

THE DECAPOLIS SURVEY PROJECT:  
ABILA, 1980 BACKGROUND AND  
ANALYTICAL DESCRIPTION OF  
ABILA OF THE DECAPOLIS, AND THE  
METHODOLOGY USED IN THE 1980  
SURVEY

by

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### Background

The 1980 archaeological survey of Abila, one of the ancient cities of the Decapolis, was conducted from July 9 to August 6. Dr. Adnan Hadidi, Director of Antiquities, and the Department of Antiquities of Jordan, were of great assistance to the staff of the Survey throughout the season, and we express our deep appreciation to them. The staff consisted of: Dr. W. Harold Mare, Director of the Abila Project; Cherie J. Lenzen, Typologist; Michael J. Fuller, Architect and Surveyor; and Myra A. Mare, Pottery and Objects Registrar. Assistants in the survey were Miss Anne Undeland, Damascus, Syria, and Mr. Erik Harrell, Amman, Jordan, both recommended by Dr. James A. Sauer, Director of the American Center of Oriental Research and the Survey's consultant on ceramics. We also had the fine assistance of Mr. Sultan Shureidah, District Director at Irbid for the Department of Antiquities of Jordan. Mr. Shureidah served as our Department Representative.

Abila, proposed to be at the site of modern Quailibah, is located about thirteen kilometers north and slightly northeast of the modern city of Irbid. The site is

composed of a tell called Tell Abila in its north section, a lower saddle area in the center and a tell to the south called Khirbet Umm el 'Amad ("Mother of the Columns"). On a part of Umm el 'Amad are located the scattered columns of an ancient temple and on the north edge of this sector is located the cavea of the "theater" which borders the south edge of the central saddle. In the central saddle part of a wall runs north part way across the saddle toward Tell Abila; building ruins are also located in it. To the west of the "theater" and north of the temple ruins is an olive orchard, on the north edge of which project ruins of the west "bridge" or possible gate; to its north projects a vault or wall extending toward the crest of Tell Abila. Along the south crest of Tell Abila run the remains of an ancient wall, probably the acropolis wall of the city. On the top of Tell Abila in its south central sector are located ruins of what has been designated a "public building," and over toward the northeast slope of the tell is a small semi-circular cavea that may be remains of an ancient odeion. Numerous other ruins of walls and buildings are to be found on the top of Tell Abila and its slopes as well as elsewhere on the site on the south (Figure 1 and Figure 2).



Figure 1. The Site of Abila

# ANCIENT ABILA

0 20 40 60 80 100 Meters

Contour Interval 2 meters

TELL ABILA

UMM EL 'AMAD

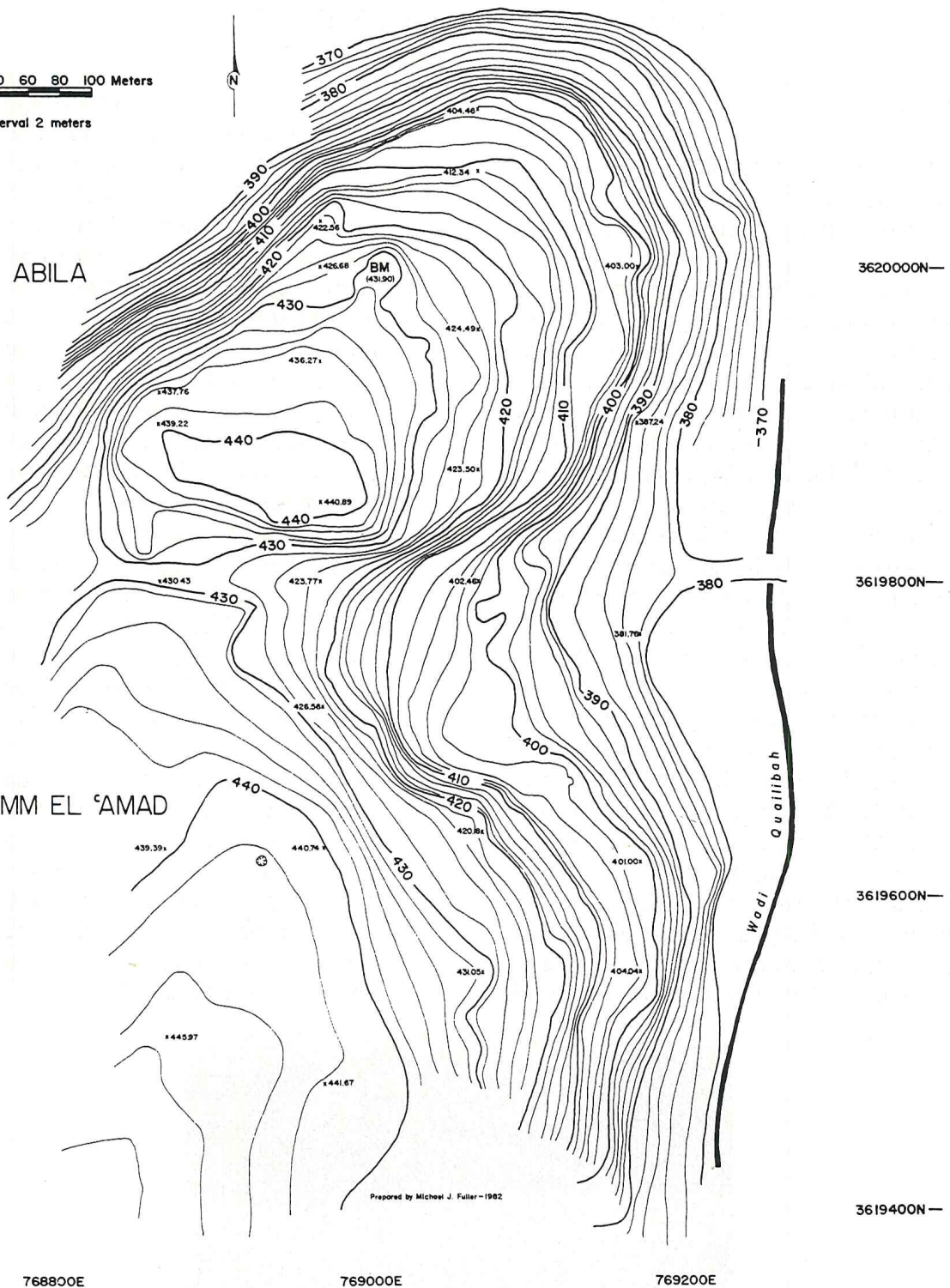


Figure 2. Contour Map

Tell Abila is bordered on the north by Wadi Abila, and Tell Abila and Khirbet Umm el 'Amad are bordered on the east by Wadi Quailibah. The cemetery areas for the site of Abila extend along the slopes of Wadi Quailibah to the south of Khirbet Umm el 'Amad about three-fourths of a kilometer, and then southwest around the wadi wall to a perennial spring, Ain Quailibah. The waters of this spring run north in Wadi Quailibah to Abila, where they have helped produce a grove of trees. The water continues to flow north under the ancient stone bridge which connected Abila with cities and communities to the east, and then flows on to the Yarmouk River about 5.3 kilometers north of Abila. Further cemetery areas are to be found east and northeast of Tell Abila along the slopes of Wadi Quailibah and along the north slope of Wadi Abila.

The evidence from the 1980 survey thus far shows that the archaeological history of Abila extends from post-classical times back at least as far as the Early Bronze period. The ancient written sources focus attention on one part of that history, the site's importance in later classical and post-classical times and its connection with the Decapolis cities.

The meaning and significance of the term Decapolis and the cities connected with it have long intrigued students. Linguistically and etymologically the term Decapolis (Δεκάπολις) means "ten cities," but according to ancient sources the number of cities in the group varied from ten to eighteen or nineteen. Pliny in his *Natural History* (5,74) under the heading Decapolis lists Damascus, Philadelphia, Raphana, Scythopolis, Gadara, Hippos, Dion, Pella, Galasa (i.e., Gerasa), and Canatha, and then mentions what he calls Tetrarchies-kingdoms, listing among them Trachonitis, Panias ("in which is Caesarea with the aforesaid spring"), Abila, etc. Inasmuch as this Abila is mentioned in

connection with Trachonitis and Panias-Caesarea, both located in the north of the Palestine area near the Sea of Galilee, it is likely that the Abila referred to is the Abila near Gadara and Capitolias and not the Abila located farther south in Peraea near Livias. Pliny then goes on to suggest (*N.H.*, 5,74) that not all writers have the same cities on their list under the term, Decapolis. Evidence of this is seen in the list given in the second century A.D. by the geographer Ptolemy (*Geography*, 5,14,22) who, while omitting Raphana which was given by Pliny, includes the other nine listed by the latter and adds nine more of his own, as follows: Heliopolis (presumably Baalbek), Abila (Quailibah), Saana (Sanamyn), Ina, Abila of Lysanias, Capitolias (Beit Ras), Adra (Edrei, Der'a), Gadara and Samoullis. This makes a total of nineteen cities, but if Raphana is the same as Capitolias, as some have argued,<sup>1</sup> then there are at least eighteen cities to be included as part of the Decapolis.

In the light of the above listings we posit that the Decapolis group of cities was located geographically east of the Jordan River and the Sea of Galilee (except for Nysa-Scythopolis) in Transjordan and ancient Syria.

As for "Abila of the Decapolis," reference to it has been made by the ancient written sources and records. Evidence that it is to be connected with the Decapolis is seen in the inscription found in Tayibeh, located northeast of Palmyra dated to A.D. 133/134 which mentions an Ἀγαθὰν γέλως Ἀβιλληνῶς τῆς Δεκάπολεως ("Good Messenger or Well Heralded Abila of the Decapolis"),<sup>2</sup> and the reference to it by the second century A.D. geographer Ptolemy (*Geography*,<sup>5</sup>, 14)<sup>3</sup> who lists it separately from Abila of Lysanias to the north near Damascus, and by Hierokles (sixth century A.D.; *Synekdemos*, 720-721), the latter of whom lists it as a part of Provincia Secunda in connection with Scythopolis, Sella

1. Emil Schürer, *A History of the Jewish People in the Time of Jesus Christ*, div. 2, part 1 (London: Hodder and Stoughton, 1894), p. 106.

2. W.H. Waddington, *Inscriptions Grecques et Latines*, III, 1870, 609: No. 2631; Augustus Spi-

jkerman, *The Coins of the Decapolis and Provincia Arabia*, ed., with historical and geographical introductions by Michele Piccirillo, (Jerusalem: Franciscan Press, 1978), p. 31.

3. Spijkerman, *The Coins of the Decapolis.....*, p. 31.

(Pella), Gadara and Capitolias.<sup>4</sup> Further, that it fits the location of our Abila at Quailibah is evidenced, according to Ritter (*Erdkunde*, XV, p. 1060), by Jerome's identification of an Abila 12 Roman miles from Gadara.<sup>5</sup> Also, according to Burckhardt (1812) in his *Travels in Palestine* (Vol. 1, p. 537, Note to p. 425) Eusebius, too, links the name 'Abel (Abel) to the city and locates it twelve miles east of Gadara,<sup>6</sup> which is in the vicinity of our site. In more modern times Seetzen in 1806 rediscovered Abila,<sup>7</sup> the site located at modern Quailibah, about thirteen kilometres north-northeast of the city of Irbid, in north Jordan. Eighty years later Schumacher briefly visited Abila, described its ruins and drew a map of the site, all of which he published in 1889.<sup>8</sup> Aside from the 1959 excavation of the chamber and shaft tombs by the Department of Antiquities of Jordan, in an area isolated some 500 metres northeast of the Abila ruins,<sup>9</sup> no work has been done at the site until our 1980 survey.

Abila became a Decapolis city (Figure 3) somewhere between the time of Alexander's conquests and the zenith of Seleucid power (c. 198 B.C.). Polybius (second century B.C. historian; *Historiae* V. 69-70) describes how Antiochus III, the Seleucid king, conquered (c. 218 B.C.), among other cities, Abila, Pella, and Gadara; and, Josephus (*Antiquities* XII 3, 3, 135, 136) tells us, citing Polybius (*Historiae*

XVI, 39, 1, 3), that Antiochus captured Batanaea and Samaria as well as Abila.<sup>10</sup> Later, in the beginning of the first century B.C., Abila was conquered by Alexander Jannaeus.<sup>11</sup> Besides Ptolemy's (*Geography* 5, 14) second century A.D. reference to Abila, there is further note of it in the Byzantine period. As we have seen, Hierokles lists it, as does also Georgios Cyprios (*Descriptio Orbis Romani*, 1028 - 1042; c. A.D. 575). Supportive of this Byzantine written record is the strong Byzantine ceramic evidence from the 1980 survey.

In the seventh century A.D. the Umayyads gained power in Palestine and Syria, and, among other victories, they conquered the Byzantine army at the Battle of the Yarmouk in A.D. 637/16 under the Arab generals Abu 'Ubayda and Khalid b. al-Walid. This was during the reign of Caliph 'Umar b. al-Khattab. M.A. Shaban comments about the battle: "The Arabs won a decisive victory which induced the Byzantines to relinquish Syria altogether."<sup>12</sup> The ceramics from the 1980 Survey at Abila bear testimony to the strong Umayyad influence at the site.

The 1980 Survey's ceramic evidence for the Abbasid period (A.D. 750-969) at Abila is minimal; yet the writer Ibn Khurdadhbeh (*Kitab al Masalik wa' l-Mamalik*, 78 middle ninth century A.D.) lists Abil (Abila) as one of the districts of Jordan

4. *Le Synekdèmos de Hierokles et L Opuscule géographique de Georges de Chypre*, Texte, Introduction, Commentaire et Cartes par E. Honigmann, Corpus Bruxellense Historiae Byzantinae, Forma Imperii Byzantini Fasciculus (Bruxelles, 1939), pp. 42, 43; Spijkerman, *The Coins of the Decapolis*, p. 42.

5. Gottlieb Schumacher, *Abila of the Decapolis*, (London: Palestine Exploration Fund, 1889), p. 45.

6. Schumacher, *Abila of the Decapolis*, (London: Palestine Exploration Fund, 1889), p. 45.

7. U.J. Seetzen, *Travels in Syria, Palestine, etc.*, Vol. I, p. 372; Schumacher, *Abila of the Decapolis*, pp. 21, 22, 45, 46.

8. Schumacher, *Abila of the Decapolis*.

9. "Recent Archaeological Discoveries in Jordan,"

ADAJ, vols. IV, V (1960), pp. 115, 116, plates V, VI, *Revue Biblique*, April, 1960, p. 229.

10. Schumacher, *Abila of the Decapolis*, p. 45. See Polybius of Megalopolis of Arcadia, born about 208 B.C., who testifies to this. For he says in the 16th book of his Histories... "When Scopas was conquered by Antiochus, that king occupied Samaria, Abila, and Gadara, and after a short time those Jews who inhabited the holy place called Jerusalem, surrendered to him."

11. Georgios Synkellos, *Chronographia*, ed. L. Dindorfius (Parisii, 1829), 294 D-295 A.

12. M.A. Shaban, *Islamic History*, A.D. 600-750 (A.H. 132), *A New Interpretation* (Cambridge: At the United Press, 1971), p. 31; see also M.A. Rauf, *A Brief History of Islam* (Kuala Lumpur: Oxford University Press, 1964), pp. 24, 25.

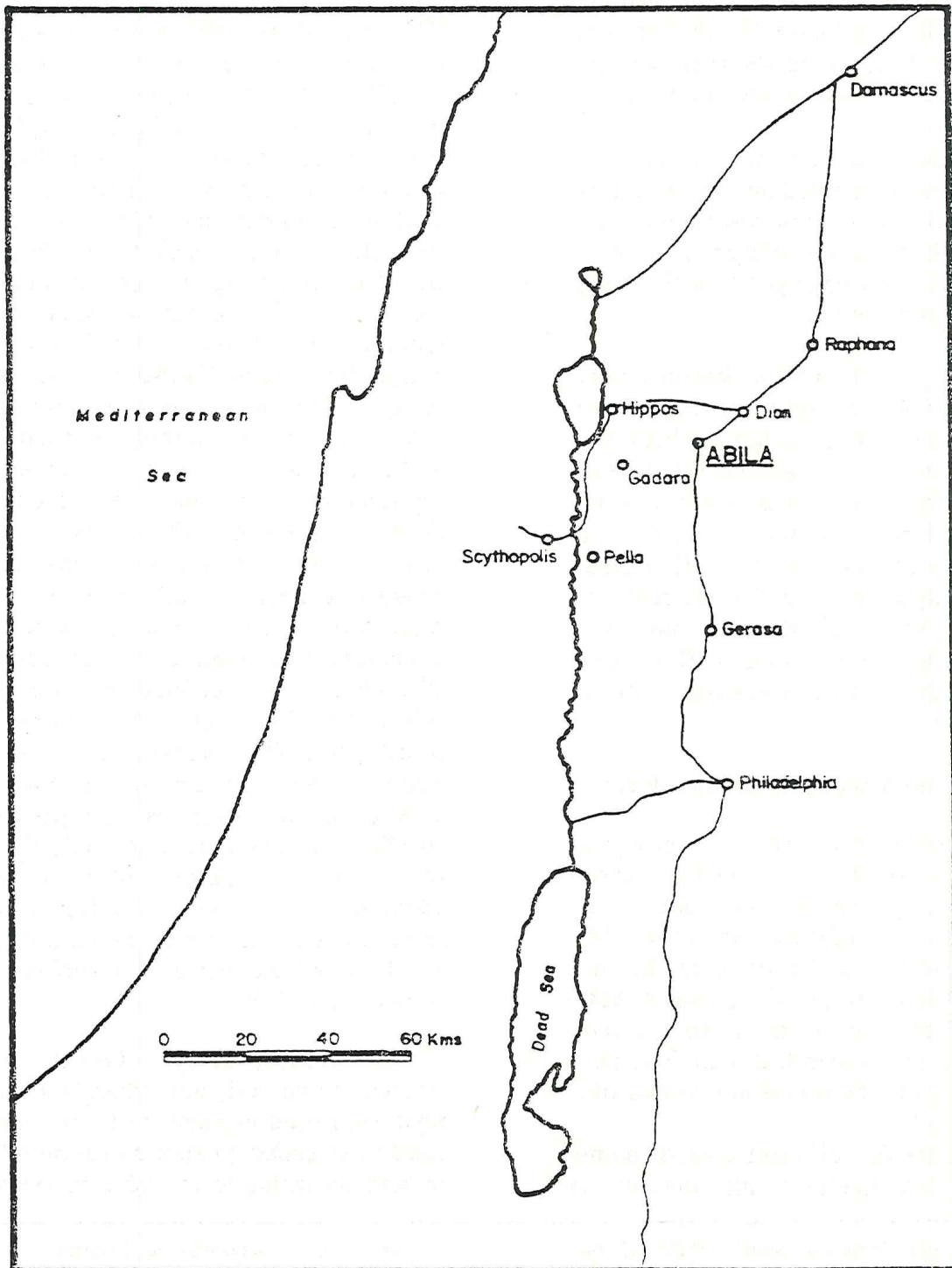


Figure 3. The location of Abila within the Decapolis. Major roads connecting the various cities are indicated as proposed by Farmer (1975)

along with Fihl (Pella), Jarash, Bayt Ras (Capitolias) and others.<sup>13</sup> In more modern times also Abila is depicted on maps, such as the map by Bourguignon d'Anville in 1732 and d'Anville's *Atlas Antiquus* of 1784.<sup>14</sup>

The territory governed by ancient Abila is not mentioned by any ancient source, but Jones suggests that through inscriptions we can gather that it was extensive. He says:

Abila adopted the Pompeian era... (it) seems to have ruled an extensive territory; we know from inscriptions that two villages about fifteen miles east by north of it belonged to a city using the Pompeian era.<sup>15</sup>

Geographically we can surmise what the extent of Abila's influence might have been. On the north it would have been the Yarmouk, and on the east the Wadi Shalalah or some other nearby wadi. On the west its governance would no doubt have stopped somewhere east of el Khureibe, where the city aqueduct of Gadara began,<sup>16</sup> and on the south its influence may have included Capitolias (modern Beit Ras) which finally became a separate city in A.D. 97-98.<sup>17</sup>

### Surveying Methodology and Procedures

In order to uncover the archaeological history of Abila, the 1980 Survey developed a systematic procedure for the accurate recovery of the ceramic and other cultural materials to be found on the site.

The initial survey of the site of Abila was conducted in order to collect data relevant to the research design. The purpose of the first field season was twofold:

1. To provide sufficient control points and architectural information to

facilitate future intensive surveys and excavations; and,

2. The investigation of basic questions concerning the size, age, and complexity of Abila.

The original research design called for a program of stratified, systematic, unaligned sampling cells which would measure 30 by 30 meters; this would have provided an eleven percent sample of the site. The project director and architect-surveyor conducted a reconnaissance of the site early in the field season and decided that the logistics of implementing the proposed sampling technique would be very difficult. A systematic transect survey (Redman 1974; Judge, Ebert, and Hitchcock 1975: 100), using 20 meter wide transects, was deemed a more appropriate sampling technique due to the extent of the site, the amount of topographic relief, and the presence of thorny vegetation. The transects were oriented North-South and consisted of chains of connecting cells; each cell measured 20 by 20 meters. The cells were given alphanumeric designations, and the corners of each cell were defined by their UTM (Universal Transverse Mercator) grid coordinates. The interaxial distance between adjacent transects was 100 meters. This technique resulted in a sample size of 16.8% (141 cells were systematically surveyed out of a potential of 837). Seven additional cells, arbitrarily selected, were surveyed near the end of the field season, which raised the percent of surface area surveyed to 17.6%

A transit (Teledyne Gurley Model 100A), stadia rod, and fiberglass metric tape were used to measure from a nearby road intersection (a spot elevation of 438 meters according to the Irbid topographic

13. Cf. Robert Houston Smith, *Pella of the Decapolis* (Wooster, Ohio: College of Wooster, 1973), pp. 74, 75.

14. Smith, *Pella of the Decapolis*, pp. 80-82.

15. A. H.M. Jones, *The Cities of the Eastern Roman Provinces*, 2nd ed. (Oxford: Clarendon, 1971), p. 259. As a footnote to this quotation, he cites I.G.R. III, 1162, 1164 (*Inscriptiones Graecae ad*

*res Romanas pertinentes*, R. Cagnat).

16. Gottlieb Schmachter, *Northern Ajlun, "Within the Decapolis"* (London: Palestine Exploration Fund, 1890), p. 78, 79.

17. B.V. Head, *Historia Nummorum, A Manual of Greek Numismatics* (Oxford, 1911), p. 787; Ptolemaeus, *Geographia*, V, 14, 18; *Tabula Peutingeriana*; B. Hulin 80a.

map) to a point along the eastern edge of ancient Abila. The UTM grid coordinates of the ancient stone bridge in the Wadi Quailibah were obtained from the Irbid topographic map. The distance and bearing from the elevation point to the center of the stone bridge allowed for the establishment of a temporary datum point with a known elevation (395.63 meters above mean sea level at Aqaba) and specific UTM grid coordinates (3619786N, 769148E). The accuracy of this datum, and all other grid measurements at the site, are limited by the accuracy of the Irbid (1963) topographic map which is at a scale of 1:50,000.

The west edge of the first transect was arbitrarily chosen as 769150E and the east edge was 769170E. This allowed the first transect to be adjacent to the temporary datum point and through it the eastern edge of the city was effectively sampled. The first transect was designated as the Eastern Transect and was divided into North and South numbered cells along the 7619800N grid line. The subsequent transects (located west of the Eastern Transect) were laid at 100 meter intervals across the site, running north-south from the east to west. Thus the transects were identified as East, Central East, Central, and Central West, and divided north-south from a survey point near the center of the site east-west. So the transects were then fully identified as the North East transect (NE), South East transect (SE), North Central East transect (NCE), South Central East transect (SCE), North Central transect (NC), South Central transect (SC), North Central West transect (NCW), and South Central West transect (SCW). At one point two of the North transects (North Central East and North East) were connected with an East-West transect (EW). The UTM (Universal Transverse Mercator) grid coordinates were used to define the corners of each cell (Figure 4). Each of the four points of each transect was marked with a surveying flag/pin, and orange spray paint circles were also used for marking survey points on the ground. A bench mark was placed in a rock on Tell Abila at an ele-

vation of 431.90 meters. Elevations calculated from the transit readings were used to construct a topographic map which includes architectural features.

Each cell was surveyed by walking *all* of the surface within the cell, recording surface conditions (plants, soil, disturbances, architectural features, etc.), and then vacuuming the surface of sherds and other cultural remains from each and every one of these transect cells, allotting one man hour of work in each cell. Debris recovered from the cells included pottery sherds, roof tiles, glass sherds, glass slag, coins, metal artifacts, pieces of worked stone, unmodified pieces of imported stone, percussion-pressure flaked flint tools, flint debitage, tesserae, fragments of a single piece of sculpture and pieces of bone. On an average, six to eight cells were sherded each day for a season's total of 148 cells. A total of 33,432 sherds were collected during the season, meaning 1,500 to 2,000 sherds were gathered each day.<sup>18</sup>

Contour mapping was integrated with the process of "laying out" the transects. Important architectural features were referenced in the surveyor's notes, and a select number of ancient structures were carefully planned, stone-by-stone. In order to include in the artifactual analysis materials within certain structures which lay outside the established transects, special surface collections were made: cultural materials were collected from two cells (denominated PBEW, Public Building East-West) within the architectural boundaries of the so-called Public Building, and from one cell (denominated AB, Abila Basilica), from the eastern portion of what seems to be a basilica. Material was also collected from four cells in an East-West transect along the eastern slope of Tell Abila, near the top of that northern tell.

#### *Artifact Identification*

All artifacts from each sampled cell were collected in the field into bags which had been properly tagged. Information on

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18. Mr. Erik Harrell, of Amman, gave assistance in the sherding on the site.

# ANCIENT ABILA

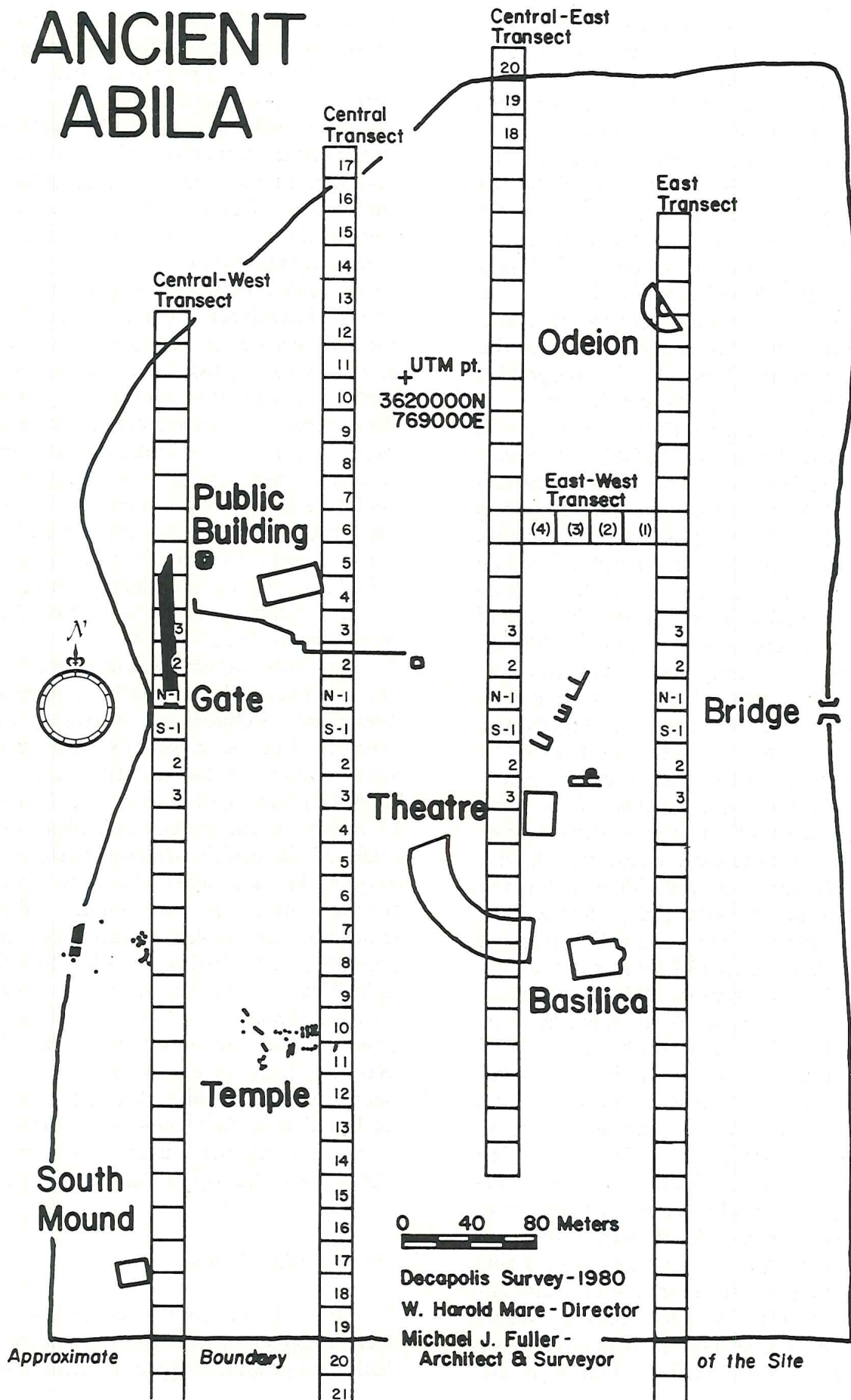


Figure 4. Transect Map



the tags for each bag of sherds included the following:

Project	D (Decapolis)
Year	'80 (1980)
Site identification	A (Abila) T (Adjoining Transects, plus compass bearing and distance numbers)
Individual numbers	1:1, etc. (Individual cell and bag numbers)

This and other pertinent information were recorded in the field on registration sheets and in the Pottery Record Book provided. Eventually after artifacts from each cell,

other than sherds, were separated out, they were tagged and identified with the following information:

Project	D (Decapolis)
Year	'80 (1980)
Site identification	A (Abila) T (Adjoining Transects, plus compass bearing and distance numbers)
Individual numbers	0-1 (Individual object cell number) 0-2, etc.

As the above information was required for the pottery bag tags, the survey field registration sheets included space for the pottery bag tag information noted above and for additional data (if available), as follows: Project name (Decapolis), season (1980), site (Abila), cell identification, geographical location (UTM), architectural feature number, pottery bag numbers, object numbers, recorder and other workers and date. Additional items included: site names, site size, type of site, kinds of structures, water installations, terrain, condition of ground and type of soil, sketch of each cell with identifying features, comments on environmental aspects, erosion, any man-caused destruction and changes, site significance, other description, and interpretation. On a separate second field sheet was recorded information on the associated pottery (by archaeological periods), objects, ecofacts (bone, charcoal, uncharred wood, shell, seeds, etc.), numis-

atics and seals, and photographs.

Members of the staff were expected to keep individual notebooks for recording pertinent information and items needing further investigation.

#### *Photographic Recording Procedures*

A special photographic recording form was prepared and included in the field registration sheets for the photographer's use. For each photograph of a phenomenon or object in the field, the photographer assigned a photo number. These numbers ran in a series beginning with the first photograph taken in the season and continuing until the last photograph was completed in the processing of the field work.

For each photograph taken in the field, data was recorded in the photographer's individual field notebook and then later transferred to the form in the field regist-

Photographs chart

Project	Year	Date	Site	Cell	Supervisor	Time	View	Camera	Lens

Speed		Flash	Distance	Kind of Film		Photographer	Subject
				Color	B/W		

ration sheets which included space for the following information:

**Ceramic Methodology, Procedures and Analysis**

The sherds and other material cultural remains were brought each day to camp where they were divided into general categories, i.e., glass, tesserae, pottery, stone, etc. The majority of the material culture remains were pottery sherds spanning the Early Bronze I period through the Modern period (ca. 3300 B.C. to the present).<sup>19</sup>

All pottery was carefully washed and examined prior to the daily pottery field reading. Because of the number of sherds and the fact that there was no sorting of pottery on the site, it was necessary to do an initial sorting of the sherds prior to the reading.<sup>20</sup> The initial sorting consisted of

dividing indicator sherds from non-indicator sherds. The standard definition of indicator sherds was utilized as follows: an indicator sherd is one which has a distinguishing feature(s), such as rim, handle, base fragment, decorated feature, and/or any unusual form which would distinguish it from a body sherd. Thus are included all "problem pieces" which may provide clues to special forms or unique styles and which are therefore of more importance than simple body sherds. It is from these "indicator sherds" that a representative number were saved for registration and drawing. As a consequence, the Abila sherds saved for registration consisted of handles, rims, bases, other distinctive parts of vessels (e.g., carination) and sherds with decoration or designs on them and, in some cases, body sherds. The Registered Pottery List, which is on file in the Survey director's

19. The typologist wishes to thank Dr. James Sauer, American Center of Oriental Research, Amman, for his expertise and support during the summer.

20. The possibility of missing indicator sherds at the time of the reading would have been too high because of time pressures had an initial sorting

not been done. The initial sorting and subsequent frequency counts also gave the typologist the opportunity to examine every sherd for uniqueness and, for example, the possibility of an ostracon. Ms. Anne Undeland assisted the typologist throughout the season with frequency counts and the basic typological division of the sherds.

office and also in the office of the Director of Antiquities of Jordan in Amman, gives the field identification of the registered sherds. In order to have a representative sample of the sherds collected from each cell, body sherds were registered where no indicator sherds were available.<sup>21</sup> Following the soaking and scrubbing process, the sherds were examined for initial sorting and then dated as to their archaeological periods at the daily pottery field reading.

From the 148 cells, 33,432 sherds were collected. Of these sherds, 2,958 or 8.85% were registered. All of these registered sherds, with the permission of the Department of Antiquities of Jordan, were brought back in August to the United States for further study, drawing, and publication.<sup>22</sup> The remainder of the sherds are being stored at the Prebyterian Anoor Hospital in Mafraq, Jordan. These latter non-registered sherds were stored in order to have them available for further interpretive study and comparison with other sherds found in future surveying at the site, for possible chemical analysis to check on any questionable dating, and for study collections for teaching purposes. No inscriptions were discovered during the survey, but two coins were found, as were also several parts of objects (as part of a bracelet, etc.), glass pieces and worked stone.<sup>23</sup>

Through the field analysis of the sherds collected, a preliminary understanding of the occupational history of Abila was reached. The site was inhabited or occupied in the Early Bronze, Iron I and II, Roman, Byzantine, and Umayyad periods; occasionally there were found sherds representing the Middle Bronze, Late Bronze, Hellenistic, Abbasid, Fatimid, Ottoman Turkish, and Modern periods. Specifically, it is to be noted that the large majority of the sherds collected,

some 32,028, belong to the Byzantine and Umayyad periods.<sup>24</sup>

The large number of Byzantine/Umayyad sherds can be accounted for by the fact that the decision was made to place all body sherds and most indicators of the following two types of vessels into the this category:

1. Bag Jars identified as Late Byzantine and/or Umayyad.<sup>25</sup> The jars have two handles, range in color from black to orange/red, are often painted with white paint, and are of a coarse ware with small inclusions.
2. Jars identified as Late Byzantine and/or Umayyad that are of a well-leveled composition with few inclusions and that range in color from pink to white. The Umayyad examples of this vessel have a folded rim; however, the change in the rim form is not clearly known presently.

Only 2.17%, or 726 sherds, are representative of the Roman and pre-Roman periods of occupation. Of these sherds sixty-five were identified as Roman/Byzantine (.194% of the total number of sherds); 267 were identified as Early Roman, Late Roman or Roman (.799% of the total); fourteen sherds were identified as Hellenistic; 232 as Iron II sherds (twenty-four of which were Iron IIA) or .69% of the total; and only three sherds were identified as Iron I(C), possibly, with 97 sherds falling into the general Iron category (.29%). Those periods earlier than Iron are not well represented. Except for the general designation of Early Bronze, in which twenty-three sherds were placed, or .069% of the total, there are few sherds before the Iron II period. This number of Early Bronze sherds cannot,

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21. Partial indicators were not registered where other examples were available.

22. The continued study of the sherds will consist of finding published parallels, identifying unique sherds, and chemical analysis of the clay.

23. The few objects found and the two coins are described on page 13. There were found an inscription and a Late Byzantine pottery lamp in a painted tomb a distance north of the Abila

ruins, but these were discovered on a random reconnaissance on a day subsequent to the end of the survey's official field work. These will be noted in our records, but not counted as a part of the 1980 survey.

24. It should be noted that only general comments, tentative in nature, are being made at this point.

25. Smith, *Pella of the Decapolis*, Plates 31, 45, 85.

however, really be considered significant in comparison to the high percentage of sherds coming from the Byzantine through the Umayyad periods.<sup>26</sup> In contrast to the pre-Byzantine periods, considerably fewer sherds, namely twenty-six, come from the Abbasid through the Modern periods, a negligible .078% of the total number of sherds. The 652 undifferentiated sherds represent 1.95% of the total number of sherds. After further study, it may be possible to place some of the questionable sherds within specific periods.

In preliminary observation and interpretation, it is to be noted that:

1. Three rims were found at Abila of the "bag jar" or bag amphorae type that are reported on by John Riley and referred to as "Gaza" jars.<sup>27</sup> The author is aware of this type of bag jar with clay seemingly slapped against the neck and the rim, a jar coming from the site of Caesarea Maritima and found frequently in all of the fields excavated by the Joint Expedition there. The examples found in the Abila survey were "dusty brown" in color and better levigated than those mentioned above.
2. Approximately twenty rims of the "Galilean bowl" type were gathered at Abila in 1980. The rims vary in color and thickness.
3. A number of cookpot rims were identified that were clearly Byzantine in ware and resembled variations of Late Roman forms.
4. Approximately thirty sherds were identified and assigned to particular periods based on their resemblance to published sherds (i.e., published by J. Sauer or R. Amiran); however, these

sherds are not totally consistent with these published materials.

5. Of the fourteen Hellenistic sherds, two should be noted here: (a) a well-preserved amphora fragment; and (b) and rim fragment from a late Hellenistic molded bowl with a heart pattern and brown slip.<sup>28</sup>
6. Two examples of late Byzantine "Jarash" ware were found.
7. Unexpectedly, a large number of Late Roman fineware sherds were found during the survey. Preliminarily, it can be said that the indicators seem mostly to be Cypriot Red Slip forms and LRC forms, according to J. Hayes' designations.<sup>29</sup>

#### *Preliminary Comments on Pottery Distribution*

As to distribution, this season's survey showed that the northern transects, NE, NCE, NC, and NCW, have a larger number of pre-Byzantine sherds than were found in the southern transects, whereas the sherds of the Byzantine through the Umayyad periods have a relatively similar distribution throughout the transects, both North and South. The North Central East transect demonstrated the highest concentration of sherds; this transect is the one proceeding north from the central saddle up over the crest and eastern edge and slope of Tell Abila.

It would appear that no clear concentration of sherds has been found to indicate an isolated area of occupation. One can conclude that the surveyed portion of the site was heavily occupied during the Byzantine through Umayyad periods and that there is at least minimal evidence for occupation during the Roman, Hellenistic,

26. One must also keep in mind that it is often difficult to identify sherds specifically from surface sharding because of weathering. It should be noted, however, that the lack of Roman and Hellenistic sherds, pre-Byzantine sherds in general, may only be a result of where the expedition surveyed. The information from the 1980 season will have to be compared carefully with evidence from future survey and excavation seasons in order to make more definitive statements about occupational patterns in antiquity.

27. John A. Riley, "The Pottery from the First Session of Excavation in the Caesarea Hippodrome," *BASOR* 218, April, 1975, pp. 25-63; John Hayes aided in the analysis discussed in this article.

28. Frederick O. Waage, *Antioch on the Orontes*, Vol. IV, Part I: *Ceramics and Islamic Coins* (Princeton: Princeton University Press, 1948).

29. John W. Hayes, *Late Roman Fineware* (London: The British School at Rome, 1972). Fig. 9.

Iron II, and Early Bronze periods; however, the areas of concentration for these periods of occupation is not identifiable based on the ceramic frequencies.

### **Architectural Methodology and Procedure, and Analysis of the Architectural Remains Studied**

#### *The Scope of Architectural Studies at Ancient Abila*

Stone foundations of several large buildings and innumerable small structures are exposed on the surface of ancient Abila. The small structures probably reflect domestic structures (living rooms, storage rooms, animal pens, courtyard walls, etc.); these walls are generally interrupted by stone robbing and/or burial by later occupation. Architectural studies conducted during the summer of 1980 concentrated on the larger buildings and three tombs.

Three of the large buildings, which were planned, measured and drawn stone by stone, will be discussed in this article: the Public Building, the Basilica, and the Temple. The architectural plans and descriptions are still being perfected for the Odeion, Theatre, Temple, Cistern, West Bridge or Gate, and Painted Tomb. To begin with, we will briefly discuss the theater.

#### *The Theater*

Although in depth-work was not done at the Theater, enough survey work was accomplished to determine the approximate dimensions of the structure (Figure 5).

The cavea of the Theater located on the north edge of Khirbet Umm El 'Amad, the south tell, and opening out to the north-east, shows a structure considerable in size, measuring in diameter across the seating area a distance of about 80 m. At the time of his visit in 1888 Schumacher observed that there were still a few theater seats visible. He states:

The configuration of the slope (of the Theater) was made use of to form the

amphitheater; the seats - of which but few remained - were placed on a masoned foundation, for the reception of which the soft rock had been prepared. No ornament or cornices of any kind in this interesting monument were sufficiently preserved to be sketched for the crumbling of the limestone soon destroys all traces of tool work. I found the diameter of this theater to be 240 feet, measured at its widest part; the rows of seats faced north-east.<sup>30</sup>

#### *The Public Building*

The Public Building, so-called for its large rectangular size and want of particular features which would identify it more specifically (Figure 6), is a rectangular shaped structure which measures 34.5 by 19.0 meters; it is located on the summit of Tell Abila. The axis of the building is oriented North 82° East; the UTM grid coordinates for the building's corners are:

Northwest corner = 3619881N, 768923E  
Northeast corner = 3619887N, 768947E  
Southeast corner = 3619868N, 768950E  
Southwest corner = 3619863N, 768916E

The surface remains of this building were discovered while surveying the North-Central Transect. Schumacher (1889) neither described nor planned this building during his 1888 survey of Abila (Figure 7, Schumacher's plan of Abila). Some of the building stones project 20-30 cm. above the ground, but most of the stones are barely exposed. The foundation has been damaged in several locations by stone robbing.

The stones exposed above the ground consist of a lower course(s) of ashlar basalt and upper courses of roughly shaped limestone and basalt blocks. Five ashlar basalt blocks are exposed on the east side of the northern wall. They are all partially buried in the soil; their length and breadth average

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30. Schumacher, *Abila of the Decapolis*, p. 30.

# ANCIENT ABILA THEATRE

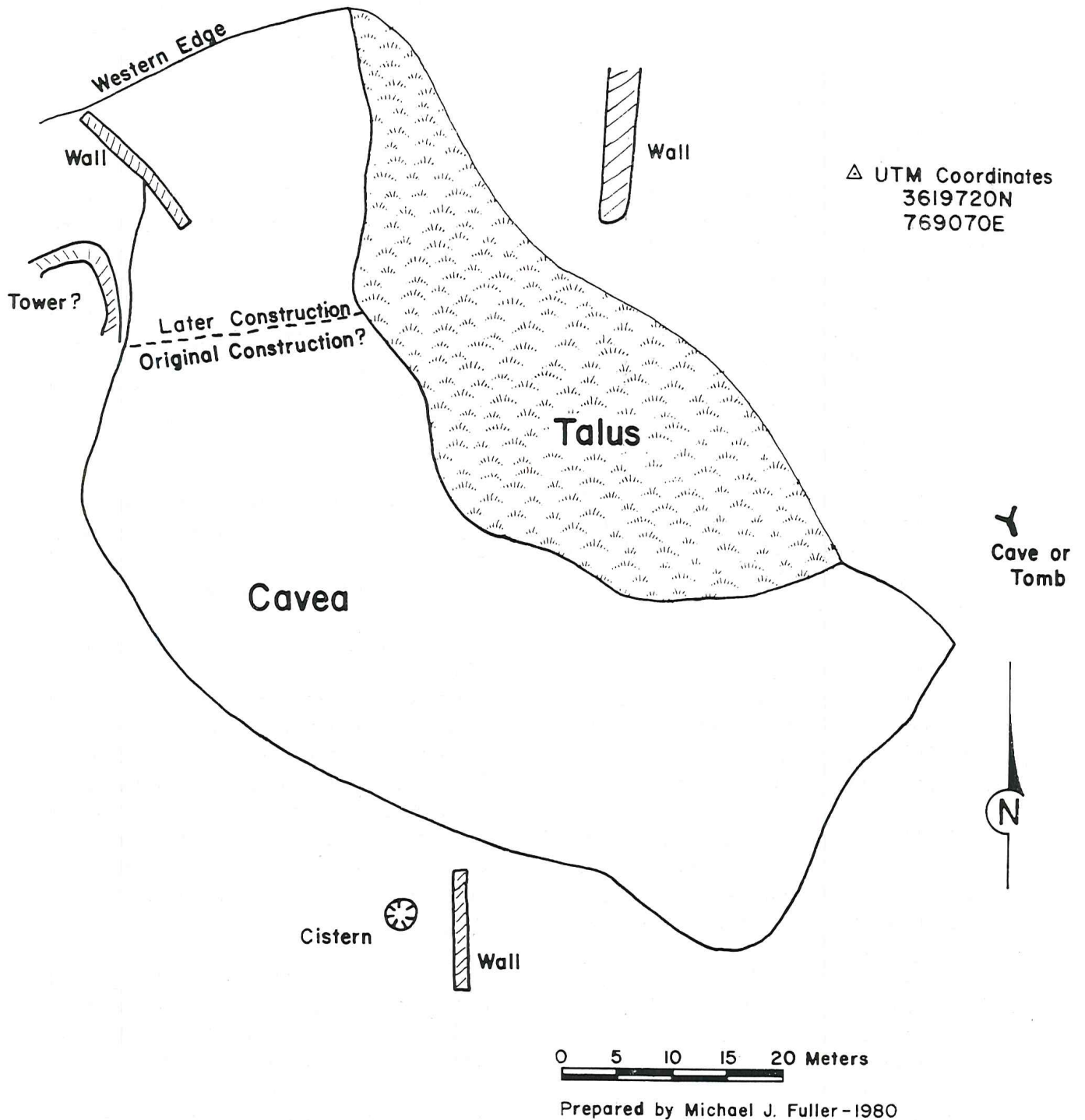


Figure 5.

ANCIENT ABILA  
PUBLIC BUILDING

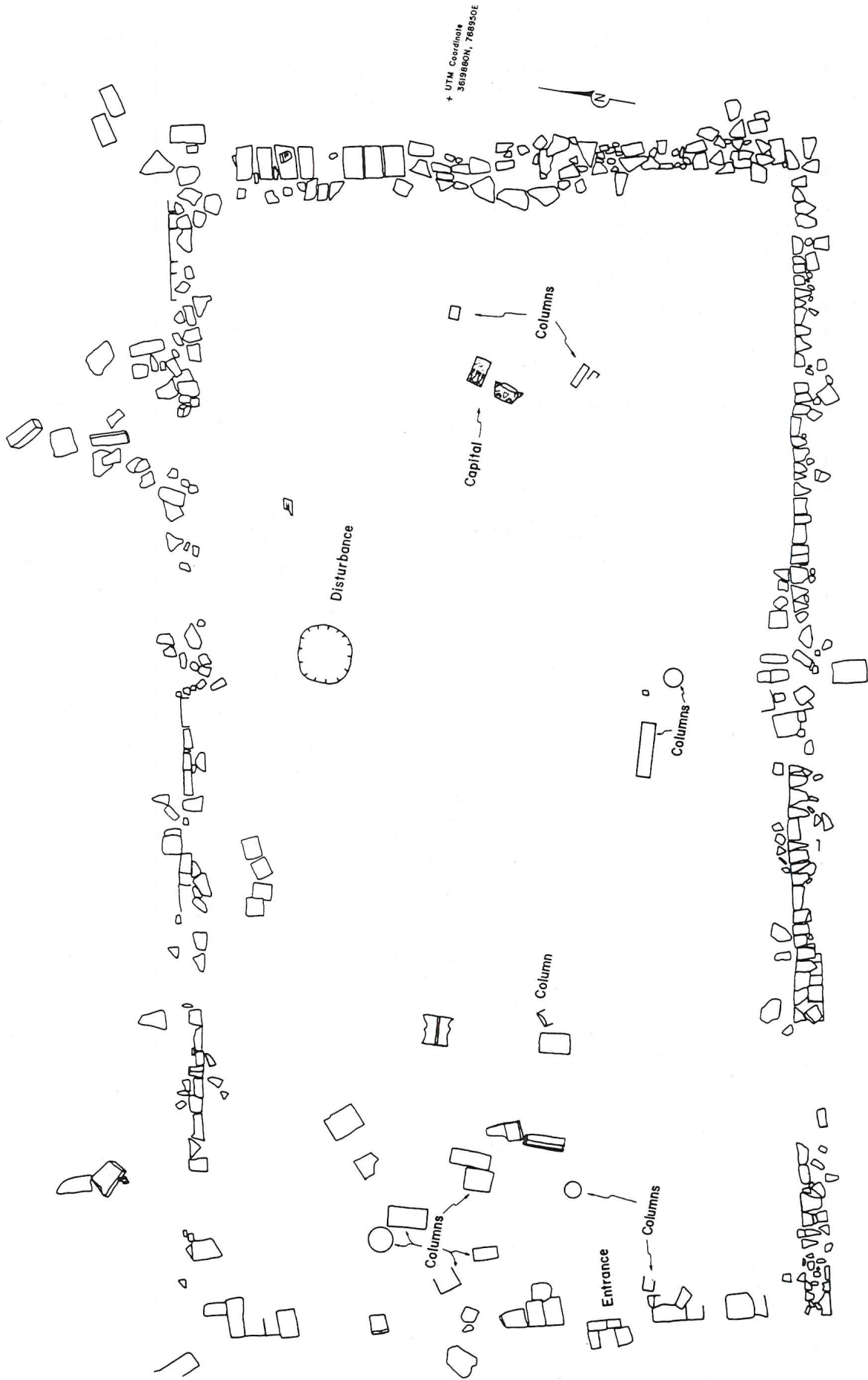


Figure 6.

95 by 50 cm. The ashlar blocks along the north wall show evidence of careful cutting and masonry; roughly shaped ashlar blocks are located along the east and west walls. They measure 95 by 60 cm. The stones resting upon the ashlar blocks are irregularly shaped and usually have only one trimmed face. They rarely exceed 60 cm. in length of breadth. Average wall thickness for the building is 80 cm.

Evidence suggests that one entrance to the so-called Public Building may have been on the west side of the structure, where two basalt stones were found,

perhaps door jambs. Near the west wall of the building are situated three basalt column drums, several ashlar basalt blocks and fragments of sculptured molding. Other basalt and limestone column drums are to be seen in the central and eastern sectors of the building, as well as a Corinthian capital, constructed as two drums and decorated with acanthus leaves.

### The Basilica

A rectangular structure (Figure 8), located immediately east of the Theater,

PALESTINE EXPLORATION FUND

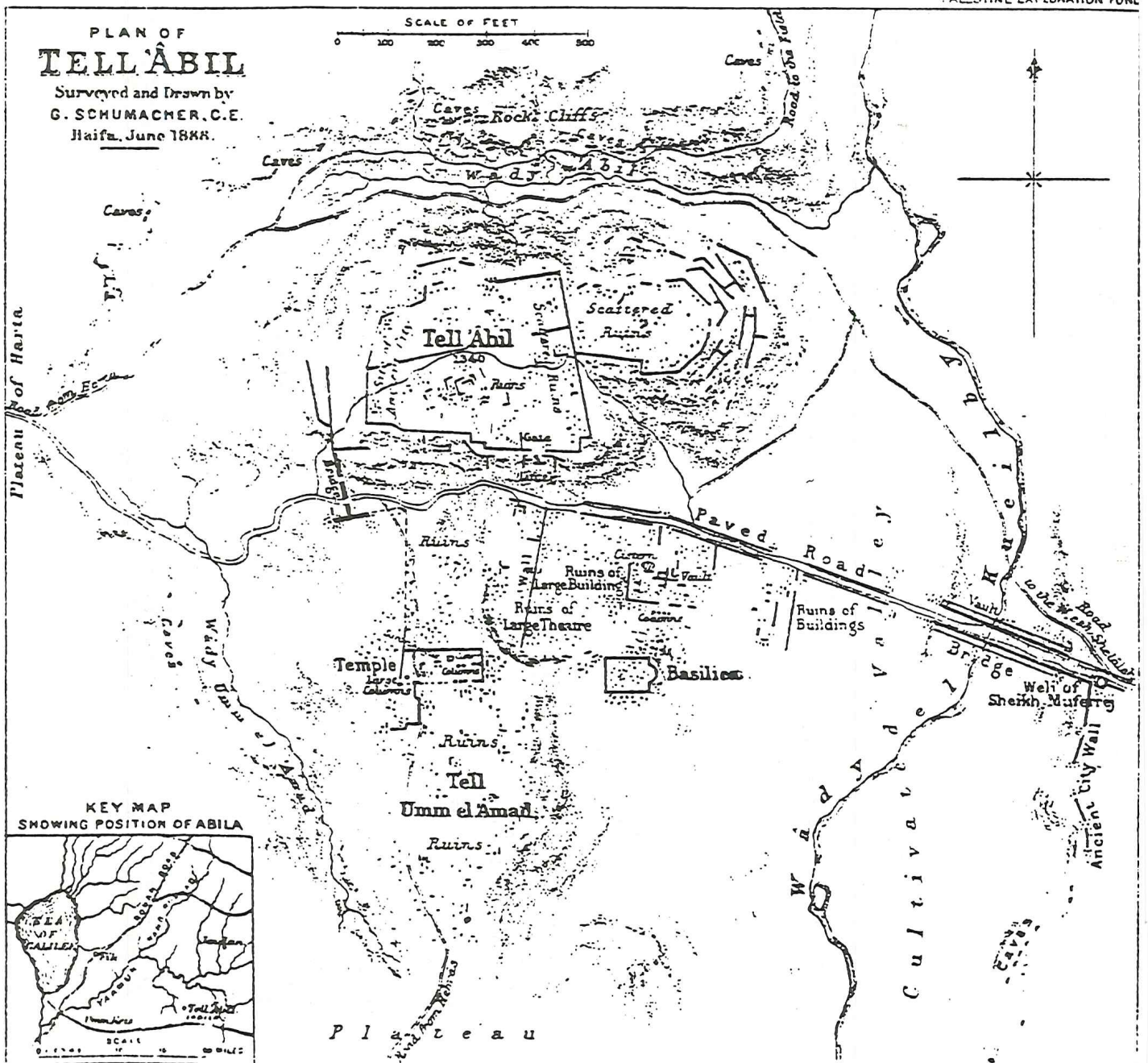


Figure 7.



ANCIENT ABILA  
BASILICA



Figure 8.

was discovered and described as a basilica by Gottlieb Schumacher<sup>31</sup> during his brief survey of the site in 1888. He described the building as one large chamber with an apse projecting from the east wall. He measured the large chamber and reported it to be 81 ft. (24.7 m) by 62 ft. (18.9 m.); the radius of the apse was reported as 16 ft. 1 inch (4.9 m.) and the main axis of the building was reported as North 89° East. Schumacher states that the building was built of carefully hewn limestone and lacked any columns or other forms of ornamentation.

The UTM grid coordinates for the corners of the Basilica are:

Northwest corner = 3619662N, 769097E  
Northeast corner = 3619663N, 769127E  
Southeast corner = 3619644N, 769130E  
Southwest corner = 3619640N, 769102E

In the stone-by-stone mapping of the Basilica, it was discovered that the building is a far more complex structure than indicated by Schumacher's description and plan. The building consists of a central large chamber, an apse, what appears to be a narthex along the west side of the central chamber, and an attached storeroom or small chapel along the north side of the central chamber. Over 99% of the building stone consists of limestone.

The large chamber of the Basilica measures 24.5 by 18.7 meters, and the radius of the apse is 4.85 meters; these measurements, taken during the summer of 1980, vary from Schumacher's measurements by only a few centimeters. The orientation of the building's axis is North 82° East. The difference in orientation (Schumacher's measurements vs. those of the 1980 Survey) probably relates to the greater precision of the Teledyne transit and the fact that the 1980 Survey corrected for the magnetic declination. The "Public Building" and the Basilica have identical orientations. This may be part of a city-wide urban plan; the orientation of the colonnade of the Temple is North 81° East (a difference of only one degree from the

Public Building and the Basilica).

Two basalt blocks were identified during the stone-by-stone mapping of the Basilica. These were located along the west wall of the central chamber; they appear to be fragments of an exterior facade - possibly part of the entryway between the narthex and the central chamber. The narthex extends 4.5 meters to the west of the outer wall of the central chamber, and extends 4.5 meters north of the outer wall of the central chamber. Millingen<sup>32</sup> noted that the addition of a narthex was a favorite method of increasing the size of Byzantine churches in Constantinople. A partially buried limestone column drum with diameter of ca. 60 cm. was discovered along the west wall of the narthex. A second limestone column fragment, measuring 32 cm. in diameter, was discovered near the apse in the central chamber.

The exact nature of the room/chapel attached to the north side of the Basilica was difficult to define because only a few stones were exposed on the surface. This room appears to be 11.2 meters in length, but it may extend as far as 12.8 meters along the north wall of the central chamber. This attached structure measures 3.6 meters in width.

The Basilica was constructed from both ashlar blocks, and blocks of stone which had been dressed on only one surface. The south wall of the structure averages 80 cm. in width, while the east wall, exclusive of the apse, averages 95 cm. in thickness. The apse wall averages 140 cm. thick and was constructed with several blocks which range between 110-140 cm. in length, and average 40 cm. in width and thickness. The walls of the narthex and attached room range between 70 and 80 cm. in thickness, and include several ashlar blocks which are slightly smaller (70 by 25 cm.) than the ashlar blocks used in the central chamber and apse.

Schumacher reported that the interior of the Basilica "is filled with heaps of building material." The interior of the central chamber was remarkably clear of building material during the survey in 1980; the

31. Schumacher, *Abila of the Decapolis*, pp. 32-33.

32. Alexander Van Millingen, *Byzantine Churches*

chamber had been recently used as a tenting pad and animal pen by the local Bedouin. These activities may have deposited soil within the central chamber and resulted in the burial of the rubble mentioned by Schumacher. Such an explanation seems unlikely. An alternate explanation is that the interior of the central chamber has been cleared of the rubble. A nearby olive grove is enclosed by a 1.5 meter high wall of limestone blocks. Schumacher does not indicate this wall on his plan of Abila, so it may have been built after his visit and constructed in part of stones from the Basilica.

### *The Temple*

Gottlieb Schumacher spent a considerable amount of time surveying a building which he designated as a "Temple." He examined the fallen colonnade, some nearby walls, and a cistern. He concluded that the building measured 152 ft. (46.3 m.) by 65 ft. (19.8 m.) and was oriented North 86° East. Schumacher's site plan indicates that the Temple is situated approximately 120 ft. (36.6 m.) southwest of the Theatre.<sup>33</sup>

In the topographic mapping of the vicinity of the Theater, no traces of a structure were discovered at the location given by Schumacher. A fallen colonnade (Figure 9) was discovered approximately 110 meters southwest of the Theater. These columns have Corinthian capitals identical to the capitals illustrated by Schumacher. Furthermore, the orientation of the colonnade and a basalt sarcophagus correspond to Schumacher's plan. The discovery of a large cistern (Figure 10) nearby served as the final confirmation that the Decapolis Survey team had rediscovered the location of the Temple. The UTM coordinates for the center of the colonnade are 3619603N, 768931E.

Schumacher erred in his description of the Temple's location; he may have overestimated its size. The limits of the colonnade are very distinct, but it is not clear that the walls situated several meters east of

the colonnade are part of the Temple. A more reasonable estimation of the Temple size, based solely on the extent of the colonnade, is 36.5 meters by 20 meters with the long axis oriented North 81° East.

After an accurate location of the Temple structure and a defining of its dimensions, as noted above, the building fragments were then identified, measured, described, and analyzed as follows.

The ruins on the west side of the Temple consist of a set of large limestone columns with elaborate Corinthian capitals. These columns were composed of drums measuring up to 4.5 meters in length and 96 cm. in diameter. The diameter of the large drums ranges from 80 to 95 cm.; the drums had been held together with center pins. Motifs found on some of the capitals suggest that they may have manufactured during the Byzantine Period. The large columns on the west suggest that the entrance was oriented towards the west. Classical temples had their entrances oriented towards the east, while Christian churches had theirs on the west. It is possible that the Christian population at Abila in the Byzantine period modified the "Temple" into a church, a procedure that happened at other places in antiquity.

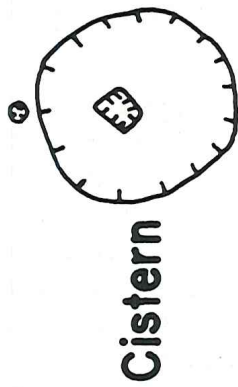
East of the large columns are two parallel rows of basalt and limestone columns. The arrangement of the drums suggest that there may have been an alternating pattern of basalt and limestone columns; spacing between the two parallel rows of columns is approximately 10 meters. The interaxial spacing between columns is approximately 2 meters. The diameter of the limestone and basalt columns ranges from 44 cm. to 62 cm.; the median diameter is 55 cm. and the mode is tied between 54 and 55 cm.

Two architectural features in the Temple are of particular interest. A marble column was discovered near the large limestone columns; the marble column has red veins and clearly represents an imported piece of stone. The temple also contains a column base manufactured from

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33. Schumacher, *Abila of the Decapolis*, pp. 24-30. in *Constantinople* (London: MacMillan, 1912), p. 12.

# ANCIENT ABILA TEMPLE



Basalt Sarcophagus



Basalt Drums

Red  
Marble

Large  
Limestone  
Columns

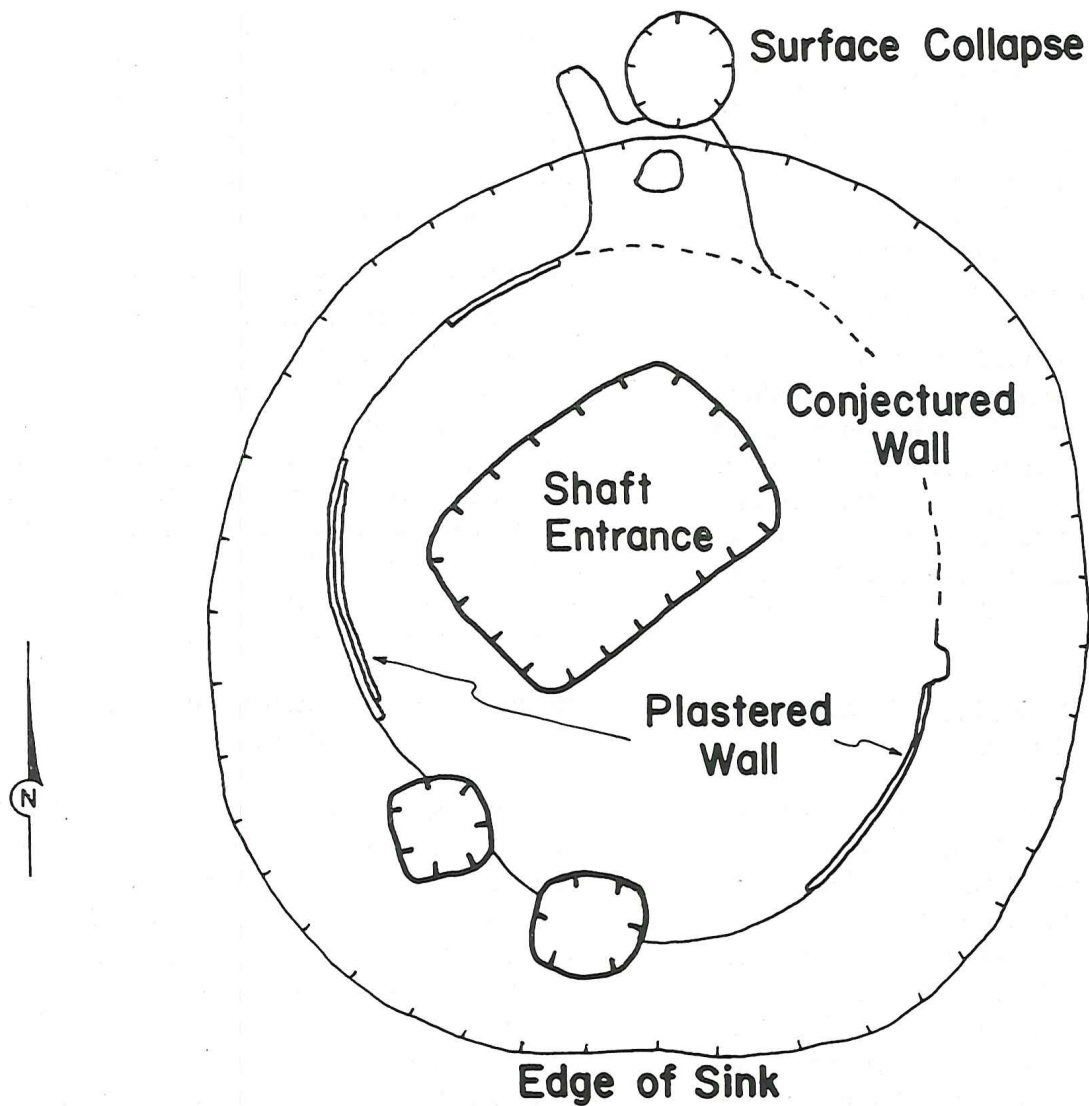


UTM pt.  
+ 3619600N  
768970E



Prepared by Michael J. Fuller - 1980

Figure 9.



# ANCIENT ABILA CISTERN

0 1 2 3 Meters

Prepared by Michael J. Fuller - 1980

Figure 10. Large cistern associated with the Temple at Ancient Abila. The cistern has been almost entirely filled with recent trash from the village of Harta.

calcareous conglomerate; the color and texture of the stone closely resembles the exposures of calcareous conglomerate in Wadi Quailibah.

### *The painted Tomb*

A few comments concerning the Painted Tomb, located about 500 meters northeast of the ancient ruins of Abila, are appropriate, considering two discoveries made in the lowest chamber. It was visited following the end of the 1980 field season by the architect-surveyor; he prepared a sketch-map (Figure 11) of the tomb. There are several fascinating features in the tomb, the most important of which is a shallow inscription (Figure 12). A Byzantine lamp (Figure 13) was discovered in a small room located to the right of the Greek inscription.<sup>34</sup> The painted Tomb is situated along the east wall of Wadi Quailibah near UTM grid coordinates 3620300N, 769400E.

### **The Geological Setting of Abila and Analysis of that Setting**

A preliminary investigation of the geological setting of Abila and its environs was conducted and the following observations were made.

The ruins of ancient Abila are situated within the Yarmuk Drainage in the Transjordan Plateau. The site lies approximately 5.3 kilometers south of the Yarmuk River in the Wadi Quailibah. The wadis in this portion of the Yarmuk Drainage have elongated watersheds with relatively incomplete dendritic drainage patterns; simulation studies identify this as the initial stages in the pattern of rapid growth occurring on a naturally sloping land surface.<sup>35</sup> Wadi Quailibah drains a watershed measuring approximately 12 kilometers in length; the watershed is approximately 3 kilometers wide at its headwaters, and narrows to 2 kilometers at its mouth. It is bounded on the east by Wadi

esh Shallalah, and on the west by Wadi Ballit Iya.

Geologically the region of Abila is composed of limestone bedrock capped with varying amounts of light colored soil as deep, at points, as three meters, and interspersed with limestone, chert, and basalt cobbles. The limestone is white to light gray in color. The chalky limestone blocks used in construction at Abila are of the same color and texture as the limestone beds that are to be observed along the eastern wall and wadi bed in Wadi Quailibah; it is to be presumed, therefore, that these blocks were quarried locally. Of the several varieties of stone and metal that were found at Abila clearly some were not from the locality. The 1980 survey produced no evidence of metallic ores, nor of marble. Marble that had been used at Abila consisted of the white crystalline variety and gray and red marble. A number of stone samples were taken back to the United States for further analysis.

### **Registration and Analysis of Pottery and Objects**

Following the reading of pottery sherds each day, the next task was to register in a systematic and meaningful way the indicator sherds to be saved. The registration process included an identification of the sherds saved by the day in which they were collected, together with the cell number on the tell from which the sherds came and the number of the bag from which they came. The sherds of each bag of a cell were numbered from number 1, consecutively, and were identified as to archaeological period and form (i.e., base, handle, rim, body sherd, etc). There were tabulated in this way approximately 8.85% of the sherds collected, or about 2,958 of the 33,432 sherds found.

The following pertinent information was inscribed on each sherd with India ink: A(bila), '80 (date), Transect (NE,etc.),

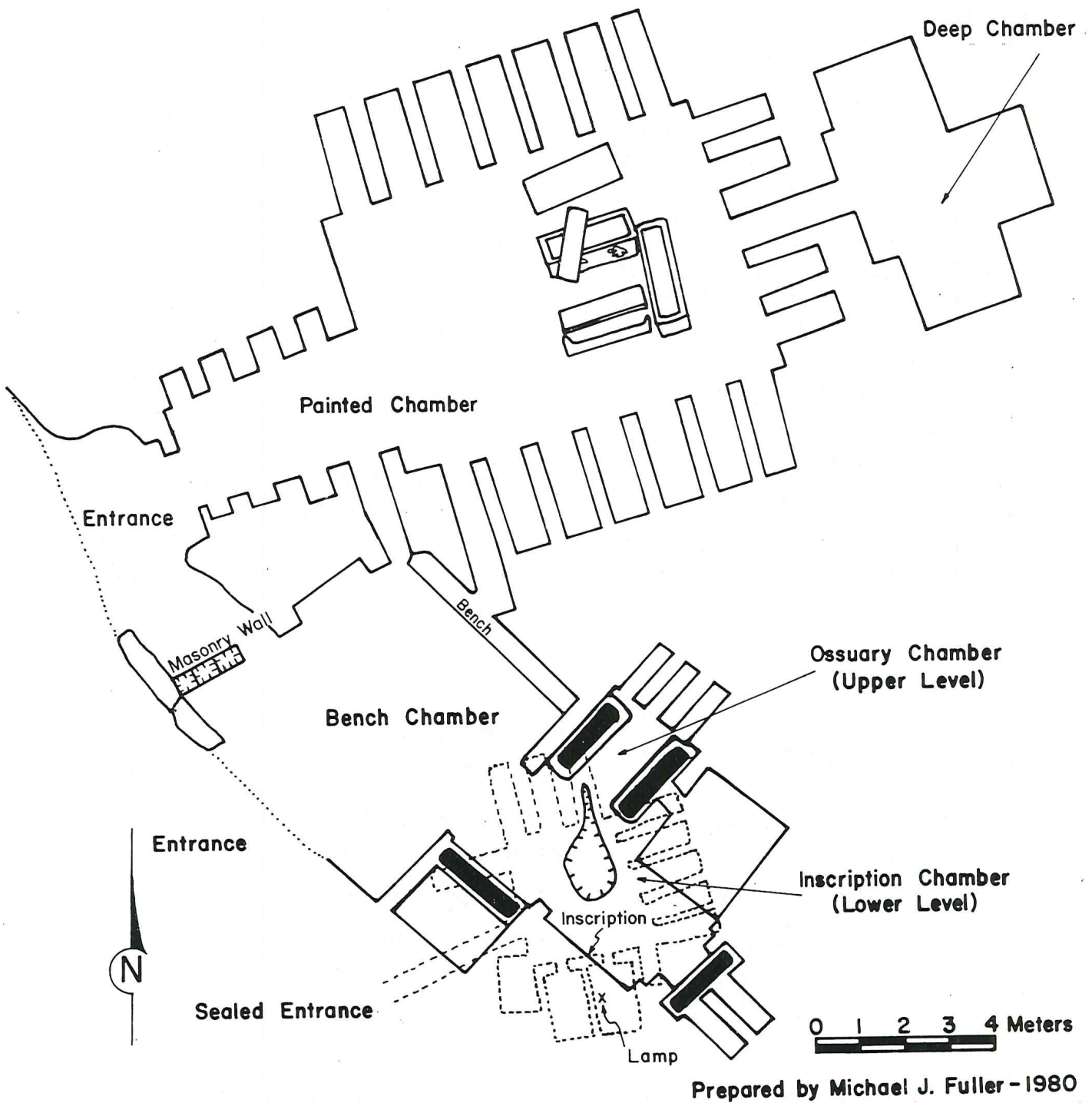
34. The above were found on a random reconnaissance after the official field season was completed. They are only briefly referred to here and will be considered an official part of the next

season's work.

35. Stanley A. Schumm, *The Fluvial System* New York: John Wiley & Sons, 1977), pp. 63-69.

# ANCIENT ABILA

## PAINTED TOMB



Prepared by Michael J. Fuller - 1980

Figure 11. Sketchmap of Painted Tomb in Wadi Quailibah.

Cell number (1, etc), Bag number (1, etc.), and individual sherd registry number (1,2, etc.). When the ink was dry, it was sealed with clear nail polish. All of this information and identification as to archaeological period (Umayyad, Byzantine, Roman, etc.), and form (i.e., base, handle, rim, body sherd, etc.), were recorded on the pottery registration sheets which included: the date sherded, cell number, bag number, registration number, dating (as to archaeological period) and form.

A few parts of objects found in this 1980 Survey at Abila were also registered in the same fashion as the pottery sherds and were given an artifact number. These objects only included a metal glob of lead (?), part of a nail, part of a copper bracelet, part of a door hinge (possibly), three small pieces of wall plaster, and two coins, which were sent to Dr. Abraham Terian, of Andrews University, the numismatist for the Abila Survey.

The two coins just referred to were carefully brushed and scrubbed and then treated with oil to help preserve the delicate metal. The inscriptions on the smaller of the two coins (identification number A. NCE11.1, N.1), measuring 1.4 centimeters in diameter and 0.2 cm. in thickness are basically illegible, but enough

can be made out of the coin to indicate that it is of the Roman aes IV type, ca. AD 400; it is a copper coin. The larger of the coins (number A. SCW2.1, N.1), 2.4 cm. by 1.75 cm. in diameter and 0.1 cm. in thickness is better preserved and is an Umayyad coin of the eighth century A.D. On the obverse of the coin the inscription reads, La ilah/illa lla/Wahdahu ("There is no God but God alone"), with an obliterated inscription around the edges. On the reverse there reads, Muhammad/rasul/allah ("Mohammad is the prophet of God (Allah)", with an obliterated inscription around the edges.

The whole Byzantine lamp (Figure 13), found in the painted tomb in Wadi Quailibah near Abila to which reference was made earlier, was drawn and recorded. Since the lamp was discovered on a day subsequent to the end of the survey's official field work, it is not counted as a part of the 1980 survey.

One further bit of registration had to do with the number of worked basalt, marble, and other stone pieces found on the site, pieces which were identified as to their geologic content. Where possible they were identified as to their function and use.

The above results of the Survey have shown that progress was made in beginning

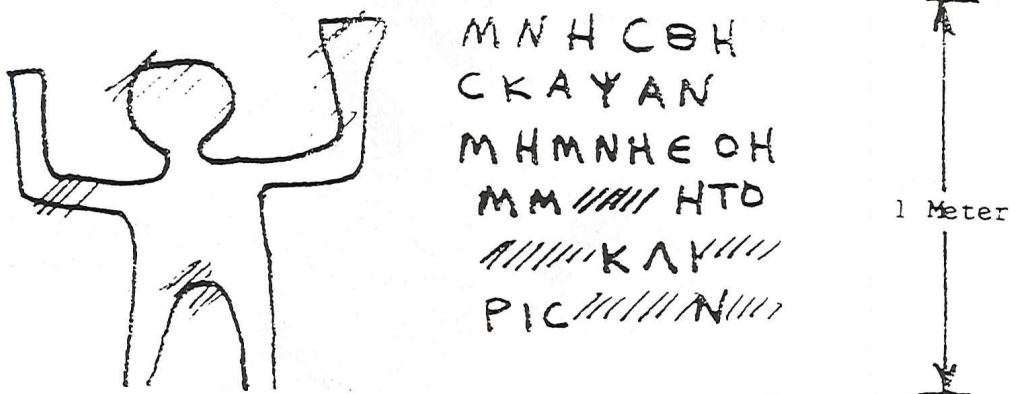
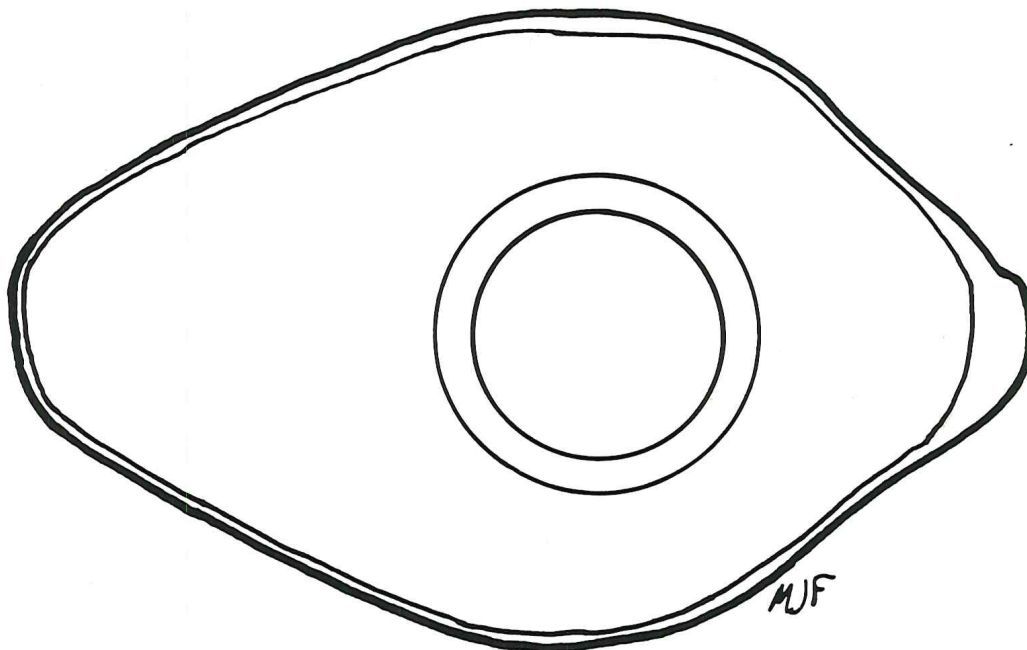
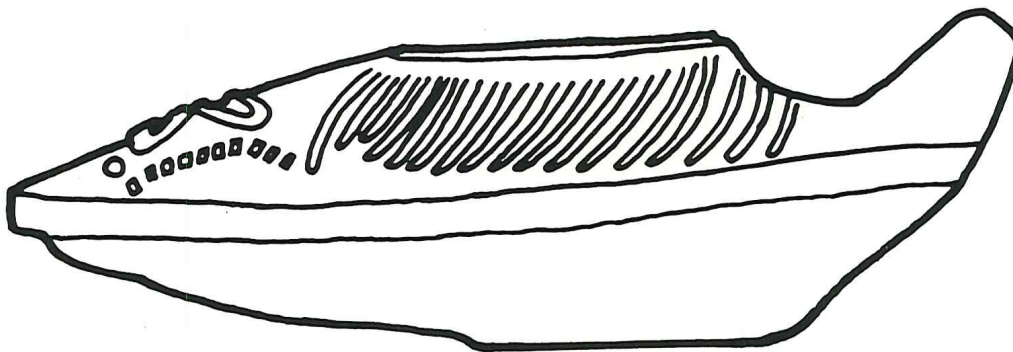
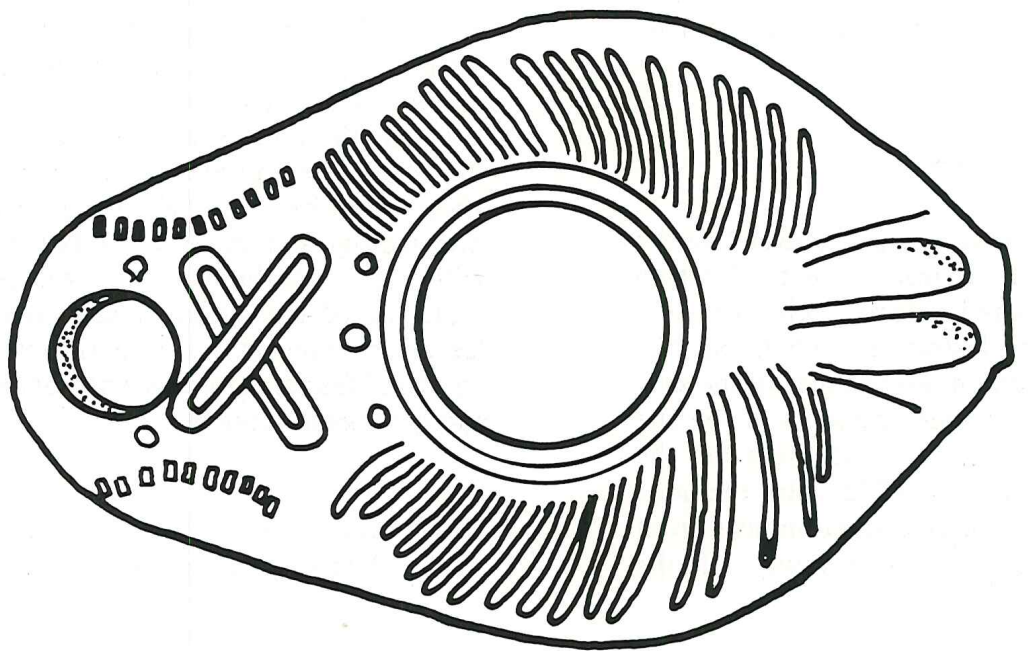


Figure 12. Greek inscription and associated raised relief figure discovered in the Painted Tomb. Some portions of the inscription were obscured by fungus and dirt. The inscription was not cleaned; obscure portions are shown as slash marks.





0 1 2 3 4 5 Centimeters

Figure 13. Byzantine lamp discovered in the Painted Tomb. The exterior surface color of the lamp ranges from pink (5YR7/4) to reddish yellow (5YR6/6). The bottom of the lamp is pink (5YR7/3). The lamp was burnt as indicated by a very dark gray (5YR3/1) area around the opening for the wick. Drawing prepared in the field by Michael J. Fuller; the scale is 1:1.

to understand the archaeological history of Abila.

### **Projections for 1982**

Further survey, architectural drawing and an archaeological probe at Abila in 1982 will shed more light on the archaeological history of Abila, on the geographical extent and culture of the site, and on the settlement patterns at the site and its environs. An extension of the surface sharding in 1982 into the area around Abila will give some indication of the continuity or discontinuity of the

surrounding area as it relates to the various archaeological periods represented at Abila. Any inscriptional and further numismatic materials to be found on the surface in the environs of Abila will make their contribution, and, of course, the archaeological excavation probes in 1982, will help establish the stratigraphic sequence of the archaeological materials (ceramics, objects, numismatic materials, floral and faunal materials, anthropological and geological remains).

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