The City Walls of Straton's Tower: Some New Archaeological Data

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The problem of the location of the Hellenistic town that preceded Herodian Caesarea can be reconsidered in light of recent work by the Caesarea Ancient Harbor Excavation Project (CAHEP). The structures, stratigraphy, and datable small finds exposed during these excavations, along with data from earlier research, illustrate a tentative topographic and architectural picture of pre-Herodian times that would have a logical common layout of a single urban unit. This urban unit, dated to the second century B.C., was enclosed by city walls of significant architectural scope and contained one or two closed anchorages. Some remains, probably from the town of the Hellenistic tyrant Zoilos, which Alexander Jannaeus failed to conquer, were dated by the excavators to the Herodian period; but further study of the stratigraphical, typological, and circumstantial evidence may date them to an earlier period, that of the only known pre-Herodian settlement at this time—Straton's Tower.

INTRODUCTION

Since archaeological excavations commenced at the vast site of Caesarea Maritima, most of the field work has been concerned with exposing public buildings and major structures from the Herodian and later eras. During these excavations some earlier structures and pre-Herodian pottery deposits have also been found. The following is a summary of these excavations insofar as they are relevant to the pre-Herodian era, or as indirect evidence and for comparative stratigraphy and architectural style found elsewhere in the site of Caesarea (fig. 1).[1]

In 1956 an archaeological expedition of the Hebrew University headed by M. Avi-Yonah, excavated the area on the seashore about 100 yards north of the Crusader city. In a short report about this dig, Avi-Yonah wrote (1956: 260), "At the bottom of the excavation, Hellenistic and Persian foundations and pottery were found belonging to Straton's Tower which preceded Caesarea on this site."

In the early 1960s the Italian mission to Caesarea excavated and exposed a stretch of a fortified wall with two round towers and a polygonal one at the seashore some 100 yards northeast of Avi-Yonah's excavation site (figs. 2, 3). Because the earliest datable finds were from the first century B.C., the excavators claimed that the structures were Herodian. Their claim was also based on architectural parallels of Herodian structures at Jericho, Samaria, Herodium, and Jerusalem (Finocchi 1965: 251–63; 282–86.)

In 1962 Avi-Yonah renewed and expanded his excavations of 1956. Three of his five excavation areas (A–E), yielded Hellenistic remains (A, C, and D) and in one (E), the Herodian remains were found on virgin soil (Avi-Yonah and Negev 1963: 146–48). Stratum I in Area A included:

> . . . Hellenistic walls, mainly headers built on rubble foundations, at a level of 2.8 m above sea level. The foundations were laid on virgin soil. The pottery associated with this stratum included fishplates, "Megarian" bowls and "West slope

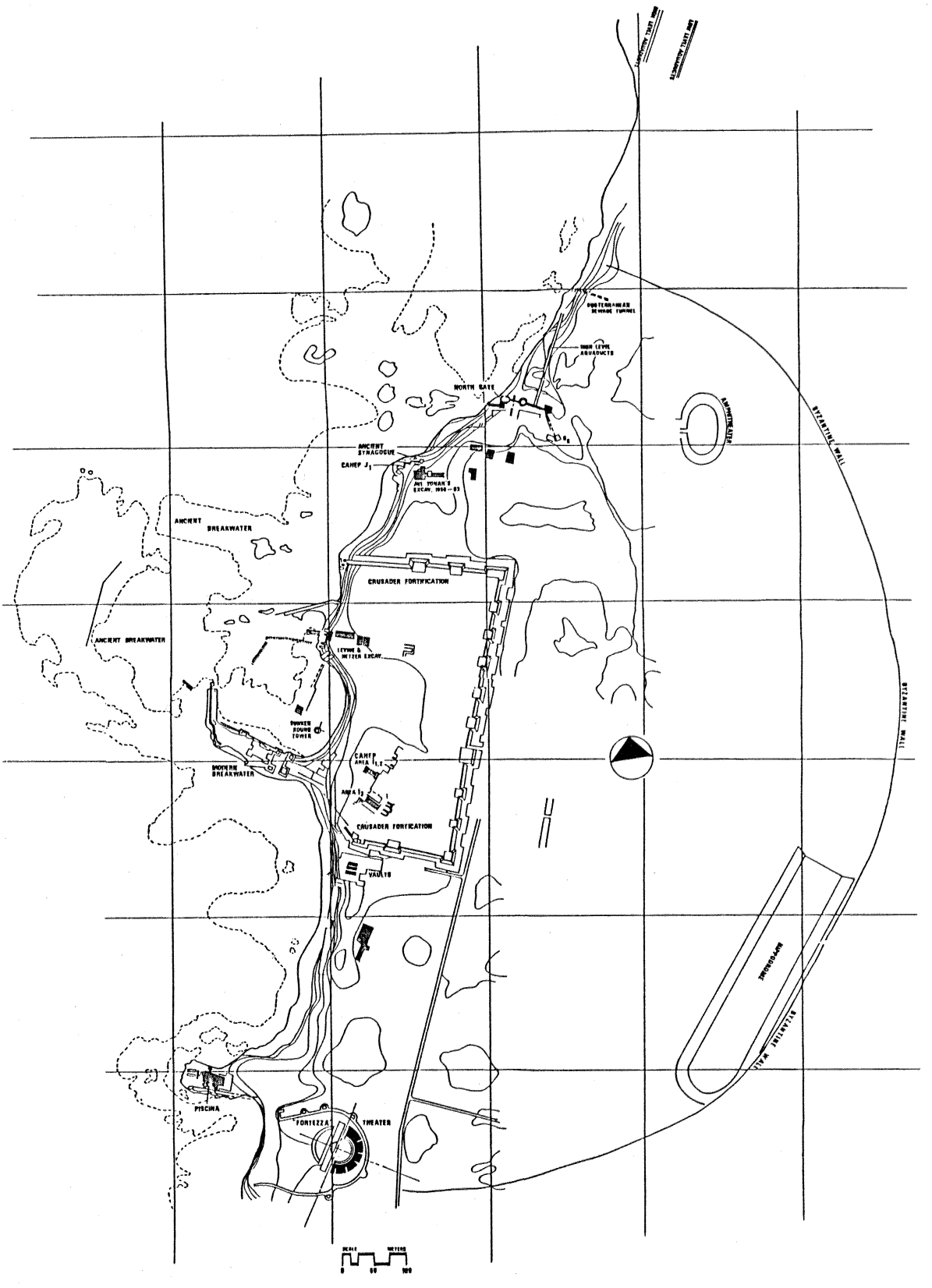

Fig. 1. Plan of Caesarea Maritima and the various excavation fields.

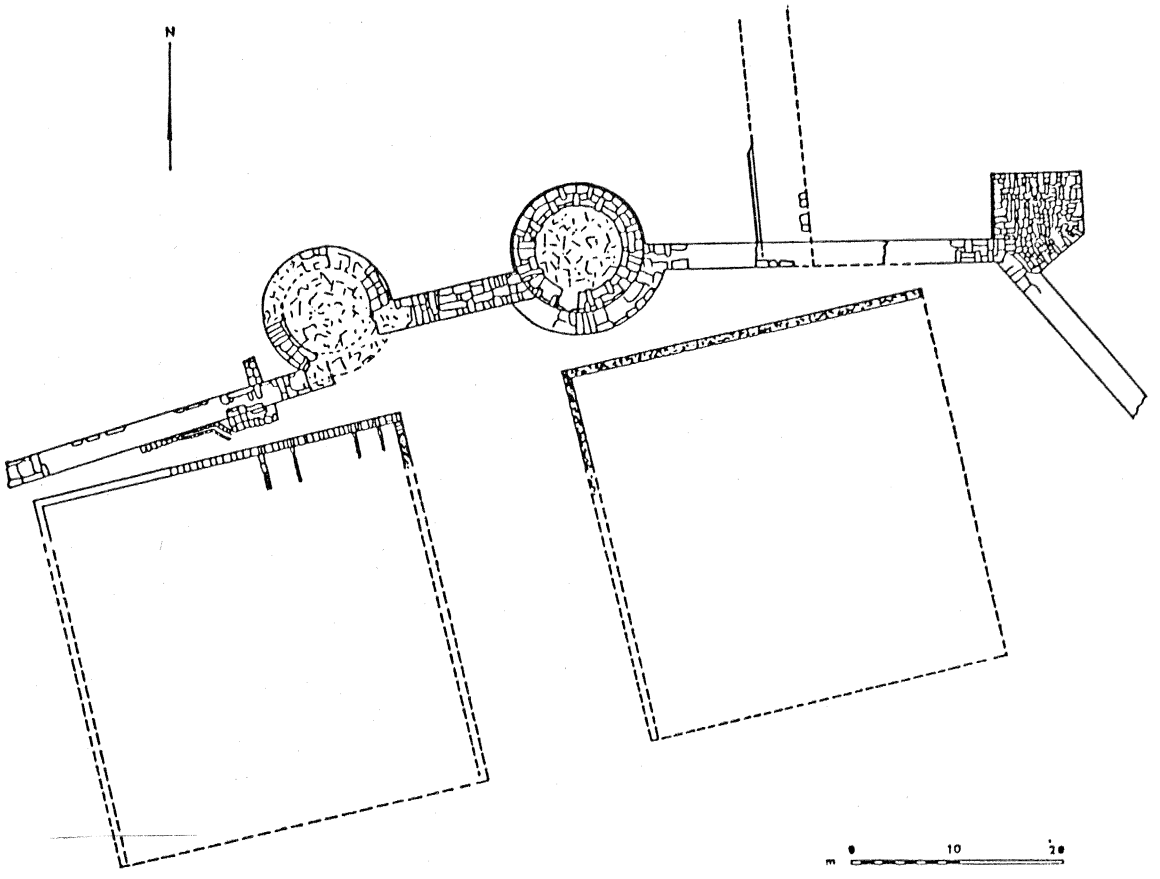

Fig. 2. The fortification wall and corresponding towers, as drawn by the Italian Mission to Caesarea (after Levine, 1975: fig. 1).

ware." The plan seems to indicate several rooms grouped around an open court. Possibly we have here the harbor quarter of Straton's Tower. No Persian pottery was found in this area. . . .

In Area D, a trench 50 m long and 10 m broad was dug. Close to the eastern end of the trench a considerable quantity of pottery sherds was discovered. It included a large collection of Rhodian, Coan, and Cnidian stamped jar handles, many fragments of "Megarian" bowls, fishplates, early Hellenistic lamps, early types of "Eastern Sigillata A" and their like; on the whole, a typical Hellenistic context, paralleled up to the present only at Samaria. When this accumulation of pottery was cleared, a corner of a large house emerged. Of this only two courses were preserved, each course consisting of two headers and a stretcher.

The examination of the pottery suggests that the building was abandoned some time in the early first century B.C., possibly after Alexander Jannaeus's conquest of Straton's Tower. In the sea, close to the synagogue remains, a massive wall can be seen; this may well be part of a mole of the harbor of Straton's Tower.

In 1976, during a field study by the students of the department of history of maritime civilizations at the University of Haifa, a round tower was located, similar to those found by the Italian archaeologists near the north shore at the bottom of the inner bay, within the Crusader city (figs. 4, 5). A trial trench was dug along its west side, down to its base on bedrock at a depth of 2.7 m below sea level. Among various pottery sherds, mostly wave-carried, fragments of a cooking pot were found crushed against the side of the tower. This type of clay vessel resembles cooking pots of the second century B.C. (fig. 6). The fact that some of the ashlar headers of which the tower was built have plastered surfaces on their long sides indicates that they were reused in the tower construction and originated from earlier ashlar structures

Fig. 3. The round tower and the north fortification wall, looking west. Note the additional width of a later phase at the left side of the original structure (photo: M. Little).

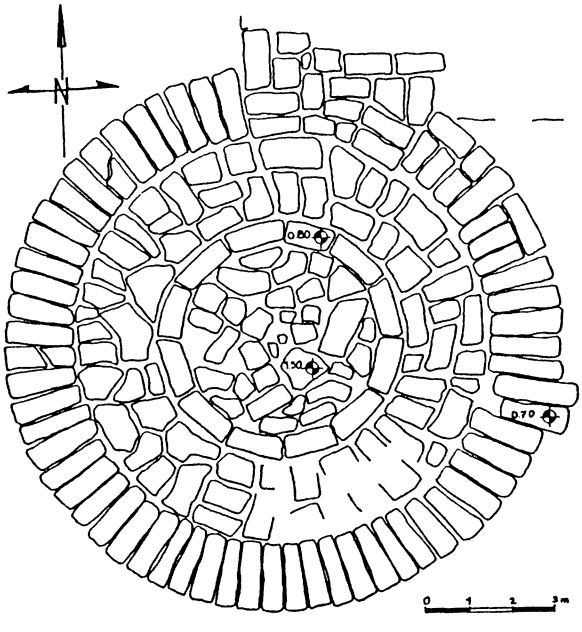

Fig. 4. Plan of the Round Tower in the inner bay.

on land (Raban and Linder 1978: 241–43).

During the 1978 season of the American Joint Expedition to Caesarea, Roller excavated the area on top of the high ground east of Avi-Yonah's dig. In this area (Field G) Hellenistic pottery was found, but not in association with Hellenistic architecture. According to the excavators the Hellenistic pottery was part of the fill into which the foundation of a manor farm dating to late antiquity was placed (Roller 1980: 35–42; 1983: 64).

Other casual Hellenistic finds were discovered east (Yeivin 1952: 143) and south of the Crusader city (Roller 1983: 65), but without any architectural context.

During the 1980 CAHEP season the massive wall near the water line in the north (Avi-Yonah and Negev 1963: 148) was studied and carefully surveyed (figs. 7, 8). A trench was dug in the water next to its north face. An ashlar-built wall with dovetail grooves for lead clamplings was traced superimposing the mole (or rather a quay),

Fig. 5. Submerged courses of headers at the side of the round tower (photo: M. Little).

suggesting a pre-Herodian date for the structure underneath (Raban 1981a: 293, figs. 13, 14). During the 1981 (Raban 1981b: 87–88) and 1982 seasons, the trench across the quay was continued to its south side on land. The bedrock on which the quay had been directly laid was cleared. From it a rock-cut passage led to double rock-cut chambers whose original floor was below the present sea level. A large quantity of Hellenistic pottery was recovered from the flagstone-paved floor of these chambers (fig. 9). In one chamber, the main group consisted of more than a dozen cylindrical jars with a double holed mouth and without handles, and as many as 20 cooking pots (fig. 10). Among other sherds were Megarian bowls, Eastern Sigillata A plates and bowls, and a few Rhodian amphorae (three of them with stamped handles). The other chamber contained broken bag-shaped jars and fishplates on its original floor (Raban 1983a: 248–51; fig. 11). The contents of the chamber and the stratigraphical fact that it

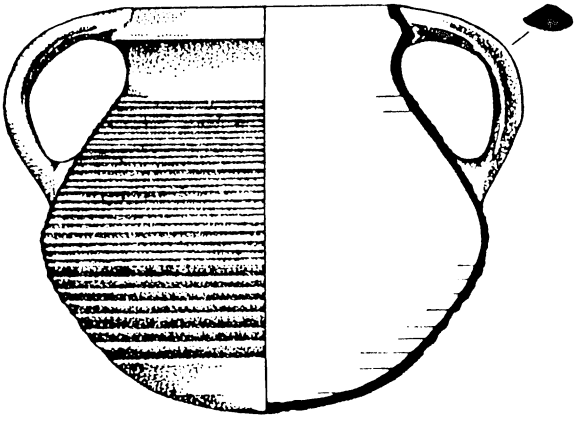

Fig. 6. Cooking pot found crushed to the side of the submerged round tower.

Fig. 7. View of the quay near the synagogue, from the northwest.

was overlaid by a nondisturbed Herodian stratum ensure the pre-Herodian dating for the quay (fig. 12).

During the 1978–1980 seasons of the American Joint Expedition to Caesarea a segment of the fortification wall, southeast of the polygonal tower exposed by the Italian mission, was examined by Blakely. A section of over 5 m of the external face of the wall was cleared to below the foundation base. Careful stratigraphy was ensured and the data (Blakely 1984) have been interpreted as proving that the original date of construction of the wall was during the Herodian period.

In 1960 Negev excavated the great mound within the Crusader city on behalf of the National Parks Authority. During the excavation between 1960 and 1962, a series of great vaults and a podium of a temple were exposed at the base of the west side of the mound facing the inner bay. While the northern part of the podium was divided into rather large rectangular cells deliberately filled with crushed sandstone in antiquity, the southern part contained six or seven large vaults of which only the southernmost has been preserved intact. This vault is 21 m long (west–east), 7 m wide and more than 13 m high, from what has been considered the original floor to the highest point of the inner arch. The south and east walls were built of large dressed ashlar blocks laid in courses alternating a stretcher and two headers. This pattern seemed characteristic of the Herodian period. Only a few pottery sherds were found during the clearing of the vault. These sherds were mostly of early Roman vessels, although a few late Hellenistic types were also found (Negev 1963: 728; 1975: 273–74).

During the 1984 season of CAHEP two trenches were dug inside the same vault. One (I-3-a) was placed along the side of the southern wall, while the other (I-3-b) was along the face of the north wall. Both trenches were dug to a level below the wall foundations. As expected, the north wall turned out to be a later addition to the south and east walls. It was built in two stages, which differed in orientation as well as in types and sizes of building stones (fig. 13). The foundation base of the north wall and the ledge on top of it (a base for the floor) are some 0.8 m higher than the corresponding features of the south wall (figs. 14, 15). The architects of CAHEP carried out a thorough survey and redrew the structural members of the walls at the vault, the dressed stones along the western face of the great podium, and the northern fortification wall with its corresponding towers near the northern shore. The inner face of the fortification wall in the north, and especially the segment between the round and the polygonal towers (fig. 16) comprised the same type and size of dressed ashlar and the same system of alternating headers and stretchers as the south and the east walls of the southernmost vault.

The pottery finds at the lower levels of the two trenches were scanty. Two sherds of Eastern Sigillata A and a handle of Rhodian amphora were found in I-3-a at the level of the ledge on top of the foundation course, in a thin layer of dark

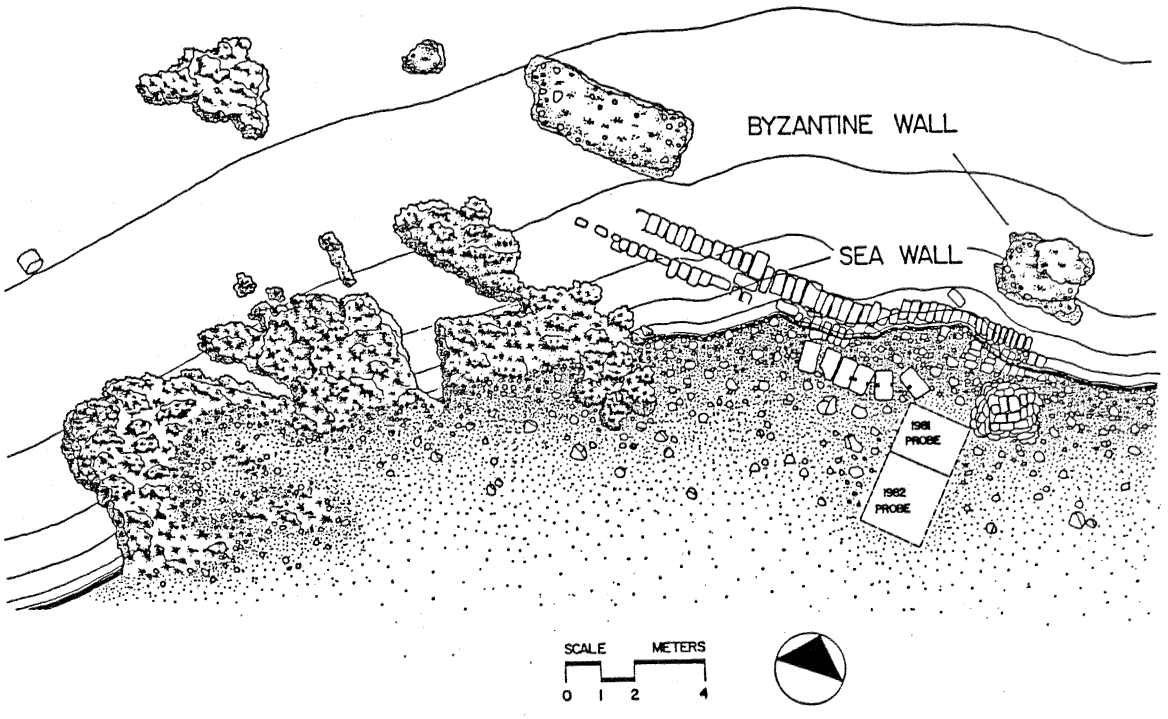

Fig. 8. Plan of the quay, the superimposed ashlar structure, and the adjacent rock-cut chambers.

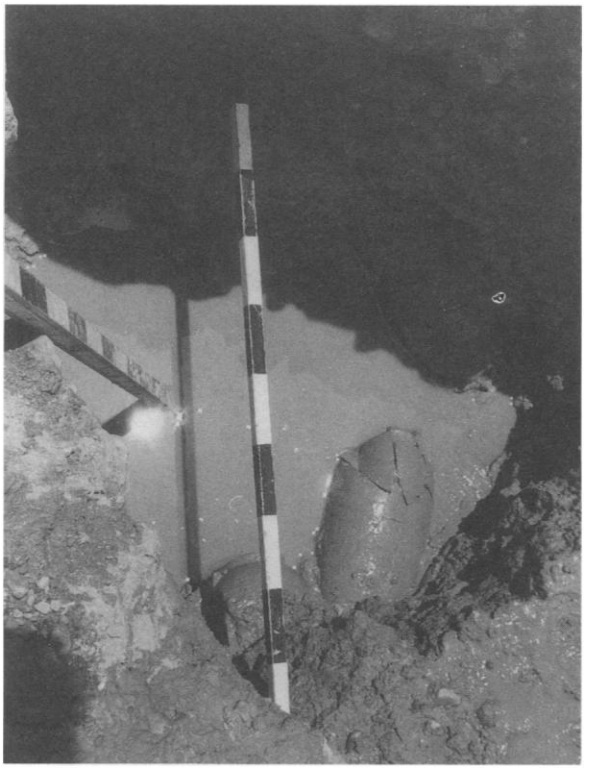

Fig. 9. The northern rock-cut chamber at the lee of the quay and some of the pottery at its lower level.

gray-brown silt. This suggests a late second or early first century B.C. date for the original ground on top of the foundation trench. At the top of foundation courses in I-3-b was a floor of beaten earth with crushed bricks and many fragments of carbonized organic material. The pottery sherds included parts of cooking pots and a few sherds of Terra Sigillata A from the late first century B.C. or early first century A.D.

It is stratigraphically clear that the south and east walls of the great vault predate the vault itself and its northern wall. Taking Negev's account of the vault being from the Herodian period (Negev 1960: 21), the earlier walls must be dated prior to the city of Caesarea. The pottery finds correspond with this conclusion.

Another land excavation was carried out during CAHEP'S 1984 season at the foot of the western façade of the Herodian great podium, at the tip of a "Roman pier," probably of the Herodian inner harbor (Negev 1975: 274). There, at only 1.6 m above present sea level, Negev reached a north–south ashlar course that looked like a wide staircase or the tip of a quay. In 1975 a trial trench was opened next to the south end of the quay, down to the base of its vertical wall facing west.

Fig. 10. Restored clay vessels from the upper and lower strata within the rock-cut chambers.

At an elevation just above the M.S.L. is a horizontal notch in the wall, covered with fossil marine encrustation and vermetids (fig. 17), below which the marine coating contains mostly ostrea (Raban *et. al.* 1976: 36–38). In 1983 a narrow ditch was dug along the north part of the quay, exposing a mooring stone in the vertical face of the wall (Raban 1983b: 263; 1985: 166–69). Thus, during the 1984 season the entire area west of the quay (I-1, 2) was cleared and surveyed all the way to bedrock (fig. 18). This bedrock slopes down toward the west in a manner suggesting artificial quarrying.

DISCUSSION

The new archaeological data from the CAHEP 1984 season on pre-Herodian ashlar walls call for a reconsideration of similar structures elsewhere at the site. The following points should be noted:

1. Marginal drafted ashlars have not been found in the inner walls of any other roofed structure from the Hellenistic, Herodian, or Roman periods, at least not ashlars with undressed busts. Thus, it must be assumed that the south and east walls of the great vault here originally formed a very large inner southeast corner of a free-standing wall.

2. Most of the northern wall east of the twin round towers exactly matches the south and east walls of the great vault in type of ashlars, order and arrangement of courses, and style of marginal drafted blocks on the inner face. The choice of this segment of the northern wall for comparison is based on the excavators' assumption that other parts of the wall had been modified at various times later on (Finocchi 1965: 277). Such modifications can be seen in the closings between and around the twin towers, in the westernmost part of the wall (including the use of cement for placing back original blocks with their marginal dressed sides turned into the wall), and in the segment exposed in Area G-8.

3. Blakely's excavation in Area G-8 exposed the external side of a fortification wall. Yet additional structures are attached to it (Blakely, 1984: 8, fig. 2, Walls 8024, 8083). His fig. 4 indicates that these additions are from a later phase (the base of Wall 8024 is 1.5 m higher than that of Wall 8001), yet the repertory of potsherds from Locus 8118, which covers the base of Wall 8024, includes either Herodian or late Hellenistic types (Blakely, 1984: 11, fig. 11). Thus, if the additional walls are of Herodian date, the main earlier wall, Wall 8001, must be pre-Herodian. It is not logical to add

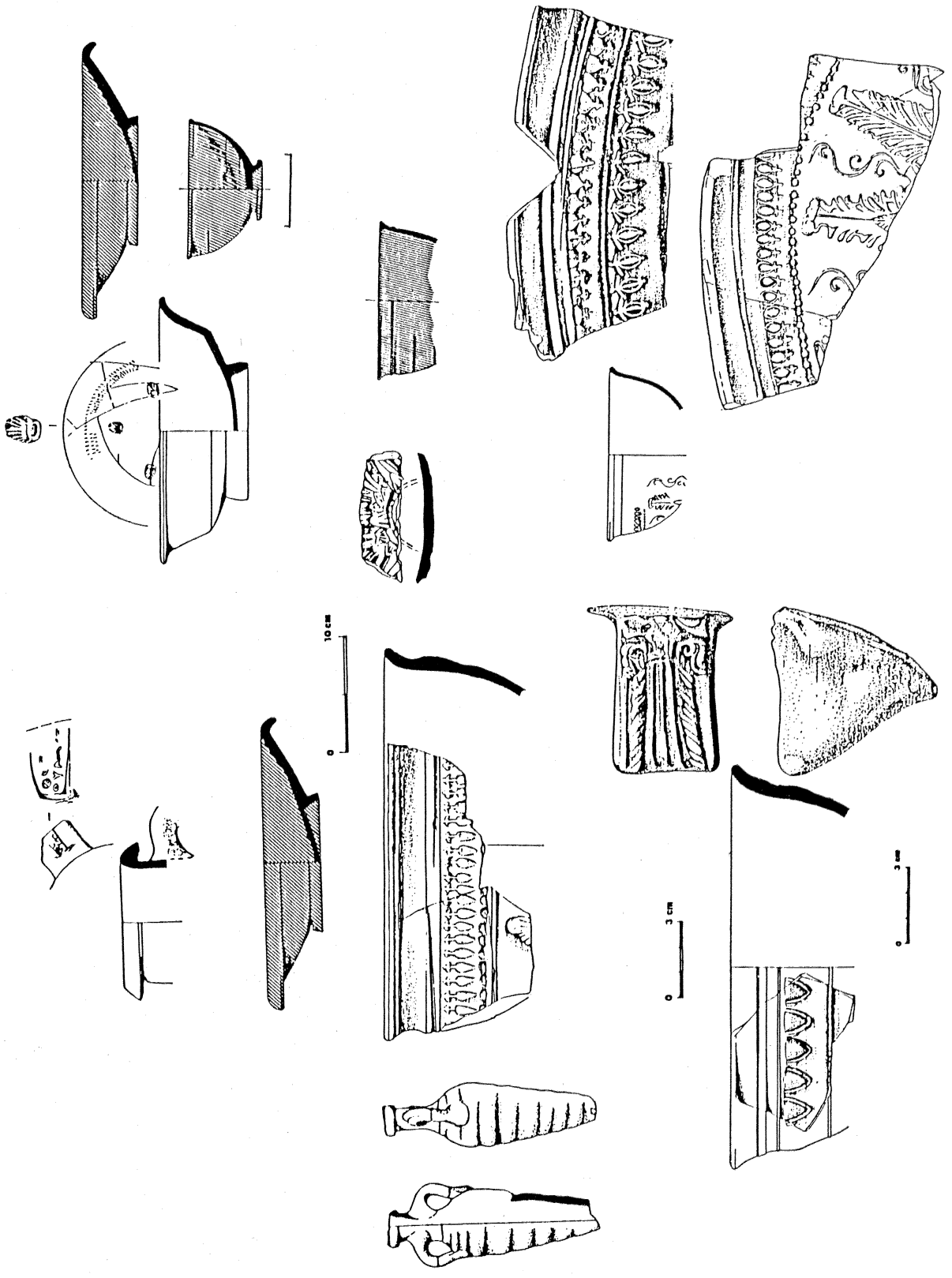

Fig. 11. Selection of pottery from the Hellenistic level in the rock-cut chambers.

Fig. 12. A jug of the Herodian period *in situ* in the upper level of the rock-cut chamber.

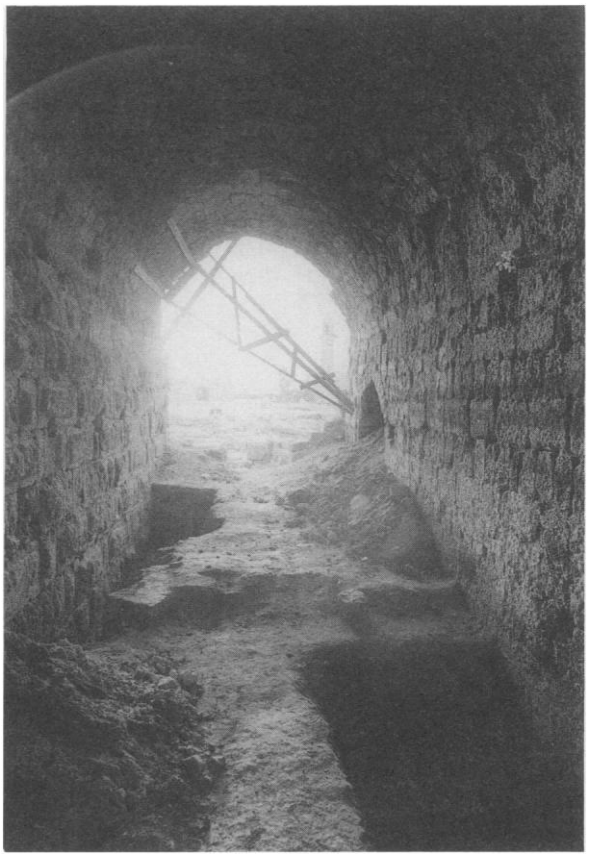

Fig. 13. The great south vault, looking west (CAHEP 84: I-3-a on the left, and I-3-b on the right side of the photo (photo: M. Little).

structures to an external face of a functioning fortification wall, so Wall 8001 would not have served as a fortification line during the Herodian period. Blakely's Locus 8125 (1984: fig. 2) has been referred to as the original foundation trench for Wall 8001 (Blakely 1984: 9), yet its bottom reaches a level about 1 m higher.

Following Blakely's section (1984: fig. 4) one would wonder if a wall could be inserted down far below the bottom of its foundation trench. Considering the fact that the north wall was repaired, modified, and reused several times after it was first built, this foundation trench might explain the random use of marginal dressed ashlars on the external face of a wall that has no such blocks on the external face of its original phase (figs. 19, 20).

4. The Herodian date for the north wall and its twin round towers was already argued by Levine (1975: 11–12) and Negev (1975: 273). The stylistic argument for such a date, used by the Italian excavators (Frova 1965: 275), was rightly questioned also by Blakely (1984: 7). That the wall was reused during the building of the Herodian city of Caesarea is apparent from one of its segments, east of the towers, which was modified to serve as a base for one of the arches of the high level aqueduct. The arguments for dating this aqueduct to Herod's time were discussed by Negev (1967: 46–47) and by Olami and Peleg (1977: 136). Our new data, from a wall in the south that seems to be part of the same fortification system and of clear pre-Herodian date, are conclusive additional evidence for assigning to the north wall an original function as a pre-Herodian fortification line.

It is also reasonable to assume that when Herod's architects made the master plans of Caesarea, at least part of the wall was a prominent component in what seems to have been the deserted and dilapidated town of Straton's Tower (Josephus, *War*, I.408) and thus could be reused

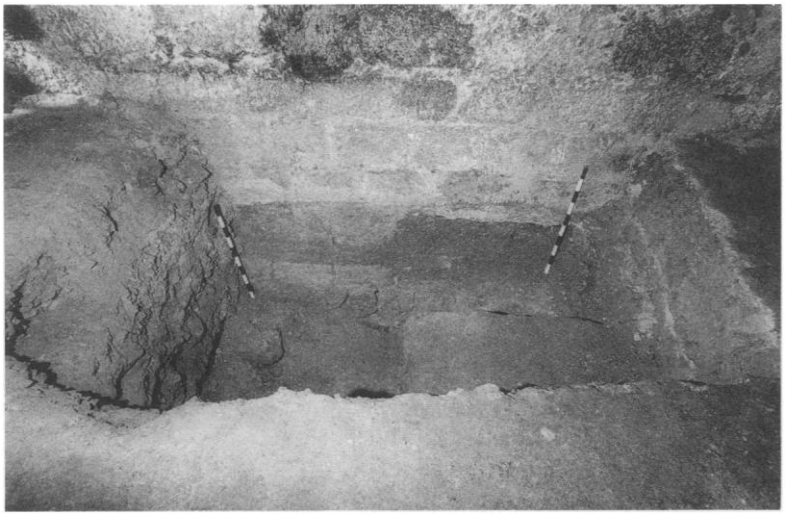

Fig. 14. Trench I-3-b, the right hand meter-stick based on the original floor (photo: M. Little).

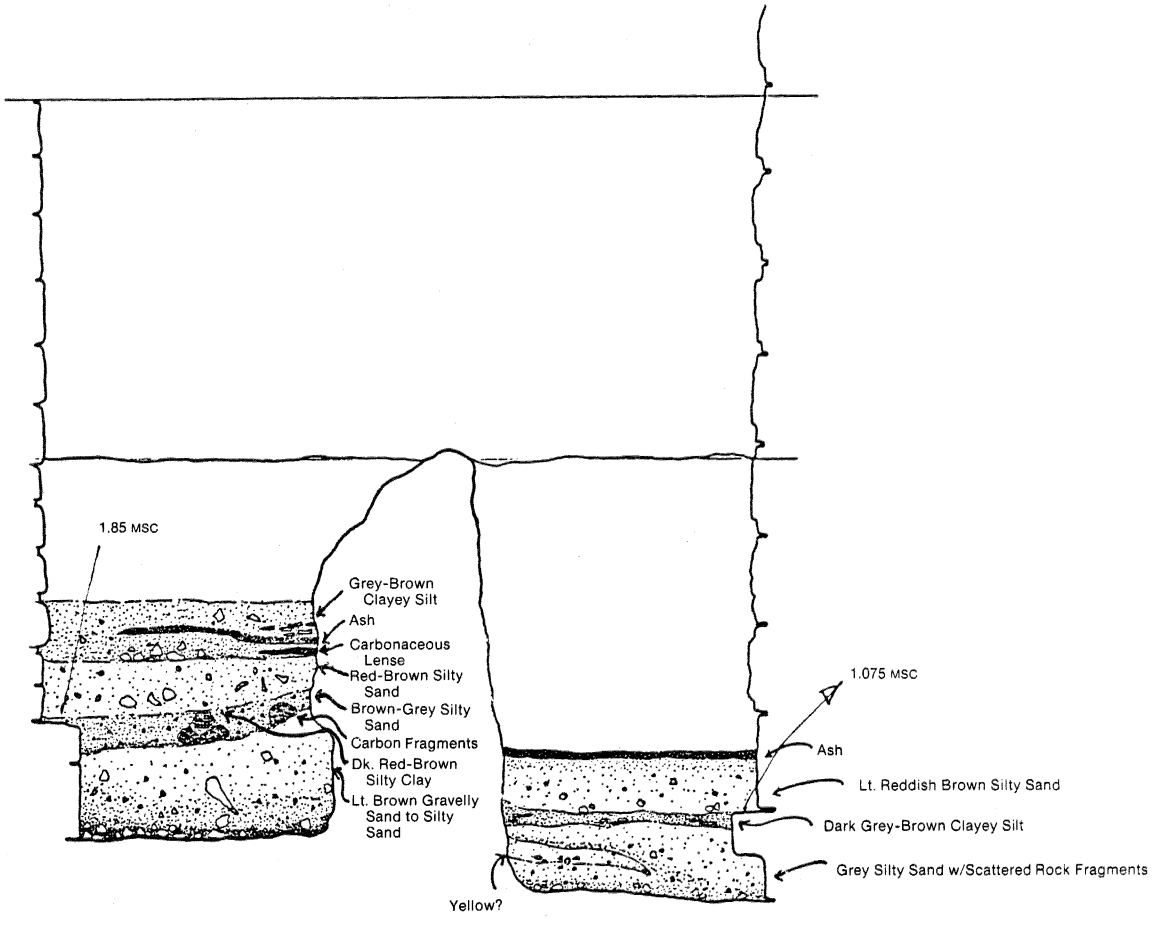

Fig. 15. Cross section of the southern vault (CAHEP 84), facing east.

Fig. 16. The inner (southern) face of the north fortification wall, east of the round towers, looking north.

and incorporated within the new planned structures. Nonetheless, reused walls seem not to have been city walls or part of the outer fortification line at that time, since most of the public buildings and installations of the new city would be beyond them. Those buildings and installations include the theater and the storage vaults to the south (Roller 1982: 50), the amphitheater to the east, and the main sewage system that ran under the streets and was washed and cleared off by the sea waves (Josephus, *Antiquities*, XV.340; Finocchi 1965: 281–82) to the north.

5. The walls at the east and south sides of the great vault correspond to the rock-cut inner harbor and its quay exposed during the CAHEP 1984 season. The south wall's orientation, if continued west, would suggest a defense line along the rocky promontory that protects the harbor from the south. This hypothetical course for the city wall would allow for proper defense of a 30 m wide entrance, between the submerged round tower and the wall, which may have led into the inner harbor (see fig. 21). Though in the limited exposed bottom of this basin we have not yet found evidence for dating it to the pre-Herodian era, the tower itself (Raban and Linder 1978: 243) and the encompassing wall have been so dated. It is therefore suggested that all these elements were parts of the same unit, well adjusted to the natural topographic outlines, and would create well protected *limen kleistos* of typical Hellenistic character.

6. The Hellenistic quay at the north coast is also located within the natural protection of the reefs to the west and of the sandstone ridge at its back to the south. It faces the open sea to the north, "on which side there was the stillest of the winds" (Josephus, *Antiquities*, XV.338). The north wall that extended west to the sea provided partial protection for the eastern side of the entrance.

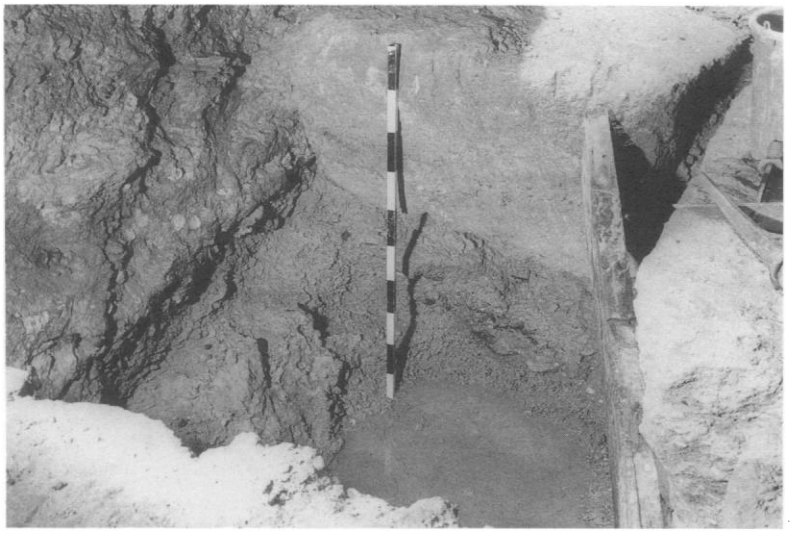

Fig. 17. The base of the quay in area I-1, notice the marine ostrea and the quarried bedrock (photo: M. Little).

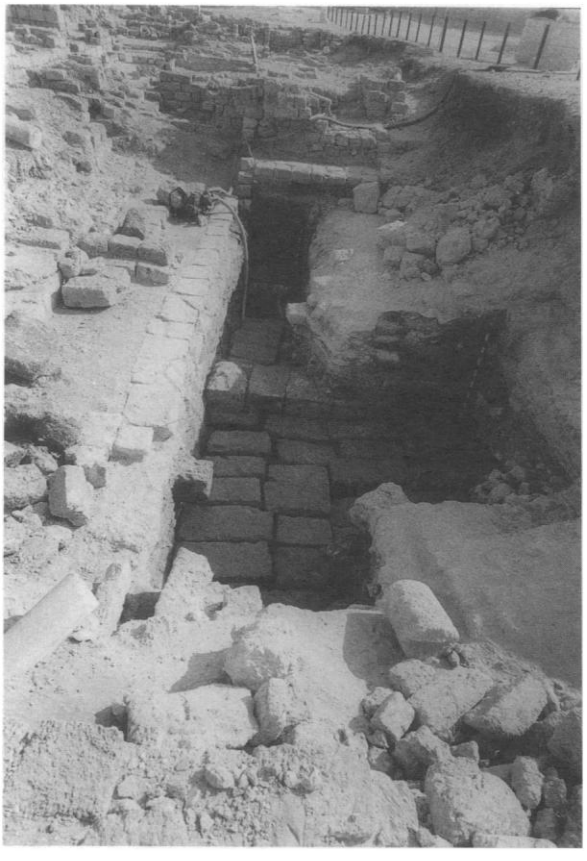

Fig. 18. CAHEP 1984 excavations in area I-1, 2, looking south. Notice the mooring stone on bottom left side and the later beach deposits in the section (photo: M. Little).

Identification

The archaeological evidence for the existence of pre-Herodian fortification walls and protected harbor(s) at the site of Caesarea needs historical interpretation. There are several references to such a fortified place under the name of Straton's Tower. The history and character of Straton's Tower have been discussed by several scholars in recent years (Levine 1973; Foerster 1975; Negev 1967: 3–7; 1975: 271; Ringel 1975: 15–26; Roller 1982: 45–46; 1983; Blakely 1984: 6). Although it seems that Straton's Tower was an important administrative center under the Ptolemaic regime, as one can learn from the Zenon papyrus (PCZ 59004), Roller, who quoted this source (1982: 45), tried to diminish its role to a secondary anchorage for a small and economically depressed agricultural hinterland (Roller 1982: 50). This is not Blakely's opinion (1984: 6). Both scholars, as well as some earlier writers, refer to the settlement by taking its name at face value—e.g., a mere tower. Roller (1982: 45) even suggests that it might be an agricultural storehouse rather than a lighthouse. The reference to the history of Straton's Tower in the later Hellenistic period is, in any case, a reference to a real city, strong enough to successfully repel the military attempts of Alexander Jannaeus to conquer it (Josephus, *Antiquities*, XIII.324–26). As for "Tower" as a component in

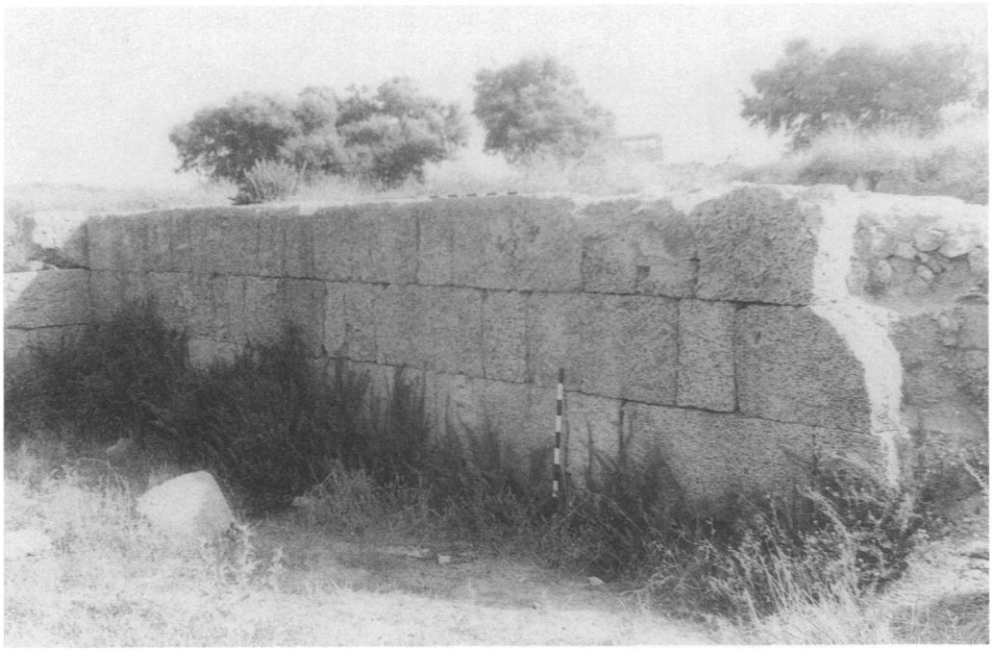

Fig. 19. The external (north) face of the north wall, east of the round towers, looking south.

placenames, it was (and still is) quite common in Palestine and throughout the Levant. In Avi-Yonah's gazetteer (1976) there are at least six places that had retained their Semitic name *Migdal*, within which were towns of considerable size, such as *Migdal Nunia* (Magdala) on the Sea of Galilee—a fortified town with a stadium, an aqueduct, and a synagogue (Josephus, *War*, III:599). Roller (1982), basing his arguments on a preconception of Straton's Tower as one of a group of small agricultural settlements, regards the pre-Herodian archaeological findings from within the site of Caesarea as representing at least three settlements: the quay and public buildings on the north shore as some unknown anchorage; the Hellenistic finds from his dig in Field G some 50 m inland as a manor farm (Roller 1983: 64); and the casual single grave east of the Crusader city as the best candidate for a nearby Straton's Tower (Roller 1983: 65). His argument against identifying Straton's Tower with CAHEP's Area J and Avi-Yonah's excavated area near the synagogue is that this site is too far north of what was supposed to be the actual site of Caesarea, so the reference in Josephus (*Antiquities*, XV:293) could not be "at" but would rather be "near" (Roller 1983: 64–65).

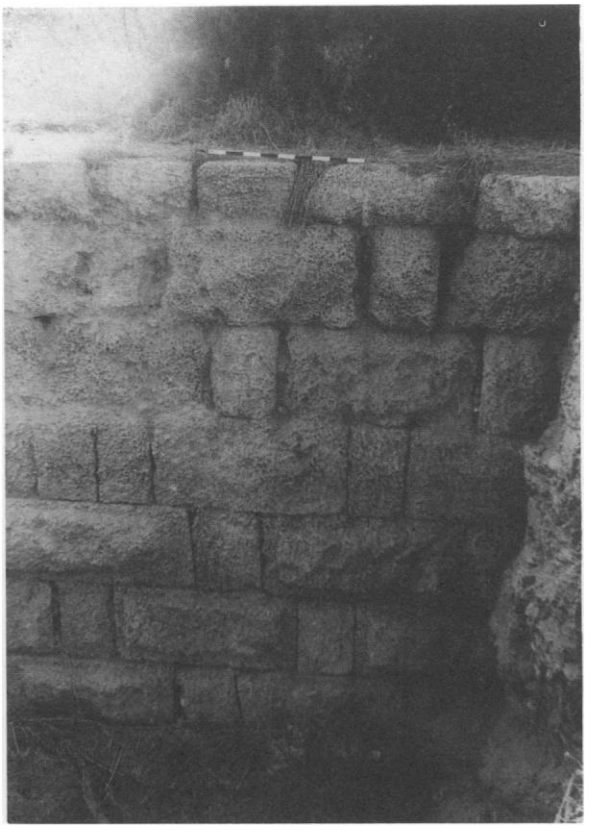

Fig. 20. The wall G.8001, looking west.

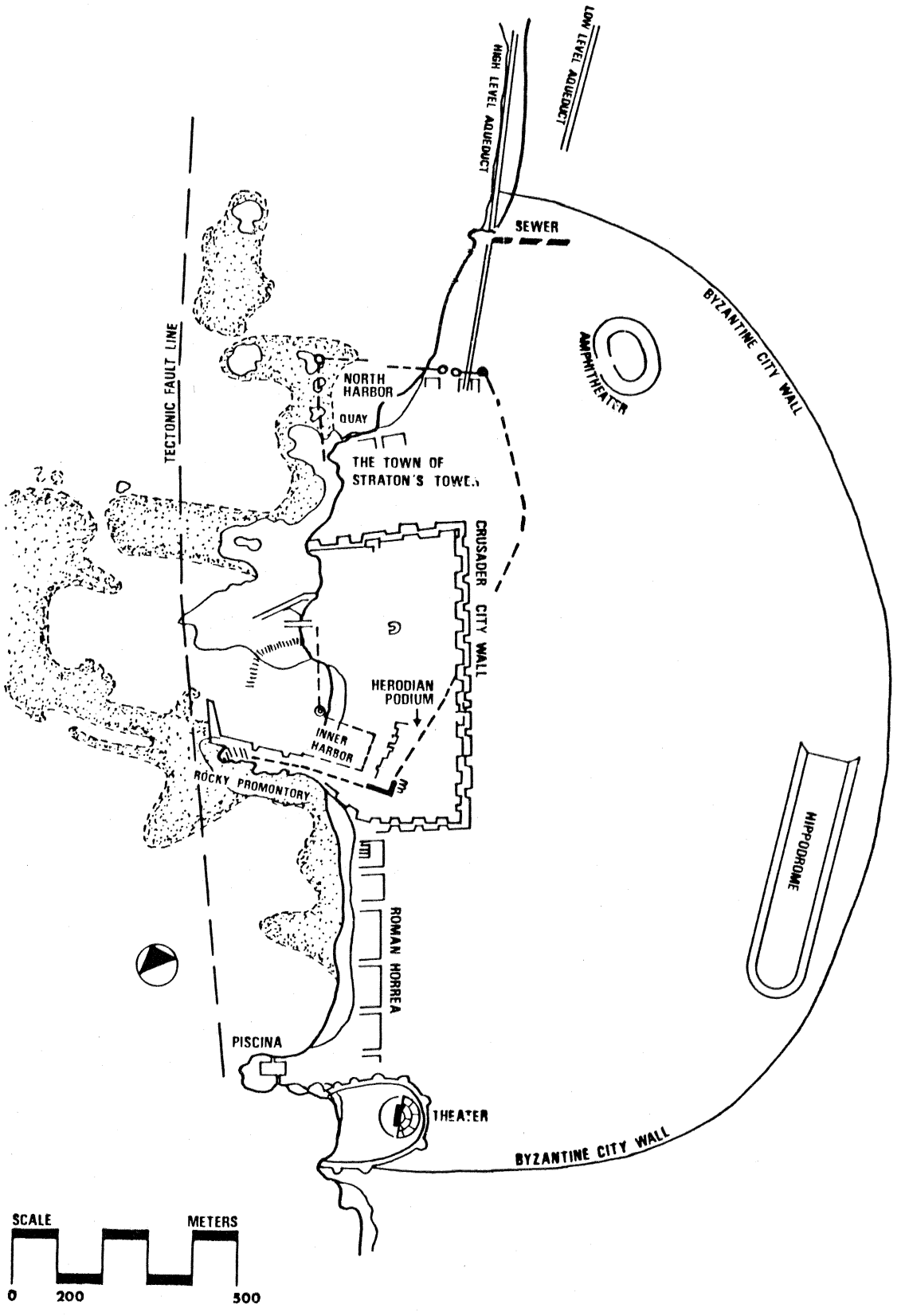

Fig. 21. Tentative plan of the outline of Straton's Tower city walls at the end of the second century B.C.

This assumption might be altered if one could consider small places to which there are no historical references. Such sites include Tel Mevorakh, Tel Esur, and Tel Zeror (Roller 1982), as well as nearby coastal sites such as Tel Dor, which was in close contact with Straton's Tower, at least toward the end of the second century B.C. (Josephus, *Antiquities*, XIII: 325–26).

The archaeological excavations at Dor in recent years have exposed a well-planned Hellenistic settlement with a very impressive fortification wall. The suggested date for this wall is late third century B.C. (Stern 1982: 109; 1983: 118–19). The size of the area encompassed by the Hellenistic walls at Dor is about half of that encompassed by our tentative fortification line for Straton's Tower, from the heyday of Zoilos, in the second half of the second century B.C. (Roller 1982: 50). This tentative line would encompass all three sites dealt with by Roller (1983) and although it includes the "nucleus" of Herod's city, it would still leave many of its public installations outside the line (above). Thus, the reference for Caesarea's siting "at" the site of Straton's Tower does not in any way conflict with the available archaeological data. The suggestion that Straton's Tower was twice the size of Dor is not surprising. It seems that under Zoilos Straton's Tower surpassed Dor as the main stronghold of the *tyrannate* since Josephus fails even to mention Dor when reporting Alexander Jannaeus' taking over Zoilos' territory (*Antiquities*, XIII:395). The same assumption can be made from the archaeological data from both sites. At Dor most of the building activities are dated to the Early Hellenistic Period (Stern 1983: 118) and the bulk of small finds are from the second half of the third century B.C. (Stern 1982: 108–9). However, both pottery and structures in Caesarea from pre-Herodian times are by and large from a century later (Roller 1980; Blakely 1984; and above). Josephus' rendering might illustrate just this case by mentioning "Joppa and Dora, which are lesser maritime cities" (in comparison with Straton's Tower, in her dilapidated state) (*Antiquities*, XV:333). Roller (1982: 50) assumes that the earthquakes of 31 B.C. might have destroyed the walls of Straton's Tower, but there are no historical sources to support this claim. In fact, Josephus' account of that event (*Antiquities* XV:5, 2) refers to falling houses in Judea only.

CONCLUSION

The cleared architectural and stratigraphical picture at the southernmost vault of the great podium confirmed a pre-Herodian date for its east and south walls and stylistically connected them to the fortification walls on the north. The same connection has been shown between the round tower in the inner bay and two towers near the north shore. Unless one suggests two neighboring fortified settlements, both from the second century B.C., with their outermost extremities less than half a kilometer apart, one must consider all the architectural features to be of the same urban unit. This unit had a city wall that encompassed a naturally protected marine basin north of the site of the later Jewish quarter, which was detached from the open sea by a line of rocky platforms at its west side. This basin had a pre-Herodian quay along its south shoreline. The combination of marine structures, the topographic setting, the line of fortifications, and the nearby Hellenistic land site to the south and to the east make perfect sense for reconstructing typical Hellenistic settlements with an anchorage protected by encompassing walls (*limen kleistos*) (see Raban, 1984: 28–29). This unit had at its other end another part of the same fortification wall leading from the east toward the natural rocky promontory that protects the bay, which later became the intermediate basin of the Herodian harbor and part of which was designated the main Crusaders' anchorage. East of this bay, in the recently silted-up area between the round tower in the water and the inner quay in CAHEP's area I-1, was an inner harbor basin, part of which might have been artificially quarried and deepened. This basin was encompassed by the fortification walls which at a later phase were used as side walls for a series of vaults that probably served as harbor magazines. In other parts those walls were reused by Herod's engineers as retaining walls for the east side of the great podium. The podium and the vaults were used as a base to the temple which Herod built according to Josephus (*Antiquities*, XV:339) and which cannot be dated later than the seventh decade of the first century A.D. The fortification walls, of an earlier phase, are probably contemporary with the round tower and perhaps also with the dug-out inner basin. These three features would relate to each other and to the natural

topography in the same type of *limen kleistos* as the north part of the unit.

It seems therefore, that we now have enough data to allow us to reconstruct the outlines of a second century B.C. fortified city that possessed two safe harbor basins within its walls. The only unknown part is the exact course of the eastern city wall along about 400 yards, between Area G-8 in the north and the back wall of the southern vault in the south (fig. 21). The only known candidate for this city is Straton's Tower, and that is the only pre-Herodian city to be found thus far at the site of Caesarea Maritima. The magnitude and quality of its fortification walls may explain their retaining a function as a landmark for the traditional boundaries of the Holy Land and it would be reasonable to assume that Herod's engineers and architects incorporated those walls within the new larger city instead of dismantling them. Josephus might have had just that in mind when he wrote: "... but the place (Straton's Tower), by the happiness of its situation, was capable of great improvements from his (Herod's) liberality" (*War*, I:408). Some of these altered uses have been enumerated here.

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NOTES

[1]Since 1975, the Center for Maritime Studies (CMS) has conducted annual field sessions of coastal and underwater survey and excavation to study the ancient harbors of Caesarea. In 1979 the project was expanded to include other collaborating institutions, and this led to the establishment of the Caesarea Ancient Harbor Excavation Project (CAHEP). The author is the head of this project; R. L. Hohlfelder (University of Colorado at Boulder), J. P. Oleson (University of Victoria, B.C., Canada), and R. L. Vann (University of Maryland) are codirectors. However, the author takes sole responsibility for the ideas and conclusions expressed herein.

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