

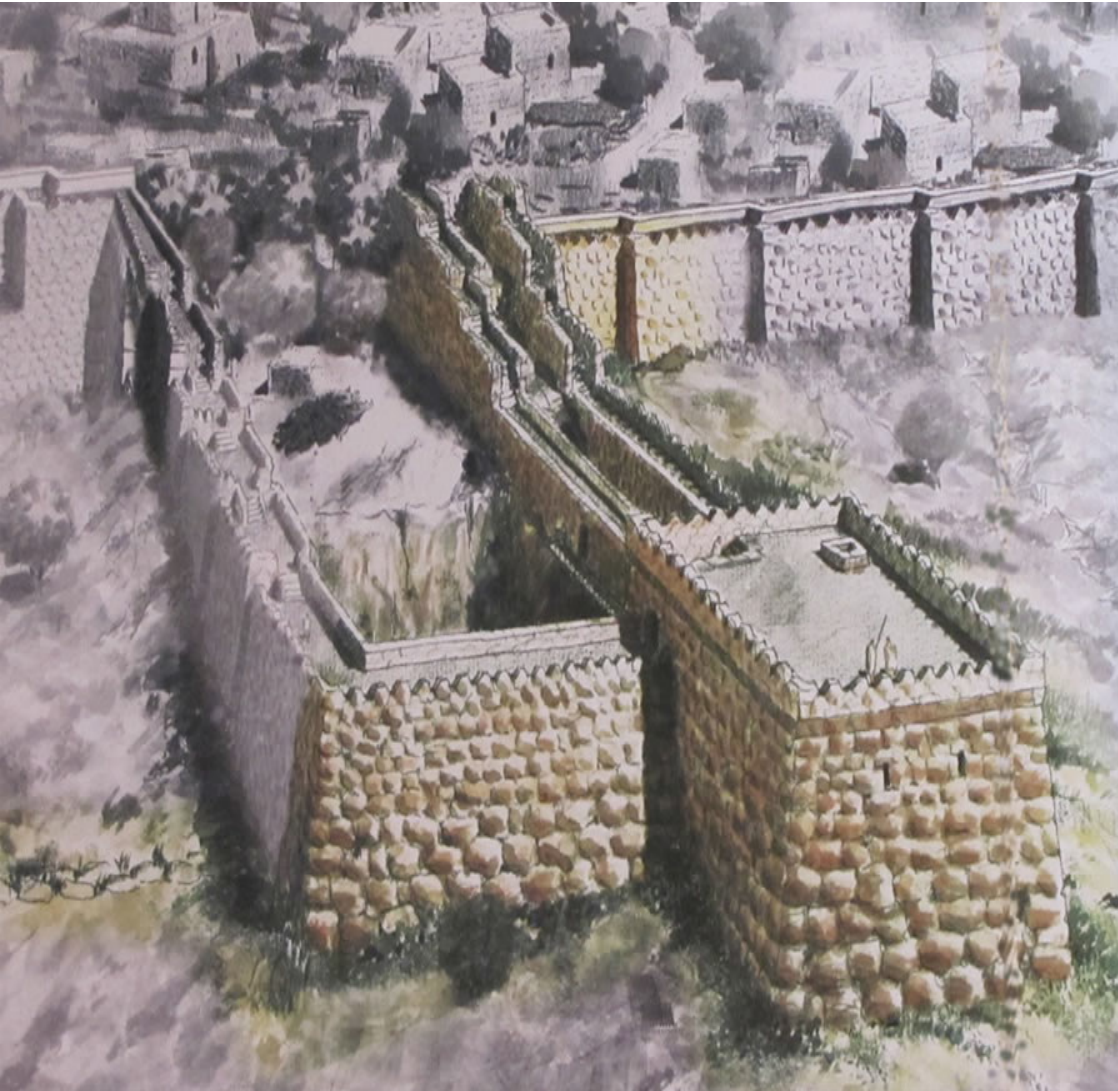
Evidence of Water Cistern and fixed well on the Temple Mount



The people are suffering
from the queen Helena
syndrome

Just point at it!!!!!!!
and is an official location

Was the Gihon Spring the only water source?



2 Kings 20:20

Now the rest of the acts of Hezekiah, and all his might, and how **he made the pool, and the conduit, and brought water into the city**, aren't they written in the book of the chronicles of the kings of Judah?

2 Chronicles 32:

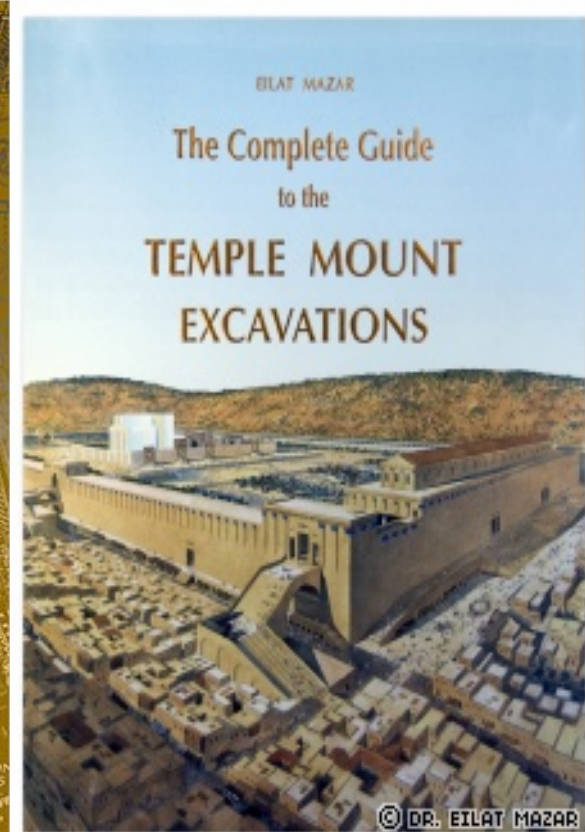
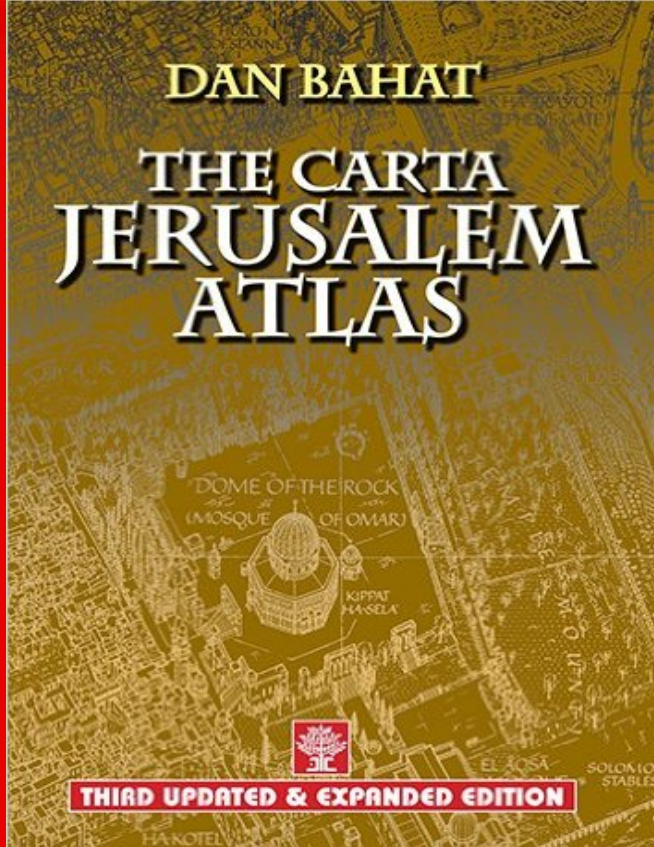
30 **This same Hezekiah also stopped the upper spring of the waters of Gihon, and brought them straight down** on the west side of the city of David. Hezekiah prospered in all his works.

Below the Temple Mount in
Jerusalem

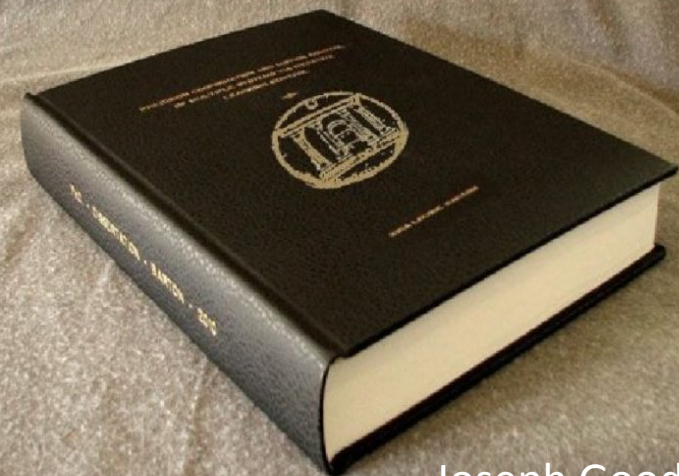
A sourcebook on the classical, subterranean
chambers and conduits of the Mount of Moriah

Sharon Gibson
David M. Jacobson

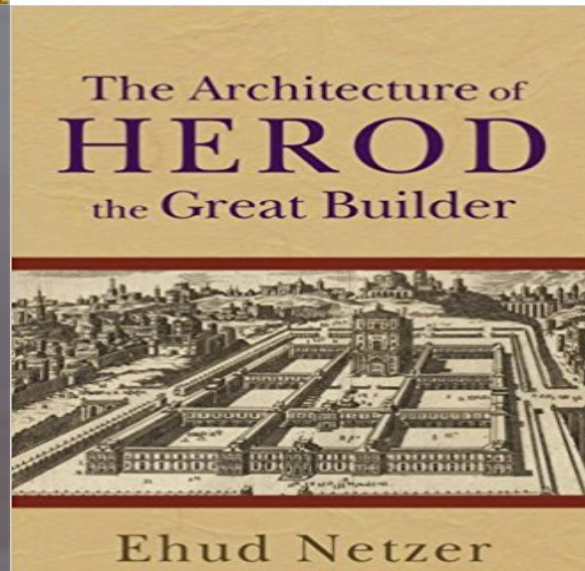
BAR International Series 437
1996

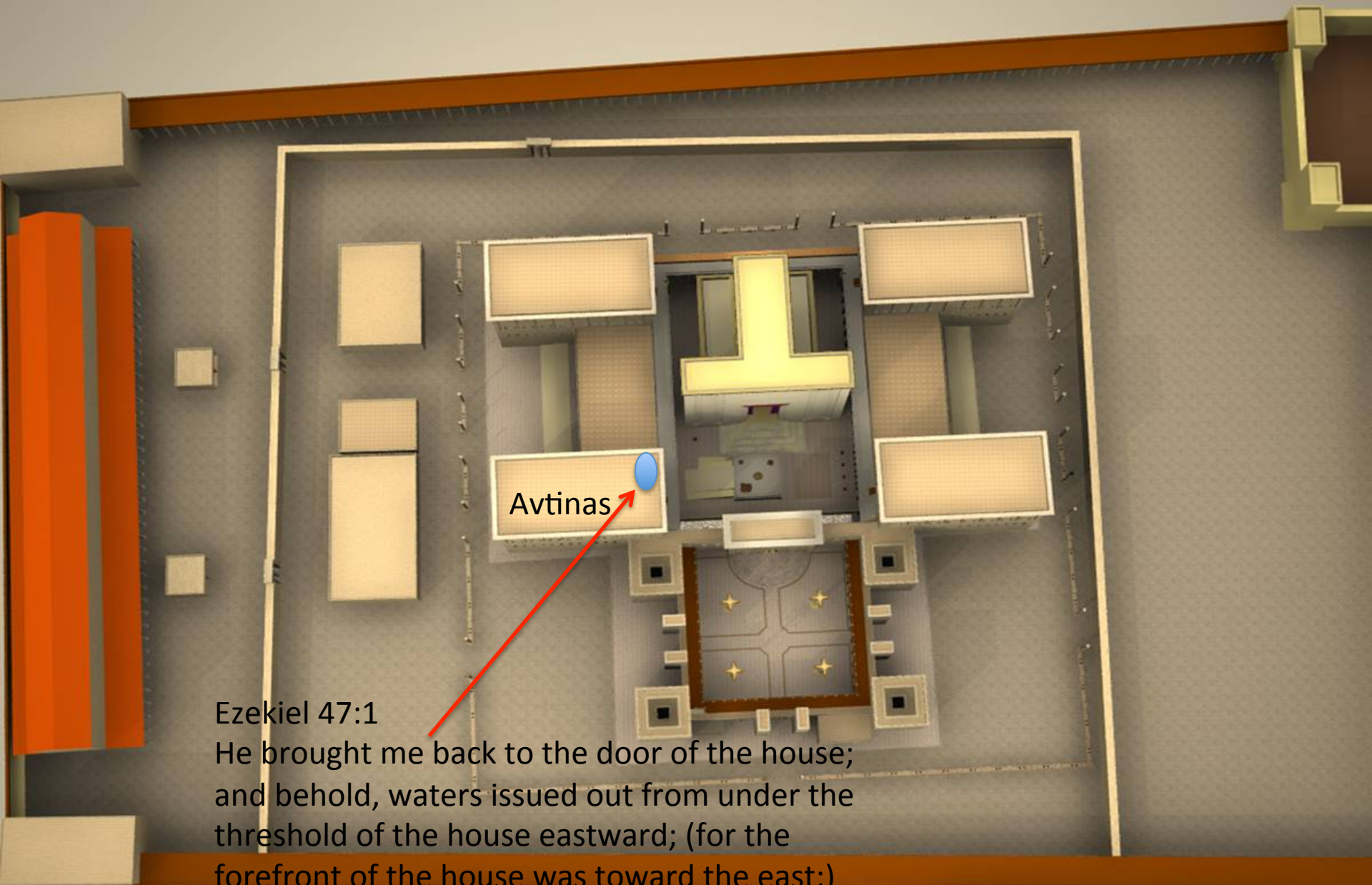


Measure the Pattern



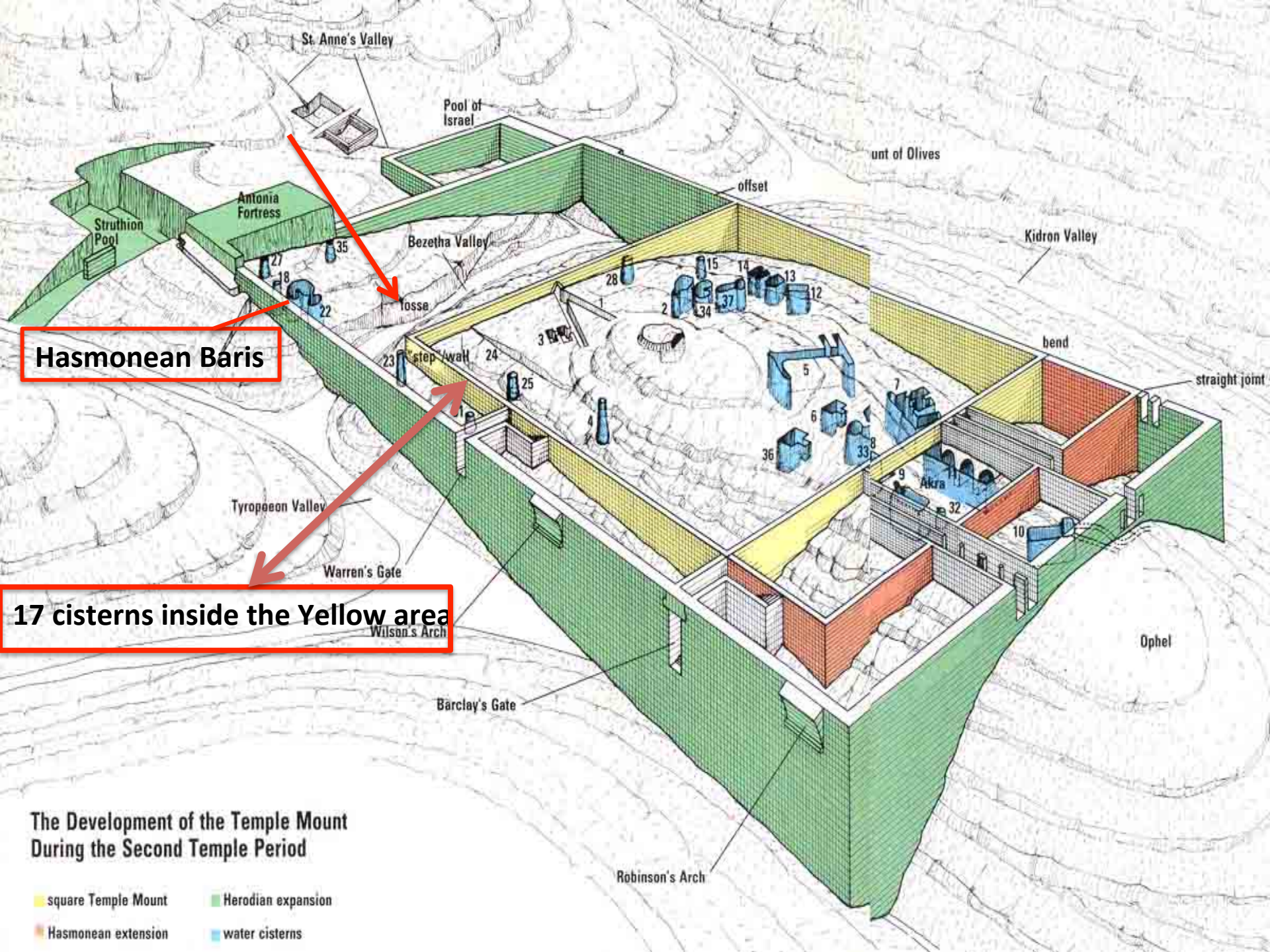
Joseph Good





Ezekiel 47:1

He brought me back to the door of the house; and behold, waters issued out from under the threshold of the house eastward; (for the forefront of the house was toward the east;) and **the waters came down from under, from the right side of the house, on the south of the altar.**



St. Anne's Valley

Pool of Israel

unt of Olives

Antonia Fortress

Struthion Pool

Bezetha Valley

offset

Kidron Valley

Hasmonean Baris

fosse

step wall

bend

straight joint

Tyropæon Valley

Warren's Gate

Akra

17 cisterns inside the Yellow area

Wilson's Arch

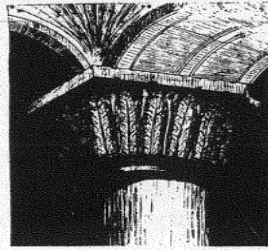
Ophel

Barclay's Gate

Robinson's Arch

The Development of the Temple Mount During the Second Temple Period

- square Temple Mount
- Herodian expansion
- Hasmonean extension
- water cisterns



Below the Temple Mount in Jerusalem

A sourcebook on the cisterns, subterranean chambers
and conduits of the *Haram al-Sharīf*

Shimon Gibson
David M. Jacobson

All good wishes
David M. Jacobson



TEMPVS REPARATVM

BAR International Series 637

1996

Researchers of the temple mount in the 1800's for the PEF

1. James Barclay
2. Ermete Pierotti
3. Melchior de Vogue
4. Captain Charles Warren
5. Conrad Schick
6. Claude Reignier Conder
7. Sir Charles Wilson

Many of these men were Royal Engineers of
England

How did they gather the information?

The first part of this book is a catalogue of cisterns and underground chambers beneath the Temple Mount. Our method of cataloguing has been as follows: to determine the shape and dimensions of each underground cistern, whether it was rock-hewn or had stone-built walls, whether the walls were plaster-lined or not, and other details. Alternative plans of cisterns existing in the PEF Archives are discussed. We have adopted the numbering system of Schick which is based on an itinerary through the *Haram* [S 1887, 73] rather than that employed by Wilson and Warren which we find random and illogical. Hence, all cistern numbers referred to in this book are listed according to Schick's system (labelled with an S prefix); the Wilson/Warren numbers appear in brackets preceded by a W prefix. To assist readers who are more familiar with the numbering system of Wilson/Warren in identifying cisterns quickly, a table is provided below which lists the cisterns in the order of that system, together with the equivalent number in Schick's sequence.

Those studying the underground chambers and cisterns of the *Haram* have had at their disposal four detailed maps, of which only the last two have been regarded as reliable. The first was prepared by the Italian engineer E. Pierotti during his sojourn in Jerusalem between 1854-1861.⁵ This map shows conduits, subterranean tunnels and the approximate plans of 13 cisterns [P 1864, II, Pl. XI; scale approximately 1:1740]. The second map, dating from the same year, was published by Melchior de Vogüé [DV 1864, Pl. XVII; scale approximately 1:2030 (although not indicated on the plan)], following his examination of the *Haram*, during his visit to Jerusalem in 1862. While his map bears the evident influence of Pierotti's survey, it differs on some of the features including the cisterns, which reflect the French scholar's keen powers of observation. Next is the map dating from 1864-1865 (with additions from April 1866) prepared by Wilson, of the Royal Engineers, as part of the Ordnance Survey of Jerusalem. This shows the plans of 16 cisterns and the shaft entrances of 14 more [W 1866, Sheet 1, scale 1:500, entitled "Haram Grounds, etc."].⁶ The fourth map was prepared as a result of Warren's researches in Jerusalem during 1867-1870 for the Palestine Exploration Fund, but it also included information recorded by others up to the time of its publication [Wa 1871, 204-217; Wa 1884, Pls. IV-VII, scale 1:1000]. Work on mapping the cisterns of the *Haram* was continued by Conder and by C. Schick during the 1870s and later [Wa & C 1884, 217-25, 277-78; S 1887, 72-87; S 1896, 292-305] but their discoveries were not always published or correlated properly with the earlier maps of Wilson and Warren (cf. Gibson and Jacobson 1994, 150).

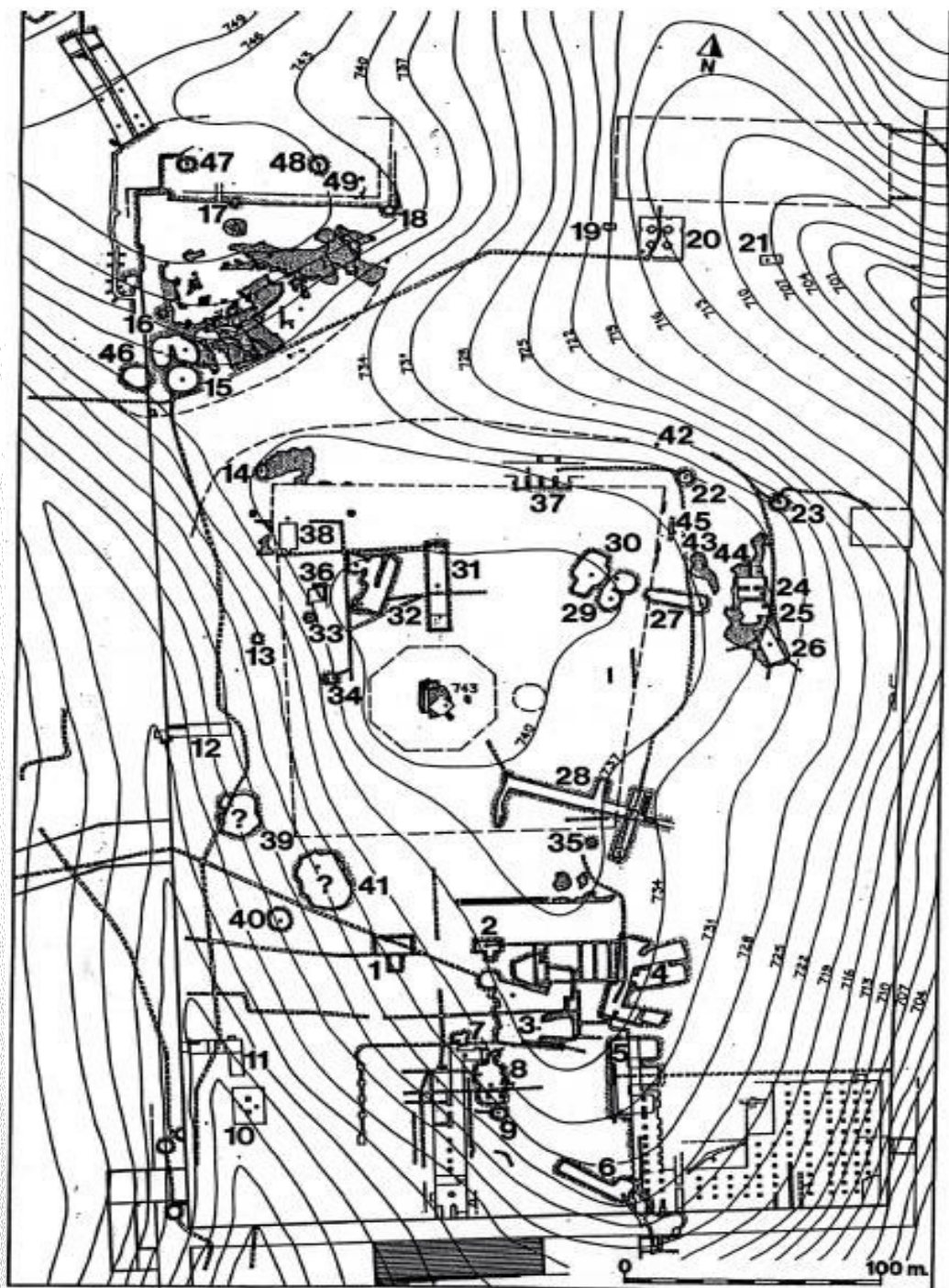
The cisterns and underground chambers listed in the order given by Wilson/Warren (W), and the equivalent number in Schick's sequence (S).

W1	=	S31	W14	=	S24	W27	=	S17
W2	=	S30	W15	=	S23	W28	=	S22
W3	=	S32	W16	=	S20	W29	=	---
W4	=	S34	W18	=	S20	W30	=	S12
W5	=	S28	W17	=	S16	W31	=	S13
W6	=	S2	W19	=	S11	W32	=	S9
W7	=	S4	W20	=	S10	W33	=	S7
W8	=	S3	W21	=	S21	W34	=	S29
W9	=	S8	W22	=	S15	W35	=	S18
W10	=	S6	W23	=	S14	W36	=	S1
W11	=	S5	W24	=	---	W37	=	S27
W12	=	S26	W25	=	S33			
W13	=	S25	W26	=	S19			

Numbering the Cisterns

The cisterns and underground chambers listed in the order given by Wilson/Warren (W), and the equivalent number in Schick's sequence (S).

W1 = S31	W14 = S24	W27 = S17
W2 = S30	W15 = S23	W28 = S22
W3 = S32	W16 = S20	W29 = ---
W4 = S34	W18 = S20	W30 = S12
W5 = S28	W17 = S16	W31 = S13
W6 = S2	W19 = S11	W32 = S9
W7 = S4	W20 = S10	W33 = S7
W8 = S3	W21 = S21	W34 = S29
W9 = S8	W22 = S15	W35 = S18
W10 = S6	W23 = S14	W36 = S1
W11 = S5	W24 = ---	W37 = S27
W12 = S26	W25 = S33	
W13 = S25	W26 = S19	



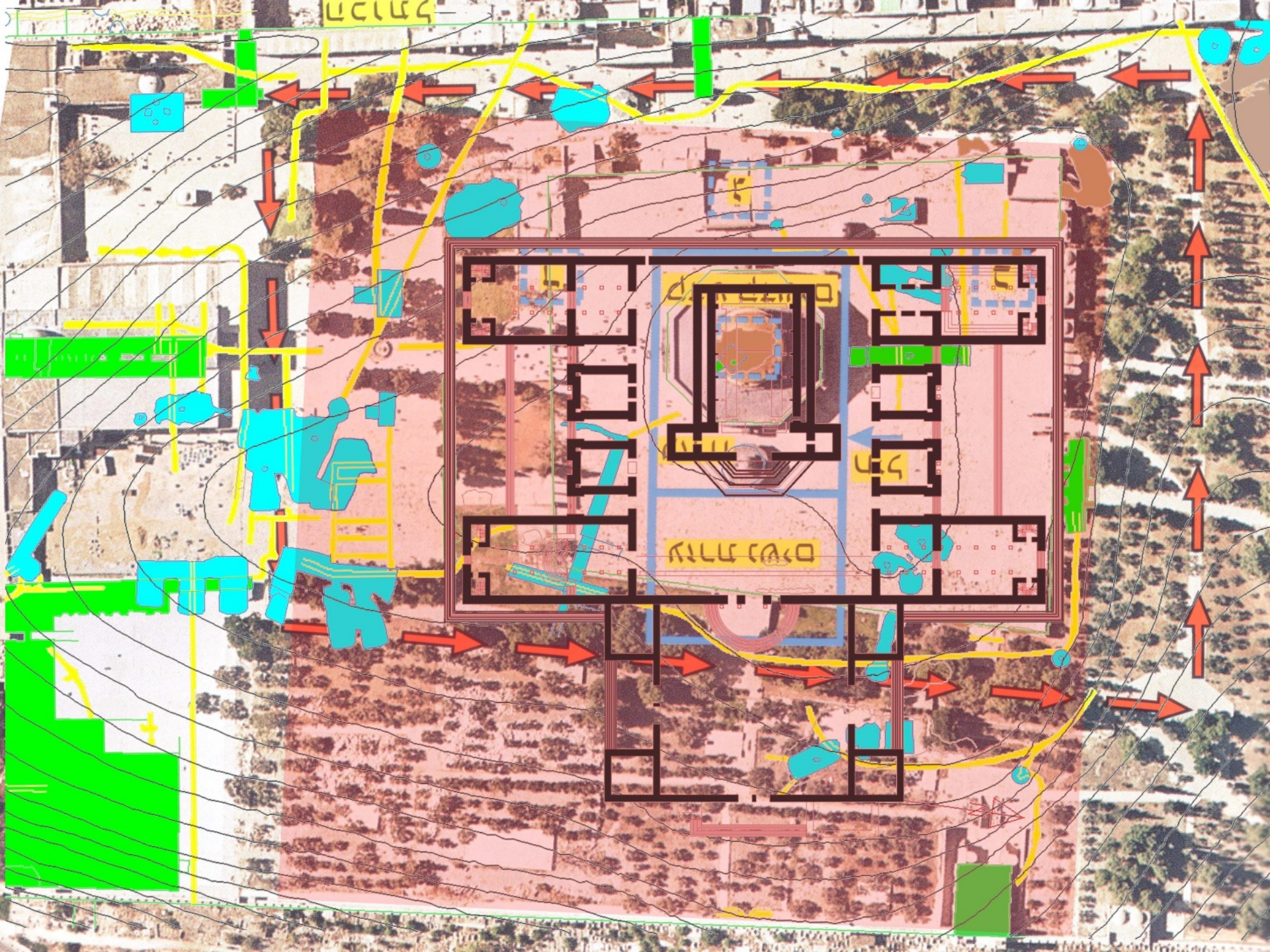
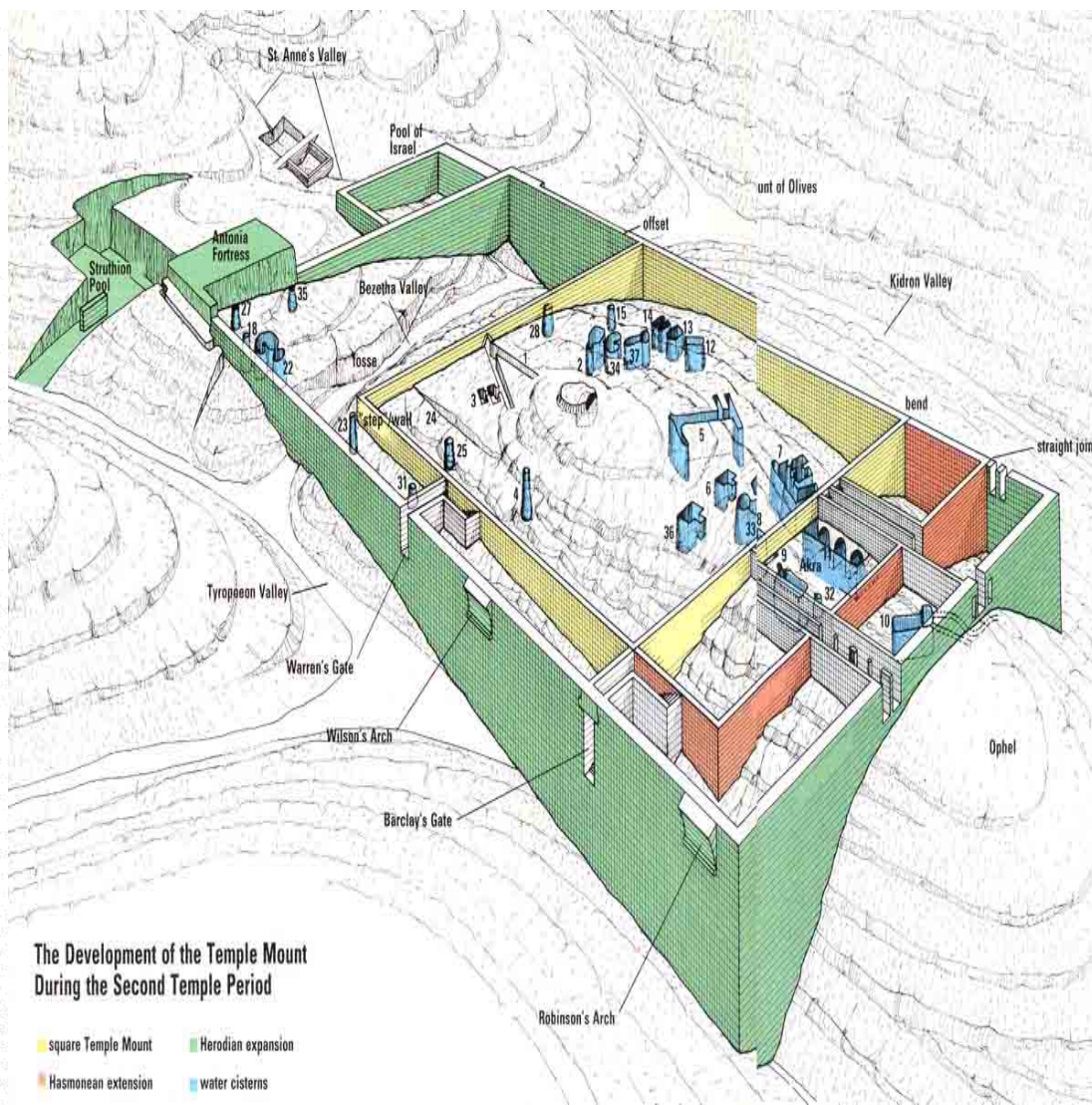
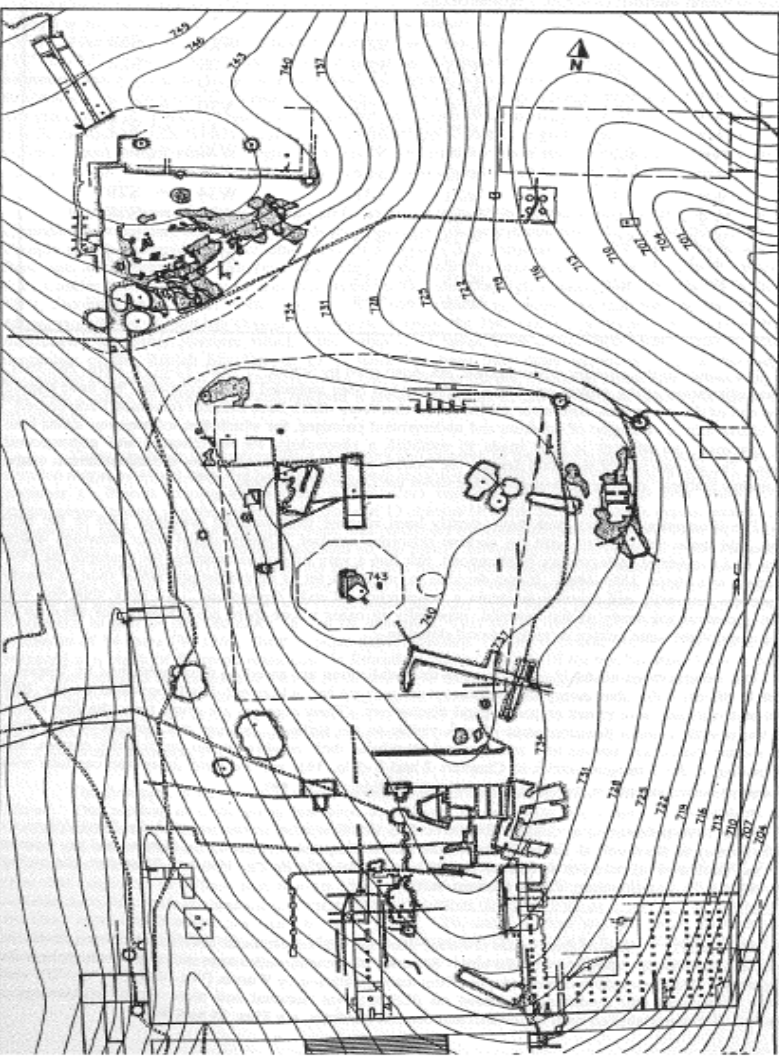


Figure 2 (overleaf). Map of the *Haram al-Sharif* showing the subterranean cisterns, chambers, conduits, passages and the natural topography of the area. Remains of ancient walls, steps and rock outcroppings are also depicted. This new map has been adapted from maps published by Warren [Wa 1884, Pls. VI-VII], with numerous corrections and modifications based on PEF archival material and more recent archaeological discoveries. For maps labelled with the cistern and conduit numbers, see **Figs. 10 and 86**].

Figure 2



The Development of the Temple Mount During the Second Temple Period

- square Temple Mount
- Herodian expansion
- Hasmonean extension
- water cisterns

Evidence from the Mishnah

The Mishnah, which draws mainly on sources from the late Second Temple, includes information about cisterns and underground chambers on the Temple Mount. Three water installations are specifically mentioned [*Erubin* 10:14]: the *Golah* Cistern (*Bor ha-Golah*), the Great Cistern (*Bor ha-Gadol*) and the *Hager* Well (*Be'er Hager* or *ha-Oer*). J. Schwartz has translated *Be'er* (or *Bor*) *Hager* as the "Cistern of the *Akra*" [Mazar 1985, 466].³ The *Golah* Cistern was located under one of the six chambers on the south side of the Temple court: "the *Golah* Cistern was there, and a wheel (for drawing water) was set over it, and from thence they drew water, enough for the whole Temple court" [Mishnah, *Middoth* 5:4, transl. H. Danby 1933, 598]. It may also be inferred that rainwater collected in the *Beth Horodath ha-Mayim* [Mishnah, *Middoth* 4:7] on the southern side of the Temple must have been channeled into a cistern [Patrich 1986, 225 and n. 37]. Subterranean chambers are referred to "beneath both the Temple Mount and the courts of the Temple" [Mishnah, *Parah* 3:3, transl. H. Danby 1933, 699; cf. *Ma'aser Sheni* 3:8]. A considerable quantity of water was required on the Temple Mount in this period, not only for drinking purposes, but also for ritual purification of worshippers and for the cleansing of the sacrifices [Har-El 1987]. A channel which collected blood from the sacrificial altar of the Temple is mentioned as extending as far as the Kedron Valley [Mishnah, *Yoma* 5:6].

Muslim eye witness year 985 ce.

According to Muhammad ibn Ahmad al-Muqaddasī (henceforce al-Muqaddasī), writing in 985, "in the Mosque Area there are twenty underground cisterns of vast size ..." He added that the reservoirs in Jerusalem, which collect the winter rains, "are opened during the spring in order to fill the tanks under the Haram Area, and also those in other places" [Le Strange 1890, 200].

Persian Nazir-i Khusraw in 1047

Below the Temple Mount in Jerusalem

The Persian Nāṣir-i Khusraw, who visited Jerusalem in 1047, provided the following account of the water installations of the Ḥaram: "Below the ground-level are numerous tanks and cisterns hewn out of the rock, for the Noble Sanctuary (*Ḥaram al-Sharif*) rests everywhere on a foundation of live rock. There are so many of these cisterns that however much rain falls, no water flows away to waste, but all is caught in the tanks, whence the people come to draw it. They have constructed leaden conduits for carrying down the water, and the rock cisterns lie below these, with covered passages leading down thereto, through which the conduits pass to the tanks, whereby any loss of water is saved, and impurities are kept therefrom ... The tanks that are below the Haram area never need to be repaired, for they are cut in the live rock. Any place where there may have been originally a fissure or a leakage, has been so solidly built up that the tanks never fall out of order. It is said that these cisterns were constructed by Solomon - peace be upon him! The roofing of them is like that of a baker's oven (*tannur*). Each opening is covered with a stone, as at a well-mouth, in order that nothing may fall therein" [Le Strange 1890, 197-98].

The picture presented by Nāṣir-i Khusraw is confirmed a little more than a century later by Theoderich, when Jerusalem was in Crusader hands: "Round about the Temple itself there are great pools of water under the pavement. Between the Golden Gate and the fifteen steps (leading up to the platform of the Dome of the Rock) there stands an ancient and ruined cistern, wherein in old times victims were washed before they were offered [Theoderich xiv; transl. A. Stewart 1891, 25]. Also, towards the south-east of the Temple enclosure he noted "a great stone like an altar, which, according to some traditions, is the mouth of some pools of water which exist there" [*idem*, 24-25].

Temple mount eye witnesses of water

The mid-14th century work, *Muthīr al-Gharam*, written by the Muslim Jerusalemite scholar Ahmad ibn-Hilāl al-Maḡdisī, mentions "24 great water cisterns" in the *Ḥaram* area and that ten Christians regularly "swept out the conduits which carried the water into the cisterns, and, further, attended to the keeping clean of the cisterns themselves, and other such service" [Le Strange 1890, 148-49; on the author of the *Muthīr al-Gharam*, see Burgoyne 1987, 228].

Muḥammad ibn-Shams al-Dīn al-Suyūṭī (henceforth Shams al-Dīn al-Suyutī), writing in 1470, described the *Bīr al-Waraqā* (Cistern 8) located beneath the pavement of the *Aqṣā* Mosque and the traditions associated with it [Le Strange 1887, 24-26; 1890, 198-200; Shalem 1995].

The Muslim scholar and cleric, Mujīr al-Dīn al-'Ulaymī (henceforth Mujīr al-Dīn), writing about his native city and its sacred sites in 1496, mentioned 34 cisterns, seven within the inner platform and the rest round about. According to Mujīr al-Dīn, "some (of these cisterns) have no opening, others have as many as three, so that there are more than forty mouths to these wells.⁴ Some are in ruins and some stopped" [Mujīr al-Dīn xix; Williams 1849, I, 150]. One of the cisterns in the area of the inner platform was described as "a well of running water" by Rabbi Meshullam of Volterra in 1481 [Adler 1930, 190].

The cisterns of the *Ḥaram* have continued to be used to the present day. In the 19th century, at times of drought, water was distributed in jars from the cisterns [Avitsur 1972, 43]. Some of these cisterns are still in use and are regularly cleaned by workmen employed by the *Awqāf* authorities (Fig. 1).



Lowest of the Three “Pools of Solomon”

The three large cisterns called “Pools of Solomon,” in an east-west valley about three miles (five km) southwest of Bethlehem, probably actually date from Hasmonean times. Pontius Pilate enlarged and repaired them and built long aqueducts to channel water to them. Each pool widens west to east, and the bottom of each is higher than the top of the next lower pool. The lowest pool fed a vast reservoir under the Temple Mount.

[2 Sam 5:8](#), [2 Kgs 20:20](#), [Eccl 2:6](#), [Matt 27:24](#)

An overview of Jerusalem's aqueduct system

Air photo of the Solomon's Pools The water supply system of Jerusalem, which reached its height in the late Second Temple period, consists of several independent but interconnected elements which were built/re-built at different times. It was explored and mapped by the 19th century explorers Charles Wilson and Conrad Schick and again in recent times by Amihai Mazar and others. The heart of the system is Solomon's Pools, three reservoirs which descend in stair-step fashion down the Artas Valley just southwest of Bethlehem.

They are monumental and quite astounding, with a combined surface area equal to more than four football fields and a capacity of over a quarter million cubic meters. The pools serve as a kind of junction or interchange for the system. Besides collecting rainwater from the plains to the west and the output of some local springs, the pools receive the water of the two major supplying aqueducts and then send it all out through three channels to Jerusalem en Herodion (all discussed below). The Solomon's Pools - surely not built in the time of King Solomon - were completely refurbished by the British in 1924, when a pumping station was also installed, to send the water through iron pipes to the Old City.

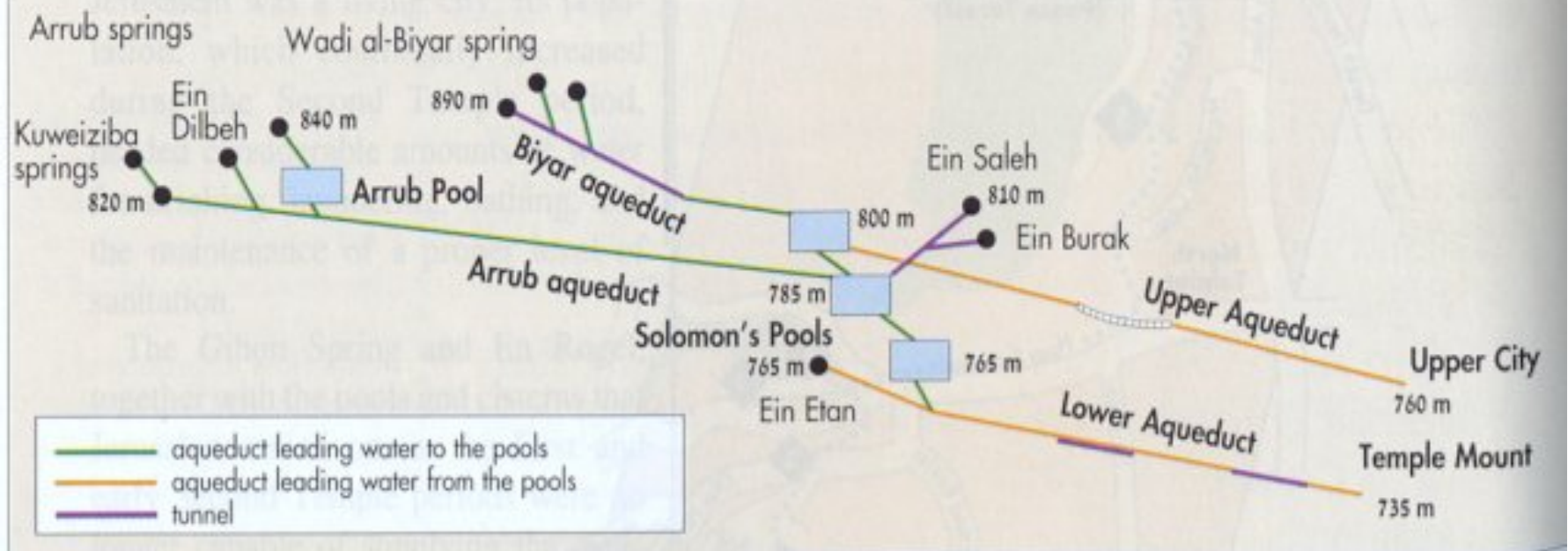
Solomon pools

Dimensions according to Mazar 2002

(in meters)	L x W	H	Capacity (m3)
Upper Pool	71 x 118	9,5 - 11,0	85.000
Middle Pool	135 x 50	10 - 12	90.000
Lower Pool	179 x (46 - 81)	8 - 16	113.000
Total			228.000 m3

Upper pool= 22,454,624 gallons
Middle pool=23,775,485 gallons
Lower pool = 29,851,441.9 gallons

Total gallons of water
228,000 m3 = 60,231,227 gallons



"He [Herod] spent money from the sacred treasury in the construction of an aqueduct to bring water into Jerusalem, intercepting the source of the stream at a distance of thirty-five kilometers. The Jews did not acquiesce in the operations that this involved; and tens of thousands of men assembled and cried out against him, bidding him to relinquish his promotion of such designs".

Flavius Josephus, *Jewish Antiquities*
18.60-62

"The growth of Jerusalem in the Second Temple period and the massive sacrificial activity on the Temple Mount caused a major problem of water supply. The solutions that has been provided in the First Temple period - exploitation of the Gihon waters, digging of cisterns under the houses, and the construction of large public pools - no longer sufficed" (from: Mazar 2002).

Prof. Amihai Mazar - Institute of Archaeology

A second phase occurred when Herod the Great, using Roman engineering and in connection with his rebuilding program of the Second Temple, created the sophisticated Wadi el-Byiar Aqueduct, which fed the upper pool. The aqueduct was partially built as a tunnel which collected underground water from the aquifer it was passing through, in the way of a qanat, to supplement the spring water and surface runoff it was also carrying. Water from the same upper pool was taken to Jerusalem's Upper City, where Herod had erected his new palace, through the king's ambitious so-called Upper or High Level Aqueduct. North of Bethlehem a tall bridge consisting of two levels of arches helped pass a deep valley.[2]

In a third phase, Roman prefect Pontius Pilate built 39 kilometres (24 mi) of aqueduct bringing yet more water to Solomon's Pools from the large collection pools at Arrub to the south.[9]



A Public Water Reservoir Dating to the First Temple Period has been Exposed for the First Time next to the Western Wall



Archaeologists have discovered an ancient water reservoir in Jerusalem which they suspect was used by pilgrims on their way to the Temple Mount.

The Israeli Antiquities Authority said the 'cistern' could have held 66,000 gallons (250 cubic meters) of water.

It likely dates back to the era of the First Temple, which could make it up to 3,000 years old.

According to the Hebrew Bible, the First Temple was constructed by King Solomon in the 10th century B.C. and then destroyed 400 years later.

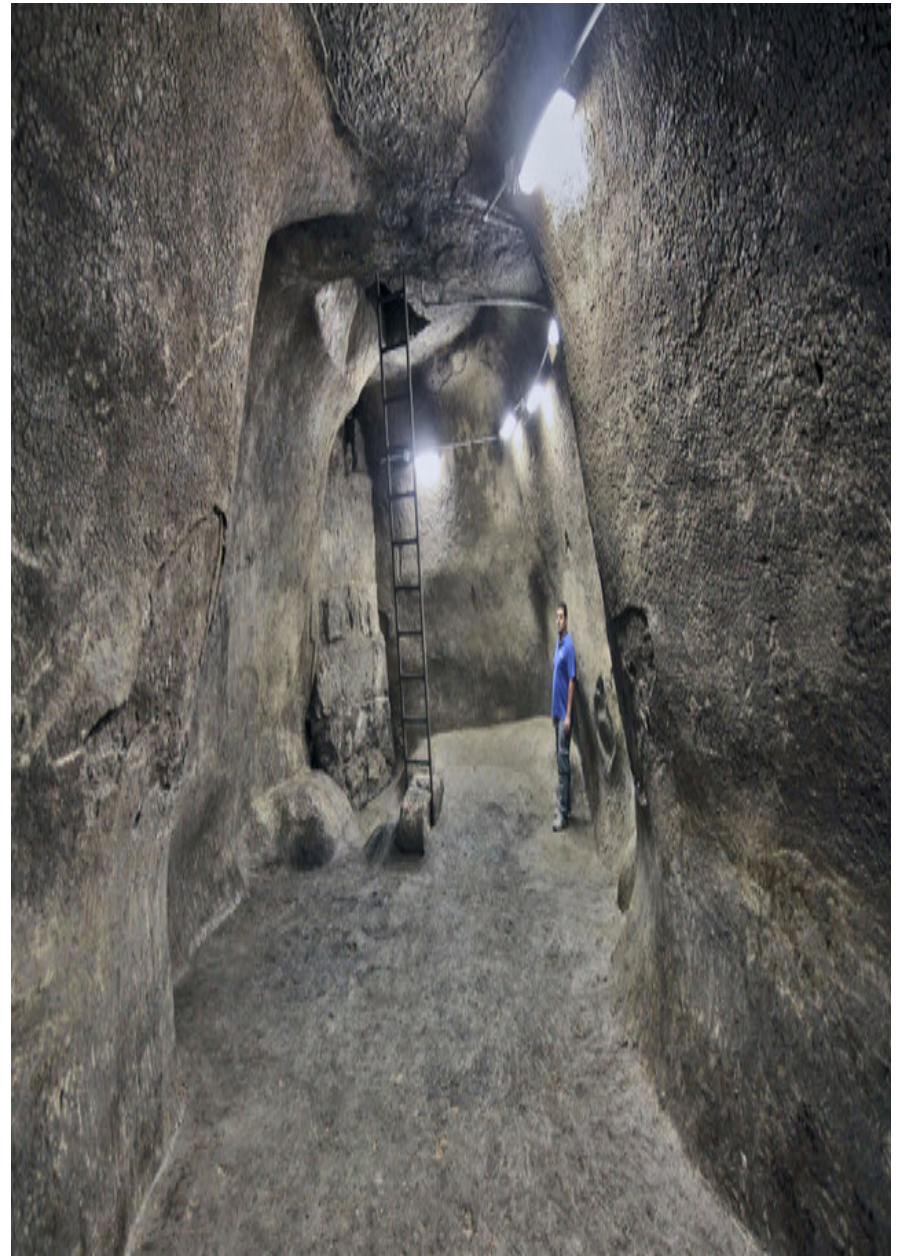
Read more: <http://www.dailymail.co.uk/sciencetech/article-2201175/Archaeologists-discover-ancient-reservoir-used-pilgrims-way-Temple-Mount-Jerusalem-3-000-years-ago.html#ixzz4c1TKX5ap>

Ecclesiastes 2:

4 I made myself great works. I built myself houses. I planted myself vineyards.

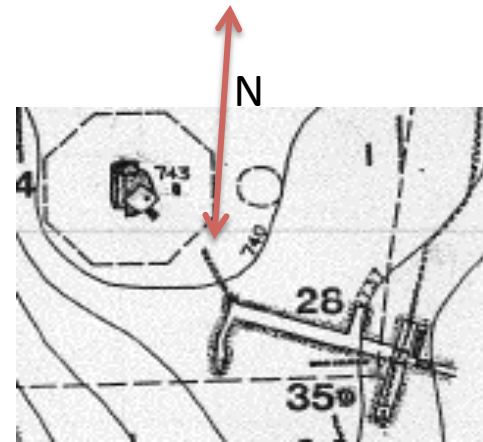
5 I made myself gardens and parks, and I planted trees in them of all kinds of fruit.

6 I made myself pools of water, to water from it the forest where trees were reared.



Drain system
to the cistern

Topographical map of the temple mount Cisterns and Conduits under the mount Number of the cisterns according to Conrad Schick



S

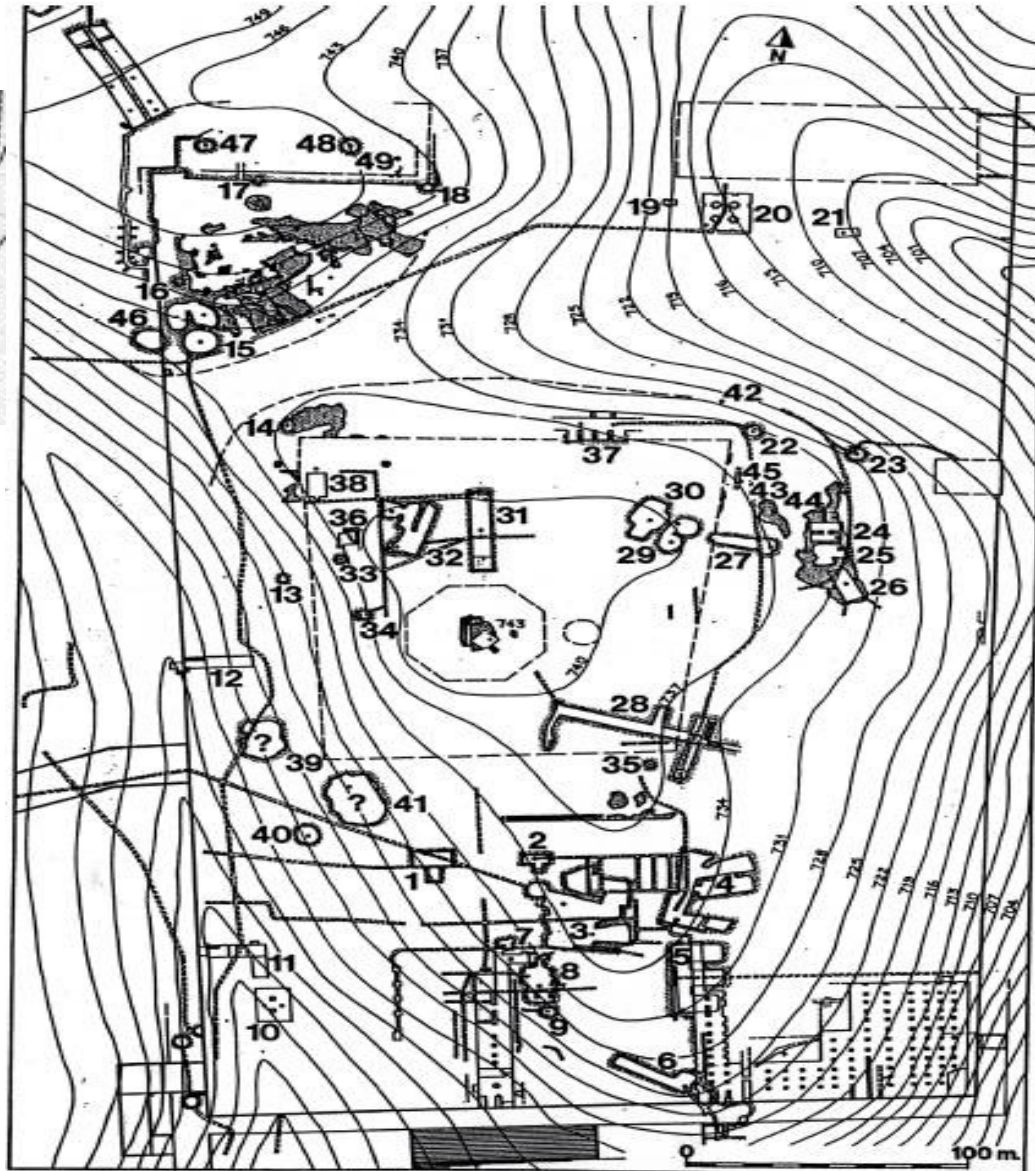
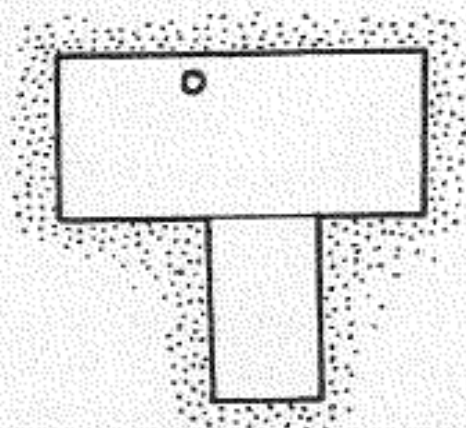


Figure 11 (overleaf). Plan and sketch of Cistern 1.

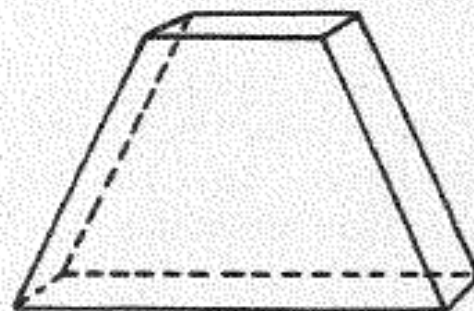
A. Adapted from a plan by Wilson [*PEF Archives*, JER/WIL/18/13].

B. Adapted from a sketch by Wilson [*PEF Archives*, JER/WIL/7/33 (= W 1866, Pl. XVII:4)].

Cistern #1



A

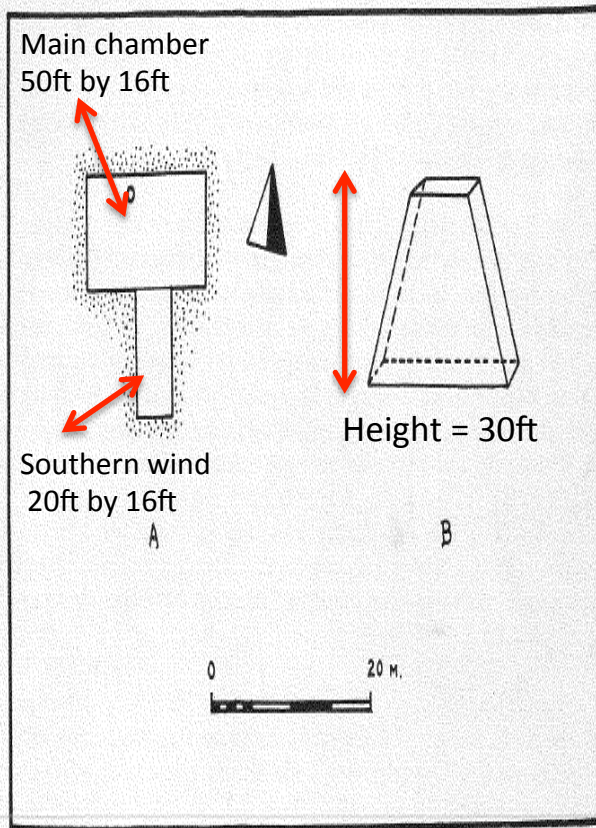


B



No. 1 (W36, should be labelled W6): Name unknown.

Summary Information:



Main chamber= 50ft by 16ft
Southern wing= 20ft by 16ft
Height = 30ft

Features		
Number of chambers:	A main chamber with a single wing	
Shape:	"T", with the main chamber constituting the cross-head	
Orientation:	Main chamber parallel to the southern wall of the <i>Haram</i> ; southern extension parallel to the western wall of the <i>Haram</i>	
Rock level at cistern:	734.7 m; 1.7 m below the <i>Haram</i> surface [Wa 1871, 208; C 1880a, 83]	
Wall type:	Rock face, inwardly sloping [W 1866, 43]	
Ceiling type:	Partly of rock, partly of large flat stones [W 1866, 43]	
Roof supports within cistern:	None	
Openings:	Single round shaft entrance on north side of the cistern [Ar W 18/13]	
Linkages:	Conduit runs above cistern [S 1887, 73], but none enters it [W 1866, 43]	
Dimensions		
	Dimension, in named reference	Dimension, scaled from plan
Area dimensions:		
Main chamber	15 x 5 m [S 1887, 73]	15 x 7 m [Ar W 18/13]
Southern wing	6 x 5 m [S 1887, 73]	8 x 4.3 m [Ar W 18/13]
Height of main chamber:	9 m [S 1887, 73]	
Depth of floor below the <i>Haram</i> :		
Main chamber	13 m [S 1887, 73], 12.5 m [W 1866, 43]	
Southern wing	11.6 m [S 1887, 73], 11.1 m [W 1866, 43]	

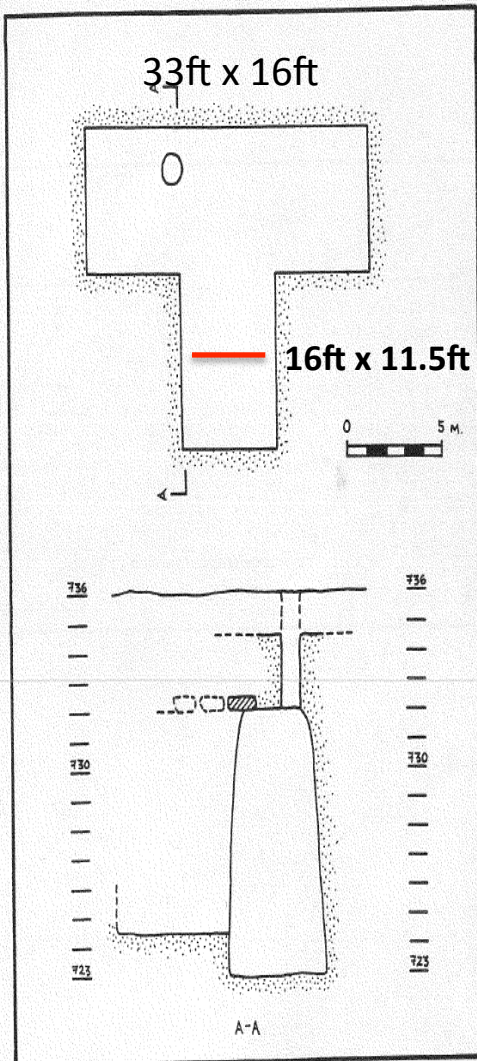
Cistern #2

No. 2: (W 36) Name: *Bīr Sirru* بئر سرو (Well of the Cypresses). Probably named after the cypress trees that stand around the *K'as* Fountain.

Summary Information:

Features	
Number of chambers:	A main chamber with a single wing
Shape:	"T", with the main chamber constituting the cross-head
Orientation:	Main chamber parallel to the southern wall of the <i>Haram</i> ; southern extension parallel to the western wall of the <i>Haram</i> .
Rock level at cistern:	734.9 m; 1.5 m below the <i>Haram</i> surface [C 1880a, 83]
Wall type:	Almost certainly rock-face
Ceiling type:	Rock (implied by Wa & C 1884, 225)
Roof supports within cistern:	None
Openings:	Single round shaft entrance on north side of the cistern [W 1866, Sheet 1]
Linkages:	This cistern was fed by the system of channels to the east that also supplied Cistern 3 and 4 [W 1866, Sheet 1]

Dimensions		
	Dimension, in named reference	Dimension, scaled from plan
Area dimensions:		
Main chamber	10 x 5 m [S 1887, 73]	10.0 x 4.3 m [W 1866, Sheet 1]
Southern wing	5 x 3.5 m [S 1887, 73]	4.1 x 2.6 m [W 1866, Sheet 1]
Height of cistern/ capacity:	Not known	
Depth of floor below the <i>Haram</i> :		
Main chamber	Not known	
Southern wing	Not known; the floor is raised 4.8 m above the floor of the main chamber [S 1887, 73]	



Ablutions Fountain south of the Dome of the Rock is found between Cistern #2 and #3

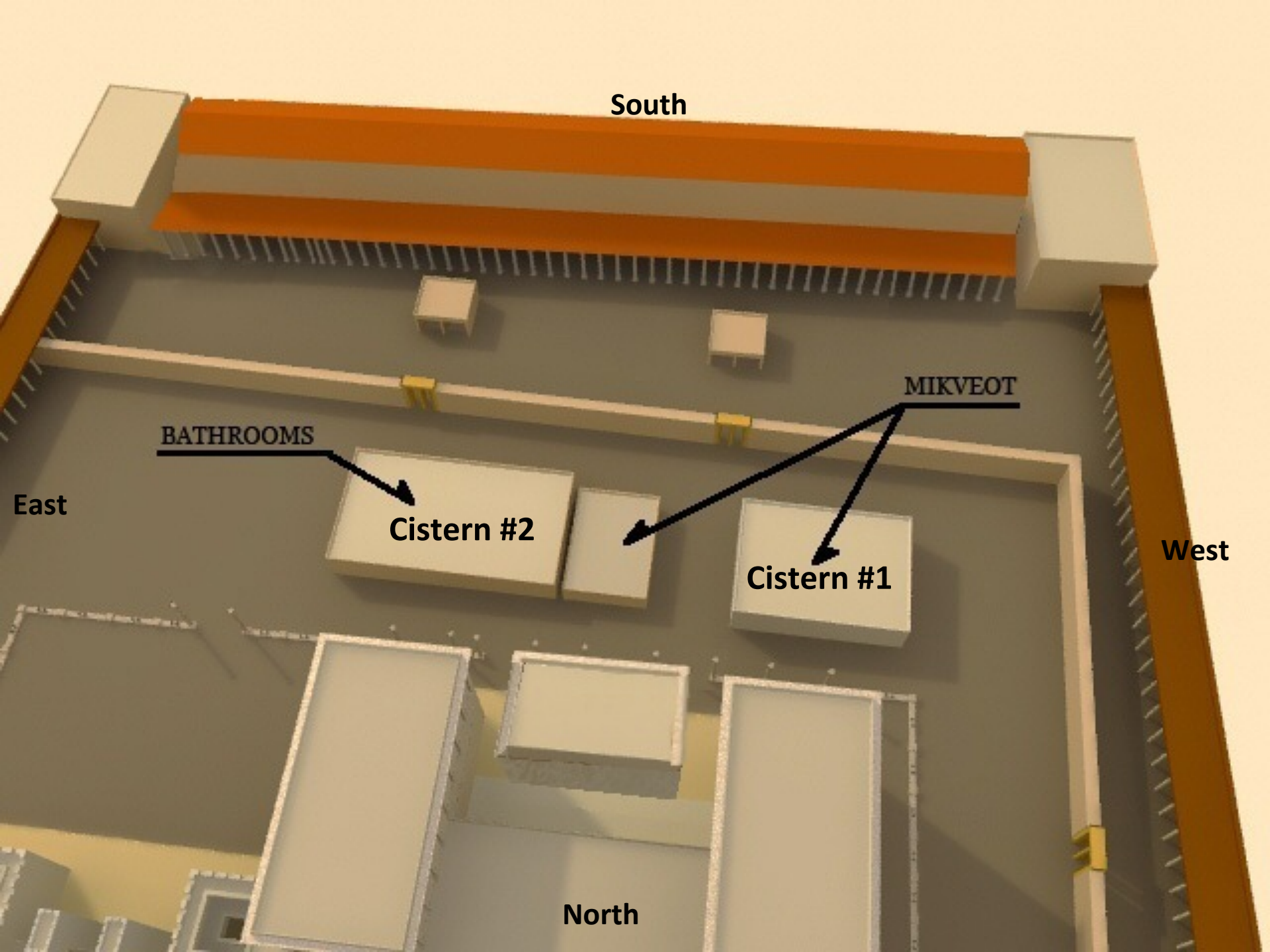


Details:

Wilson [W 1866, 43] described the cistern as follows: "*Cistern No. VI.*, south of the platform and near the fountain Al-Kas, descended; 41 feet deep (= 12.5 m), 1 foot 4 inches (= 0.41 m) water. This cistern has a branch on its southern side 25 feet (= 7.6 m) long, and raised 4 ft 8 ins (= 1.4 m) above the floor line; its shape is peculiar, being that of a hollow truncated pyramid; no conduit was seen entering; the roof was partly of rock and partly of large flat stones" (see the sketch showing the shape of this cistern in W 1866, Pl. XVII:4; confirmation that this sketch represents Cistern 6 (S 1) and none other is made quite clear from the placing of the sketch in Wilson's original manuscript: *PEF Archives*, JER/WIL/7/33 (Fig. 11:B). According to Wilson's original sketch for this illustration (Fig 11:A; labelled "no:VI"; *PEF Archives*, JER/WIL/18/13, scale 1:500) this is a "T" shaped cistern with a main chamber measuring 15 x 7 m. and a southern extension 8 x 4.3 m.

Schick [S 1887, 73] gave the following measurements: 15 x 5 m with the extension 6 x 5 m). A circular shaft entrance exists in the ceiling on the north side of the cistern. A conduit passing over this cistern fed the K'as Fountain with water. Schick [S 1887, 73] added that the floor of this cistern lies 13 m below the surface of the *Haram* and was of sufficient height to hold water to a depth of 9 m (Fig. 12). He commented that the southern appendage once accommodated steps which led down into the pool.

This cistern resembles another smaller "T"-shaped cistern (S2, or W6) which is located east of the *K'as* Fountain. In the second edition of Wilson's map of the *Haram* (published in 1876). Cistern W6 was incorrectly labelled as No. 36 on the published plans, a mistake which does not seem to have been noticed or corrected until now and has been perpetuated by other scholars (cf. Wa 1884; S 1887). While both cisterns are in close proximity to each other, there are a number of facts which help identify the larger western cistern as Cistern W6 (S1) of the descriptions and the smaller eastern cistern as W36 (S2). First, the plan of the larger western cistern appears among Wilson's original sketches where it was clearly labelled by him as "No.VI" (Fig. 11:A). Secondly, the measurements given by Wilson [W 1866, 43] for the branch on the southern side (25 ft = 7.6 m) of the chamber fit the measurements of the western cistern but not those of the eastern cistern. Thirdly, Wilson clearly stated that "no conduit was seen entering" Cistern 6; this is true of the western cistern but not of the eastern cistern which is shown on Wilson's map with a conduit entering it from one of the sides. It should be pointed out, however, that Schick believed that the western cistern was fed by a conduit [S 1887, 73].



South

MIKVEOT

BATHROOMS

East

Cistern #2

Cistern #1

West

North

No. 3: (W8) Name: *Bīr Buhāyr* بئر بحير (The Small Sea).

Summary Information:

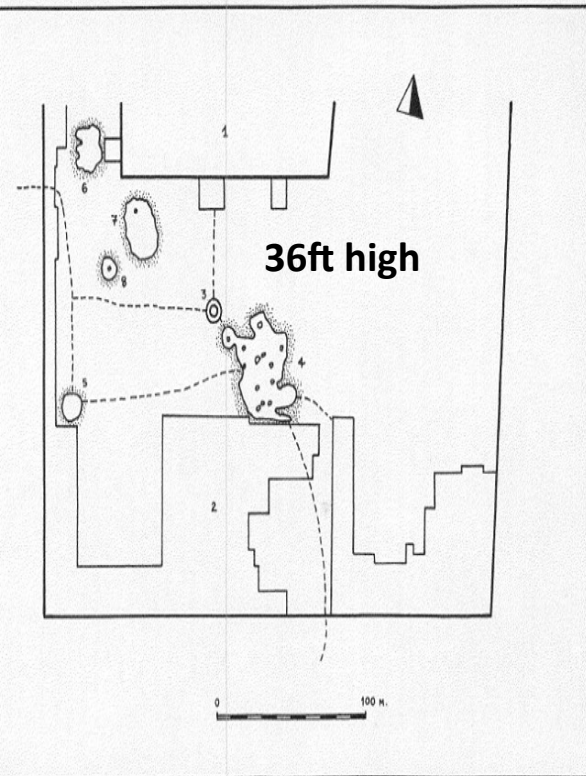


Figure 15

Features		
Number of chambers:	One principal chamber divided into three parts by rock partitions, and a small circular chamber projecting north-west	
Shape:	Irregular, overall approximating to a square	
Orientation:	Roughly aligned with the western and southern walls of the <i>Haram</i>	
Rock level at cistern:	734.9 m; 1.5 m below the <i>Haram</i> surface [Wa 1871, 208]	
Wall type:	Entirely rock-cut. Plastered over [B 1858, 527]	
Ceiling type:	Principally of rock supplemented by large flat stones and some vaulting [W 1866, 44].	
Roof supports within cistern:	5 free-standing piers [S 1887, 74]; 4 piers [Ar W 18/14] and 2 projecting rock partitions at the north-west and east sides of the cistern [Ar W 18/14]	
Openings:	Numerous shaft entrances [P 1864, II, Pl. XI]; 3 in use [W 1866, 44]. Descending staircase from the south-east with 44 steps [B 1858, 525] or 50 steps [S 1887, 74] (see also below)	
Linkages:	Conduit seen reaching the cistern from the east [W 1866, 44]; several claimed to converge at the opening at the south-west [B 1856, 527]; additional ones from the west, north and south-east [P 1864, I, 97]	
Dimensions		
	Dimension, in named reference	Dimension, scaled from plan
Area dimensions:	Approx. 40 x 30 m [S 1887, 74] 120x90 ft	For plan with detailed dimensions, see Ar W 18/14
Height of cistern / capacity:	10m [P 1864, I, 96-97]; 11.5 m [S 1887, 74] capacity: 12,000 m ³ [S 1887, 74]; 9,100 m ³ [B 1858, 527; W 1871, 17]	
Depth of floor below the <i>Haram</i> :	14 m [S 1887, 74]; 13.3 m [W 1866, 44]	

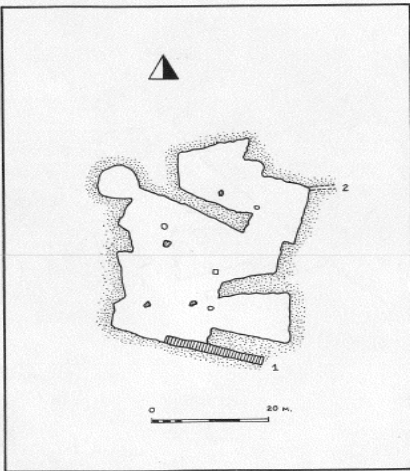
Schick's estimate
 12,000 m³=3,170,064 Gallons
 Barclay's estimate
 9,100 m³= 2,403,966 Gallons



The Great Sea,
painting by William
'Crimea' Wilson, from
the archives of the
Palestine Exploration
Fund. This lies
beneath the platform
of Temple Mount
between the al Aqsa
Mosque and the
Dome

Details:

The cistern is located to the south of the inner platform and is the largest of the underground cavities on the *Haram*. It was first investigated and mapped by Barclay [B 1858, 525-527 and map opposite p. 233; sketch of interior on p. 526] having removed a half-buried marble capital covering the entrance (Fig. 14). It had a flight of 44 broad rock-cut steps (50 steps according to Schick [S 1887, 73-74]) "so worn in some places as to have required partial re-cutting, only a few centuries ago to all appearance...". The water at the bottom of the cistern was "knee-deep". Barclay, together with his sons, measured the cistern and found that it was 736 ft (=



224.3 m) in circuit and 42 ft (= 12.8 m) in depth, with a capacity a little short of two millions of gallons (9,100 m³). Barclay described the cistern as "a rude piece of work" with "ill-shaped piers, apparently of unhewn rocks, badly plastered..." According to Barclay, "the rain from el-Aksa is conducted into it by a small trench, and much also finds its way through small superficial channels leading from various parts of the Temple area into the same opening near El-Aksa Porch." He reported that one of the "old keepers who had formerly visited this subterranean lake" claimed that an extension of the aqueduct leading from Solomon's Pools entered the cistern from the west. The cistern had eight shaft entrances but only one was open at the time of Barclay's visit.

It was visited by the engineer, John Irwine Whitty, in 1862 while working on the "water supply and sewerage" system of Jerusalem for the London Syrian Improvement Committee [Whitty 1863, 71-72]. He wrote that the cistern was "excavated in the solid rock, the sides coated with cement, and the roof supported by numerous columns built of rough stone, or hewn out of the original material." Whitty further observed that "the opening through which I let myself down is like the mouth of a well, several feet deep, at the bottom of which commences a ruined flight of steps, leading down to the water's edge."

According to Pierotti [P 1864, I, 96] it was known as "Birket es-Sultan" but it is now commonly referred to as the "Great Sea" (*al-Bahr al-Kabir*).¹ This is the only one of Pierotti's plans (Fig. 15), which resembles a subsequent plan of the same cistern, in this case Cistern 8 in Wilson's survey. Pierotti [P 1864, I, 95] reported visiting the cistern in the summer of 1859. On the basis of Pierotti's plan, the cistern was of irregular shape, measuring approximately 44 x 45 m, with numerous shaft entrances in its ceiling. Pierotti [P 1864, I, 96-7; cf. Bonney 1864, 7] claimed that the cistern was wholly hewn out of the rock. In the wall close to the small circular chamber projecting north-west, Pierotti observed "notches cut in the rock, obviously to be used as steps" [P 1864, I, 97]. Two conduits are shown entering the cistern from the west, one extending from the direction of the Gate of the Chain (*Bāb al-Silsila*) in the western wall of the Temple Mount via the *K'as* Fountain, and the other extending from Cistern 19 or Barclay's Gate. A passage is shown extending from the east wall of the cistern towards the subterranean structures known as "Solomon's Stables." A second passage is shown extending southwards from the cistern towards the area of the Triple Gate.

Summary Information:

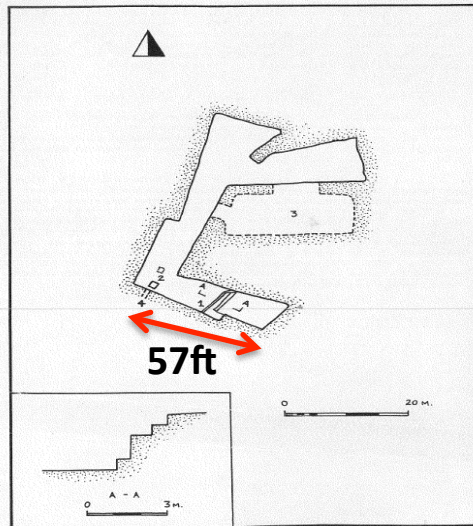
Cistern #4

Features	
Number of chambers:	Rectilinear "C"-shaped chamber with an elevated central annex connected to the main chamber via openings on the west and north sides.
Shape:	A distorted "E"
Orientation:	Approximately aligned north-south
Rock level at cistern:	734.9 m; 1.5 m below the <i>Haram</i> surface [Wa 1871, 208]
Wall type:	Rock, covered with plaster [W 1866, 44]
Ceiling type:	Rock [W 1866, 44; S 1887, 74]
Roof supports within cistern:	No free-standing piers
Openings:	2 square shaft openings 5.2 m apart, formerly connected by a slot cut in the rock but this is now filled in with column fragments [S 1887, 74]
Linkages:	A conduit enters the south side of the cistern near the south-west corner [Ar W 18/14]. The northern shaft entrance is connected to a network of conduits to the north [W 1866, Sheet 1]. Rock cut channels run above the cistern [S 1887, 74]

Dimensions		
	Dimension, in named reference	Dimension, scaled from plan
Area dimensions:		
Main chamber		
west branch	36 x 5.3 m [S 1887, 73]	36.5 x 6 m [Ar W 18/14]
south branch	17.4 x 5.3 m [S 1887, 73]	17.5 x 5 m [Ar W 18/14]
north branch	22 x 8.5 m [S 1887, 73]	22 x 8.5 m [Ar W 18/14]
Annexe		20 x 8 m [Ar W 18/14]
Height of cistern / capacity:	11m [S 1887, 74]; capacity 8,000 m ³ [S 1887, 73]	
Depth of floor below the <i>Haram</i> :	19.5 m [S 1887, 74]; 18.9 m + 0.8 m water [W 1866, 44]	

Details:

According to Wilson's original sketch [PEF Archives, JER/WIL/18/14, scale 1:500], the cistern is a distorted "E" in plan with an elevated chamber which communicates with the northern and western parts of the cistern and no differences in level are mentioned by Schick [S 1887, 74] (Fig. 20). In addition there is an elevated extension at the southeast extremity with four irregularly spaced steps ascending 8 ft 9 ins (= 2.67 m), according to measurements given by Wilson on the plan. In the southwest corner there are two square shaft entrances with an opening between them in the rock which was "roofed with old pillars". A conduit is shown entering the cistern from the southwest. The position of the shaft entrances and the conduit on the sketch

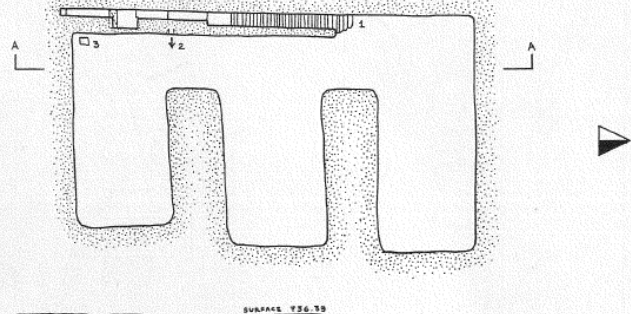


Height 36ft
8,000 m³= 2,113,376 gallons

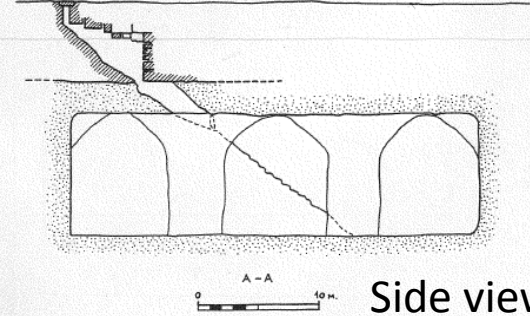
Summary Information:

Cistern #5

Top view



Side view



Features	
Number of chambers:	One, divided into four wings by two rock partitions
Shape:	An "E" in plan
Orientation:	Aligned with the axial system based on the western and southern walls of the <i>Haram</i> , and closely registers with the ramped passage to the Triple Gate
Rock level at cistern:	730.6 m; 5.8 m below the <i>Haram</i> surface [Wa 1871, 208]
Wall type:	Rock-cut [W 1866, 44]
Ceiling type:	Rock-cut in the form of barrel vaults [Wa 1871, 209]
Roof supports within cistern:	No free-standing piers. The four wings are separated rock partitions [S 1887, 74]
Openings:	A long flight of steps descends to the cistern on its west side [S 1887, 75; Wa 1871, 209; Ar Wa 62/36]. A square shaft opening exists in the south west corner [Ar Wa 62/36]
Linkages:	It shows a clear relationship with the passage leading to the Triple Gate which is located above it. A conduit enters this cistern close to its south-west corner [Ar Wa 62/36]

Dimensions

	Dimension, in named reference	Dimension, scaled from plan
Area dimensions of chamber:		
west branch	32 x 6 m [S 1887, 75]	33.6 x 6 m [Ar Wa 62/36]
south branch	13 x 8.4 m [S 1887, 75]; 12.2 x 7.9 m [Wa & C 1884, 220]	11.3 x 7.9 m [Ar Wa 62/36]
middle branch	"	12.5 x 8.3 m [Ar Wa 62/36]
north branch	"	13.0 x 8.2 m [Ar Wa 62/36]
Height of cistern/ capacity:	9 m/ 3,200 m ³ [Wa 1871, 209]; 10 m/ 5,000 m ³ [S 1887, 75]	9.6 m [Ar Wa 62/36]
Depth of floor below the <i>Haram</i> :	22 m [S 1887, 75]; 19.1 m [W 1866, 44]; 19.1 m + 2.4 m water [W 1866, 44]; 18.7 m [Wa 1871, 208]	

Details:

Wilson [W 1866, 44] described this cistern as follows: "*Cistern No. XI*, east of Al Aksa; 2 feet 6 inches (= 0.8 m) deep, 8 feet (= 2.4 m) of water; not visited, apparently very large." Only the position of the round shaft entrance in the southwest corner appeared on Wilson's map of the *Haram* [W 1866, Sheet 1].

Warren [Wa 1871, 208-209] wrote the following: "No. 11. Examined 11th November, 1867. Situated on east of Mosque of Aksa. Rock 2397 (ft = 730.6 m); at 19 feet (= 5.8 m) below surface; bottom 61 feet 6 inches (= 18.75 m) below surface of ground. It consists of three tanks, each about 26 feet (= 7.9 m) by 40 feet (= 12.2 m), lying east and west, connected by a passage 14 feet (= 4.3 m) wide, running north and south; it is capable of holding about 700,000 gallons (= 3,200 m³) of water. The roof is cut in rock, in the form of arches. Steps cut in the rock run up along the west side, and issue close to the mouth of the cistern.

Warren = 1871
30ft high/ capacity 845,350.6 gallons

Schick = 1887
33ft high / capacity 1,320,860 gallons

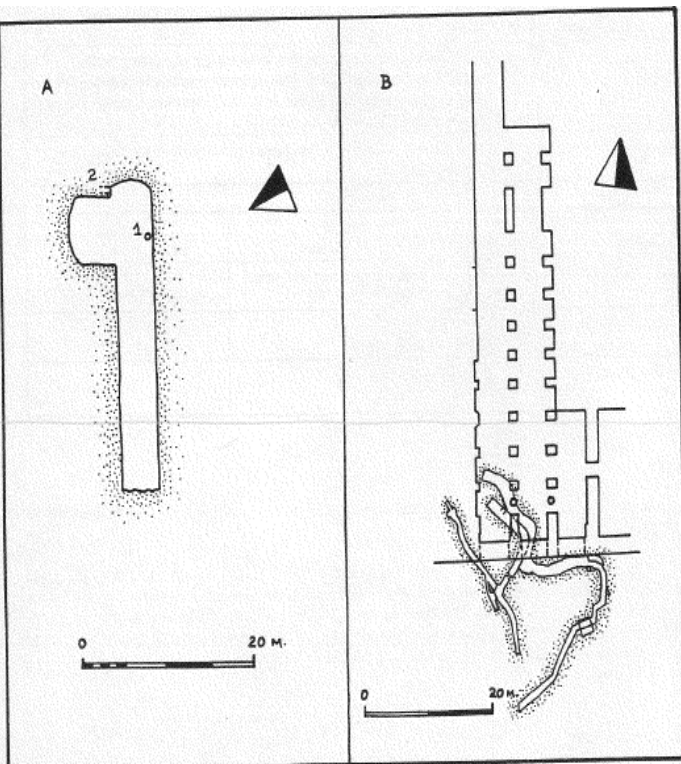
Cistern found near the triple gate on the southern part of the mount

No. 6: (W 10) Name: *Bīr Kharbān* بئر خربان (The Derelict Well).

Cistern#6

Summary Information:

Features		
Number of chambers:	One, widened at its south-eastern end	
Shape:	Oblong, with lateral widening at south-east end	
Orientation:	Aligned north-west to south-east, with the natural rock escarpment	
Rock level at cistern:	727.6 m; 9.4 m below the <i>Haram</i> surface [Wa 1871, 208]; 10.2 m [Ar Wa 62/10]	
Wall type:	Rock-cut [Ar W 18/13; Ar S 28/2]	
Ceiling type:	Rock [W 1866, 44]	
Roof supports within cistern:	None	
Openings:	Two channels join the cistern at its south-eastern edge, one a shaft entrance and the other a lower-sited outlet for overflow beneath the Triple Gate according to S 1887, 75 and Ar W 18/13, but three openings are shown in Ar S 28/2 and Ar Wa 62/1	
Linkages:	This cistern is connected to the channel system beneath the Triple Gate (see above)	
Dimensions		
	Dimension, in named reference	Dimension, scaled from plan
Area dimensions of chamber:	33 x 5 m, except at the south east, where its width doubles [S 1887, 75]	30.8 x 4.3 m (x 9.8 m at the south-east) [Ar W 18/13]
Height of cistern:	12 m [S 1887, 75]; 9.1 m [W 1866, 44]	
Depth of floor below the <i>Haram</i> :	16 m [S 1887, 75]	



Schick = 40 high (1887)

Depth from the haram 53ft below

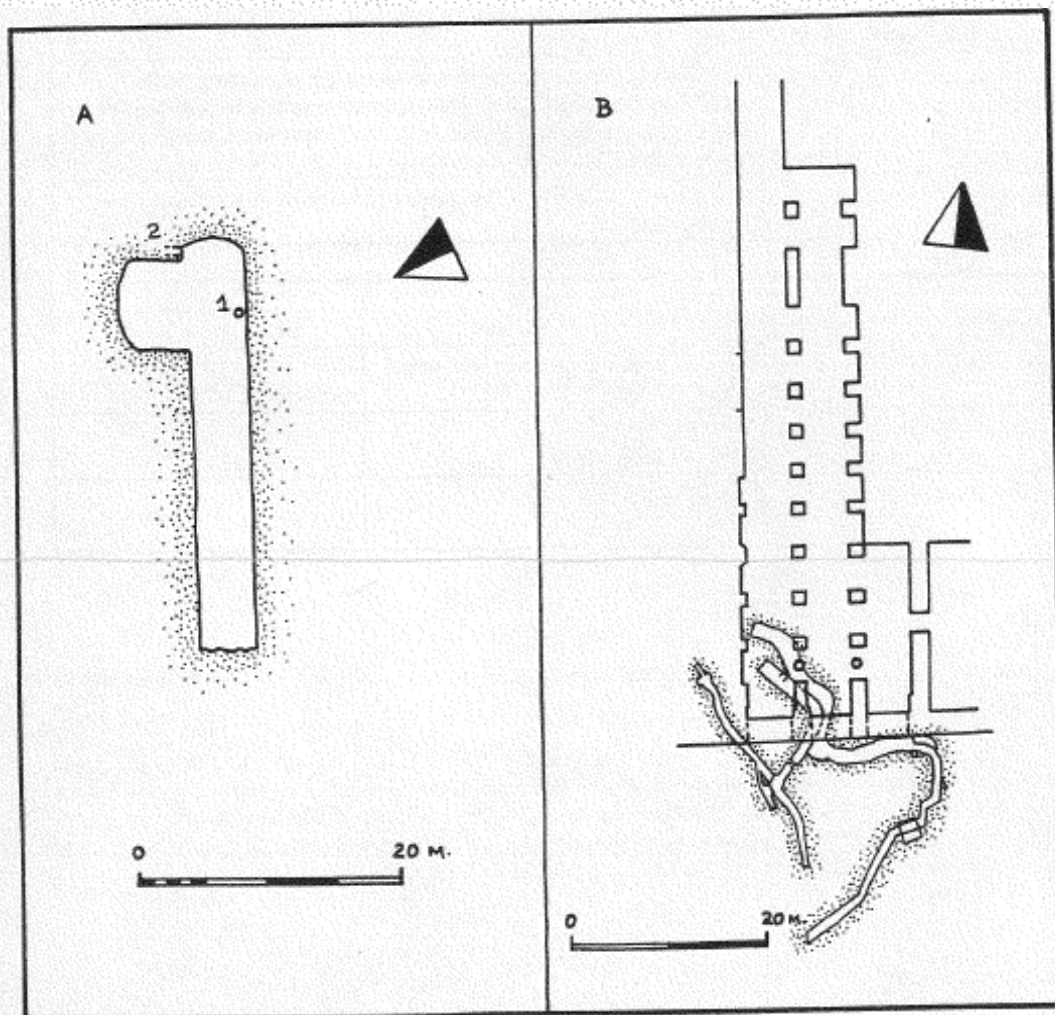
Details:

This cistern was described by Barclay as "an oval-shaped well five or ten yards (= 4.5 or 9 m) in diameter" [B 1858, 506].

According to Wilson's original sketch [PEF Archives, JER/WIL/18/13, scale 1:500] (Fig. 23:A), the cistern consists of an elongated chamber with an extension towards the northeast. It measures 30.8 x 4.3 m (or 33 x 5 m according to Schick 1887, 75). There are two openings, one partly closed near the southwest wall and the other situated at the southeast corner between the main chamber and the extension. This corner is omitted from the plan in the *Ordnance Survey* map published by Wilson [W 1866, Sheet 1].

Figure 23 (overleaf).

- A. Plan of Cistern 6, adapted from a sketch by Wilson [*PEF Archives*, WIL/18/13].
(1) Entrance which was, according to Wilson, "curiously closed";
(2) Tunnel entrance (see under Conduit 14, in Chapter 5).
- B. Plan of tunnels (see under Conduit 14) and passage leading from the Triple Gate, from a plan published by Wilson [W 1866, Pl. XV:3].



Summary Information:

Features		
Number of chambers:	Three	
Shape:	Two interconnecting ovular chambers, west and east, the latter communicating with a round chamber to its south [Ar Wa 62/12; Ar S 239/6]	
Orientation:	----	
Rock level at cistern:	736.4 m [Wa 1871, 214]	
Wall type:	Entirely of rock [S 1887, 78]	
Ceiling type:	Rounded rock [Wa 1871, 214]	
Roof supports within cistern:	None	
Openings:	One circular shaft opening to each chamber [Ar Wa 62/12; Ar S 239/6]; Schick shows an additional round opening (inlet) close to the north side of this cistern [Ar S 239/6]. An opening in the wall of the east chamber leads to a staircase along the internal wall.	
Linkages:	This cistern may have been fed via the rock-hewn passage leading from the Struthion Pool [C 1879, 27; 1880b, 93]	
Dimensions		
	Dimension, in named reference	Dimension, scaled from plan
Area dimensions:		
Western chamber	7.25 x 13.0 m [S 1887, 78]	7.2 x 13.0 m [Ar S 239/6]
Eastern chamber	----	8.3 x 10.5 m [Ar S 239/6]
Southern chamber	11 m diameter [S 1887, 78]	11.4 m diameter [Ar S 239/6]
Height of cistern:	7.6 m [S 1887, 78]	
Depth of floor below the <i>Haram</i> :	11 m [S 1887, 78]	

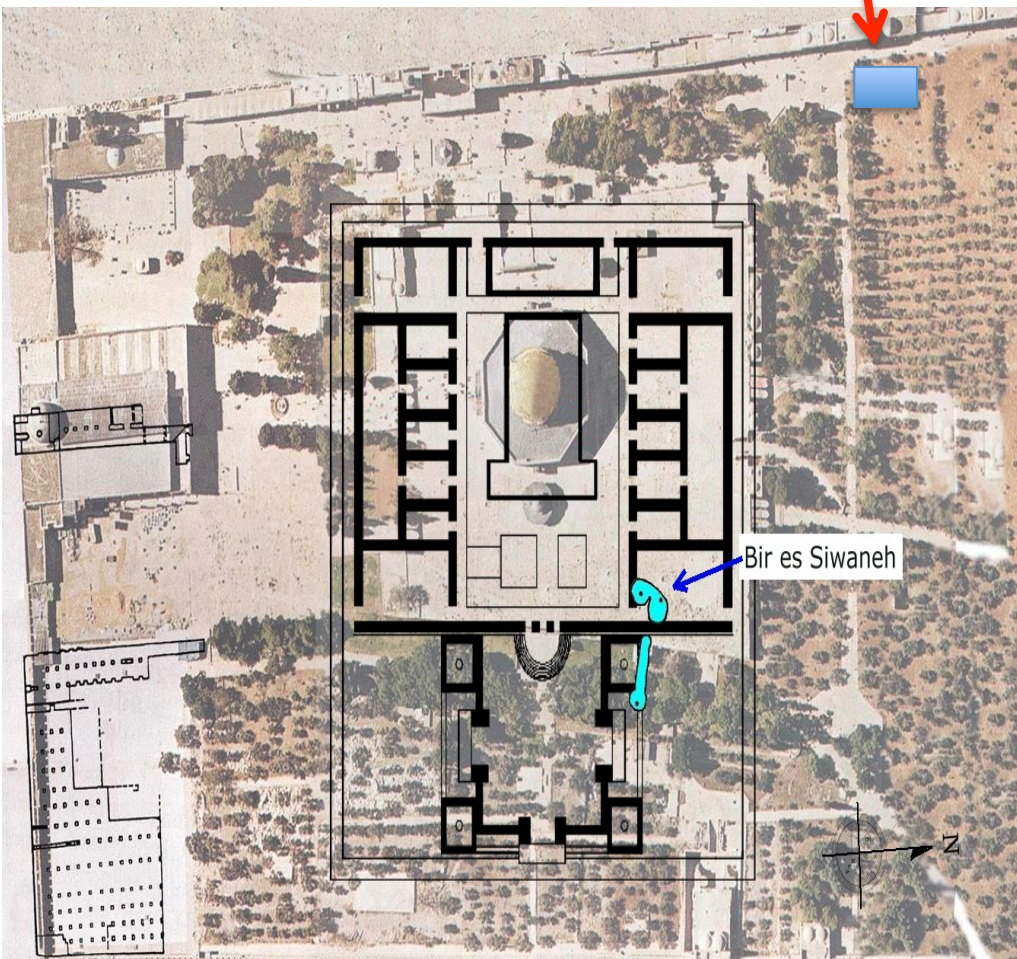
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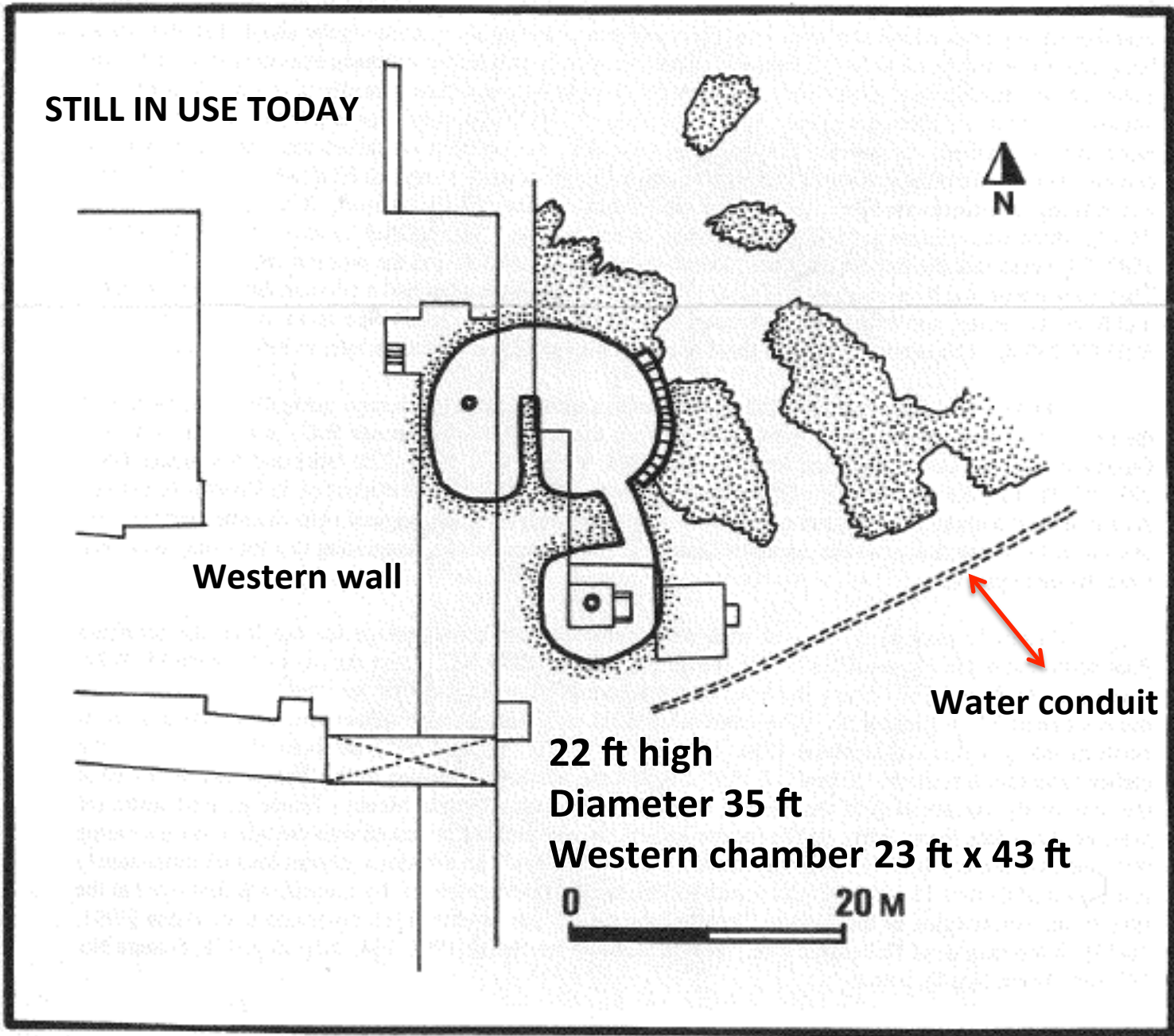
Wilson [W 1866, Sheet 1; scale 1:500] indicated that a cistern was located beneath the early 15th century *Sabil Basiri*, a cubic structure topped by a dome, which is situated close to the northwest corner of the *Haram* (Figs. 44-45). This drinking fountain is named after a late 13th century Mamluk Superintendent of the Two Harams (the *Haram al-Sharif* in Jerusalem and the *Haram al-Khalil* in Hebron), 'Alī' al-Dīn al-Basīr, but the present structure was erected at the expense of a pious Muslim pilgrim, Ibrahim al-Rumī, in 1435 as attested by an inscription on the exterior [Walls and Abul-Hajj 1980, p. 17, No. 180; Burgoyne 1987, 542-43].

Cistern #15



Cistern near the fosse on the north-west near Antonia





Hasmonean Period cistern for the Baris a fortress during the first temple period

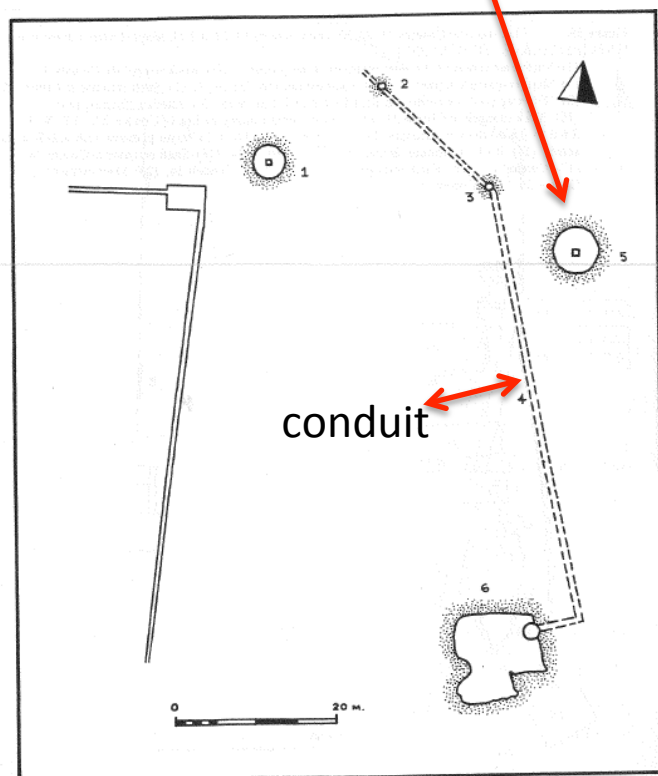
This dry cistern is located near the golden gate on the east

Summary Information:

Features		
Number of chambers:	One	
Shape:	Approximately circular [Wa 1871, 209]	
Orientation:	-----	
Rock level at cistern:	729.4 m [Wa 1871, 209]	
Wall type:	Lower portion rock cut, upper part of masonry [S 1887, 80]	
Ceiling type:	Masonry vaulting [S 1887, 80]	
Roof supports within cistern:	None	
Openings:	One square shaft entrance [W 1866, Sheet 1; Ar S 239/8]	
Linkages:	Fed by a conduit from the direction of the Golden Gate to the east and a conduit extending from the north-west.	
Dimensions		
	Dimension, in named reference	Dimension, scaled from plan
Area dimensions of chamber:	5.5 m diameter [Wa 1871, 209]; 5.8 m " [S 1887, 80]	5.5 m diameter [Ar S 239/8]
Height of cistern:	6 m [S 1887, 80]	
Depth of floor below the <i>Haram</i> :	10.7 m [W 1866, 44]; 11m [S 1887, 80]	

Cistern #23

N



conduit

E

19 ft diameter 20 ft high

Details:

This is described by Wilson in the *Ordnance Survey* [W 1866, 44] thus: "*Cistern No. XV.*, near Golden Gateway, not visited; 35 feet (= 10.7 m) deep, dry." Only the square shaft entrance to the cistern is shown on Wilson's map in its first edition [W 1866, Sheet 1], connected to a conduit extending from the direction of the Golden Gate.

Warren [1871, 209] added: "No.15. Cistern near the Golden Gate, nearly circular; about 18 feet in diameter, and cut and roofed in rock. Rock about 2393 feet (= 729.4 m); about 15 feet (= 4.6 m) below surface."

On a tracing of the northern part of the *Haram* [PEF Archives, SCHICK/239/8, scale 1:500] sent by Warren to Schick, probably in the years 1872-73, for him to draw in the plans of cisterns, Schick drew a perfectly round cistern, 5.5 m in diameter, with a square shaft entrance in the ceiling. A conduit was shown descending from the north-west, via two round installations marked as "cesspits" in Warren's handwriting, but turning to the south before reaching Cistern 23 (Fig. 54).

Cistern #27

72 ft x 9ft height 21 ft 11.77 inches

Summary Information:

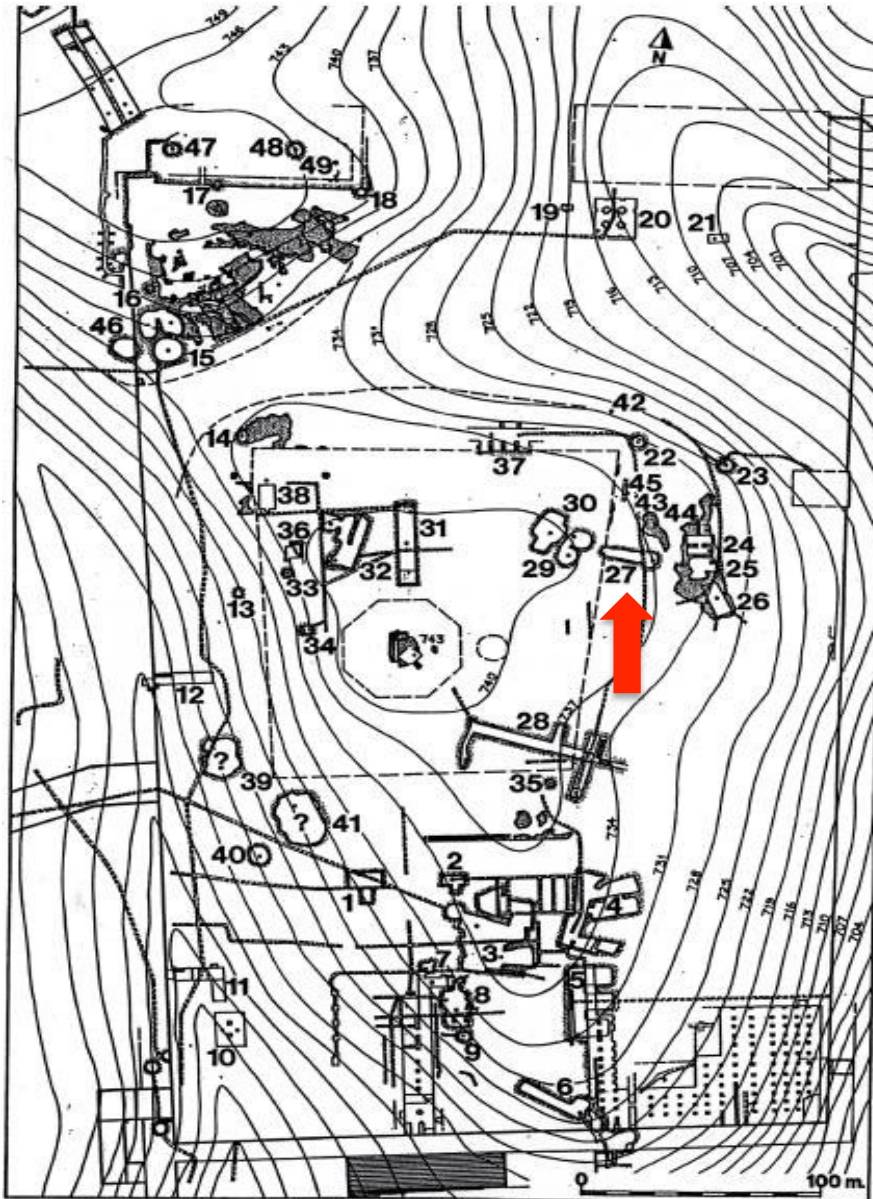
Features		
Number of chambers:	One	
Shape:	Ovular main chamber extended to the west by a passage [Ar S 239/2,3,4]	
Orientation:	Approximately east to west	
Rock level at cistern:	738.2 m (reaching the <i>Haram</i> surface) [Ar S 239/2]	
Wall type:	Rock cut [S 1887, 81]	
Ceiling type:	Completely roofed by rock [S 1887, 81]	
Roof supports within cistern:	None	
Openings:	One square shaft entrance at the east end [Ar S 239/2,3,4]	
Linkages:	None known	
Dimensions		
	Dimension, in named reference	Dimension, scaled from plan
Area dimensions of cistern (overall):	22 x 3 m [S 1887, 81]	22.6 m x 3.4 m [Ar S 239/2]
Dimension of western passage:		17.6 x 3.4 m [Ar S 239/2]
Dimensions of ovular chamber:	5 m diameter [S 1887, 81]	5.0 x 5.4 m [Ar S 239/2]
Height of cistern/ capacity:		6.7 m [Ar S 239/2]
Depth of floor below the <i>Haram</i> :	7.5 - 8.4 m [S 1887, 81]	8.8 m [Ar S 239/2]*

* as scaled off the plan: labelling on the plan gives the value as 27 ft (= 8.2 m).

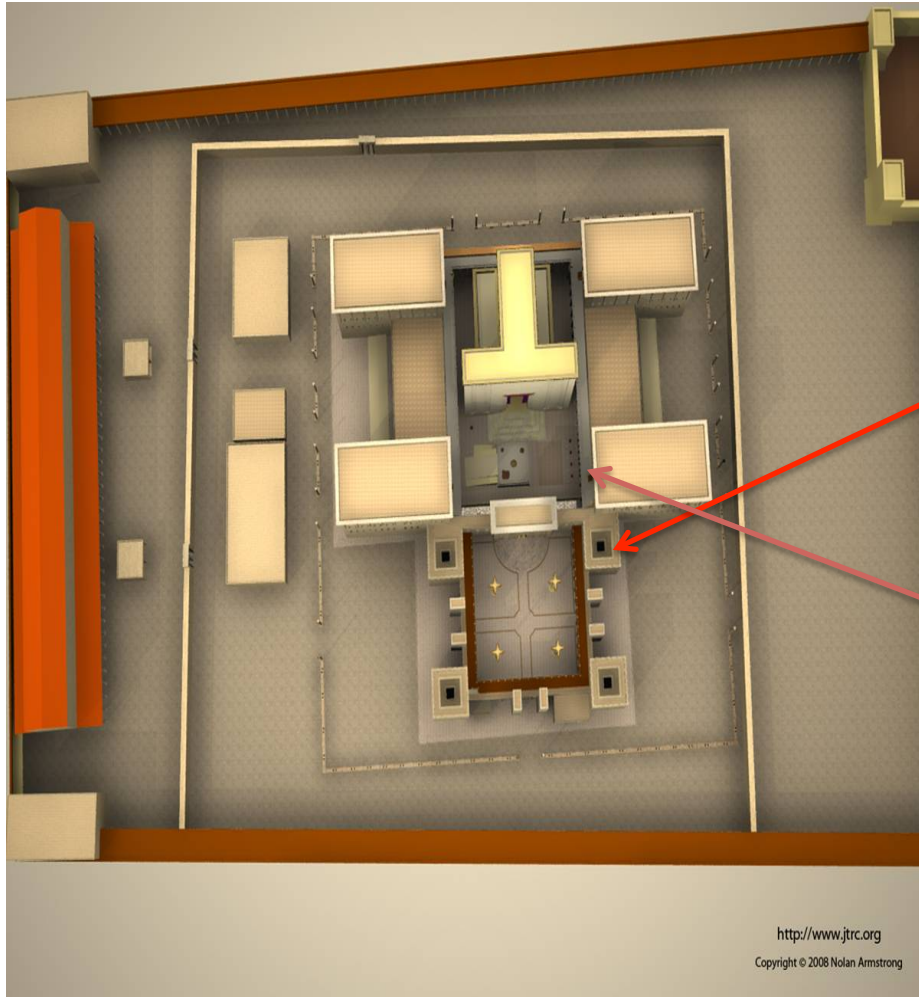
Details:

A rectangular shaft entrance leading to this cistern was depicted on Wilson's map of the *Haram* [W 1866, Sheet 1] but, in this original published version, no plan of the chamber is given.

A rock level of 2,427 ft (= 739.7 m) was recorded by Conder beneath the eastern inner platform wall immediately north of the cistern (in the drawing entitled "Rock Levels on Platform", dated 14 October 1872, in a folder labelled "Original drawings, Survey of Western Palestine, Conder and Kitchener" in the PEF Archives). In Conder's map of the *Haram*, dated 26 October 1878, an altitude of 2,419 ft (= 737.3 m) is given for the rock surface next to the round opening to the cistern [PEF Archives, Conder's uncatalogued map of the *Haram* of 1878 (scale approx. 1:425); cf. C 1879, Pl.3; scale 1:1500].



Cisterns #27,29,30



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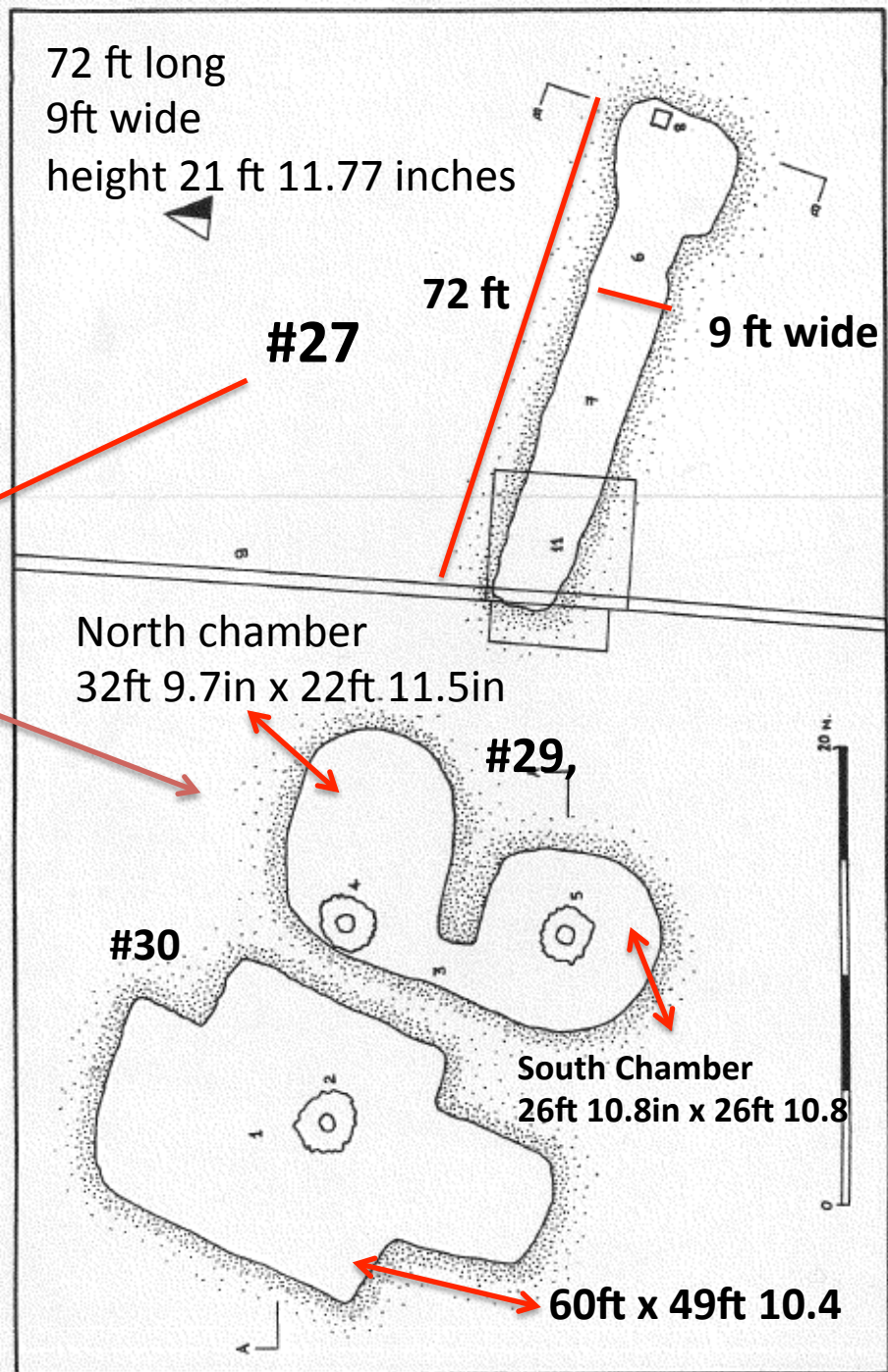
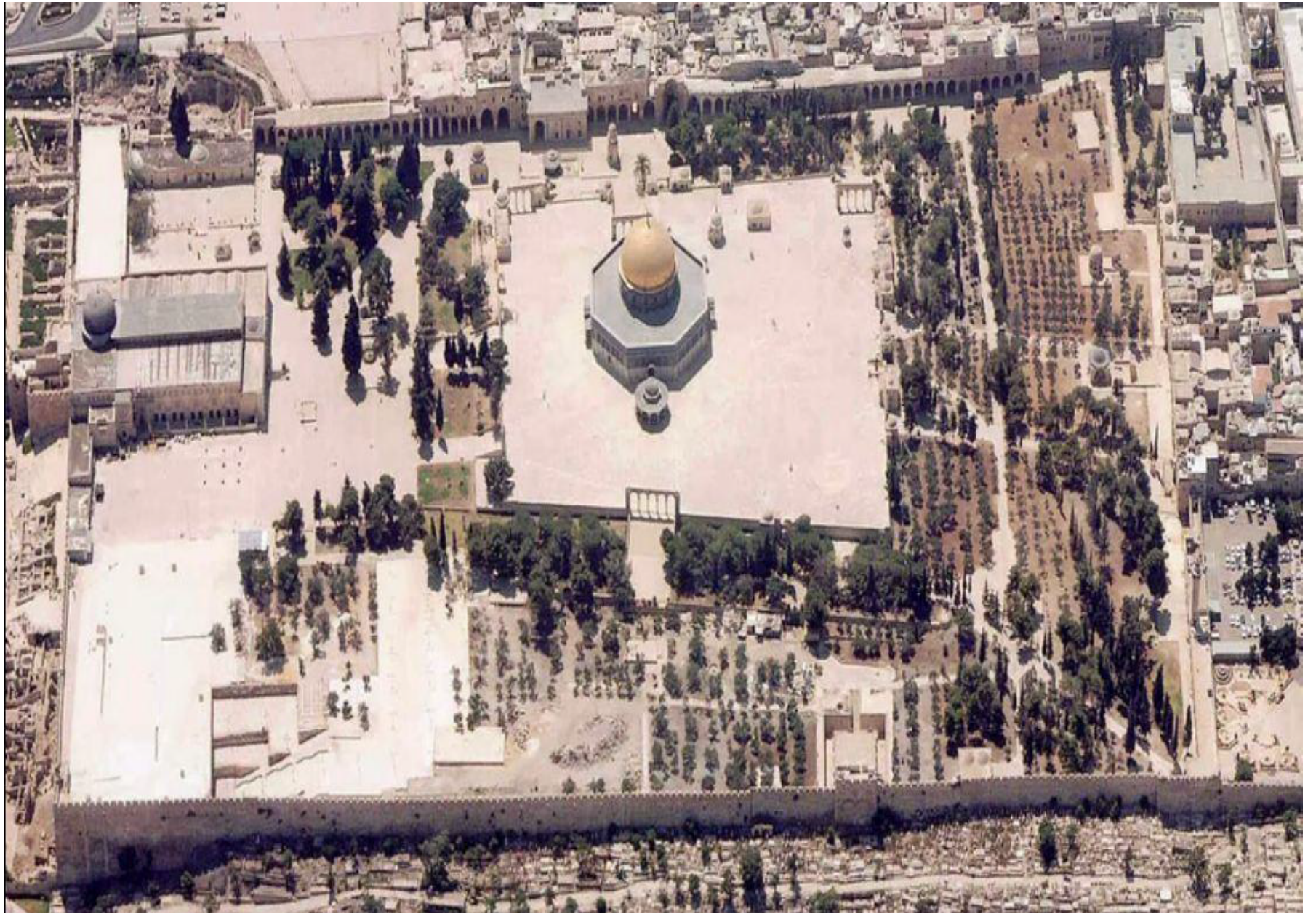


Figure 62 (overleaf). Plan of Cisterns 27, 29 and 30, adapted from a drawing by Schick [PEF Archives, SCHICK/239/2].

- (1) Cistern 30; (2) Shaft entrance to Cistern 30; (3) Cistern 29; (4) Blocked-up shaft entrance to Cistern 29; (5) Shaft entrance to Cistern 29; (6) Cistern 27; (7) Tunnel extension of Cistern 27 to the west; (8) Shaft entrance to Cistern 27; (9) East wall of the inner platform of the *Haram*;
- (11) Small building in the east wall, with steps (see Fig. 63 for sections from the same sheet of Schick's drawings).



Beit HaMoked

Beit haNitzotz

#29

#30

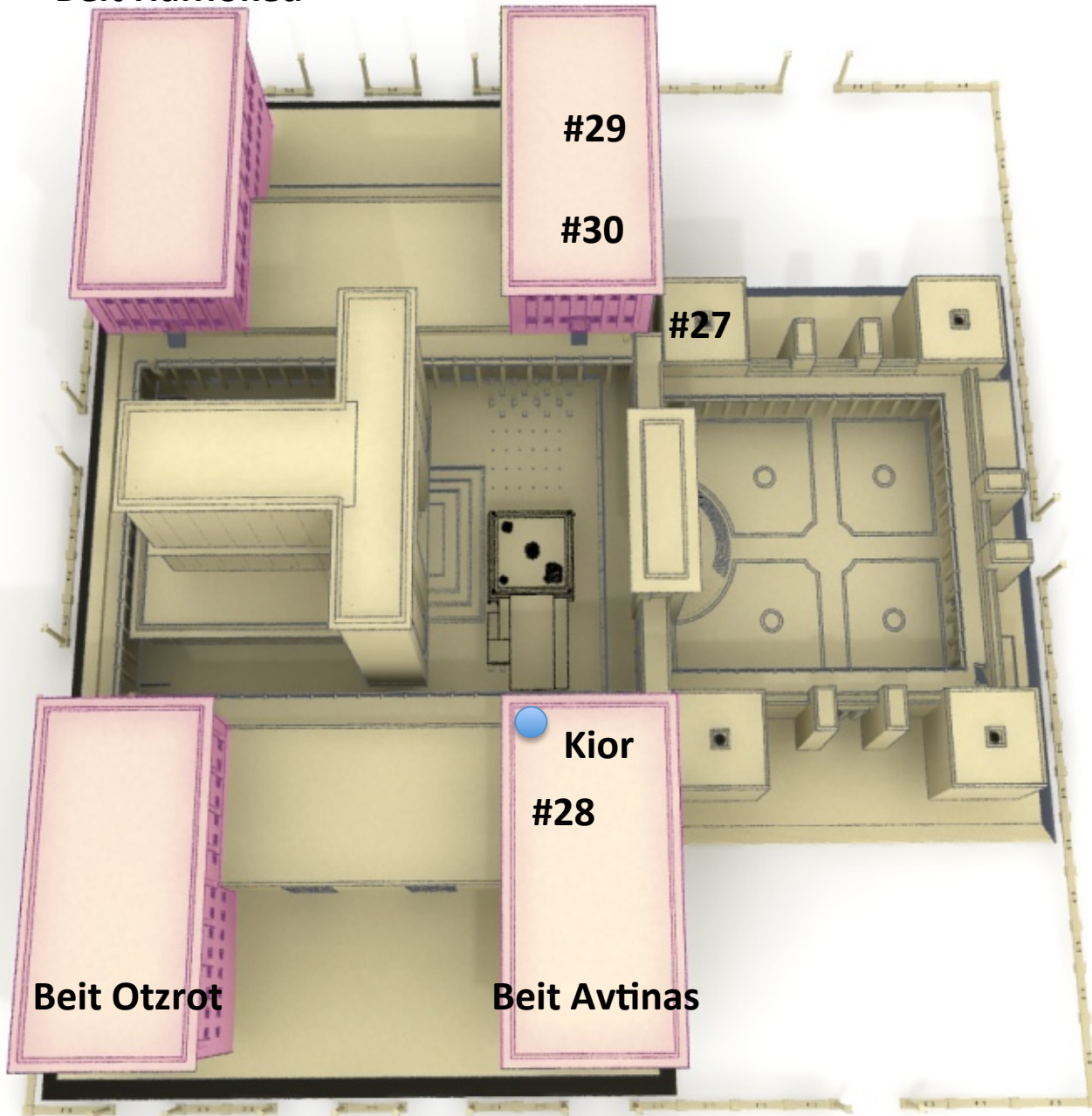
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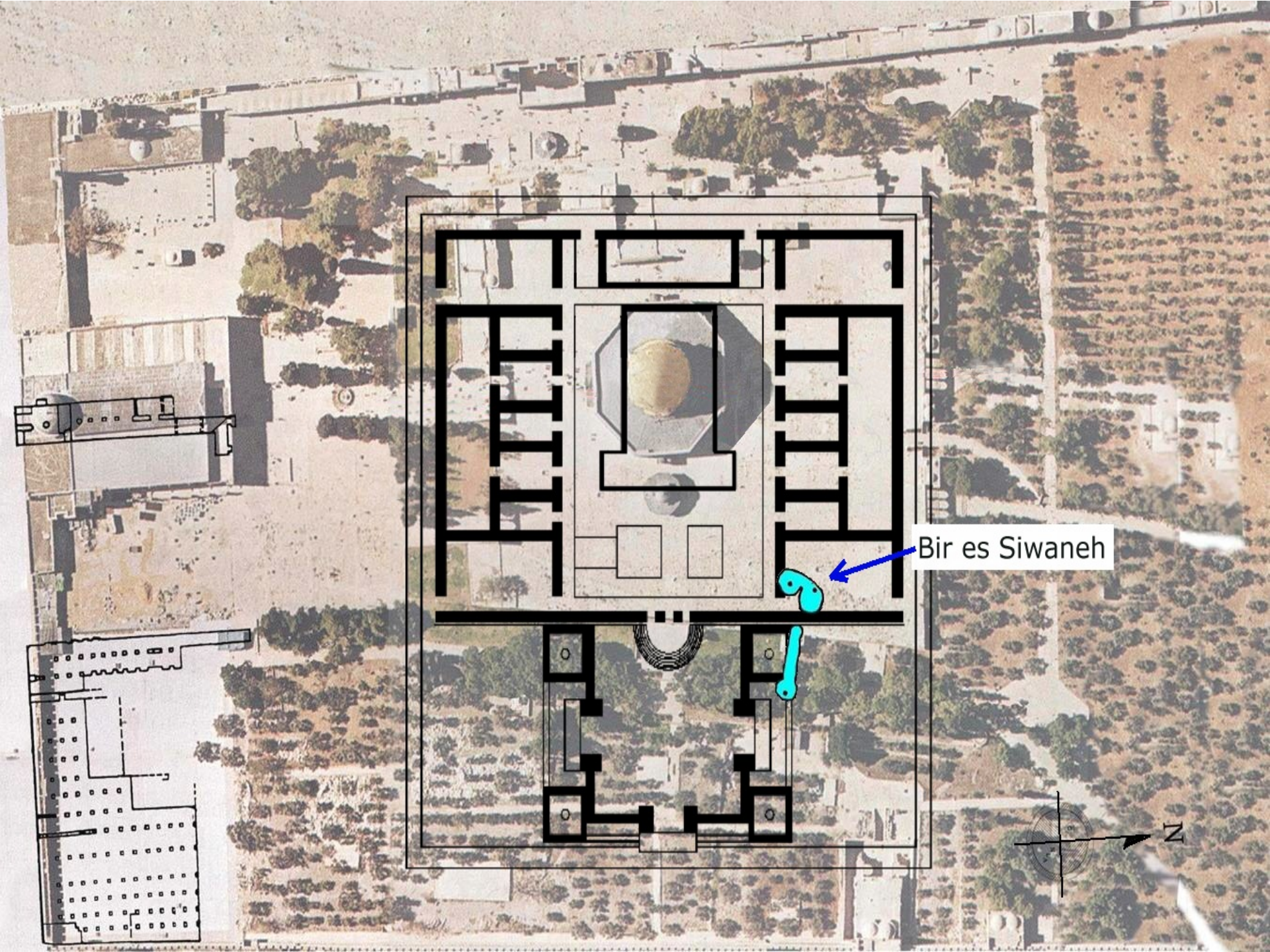
Kior

#28

Beit Otzrot

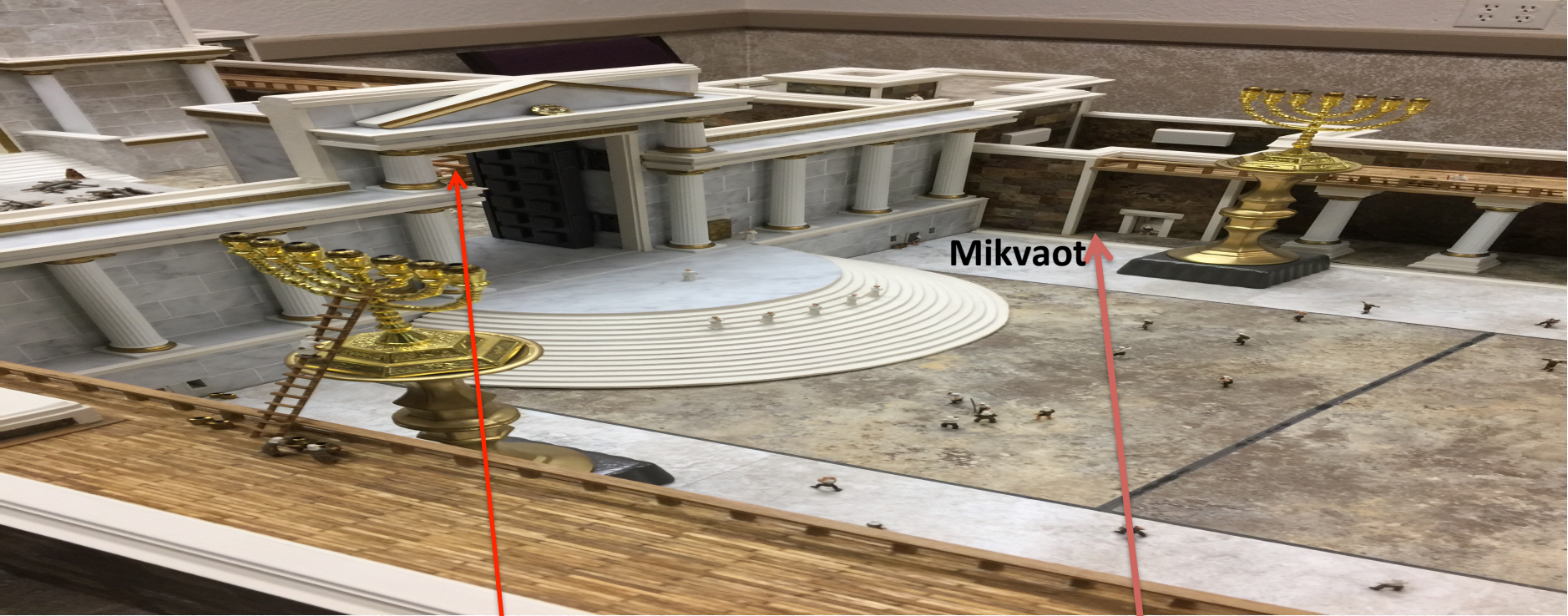
Beit Avtinat



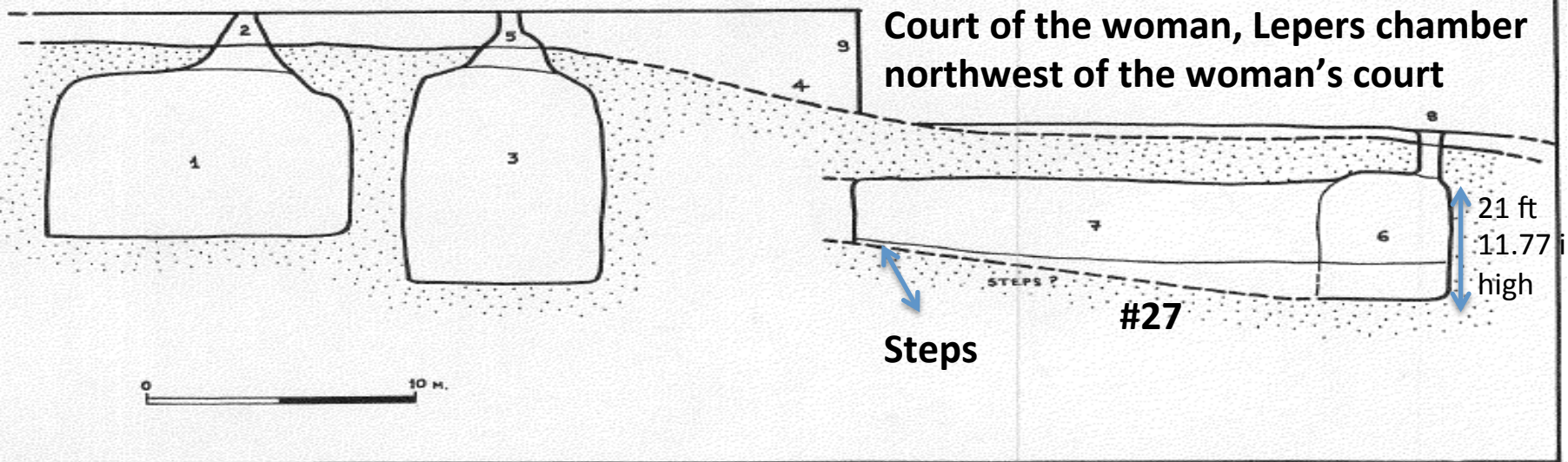


Bir es Siwaneh





Beit HaNitzots on the Azarah cisterns



Cistern #28

No. 28: (W5) Name: *Bīr Rommāna* بئر رمانة (Well of the Pomegranate).

Summary Information:

Features	
Number of chambers:	Four
Shape:	Rectilinear complex, comprising a straight gallery, running north-west to south-east, with three branches [Ar W 18/15]
Orientation:	North-west to south-east
Rock level at cistern:	739.1 m at north-west shaft entrance [Wa 1871, 207] 734.0 m at south-east shaft entrance [Wa 1871, 207]
Wall type:	Partly rock cut, but much of the surface area of this cistern is obscured by a thick layer of plaster [W 1866, 43; <i>idem</i> 1871, 18]
Ceiling type:	Partly of rock [W 1866, 43]; mostly hidden under plaster [W 1871, 18].
Roof supports within cistern:	None
Openings:	Four shaft entrances, two circular and two square, and an L-shaped staircase 1.8 m wide with doorways at either end [Ar W 18/15; W 1866, 43; S 1887, 82]
Linkages:	Surface conduits on the inner platform of the Dome of the Rock converge towards the shaft openings of this cistern [P 1864, Pl XI; DV 1864, Pl. XVII; Wa 1871, 207]

Dimensions		
	Dimension, in named reference	Dimension, scaled from plan
Area dimensions of cistern - Main gallery (without the steps):	54.5 x 4.6 m [S 1887, 82]	52.8 x 4.8 m [Ar W 18/15]
Eastern gallery:	28.6 x 4 m [S 1887, 82]	32.0 x 4.0m [Ar W 18/15]
Northern arm towards the east:	9 x (?) m [S 1887, 82]	9.3 x 3.5 m [Ar W 18/15]
Southern arm on western side:	17 x (?) m [S 1887, 82]	17.2 x 2 m [Ar W 18/15]
Height of cistern/ capacity:	Not known	
Depth of floor below the inner platform of the Dome of the Rock:	14.63 + 0.6 m = 15.23 m [W 1866, 43] <u>15 m [S 1887, 82]</u>	50ft below

Details:

This cistern is shown by Pierotti [P 1864, II, Pl. XI] within the southeast corner of the inner platform. On the basis of Pierotti's plan, the cistern had a rounded chamber measuring approximately 14 x 12 m, with a shaft entrance in its ceiling. Conduits are shown, one extending to the cistern from the Dome of the Rock and another extending to a shaft entrance located at the south-east corner of the inner platform. Unknown to Pierotti, this latter shaft entrance was an alternative direct opening to Cistern 28 (W5). Pierotti [1864, I, 99] admitted not being able to gain entrance to this cistern as it was always full of water.

The two shaft entrances are also shown on Melchior de Vogüé's map [DV 1864, Pl. XVII]. A conduit which is shown running parallel to the southern wall of the inner platform towards the east, labelled "gutter" in the British Admiralty map of 1864 (which incorporated features from Melchior de Vogüé's map), may have

Figure 65

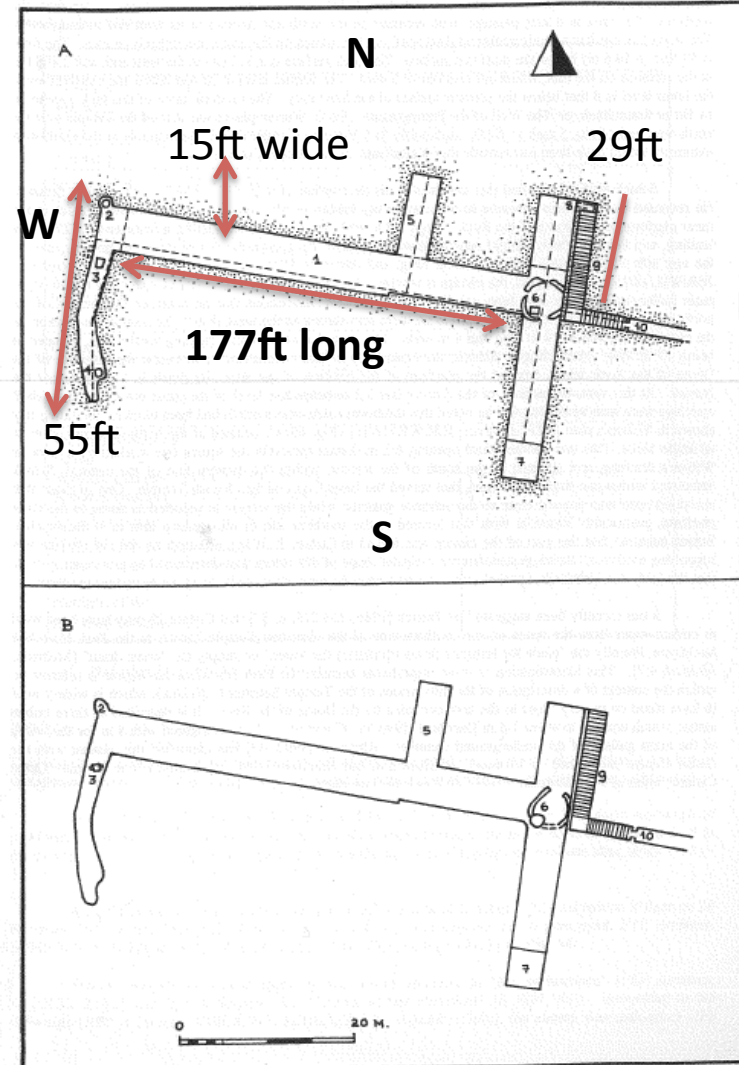


Figure 65

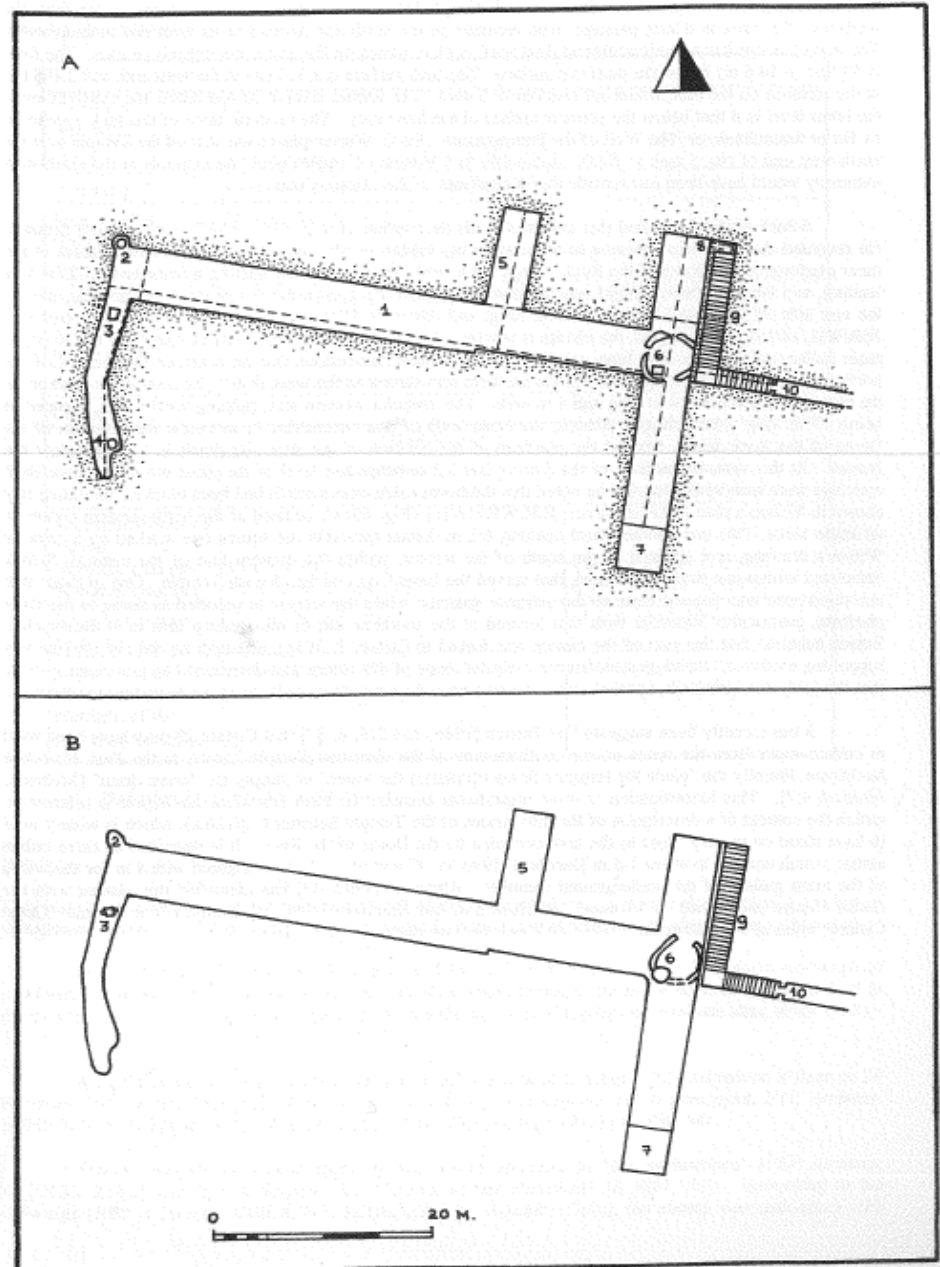


Figure 65. Plans of Cistern 28.

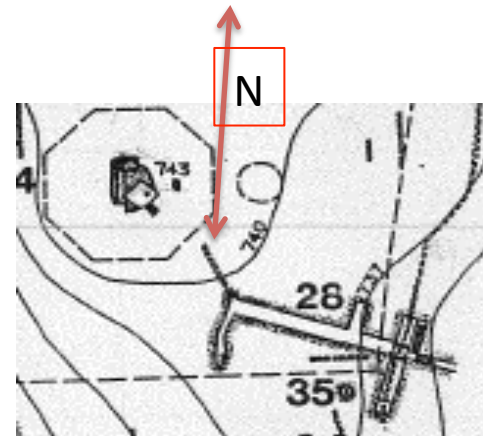
A. Adapted from a drawing by Wilson [PEF Archives, JER/WIL/18/15].

B. Adapted from a plan published by Wilson [W 1866, Sheet 1].

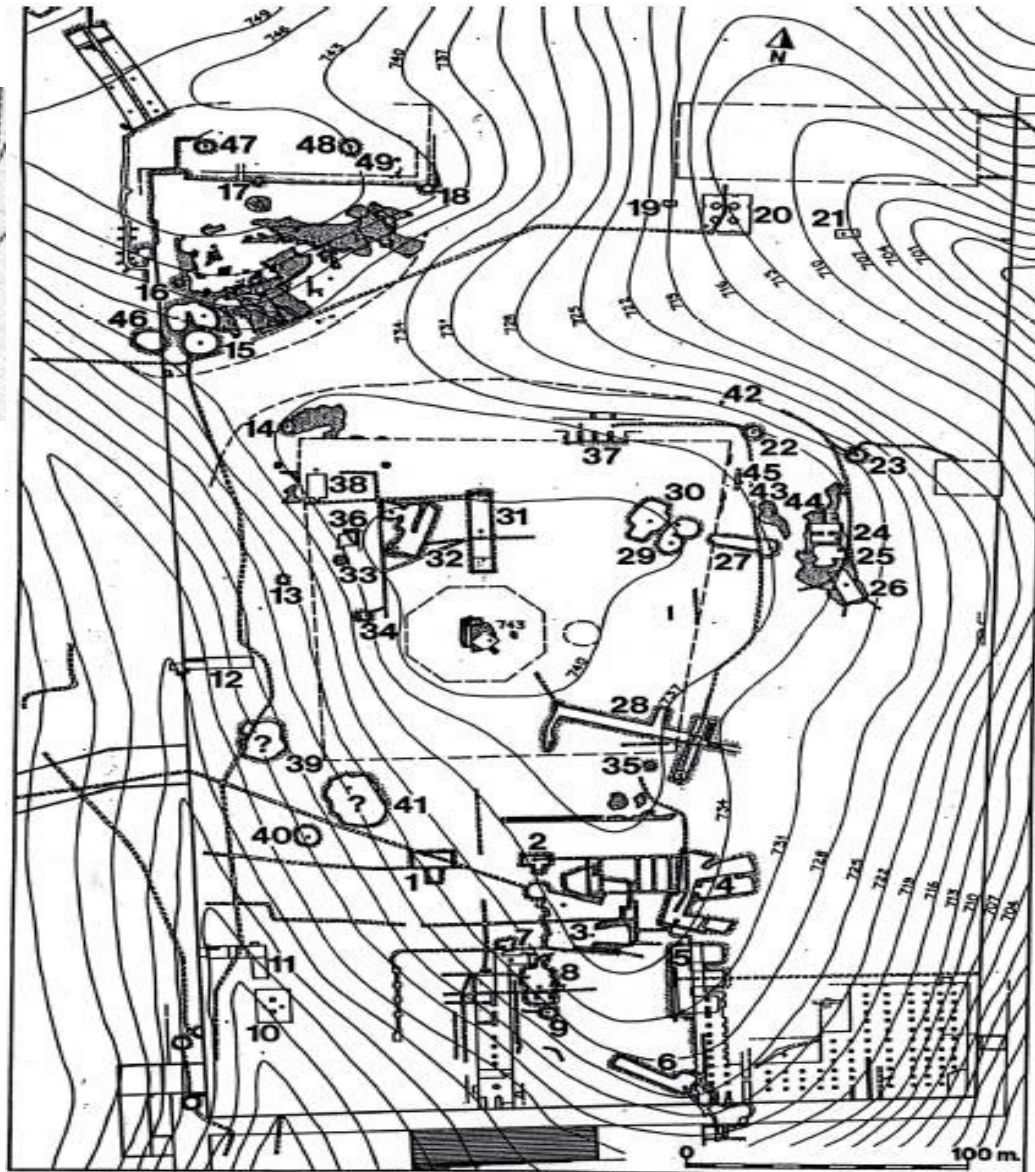
- (1) Cistern 28; (2) Shaft entrance; (3) Blocked-up shaft entrance;
(4) Shaft entrance; (5) Chamber to the north-east; (6) Open shaft entrance; (7) Change in floor level by 10 ft (= 3 m); Rock roof; (8) Low doorway; (9) Steps leading down to the floor of Cistern 28; (10) Upper doorway, blocked to the east.

Drain system
to the cistern

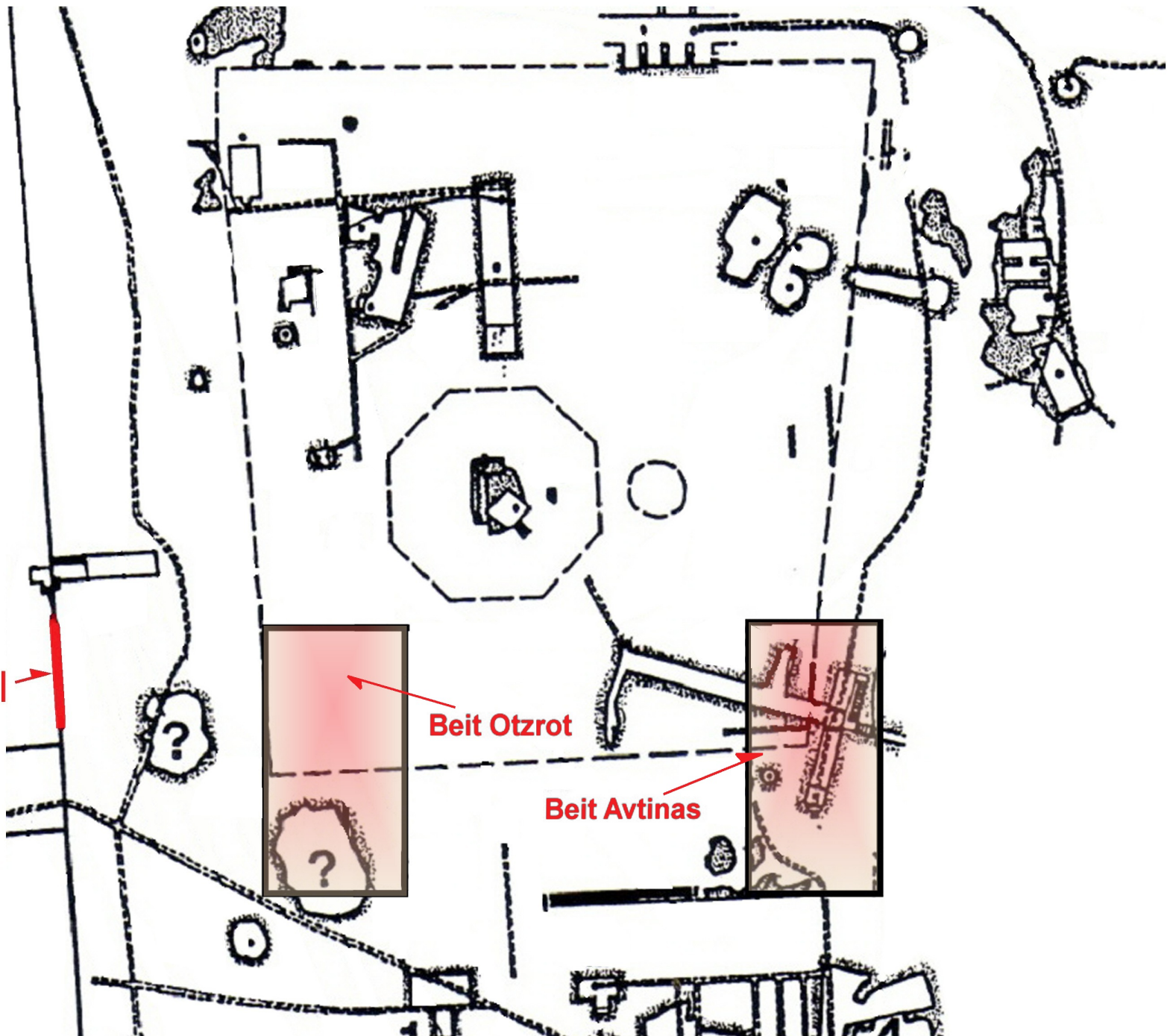
Topographical map of the temple mount Cisterns and Conduits under the mount Number of the cisterns according to Conrad Schick



S



Kotel



Beit Oztrot

Beit Avtinias

Drain system
to the cistern



Conder's description of this curious subterranean complex [Wa & C 1884, 218-19] is consistent with those of Wilson and Warren, but he added some details. It "has an entrance with a flight of steps at its east end, ascending southwards to the surface outside the platform, and a manhole at its west end, down from the platform. The tank is a long passage, with recesses on the north and another at its west end running south.

The main passage has a semicircular vaulted roof, but the branch on the east is cut entirely in rock. The floor is 48 feet (= 14.6 m) below the platform surface. The rock surface is 2,425 (ft) at the west end, and 2,408 (ft) at the entrance on the east, where are remains of a door. The former level is 10 feet below the platform level; the latter level is 8 feet below the present surface of the Sanctuary. The modern name of this tank appears to be Bir er Rummâneh, or 'The Well of the Pomegranate.' Sir C. Warren places the altar of the Temple over the north-west end of No. 5 tank (= S28). According to Lieutenant Conder's plan, the manhole at the north-west extremity would have been just outside the 'Water Gate' of the Priest's Court."

Schick evidently visited this cistern and his description of it [S 1887, 82-83] is even more detailed. He recorded that the main entrance to this cistern lay hidden in fill close to the south-eastern corner of the inner platform of the Dome of the Rock. Steps 1.4 m wide lead in from the east for a distance of 5.25 m to a landing, and thence a further flight runs northwards, flanked by a bannister 0.4 m thick cut into the rock on the east side of the cistern which is 12 m long, and descends 5.3 m (shown in Fig. 65:A; *PEF Archives*, JER/WIL/18/15). At this point, the cistern is reached. Not including the steps, Schick stated the length of the main gallery as being 54.5 m long and 4.6 m wide. Other dimensions that he cited are the lengths of the north-eastern arm, 10 m, and of the second northern arm further to the west, 9 m. The southern extension on the east side is given as 14 m long and 4 m wide. The irregular western arm, running southwards, is stated as being 17 m long. According to Schick, the main body of this cistern lies 15 m below the platform of the Dome of the Rock while, beyond the platform at the position of the steps, its depth is 11.8 m below the *Haram*. At this spot, the surface of the *Haram* lies 3.2 m below the level of the inner platform. Two shaft openings were seen by Schick, but he noted that there were also others which had been blocked, including that shown in Wilson's plan [*PEF Archives*, JER/WIL/18/15] (Fig. 65:A), situated at the north-western corner in an angle niche. This and another shaft opening 6.5 m distant (possibly the square one marked by a cross in Wilson's drawing, and situated to the south of the former, within the western arm of the cistern), Schick associated with a one-time well wheel, that served the Inner Court of the Jewish Temple. One of those that remained open was situated close to the entrance staircase while the second he reported as rising to the inner platform, presumably identical with that located at the southern end of the western arm in Wilson's plan. Schick believed that this part of the cistern was linked to Cistern 2 (W36), although he did not provide any supporting evidence. He suggested that the irregular shape of the cistern was determined by pre-existing walls that formerly stood above it, i.e. the cistern covered areas between these walls so as not to undermine them.

It has recently been suggested by Patrich [1986, 224-225, n. 37] that Cistern 28 may have been used to collect water from the space on the southern side of the Herodian Temple known as the *Beth Horodath ha-Mayim*, literally the "place for bringing down (draining) the water," or simply the "water drain" [Mishnah, *Middoth* 4:7]. This identification is most improbable because the *Beth Horodath ha-Mayim* is referred to within the context of a description of the dimensions of the Temple Sanctuary (*Hekhal*), which is widely held to have stood on or very close to the spot occupied by the Dome of the Rock. It is described as three cubits across, which equates to about 1.4 m [Jacobson 1990-91, 47 and ns. 2, 3], as compared with 4 m for the width of the main gallery of this underground chamber. Ritmeyer [1992, 43] has identified this cistern with the *Golah* Cistern mentioned in Mishnah, *Middoth* 5:4, but Kaufman [1992, 7] believes it to be the "Great Cistern" referred to in Mishnah, *Erubin* 10:4 (see the Introduction).

The Mishnah: Neusner, J. translation

Main Temple building measurements from North to South:

Middot 4:7

A From east to west was one hundred cubits:

B The wall of the porch was five [cubits thick], and the porch, eleven; the wall of the sanctuary, six, and its inside, forty cubits. The dividing space was one cubit, and the Holy of Holies, twenty; the wall of the sanctuary, six; the cell, six; and the wall of the cell, five.

C From north to south was [an area of] seventy cubits:

D the wall of the passageway was five, the passageway, three, the wall of the cell, five, and the cell, six, the wall of the sanctuary, six, and its inner area, twenty cubits, the wall of the sanctuary, six, and the cell, six, the wall of the cell, five, **and the space for draining off water**, three cubits, and the wall, five cubits.

Beth Horodath ha-Mayim [Mishnah, Middoth 4:7]

Evidence from the Mishnah

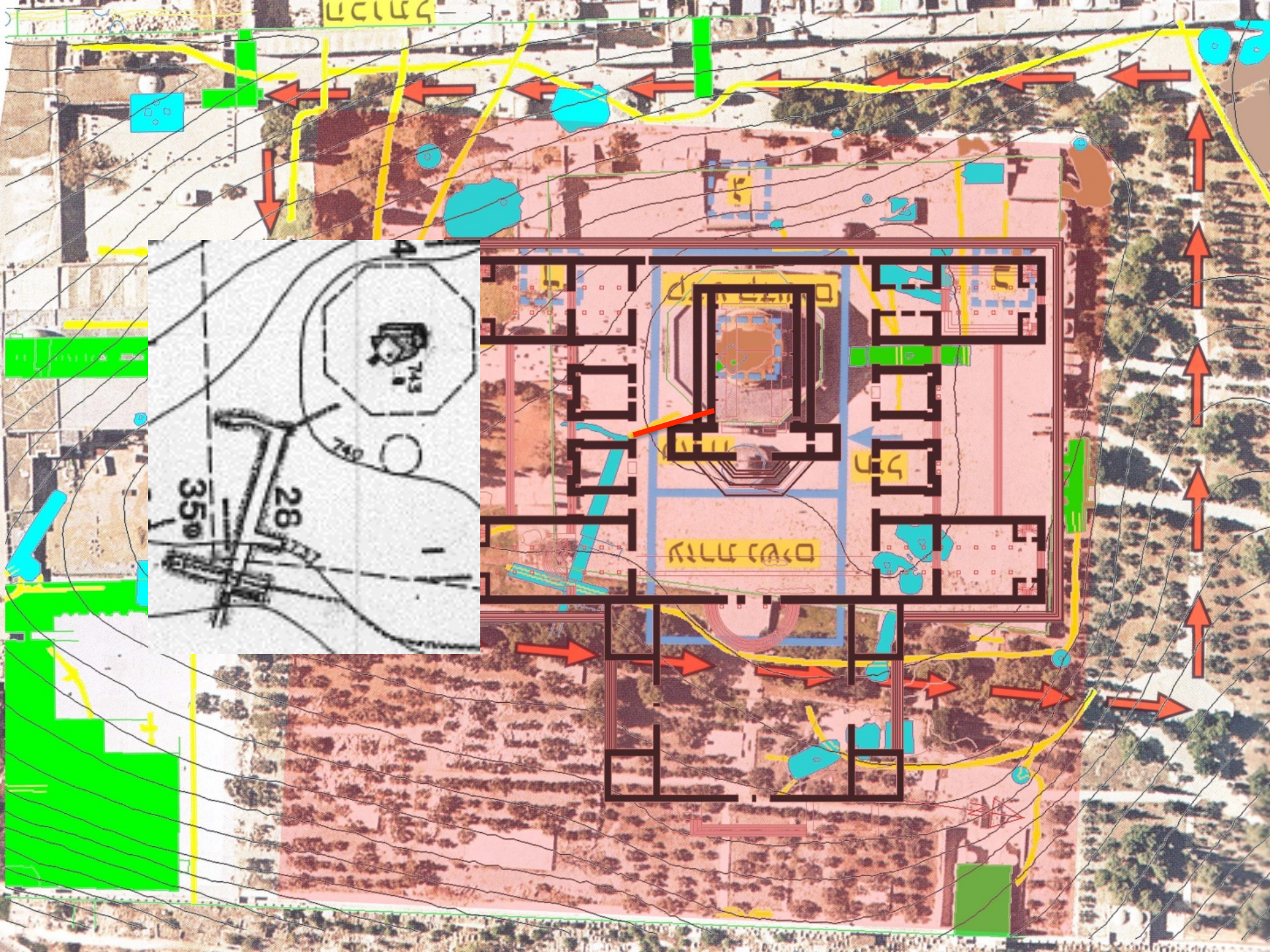
The Mishnah, which draws mainly on sources from the late Second Temple, includes information about cisterns and underground chambers on the Temple Mount. Three water installations are specifically mentioned [*Erubin* 10:14]: the *Golah* Cistern (*Bor ha-Golah*), the Great Cistern (*Bor ha-Gadol*) and the *Hager* Well (*Be'er Hager* or *ha-Oer*). J. Schwartz has translated *Be'er* (or *Bor*) *Hager* as the "Cistern of the *Akra*" [Mazar 1985, 466].³ The *Golah* Cistern was located under one of the six chambers on the south side of the Temple court: "the *Golah* Cistern was there, and a wheel (for drawing water) was set over it, and from thence they drew water, enough for the whole Temple court" [Mishnah, *Middoth* 5:4, transl. H. Danby 1933, 598]. It may also be inferred that rainwater collected in the *Beth Horodath ha-Mayim* [Mishnah, *Middoth* 4:7] on the southern side of the Temple must have been channeled into a cistern [Patrich 1986, 225 and n. 37]. Subterranean chambers are referred to "beneath both the Temple Mount and the courts of the Temple" [Mishnah, *Parah* 3:3, transl. H. Danby 1933, 699; cf. *Ma'aser Sheni* 3:8]. A considerable quantity of water was required on the Temple Mount in this period, not only for drinking purposes, but also for ritual purification of worshippers and for the cleansing of the sacrifices [Har-El 1987]. A channel which collected blood from the sacrificial altar of the Temple is mentioned as extending as far as the Kedron Valley [Mishnah, *Yoma* 5:6].

Water issued from under the Temple

Ezekiel 47:1

He brought me back to the door of the house; and behold, waters issued out from under the threshold of the house eastward; (for the forefront of the house was toward the east;) and **the waters came down from under, from the right side of the house, on the south of the altar.**

2 Then he brought me out by the way of the gate northward, and led me round by the way outside to the outer gate, by the way of [the gate] that looks toward the east; and behold, there ran out waters on the right side.



The three [chambers] in the north were the Chamber of Hewn Stone (*Lishkat haGazit*), the Chamber of the Bowl (*Lishkat haGolah*), and the Chamber of Wood (*Lishkat haEitz*). The Supreme *Sanhedrin* (*Sanhedrin Gadolah*) sat [in judgment] in the Chamber of Hewn Stone (*Lishkat haGazit*). Half was consecrated and half was not. The *Sanhedrin* sat in the half that was not consecrated.

The Chamber of the Bowl (*Lishkat haGolah*) had a well (*bor*) from which water was drawn with a bowl (*Gaggal*). This [well] supplied water to the entire Temple Courtyard (*Azarah*). The Chamber of Wood (*Lishkat haEitz*) was situated behind these two. It was the Chamber of the High Priest (*Lishkat Kohen Gadol/Lishkat haEitz*) and [also] called “the Chamber of *Parhedrin* (*Lishkat Palhedrin/Parhedrin*).”

Mishneh Torah Hilchot Beit haBechirah 5.17²⁴⁴

...FIVE IMMERSIONS AND TEN SANCTIFICATIONS: Our Rabbis taught: The high priest (*Kohen Gadol*) underwent five immersions and ten sanctifications on that day, all of them on holy ground, in the Parwah Cell (*Lishkat haParvah*), with the exception of the first, which took place on profane ground, on top of the Water Gate (*Shaar haMayim*), lying at the side of his [private] cell (*Lishkat Palhedrin/Parhedrin*). Abaye said: We infer therefrom that the *Etam* well was [at least] twenty-three cubits above the ground of the Temple Court (*Azarah*). For we have learnt: All the doorways there were twenty cubits in height, ten cubits in breadth, with the exception of that of the Hall (*Ulam*) and it was taught: And he shall bathe all his flesh in water,¹¹ I.e., in the waters of a *mikweh* (*mikveh*), in water which covers his whole body. What 'is its quantity? One cubit square, three cubits high, and the Sages have calculated that the required quantity for [the contents of] a *mikweh* (*mikveh*) is forty *se'ah*...'

*Talmud Bavli Yoma 31a*²⁵⁰

Mishnah Middot 5:4

5:4 A Those in the south: the office made of wood, the office for the Exile, the office made of hewn stone.

B The office made of wood—

C said R. Eliezer b. Jacob, “I forgot what purpose it served”—

D Abba Saul says, “It is the office of the high priest, and it was behind the other two [A], and the roof of all three of them was on the same level.”

E The office for the exile: there was a permanent cistern, and a wheel was placed on it, and from there did they draw water for the whole courtyard.

F The office made of hewn stone: there the great Sanhedrin of Israel was in session,

G And it judged the priesthood. And a priest in whom was found a cause of invalidation dresses himself in black clothing and cloaks himself in a black cloak and departs and goes his way.

H And he in whom no cause of invalidation was found dresses himself in white clothing and cloaks himself in a white cloak and goes in and serves with his brethren, the priests.

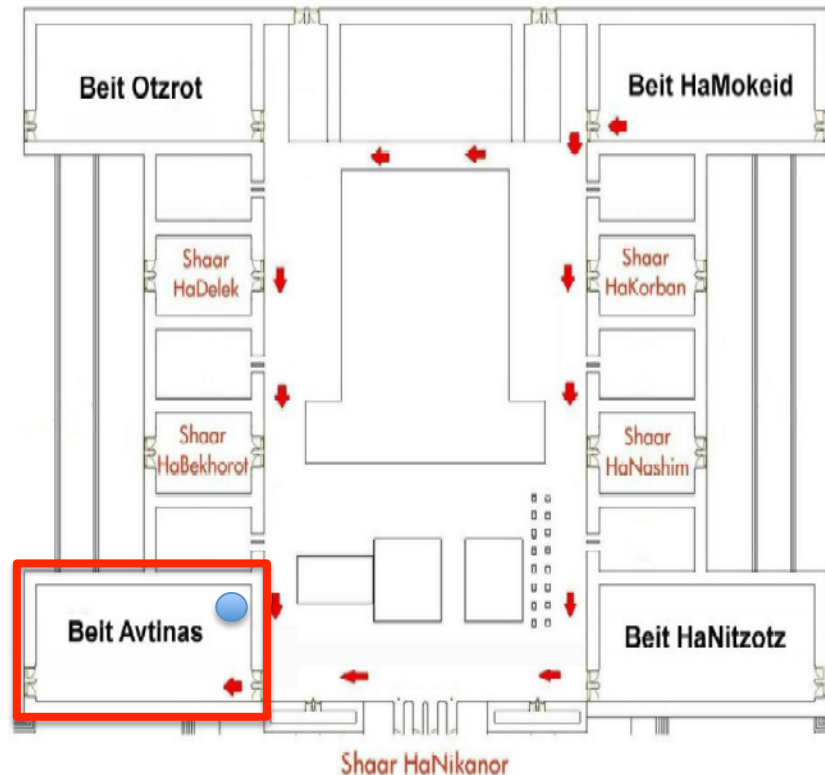
I And a festival day did they declare, for a cause of invalidation had not been found in the seed of Aaron the priest.

J And thus did they say, “Blessed is the Omnipresent, blessed be he, that a cause of invalidation has not been found in the seed of Aaron.

K “Blessed is he who chose Aaron and his sons to stand to serve before the Lord in the house of the Holy of Holies.”

Each morning the *kohen* selected by lot to ascend the *Mizbeiach* began the morning preparations for the service, entered the *Beit Avtinat* and went within the building to the *Lishkat haGolah/Gulah*. He activated the *mukhni*, which was a *galgal* (wheel) made of wood, which drew the water up to the *Kior*. He washed his hands and feet and proceeded to the *Mizbeiach*. Other *kohanim* hurried to the *Beit Avtinat* to wash their hands and feet before entering the *Azarah* proper to aid in the preparation of the *Mizbeiach*.

Yet another example of how the layout of the Temple Complex facilitated the activities is found in the services of *Sukkot*. During the festival the *Kohen Gadol* (High Priest) left from the Temple and went down to the *Shiloach* Pool (Pool of Siloam) at the bottom of *Ir David* (City of David) and filled



HaAmah of the Shaar haMayim

A channel of water 1 *amah* deep by 1 *amah* wide went through the *Shaar haMayim*. This channel must have originated within the gate and flowed inward to the *Azarah*. Water generally is not found at the mountain top but rather in the valley. Naturally, a question rises as to where the water originated. Below are the various texts that speak of this channel and some rabbinical comments concerning it.

As its procedure was on a weekday, so, too, was its procedure on the *Shabbat*, except that the priests rinsed the Temple Courtyard (*Azarah*) without the consent of the Sages. Rabbi Yehudah says, He would fill a cup with mixed blood and throw it in one action against the Altar (*Mizbeiach*); but the Sages did not agree with him.

Pesachim 5.8³¹⁹

A canal (*haAmah*) of running water went through the Temple Courtyard (*Azarah*). When the *Kohanim* wanted to rinse away the accumulated blood from the floor, they closed the canal (*haAmah*) so that the water backed up and flooded the floor. Then they opened the canal (*haAmah*), allowing the water to run out, carrying with it the blood and refuse.

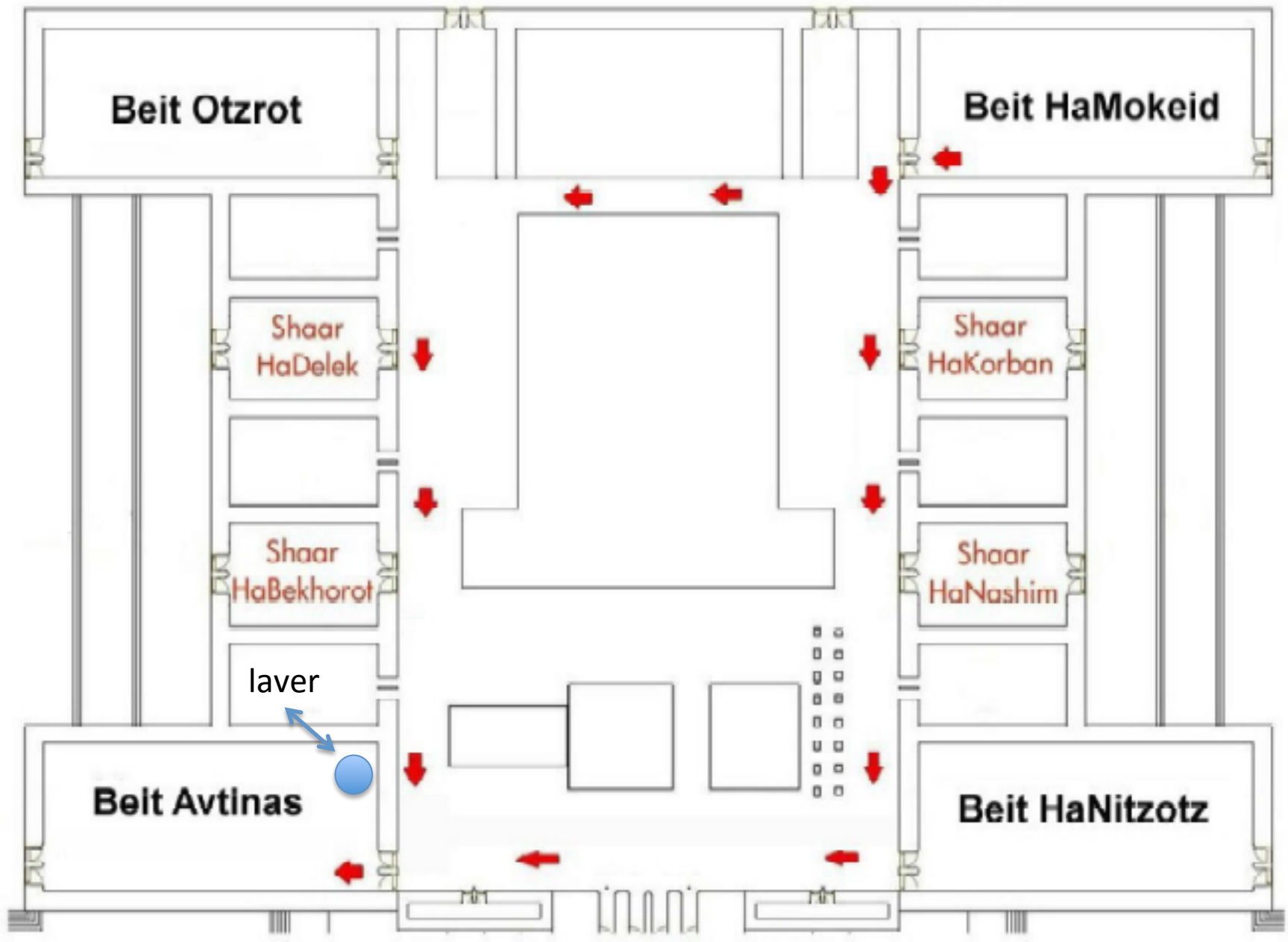
Artscroll *Pesachim* pg. 138³²⁰

319. Kehati, Pinhas, *Mishnah; A New Translation With a Commentary by Rabbi Pinhas Kehati, Seder Moed* Vol.2 ,

Pesachim, Translated by Edward Levin, Maor Wallach Press, Jerusalem, 1995, pgs. 78-79.

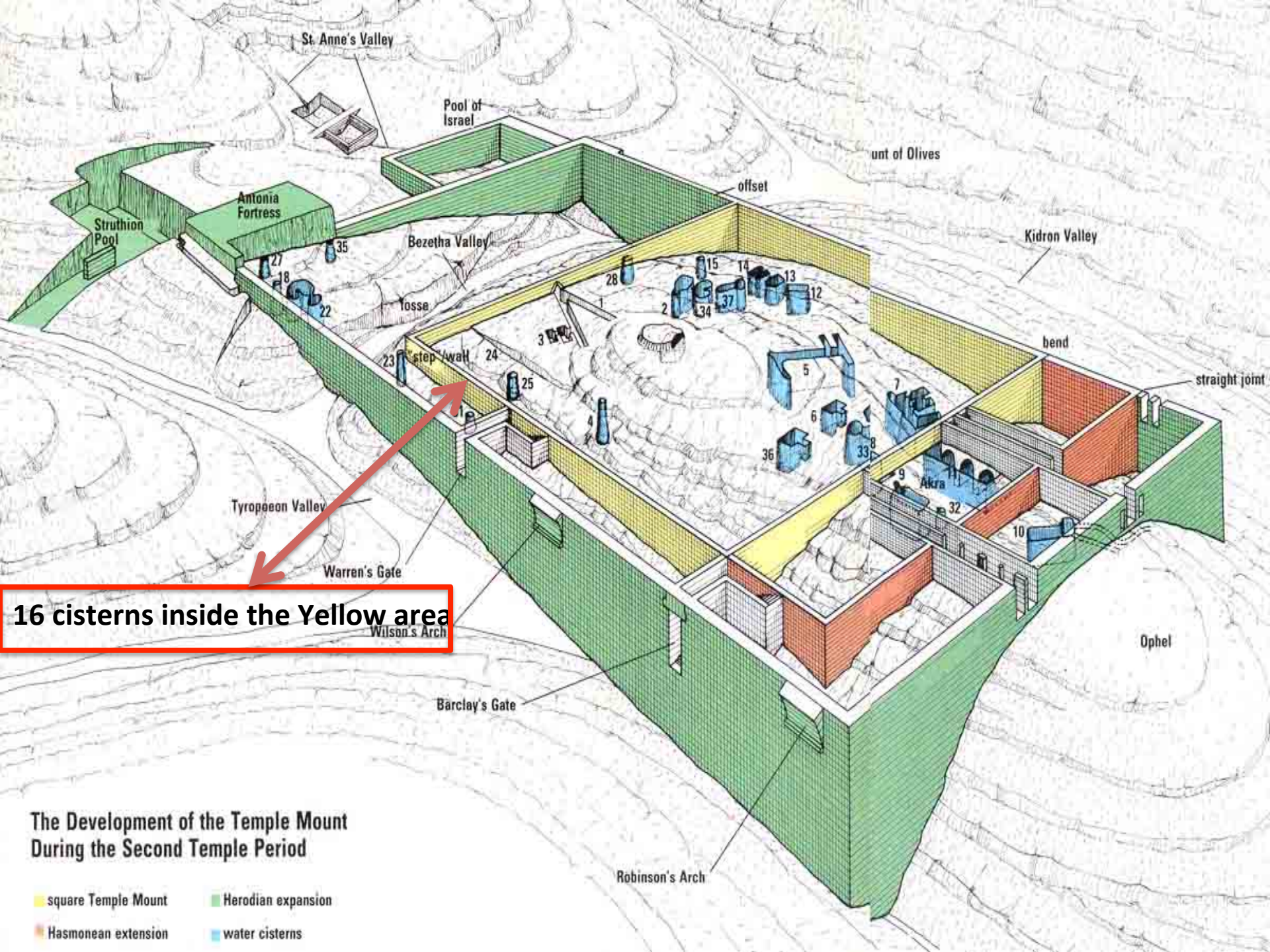
320. Rabbi Hersh Goldwurm, The Artscroll *Mishnah* Series, *Seder Moed* Vol. II: *Pesachim, Shekalim*, 1981,

1989,1994, 2005, Mesorah Publications, Ltd., Brooklyn, N.Y., Pg. 138.



**What is the bottom
line is of this teaching?**

**There was a huge
amount of water under
ground for the temple
service.**



16 cisterns inside the Yellow area

The Development of the Temple Mount During the Second Temple Period

- square Temple Mount
- Herodian expansion
- Hasmonean extension
- water cisterns