

# UNIVERSITY OF JORDAN EXCAVATIONS AT KHIRBAT YĀJŪZ

by  
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## Introduction

The ruins of ancient Yājūz lie one km north of the aş-Şuwayliḥ-az-Zarqā' main road towards Shafa-Badrān, and are located about 8 km north-east of the Campus of the University of Jordan.

The site is also known as Tal'at Nimr (Tal'at=a small tall), named after the well-known Nimr Ibn al-'Adwān. It is there that his and his wife's grave are located, in the nearby modern Islamic cemetery.

Another name, formerly used for the site by the locals, was al-Madraj (terrace), which reflects the topography of the site.

The area must have been suitable for settlement due to the existence of a good water supply at 'Ayn Yājūz, which lies 500 m south-west of the archaeological site. During the Roman and Byzantine periods it was a wayfaring station 11 km out of Philadelpia, on the way to Gerasa.

The site measures approximately 530 x 400 m and occupies the entire southern side of the hill, sloping towards the south where Wādī Yājūz runs towards the az-Zarqā' area. (Figs. 1 and 2)

Two mile-stones were discovered by the Department of Antiquities in 1994 in the Shafa-Badrān area. They were rescued and are now displayed in the University of Jordan Archaeological Museum.

It is important to state that the site has been visited by explorers during the 19th and 20th centuries; Merrill,<sup>1</sup> Conder,<sup>458</sup>

McCown<sup>3</sup> and Glueck<sup>4</sup> all mentioned the site.

In 1972, a Roman tomb was excavated in the middle of Yājūz village and on the opposite side of the archaeological site. The tomb has been reused as an olive press in later a period.<sup>5</sup>

During the spring season of 1994, the Department of Antiquities excavated a large basilica church with mosaic floors. The church measured 28 x 17 m and used Ionic-Corinthian capitals which were each adorned with a representation of a human head.<sup>6</sup>

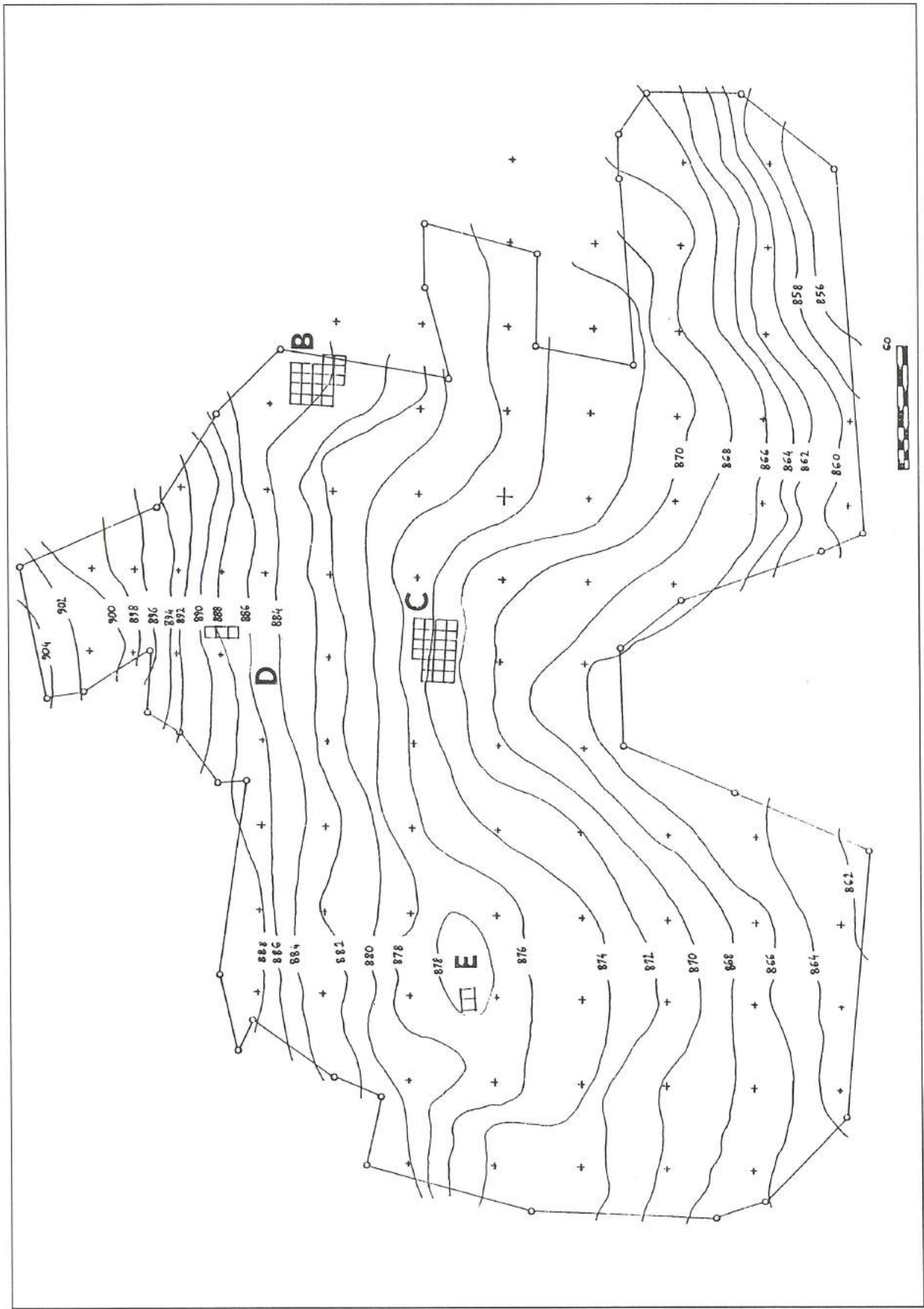
A team from the Department of Archaeology of the Jordan University, directed by the author, has excavated the site for three seasons:

- First season : 19 June - 18 August 1995
- Second season: 22 June - 18 August 1996
- Third season: 20 June - 20 August 1997.

The excavations were sponsored and funded by the University in cooperation with the Department of Antiquities. The staff of the three seasons consisted of: Ayish Abu Hilal and Dhirar De Polsky from the University Archaeological Museum; Mahmoud Arienat from the Mādabā School of Mosaics who restored the mosaic floors; Mayyada Nammari and Widad Said who did all the architectural drawings of the excavations. As well, MA and BA students of the Department of Archaeology acted as

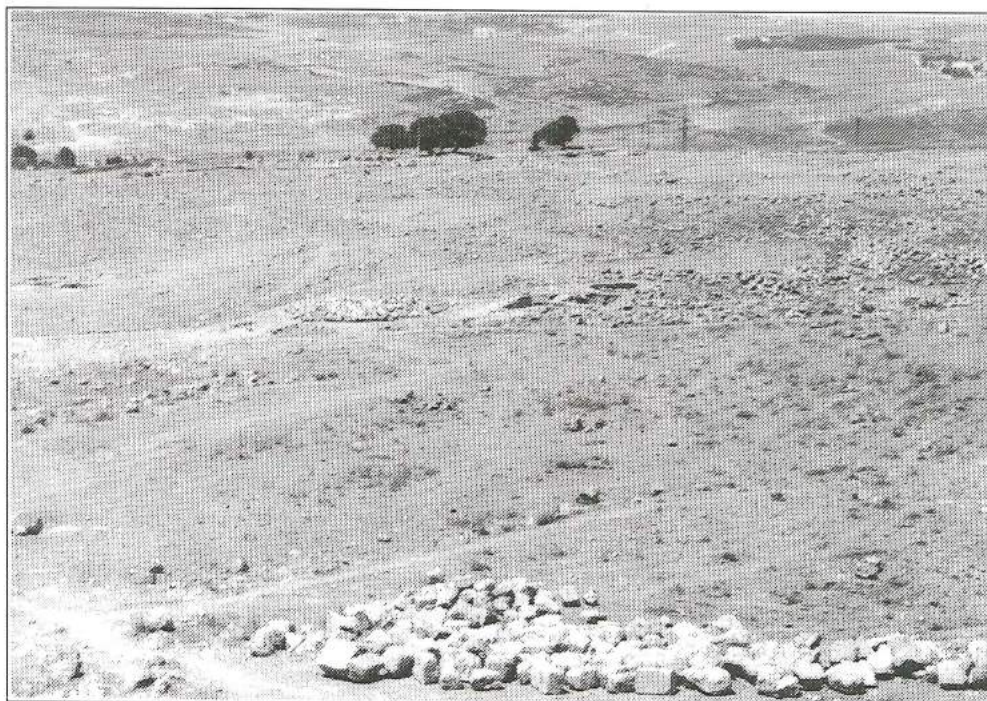
1. Merrill, S. (1883), *East of the Jordan*, NY: Charles Scribner's Sons: 272-277.  
2. Conder, C.R. (1889), *The Survey of Eastern Palestine*, Vol. I, London (PEF: 15: 279).  
3. McCown, C.C. (1930), Spring Field Trip, *BASOR* 39: 13-17.

4. Glueck, N. (1939), *Exploration in Eastern Palestine III*, *ASOR* xviii-xix: 177-178.  
5. Thompson, H.O. (1972), A Tomb at Khirbat Yajuz, *ADAJ* 17: 37-47.  
6. Suleiman, M. (1996), A Short Note on the Excavation of Yājūz. *ADAJ* 40: 457-463.



1. Contour map of Khirbat Yajuz, showing the location of excavations (Areas: B, C, D and E).





2. General view of the site looking west.

area and square supervisors.

The main objectives of the excavation were as follows:

- 1- To teach and provide on-site training for BA and MA students of the Department of Archaeology. Different processes and techniques of surveying and digging were taught and practised during excavation.
- 2- To determine the stratigraphy of the different areas (B-E) on the site.
- 3- To extend the excavation horizontally in order to uncover the architectural features, which are partially exposed on the surface.
- 4- To apply different geophysical methods, in order to explore the surface for underground archaeological information.

The excavation was carried out following the principles of the Wheeler-Kenyon method. Four areas, B-E were laid out. Area A is located in the S-W sector of the site, near the foot of the hill. Four squares (5x5 m each) were excavated during the first season. Work was stopped when modern Islamic graves were exposed.

The following account consists of: Stratigraphy and architecture of area B in-

cluding the chapel and the cemetery; the mill and wine press in area C; major remains in areas D and E, and the conclusion.

### Area B

It lies in the N-E sector of the site, about 100 m to the north of the basilica church.

Architectural remains were obvious near the topsoil, encouraging us to lay out and excavate sixteen squares in the first season. During the second season, work was continued in the unfinished squares from the previous season, and seven new squares were excavated, in addition to the excavation inside the cemetery. During the third season, work was located north of the chapel where six additional squares were excavated.

The topsoil layer in the different squares was of a gray-brownish colour, dry and compact with roots of various plants and vegetation. The lines of the uppermost course of many stone walls were visible in many squares during cleaning of the top soil.

During the excavation of the 1995 season, the balks between the squares were removed and the architectural elements of a



chapel were exposed.

## The Chapel

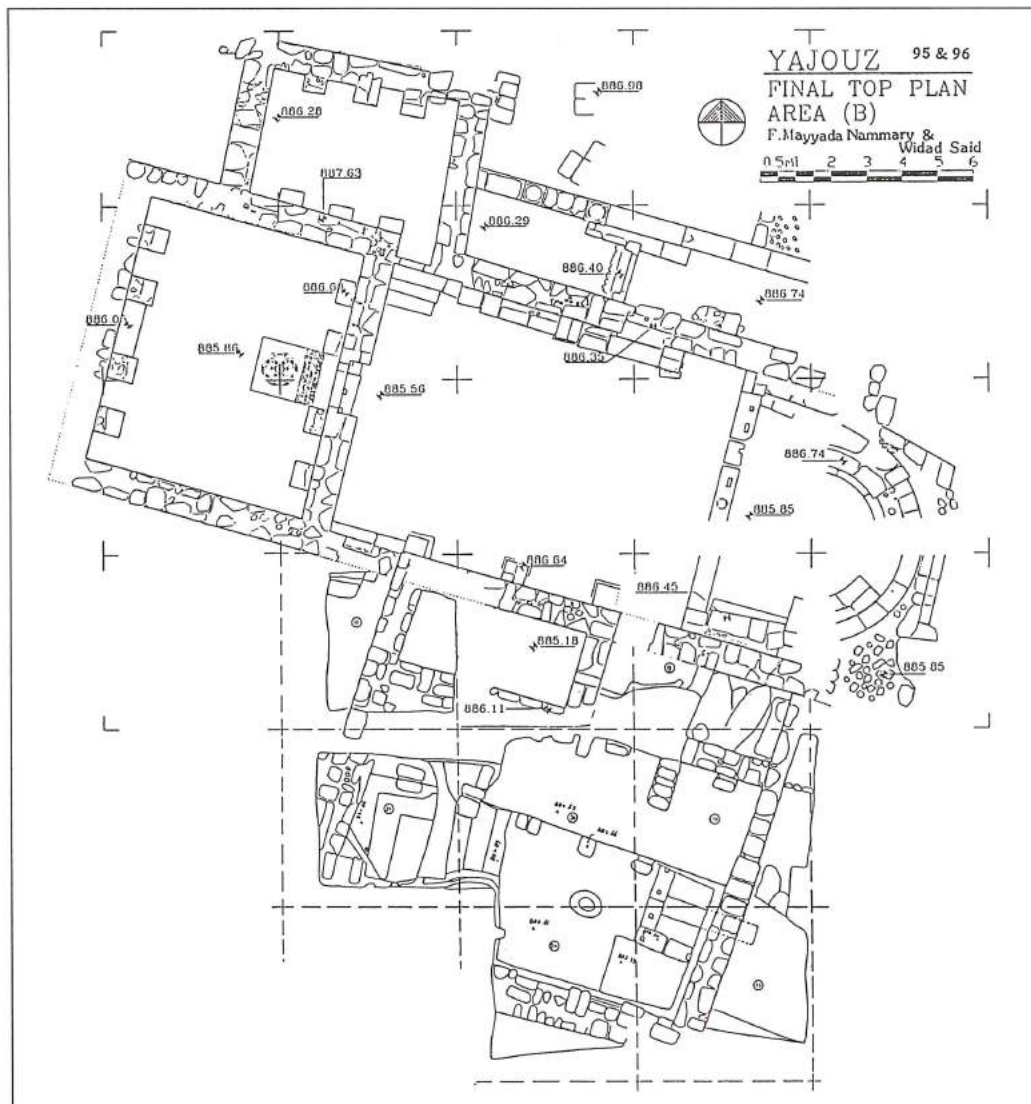
The chapel structure (Figs. 3. and 4) consists of the following:

- 1- The apse in the eastern side of the building: On both sides of the apse are adjacent rooms, made of well-dressed stones and covered with plaster.
- 2- The altar is located about the middle of the apse. It measures 1.37 m to the south wall of the apse and 1.29 m to the north wall of the apse. It is made of very well-dressed stone, and is 1.30 x 0.8 m x 0.42 m wide. Furthermore, there is a large rounded hollow, in the middle of the altar, with a cross carved in its bottom

measuring 0.44 m in diameter and with a depth of 0.15 m (Fig. 5).

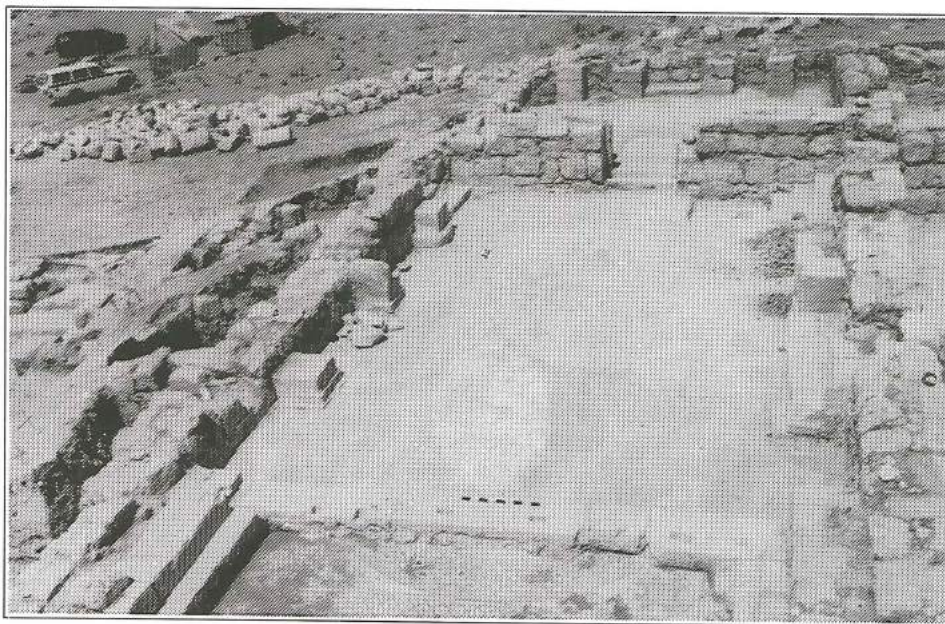
Four small square holes of 0.10 x 0.10 m diameter were carved at the corners of the altar to hold the marble columns, which were fixed inside the holes with lead, which can still be seen in one of the holes.

- 3- The chancel screen, which separates the apse from the main hall, is made of one row of well-dressed stones, with holes still in position to hold the screen.
- 4- The hall of the chapel—there are no aisles—measures 17.40 x 9.75 m. Three quasislabs built of well-dressed stones were found on each side of the walls of the hall, probably placed there for a roof support. Many roof tile fragments were re-

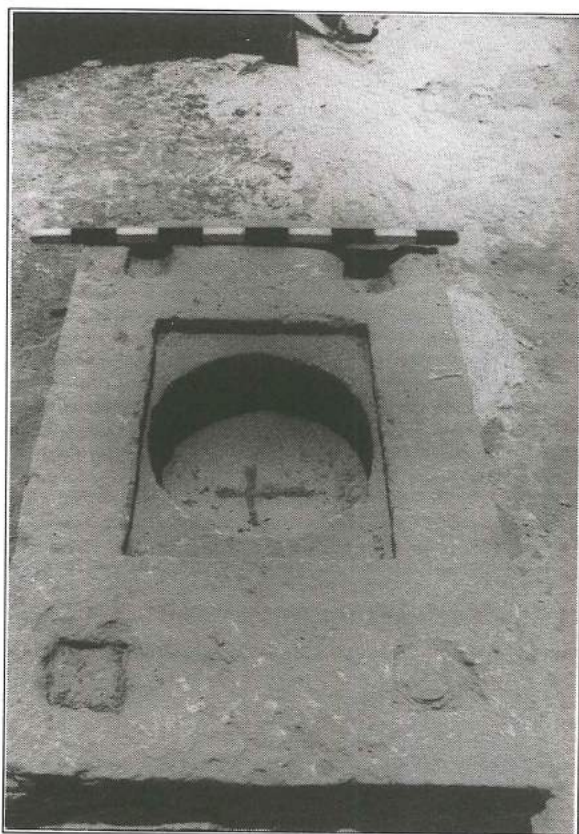


3. Top plan of area B; the chapel and cemetery.





4. The architectural elements of the chapel, looking west.



5. Altar with marble base, looking north.

trieved during the excavation, in the chapel area. In square (13) south of the apse, at a depth of about 1.5 m a number of complete roof tiles were found, measuring approximately 45 x 36 m having fallen from the chapel room. A gabled

roof made of such tiles could have been supported on wooden posts fixed on the stone bases.

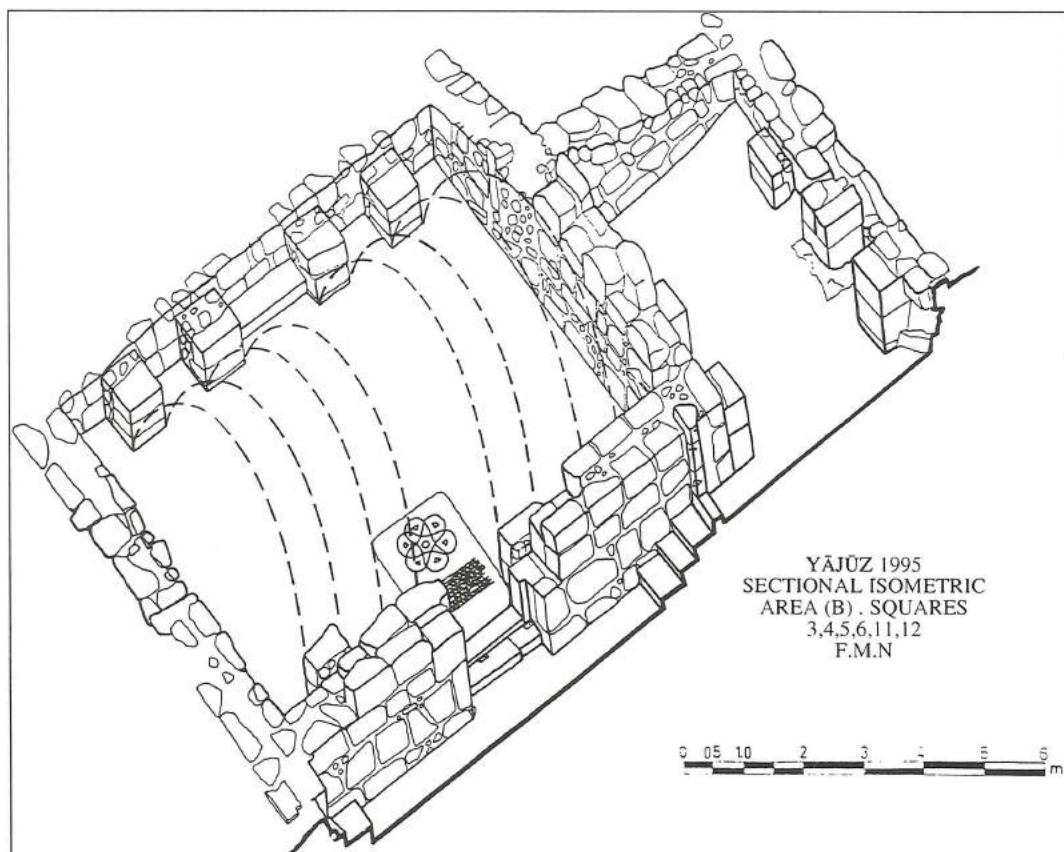
At the western end of the south wall of the hall, stairs lead to the main entrance of the chapel. Another entrance existed at about the middle of the northern wall of the hall whose door was blocked at a latter phase of occupation.

- 5- The adjacent building, has five rooms located on three sides of the main hall. The first room is located to the west and is the largest measuring 8.25 x 9.75 m, with the same width as the chapel. It had four arches; the arches and the vaulted roof, have collapsed and were excavated within a yellowish thick layer of *hawar*. It was possible to reconstruct the vaulting and ceiling system, using slabs in between every two arches (Fig. 6). A layer of clay (*hawar*) would be applied on top and made compact in order to prevent any leakage of rain water.

The second room is connected with the main hall by three steps above the level of the plaster floor in the hall with three arches of the same type. In the first room, near the staircase, an unfinished sculpture of an eagle, made of basalt, was found.

The third room is small and located near





6. A reconstruction drawing of the vaulting and ceiling system in the rooms adjacent to the chapel.

the main entrance of the hall. Finally, the fifth room is located south of the apse.

The chapel was built of well-dressed stones in two rows, reused dressed stones, and bases and drums of columns, from earlier periods. The interior of the walls were plastered, still *in situ* in many parts of the chapel and the adjacent buildings.

It seems that mosaics covered the floors of the chapel and traces of mosaic flooring were found on the edges of the main hall. The rest of the floor in the hall is covered with mortar which is usually used as foundation for mosaic floors.

During the 1996 season a small sounding of 0.5 x 0.5 m was made at the western end of the hall (Locus 10). It was found that the mortar layer lies on two layers above bed-rock. Locus 12 is a light brown layer that contains small cobbles 12 cms thick, and Locus 13 is a light yellowish colour, *hawar*-like, which has a thickness of 3-5 cm.

At the entrance between the main hall of the chapel and the first room, a coloured mo-

saic floor with a geometric pattern was discovered. Towards the threshold, a Greek inscription (Fig. 7) was discovered. The inscription of eight lines was tentatively translated by Father M. Piccirillo as follows:

### Greek Inscription

Εκτισθη των σων σοι και  
ετελειοθη το αγι(α)ν μα(ρ)τυριον του αγιου και  
αθλοφορου μαρτυρου Θεοδωρου και  
Κηρικου επι του θεοφιλεστατου και  
ασιωτατου Θεοδοσιου επισκοπου κατα  
σπουδη του θεοσεβεστατου Ηλιου  
πρεσβυτερου και Ιωαννου επιστατου επι τη  
ς δευτερας ινδικτιονος ετι

### Translation

*It was built from yours to You (God) and  
terminated the holy martyrion of the holy and  
victorious martir Theodore and  
Kiriakos at the time of the beloved of God and  
the most pious bishop Theodosius by  
care of the religious Elias*





7. The mosaic with eight lines of Greek inscription in the room adjacent to the chapel, looking east.

*the Priest and of John the curator at the time of the second indication year*

It is a dedicatory inscription, with the name of Bishop Theodocius, who is a priest and a curator. A similar dedication was found at al-Yādūdāh, south of 'Ammān, mentioning a Bishop Theodicius.<sup>7</sup> It is known that Theodocius was bishop of Philadelphia /Amman in 502/503 AD (the year 565, 11th indication, month of Gorpaios). If Theodocius is the same bishop mentioned in the Yājūz chapel inscription, it means that the chapel was founded in 508 AD, which is the second indication year (Pompeian Era), mentioned in the last line of the inscription.

The coloured mosaics cover a limited area of the floor. Also, there are few small separated areas made of large size and coloured tesserae, whilst most of the floor is

covered with mortar showing the impression of the tesserae. In the same room, above the mosaic floors, were found a ca. 15cm thick layer of ash and collapsed arches of the room.

The preliminary study of the pottery sherds from this layer date to the Byzantine-Umayyad period, and perhaps the destruction of the chapel was caused by the 749 AD earthquake.

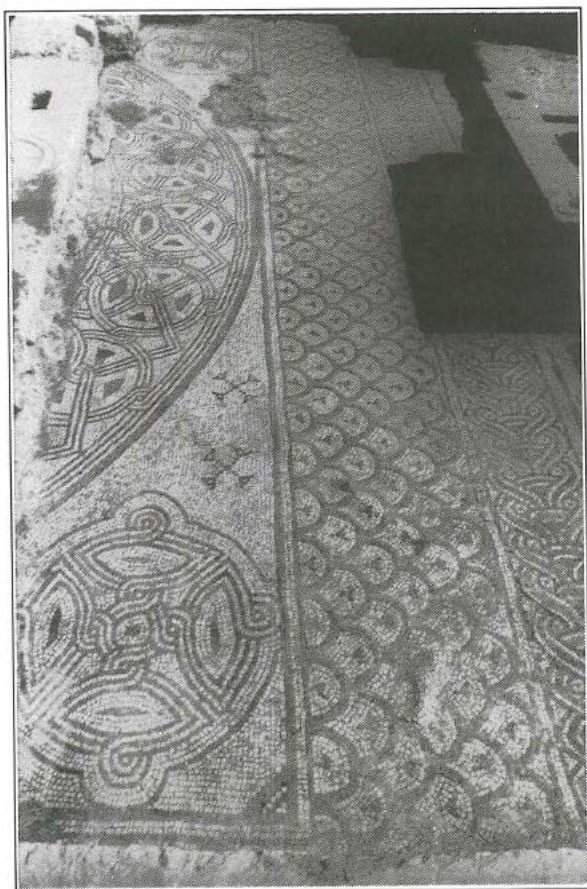
The chapel had two phases of occupation as evidenced by the architecture and mosaic floors: the door in the middle of the northern wall of the main hall was blocked during the second phase and stone benches were added along the interior side of the wall which had been plastered during the first phase.

There are two distinct levels of mosaics identified in the apse; the coloured mosaic floor, with an abstract motif pattern repre-

7. Pers. comm. Father M. Piccirillo.



senting the early phase of the chapel (Fig. 8). This floor was later covered with an ashy layer and earth 10 cm thick. Only the



8. Coloured mosaic floor in the apse, looking north.

mortar flooring, which is usually used beneath the mosaic floor, is left and few tesserae are still near the interior walls of the apse, indicating the upper level of the mosaic floor of the second phase.<sup>8</sup>

### The Cemetery

Excavating to the south and near the chapel, an undisturbed cemetery was discovered during the 1996 season. During the excavation in square B20, an entrance of an intact cemetery was discovered; it opens towards the south and was blocked with dressed stones. When more soil layers were removed from the entrance, a courtyard was found cut in the bedrock. The courtyard measures 6.25 x 5.30 m, and there are three internal bases of arches built next to the bedrock near the entrance.

The opposite bases were built on top of the bedrock and the arches were part of the vaulted courtyard.

In the eastern side of the courtyard, a niche was cut into the bedrock. In front of the niche was found a small chancel-screen with cavities carved into well-dressed stone and into the bedrock as well. The floor of the chancel screen is paved with marble (Fig. 9).



9. Entrance of the cemetery with courtyard, looking north.

8. Further study of the inscription, architecture and finds from the chapel is in preparation.



About the middle of the courtyard, a pit was dug in the bedrock; this hole could have been made to gather the blood of the sacrificed animals, which might have been part of a religious practice during the burial services.

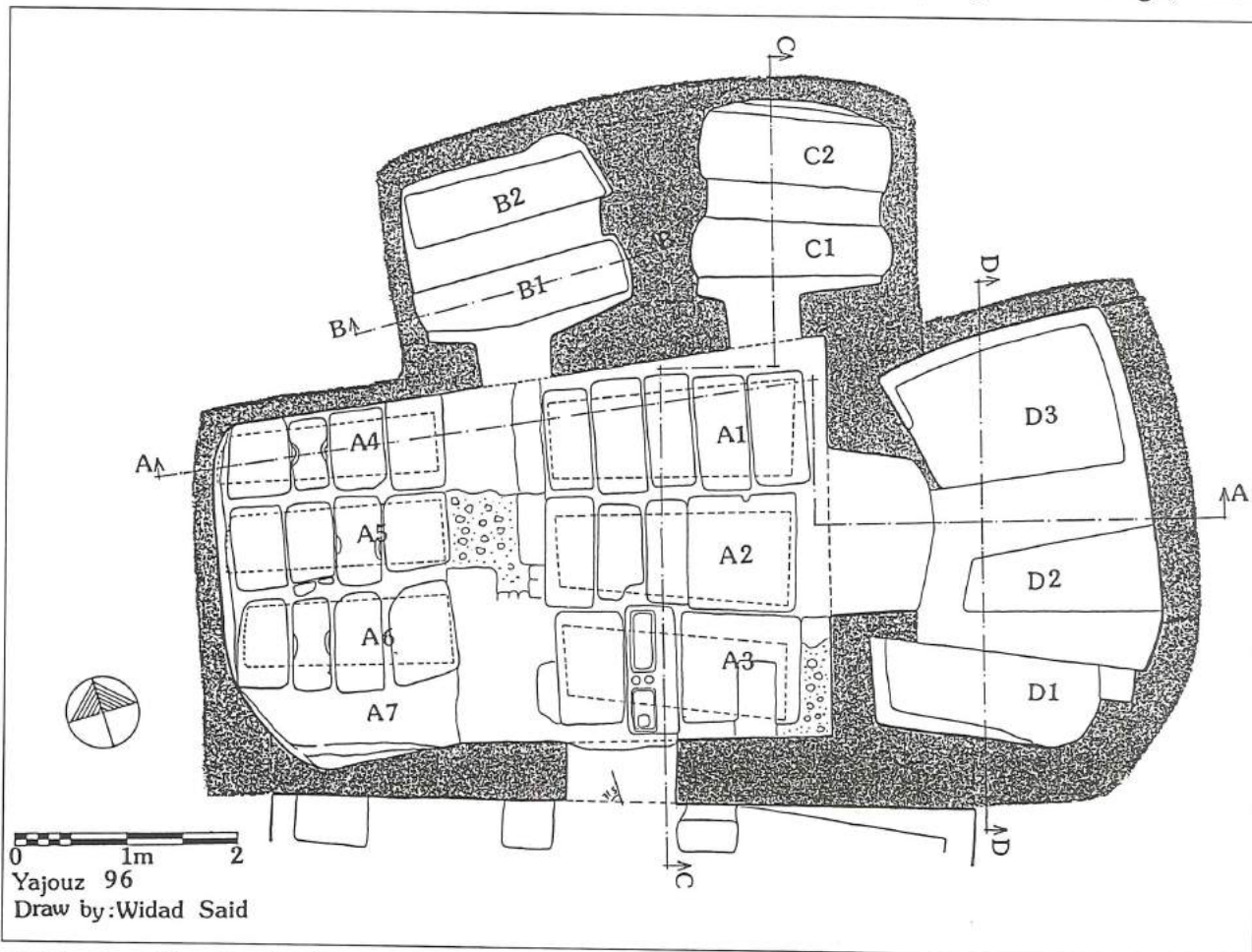
A staircase was cut in the bedrock, located at the western end of the courtyard leading towards the west, and then turning towards the southern entrance of the chapel.

The hypogean cemetery was cut into the soft limestone, its entrance measuring 1 x 0.85 m, its inside measuring, from the entrance towards the north, 6 m and from the east to the west 5.8 m.

Two types of burial systems were used; the first type consists of loculi which were carved into the rock (B1-B2, C1-C2 and

D1-D3). The second type of burial is constructed graves (A1-A6); they were built of dressed stones with stone slabs covering the graves (Figs. 10 and 11). A number of skeletal remains were found in the south-western corner of the cemetery (A7), and about 132 skeletons were found in various loculi and graves. Most of the skeletons' heads were directed towards the west. The measurement of the various skulls may suggest that males, females, adults and babies were buried in the cemetery. However, osteological studies of the human skeletal remains are still to be carried out.

The cemetery is very rich in various types of artifacts such as pottery, candlesticks,<sup>9</sup> oil lamps and glass vessels. Also, a number of bracelets, anklets, rings and earrings, made

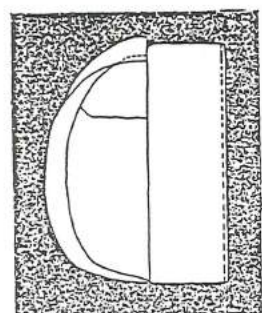


10. Top plan of loculi and built graves.

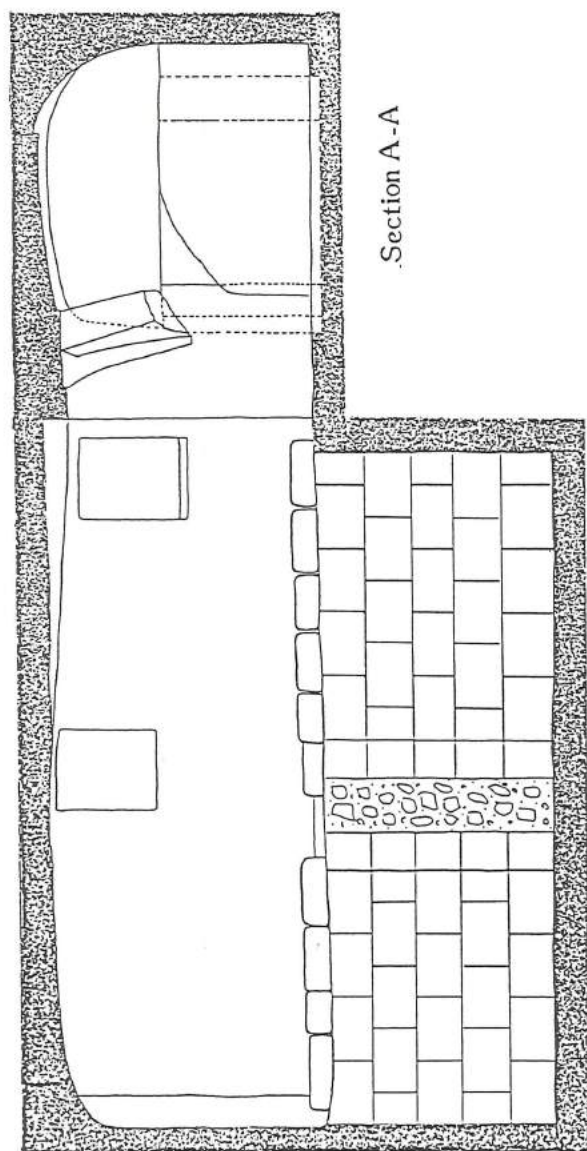
9. L. Khalil, "Pottery Candlesticks from Byzantine Periods at Yājūz". Paper submitted to the 7th Conference

on the Archaeology and History of Jordan at Copenhagen, Denmark, 1998.

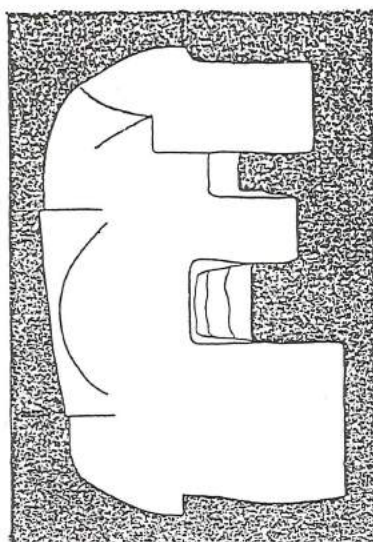




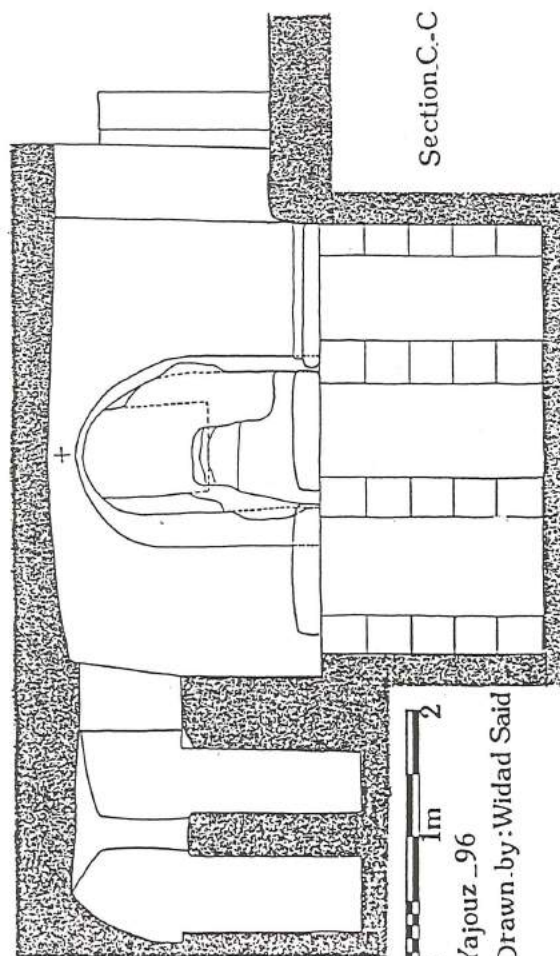
Section B-B



Section A-A



Section D-D



Section C-C



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Drawn by: Widad Said

11. Sections of loculi and graves.



**Table 1.** Various complete artifacts and skeletal remains in the different graves and loculi.

Grave loculi	A1	A2	A3	A4	A5	A6	A7	B1	B2	C1	C2	D1	D2	D3	Total
Skeletal remains	-	39	20	4	8	3	10	4	1	10	25	5	3	-	132
Candle sticks	1	1	-	-	-	-	-	5	3	5	3	2	4	6	30
oil-lamps	5	-	-	3	-	-	1	3	-	1	1	-	3	1	18
glass vessels	-	-	-	-	-	-	-	2	4	-	-	1	-	-	7

of copper alloys, were retrieved. In addition iron nails, various coloured beads, needles and miscellaneous small finds were discovered, as well, as coins.

The following remarks can be made about the distribution of the various finds and skeletal remains in the different burials:

- 1- The number of the skeletons in the various burials is different.
- 2- There is no regularity in the occurrence of certain type of artifacts in the loculi or graves.
- 3- The loculi burials are richer in finds than those in the built graves.
- 4- Loculi B1 and B2 have less skeletal remains but they have more finds. Loculi B2, is unique in this aspect, with 1 skeleton, 4 glass vessels, 2 candlesticks, many copper rings, copper brooch, spatula and needle, and a number of beads.
- 5- No skeletal remains were found in A1 or D3, but they contained finds.
- 6- The occurrence of two types of burials could be explained either by the fact that the loculi type of burial was used during an early phase of the cemetery, and at a later phase the built graves were added. Or, the loculi were used for private and important persons, while, the built graves were used for common people, either at the same time or at a later stage.

The preliminary study of the two burial systems and the various finds from the cemetery suggest the date between the fifth

and eighth century AD, which is roughly contemporary with the date of the chapel.

### Area C

It lies in the N-W sector, almost in the middle of the site. The architectural remains were obvious near the surface, and speculation of the depth of occupation for stratigraphy decided the author to excavate the area. During the three seasons, 23 squares (5x5 m each) were excavated.

The topsoil in the different squares in the area is similar; it is grey-brownish in colour, dry, not yet compact and its thickness varies from 10-40 cm. The topsoil is rich in pottery sherds and tesserae, also roots and vegetation were excavated. Beneath this layer, a reddish layer was excavated, it is compact and contains pebbles. Further digging in the various squares exposed two types of walls:

The first type is constructed of dressed stones, with two rows of arches and vaults built against these walls.

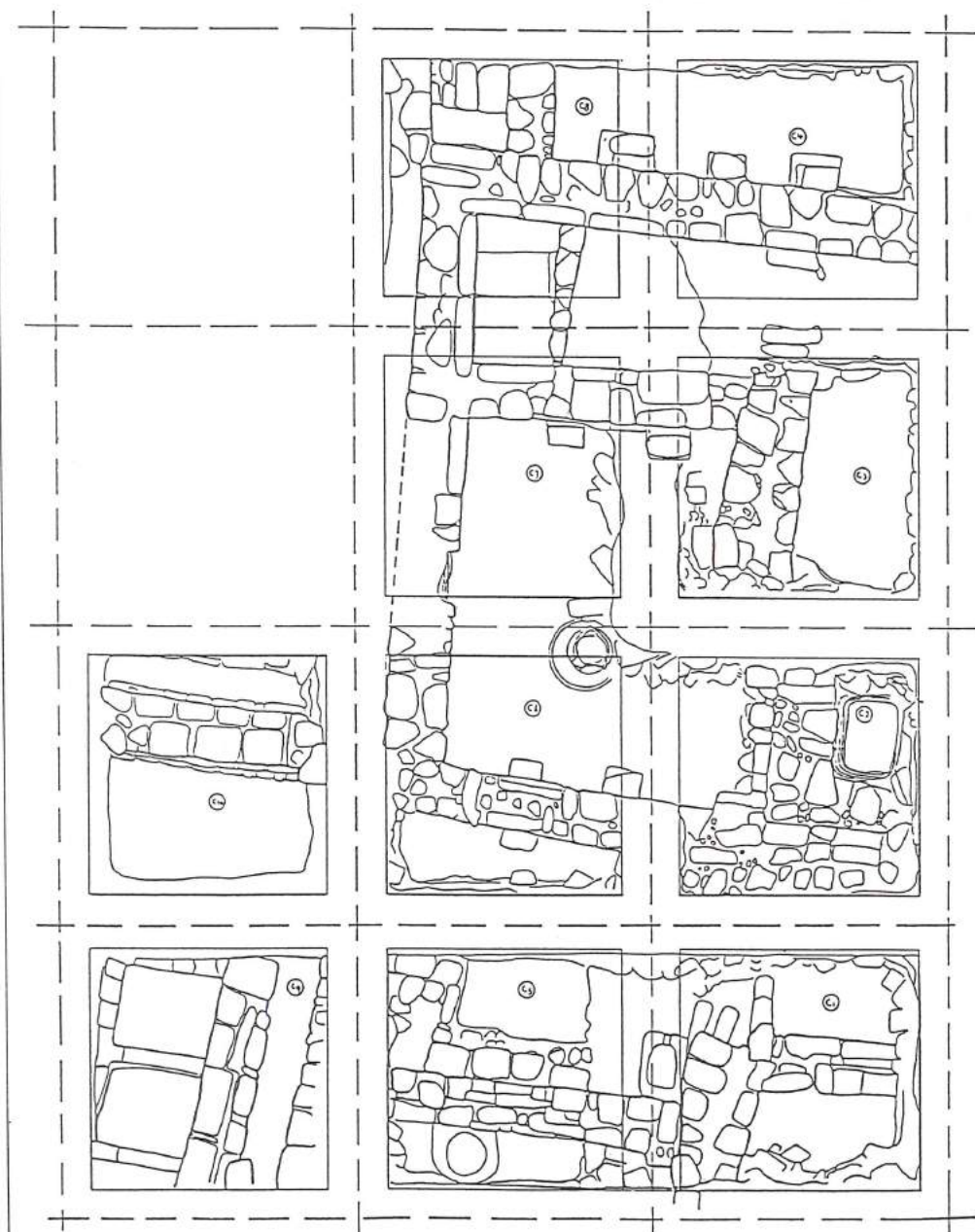
The second type of walls contains of one row of undressed, rough stones. This type was used as internal dividing walls, as well as being used to block doors of the first walls (Fig.12)

When the balk between squares C6 and C7 was removed during the 1995 season, a complete flour mill as discovered *in situ* (Fig. 13). The mill consists of three elements; grinding stone, core and the basin.





YAJOUZ 95 & 96  
TOP PLAN  
AREA (C)  
F. Mayyada Nammary  
& Widad Said



12. Top plan of Area C: the flour mill and wine press.

The grinding stone has an hour-glass shape, but it is open from both ends. It is fixed on the conical core; both parts are made of basalt. Abutting onto two sides of the grinding stone, there are two square holes located op-

posite each other. Those holes hold two wooden poles, to facilitate turning the grinding stone on the fixed and heavy core by man or animal power.

The third element of the mill is a large,





13. Flour mill in C6, looking north.

circular basin, made of limestone. It is located beneath the core to collect the ground flour. There is a hole in the side of the basin to pour the flour.

The mill is located in the middle of a building, its walls are constructed of dressed stones, with the main entrance from the southern side.

### The Wine Press

During the last two seasons of excavations, a wine press was discovered. It is located about 7 m to the south-eastern side of the mill in square C9. The installation consists of three basins; two of them were completely recovered, the third one is still unexcavated, beneath the eastern balk of the square.

Each basin is surrounded with walls, made of well-dressed stones which separated them.

The length of the west wall of basin (I) is 1.60 m meanwhile, the eastern side wall, which is a dividing wall, measuring 1.44 m with a width of ca. 1.45 m. The height of the western walls of basin (I) is 1.60 m, the depth of the basin near the dividing wall is 0.20 m.

The measurement of the middle basin (II) is 1.50 x 1.42 m; it has almost the same depth as basin (I).

The floors of both basins (I and II) are made of white and large tesserae, each mosaic floor slopes slightly towards the south-

western corner, where there are plastered holes built up in the mosaic floors for the drainage of the pressed juice to a lower part of the wine press.

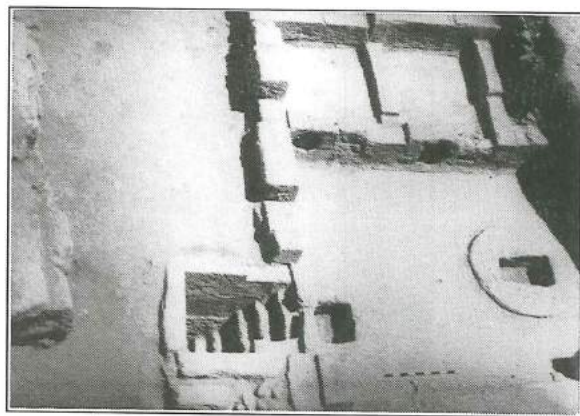
During the 1997 season, excavations were extended south of square C9 and C10, to expose more architectural elements of the wine press. When squares C13 and C14 were excavated, a yard and a reservoir were discovered (Fig. 14).

The yard is surrounded by retaining walls and furnished with a mosaic floor of the same type which was used in the above mentioned basins. It measures from N-S 3.30 m, and from W-E 4 m and it continues beneath the eastern balk of C13. At the eastern part of the yard, there is a large, circular stone fixed in the mosaic floor. Its diameter measures 1.50 m and it has a hole in the middle. This hole might be carved to hold a wooden post to drive another stone, which is a technique used for further pressing.

At the western end of the yard, there is a basin built with dressed stones, it measures 0.75 x 0.60 m and is 0.40 m deeper than the floor level of the yard.

The slope of the floor of the yard, and the location of the latter basin, indicate that the purpose of its construction is the last purification stage of the juice.

The reservoir is the place where the pure juice was collected, it is located to the west of the purification basin. It measures 1.5 x 1 m with a depth of 2 m. It was built of three



14. Wine press: press basins, yard and reservoir, looking north-east.



courses of well-dressed stones and its interior walls were plastered with mortar to prevent any leakage of the juice. It has a five-step staircase, built of stones and its bottom has a mosaic floor.

To the west and the south of the mill building there are two adjacent large rooms with internal arches - the southern room has eight arches - with plastered floors. The building might have been used as living quarters or for storage purposes. The arches collapsed above the plaster floor probably due to an earthquake (Fig. 15).

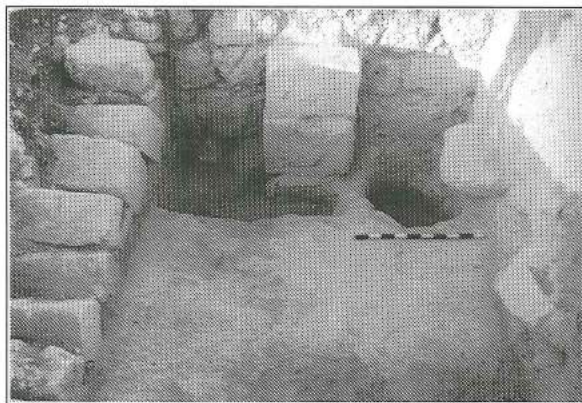
A number of copper coins, beside complete vessels and pottery sherds, were retrieved in the mill and the wine press constructions can be dated to the Byzantine and Umayyad periods.

Excavating in a lower strata in square C/O, a number of sigillata sherds of the second century AD were found. There are no architectural remains that can be related to this type of pottery.

Further excavation in Area C is required in order to expose more of the wine press and to determine the Roman phase of occupation.

#### Area D

It lies in the N-W sector, and is located about 100 m north of Area C towards the summit of the site. Seven squares (5x5 m) were excavated during the 1997 season (D3 - D6) from which no architectural remains were recovered.



15. Collapsed arch above plaster floor, looking south.

When the topsoil layer in the square D11 was excavated, a wall running E-W, with rows and two internal arches built south of the wall, was revealed. The wall is built with dressed stones, its width measures one meter and it runs under the west balk, with a height of 1.90 m. This wall is part of an uncovered building extending towards the south and the west.

To the north of the above mentioned wall, lies square D12. It was very easy to excavate and had a dark gray topsoil layer colour. When further soil layers were removed, a *tābūn* with a diameter of 1.75 m was discovered, built of clay and surrounded with medium size stones (Fig. 16).

At the same level of the *tābūn*, an entrance of a two-chambered cave, was discovered in the N-E corner of the square. The entrance is made of dressed stones built against the natural rock, and opens towards the north (Fig. 17). There are four steps leading into the cave a small basalt mill was found near the entrance, similar to what was found in Area C.

Excavations inside the cave are not finished yet, but a domestic use is suggested. Furthermore, the preliminary study of the pottery and other finds from the cave, suggest Late Roman-Byzantine periods.

#### Area E

It is located at the west edge of the S-W sector, with traces of few architectural remains near the ground surface.

Three squares were laid out at the last week of the 1997 season and when the light grey ashy layers of the surface were removed, walls and vaulted arches, were revealed. The associated sherds of pottery with the architecture is very distinguishable, dating to the Umayyad-Mamluk periods.

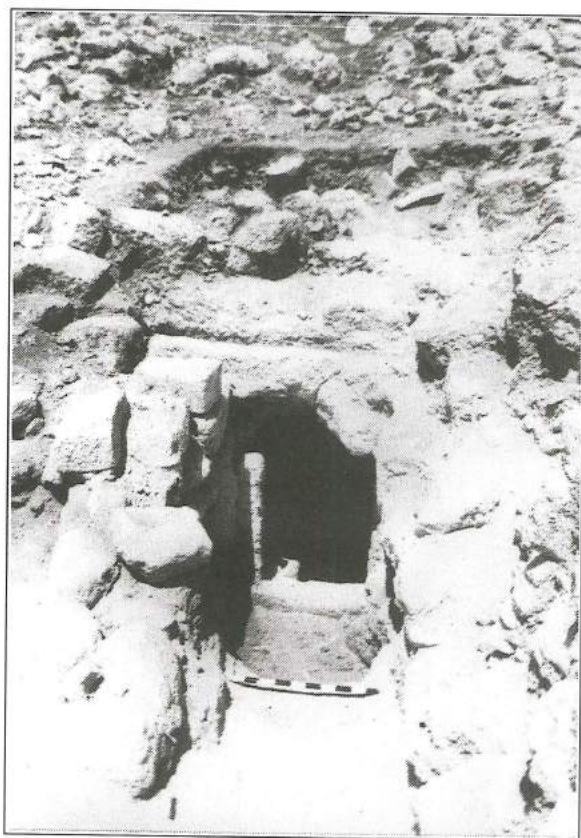
#### Conclusion

The large number of the reused carved stones from the Roman period such as ro-





16. *Ṭābūn* at D12, looking west.



17. Entrance of the cave in D12, looking north.

settes, capitals and altars, that were used to built up the basilica church and the chapel, besides the discovered Roman pottery from

the excavations, confirm that Khirbat Yājūz was first founded in the Roman period, as an important town on the main road between 'Ammān and Jarash.

The site continued to be important during the Byzantine period, when the basilica church, the chapel and the cemetery were founded. The mill and the wine press belong to this period and those installations could have served for religious as well as common life purposes.

The types of pottery, which were discovered during the three seasons of excavations consist of flat-based bowls, carinated bowls, large kraters, frying pans, cooking pots with bevelled rim and short neck jugs, and water jars.

Most of these varied types are of the same ware and are locally produced.<sup>10</sup>

The pottery assemblage of Yājūz shares the characteristics common in the Byzantine period in Jordan.

Another wine press was revealed to the east of the above mentioned found by the Department of Antiquities during the 1997 excavations. It is built with dressed stones and plastered without mortar and is dated to

10. Pers. comm. Pamela Watson.



the Byzantine period.

The presence of two wine presses on the site at the same period shows that Yājūz was an important site for making wine during the Byzantine period, and was surrounded by large vineyards to supply the two wine presses.

Kom Yājūz, is another site which lies 1.5 m east of Khirbat Yājūz. It was mentioned as "Maioudos"; a main town located on the road between Amman and Jarash.<sup>11</sup> The site was visited by N.Glueck and dated to the Bronze -Iron Age.<sup>12</sup>

The capitals that were discovered in the basilica church in 1994, are important from a stylistic and chronological point of view. They are composed of Ionic-Corinthian elements of decoration, and the human faces were disfigured with a cross having been carved on one capital. This action must have occurred during the time of the Emperor Leo III ca. 728 AD, when the iconoclasm took place in the Umayyad period.

The third season of the University of Jor-

dan excavations brought to light evidence of the Umayyad-Mamluk periods of occupation on the west edge of the site. Further excavation in this area is essential to obtain more data of the Islamic periods.

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11. F.-M. Abel (1967), *Histoire de la Palestins* (3rd ed.), Paris, Librairie le coffre: 185.

12. N.Glueck, *op cit*: 178-179.