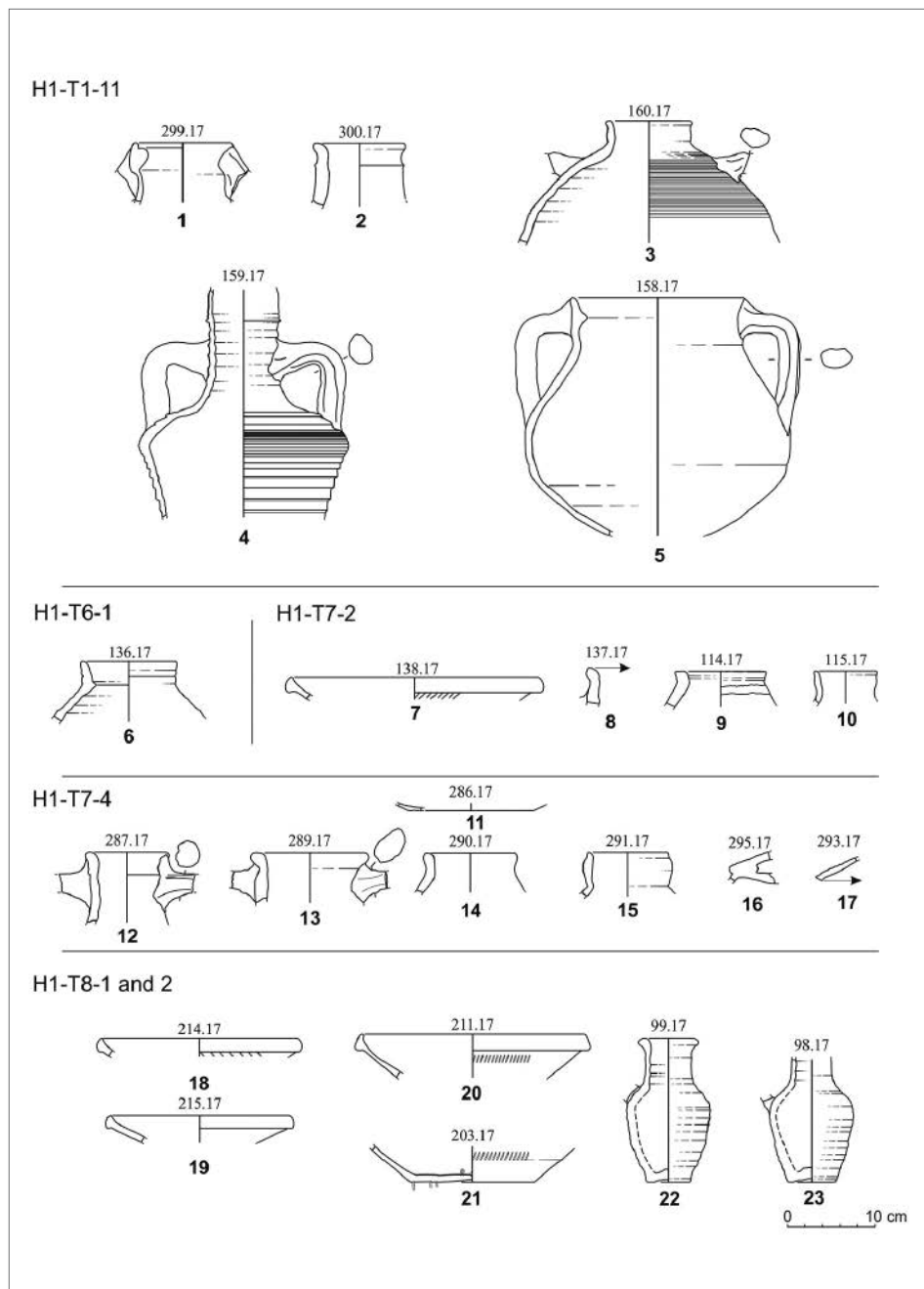


Fig. 5. Selected ceramic vessels from trenches T1, T6, T7 and T8: 1 – AE 3; 2 – LRA 1; 3 – LRA 5/6; 4 – LRA 7; 5 – cooking pot; 6 – LRA 5/6; 7 – LRD bowl; 8 – LRA 1; 9 – LRA 4; 10 – LRA 5/6; 11 – ERSW A, 12, 13 – LRA 1; 14 – LRA 4; 15 – LRA 5/6; 16 – handle; 17 – pot lid; 18–21 – LRD bowls; 22, 23 – jugs (University of Warsaw Marea Archaeological Project | drawing M. Gwiazda, A. Pawlikowska-Gwiazda)

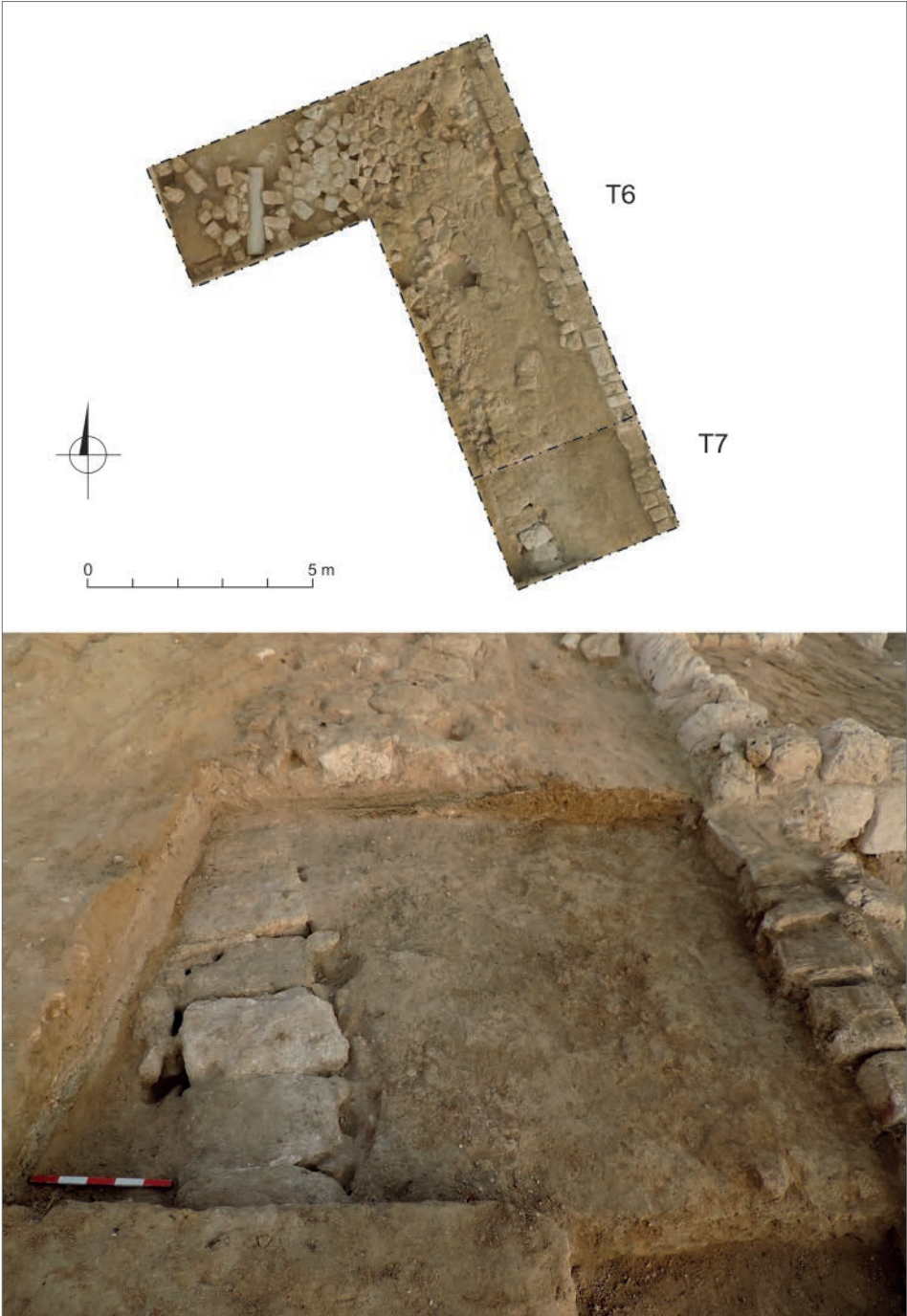


Fig. 6. Trenches T6 and T7: top left, orthophoto plan of the combined trenches; bottom, street level with the sewer in Trench T7, looking north (University of Warsaw Marea Archaeological Project | photo and orthophoto M. Gwiazda)



A column of Aswan granite, 1.90 m high, was found among the rubble in the western part of the trench [see *Fig. 6 top*]. It appears to be resting directly on the tamped earth surface of an ancient street and the rubble from the southwestern part of House H<sub>1</sub>, which apparently collapsed on top of it. The assumption is that it had been abandoned there some time before the destruction of the building.

Trench T<sub>7</sub> (extending T<sub>6</sub> southward) was 2.65 m long north–south and 3.40 m wide east–west [see *Fig. 6 top*]. The surface layers consisted of rubble associated with the destruction of the House H<sub>1</sub> wall. Below it, a sequence of layers corresponding to successive street surfaces was identified. A concentration of ash, measuring 1.00 m by 1.50 m, lay on top of these deposits. It does not seem to have been related to the destruction because it is separated from the rubble by a 0.10-m-thick accumulation of earth. Thus, it is presumably proof of a hearth burning nearby. The level corresponds to finds of tableware (Late Roman D ware, Hayes 1972: 379–382, Form 9A, second half of the 6th century) [see *Fig. 5:7*] and fragments of LRA 1, LRA 4, LRA 5/6 and LRA 7 amphorae [see *Fig. 5:8–10*]. A layer rising eastward might have been a provisional rubbish dump. Numerous fragments of LRA 1, LRA 4, and LRA 5/6 amphorae, as well as tableware (ERSW A, Gempeler 1992: 78, Pl. 22.12, Form T 244), kitchen utensils and a fragment of a clay ventilation pipe were found there, in addition to fragments of residual amphorae AE<sub>3</sub> and AE<sub>4</sub>, and a separator. The original antique street surface, which under-

lay these accumulations, was furnished with a sewer running northwest–southeast [*Fig. 6 bottom*]. It had a covering of stone slabs. Mortar mixed with crushed ceramics was used in its construction. A tamped-earth surface stretched east of the sewer, reaching the outer wall of House H<sub>1</sub>.

### TRENCH T<sub>8</sub>

The trench on the south side of House H<sub>1</sub>, next to room 1, was 1.50 m wide and 4.50 m long. A thin-wall compartment was recognized, attached to the walls of the house in the western part of the trench [*Fig. 7*]. The eastern part of this structure was best preserved, while the western and southern parts were completely destroyed, the only remaining evidence being impressions of mortar on the adjoining structures. The unit measured 1.40 m from west to east, and 1.30 m from north to south. The wall was 0.31 m above the tamped earth level located east of it. No artifacts that could help to identify its function were found in it. In terms of the architectural stratigraphy, it is younger than the walls of House H<sub>1</sub>, but it cannot be ruled out that it belongs to the first occupational phase of the building.

The tamped-earth level east of the unit was covered with a layer of crushed mortar, most likely washed out from the neighboring wall. Two layers with a large number of broken vessels were found above this surface. The ceramics included LRA 1, LRA 4, LRA 5/6, and LRA 7 amphorae, LRD bowl fragments (Hayes 1972: 379–382, Forms 9A–B, second half of 6th–7th century) and two well-preserved jugs [see *Fig. 5:18–23*]. A hoard of 162 bronze coins from the 5th and 6th

centuries was found in a pit, just 5 cm in diameter and 10 cm deep, in the original walking level next to the wall of House H1 [Fig. 8].

The foundation of the south wall of House H1 was examined and found to be composed of unworked limestone rocks (0.2 m x 0.17 m x 0.15 m and less), and two courses of limestone pseudo-ashlars, one without mortar in the joints and the other already bonded with mortar and partly plastered. The foundation reached 0.50 m below the street level and cut through several layers preceding the construction of the building. The highest

layers contained a varied repertoire of tableware (including LRD bowl, Hayes 1972: 373–376, Form 1, late 5th–early 6th century), kitchen utensils, fragments of LRA 1 and LRA 4.4 (Majcherek 1995: 169, late 6th–7th century), and LRA 5/6 [Fig. 9:1–5]. In addition, animal bones and numerous small fragments of ceramic vessels were identified, some of which were water-washed [Fig. 12 top]. The oldest of the layers found thus far lay directly below the foundation level of House H1. It contained large quantities of Roman AE3 and AE4 amphora sherds, separators and charcoal inclusions [see Fig. 9:6–9].

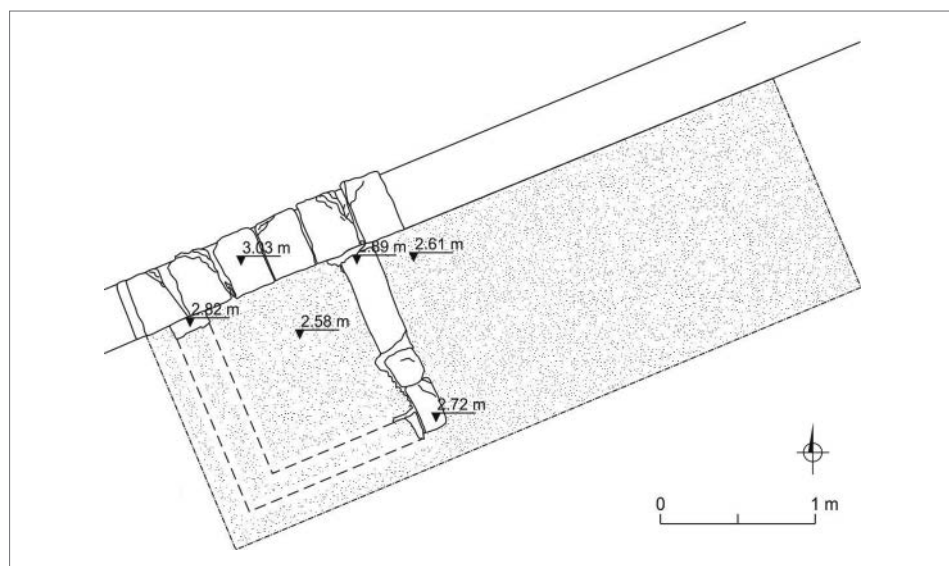


Fig. 7. Plan of trench T8 with the position of a compartment attached to the outer wall of the building (University of Warsaw Marea Archaeological Project | drawing A. Pawlikowska-Gwiazda, digitizing M. Gwiazda)

Fig. 8. Hoard of coins found in a pit near the wall of house H1 in trench T8; scale = 5 cm (University of Warsaw Marea Archaeological Project/photo M. Gwiazda, A. Pawlikowska-Gwiazda)



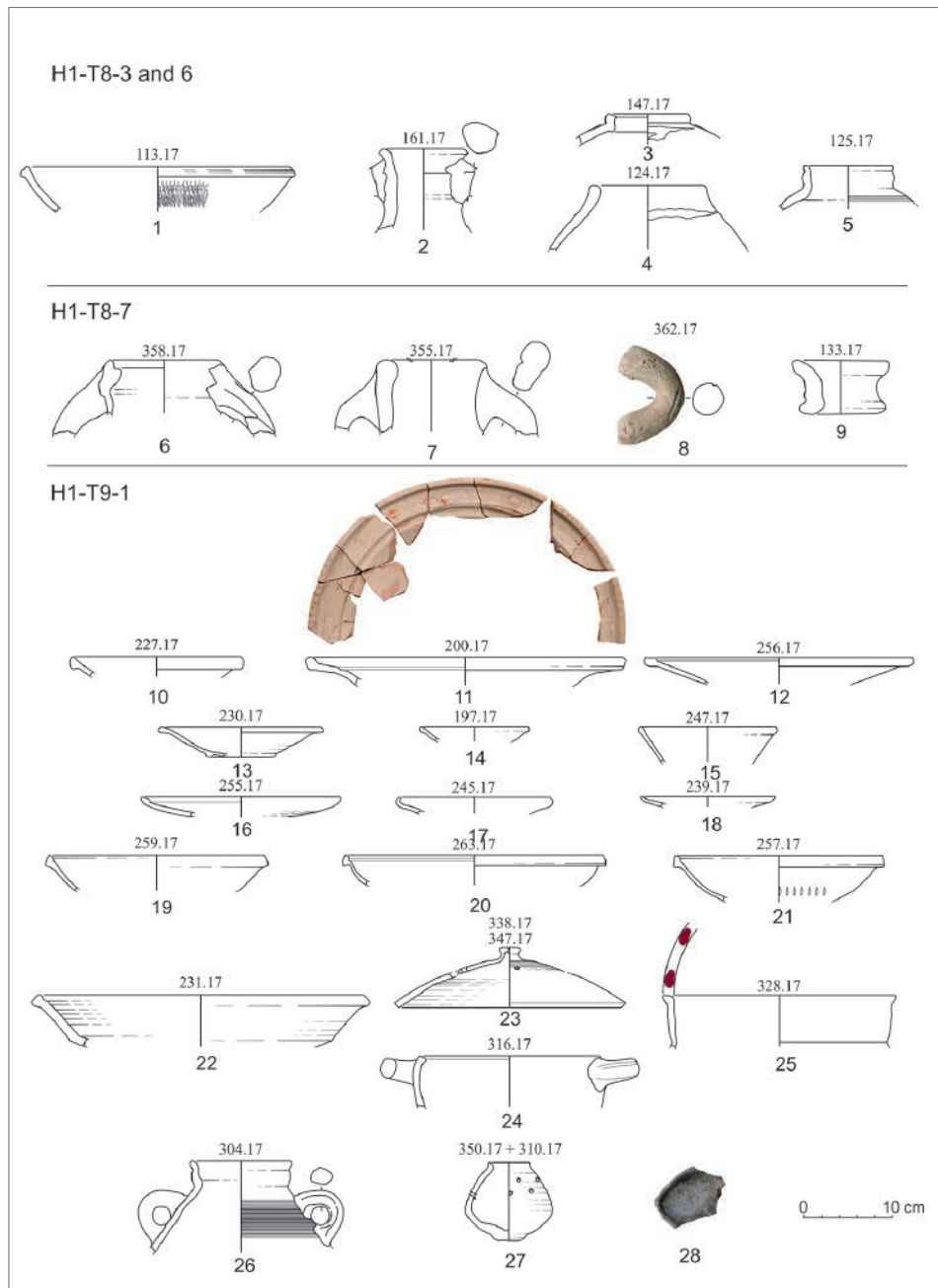


Fig. 9. Selected ceramic vessels from trenches T8 and T9: 1 – LRD bowl; 2 – LRA 1; 3, 4 – LRA 4; 5 – LRA 5/6; 6 – AE3; 7 – AE4; 8, 9 – separators; 10 – LRD bowl; 11–21 – ERSW A; 22 – frying pan; 23 – pot lid; 24 – cooking pot; 25 – carinated bowl; 26 – LRA 5/6; 27 – lantern(?); 28 – saucer lamp (University of Warsaw Marea Archaeological Project | drawing A. Pawlikowska-Gwiazda, digitizing M. Gwiazda)

**TRENCH T9**

The trench dug east of Rooms 12 and 13 was 2.40 m long north–south axis and 4.00 m wide east–west (later reduced in size). The objective was to verify the presence of a wall and additional rooms east of the house. The latest accumulations consisted of silt with a lens of ashes and a large number of ceramic vessels representing a broad repertoire of forms: a small number of LRD bowls (Hayes Form 9A, second half of 6th century), a plate with a painted scroll motif, ERSW A, frying pans (see Bailey 1998: 38, Pl. 20), cooking pots with lids (see Egloff 1977: 110, Form 116), carinated bowls (Majcherek 2008: 113, 114, Fig. 40), a single handle of an LRA 1

amphora, much more numerous fragments of LRA 5/6, and lanterns(?) with round perforations [see Fig. 9:10–27]. The deposit also contained a fragment of a 7th-century oil lamp (Rodziewicz 1984: 106–109, 236, Pl. 65) [see Fig. 9:28], animal bones and a small number of glass objects.

The underlying deposit was 0.20 m thick with a significant number of small fragments of ceramic vessels with rounded edges [Fig. 11 bottom]. The deposit also contained tableware (LRD and ERSW A), LRA 4, LRA 5/6, LRA 7 [Fig. 10:1–7], and Egloff 167 amphorae, dating this layer and the ones above it to the second half of the 7th century or later. The debris underneath was composed of small ir-

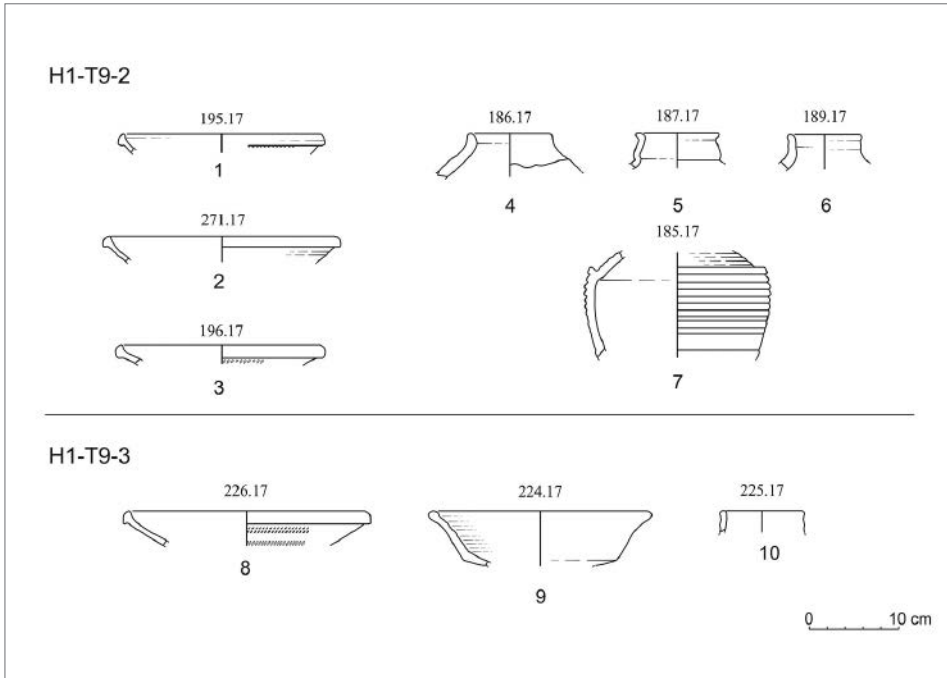


Fig. 10. Selected ceramic vessels from trench T9: 1–3 – LRD bowls; 4 – LRA 4; 5, 6 – LRA 5/6; 7 – LRA 7; 8 – LRD bowl; 9 – ERSW B frying pan; 10 – LRA 5/6 (University of Warsaw Marea Archaeological Project | drawing M. Gwiazda, A. Pawlikowska-Gwiazda)



Fig. 11. Selected small water-washed ceramics from Trench T8 (top) and T9 (bottom) (University of Warsaw Marea Project | photos A. Pawlikowska-Gwiazda and M. Gwiazda)

regular chunks of limestone mixed with large lumps of mortar, the latter bearing impressions of limestone pseudo-ashlars, wooden beams, and bunches of reeds [Fig. 12]. This material was certainly associated with the collapse of a wall and ceiling of a room. The earth deposit upon which this debris had collapsed yielded a small amount of ceramic vessels, including LRD bowls (Form 9), a frying pan and an LRA 5/6 amphora rim, with a *terminus a quo* of their deposition in the second half of the 6th century [see Fig. 10:8–10].

This layer covered a tamped earth level mixed with crumbled mortar, abutting the face of the house walls. It was the lowest level uncovered during the excavations in this place.

A wall abutment made of pseudo-ashlars bonded in mortar reinforced the east wall of the house, being located directly in line with the extension of the partition wall between rooms 12 and 13. It was interconnected with the wall, demonstrating its contemporaneity with the construction of the house.

## DISCUSSION

The LRA 4.4 amphora fragment found in trench T8, in a layer cut by the house foundation, is a surprising discovery. Vessels of the kind used to be produced in the late 6th and 7th centuries (Majcherek 1995: 169), which may suggest a later than previously assumed time for the construction of house H1. Considering the isolated nature of this find, it cannot be ruled out that the sherd is an intrusion from higher-lying layers. In the same trench, a ceramic midden of Roman AE3 and AE4 amphorae (on these, Dixneuf 2011: 97–134) was uncovered in layers underlying this building. Ceramic middens of this kind were recognized already in the 2016 season under the southwestern part of this building (Gwiazda and Wielgosz–Rondolino, in preparation), confirming earlier assumptions concerning the settlement character of this part of site between the 1st and 3rd centuries AD (see Babraj and Kogut 2015: 88).

Excavations in room T1 made it possible to identify the function of one



Fig. 12. Fragment of a lime-mortar ceiling with imprints of reed bunches and wooden beams (University of Warsaw Marea Archaeological Project | photos M. Gwiazda)

of the installations located there. The partly excavated shaft, made of pseudo-ashlars bonded in hydraulic mortar, was certainly a well or cistern. Characteristic footholds for climbing, known from the Christian basilica and the *saqiyah* (Szymańska and Babraj 2008: 85, Figs 31, 32, 34, Phot. 71; 2012: 60, Fig. 3), were previously identified in other structures of this kind in 'Marea'. In the case of House H1, the presence of a relatively narrow shaft may indicate that it was indeed a well wherefrom groundwater would have been drawn (see Mycielska-Dowgiałło and Woronko 2008: 23). Similar structures are also present in other parts of House H1. Two wells were found previously in the northeastern and southwestern parts of Courtyard 17. Another small presumed well, built entirely of bricks, was added to the east wall of the house, east of Room 12. The installation uncovered in room T1 is different because it was enclosed on three sides by walls creating a small room that was probably originally roofed. Most probably, this newly examined well was originally connected with a building located on the north side, and only later incorporated into house H1.

A water drainage channel is known from Courtyard 17, leading toward the street on the west side of the house (Gwiazda and Wielgosz-Rondolino, in preparation). It connected to a much larger public sewer recognized now in trench T7. The inclination and orientation indicate that the sewage from this

part of the settlement was discharged south, towards an artificial bay/port (see Rodziewicz 2010: Fig. 4.14) [see Fig. 1].

Excavations carried out in 2017 indicate that House H1 was a semi-detached building as late as the end of the 6th or 7th century; there were no adjoining buildings on the west, south and east, only a public space that was most likely empty. Changes occurred, but not before the end of the 6th or in the 7th century: hearths, earth accumulation, construction debris and household rubbish (animal bones, ceramic table ware, kitchenware and storage ware).<sup>2</sup> The ceramic evidence from the dumps outside the house (especially from trench T9) corresponds in terms of forms and chronology to the material found in earlier seasons in the latest phases of House H1. In the second half of the 7th century, rooms inside the building were also changed and so was their use (Gwiazda and Wielgosz-Rondolino, in preparation).

The collapsed wall of the southwestern part of the building suggests that it was about 6 m high where the staircase was located (rooms 18 and 19). There were no traces in the rubble of mud bricks, which could have been used in the upper part of the wall, despite extensive attestation of this building material in 'Marea' (Szymańska and Babraj 2007: 57, 59–62, Figs 3, 4). It is also assumed that mixed construction material was used on the upper floors of Roman houses at Marina el-Alamein (Medeksza 1997: 84). This discovery brings us closer

<sup>2</sup> A concentration of broken ceramic vessels was located on the surface north of room 26 and a clustering of discarded ostraca from the late 6th century lay by the wall of the house just south of room 5 (T. Derda, personal communication).

to knowing what House H1 may have looked like in the last phase of use.

The discovery of fragments of mortar ceilings with imprints of wooden beams and reed bunches in trench T9 is also important in this context. Architectural elements of this type were found during earlier excavations in this building, in rooms 23 and 24a. They are also known from the roof of the early Byzantine portico next to the theater building and auditoria on Kom el-Dikka in Alexandria (G. Majcherek, personal communication, 17 September 2015). A similar construction technique, using palm branches, has also been recorded in Roman houses in Kellis (Dakhleh Oasis) (Hope 2015: 209, Fig. 9).

The stub wall against the east wall of the house was found to be an abutment for the wall between rooms 12 and 13. Being located already on the slope falling away to the lake, the east wall of the building may have been in need of such reinforcement for structural reasons. A similar structure was uncovered in trench T2 on the north side of the house, where it supported the arch between rooms 24b and 25 [see Fig. 2].

Of interest are the small pieces of water-washed ceramic sherds, found in abundance in trench T8, in the levelling layers under the house, and in trench T9, in the trash from the end

of the 7th century or later. Water-washed sherds had also been found in the levelling layer under the floor of room 16 (Wielgosz-Rondolino and Gwiazda 2016: 119–120). Rounded ceramics for wiping can be found in ancient latrines (Czerner et al. 2016: 156), but this does not seem to have been the practice in 'Marea' (Szymańska and Babraj 2007: 62–63; 2008: 35; Majcherek 2008: 107; Szymańska 2010: 402, Fig. 5; Babraj, Drzymuchowska, and Willburger 2014: 48). The appearance of rounded ceramics in at least two cases in the levelling layers under the building may indicate some other function for these objects at the site.

The granite column from trench T6 resembles columns of similar size excavated in the nearby Christian basilica (Szymańska and Babraj 2005: 45–46), but the overall number of finds of columns is relatively small considering the size of this church. The building must have been robbed in one of the occupation phases (late 7th, mid-8th century). The column, found next to house H1, in a street leading from the basilica toward the northern part of the artificial bay/port, could be construed as evidence of shipping these architectural elements away from the town. For whatever reason, this particular column was dropped in the street.

## CONCLUSIONS

Excavations in 2017 demonstrated the extent of the area in which pottery dumps related to the production of amphorae in 'Marea' in the Roman period can be found.

The discovery of another well in the house indicates the self-sufficiency of the household with regard to the water supply. The street sewer in one of the trenches is likely to have been



connected with the drainage network found earlier inside the house. A small compartment was observed attached to the southern facade of the building, whereas the east wall was abutted. Excavations outside the house walls showed that the space around it was free of architecture, ensuring easy communi-

cation. Except for the place where there was a sewer, there was no stone paving.

At the end of the 6th or 7th century, the streets around House H1 gradually began to change character, becoming a place for discarding rubbish. At about the same time, House H1 began to change both in form and function.

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