

TALL EL-HAMMAM

Southern Jordan Valley, Jordan (E. Kikkar)

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Views of the Bronze Age Fortifications



With an settlement platform in excess of 40 hectares (most of which lies behind massive, complex, multi-period fortification systems) and with an abundance of towns, villages, and hamlets within a .2km to 4km radius of influence, Tall el-Hammam was the epicenter of a significant city-state that dominated the region (likely) from EB1 through MB2, seemingly with little or no occupational breaks. Visible is the 5m-thick EBA city wall, with the 4m-thick MBA city wall just behind it on the horizon. In this photo, the fortifications in Trench LA.28 on the lower tall get a good cleaning before a photo shoot. Below are a few pictures from that shoot-around of locus photos.



Here (looking NNE) you see the outer face of the southern EBA city wall which, thus far, reveals two distinct building/refurbishing phases. Each 5m-thick stone foundation phase is topped by a mudbrick superstructure, clearly visible on top of the final phase, and toward the bottom of the exposed face of the later phase. Sealing against the outer face is a street surface consisting of an extremely hard-packed matrix of clay, tiny pebbles, and bits of broken pottery. To the left, on that surface, you can see destruction debris, mainly mudbricks from the wall. The surface extends to the right underneath the (MB2 ?) curtain/revetment wall to the extreme right of the photo. The revetment wall may once have stabilized a glacis connected to the MB2 city wall just beyond and above the EBA wall. The upper tall rises to the E.



Here you can see the two phases (so far) of the EBA city wall (view W). Both the earlier and later phases are topped by mudbrick, visible atop the wall in the far balk and just below the stone courses of the later phase in the outer wall face. Plaster still adheres to the stones of the outer wall face in many places. At the far end of the exposed street surface, mudbricks from the collapsed EBA wall are visible. Due to the fact that EB1, EB2, EB3, IB1-2, and MB1 pottery sherds were present on the walking surface and mixed into the thick debris matrix overlying it, this wall and street may still have been in use just prior to the construction of a new wall and associated glacis during the mid-MBA. The MBA builders may have filled in this area which then provided a firm substrate for their glacis which then covered this space. The E balk reveals layers and lenses of fill that seem purposefully placed.



This is the EBA city wall in Trench LA.28 looking E. The wall width (thickness) is just over 5m. It is constructed of mono-sized, one-man, undressed field stones, typical of EBA wall construction. Here you can see the full width, with the inside face to the left and outside face to the right. The sub-balk in the foreground reveals that the stone foundation is constructed consistently from face to face. The visible brown material on top of the foundation is mudbrick. At the far end of this portion of the wall is a tower foundation laid square to the wall faces. It seems to be built over one or two mudbrick courses and not tied to the stone foundation itself. We still have to clarify this. The unorganized stones just to the right of the tower courses have tumbled from the tower, along with a slurry of cobble-sized stones that may have been a surface associated with the tower.



Here you can clearly see the topping mudbrick courses from the earlier phase of the wall. These bricks are extremely hard. After the re-builders had scraped away the looser materials, these few mudbrick courses were evidently considered solid enough to build their new stone foundation phase upon them. Indeed, these bricks are, even now, neither cracked nor crumbling. This wall is traceable, as is the main MBA city wall, around most of the site. Some sections have been bulldozed away for farming. We've still got five weeks of excavation to go, so much more will clarify in this area as we continue. Surely, there will be many surprises!



The meter-stick is sitting on the tower stone courses which are built over the EBA foundation, and actually cut into the mudbrick courses atop the foundation proper (in situ mudbricks are visible in the immediate foreground). The question is: Was this an IBA/MBA rebuild or an original part of the final EBA wall phase? That it seems to float over one or two mudbrick courses (which seal against the EBA foundation) is suggestive that this tower was either an EBA afterthought or an IBA or MB1 addition. I think we'll figure this out in the course of things as the sequencing unravels, and as we perform a full coring of this wall for purposes of phasing. You can see the MBA wall to the left. This wall is 4m thick here, but up to 8m thick in another location about 200m to the west.



Here I am (left) with Gary Byers standing on the tower foundation. The wall extends behind us to the trees in the background. Beyond that you can see banana fields. To the immediate left of our dirt pile (at the right) you can see stones that are a part of the curtain/retaining wall that extends several for several hundred meters parallel to the southern MBA city wall. It may have footed the MBA glacis, which has almost entirely eroded away. Perhaps much of it has been bulldozed away as the site was leveled for farming. However, we now know of several places where it may be preserved substantially, and we also think we know where at least one of the main MBA gate complexes is located in the same area. It's a massive system of walls, towers, and many unidentifiable structures, and will take us many years to excavate.



Here you can see 4+ courses of mudbrick laid over the final stone course of the EBA city wall foundation. In the immediate foreground you can see more of the mudbrick superstructure. The sub-bank was created to reveal how the first mudbrick course sealed against the stone substrate.



The MBA city wall is behind (N of) the EBA wall, and running parallel to it over the 300 or so meters where we can trace them both on the S side of the lower tall. The EBA wall was, then, underneath the MBA glacis, but not underneath the MBA wall. Why the MBA builders didn't build their 4m-thick city wall directly over the 5m-thick EBA city wall is a little mystery that we hope to resolve at some point. Due to the presence of EBA, IBA, and MBA pottery directly on the street surface associated with the two now-exposed EBA wall phases, we surmise that the EBA wall and street were still in use up until the time the MBA wall/glacis/revetment fortification system was built. This idea is reinforced by the presence of ceramics from every phase and sub-phase of the EBA, IBA, and MBA all over the site, and in several excavated Bronze Age contexts on both the lower and upper tells.



This photo was taken standing atop the MBA city wall looking SE (the stones cut off along the bottom edge of the photo belong to the MBA wall). You can clearly see the tower foundation dug into the mudbrick superstructure of the EBA wall final phase. The outer (S) face of the tower foundation does not extend to the outer EBA wall-face, but stops about 60cm short of it. But it is flush with the N EBA wall-face. The character of the tower masonry is fundamentally different from the stone construction of the EBA wall proper. From this angle you can see a section cut through the mudbrick revealing the top of the stone foundation below. At the far end of the trench (intersected by the E balk) is the curtain/revetment wall that we think retained the bottom of the MBA glacis. Thus, you can extrapolate the glacis from there to about the forehead of the photographer standing on the MBA city wall foundation.