

# THE FIFTH SEASON OF EXCAVATIONS AT TALL JĀWĀ (1994) A PRELIMINARY REPORT

by

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## Introduction

The fifth season of excavations at Tall Jāwā, south of 'Ammān, took place from June 4 - July 24, 1994. As in preceding seasons, the excavations were sponsored by Wilfrid Laurier University and funded by a grant from the Social Sciences and Humanities Research Council of Canada.<sup>1</sup> The American Center of Oriental Research in Amman provided housing and invaluable research and logistical support during the season. Additional support and facilities were provided by the British Institute at Amman for Archaeology and History. Forty-one participants from Canada, the United States, Belgium and Jordan served as field and camp staff,<sup>2</sup> along with fifteen Jordanian workers who assisted with the field excavations. Dr Safwan Tell, then Director-General of the Department of Antiquities of Jordan, provided support and encouragement, while Nazmieh Rida Tawfiq<sup>3</sup> served as representative of the Department. As in previous seasons, she greatly facilitated

our operations and made a significant contribution in helping us to achieve our research and excavation goals.

## RESEARCH STRATEGY

Three distinct occupation phases were currently under excavation; the middle Iron Age II in Fields A-B and E, the late Iron Age II in Field C, and the Late Byzantine-Early Islamic period in Field D (Daviau 1994: Fig. 1). The focus of this season's excavation was first, to expose sufficient Iron Age remains to be able to classify, according to type, complete buildings in Fields A, C and E and to determine the characteristics of an Ammonite walled town. The particular strategy employed was to recover and document all artifacts and ceramic vessels from living surfaces in order to undertake a distribution study of finds that would facilitate the functional classification of activity sets within individual rooms, thereby contributing to an

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1. A three-year grant was awarded for the period April 1992-1995 to investigate the Iron Age architectural traditions and town planning at Tall Jāwā. Additional funding was provided by Wilfrid Laurier University and by a generous gift from P. E. Dion.

2. The author was responsible for the overall research design and excavation strategy. In this, she was assisted by field supervisors R. DeFonzo (Field A-B), R. Hutson and S. Klassen (Field E), S. Thompson (Field C), and A. Tempest (Field D). J. R. Battenfield, Director of Survey and Documentation, undertook special projects (Tomb T1 and Drain B24:24). Square supervisors were M. Beckmann, L. Broadhurst, R. Chadwick, L. Cowell, T. Epp, L. Knuttila, L. Manktelow, H. Mansur, M. Semple., S. Thibodeau, and S. Wakefield; D. Elder was square supervisor in training. K. Kane was pottery registrar; D. Beal registered artifacts; L. Cowell was in charge of ceramic technology and S.

Thompson registered samples. P.E. Dion was project epigrapher. K. Gerlach and T. Hellum were responsible for photography. R. Hutson served as administrative assistant and T. Cowell as camp manager.

3. Our deepest appreciation to Nazmieh Rida Tawfiq who generously contributed to the instruction of new team members, shared her expertise at pottery reading, and helped to make available earthmoving equipment to remove soil dumps from previous seasons.

Through the intervention of Dr Safwan Tell, then Director-General of the Department of Antiquities, the site was made safer for excavation with the removal of a mortar shell from Cistern D15:2 by the Jordanian Army Bomb Squad. Special thanks go to the owner of Tall Jāwā, Mr H. Talafiyeh, for his hospitality and support in arranging for local workers.



understanding of how those rooms functioned and, ultimately, how each building functioned as a whole.<sup>4</sup> Secondly, new Squares in Field C-east were opened to investigate a heavily walled structure that dates to the end of Iron Age II and third, excavation in Field D was continued in view of the discovery (in 1993) that Building 600 was a two-storey Islamic house with a mosaic floor in the central court (Daviau 1994: Figs. 14 and 18).

Survey around the tall was limited due to increased construction of new houses. Salvage excavation of a Roman period tomb in Jāwā village was begun this season and will be completed in 1995.<sup>5</sup>

### The Iron Age: Field A-B

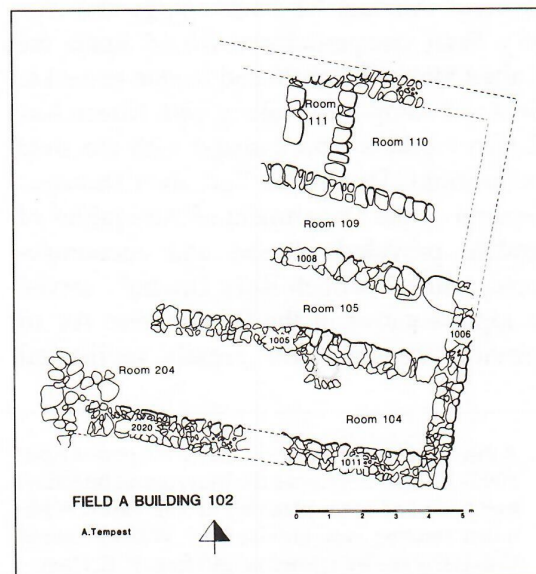
#### Excavation Strategy

The specific excavation strategy for the 1994 season in Fields A-B was to complete excavation of middle Iron Age II structures (Buildings 102<sup>6</sup> and the casemate wall; Daviau 1994: Fig. 2) exposed in previous seasons (1989-1993). Special attention was given to the plan of long-roomed Building 102 in order to determine its function and its association with other structures adjacent to the wall system in this area. Secondly, with the discovery in 1993 of Drain B24:24 at the south-west corner of the site, an attempt will be made to delimit the outlet of the drain through the town wall (Daviau, 1994: Figs. 2, 4) and determine its total length. This may prove unsuccessful due to the construction of a modern path in this area which destroyed much of the outer wall (W2023) and damaged the drainage system. In addition, excavation was planned to determine the or-

igin of the drain within the town and the types of structures located adjacent to it (B34-35). Squares B45, 55, and 65 were opened to establish the connection of this area of the town with the large cooking complex further east in B63 (Daviau 1992: Pl. I.1).

#### Results

Excavation continued in Building 102 with expansion to the north in Squares A5 and B65 (Fig. 1). To date, a series of parallel units (Rooms 104, 204, 105, 109, 110 and 111) have been exposed that ran north-west with a possible doorway in Room 109 on the east. The plan of this building is different from all other Iron Age II buildings uncovered so far at Tall Jāwā. Finds from Building 102 this season were minimal, con-



1. Field A, Building 102. Room 110 with North Wall 1024, South Wall 1022, West Wall 1023. Room 111 with Partition Wall 1025.

4. Nicholas employed a similar strategy in the excavations at Tall e-Malyan in Iran (1980). Good documentation and further analysis of artifact distribution and surface contents enabled Ciolek-Torrello to revise the interpretation of room function at Grasshopper Pueblo in Arizona (1984). In a similar vein, Voight studied the artifact assemblages and waste products at Hajji Firuz Tepe that produced evidence for various behavioral pat-

terns, such as food processing, storage, disposal, secondary deposition and manufacturing (1983: 295-321).

5. Excavation of Tomb T1 was supervised by J.R. Battenfield. The report and final plan of Tomb T1 will appear in a preliminary report of the 1995 season.

6. Building 102 was originally numbered Building 101 (Daviau 1994: 178).



sisting primarily of pithos sherds in Room 111 and a few handmade painted ceramic fragments, possibly from house or shrine models whose complete form remains unknown. These may have been used in association with the ceramic head of a male figure wearing an Osiris crown recovered from Room 105=Room 5 in 1989 (Younker *et al.* 1990: Pl. 10; Daviau and Dion 1994: Figs. 1 and 2).

In Room 110, large slabs of plaster (A5:18) were scattered on a surface (A5:19) and in the debris layer (A5:17) immediately above. All this was sealed underneath collapsed mudbrick (A5:17, 12, 7) which accumulated for a total depth of ca. 0.75 m, evidence of collapse of the superstructure and ceiling above the stone walls of the lower storey. Ash lenses were also present in both the debris layers and on the floor.

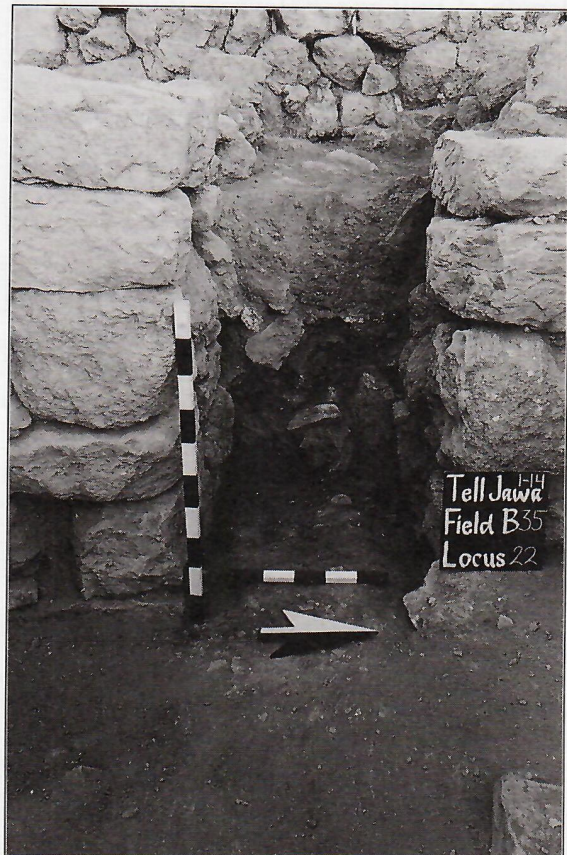
The northernmost wall (W1024) of Building 102, partially exposed north of Room 110, was identified as an outer wall on the basis of its two-row boulder-and-chink construction that is comparable to Wall 1006 on the east. The interior walls (1022, 1023), and Partition Wall 1025 surrounding Room 111, were all one row thick and formed of medium size flat-topped boulders (0.55 x 0.75 m). In Room 109 were several large, elongated boulders fallen from Wall 1008 at intervals suggesting stone piers that supported the ceiling. Further excavation to the west is needed to reveal the full plan of this building.

West of Building 102 in Field B was an open court (211). The soil layers (B55:19, 20, 21) in this court were stained grey (10YR 5/2) and contained 93 broken basalt artifacts along with several chert pecking stones. Sixteen complete artifacts, possibly manufactured from the broken millstones, were also recovered from this work area. Court 211 may also have served as the catchment area for water that flowed out of the town through Drain B24:24.

Further west, excavation continued in Square B35 in order to expose structures lo-

cated inside the south-west corner of the fortification system north of Drain B24:24 (Daviau 1994: Fig. 2). Two rooms were partially exposed in 1995; Room 215-213 was a broad room that ran north-south, parallel to the outer west wall (W2023) and formed a casemate room while Room 212 was a perpendicular room that extended east. Connecting these two rooms was Doorway B (B35:22), located in the middle of north-south Walls 2004 and 2029. The doorway measured ca. 0.75 m wide and was flanked by jambs constructed of smoothly hewn rectangular boulders, dry-laid in regular courses and keyed into their respective boulder-and-chink walls (Fig. 2).

Within both rooms (R212, 215) and the connecting doorway (B) were layers of compacted rockfall probably from the upper courses of the surrounding walls. The stones ranged in size from medium to large cobbles (0.12-0.25 m) and small boulders (0.25-



2. Field B, Doorway B between Rooms 212 and 213.



0.50). Within these loci, there were over 300 sherds, many probably associated with an underlying surface.

### Field E

#### *Excavation Strategy*

In Field E, the goal was to expose additional rooms adjacent to the casemate wall system and determine the plan and integrity of Building 300. After the 1993 season, this complex consisted of two rooms that abutted the casemate wall (R302, R303) with an additional two rooms (R305, R307) that flanked Cistern 13 on the west (Daviau 1994: Fig. 3). In 1994, we opened squares on the east (E74, E75) and west sides (E53) of Cistern E64:13 (Fig. 3). Excavation in E74 was designed to investigate "Room" 309, a corridor that pierced the casemate wall system at the east end of Building 300 and remained unexplained after the 1993 season. Square 75 was opened to determine the full length of Building 300 where it touched the casemate wall system. Balk removal in E54 and E64 was necessary to completely expose Rooms 302 and 303 which contained large assemblages of food preparation equipment recovered in 1993 (Daviau 1994:182, Fig.7).

#### *Results*

Partially exposed in 1993, a beaten earth floor (E54:32) stained with ash indicating cooking activities was shown to extend the full length of Room 303 (3.1 x 4.6 m; Fig. 3). Recovered from the floor in 1994 were sherds of cooking pots, store jars, pithoi, red slipped bowls, jugs and juglets. Domestic artifacts included 3 chert pounders, 1 basalt grinder, sherds of a ceramic footed bowl, and one utilized chert flake. Additional finds include small bowls, a strainer bowl, a red slipped juglet without its rim (not shown), sherds of a white slipped and painted decanter, a red slipped chalice, the upper half of a female figurine (Fig. 4) and a faience bead.

Immediately south was Room 305 (Fig.

3), separated from Room 303 by a wall (3004) formed of medium boulders (0.50 x 0.75 m) and cobblestone units that connected the boulders to one another. The same building techniques were employed in the south wall (3035, 3037) of Room 305 which consisted of three piers, each formed of medium size, rounded boulders stacked in two courses. Doorway G was located in the centre of the wall and led into Room 315. Against the north face of this entrance, was a mudbrick step into Room 305 and an oven (E53:23). This installation consisted of an inverted cooking pot, broken at the point of carination and sealed in place by packed mud and eight small stones, three of which were broken basalt millstones and one was a small quern fragment. Very little ash (E53:24) and few bones were associated with this oven.

Embedded into the floor surface (E54:53) of Room 305 was a limestone boulder mortar (E54:54), 0.55-0.63 m in diameter (Fig. 5). Smashed *in situ* on the mortar were sherds of red slipped bowls, jugs, juglets, ordinary cooking pots and pithoi that were more concentrated along the east side of the room. In the south-west corner behind Mortar 54 were two slabs of a stone bench(?) (E53:26) that measured 0.18 x 0.86 and 0.18 x 0.93 m, respectively. Behind and underneath these dislocated stones were 8 unfired clay loom weights (donut-shaped), one flat perforated stone and 3 basalt grinders (Fig. 5).

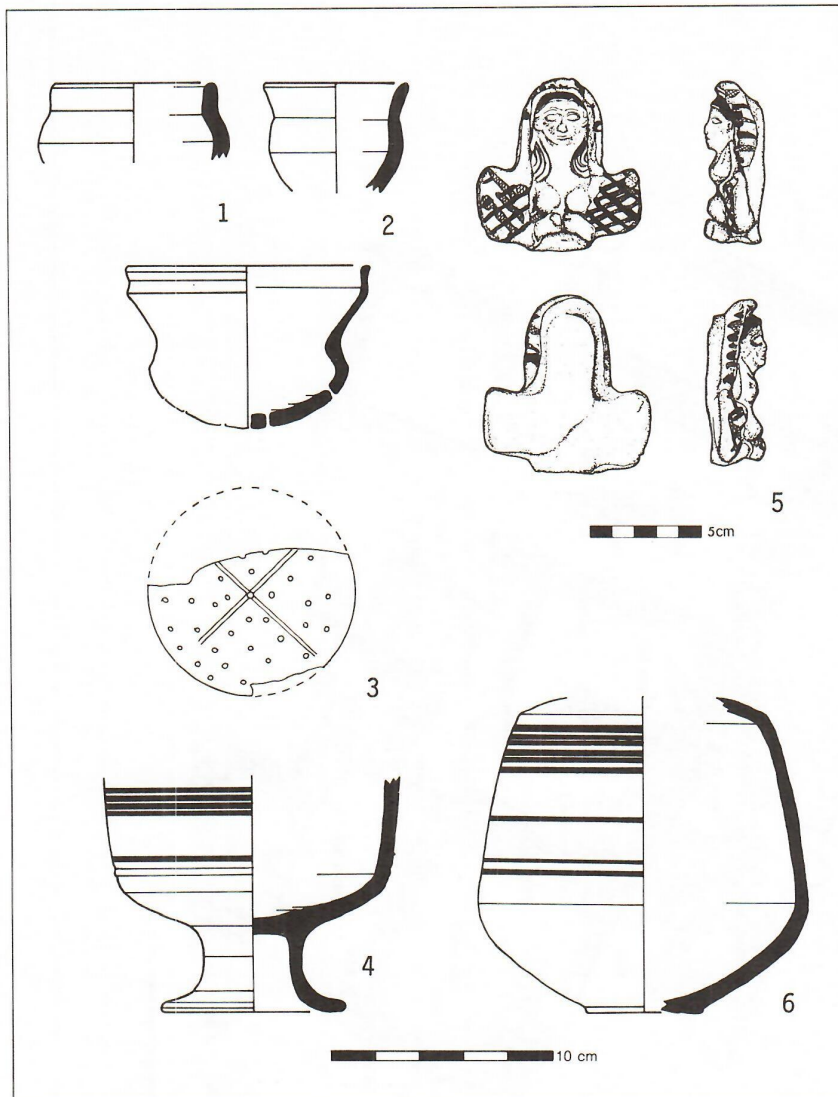
Further south, Room 315 had a cobblestone floor (E53:17) with a small amount of ceramic vessels smashed *in situ* and three objects (2 upper millstones and 1 grinder) in the north-west corner of the room. Debris above the floor consisted of approximately 800 ceramic sherds, 1 polishing stone, 1 grinder, 1 spindle whorl, 5 iron points, 2 upper millstones, 1 small mortar, 1 obsidian point, 1 Canaanian blade, 1 blade, 2 bladelets, 1 scraper and 1 utilized flake. Finds amidst the upper debris layers (E53:6, 4 and





3. Field E, Building 300, middle Iron Age II.





4. Building 300, Room 303 finds; 1. miniature bowl, E54.91.2; 2. miniature bowl, E54.135.9; 3. strainer bowl, E44.70.15; 4. chalice, E54.59.1-4, red slip with black bands; 5. female figurine, TJ 1119, red slip on face, black paint on hair, wings of chair and shawl painted in white, black and red; 6. decanter, E54.104.1, white slip with black and brown bands.



5. Building 300, Room 305. Boulder mortar with stone slabs and unfired clay loom weights.

3) that filled Room 315 included 1 perforated stone/weight, 1 upper loaf-shaped millstone, 2 grinders, 2 pestles, 1 pounder, 1 tripod basalt mortar and 1 iron point. These finds suggest a variety of food preparation activities in Room 315 that were surely related to the oven in Room 305 one step away.

The earliest floor surface (E54-64:41) in Room 302 was uncovered in 1994. Surface 41 consisted of beaten earth that sealed against Bench E54:24, a feature that continued in use with later Floor E54:26=27 (Daviau 1994: 182-183). Cut into the lower floor (E54:41) was a hearth (E54:43) probably used for cooking. The ashes (E54:48),



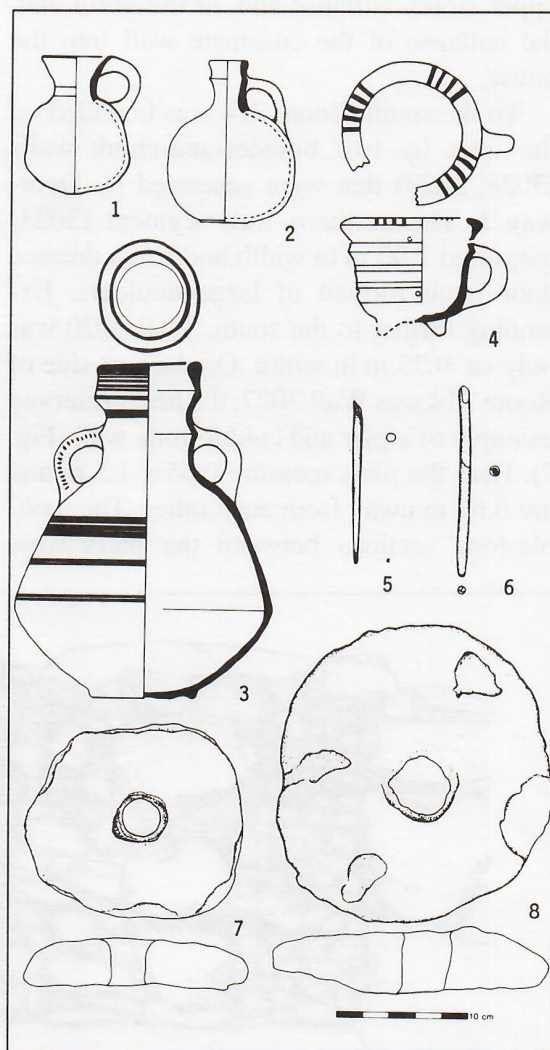
that accumulated on Floor 41 extended south to the lip of Boulder Mortar E54:38, an installation embedded in the floor. A large stone working surface, bedrock (E54:50), was immediately southeast of the mortar. No finds were present on the working surface, but smashed on the earthen floor (E54:41) was an assemblage of cooking pots, pithos sherds and several half-lentoid flasks, one of these flasks was inside Mortar 38.

Superimposed above this floor was Debris Layer E54:37 that also contained smashed pithoi, jars, jugs, bowls and red slipped juglets along with 4 polishing stones, 2 murex shells, 2 sling stones, 8 grinders, 2 chert pounders, 1 bone spatula, 1 basalt pestle, 1 mortar fragment, 1 whetstone, and 1 worked stone. Scattered among the ceramic sherds were 33 iron points, including javelin points and arrowheads, some oxidized to the sherds of a flask suggesting that these weapons had been in storage in a vessel when the room went out of use (Kelm and Mazar 1982:11, Fig. 11). Excavation of these floor levels (E54:41 and E54:26-27) in 1993 and 1994 showed that they were both in use with Bench E54:24 and probably represent a short period of occupation. Secondly, there is no evidence of subsequent occupation in Field E following the final destruction of Building 300.

The eastern wall (W3005) of Room 302 now stands 0.60 m in height and separates it from Room 306 (Fig. 3). In Room 306, several earthen layers contained flat-lying pottery while the earliest floor (E65:29) consisted of beaten earth and small cobbles, at least along its north end. Although Floor 29 was at a slightly higher level than the earliest floor (E54:41) in Room 302, they appear contemporary. Floor E65:29 was also strewn with sherds from pithoi, painted jugs, one with white slip and black painted bands (possibly an import), red slipped juglets, kraters, bowls and fragments of a tripod cup (Fig. 6). Underneath these sherds were two ivory sticks, probably spindles. Other artifacts on

Floor 29 and immediately above it include 1 bone spatula (broken), 3 basalt trays, 3 mortars, 6 iron points, 1 bead, 1 greenstone pendant, 2 door weights, 2 pestles, 1 basalt grinder, 3 shells, 1 upper millstone and 16 perforated sandstone disks whose function is unclear (Fig. 6).

Three rooms (R312, R313, R314) formed the eastern side of Building 300. In Room 313, there were three boulder-and-chink walls (3025, 3026, 3016), along with the



6. Building 300, 306 finds; 1. red slipped juglet, E65.75.1; 2. E65.92.1; 3. amphora, E65.79.18, white slip, ring base, with black and brown bands (Cypriot?); 4. tripod cup, E65.40.1; 5. ivory spindle, TJ 1603; 6. ivory spindle, TJ 1530; 7. perforated sandstone disk, TJ 1535; 8. Perforated sandstone disc, TJ 1540.



casemate wall, that formed the perimeter. One doorway led west into Room 312 that remains unexcavated. Inside Room 313, Floor E75:16, partially exposed in the southwest corner, consisted of a hard-packed plaster surface covered with smashed pithos sherds and an accumulation of ash and soil suggesting the presence of a nearby cooking area. Above the ash (E75:15) was a series of deep soil layers filled with small to medium size boulders that demonstrate significant upper storey collapse and, at the north end, the collapse of the casemate wall into the house.

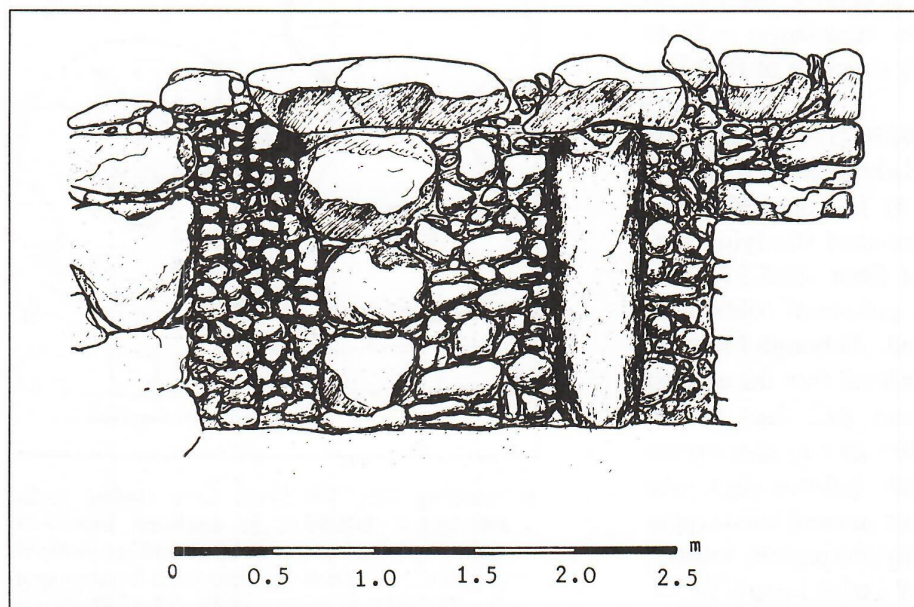
To the south, Room 314 was bounded on the west by two boulder-and-chink walls (3028, 3029) that were separated by Doorway J. The northern wall segment (3028) measured 1.00 m in width and had a dressed door jamb formed of large boulders. Extending further to the south, Wall 3020 was only ca. 0.75 m in width. On the east side of Room 314 was Wall 3027, the best preserved example of a pier and cobblestone wall (Fig. 7). Here the piers measure 0.65 x 1.5 m and are 0.67 m away from each other. The cobblestone sections between the piers were

formed of small and medium cobbles while the top course was formed of very large rectangular boulders, one measuring 1.25 x 0.75 m. The end of this wall was dressed, similar to the frame of a doorway.

By contrast, the south Wall (3036) was probably robbed out<sup>7</sup> since it now stands 0.80 m lower than the top of Wall 3027. Inside the room (314) was a thick layer (0.67 m; E74:7) of hard-packed dark red clay with plaster inclusions sealed by large lumps of white plaster. The function and purpose of this soil layer is unclear at this stage of excavation. Although finds from Room 314 were few as the floor level was reached only during the final week, there were human bones *in situ* on the floor (E74:24) immediately above bedrock. In west Doorway J (E74:25) was a pillar-style female figurine, broken at the shoulders. During the 1994 season, the association of Rooms 314 and 313 with Corridor 309 was not clarified and further excavation is planned for 1995.

#### The Late Iron Age: Field C

In Field C, where late Iron II occupation was first uncovered in 1991, the primary task



7. Field E, Building 300, Wall 3027 with stacked boulders and limestone pillar with cobblestone connecting units.

7. V. Fritz first suggested that the wall had been robbed out (July 1994).



was to expose the northern part of a large structure (Building 800 in C-west) that had produced evidence for domestic activity (Daviau 1994: 185, Fig. 11). In the eastern part of Field C, exploration continued for the city gate since this appears to be the only area along the length of the casemate wall system where a gate structure is possible.

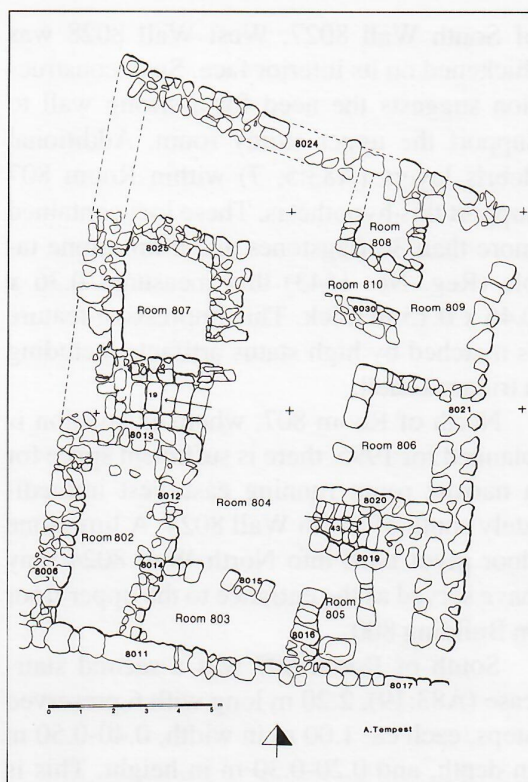
#### *Excavation Strategy for C-West*

The goal for the 1994 season in Field C-west was to expose the northern limits of Building 800 (Squares A83-84 and A93-94), currently located beneath a modern property wall (A83:1=93:4). Because of the irregularities in the grid system, Squares A93-94 each measure 6 m north-south and 7.1 east-west.

#### *Results*

Building 800 (Fig. 8) extended north for a maximum length of 18.00 m and included at least 8 and possibly as many as 11 rooms on the ground floor. The outer walls were identified this season on the north (W8024) and west (W8028). Wall 8024 ran north-west for a total length of 14.0 m, forming a slightly trapezoidal building. The wall itself was built of medium to large boulders and measured 1.90 m in thickness at its eastern end and 1.45 m thick where it entered Square A84. Due to time constraints, only the uppermost courses were exposed this season.

Excavation began along the west side of the building in Room 807 that measured 2.70 x 3.10 m. Within Room 807 was a beaten earth Floor (A83:16) covered with smashed vessels including cooking pots, red slipped wares, black burnished bowls, pithoi, juglets and lamps. Artifacts consisted of 1 basalt ball, a grinder, 2 upper millstones, an oversized hand grinder, lower millstone, pecking stone, and a bone peg/stopper. Nine donut-shaped, unfired clay loom weights, comparable to those found in Room 802 (Daviau 1994: 185), were also included in the artifact assemblage suggesting extensive textile pro-



8. Field C-west, Building 800, Stairway 19 (west side) and Stairway 43 (east side), late Iron II.

duction. One unique object whose precise function is unclear was a red slipped and painted (black and white) saucer-shaped stopper(?) (TJ 1589).

A thick layer of soil and collapsed boulders (A83:15?), probably from the Surrounding walls, covered the surface (A83:16) and formed a debris layer under Plaster surface A83:10. The debris, ca. 0.15-0.25 m thick, may itself have been a collapsed floor since above Plaster Surface A83:10 were more than 200 ceramic sherds, a grinder, a ceramic spout, an unfired clay loom weight, and a basalt upper millstone.

Room 807 was bounded by three dry-laid, boulder-and-chink walls. A single doorway (A83:20) located in the southeastern corner of the room opened into Central Hall 804. The west wall (8028) was built of two to three rows of small, medium and large boulders in boulder-and-chink construction and measured 1.4 m thick. Beginning 2.5 m north



of South Wall 8027, West Wall 8028 was thickened on its interior face. Such construction suggests the need for a strong wall to support the upper storey room. Additional debris layers (A83:5, 7) within Room 807 support this hypothesis. These loci contained more than 36 flagstones and a limestone table (Reg. No. 1543) that measured 0.36 x 0.46 x 0.15 m thick. This impressive feature is matched by high status artifacts including a tridacna shell.

North of Room 807, where excavation is planned for 1995, there is sufficient space for a narrow room running east-west immediately south of North Wall 8024. A limestone door pivot built into North Wall 8024 may have served as the entrance to the upper floor in Building 800.

South of Room 807 was a second staircase (A83:19), 2.20 m long with 6 preserved steps, each ca. 1.00 m in width, 0.40-0.50 m in depth, and 0.20-0.30 m in height. This is comparable to Staircase C27:43 recovered on the east side of Room 804 where the steps were also 1.00 m in width. By contrast, Staircase A83:19 did not have free standing support walls but was built between the south wall (8027) of Room 807 and the north wall (8013) of Room 802.

Room 804, originally thought to be the central room of a four-room style Building 800,<sup>8</sup> now appears to have been located in the centre of seven surrounding rooms. Two superimposed floors (C27:55, 56), covered by Soil Layer C27:48 that had remained in place (in its lowest levels) following the 1993 season, were excavated by using a 1 m<sup>2</sup> grid to recover evidence for room function and use.<sup>9</sup> Ceramic evidence from Floor 55

was predominantly Iron Age II, although one diagnostic could be dated to Iron I. A basalt sphere, the size of a large bead and a stone seal were the only two artifacts recovered in the area exposed this season. The seal was incised with the image of a horse, a cross mark and three drilled circles.

At a depth of ca. 0.15 m below Floor 55 was an earlier floor surface (C27:56). Excavated only in grid locations 1-2 and 37-38, Floor 56 yielded Iron Age II pottery. Evidence from Room 804 suggests that it was central to the traffic patterns in Building 800 in contrast to Rooms 802 and 807 along the back of the house where a large number of store jars, bowls, lamps and cooking pots were evidence of intensive domestic activities and storage.<sup>10</sup>

North of Stairway C27:43 were two additional rooms (806 and 809) along the east side of Building 800. The wall (A93:2) that divided these rooms from one another was formed of one row of small boulders in boulder-and-chink construction and was preserved 8 courses high (1.93 m). Built up against the north face of Wall 8023 inside Room 809 was Oven A93:27. This feature was constructed of 2 flagstones set on edge, one on the east and one on the north, along with one upper millstone and a grinder that formed its perimeter. The bottom of the oven was a white plaster surface (A93:45) whose association with contemporary floor levels is unknown due to the limits of excavation. Inside the oven, the lowest soil layer (A93:44) was hard packed moist reddish soil that contained lithics and bone fragments along with red slipped pottery sherds. This lowest layer may actually be debris above an earlier floor

8. This initial judgment was based on parallels with other Iron Age pillared houses that contained four or more rooms, such as those at Tall al-Far'ah (N), especially House 327 (Chambon 1984, Pl.21) However, by contrast, House 327 has only one storey.

9. The 1 m<sup>2</sup> grid was located in the north central sector of C27. All soil from each individual square was passed through a fine gauge sift. Due to the

instability of the pillars in Wall 8015, a balk consisting of Rockfall Layer C27:39 was left in place along their north side to protect workers from possible collapse.

10. Excavation in 1995 showed clearly that Surfaces C27:55 and 56 were in fact layers of ceiling and upper storey floor that had collapsed into Room 804.



but only future excavation can verify this sequence. Ash (A93:43) accumulated above Soil Layer 44 and was 0.08 m deep. No bio-data was recovered from flotation of this ash. The uppermost layer (A93:28) was a hard-packed moist soil layer with inclusions of nari. The western limit of the oven remains unexcavated although it currently measures 1.50 m east-west. Its width, north-south, is 0.49 m and the total depth was 0.51 m. Associated finds include the base of a cooking pot and one pestle.

The amount of high status ceramic wares (16% in 1993)<sup>11</sup> and specialty items present in Building 800, its large size and location near the gate suggest that this house was the residence of a person of great status, possibly a governor. The seal (R804) and ostrakon (R802) support this suggestion although more examples of both items should be present if this was indeed a governor's residence.

#### *Excavation Strategy in Field C-East*

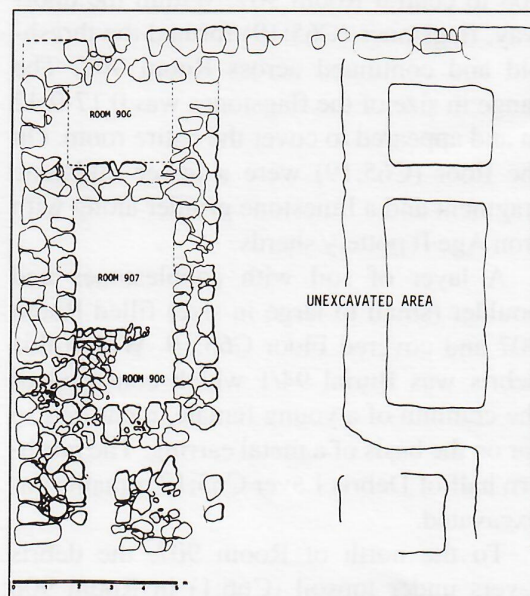
Three features visible above ground in Squares C61-65 pointed to Field C-east as the only possible location for the main gate of the Iron Age town. These features consisted of 1) a flanking wall and buttress (9007, 9008) that ran 15 m east-west on the slope of the terrace in Field C, 2) a north-south wall (9010) that ran uphill from Wall 9007 and appeared to be in line with the easternmost wall (9021) of a heavily built structure (Building 910) and 3) West Wall 9019 of the same structure (Daviau 1994: Fig.5). Plans for the 1994 season included expansion of C-east to the north (C65-66) to expose and identify Building 910.

#### *Results*

The west half of a probable gate structure was first identified by the delineation of

Wall 9019 and its extension to the north in Square C66 (Fig. 9). This wall bonded with Wall 9025 (C66:6) that ran east-west and formed the northern limit of the gate. Perpendicular to Wall 9025 was the east wall (9039+9021)<sup>12</sup> that ran south to bond with Wall 9018 and formed a unit that measured 6.10 x 12.80 m. Within Building 910 was one cross wall (9022) that divided the interior space into two unequal parts, Room 906 in the north and Rooms 907-908 in the south. Room 907 was subdivided by a partition wall (9023) that served as the north wall of Room 908.

The outer walls (9018, 9019, 9025, 9039+9021) of these rooms were constructed of medium to very large boulders which were of limestone (75%) and chert (25%) in a boulder-and-chink style. East Wall 9039+9021 ran along the west side of the central road and measured only 1.30 m. The widest wall (9019) was on the outer, west



9. Field C-east, Building 910, possible chambered gate building, late Iron II.

11. This data is based on a study entitled "Intrasite Distribution of Red Slipped and Black Burnished Wares at Tell Jawa, Jordan." This paper was presented at the Annual Meeting of the American Schools of Oriental Research, Nov.

21, 1993, in Washington, D.C.  
12. Doorway F, identified in 1995, divided the east wall into two units, Wall 9039 north of Doorway F and Wall 9021 to the south.



side and measured 1.75 m while North Wall 9025 was 1.60 m thick. The southern wall (9018) was also 1.30 m but it was protected by a tower (9020) that abutted it on the south.

The cross wall (9022) between Rooms 906 and 907 was built of medium to large boulders and was two rows thick (1.00-1.10 m). Partition Wall 9023 separating Rooms 907 and 908 was built of small (0.25-0.50 m) limestone and chert boulders with one medium boulder that may have formed the door jamb.

Southern Room 908 measured 2.10 x 2.95 m and was paved with flagstones (C65:21) in its western half and with beaten earth (C65:15) in the east. Immediately above the beaten earth surface were 3 rectangular, unfired clay loom weights, a basalt millstone fragment, a perforated triangular stone, scattered red slipped pottery sherds, bits of charcoal and plaster fragments (C65:14).

A doorway (C65:26) connected Room 908 to central Room 907. Within the doorway, flagstones (C65:19) formed the threshold and continued across Room 907. The range in size of the flagstones was 0.17-0.42 m and appeared to cover the entire room. On the floor (C65:19) were a lower millstone fragment and a limestone grinder along with Iron Age II pottery sherds.

A layer of soil with cobblestones and boulder (small to large in size) filled Room 907 and covered Floor C65:19. Within this debris was Burial 94/1 which consisted of the cranium of a young female, identified so far on the basis of a metal earring. The northern half of Debris Layer C65:17 remains unexcavated.

To the north of Room 907, the debris layers under topsoil (C66:1) in Room 906 were cleaned but remain unexcavated although it is clear that Wall 9022 formed the

southern limits of a discrete room that measured 2.50 x 3.15 m. Further excavation is planned for next season to expose Room 906.

Only the north wall (9024) of the eastern half of the gate complex is visible but has not yet been excavated. The remainder of the eastern half of the complex appears to be buried under a modern property wall adjacent to a modern cemetery.

A road through the gate, also visible at ground level, measures 4.10 m in width.<sup>13</sup> At the southern end of the roadway there was a small area of cobblestones (C63:22) that formed a pavement. The cobbles were embedded in a hard packed surface and appeared to seal against the northern edge of Wall 9010. The same hard packed surface ran east (as C73:8) and was exposed only in a limited area in the south balk. Additional excavation is needed to reveal the complete length of the roadway associated with the gate and the association of the outer wall (9000) with the gate itself.

### The Umayyad Period: Field D—Building 600

#### *Excavation Strategy*

Excavation continued in Building 600 (Field D) that appears to date, in its final period of use, to the Late Byzantine-Early Islamic period. First opened in 1991, this building was a two-storey structure that contained a central arched room or atrium (607) surrounded by rooms on three sides (Daviau 1994: 188; Fig. 14). Two major tasks for the 1994 season consisted of the completion of excavation in Central Room 607 (Daviau 1994: 188; Fig. 18) and in northeastern Room 606, along with the excavation of additional rooms on the west (608, 609).

In 1994, the strategy was to reopen

13. The width of the roadway at Gezer was also 4.10 m while at Hazor and Megiddo it was 4.20-4.25 m. The current projected width of the gate at Tall Jāwā is 15-16 m, close in width to the Gezer gate

(17.00 m), whereas Megiddo was 17.50 m and Hazor measured 18.20 m (Herzog 1992:268, Table 2).

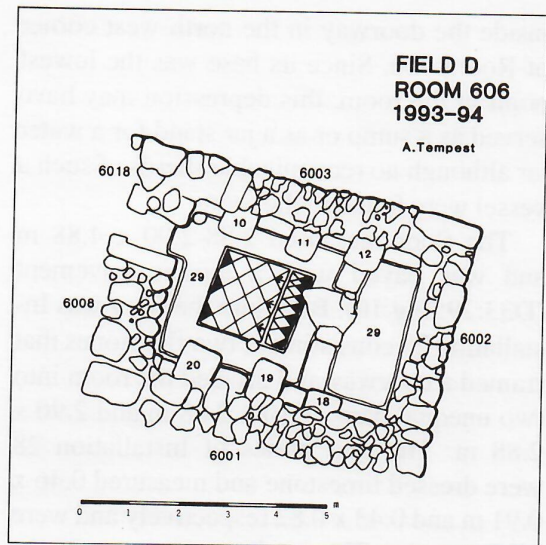


Square D33 in the north-east to ascertain the relationship of Room 606 to Central Room 607 and compare the floor level(s) in Room 606 to those in Room 605 to the south. Because Room 606 was located in two excavation squares (D32-33), a balk was left in place, recorded and finally removed in order to expose the entire room.

Limited excavation continued in Squares D22-23 to document the architectural phasing of the building, especially in Central Room 607. Hypotheses to be tested are 1) the Umayyad period occupants remodelled an earlier Byzantine period building; 2) Building 600 was remodelled after the earthquake of AD 747; and 3) there was a post-Umayyad occupation of this building.

#### *Results in Room 606*

Excavation resumed in Room 606 where collapsed walls stones, arch springers and hundreds of tesserae had been recovered in 1992. In the collapse (D33:7), there were 14 architectural pieces, the majority of which were voussoirs. The room itself (Fig. 10) measured 3.3 x 4.7 m and was spanned by three transverse arches (numbered west to east, D33:10=20, D33:11=19, D33:12=18) that measured ca. 0.68-70 m in width and currently stand ca. 1.66 m in height. The arches were formed of dry-laid rectangular stones, ca. 0.32 x 0.35 x 0.74 m in size. Tooling marks are clearly visible on all arch stones as well as on other architectural elements. Between the feet of the arches (10, 11, 12) against north Wall 6003 was a series of rectangular stones (D33:32:1, 2, 3, 4) of very hard limestone, all ca. 0.44-0.50 x 0.70 x 0.21-0.32 m in height, that formed low benches/shelves. Because the border of the mosaic pavement ran along the base of the shelves, it is clear that it was laid subsequent to their installation and possibly of the arches themselves which were not footed on floor level but at the height of the shelves.



10. Field D, Building 600, Room 606.

The arches did not spring from the walls; instead they were constructed in front of the walls with fill consisting of soil, cobbles and small boulders behind the springers.<sup>14</sup>

The southern spans of the arches were also built in front of the wall (6001), but were footed on a layer of fill (D33:27) that appeared to continue up the wall between the arches to give them support. White unpainted Plaster (D33:31) sealed the lowest part of the fill immediately above Floor D33:29 to a preserved height of .18 m and a length of 1.47 m. A concentration of painted plaster (D33:24 at 923.76 masl), located 0.12 m below the bottom course of Arch 18, was incised with graffiti that damaged the paint. At the same level, three lamps were found (923.78, 923.77, 923.85 masl) located on soil layer D33:25=26, immediately above the floor. By contrast with Arch 18, there was no evidence of plaster, painted or unpainted, on Arches 19 and 20.

Entry into Room 606 was through Doorway D23:20 located in the north-east corner of Room 607. Two steps led up to Room 606 which had its floor 0.32-0.50 m above that of Room 607. There was a small hemispherical depression in the mosaic floor immediately

14. All arches were preserved four to five courses in height and remained standing 1.43-1.66 m in height.



inside the doorway in the north-west corner of Room 606. Since its base was the lowest point in the room, this depression may have served as a sump or as a jar stand for a water jar although no recognizable sherds of such a vessel were found in the room.

The floor measured 2.88-2.90 x 4.88 m and was paved with a mosaic pavement (D33:29; Fig.10). Built into the floor was Installation 28 consisting of two flat stones that framed a doorway and divided the room into two unequal parts, 1.10 x 2.88 m and 2.90 x 2.88 m. The two stones of Installation 28 were dressed limestone and measured 0.46 x 0.91 m and 0.43 x 0.82 respectively and were 1.15 m apart. The smaller, eastern unit was paved with a plain mosaic. In the larger, western unit of Room 606, the mosaic pavement contained a decorated carpet design that consisted of a white/pale yellow background with a square outlined in red tesserae that was itself divided into two unequal parts. In the main part of the room, there was a design of diamonds formed of blue-black tesserae that ended in three yellow-orange triangles on the west. On the eastern end of this large square were three red arrows pointing west toward the doorway. The smaller rectangular sector consisted on one row of six and one-half diamonds and was bordered on the east by six upright triangles and one right angle triangle.

Decoration of Room 606, apart from the plaster in front of Arch 18, consisted of wall plaster painted red-orange, brown, red and black on a white background. The greatest concentration of plaster was along the east wall (W6002). Chunks of plaster and mortar were also frequent in the layers of collapse that filled Room 606. The mortar appears to be a mixture of charcoal ashes and lime mor-

tar.<sup>15</sup> The most common element of decoration was mosaic tesserae. More than 10,000 have been recovered in debris layers filling Room 606 along with tesserae still embedded in fragments of mortar. Only an analysis of the relative sizes of these tesserae will be able to confirm whether there was mosaic wall or ceiling decoration in this room or a fine, floor mosaic on an upper storey.

Finds on Floor 29 were few and consisted of tesserae and ceramic sherds, some burnt (D33:27C,D33:27F—the eastern end of Room 606), possibly from the burning oil of the lamp found on the floor. Finds within the overlying layers of soil and collapsed voussoirs were consistently a mixture of Iron Age II pottery, Byzantine style vessel fragments and Umayyad-Abbasid sherds. Several lamp fragments with the grape vine motif (TJ Type 2.11-2.19)<sup>16</sup> and glass sherds were scattered throughout the debris layers that filled the room. One intact lamp (TJ Type 1.4) and several fragments of roof tile had fallen deep within the debris layers in front of central Arch 19. In these same loci (D33:13, 16, 17), Iron Age II sherds were much fewer in number than in overlying loci and Umayyad sherds were dominant. Upper level disturbance throughout building 600 is evidence of modern disturbance.

#### *Interpretation of the Phasing*

Room 606 with its arches and its mosaic floor seems to have been built in one construction phase. The precise function of Room 606 during this phase is not certain. The small number of finds on Floor 29 does not allow for an accurate identification of room use although their paucity is suggestive. So too is the fact that we could not recover the inner row of East Wall 6002

15. Analysis is planned for the winter of 1994 by L. Pavlish and R. Hancock at the University of Toronto.

16. A typology of ceramic lamps from Building 600 was prepared by M. Beckmann and presented in a joint paper with the author, entitled "Umayyad Painted Pottery and Abbasid Period Lamps: A

Chronological Dilemma," at a conference sponsored by the British Institute at Amman for Archaeology and History and Institut Français d'archéologie du Proche-Orient à Damas. The Colloquium, "Byzantine and early Islamic Ceramics in Syria-Jordan IVth-VIIIth Centuries," was held in Amman, Dec. 3-5, 1994.



(=D33:5) which may have been removed down to the level where two flat stones protruded from the wall, 1.25 m above the level of Floor 29. On Floor 29, Soil layers (D33:24-26) accumulated and served as the surface on which three channel-nozzle lamps and sections of painted plaster (D33:24) fell along with collapsed voussoirs when Building 600 was severely damaged. This surface may indicate a first stage of collapse that was followed by a more complete collapse that filled the room with architectural elements and made reuse impossible.

*Excavation Strategy: West Side*

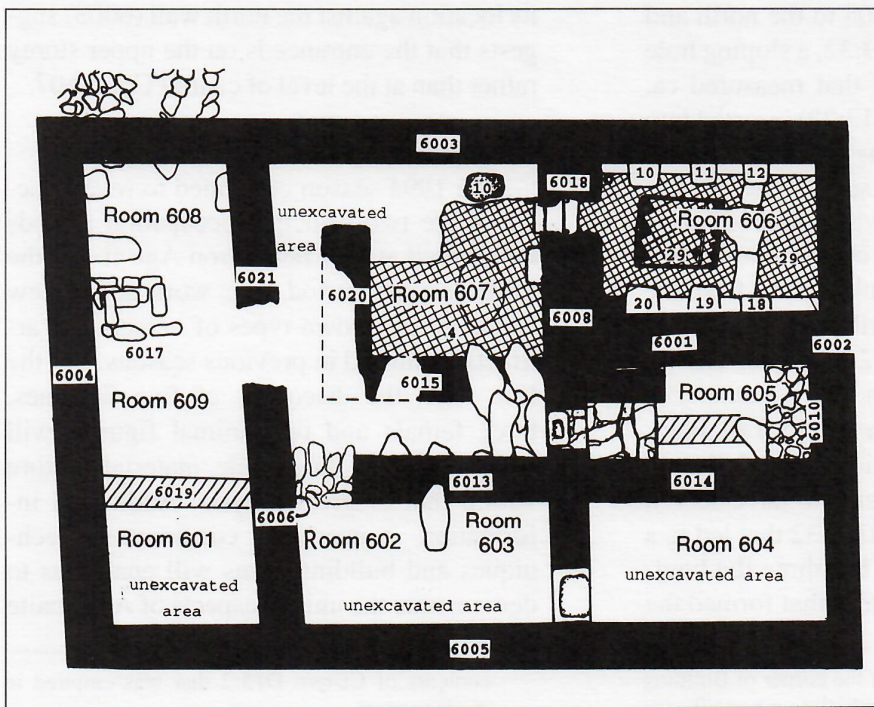
Along the west side of Building 600, excavation began north of Room 601, first exposed in 1991 (Fig. 11). The goal for the 1994 season was to expose two additional rooms (608, 609) on the upper storey, determine their association with Room 601 and lower Court 607, and clarify the function of the wall (D13:19=6006) that appears to run along the east side of Rooms 608 and 609, parallel to the western outer wall (W6004).

Evidence from these rooms may help to determine the exact number of storeys in the original construction phase of Building 600. This is especially true on the west where the state of preservation was expected to be better than on the east due to the deposition history of the site.

On the north-west in Square D14, excavation was undertaken to clarify the outer wall of Building 600 and attempt to locate an entrance into the building proper and a stairway from the upper floor to central Room 607 on the lower level. The height of Iron Age remains around Building 600 has led us to suspect that the entrance was on an upper floor rather than at ground level (Petherbridge 1984: 197, 202).

*Results*

Renewed excavation of Room 601 (Daviau 1992: Fig. 7) yielded a section of flagstone flooring (D2:18) located in the north-west corner between a stone pier and North Wall W6016 (Fig. 11, above W6019). Large portions of at least four different vessels in-



11. Field D, Building 600, upper storey Rooms 601-605, 608, 609, and lower storey Rooms 606 and 607, Umayyad.



cluding a casserole and lid, painted Umayyad vessels and glass sherds were located in the debris immediately above the floor. Embedded between two flagstones and spread over their edges was an accumulation of bitumen, ca. 0.15-0.20 m in size. Its surface was rippled in numerous folds suggesting a time when it was in a semi-liquid state. The precise use of this product and of a lump of sulphur recovered in 1991 from Room 603 (D22:4) remains unclear.

Wall 6016, preserved 1.25 m in height and 0.75-0.85 m in width, formed the south wall of Room 609. This wall was constructed of medium to large size boulders (0.25-0.75 m) of which 30% were chert and the remainder were limestone in boulder-and-chink style. The collapse of Wall 6016 at its eastern end makes it impossible to reconstruct the full plan of Room 609 on the upper storey although it is clear that the room extended north to Wall 6017 and measured ca. 2.00 m x 3.80 m.

Wall 6017 was also formed of limestone and chert boulders, some in the range of very large boulders (>1.00 m). This wall formed the south side of Room 608 to the north and contained Installation D13:32, a sloping hole (40°) through Wall 6017 that measured ca. 0.30 m in length. A jar (D13:22) inserted into the hole (D13:32) from the north fed into Installation D13:13 on the south. The jar was of light red brittle-ware with a smooth outer surface in contrast to the closest known formal parallel which is a vaulting tube from the baths at Pella that has a ribbed exterior surface (McNicoll *et al.* 1992:Pl. 98:5). The jar measures 0.29 m in length with a diameter of ca. 0.20 m. The function of the Tall Jāwā vessel in its current position is not fully understood although it appears to have served as a liner for Installation D13:32 that led to a possible sump (D13:13). The three flat boulders in a semicircular pattern that formed the

capstones of Sump(?) 13, bonded with Walls 6004 and 6017 showing that these features were all in use during the same occupation phase. Due to the limits of excavation, the purpose of this installation is unclear.

Above and beside these features was a series of rockfall layers that filled Room 609 and Room 608. These loci contained architectural fragments, wall stones and soil. Further support for the view that there was serious disturbance in Building 600 comes from the presence of mendable Iron Age II pottery on the surface of Soil Layer D13:6 below 0.30 m of collapsed wall stones with dressed edges. This material could have been introduced in antiquity, during an Umayyad/Abbasid period rebuild or in modern times when the nearby cistern (D15:2)<sup>17</sup> and Court 607 were explored and partially emptied.

At this stage in the excavations, no main entrance into Building 600 has been identified although a stone platform (D14:7) against the north-west corner may mark the entry. Only one course of stone is currently preserved and excavation has not yet progressed below this pavement. Nevertheless, its location against the north wall (6003) suggests that the entrance is on the upper storey rather than at the level of central Court 607.

### Conclusions

The 1994 season continued to reveal facets of the two principal occupation periods recognized at Tall Jāwā, Iron Age II and the Early Islamic period. Our work added new forms to the known types of vessels and artifacts identified in previous seasons. For the Iron Age, the discovery of five figurines, three female and two animal figures, will help to situate Ammonite material culture within that of greater Syria. Additional information concerning construction techniques and building plans will enable us to demonstrate the unique aspects of Ammonite

17. Immediately north-west of the corner of Building 600 was a pile of debris which is reportedly the

contents of Cistern D15:2 that was emptied in modern times.



architecture. The recovery of an area of ground stone tool manufacture has increased our knowledge concerning an important industry that was intimately connected with food processing in antiquity.

Additional examples of Islamic period lamps with inscriptions may contribute to a better understanding of the chronology of settlement at Tall Jāwā during the Umayyad and Early Abassid period. Because the lamps and, especially, the painted pottery from Tall

Jāwā have their greatest affinities with wares from 'Ammān, Umm al-Walīd and Umm ar-Raṣāṣ,<sup>18</sup> our corpus may help to define regional trade and economic patterns on the central Jordanian plateau.

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18. See n.15 above. The paper by Beckmann and Daviau is currently in press in the proceedings vol-

ume of the colloquium.



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