

# PRELIMINARY REPORT OF THE 1990 EXCAVATION AT TELL NIMRIN

by  
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## Project Background and Objectives

The second field season of the Tell Nimrin excavation in Shunah South, Jordan, extended from May 15 to June 28, 1990. At the beginning of the season, Dr. Khair N. Yassine of the University of Jordan joined Drs. James W. Flanagan of Case Western Reserve University and David W. McCreery of Willamette University as co-director. His participation enabled the project to achieve one of its primary goals: the full cooperation of Dr. Yassine and the University of Jordan, as well as the addition of ten student staff members from the University, made the project a fully collaborative Jordanian-American effort at every level.

In addition to the ten University of Jordan students, the staff comprised 19 other faculty and students representing Case Western Reserve University, Willamette University, Catholic University, LeMoyne College, Canisius College, University of Montana, Kansas State University, College of Wooster, Columbia Theological Seminary, and the Milwaukee Public Museum. Funding was provided by the participants' home institutions and by the H.M. O'Neill Charitable Trust (Cleveland), the S.H. and Helen Scheuer Family Foundation (New York), the Catholic Biblical Association (Washington), the Atkinson Foundation (Willamette), and the Kyle-Kelso Foundation (Pittsburgh).

The 1990 excavation concluded Phase I of the project. All primary objectives for the phase were achieved:

1. determining the full occupational sequence of the site;
2. gathering data for reconstructing the environmental setting and economic subsistence base for the site throughout its occupational history;
3. assessing the tell's potential for future investigation and conservation;

4. launching a Jordanian-American collaborative project

## Recording System

The polar-point grid and corresponding recording system employed at Tell Nimrin are designed to facilitate computer-assisted analysis of data. Each five meter square is identified by the single point closest to the central reference point 00/00 located on top of the tell. However, the system established during the 1989 season was modified slightly in 1990. Upon the advice of the project's professional surveyor, the sequence in which the X and Y axes were cited in 1989 was reversed. The change was accomplished easily in the software and data files, but readers who compare this report with that of 1989 are advised to note the difference and adjust accordingly.

In this system N40/W20, for example, identifies the five meter square whose SE corner lies 40m north and 20m west of 00/00. The locations of loci and objects within squares are pinpointed by their X (N/S), Y (E/W), and Z (vertical) coordinates. Hence, an object at N42/W23/Z-2 is located within the excavation square N40/W20, 42 meters north, 23 meters west, and (because the site is below sea level) 2 meters below the 00/00 reference point. Because every point is unique within the system, computers can maintain three dimensional provenance records of all loci and finds. Similarly, artifacts and stratigraphy can be correlated quickly.

Computerizing the excavation records introduces consistency into the recording system, minimizes subjectivity in collecting data, and facilitates post-season data configuration and analysis. It also facilitates the exchange of information among core staff and expedites publishing.

## First Season of Phase I

In 1989, four five-meter squares were

opened for excavation. In order to determine the depths and dates of the stratified material preserved at Tell Nimrin, the squares were strategically placed at three different levels. Three (N50/W00, N45/W20 and N45/W25) were located along the road cut on the northern edge of the site and one (N25/W20) on the summit of the tell.

Excavation of these limited areas indicated that the site comprises approximately twelve meters of stratified material and that modern disturbance has removed virtually all post-Roman occupational strata from the top of the mound. Although the Islamic strata have been bulldozed from the top of the tell in recent years, the surface survey conducted at the beginning of the 1989 season confirmed the findings of earlier investigators who noted that Tell Nimrin was occupied throughout the Islamic periods (Glueck 1943: 11; Ibrahim *et al.* 1988: 192). Based on examination of the face of the road cut, the mound's surface, and 1978 aerial photographs, the directors hypothesized that the Byzantine and Islamic periods settlements expanded to the west. It is there where *in situ* strata from Byzantine through late Islamic periods might be found.

The surface survey and the initial excavation in 1989 confirmed a tentative occupational sequence for the site. The earliest settlement represented in the lowest layers of the mound dates to the EB IV through MB II periods (ca. 2000-1500 B.C.). Following a five hundred year occupational gap (ca. 1500-1000 B.C.), the site was resettled and has been continually occupied up to the present day. The MB and Iron II periods appear to be especially well represented at the site. *In situ* Iron II strata were encountered in N25/W20 between the elevations of 189m and 190m below sea level (hereafter BSL), and *in situ* MB strata were documented in N50/W00 and N45/W20 between the elevations of 195.30m and 198.80m BSL. Thus, it was demonstrated that in the northern sector of the site, at least one meter of Iron II and three and one half meters of MB strata are preserved.

There is little evidence of Ottoman occupation on the tell proper although the village of South Shunah was inhabited during the Ottoman Period. Ottoman material has been found in the fields surrounding the site,

and Nelson Glueck noted the presence of an Ottoman period cemetery on top of the tell. No trace of the cemetery is evident today.

Among the questions left unanswered at the conclusion of the 1989 season were the nature and date of the strata at elevations between 190.00m and 195.30m BSL in the northern sector of the site. Examination of these elevations during the 1990 season was essential for determining the full extent of the Iron II and MB strata and checking for evidence of LB and Iron I occupation.

## PRELIMINARY RESULTS OF THE 1990 SEASON

### Road Cut and Site Summit

A major objective of the 1990 project was to connect the squares on the summit of the tell to those excavated along the road cut in 1989 by linking N25/W20 to N45/W20. This was done by opening three new squares (N30/W20, N35/W20, and N40/W20). The intention was to create a 25 meter section extending from the northern edge of the tell to the interior of the site (Fig.1). This E/W section is expected eventually to reveal the entire occupational sequence from the bottom of the road cut to the summit of the tell. Because of its location and elevation, N40/W20 was deemed especially important for exploring the layers lying between 190m and 195m BSL, the elevations that were not reached in 1989.

In 1990, four distinct occupational phases were identified in N40/W20. Until more C-14 dates are available, the following chronological sequence that is based primarily on pottery field readings and initial stratigraphic analysis must be considered preliminary and subject to revision.

The earliest phase of occupation encountered in N40/W20 at an elevation of 193.00 m BSL was the top of mudbrick wall L143 (Fig. 2). This large structure with stone foundations represents the latest phase of occupation in N45/W25 and N45/W20 (excavated in 1989). Foundation deposits L8, L9 and L23 date the wall to late MB II. The bricks of L143 are dry-laid and measure approximately 40×40×16cm. Rather than forming a solid wall along an E/W axis, L143 appears to



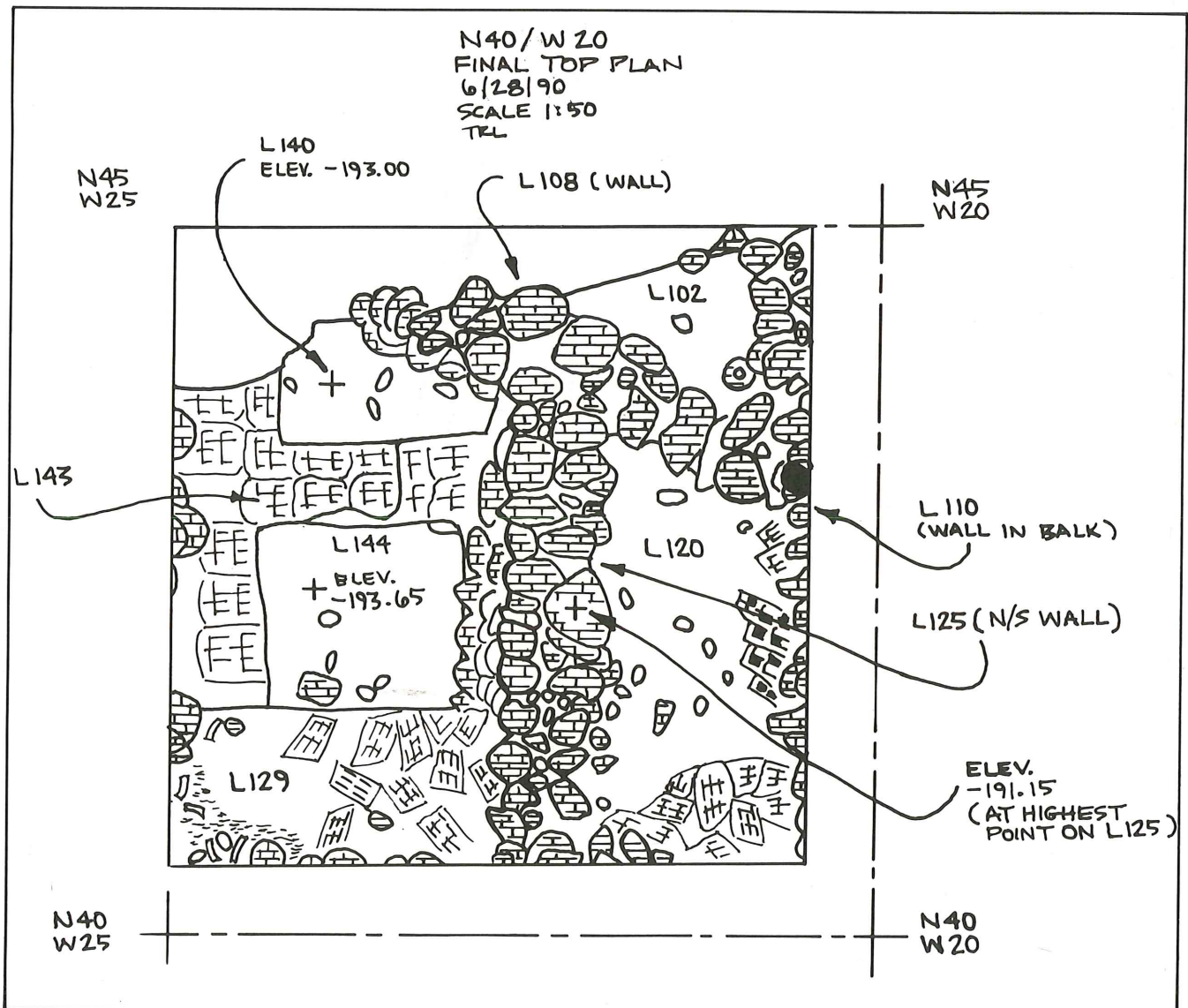
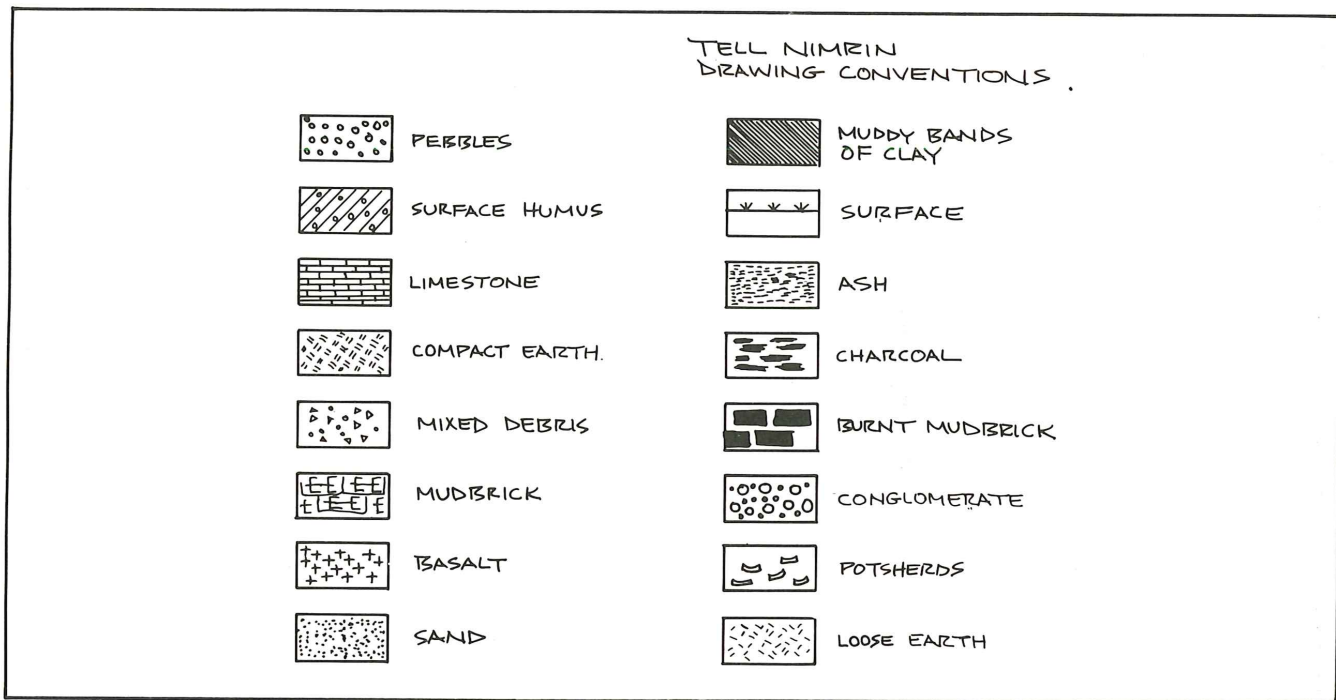


Fig. 2. N40/W20 final top plan.

consist of two alignments, one running E/W and one running N/S along the west balk. It is not yet clear whether this was the original disposition of L143 or whether L144 represents a later modification, perhaps a pit cut into the wall.

The second phase of occupation in N40/W20 is represented by the remains of stone walls L125, L108 and the associated surface L140 (Fig. 2). These well-preserved structures and surface immediately overlie the top of the MB II mudbrick wall L143 (Pl. I,1). Other loci associated with this phase of occupation — L120, L129, L130, L137, L138 and L139 (Fig. 3) — constitute destruction debris containing large quantities of ash, burned brick, botanical remains, and pottery tentatively dated to the 10th century B.C. The abundance of botanical material in these layers is particularly noteworthy. Whole carbonized figs as well as thousands of barley grains and linseeds were recovered. It appears that the food stuffs found in this phase had been placed in poorly fired store jars and perhaps set on shelves. Falling brick at the time of the room's destruction shattered the storage vessels and scattered the botanical remains throughout the room at different levels.

The next clearly defined phase of occupation in N40/W20 is represented by surface L106/L95, mudbrick wall L116 and related loci L96, L98, L100, L107, L110, L113, L115 and L118 (Figs. 3, 4, 5). The quality of the construction and preservation of architectural features in this phase is notably inferior to that of the earlier phases. There is no evidence of an occupational gap between this phase and the underlying 10th century destruction, suggesting roughly a 9th century date for this level. The walls and surfaces of Phase III appear to have been built upon the leveled destruction debris of Phase II. A relatively thick burn layer, L88, may represent the destruction of this phase of occupation.

Phase IV, the final discernable episode of occupation is represented by a cobble platform (L90), a partially preserved *tabun* (L86), a door socket, and a thick layer of destruction debris (L83 and L84) (Figs. 3, 5). The poor state of preservation of the loci in

this phase are no doubt due primarily to their proximity to the modern surface of the tell and the road cut. Pottery readings suggest a date of Iron II and preliminary stratigraphic analysis indicates little or no break between this phase and Phase III. It is therefore tentatively assumed that Phase IV represents the remains of a late 9th- or early 8th-century occupation. The elevations of Locus 90 (-190.23m) in N40/W20 and the Iron II surface (L25) in N25/W20 (-190.25 m) are very close. Pottery readings from the lowest layers of excavation in N25/W20 in 1989 yielded consistent late 9th through 8th century dates. It thus appears as if Phase IV, the latest phase in N40/W20, corresponds to the 9th-8th century walls (L15 and L28) and surface in N25/W20.

On top of the tell, squares N30/W20 and N35/W20 not only connected squares N40/W20 and N25/W20, but also provided evidence for the late Iron II occupational sequence. The lowest layers encountered in square N30/W20 (L28, L29, L32, L34, and L35) consist of what was apparently Iron II fill in a large pit that had been cut into mudbrick walls L36 and L37 (Fig. 6). The balk separating N30/W20 and N25/W20 obscures the precise relationship between wall L28 in N25/W20 and wall L36 in N30/W20 but their proximity and similar elevations suggest that they are contemporaneous. Thus, wall L36 has been tentatively dated to the 8th or late-9th century B.C. The pit cut into L36 appears to date to the late 8th century.

Immediately overlying this fill, designated Phase V for the purposes of this report, is a burned surface that extends across both N30/W20 (L17), and N35/W20 (L36) (Fig. 7). This surface, along with the destruction debris which overlies it (L15 and L13 in N30/W20, and L24, L32, and L37 in N35/W20), constitutes Phase VI. This level contained numerous Iron II storage jar sherds, loom weights, and large chunks of charcoal. The extensive ash and debris overlying the surface (L17 and L36) attest to the fiery destruction and building collapse which mark the end of Phase VI. Among the sherds scattered about the destroyed surface were those of a reconstructible krater with a frieze of plant, animal,

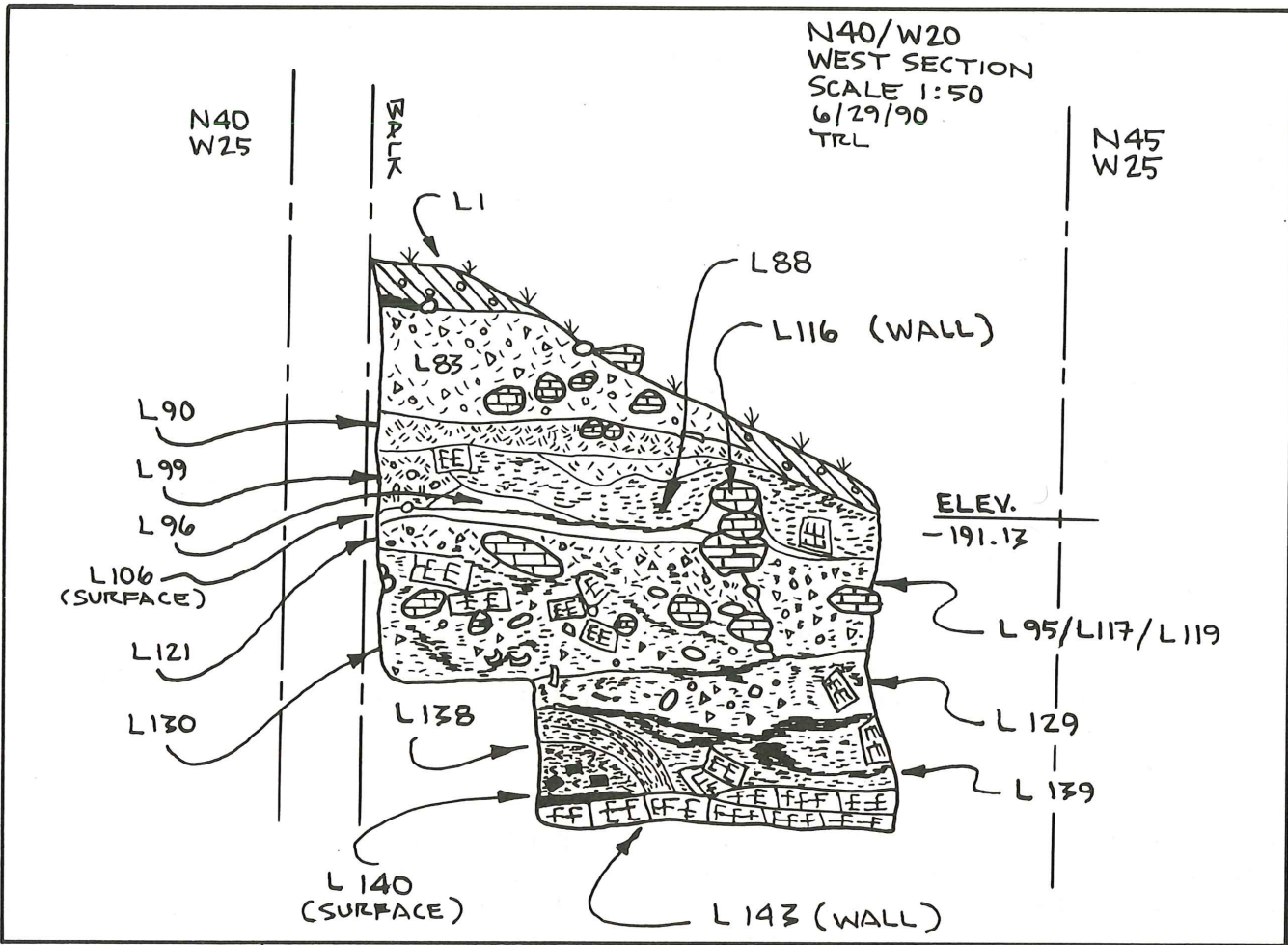


Fig. 3. N40/W20 west section.

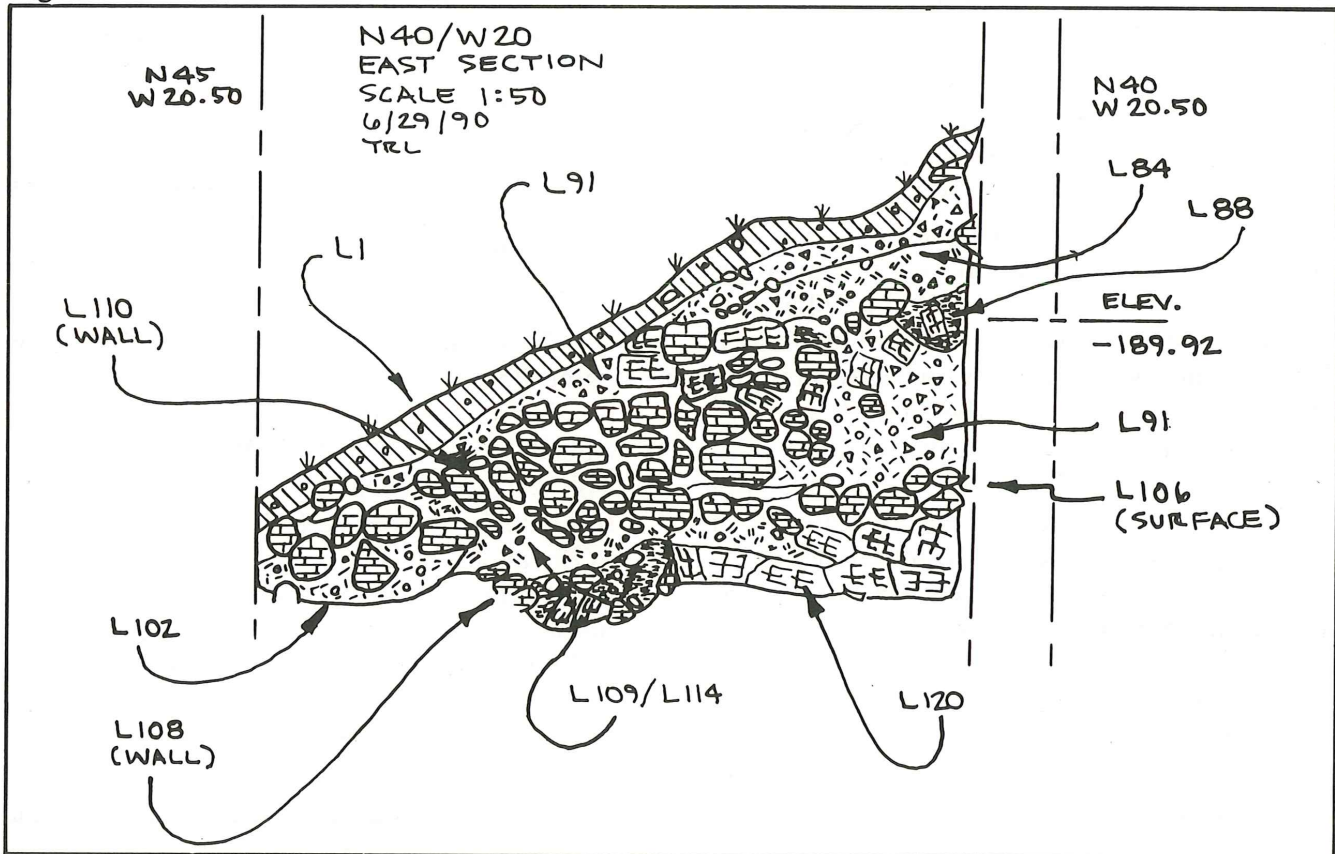


Fig. 4. N40/W20 east section.

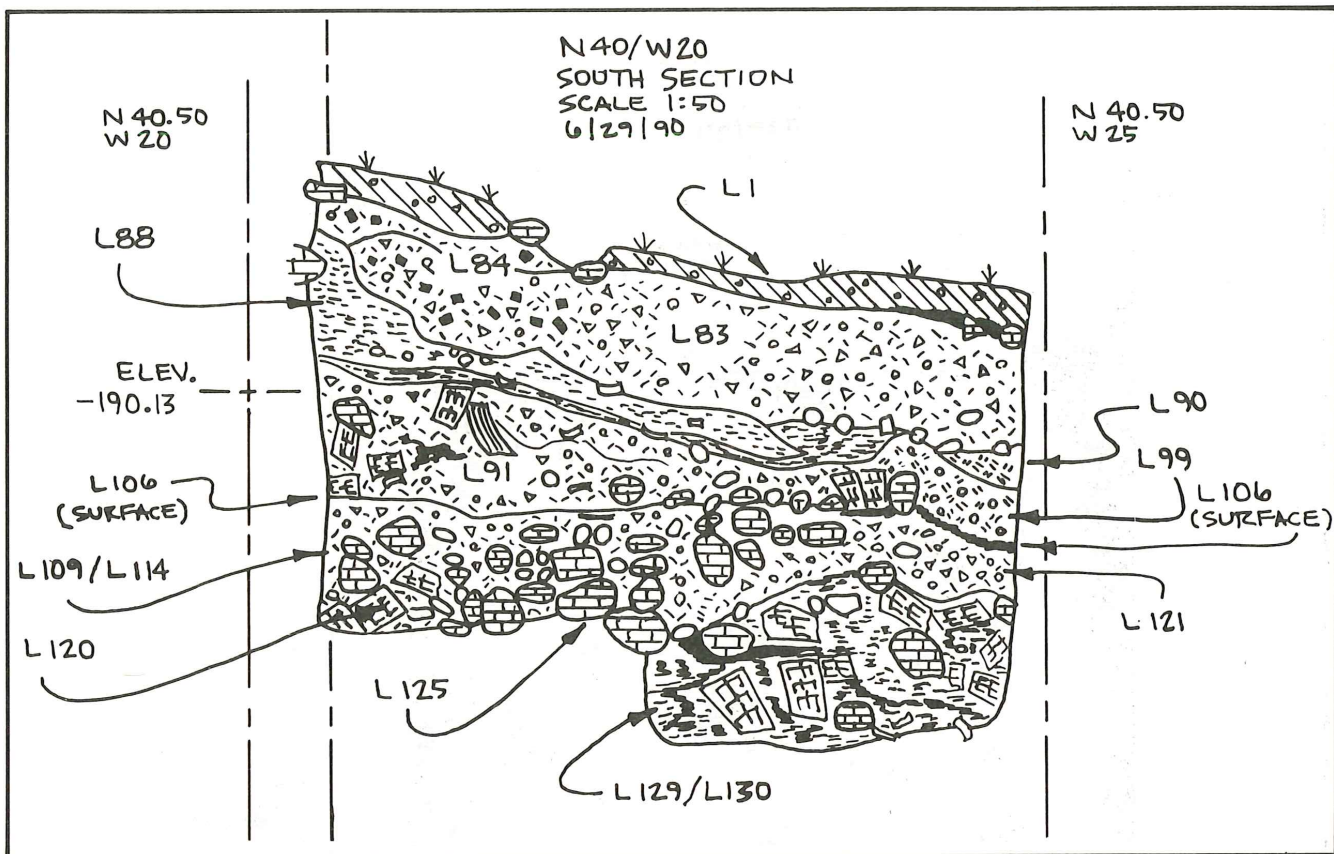


Fig. 5. N40/W20 south section.

and human motifs just below the rim (Pls. I, 2; II,1). The diagnostic Iron II pottery of this phase does not currently allow for precise dating, but the stratigraphic context of Phase VI suggests the 7th century.

Phase VII, immediately overlying the destruction debris of L13 and L24, consists of a thick layer of laminated, clay wash layers (Figs. 7,8). This appears to represent a period of abandonment following the destruction of Phase VI on this part of the tell. The tip lines of L7/L19 indicate that these loci were washed down from a higher elevation to the east, possibly from the slow disintegration of mudbrick structures left abandoned at the end of Phase VI. The pottery and stratigraphic context of this deposit suggests a late 7th/early 6th century date for this phase.

Phase VIII, which appears to be mid-6th century in date, is represented by mudbrick wall (L28) and the associated cobble pavement (L44) and surface (L45) in N35/W20 (Figs. 9, 10). In N30/W20, it is clearly represented only by the end of an E/W oriented wall (L27) that projects one meter into the square from the west balk (Figs. 6, 11).

The architectural elements of Phase VIII are poorly preserved. This may be attributed to the construction of a large stone wall (L20 in N30/W20 and L3 in N35/W20) built on top of these features in the following period — Phase IX (Figs. 12, 13; Pl. II, 2). Wall L3/L20 has a N/S orientation and is constructed of two rows of uncut field stones six to seven courses high. It measures 1.45m in width and 1.8m in height. The wall slopes noticeably toward the west. No clearly defined surface or foundation trench was found in association with L3/L20, thus making it impossible to define either its date or function precisely. It seems likely that this was a late 6th or 5th century retaining wall, but further excavation, stratigraphic analysis, and radiocarbon dates are needed to test this hypothesis.

The final phase of occupation that is clearly discernable in N30/W20 and N35/W20 is represented by a bricky fill (L2 in N30/W20 and L13 in N35/W20: Figs. 8, 12) and two stone walls (L4 and L5) situated on top of L2 in a SE/NW orientation. Both walls are constructed of uncut field stones, two rows (approximately 80 cm.) wide and two courses (approximately 40 cm.) high. The top of L2

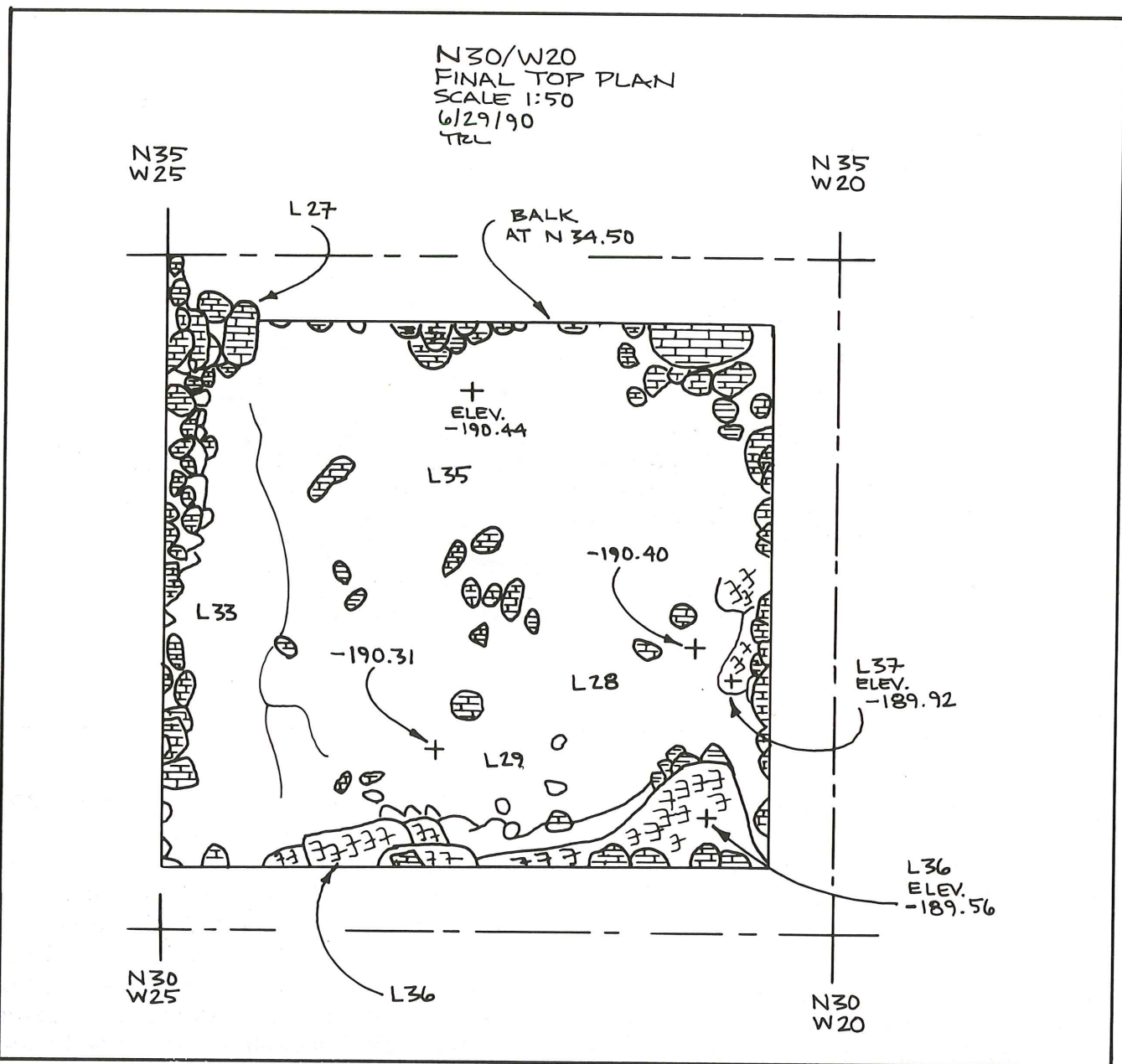


Fig. 6. N30/W20 final top plan.

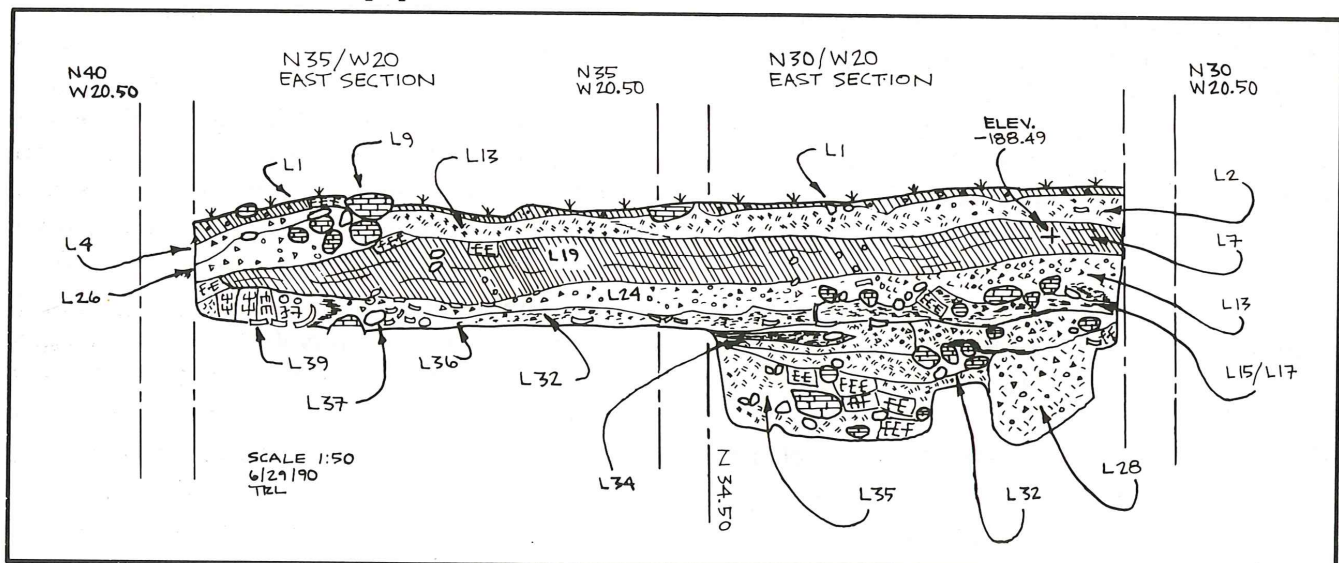


Fig. 7. N35/W20 — N30/W20 east section.



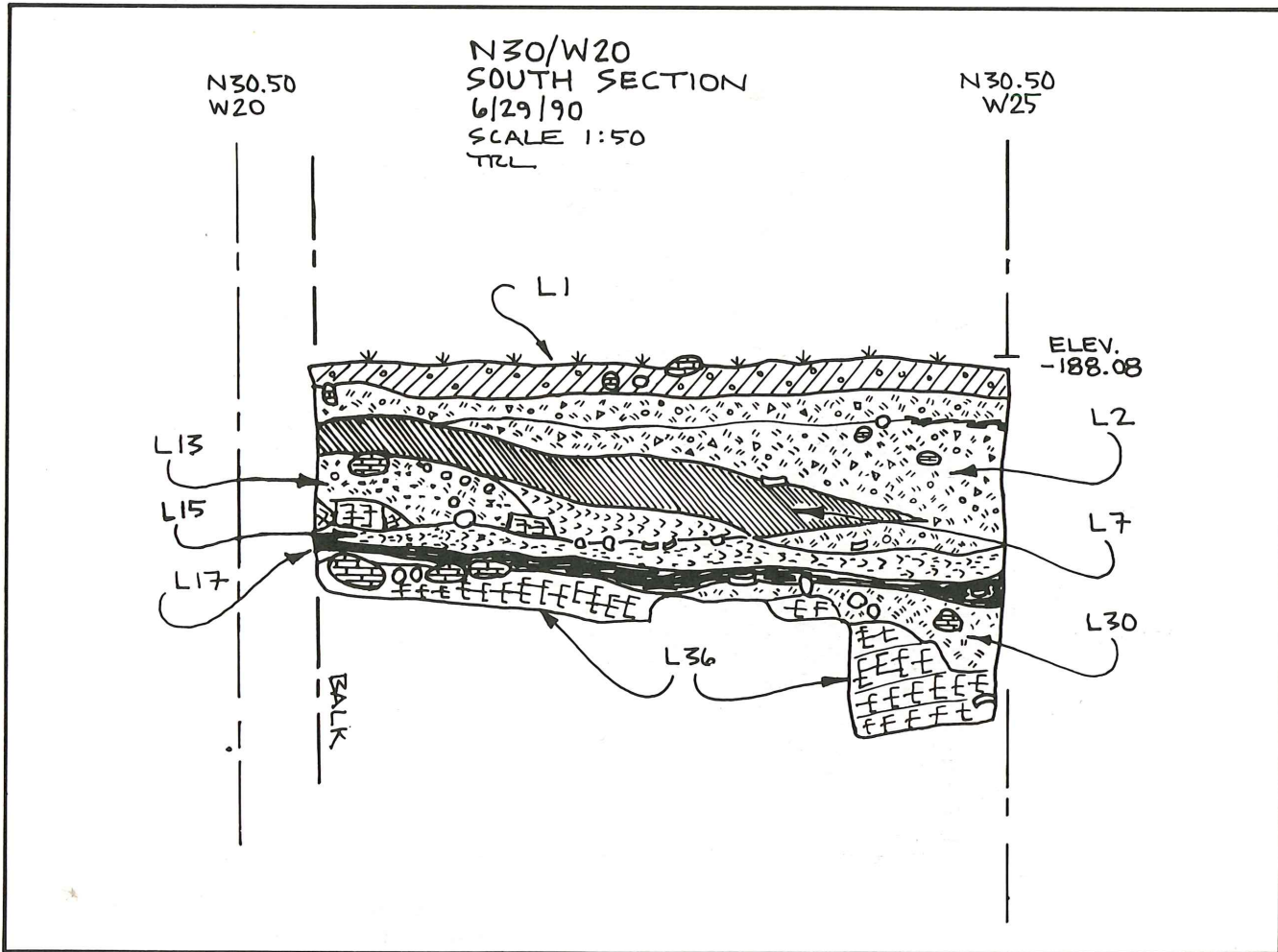


Fig. 8. N30/W20 south section.

may have served as the living surface associated with these walls, but because of erosion resulting from its proximity to the current surface of the tell, this could not be definitely established. The pottery from L2 is mixed but the dominance of Persian and Hellenistic types suggests a 4th or 3rd century B.C. date for this phase.

The N/S stone alignment (L38) visible in the west section of both N30/W20 and N35/W20 is the latest architectural element in these two squares. This locus was not excavated because it is contained in the west balk. However, judging from its stratigraphic context, this feature must date to the post-Persian period. Excavation immediately west of N39/W20 is needed to establish both the date and function of this stone structure.

Although many questions remain regarding the precise function and dates of the various strata and architectural features encountered in the area under discussion during the 1989 and 1990 seasons of excavations

unanswered, some general conclusions can be proposed.

1. There appear to be at least ten distinct occupational phases represented on this part of the site. These range from roughly 2000 B.C. to 300 B.C.

2. The Phase I stratum (EB IV-MB II) is approximately six meters deep and comprises at least three distinct occupational phases identified in N45/W20 and N45/ during the 1989 excavation season. Currently, the most recent phase (the upper-most two meters) of this stratum is attested only by the mudbrick superstructure of wall L143. Further excavation on the interior of the site south of L143 is needed to clarify the nature of the late MB occupation. Those layers between 193m and 196m BSL need to be exposed.

3. Seven phases of Iron II occupation ranging from the 10th century through the 5th century B.C. have been tentatively identified. The Iron II strata in this part of the site are

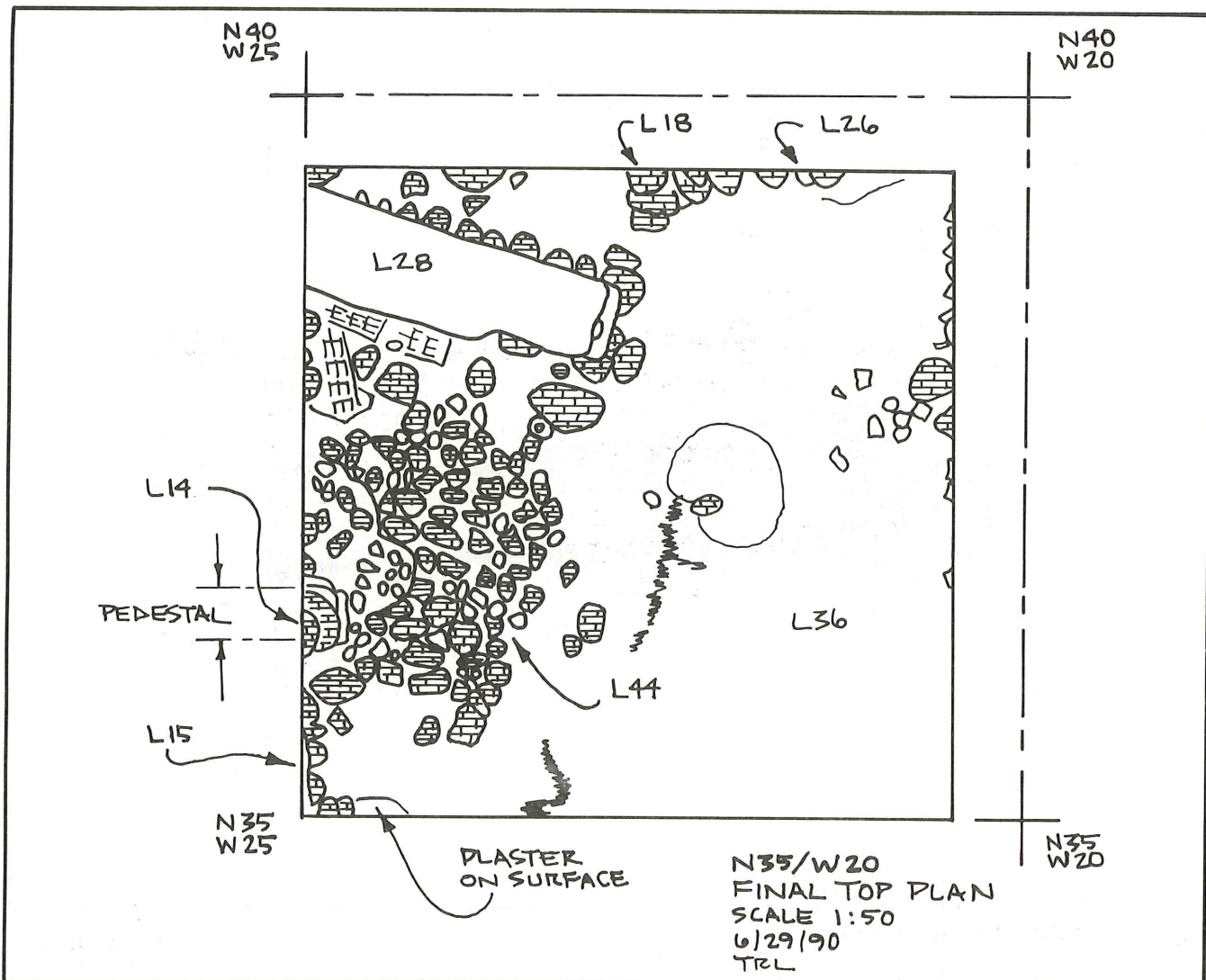


Fig. 9. N35/W20 final top plan.

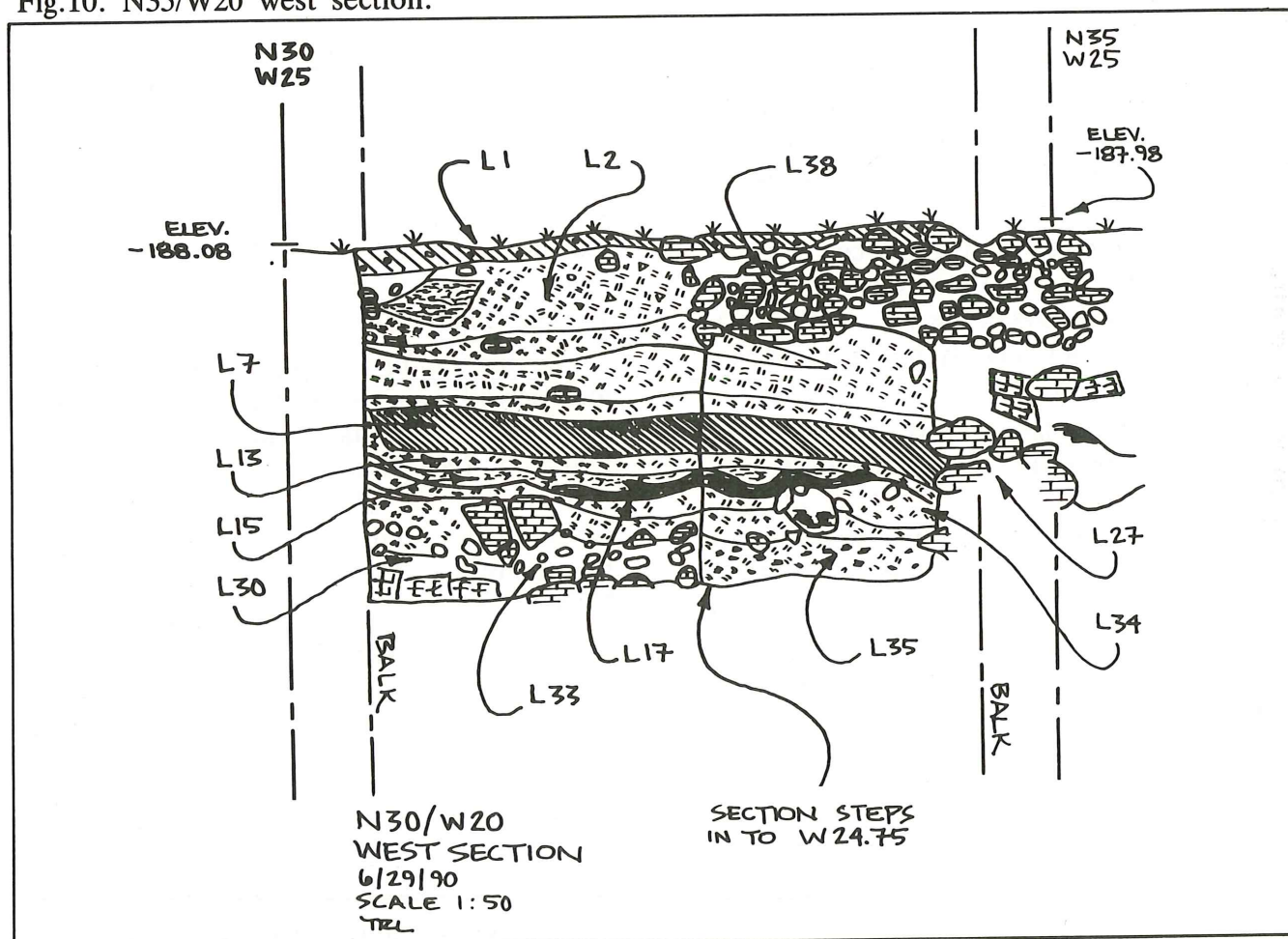
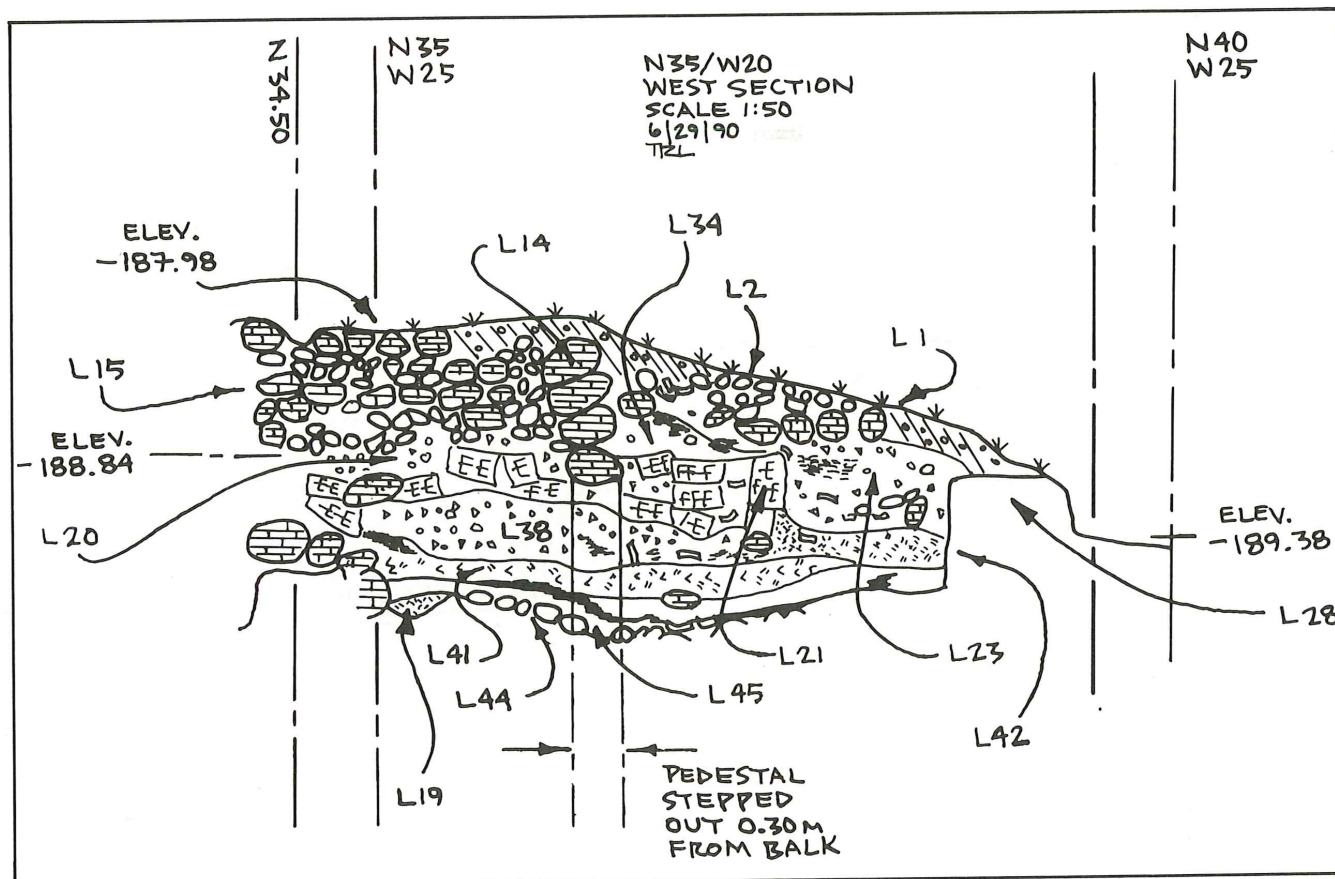
approximately 4.8m deep and are found at elevations between 193m and 188.20m BSL. Destruction layers were found in 10th-century (N40/W20), 8th-century (N25/W20), and 7th century (N30/W20 and N35/W20) contexts. Because of the limited area excavated thus far, it is impossible to prove that these burn layers represent episodes in which the entire site was destroyed, but the 10th- and 7th-century destructions do appear to be quite extensive. A 50-100 year period of abandonment appears to have followed the 7th-century destruction found in N30/W20 and N35/W20.

4. Layers and structures approximately 1.25m deep that date to the Persian and early Hellenistic Periods are found on top of the tell. Thus far these strata have proved to be only partially preserved. Clear evidence of Roman and modern pitting have been found in N25/W20.

**The Western Slope (N15/W20, N20/W70, and N20/W65)**

The 1990 excavation on the summit of the mound confirms the tentative 1989 conclusion that twentieth century bulldozing has removed virtually all post-Roman strata from the top of the tell. Nevertheless, abundant evidence for occupation during the late classical and Islamic periods is supplied by scattered surface pottery as well as by strata and architectural features visible in the road cut on the western edge of the site. Three squares were laid out on the western slope of the tell for the purpose of recovering stratified material from the later periods.

The earliest stratum uncovered in this area dates to the late Iron II/early Persian period. It was encountered in both N20/W70 and N20/W65 between the elevations of 194.89m and 195.88m BSL. The dominant features in N20/W70 include a well preserved



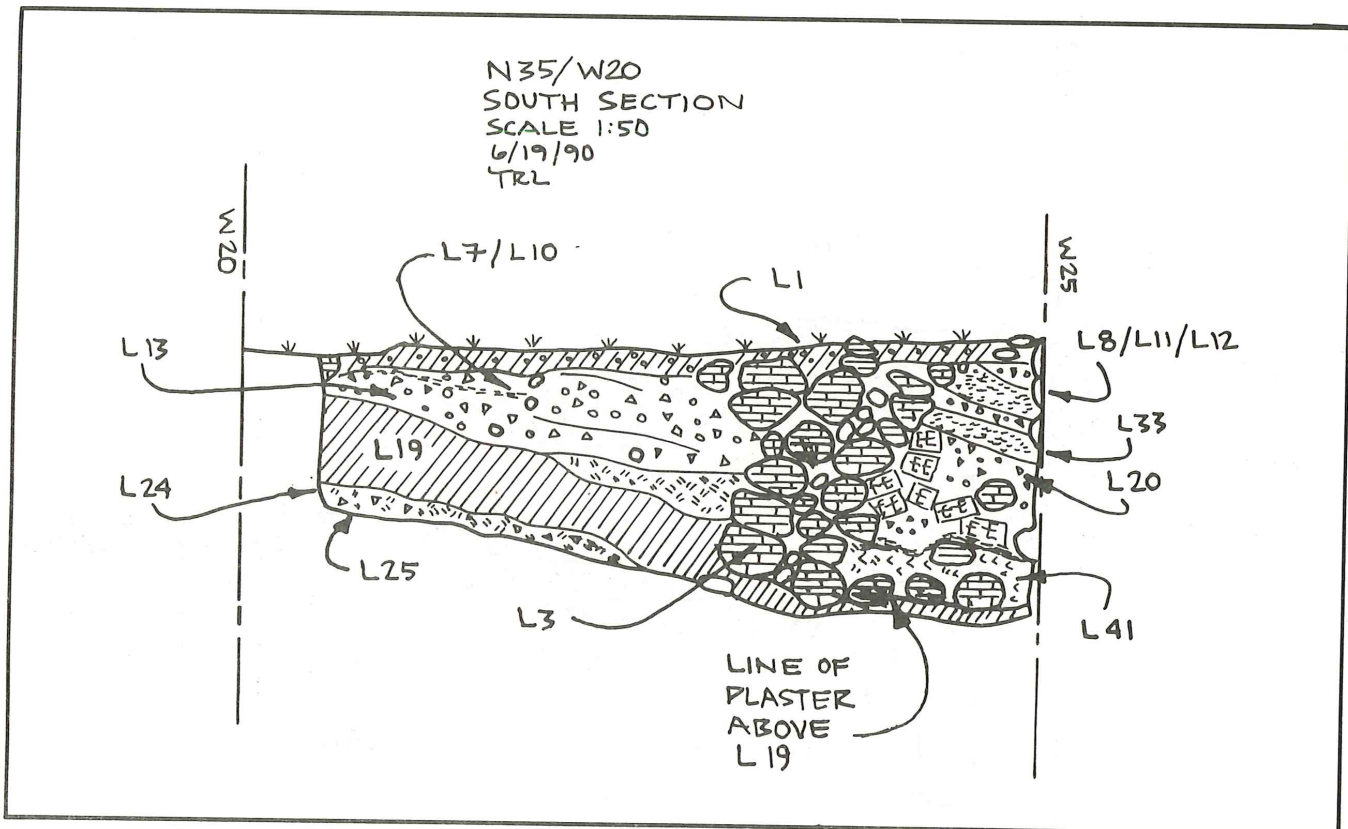


Fig.12. N35/W20 south section.

mudbrick wall (L41) with stone foundations, its associated floor (L48), and the fragmentary remains of a *tabun* (L46 (see Figs. 14,15). Floor L48 was covered by a 3-4cm layer of burnt chaff which in turn was covered by layers containing ash and mudbrick debris (L35 and L42).

The only locus that produced Persian period material in N15/W70 was L57, excavated the last few days of the season (Fig. 14). This locus lies immediately below Umayyad occupational debris.

In N20/W65 the late Iron II/Persian period is represented by walls L71, L72, and L73 with their associated floors (L57, L56, and L69) (Fig. 14). As in N20/W70, a destruction layer of ash and burnt mudbrick debris (L52, L53, L63, L49, and L54) overlies the late Iron II/Persian period living surfaces (Fig. 16). The lower horizon of this stratum was not encountered by the end of the season, and limited horizontal exposure makes interpretation of the architectural features difficult. Judging from the pottery, *tabun* fragments, loom weights, and botanical and faunal material scattered across the living surface, this may be an area of domestic occupation that ended in a fiery destruction.

Soil layers (L38, L44, L40, L47, and L43) immediately above the late Iron II/Persian period strata in N20/W65 contained significant amounts of Hellenistic pottery but no Hellenistic structures were found. A pit (L58) dug through Persian layers L54, L60, and L62 was the only remaining *in situ* Hellenistic feature. A Hellenistic cooking pot was found near the top of the pit against the north section (Fig. 17).

Evidence for occupation during the Roman period is similar to that for the Hellenistic period. Certain layers in N20/W65 such as L20, L21, L43, L44, L39, and L41 contained Roman pottery. However, no Roman surfaces were found in association with architectural remains. This was also the case in squares N20/W70 and N15/W70.

There is abundant evidence from the road cut, in the section near the Jordan Valley Authority school, and from the Byzantine church excavated in 1980, that the west slope of Tell Nimrin was intensively occupied during the Byzantine era. Byzantine pottery was present in the upper soil layers of all three squares excavated in 1990 but few undisturbed Byzantine loci were identified. Foundation trench L16, surface L19, and

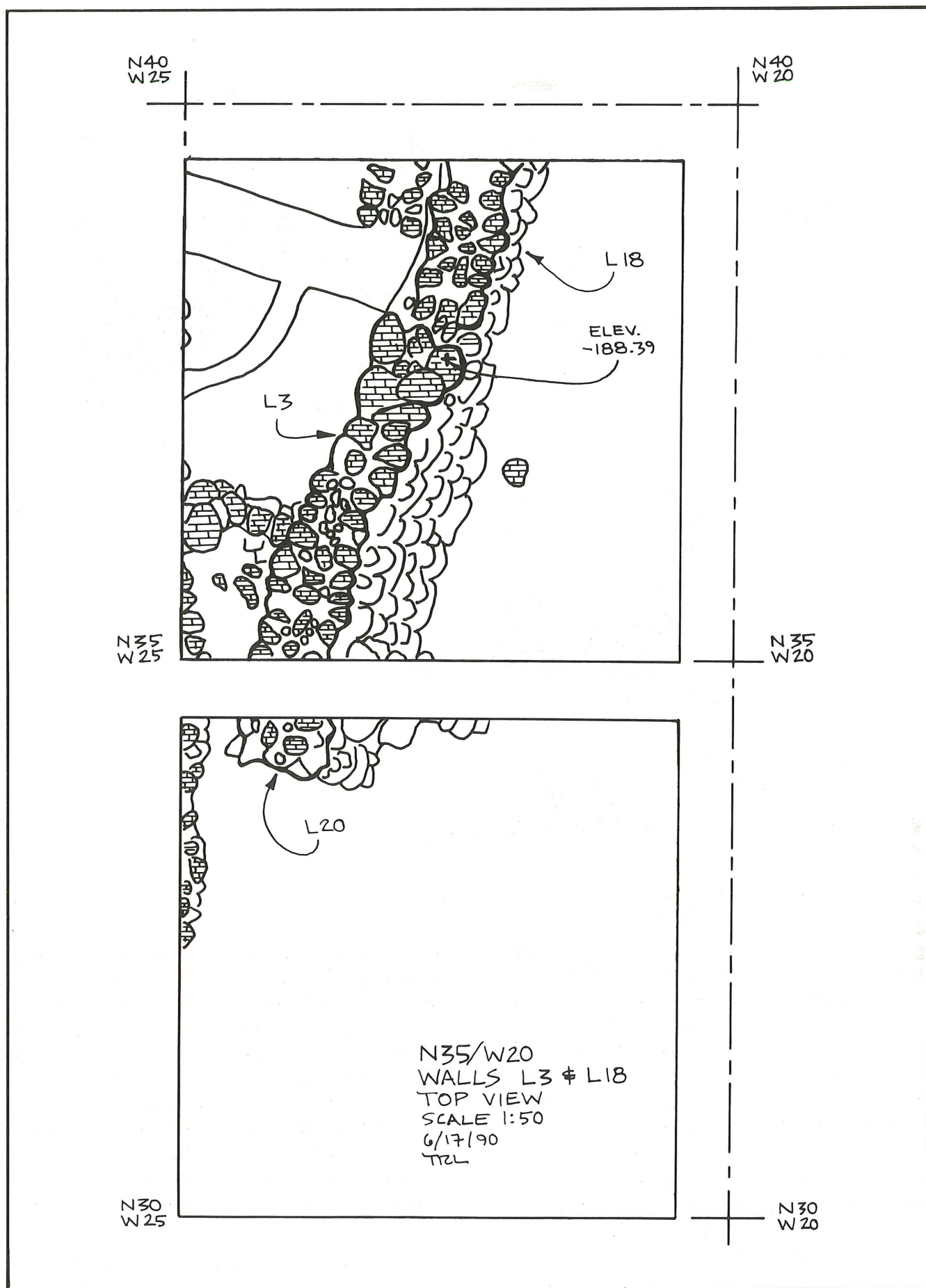


Fig.13. N35/W20 walls L3 and L18.

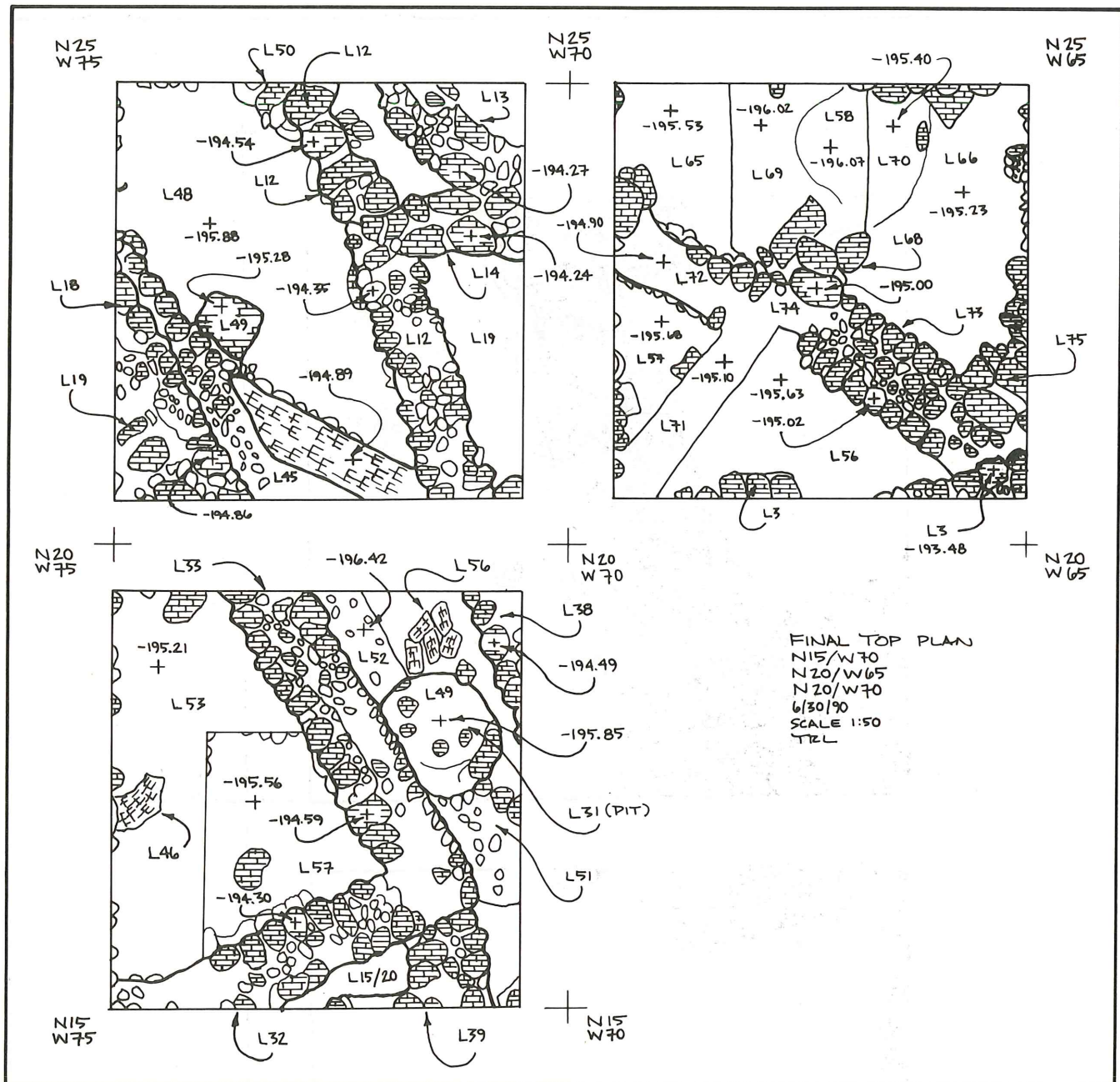


Fig.14. N15/W70 and N20/W70 final top plan.

walls L12, L13 and L14 in N70/W20 (Fig. 14) appear to constitute the only *in situ* remains from the Byzantine period (note that wall L38 in N15/W70 is the southern extension of wall L12 in N20/W70; Fig. 14). Although the pottery readings support a Byzantine date, the proximity of all of the loci to the modern surface of the tell makes the dating uncertain.

Most of the intact surfaces and architecture in this area date to the Umayyad and Mamluk periods. The poor state of preservation of the Hellenistic, Roman, and Byzantine strata in this area is due to activity on the site during the early and late Islamic periods. The most well-preserved examples of

Umayyad occupation and architecture were found in N20/W70 and N15/W70. In N20/W70, the foundation trench L20 for wall L18 cuts through the upper courses of the mud-brick late Iron II/Persian wall L41 and extends to the south into square N15/W70 as L33 (Pl. III,1). In N15/W70 wall L33 abuts wall L32 at approximately 90 degrees. Surface L53, associated with both L32 and L33, appears to be the interior surface of an Umayyad domestic structure (Fig. 14, Pl. III,2).

In N20/W65, Umayyad remains include walls L15, L34, and a plaster-lined water channel (L36) extending from the east section

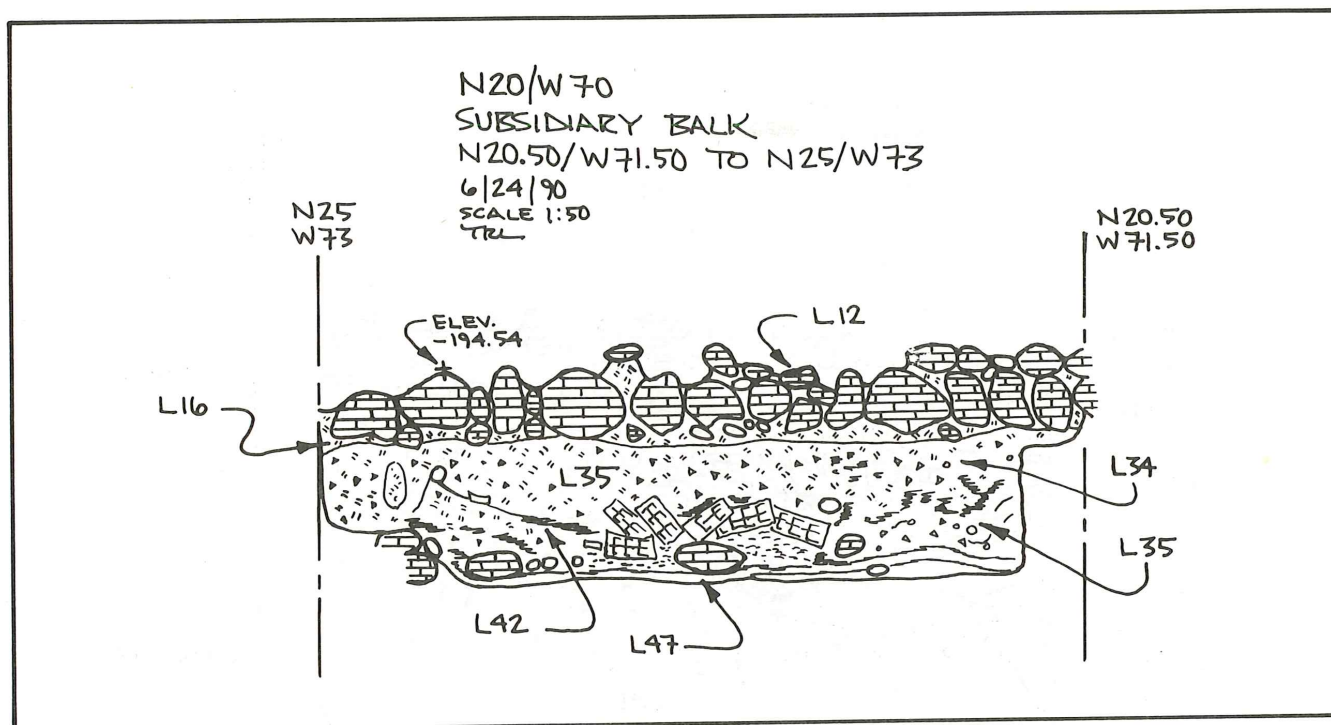


Fig.15. N20/W70 subsidiary balk (N20.5/W71.5 to N25/W73).

to the center of the square (Figs. 16; 17). No clearly defined Umayyad living surfaces are preserved in the square, but Umayyad pottery was found in soil layers that form the modern surface of the tell up to a depth of two metres in some places.

Immediately on top of the Umayyad stratum, Mamluk occupation is evident in all three squares. Mamluk walls were found in N20/W65 (L3 and L24), and N15/W70 (L11). No foundation trenches or preserved surfaces were found in association with these walls, but all of the pottery in and around the walls date to the Mamluk Period. Fragments of Mamluk *ṭabuns* were found in N20/W70 (L2, L5, and L7), as well as in N20/W65 (L8) and N15/W70 (L15). A series of pits or silos were also dug during this period.

The best-preserved Mamluk pits were found in N15/W70 (L18 and L31) and N20/W70 (L11 and L28). The dimensions of the pits varied from 0.75m to 1.25m in diameter and 0.90m to 1.25m in depth. In addition to Mamluk pottery, the pits contained relatively rich faunal and botanical deposits. The large

numbers of carbonized barley grains in pit L11 in N20/W70 suggests that this pit, and perhaps the others, were used primarily for grain storage. If this was the case, the names Tell Shunah (Arabic = "tell of the granary") and Shunât Nimrin (Arabic = "the granaries of Nimrin") may derive from the cereal storage pits of the Mamluk period.<sup>1</sup>

The latest stratified deposit from the excavations on the western slope consists of a late Mamluk/early Ottoman burial (L23 and L27: Fig. 16). The skeleton in a supine position was fully articulated and laid in a shallow stone-lined cyst tomb with cap stones covering the body. Preliminary analysis of the poorly preserved remains indicate the individual was a middle aged caucasian, at least 40 years old and approximately 182 cm (6 feet) tall. Numerous dental caries and moderate occlusal attrition of the teeth suggest a diet high in carbohydrates and sugar. This correlates well with the documented widespread production of sugar cane throughout the Jordan Valley during the Mamluk period. Numerous sugar pot fragments scattered

1. According to local legend, Tell Nimrin (Arabic = "tell of the leopards") got its name in the distant past when one Nimr (Arabic = "leopard") ibn Adwan killed two leopards (Arabic dual would be "nimrain") on the site. The leopard

depicted on the 6th-century C.E. Madaba mosaic map, at the approximate location of Tell Nimrin, suggests that the name Tell Nimrin and its association with leopards dates from as early as the late Byzantine Period.

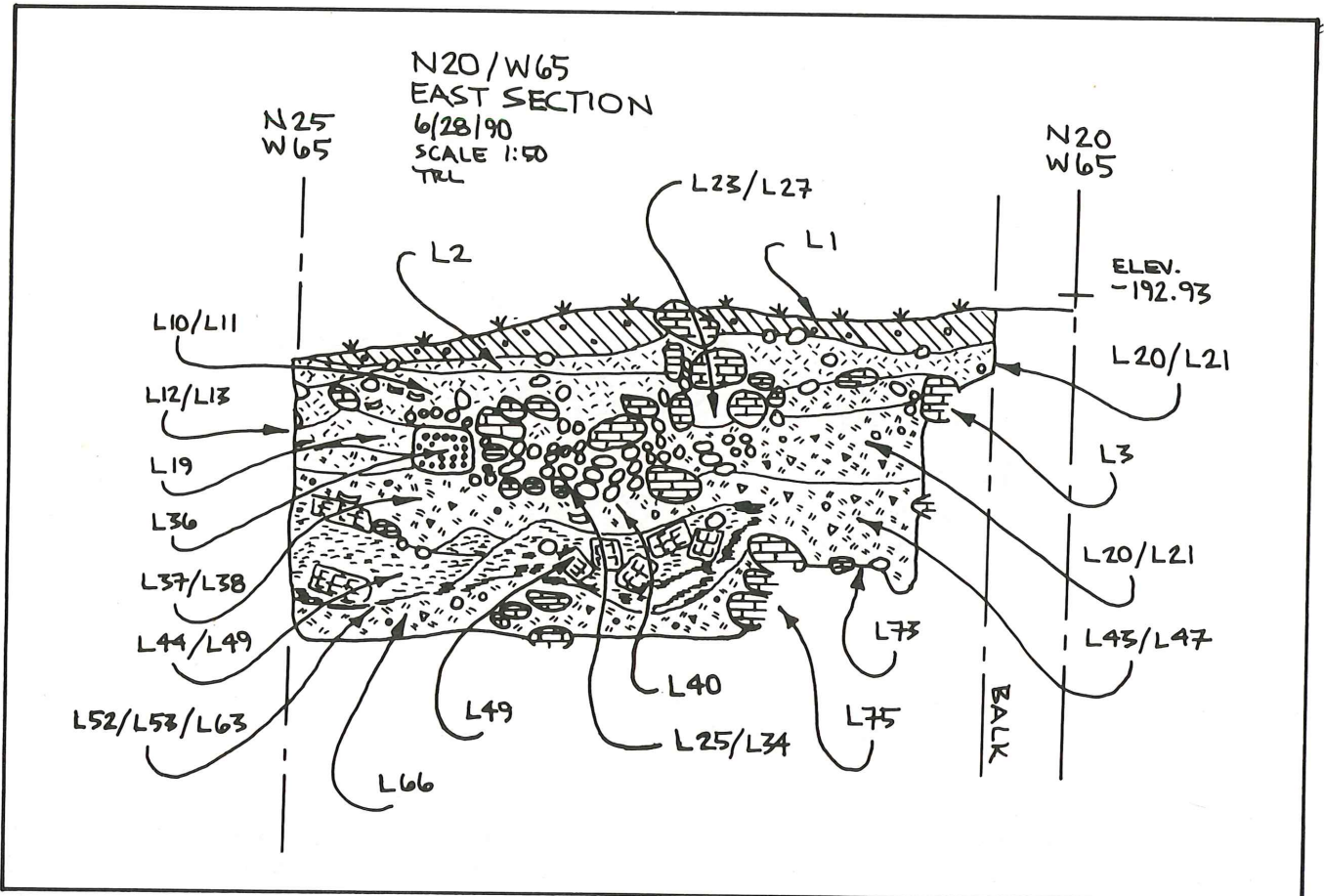


Fig. 16. N20/W65 east section.

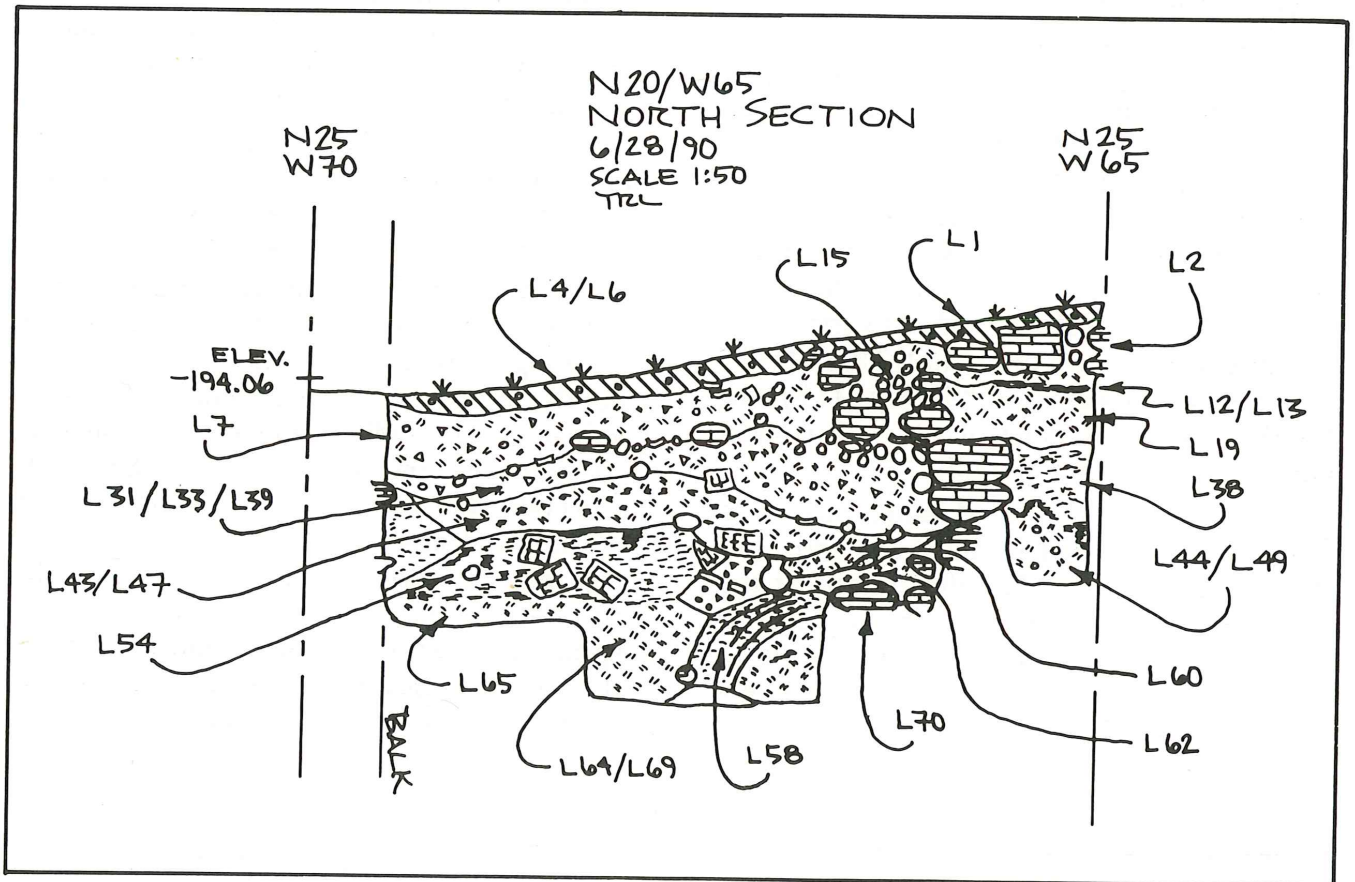


Fig.17. N20/W65 north section.



around the mound indicate that sugar was being processed, if not grown, at Tell Nimrin during the Mamluk period. Osteophytic nodules were present on the thoracic vertebrae. These are probably due to stress on the spinal column caused by heavy manual labor.

The uppermost layers of the squares excavated on Tell Nimrin's western slope showed signs of modern disturbance, but it is not nearly as extensive as on top of the tell. The pits from the Mamluk period and walls from the Umayyad period that have cut into the underlying late Iron II/Persian through Byzantine levels complicate the study of these strata. Nevertheless, it is reasonable to postulate that continued investigation of the western slope of Tell Nimrin will produce good stratified material from the Persian through the Mamluk periods. Judging from the section created by the road cut adjacent to N20/W70 and N20/W65, the 1990 excavations stopped approximately three metres above archaeological bedrock. It seems likely that most of the material within these three metres (between 196m and 199m BSL) will prove to be relatively undisturbed Iron II remains, although there is a possibility of MB material at the base. The directors doubt, however, that the MB city extended this far west. If the city flourished and expanded to the west in the Iron II period, it would not be surprising to find Iron II material immediately overlying bedrock on this part of the site.

#### **Faunal Remains**

Preliminary faunal analysis has identified the following wild and domestic animals from stratified contexts: wild hare, deer, gazelle, pig, carp, armored catfish, rodent, small and medium sized birds, sheep, goat, cow, horse, donkey, camel, cat, and chicken. All of the pig bones recovered are from young individuals, but it is impossible to determine whether they are wild or domesticated.

The presence of hare, deer, gazelle, and fish indicates that the inhabitants of Tell Nimrin occasionally supplemented their diet of meat from domesticated animals with wild game. The small percentage of wild animal bones suggests that hunting and fishing were not critical elements of the economy.

Sheep and goat comprise the vast major-

ity of the identifiable bones (70%) followed by cattle (11%). Overall, sheep outnumber goats by a factor of 3%. This suggests a relatively lush environment. Chicken is present in Iron II through Mamluk contexts, but in very small quantities. Camel, horse, and donkey were no doubt used as beasts of burden and would have played an important role in the agricultural economy. Pork consumption appears to have been greatest during the MB Period, decreasing in the Iron II period, and becoming negligible in the latest Islamic periods.

#### **Botanical Remains**

A wide variety of cultigens were recovered from 128 flotation samples in 1990. Laboratory analysis of the paleobotanical remains from stratified contexts is still in its initial stages but some preliminary observations can be reported.

Cultigens include wheat, barley, flax, lentil, field pea, horsebean, chickpea, bitter vetch, olive, grape, fig, pistachio, zizyphus, and date. The presence of emmer, bread wheat, six-row barley, grape, and large-seeded flax attests to the practice of irrigation throughout the history of the site.

Botanical remains have been recovered from all strata excavated thus far, but the 10th century B.C. level in N40/W20 yielded especially rich deposits. In what appears to be a burned storeroom, whole figs and grapes, thousands of barley grains, and millions of linseeds were recovered along with small quantities of other cultigens. Neutron activation analysis is being conducted on plant remains from various strata in an attempt to determine whether the cultigens were grown locally or imported. This analysis may also provide additional evidence for irrigation and expose problems such as soil salinity.

#### **Summary**

The 1990 excavation completes Phase I of the Tell Nimrin salvage operation. The general chronology of the occupational sequence is clear, although further stratigraphic and ceramic analyses along with additional C-14 dates are needed. With the exception of LB and early Iron I, all periods between EB IV and Ottoman are represented at the site. The

MB and Iron II strata are both deep and extensive with well preserved architecture and abundant paleobotanical and faunal deposits. Early Islamic through late Islamic occupation was also probably quite extensive, but much of the remains from these periods has all been removed from the top of the tell. Umayyad and Mamluk strata on the western slope of the mound are well represented. It appears that the population density was particularly high during these two Islamic periods.

Tell Nimrin appears to have been supported throughout its history by a multi-crop, intensive agricultural industry. As today, most crops were probably grown under irrigation. Diet comprised at least thirteen domesticated plant species, four species of domesticated animals, and a variety of wild plants and animals. Neutron activation of paleobotanical specimens should help determine which, if any, cultigens were imported from outside the immediate vicinity of the site.

Tell Nimrin's location along a major E/W trade route connecting the Cisjordan and Transjordan highlands makes it a likely center for exporting agricultural commodities and other goods. Considering the favourable environmental conditions and the strength of its own agricultural industry, the inhabitants of Tell Nimrin would have had little need or incentive to import food stuffs, but they were no doubt able to profit from the sale of locally grown agricultural products.

Evidence of outside influence is provided by the 4th-century Aramaic ostrakon as well as the 7th-century krater with Egyptian and Mesopotamian motifs. The site's border position amongst the region's powers, together with its self-sustaining agricultural base, allowed Nimrin to flourish for almost 4000 years. However, in spite of its marginality, Nimrin's strategic location exposed its people to a variety of foreign influences greater than one would normally expect for a small agricultural community. The site presents an interesting study of a village that survived

most of the long-term tumultuous history of the region, but for some reason, was not able to withstand the upheavals of the LB and Iron I periods.

The excavations at Tell Nimrin have demonstrated exceptional potential for continued investigation. Both the Department of Antiquities and the local Jordan Valley government officials have intensified efforts to protect the site from further damage. At least two more seasons of excavation are planned. The project will continue to focus on questions and the collection of data relating to the environmental and economic history of the site, with special attention given to attaining greater horizontal exposure of the Iron II and MB strata.

#### Acknowledgements

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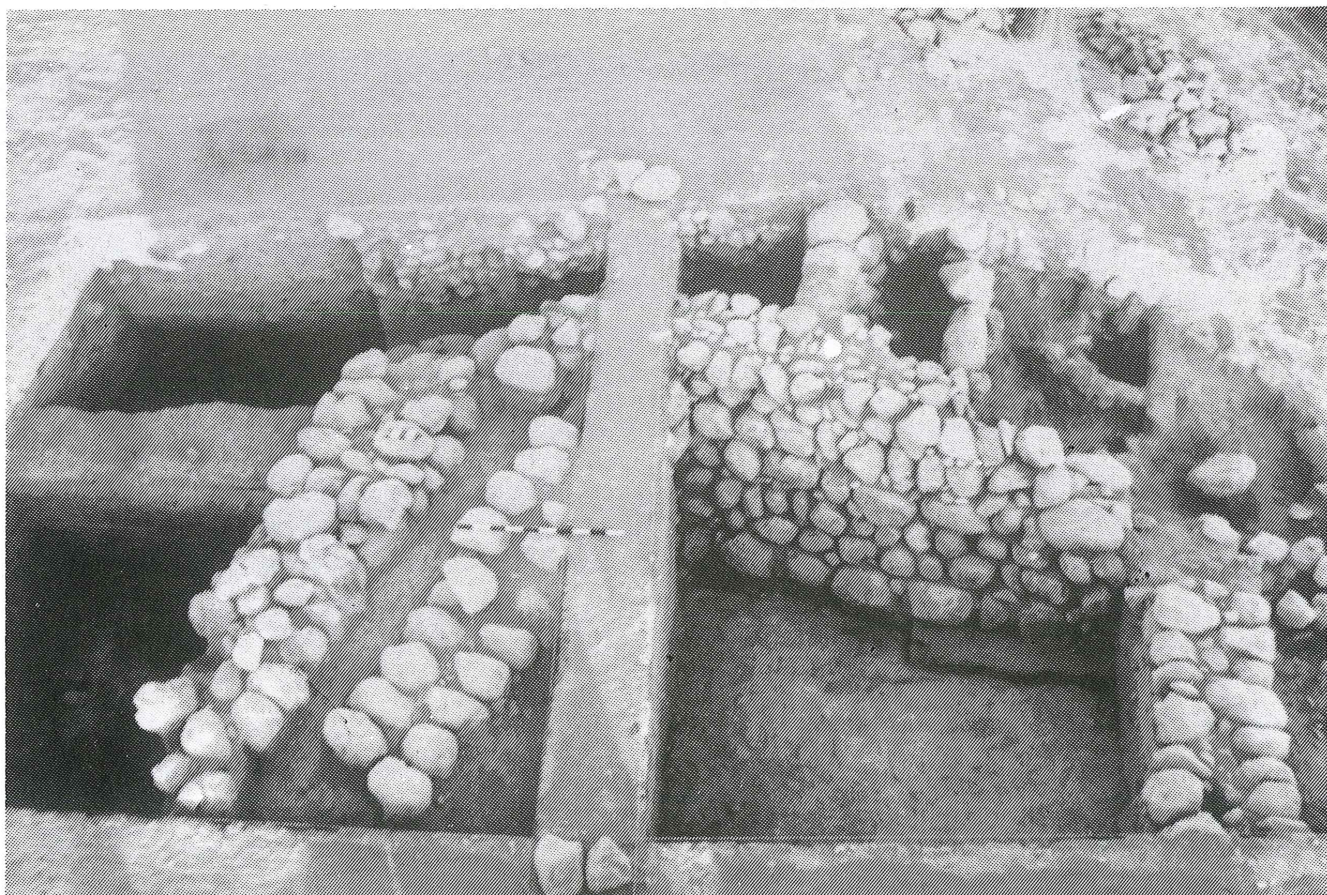
1. Final shot of N40/W20 from the Shuna/Salt road.



2. Seventh century B.C. krater sherds *in situ* in N35/W20.



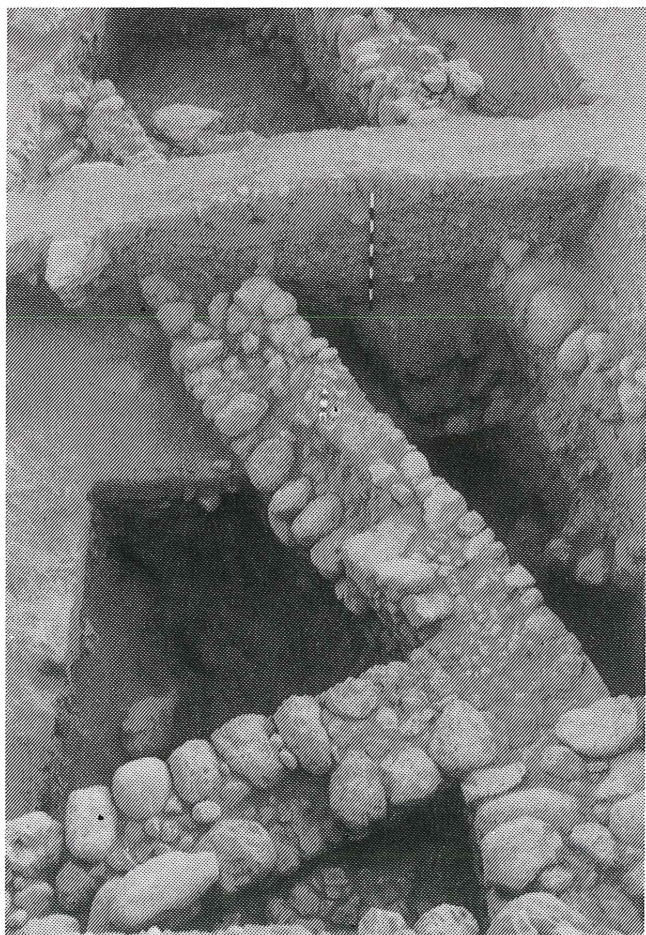
1. Reconstructed 7th century krater from N35/W20.



2. Aerial view of wall L3/L20 in N35/W20.



1. General view of N20/W70 looking S, end of excavation.



2. General view of N15/W70 looking N, end of excavation.