



# Republic of Iraq Ministry of Culture, Tourism and Antiquities State Board of Antiquities & Heritage International Organizations Department State of Conservation report Ashur (Qal'at Sherqat) In response to the extended 44<sup>th</sup> session of the World Heritage Committee, Fuzhou, China 2021 Decision 44 COM 7A.7

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Property name: Ashur (Qal'at Sherqat) State party: Iraq Governorate of Salhaddin N35 27 24 E43 15 40 Date of Inscription: 2003 Criteria: (iii)(iv) Property: 70 ha Buffer zone: 100 ha Ref: 1130

#### - Executive Summary

This report is submitted in response to the World Heritage Committee Decision (44 COM 7A .6) in its 44<sup>th</sup> extended session (Fuzhou, 2021), which requests the State Party to submit a State of Conservation Report to the World Heritage Committee to review the status of Ashur World Heritage property. Therefore, it contains summery of important topics related to the management and conservation of Ashur World Heritage site, taking into consideration that the security of Ashur WH site is stable enough that permits us to invite a joint World Heritage Centre/ICOMOS Reactive Monitoring mission to help in assessing Ashur damage and discuss together the short, medium and long term goals and action required to protect the property and implement corrective measures aiming at achieving the DSOCR. The report is submitted for considerations by the World Heritage Committee at its 45<sup>th</sup> Session to be held in Kazan, Russian Federation 19-30 June 2022. The city of Ashur (Qal'at Sherqat) is the second site that Iraq has the honor to inscribe on the UNESCO list, and for reasons mentioned in our previous reports submitted to UNESCO, it has been inscribed on the List of World Heritage in Danger since 2003, which is the date of the inscription of the city on the World Heritage. We actively work to get the city out of the List of World Heritage in Danger.

In this report, we briefly review all the necessary measures that we have taken to protect and preserve the property. Though difficulties, we can say that the necessary measures to protect the site have been activated through the activities that will be detailed in this report. We believe that there is enough time to take all international commitments in this regard, as Makhoul dam is still in the process of preparation to start the real work.

Many works, which we believe are important, have also been implemented, and they represent the beginning of broader and larger works in conservation to upgrade the current state of preservation of the property. We will present a comprehensive conservation plan for most of the property's important features, which were uncovered in previous periods. The conservation and preservation must be within UNESCO approvals, taking into account the principles of authenticity and integrity depending on the fact that, we are dealing with a mud civilization which

affected more and faster than civilizations that relied on stone in constructing its buildings such as Egyptian civilization. We trust UNESCO instructions the to reach the desired of state conservation and preservation, especially as we are about to prepare a management plan for the site in cooperation with the American University of Sulaimani (AUIS). We hope that the decision of the World Heritage Committee in the next session will be different in regards to Ashur World Heritage site.

6. Ashur (Qal'at Sherqat) (Iraq) (C 1130)

**Decision: 44 COM 7A.6** 

The World Heritage Committee,

1. Having examined Document WHC/21/44.COM/7A.Add,

2. Recalling Decisions 43 COM 7A.18 and 43 COM 7A.21, adopted at its 43rd session (Baku, 2019),

**3.** Taking into account Decision 44 COM 7A.9, on the World Heritage properties of Iraq,

4. Notes the State Party's efforts to address risks at the property and to keep the World Heritage Centre informed about the situation at the property, but expresses again its concern about its condition and the lack of comprehensive information on its state of conservation;

5. Acknowledges the information provided by the State Party concerning the planned construction of Makhool Dam, and deeply regrets that the construction of the dam is again proposed and requests the State Party to relocate or cancel the project in view of its potential impact on the Outstanding Universal Value (OUV) of the property and other archaeological sites, and in the meantime, to submit the full technical information including a comprehensive Environmental Impact Assessment to the World Heritage Centre for technical review;

6. Reaffirms the potential danger to the OUV of the property arising from the proposed dam, which already justified in 2003 the inscription of the property on the List of World Heritage in Danger in accordance with Paragraph 179 (b) of the Operational Guidelines;

7. Calls upon the State Party to suspend any work towards the dam construction, pending consideration of cancellation or relocation of the project and review of the technical information for the project;

8. Reiterates its request to the State Party to submit all preliminary assessments of the property it has undertaken, and to carry out a detailed review of the damage incurred outlining the potential risks to the property, prior to taking any action on the ground, and to submit this assessment for review by the World Heritage Centre and the Advisory Bodies;

9. Also requests the State Party to submit a detailed report on all interventions carried out as a matter of priority and also reiterates its previous request that interventions be addressed within the framework of the overall assessment of damage and risks and a comprehensive conservation plan prepared in full consultation with the World Heritage Centre and the Advisory Bodies;

10. Reminds the State Party of its obligation to submit to the World Heritage Centre, for evaluation by the Advisory Bodies, detailed information of any future works that may affect the Outstanding Universal Value of the property, in conformity with Paragraph 172 of the Operational Guidelines;

11. Reiterates the need for a joint World Heritage Centre/ICOMOS Reactive Monitoring mission, once conditions permit, to assist in assessing damage at the property, preparatory to the development of a comprehensive conservation plan, the identification Decisions adopted during the extended 44th session

of the World Heritage Committee WHC/21/44.COM/18, p. 23 of corrective measures, and the development of a Desired state of conservation for the removal of the property from the List of World Heritage in Danger (DSOCR); 12. Reiterates its appeal to all States Parties to cooperate in the fight against the illicit trafficking of cultural heritage coming from Iraq as per the United Nations Security Council Resolutions 2199 of February 2015, 2253 of December 2015 and 2347 of March 2017;

13. Calls again on all States Parties to support emergency safeguarding measures, including through the UNESCO Heritage Emergency Fund;

14. Further requests the State Party to submit to the World Heritage Centre, by

1 February 2022, an updated report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 45th session;

15. Decides to retain Ashur (Qal'at Sherqat) (Iraq) on the List of World Heritage in Danger.

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# Makhoul Dam

The construction of Makhoul dam will have severe impact on the property of Ashur, comprising covered and a great percentage of uncovered archaeological sites. A study will be prepared by AUIS for reducing the impact of Makhoul dam on the property. And we will redouble our efforts to stop the construction of Makhoul dam, which the Iraqi Ministry of Water Resources has recognized the danger of its construction in the proposed area in particular because it is not suitable for the construction of dams despite its continued work on the (cancelled) Makhoul dam project. It's worth mentioning that work on the construction of the dam is still in the logistical preparations, and the dam's real construction has not been started yet.

Measures have been taken by the Iraqi Ministry of Water Resources after several visits to the site in the recent period to protect the property and to discuss the impact of the Tigris River. One of the river's branches passes adjacently to the city of Ashur on its eastern side. The Ministry seeks to complete all the studies necessary to develop successful measures in protecting the city of Ashur from the danger of the dam. The dam's water level rise will affect the new city that was added to the ancient city of Ashur during the reign of king (Bozar Assur IV 1530 - 1511 BC) which had been added to expand the fortified city borders, in addition to its impact on Bait Akitu (Akitu house), the house of Assyrian celebrations.

#### **Responding to the decision of the World Heritage Committee**

# (Cooperation contract between the Ministry of Culture, Tourism and Antiquities and the AUIS)

The World Heritage Committee, at its last meeting of the 44<sup>th</sup> extended session by its Resolution (WHC/21/44.COM 7A), identified that the construction of Makhoul dam represents a serious threat to the city of Ashur and the archaeological sites located within the basin of the dam. For rapid response to UNESCO decisions, a cooperation contract was signed between the State Board of Antiquities and Heritage (SBAH) - Iraqi Ministry of Culture, Tourism and Antiquities and the American University of Iraq - Sulaimani (AUIS), represented by Dr. Tobin Hartnell, Assistant Professor and Chair, Department of Social Sciences Director,

Center for Archaeology and Cultural Heritage (CACHE). With the beginning of the construction of Makhoul dam, the two parties decided to organize an international response to the threat facing the Iraqi archaeological sites. The State Board of Antiquities and Heritage (SBAH) will assist in organizing field surveys to determine endangered archaeological sites.

(AUIS) will finance logistics, training and implementation for this first phase of the project and the subsequent phases. It will also contribute in providing scientific experience, remote sensing, aerial survey, and field divisions of archaeological sites at risk. During the initial phase of this project, latest scientific techniques will be used to automatically identify archaeological sites at risk. The two parties will also cooperate in documenting the damage caused by ISIS through looting and other destructive activities, in addition to traditional field survey excavations. The information collected will allow both parties to identify the most important sites to conduct a geophysical survey.

(AUIS) proposed a work plan to identify the steps for detecting and documenting archaeological sites at risk, and it was sent to the State Board of Antiquities and Heritage in April 2021, that is attached hereto which is considered an integral part of the cooperation.

This partnership aims at formalizing the two parties work on the next steps of the project and to define their joint responsibilities.

The two parties agreed to implement the following objectives:

- **a.** The main objective of this long-term partnership is to uncover and document the archaeological sites threatened by Makhoul dam.
- b. The second objective is to document the looting and other destructive activities carried out by ISIS in the affected areas, before submerging evidences of their destruction under the water of the dam.

**c.** <u>The third objective, and for the first time, is to develop a master</u> management plan for Ashur in order to mitigate the potential damage caused by the construction of the dam. It is expected that the documentation project will take five years to be completed.

**d.** The two parties will make every effort to accomplish the following priority activities related to the in danger archaeological sites due to the construction of Makhoul Dam as mentioned in the action plan:

Activities	Details	Responsible parties	
Strengthening dialogue with future generations of Iraqi scientists			
Gender Differences	Youth and women will be trained and	AUIS / SBAH	
	prepared as experts in the field of		
	cultural heritage in the future		
National Training	Peaceful dialogue will be enhanced	AUIS / SBAH	
Strategy	by involving all antiquities		

	directorates and inspectorates inside Iraq including Kurdistan and ISIS- affected areas, in all training initiatives,	
Arrange future	The two parties will cooperate to find	AUIS / SBAH in
leaders in cultural	opportunities to send postgraduate	cooperation with
heritage	studies (Master and Ph.D.) abroad for	HTW Dresden
	the active members of the project	
	who are selected by conducting	
	proficiency tests and scientific	
	evaluations by experts of both parties	
	Archaeological sites Investigation	
Machine learning	A database will be created to train an	AUIS / SBAH in
project (automation)	artificial intelligence (AI) algorithms	cooperation with
	for automatic positioning	HTW Dresden
Remote sensing	All archaeological sites discovered by	AUIS / SBAH in
assessments for	an artificial intelligence algorithm, as	cooperation with
archaeological sites	well as those discovered through	HTW Dresden
_	traditional techniques, will be	
	remotely evaluated.	

Documenting archaeological sites threatened by the Dam			
Field assessments	Field assessments will be	AUIS / SBAH	
	conducted for all		
	uncovered archaeological		
	sites, including but not		
	limited to the		
	archaeological tells and		
	existing archaeological		
	buildings		
Aerial documentation	A three-dimensional	AUIS / SBAH	
	image will be taken for all		
	affected archaeological		
	sites		
Geophysical survey	The two parties will	AUIS / SBAH	
	cooperate to identify the		
	most important		
	archaeological sites		
	affected by Makhoul dam		
	project and conduct		
	magnetic mechanical		
	surveys and GPR (Ground		
	Penetrating Radar ) for		
	each of them		
Keeping data for future	The parties will cooperate	AUIS / SBAH	
generations	to ensure that the data		
	collected through the use		

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	of computer servers as well as LTO 8 tape drives is saved to create copies	
	that are suitable for cold storage.	
Colla	borative work results Publication	
Preparing a management	A master plan will be prepared	AUIS / SBAH
plan for Assur site	to determine the threats to	
	Ashur World Heritage Site, as well as the steps that can be	
	taken to reduce or eliminate	
	this threat	
Creating a virtual	The results of the project will	AUIS / SBAH
museum	be coordinated and represented	
	in a virtual digital museum so that Iraq Heritage stays in the	
	memory of humanity, even as	
	the physical remains disappear	
	under water.	
Annual conference to	An annual conference will be	SBAH / AUIS
discuss archaeological	held in Baghdad to discuss the	
sites	archaeological and vital natural	
	sites that have been damaged due to the dam, with a call to	
	protect these sites, and to	
	publish the results that have	
	been achieved. As there is no	
	such international conference in	
	Iraq currently	
	Capacity Building Measures	
Archaeological buildings	The joint work between the two parties on archaeological sites	AUIS / SBAH
	during the project	
	implementation phases will	
	provide great opportunities for	
	cooperation between the State	
	Board of Antiquities and	
	Heritage and international experts in cultural heritage, so	
	that priority will be given by	
	both parties to such events in	
	the future	
Remote Sensing	Direct national and	AUIS / SBAH in
	international training will be	cooperation with
	provided by the second party	HTW Dresden
	on geographic information systems, SfM, and remote	
	sensing in documenting	
	sensing in accumenting	

	archaeological sites, as well as			
	destruction caused by ISIS.			
Archaeological	AUIS in cooperation with the	AUIS / SBAH in		
computing	University of Technology and	cooperation with		
	Economics in Dresden will	HTW Dresden		
	offer annual international			
	training workshops for trainees			
	from the State Board of			
	Antiquities and Heritage with			
	team leaders focused on			
	developing skills in			
	archaeological computing.			
Aerial documentation	Direct training in the	AUIS / SBAH		
	automation of drone flights will			
	be provided by the second party			
	to record the archaeological			
	sites affected by the dam.			
Advanced 3D	An open source computer	AUIS / SBAH in		
representation of	application will be developed	cooperation with		
archaeological sites	by the second party that can	HTW Dresden		
	create three-dimensional			
	visualizations of all			
	archaeological sites.			
Clarifying strategy	Develop a strategy by experts	AUIS / SBAH in		
	of both parties to support the	cooperation with		
	employees of the State Board	HTW Dresden		
	of Antiquities and Heritage to			
	join higher education			
	institutions in Germany and			
	around the world to obtain MA			
	and PHD degrees.			
Communication				
Clarifying strategy	Clarifying a strategy that	AUIS/SBAH		
	enables stakeholders (work			
	team) to access data as well as			
	to disseminate key messages to			
	these parties and the press.			

# In situ implemented works

Cleaning, conservation and protection works were carried out on some parts of the property, taking into consideration the necessity and importance of the authenticity and integrity of the outstanding universal values of the World Heritage property.

#### **First: Protecting Tabera Gate**

In order to protect Tabera Gate in the archeological city of Ashur from natural factors such as rain, wind and other factors and to ensure that the bricks of arches and gate supporters do not collapse and preserve it to the time of future conservation work, a cadre of blacksmiths under the supervision of Ashur site administration and with the support of the AUIS, made some temporary conservation steps for Tabera gate, which is based on preserving its important features and preventing its collapse under the supervision of Mr. Tobin Hartnell. We can take permission from the AUIS to provide UNESCO with a full report about it.

# Second: Closing the openings

Despite the launch of the project to revive the archeological city of Ashur in 1978 A.D and the beginning of real interest in the property, but the vehicles of local and foreign tourists continued to roam around the city freely until the property administration and the State Board of Antiquities and Heritage became aware of this danger and decided to stop it. So the SBAH addressed the local government in Salah al-Din Governorate to assist in preventing vehicles of all kinds from entering the property, and entering the property on foot only, and this was strictly implemented.

#### **Third: Cleaning up Walter Andrae Palace after ISIS**

Walter Andrae Palace is the residence of the German excavation expedition that worked in the property of Ashur for the period from (1903-1914 A.D). As for Andrae, he was a German engineer who worked in Ashur as head of the German excavation expedition.

The palace is very spacious, with an area of  $32 \times 43$  m. It is located on the west bank of the Tigris River, on the eastern side of the Ashur. The palace was two-storey, except the south side with one. The cleaning work wasn't without risks due to the use of the palace as magazine (munitions) by ISIS. The work was scientific supervision of specialists in archeology and under the and explosive experts. Closing the doors and windows was to keep the palace clean except that of main gate on the west side of the palace, noting this closure is temporary pending that the completion of the conservation works.

## Fourth: Cleaning the Royal Cemetery

The cleaning of the royal cemetery is considered one of our great achievements of the year, as it is one of the most important features of

Ashur. Many sources mentioned details about its importance. The place was prepared for future conservation work through cleaning, which lies within the scope of fulfilling the commitments of the state party (Iraq) with the International Organization (UNESCO) to remove it from the List of World Heritage in Danger. The cleaning included the broken glass ceiling of the cemetery, and the dirt and weeds that were covered the burial rooms, passages and walls completely. Workers wore protective equipment in the cleaning process, such as protective glasses and leather gloves, for their own safety.

# **Restoration and conservation works**

The vandalism of the cemetery by ISIS and due to the variance in time dilation, in addition to the natural factors of rain, wind and others, all these factors had a great impact on its walls which were conserved in the eighties of the last century. We renovated the old conservation by following a method based on the principle of minimal intervention after cleaning the cemetery and removing the natural plant that some of which had rooted between the wall bricks, to prepare them for conservation. It is noteworthy that conserving the walls protects the cemetery from water leakage from its sides during the rainy seasons, knowing that it was originally hidden underground since the time of Assyria, and it is

6 meters deep. After its discovery, it became vulnerable to rain water coming down to it from distance that may reach a hundred meters through grooves and winding tunnels, especially those which were excavated by Walter Andrae to the north of the cemetery, as well as the water coming down to it from inside the old palace (the royal palace) north of the cemetery, all because the cemetery was lower than the adjacent lands, not to mention the water that was directly affected it due to the removing of the cemetery's roof.

#### **Fifth: The Parthian Palace**

The Parthian Palace is one of the important archaeological landmarks in Ashur, as it contains a new style of architecture, decoration and geometric shapes. Between 1903 and 1914, the Germans moved one of the palace facades to be re-installed in one of Berlin Museums. The German prospector, Walter Andrae, provided us with a complete plan of the palace, and the Iraqi excavation expeditions later revealed the palace storages and its facilities.

# **Restoration and conservation works**

Restoration and conservation works focused on the northern side overlooking the central courtyard of the palace, especially the walls of the great hall. It is a rectangular hall with dimensions (18.5 x 15.5 meters) oriented from north to south. It has two gates, one of which is on the northern side, which is far from the northeast corner in about 107 cm, its width is 160 cm, and the other gate is located on the southern side, which is far from the southwest corner in about 5.3m and it is equal to the width of the first gate. The width of the hall walls is as follows: the western and northern sides are 2 meters while the southern and eastern sides are 1.9 meter.

Inside the hall there are four square column bases, each with a diameter of 160 x 160 cm, built from local marble (limestone) of the same size as the bricks from which the hall walls were built. These bases were the supporters of the interior arches that constitute the supporter elements of the hall roof. After cleaning the northern side completely and finish with the preparation of restoration materials such as, local marble (limestone) measuring 33 x 33 x 7 cm, pure gypsum and lime, we started the hall walls and the subterranean column bases restoration and conservation, leaving only a few remnants of the previous conservation. Those walls were built to a height of 1 meter, and were bonded from the inside and outside with the same binding material that was used in the construction, in addition to back wall binding. The hall planning became clearly

visible. When the conservation works completed, place was cleaned up from the work remnants of gypsum and limestone.

Moreover, all necessary formal approvals have been obtained in order to fence the city with BRC, which will be on the same path as the old fence in order to strengthen its borders in front of the encroachments, and to get full control of all entrances, in addition to dedicating a single entrance managed by members of the security, to Salhaddin Inspectorate officials. The installation of the fence will start in early 2022.

#### **World Heritage Site Ashur**

#### **Preserving the Outstanding Universal Value of the site:**

The Outstanding Universal Value of Ashur distinguished it from other sites in regards to the cultural aspect, by which it exceeded the regional borders of the country.

Ashur cultural heritage is important to the whole world, and it belongs to all mankind. Therefore, protecting it is a matter of great importance to the whole world. The majority of the World Heritage criteria are applicable to the site, as well as the conditions of Integrity and Authenticity, in addition to the availability of the necessary protection and management requirements, all that increases the importance of the site. Ashur is still waiting the measures that will be provided or taken by UNESCO in the future to protect this cultural property and focus on integrity and authenticity.

#### Authenticity:

1. The city of Ashur was inscribed on the World Heritage List according to specific criteria.

2. The ability to understand the value attributed to the site with complete credibility so that it can be considered a source of information and this is what characterizes Ashur as a source of information.

3. It has distinctive characteristics, such as form or design / use and function / traditions and management systems / place and environment / language and other forms of intangible heritage / spirit and feeling / and many other factors.

#### **Integrity:**

It applies to the whole of Ashur as it keeps its entire heritage whether it is present or written cultural one with its full characteristics that has not been damaged by modern development processes.

Farhan Pasha Palace, which was built in (1870 AD) and used as a local museum for the period from 1979 to 1994 AD, and the building of the German expedition residence, whose construction dates back to 1903, if

restored, they can be used as simple museums, gypsum models exhibition or residences for expeditions and a staff break.

# The role of local communities in preserving the city's cultural heritage:

#### Local communities are of two types:

The first is the majority of the nearby rural areas residents who need awareness of the importance of the Ashur. But they do not represent a threat of the site as they fear the power of law.

The second are a small minority who are aware of the importance of the site and look at the heritage in a positive view and do as much as they can to preserve it and pursue all the details and activities related to the site those who plays a positive and effective role.

# The buffer zone surrounding the site and the activities that take place therein:

The area separating the cultural property and its surroundings is necessary to protect it whose borders are illustrated on the map of the city of Ashur as a World Heritage site. The buffer zone is not the property boundaries itself, but rather it surrounds it. The buffer zone can be described as follows: **a**. From the eastern side, the Tigris River. (Natural barrier)

**b**. From the northern side, there are vast agricultural lands.

**c**. As for the northwest side, there are houses of the residents of the Sabkha village, which is adjacent to the fence of the property and on the outer borders of the buffer zone.

**d**. The southwest side is adjacent to the buffer zone, which is fenced, where the State Board of Antiquities and Heritage built three service houses in 1979 (outside the berm) and these houses belong to the site management.

e. The south side is separated by Wadi Al-Zarzour from Al-Hasawiya village.

**f.** As for the west side, there is urban sprawl outside the BRC fence inside the buffer zone, which began in 1979. Some houses were constructed. What had pushed them to encroach is what occurred in the fifties of the last century (the construction of the old Baghdad-Mosul Street, which penetrates the berm (See Maps no. 9 and 10)

The activities practiced in the buffer zone are simple agricultural activities, that is, seasonal cultivation in the north and south of the property.

# **Conservation plan**

#### **Conservation plan in Ashur**

#### Cultural features in need of conservation

- 1. Ashur Ziggurat / Conservation Project
- 2. Assur walls / The double wall that connects Tabera and the Al-Lat
- 3. Reviving part of the trench
- 4. Ashur Massanah (Jetty / buttress) / Conservation Project
- 5. Tabera Gate in which conservation work started by AUIS
- 6. Almawkib Street(ceremony street
- 7. West Gate / Al-Lat
- 8. Anu-Adad Temple
- 9. Royal Cemetery
- 10. Farhan Pasha Palace / archeological building

11. Walter Andrae Palace / German expedition residence / archeological building (cleaned)

12. The Parthian Palace (the old conservation dating back to the seventies has been renovated)

#### Important information about conservation

Ashur has thirteen residential layers, as we knew that from Sennacherib Palace sounding. The plan was in sound condition that guarantees the integrity of the discovered walls. The layers represent different historical periods. Accurate scientific methods were used in conservation that based on minimal intervention after consulting and obtaining the approval of UNESCO, taking into account the principles of integrity and authenticity and all other criteria of the World Heritage Center. Despite the necessity of conservation work for the site, we stand idly in front of most of the monuments. We are not able to take a step forward, for that the new conservation would hide archaeological layers.

Within the plan, the cultural monuments based on the virgin land were identified and named, because they are in the conservation plan, as their conservation wouldn't hide a historical stage, a building, a monument or a symbol of civilization. So at the forefront of these cultural monuments: The Ziggurat of the deity Assur, the city walls (the double wall and the earthen wall), the gates, including Tabera Gate and the West Gate, Ashur Massanah (Jetty - Massanah (buttress)), which prevents the bank of the river from collapsing, the Royal Cemetery, the double temple, Anu-Adad Temple, the Parthian Palace, Walter Andrae palace (the residence of the German expedition), and last but not least the surrounding Assyrian trench.

# The latest conservation of the Ziggurat and the five-year plan for future conservation:

In 2018, in the winter, sound the alarm from inside Hormuzd Rassam tunnel, which refers to the existence of moisture in the south section of the tunnel and the moisture comes from the hole located in the back of the (top) of the Ziggurat from the outside, measuring (a square of side length 4 meters) and a depth of 8 meters, and the reason is the decayed adobe bricks in that hole where water and mud were accumulated. The solution is to patch this large hole in the body of the Ziggurat. Patching process is by removing the decay, uncovering the adobe bricks joints, and constructing the square hole (a scientific-practical construction).

It is noteworthy that the danger still exists despite the backfilling of the trench. As the decayed pocket remains at the top of the Ziggurat, the decay is still expanding, and the administration of the site constantly watch that alarm, which is still sounding. From our perspective that the moisture does not dry due to its source which is a deep decayed hole at the top of the Ziggurat. The solution is to clean the hole first and then build it with adobe bricks and mud, that will cut off the source of

moisture permanently, and as a precaution for the future, we see that the Hormuzd Rassam tunnel needs to be built with adobe bricks, starting from the center. There are other solutions to ensure that no tunnel or hole left, which should be implemented as soon as possible.

The aim of the conservation is to return the edifice of Ashur with its five floors and its high temple embracing the sky with its spiral staircases, and to be a unique cultural feature.

The Ziggurat is a source of attraction for visitors and tourists that no visitor passes through it unless he stands in front of the Ziggurat or ascend to it. So how will it be if life is restored to it, in addition to its importance for scholars and researchers? Such huge edifice conservation project is not an easy matter, and implementing it requires a long-term work plan of at least five years (with continuous work) and its building material is sun-dried adobe and bricks (burnt adobe). The adobe is used as a building material, and the brick is for outer coverage, staircases, and walls.

As for the rest of the mass of this edifice on the ground (the pyramidal shape referred to above) with a height of 17 meters, it represents a percentage of the core as follows:

80% of the first layer core

50% of the second layer core

15% of the third layer core

As for the action plan, it must be limited by a specific time frame - for example:

The first year: preparing the site for restoration and conservation, work materials processing, building additional kilns to burn the adobe, piling work materials sufficient to build the first layer, finally choosing a specialized cadre.

Second year: building the second layer

Third year: building the third layer

Fourth year: building the fourth layer

Fifth year: Building the fifth layer and the high temple

#### **Building materials:**

1. Assyrian size sun-dried adobe (40 x 40 x 12 cm) to build the Ziggurat core. It is made in situ from pure red earth, known locally as (al-Hari), and alluvial mixed with fine hay that fermented for two days.

2. Earth: pure red earth that is used as a binder (mortar) for building adobe bricks.

3. The bricks are sun-dried adobe measuring (40 x 40 x 12 cm) burnt in kilns set on the site for this purpose.

4. Lime (fresh gypsum) is a binding material for building the outer brick cover.

5. Bitumen: it is chemically treated mixed with familiar fixed proportions of fine sand and fresh gypsum to prevent it from melting in the heat of the sun which is used to build the outer course of stones.

6. Pure river sand mixed with bitumen in a fixed proportion.

# **Preparing sites for conservation:**

1. Uncovering the square sacred area (temenos) surrounding the Ziggurat from all sides stating from its residential floor at a depth of (3 meters), as proven by the trench surrounding the Ziggurat from the east and south sides, until reaching the first frieze of the Ziggurat, which is the beginning of the construction of the four sides. The excavations should be of the same depth, level, and with a width of not less than (10 meters) on each side. We concluded from digging the trench the fact that the area is free of covered antiquities, however, sounding must be made to be sure. The sounding must be vertical and close to the four facades with the same depth. Noting that the process of uncovering the yard and removing the rubble from it was part of the project (the archaeological revival of the Ziggurat) in particular and for the city in general, but it was not implemented.

2. Removing rubble and decayed parts from the front of the Ziggurat because of the old excavations, and this is done scientifically for fear of losing one of the historical evidences, and after sorting the rubble; it is moved outside the city.

3. Removing the protective adobe bricks relating to the old conservation which was used in 1981 completely to replace it with the brick cover.

# **Reviving part of the trench**

The trench was dug by King Tukulti-Ninurta I (1243-1207 BC). It was built to be a mere obstacle for horses and pedestrians which enabled them to defeat the enemy before reaching the wall. The trench surrounds the northwest and southwest regions enclosed by the double wall. It starts from the deviation of the (north) wall towards the west and continues along the wall through the Tabera gate and continues parallel to the wall until it pours its waters into the Tigris River. The trench is still tilted in the form of a shallow dry valley surrounding the city walls.

Width of the trench at the bottom = 11 meters

Width of the trench at the end edge = 15 meters

Trench depth = 15 meters (to groundwater)

The following is seen:

If the wall connecting the west gates to Tabera is uncovered, it is necessary that it be accompanied by a revival of the trench along the distance or part of it to be a living trench and a sample for the Assyrian trenches.

#### Ashur Masnah (buttress) / Conservation Project

Since the beginning of the Assyrian dwelling in the city of Ashur, they have been aware of the danger of the Tigris River to the city, and it causes permanent erosion on the eastern side. The overflow of the river during the flood seasons will lead to the erosion of the city. Preventive measures must be taken to protect the city's cliff from erosion and demolition. We do not have information about the history and the planning of the first Masnah (buttress)) and who is the king who planned and built it.

Part of the Masnah (buttress) is still standing (existing - the northern side about 200 meters) due to the relative stability in the river's flow most days of the year.

The far distance of the estuary of Umm al-Shababet in the Tigris River from this area keeps this part sound unlike the rest of the Masnah (buttress) which was eroded by the river, and we do not know whether its foundations still exist or not. (Width 80 cm down to the river) was created during the renovation.

#### The Masnah (buttress) planning

1. The foundations of the Masnah (buttress) were submerged in the course of the river.

2. The bare walls are in constant conflict with the waves.

3. The building must be high and solid without gaps to withstand the water pressure, and all joints should be filled with a resistant material such as bitumen to prevent water leakage.

# **Conservation benefit:**

Within a few years, the river entered from the weak areas between the expedition residence and the estuary of the nearby valley in the south, then it entered to the city for a distance of 30 meters, and the distance is still increased. Therefore, the cliff is collapsing and the city is under threat, because the demolition takes hundreds of the archeological parts. So, the solution is to conserve and rebuild the Masnah (buttress) at a distance (73 meters) with the parts that preserved their foundations.

# A vision to rebuild the Masnah (buttress) to preserve Ashur from the danger of the river:

 The tributary is dried in the summer to search the path of the Masnah (buttress) foundations that buried in the dried-up river bed.

2. Working to find the original parts of the Masnah (buttress) and try to return them to their original places.

3. Rearranging the regulator nearby the Tigris Gate.

# **Tabera post ISIS**

Tabera was subjected to destruction, and a number of gunpowder barrels exploded inside. Its entire body was affected; as the covers of the brick walls fell and the brick cover fell from the inside also. Even the north tower (outer) had a severe crack that could lead to its collapse if not conserved. The supporting elements are the most damaged and its shape warns of danger and calls for urgent restoration, otherwise all the brick covering the walls will fall off.

However, the three arches, despite the damage they subjected to, were difficult to collapse, and we will follow the arches, starting with the northern one.

#### The first arch:

It is still coherent and standing despite the crack caused by a massive explosion that torn down a number of its bricks in the first outer course from both eastern and western sides, with a damage in the northern top.

#### The second arch:

It is the largest arch in terms of area and size. It was also affected by the massive explosion, so as a result, cracks formed on its west and east sides, besides, part of the bricks of the western facade fell in addition to the creation of a vertical crack in the middle.

#### The third arch:

It is the last arch that was less affected than the rest, as it has little cracks. Our concerns lie in the rainy season, which may increase the size of the cracks.

#### **Supporter elements:**

The supporter elements holding the arches have been damaged in a way that make us urged to accelerate their restoration and conservation before too late.

#### Supporter elements of the first arch:

The bricks covering both supporters have collapsed significantly, and there is a serious damage to the stability of the arch. More than half of the northern supporter elements from the west collapsed. This forms an alarm sound of the possibility of the arch collapsing.

#### Supporter elements of the second arch:

The large arch, the supporters, and the whole brick covering have collapsed. The non-collapsed part is cracked and separated from the core of the wall, and there is no vain in conserving it without opening these cracks and rebuilding it.

#### Supporter elements of the third arch:

The two supporter elements are not collapse prone, but they have cracks. The right supporter element begins to crack from the bottom up to a height of 2.5 meters, and the crack increases in width and height towards the top. We see that if it reaches the beginning of the arch, what we do not wish will happen, the sound arch will collapse. It is noteworthy that the left supporter has a similar crack.

#### The large outer tower:

This tower was not collapsed, but it was cracked vertically. The affected parts must be treated and reconstructed when the gate completed.

When we came back in September 2016, and after the liberation of the city, we found that the Gate was the most affected part and the arches were ramshackle.

The conservation of Tabera gate was adopted by the Center of Archeology and Heritage at AUIS. The conservation implemented by Dr. Tobin Hartnell and a work team. The process was done scientifically and safely by adding new iron supports temporarily to the second arch to avoid collapsing.

The conservation was limited to the northern supporter element; we hope to continue conserving the rest as other arches were about to collapse.

#### Central Procession Road (Almawkib Road):

It was discovered by the German expedition, it is located in the north side of the city between the Temple, the Ziggurat, and the Royal Palace area. It is paved with layers of stone fragments and river pebbles, covered with bitumen mixed with pure sand.

It extends from the sacred square located between the Ziggurat and the Temple of the deity Assur, passing through the Ziggurat, the Royal Cemetery, and the double temple of Anu - Adad. When it approaches the double wall, which is the inner city wall (the western wall), it deviates to the right towards the north, and a branch forks from it towards Tabera gate to overlooks the large rectangular yard. When the street passes Tabera ends towards a yard located between the new Palace and the inner gate of the cracked wall. The width of the street is (7m), which was narrowed to 4m in the later ages through test sounding done by the revival expedition of Ashur. Through exploring the layers, we believe that the narrowing was in the era of the Parthian occupation of the city. The main street is surrounded by a sidewalk on both sides. The sidewalk is a line of refined stones fixed on both sides.

The street is very important as it is specified to the passage of Assur (the chief of the deities). It is useful to say that the Procession Street and the Obelisk Street on the second side of the city are included by the archaeological revival of the city for two reasons; the street built on virgin ground and its restoration does not affect negatively as there are no hidden layers, nor residential floors.

It is necessary to uncover and conserve the entire street, so after completing the conservation of the Gate, the street would link between Assur Temple and Beit Akitu.

#### Western Gate (Bab Al-Lat)

It is located in the western wall of the city. It is one of the important gates. The German expedition excavated it at the beginning of the

twentieth century. Through the excavation processes, we revealed its planning, facilities, and residential layers.

It was one of the first signs of a civilization that was revealed in the first season of the archaeological revival expedition in 1978. The excavations showed us the extent of erosion and damage as a result of leaving the excavations open since the beginning of 1914.

The gate is built on a platform made of adobe bricks over a natural pebble made supporter and overlooks the hilly area. The gate was originally connected to a wooden bridge across the trench.

Conserving the western gate is very necessary for several reasons:

a. It is the only standing gate of the double wall that represents a model for the two gates for each wall, and the two gates are not opposite, but they are similar in planning and design. There is a vast space (160 meters) between them. Ascending the gate is through hidden stairs within the walls.

b. In the last Assyrian era, the inner gate (the gate of the inner wall) was removed, and the Assyrian King Tawkilti Ninurta built a door that leads outward to a watchtower to monitor the movements of the enemy from afar.

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c. The trench adjacent to it is crossed by a wooden bridge. The wall connected to the external gate runs towards the west which is distinguished by its semi-circular stone towers. All these features encourage us to decide the need of its conservation.

### **Anu-Adad Temple:**

A double deity's temple (Anu-Adad) was named after both of them which located between the new and old palaces. We can notice a harmony in the masonry of the large Ziggurat, the old Palace, the Anu-Adad Temple, and the New Palace.

These buildings are adjacent to the main street that reaches the entrance of the Tabera Gate. The German expedition excavated it and revealed its planning in detail.

The old and middle building was completely removed, even the ziggurats removed by King Shalmaneser III (858 - 824 BC) and rebuilt again. Therefore, he attributed the building of Anu - Adad Temple to himself, as the Assyrian texts mention. The temple and the two Ziggurats are from the ancient era, built by king (Assur - Rech - Ishi), but the temple was not completed and then was completed by his son king Taglath Plieser I. Then the entire building was removed during the reign of King Shalmaneser III. It is useful to say that the German expedition completely excavated this temple until removed the eastern ziggurat to the foundations, and limestone fragments are still scattered around the place.

The temple is built of Assyrian adobe bricks (40 x 40 x 12 cm). It is based on virgin ground. The Iraqi Archaeological revival expedition, which began its work in Ashur on 6/3/1978, excavated the temple again and restored the western side and the front-south facade. As for the eastern side, it is not includes in conservation and restoration works.

In general, Anu-Adad temple was built from sun-dried adobe bricks and covered with clay and pure red earth that was free of salt and mixed with fine hay and fermented for three days.

# **Royal Cemetery**

It is one of the most important Ashur cultural features and a unique model in its planning, construction and design, in addition to being the only Assyrian model discovered so far.

The name is attributed to the Assyrian kings buried in it, and its location is adjacent to the royal palace from the south.

The cemetery is one of the discoveries of the German expedition (1903 - 1914 AD). The expedition provided us with the planning of the royal cemetery, and three out of five of its inhabitants that were identified, the

first of whom was King Assur-bel-kala (1074 - 1057 BC) and the last one was the King (Shamshi - Adad V 823-811 BC). There are well known Assyrian facts that:

1. The Assyrians burial was deeply hidden.

2. Ashur (city) was the principal burial place of the Assyrian kings and the major royal figures of Assyria.

3. There were (117) king ruled Ashur, and the royal cemetery contained the remains of five kings, three of whom were known. The question arose, where are the other burials?

Their tombs are located in Ashur, and they weren't excavated for two reasons:

The First: hiding them deeply;

**The Second**: (linked to the first) as the depth of the land in which the cemetery is built may reach to (6 m) or more.

Conclude form the above, that the royal cemetery is not the only one in Ashur, but there are dozens. To discover them is a very difficult task. The planning of the cemetery is simple and it has room for expansion. There is a long passage that goes across the cemetery from north to south, from which three sub-routes towards the east to where the protector deity of Assur resides. The third passage at the end of the cemetery extends to the east and west and its shape has become perpendicular to the main sloped passage.

The cemetery (passages and burial chambers) was built from bricks measuring (33 x 33 x 7 cm), and the width of the walls is similar to the width of the bricks. The core material building is sun-dried adobe bricks measuring (33 x 33 x 7 cm). As for the floor of the passages and cemeteries, they are paved with bricks of the same size, except for two burials:

**First**: the tomb of the king (Assur - Bel - Kala) whose floor was paved with carved limestone, measuring (40 x 40 x 12 cm)

**Second:** the tomb of the king (Assurnasirpal II) whose floor was paved with coarse black diorite stones measuring  $(40 \times 40 \times 12 \text{ cm})$ 

Therefore, it is necessary to conserve and protect it with a new standard size and durable material shed to be safe from the factors of nature, taking into account the direction of water flow to be towards the south in order to pour into the Tigris River and with four iron supporter elements, 3-4 meters high above the level of the Virgin wall and with a metal cover one-meter-long outside the shed to keep rain water away from the wall.

Conservation is carried out after lifting the iron structure, which weighs dozens of tons, and covered with tons of fragments of glass (figure no. 28)

When ISIS terrorist gangs occupied the site, they smashed the glass completely.

## Farhan Pasha Palace / archeological building:

The palace is located in the northeast corner of the historical city of Ashur, overlooking the Tigris River directly from the east and from the north overlooking the vast plain of Sherqat.

On the west and south sides, it is bordered by the ruins of the historical city and the palace itself stands on the ruins of the temple of the deity Assur.

It was called - Farhan Pasha Palace - in relation to Sheikh Farhan bin Safough Al-Jarba, the head of Shammar tribe in the days of the governor Medhat Pasha (1868 - 1872), who built this palace for him in 1870 AD.

The palace has an area of (1862 m2), of which (540 m2) is a building area except the facilities, which were subjected to bombing during ISIS period.

It is known that the palace hides under it the main temple in the city ( the temple of the god Assur) and this was proven by the excavations of the German expedition for the years (1903 - 1914 AD), but there were no accurate and comprehensive excavations in the place.

Farhan Pasha Palace was completely destroyed by ISIS. It was completely damaged and is included in the reconstruction. Sherqat site Administration-Saladin Inspectorate of Antiquities, are waiting for the decision of the UNESCO and the State Board of Antiquities and Heritage, which will be the first one in regards to the conservation of Farhan Pasha Palace or the temple of the deity Assur.

# Walter Andrae Palace / German expedition residence / archeological building

Walter Andrae is the head of the German excavation expedition that excavated in the city of Assyria for the period from (1903 - 1914 AD). As soon as he reached Assyria in 1903, he began excavation work and started building residences for his expedition members, which he planned to work for dozens of years, but war had other laws. He did not know that his country would enter a fierce war. Therefore, he began planning the palace (the residences of the expedition) and building it. Andrea specified specific features to build the palace, including:

1. It should be located on the edge of the river.

2. No foundations be dug for it, rather it should be built above the ground.

3. To be built from the scattered limestone stone in the ruins of the city.

4. It should be built vertically to shorten the distance occupied by the palace.

The palace was built according to the typical Islamic architecture style in which a central square surrounded by buildings on all sides.

The northern side was built on two floors, it is a row of juxtaposed rooms, was used as workers' residential area.

In the east part of the south side, there is a two-story apartment specified to the chief of the expedition, and in the west part there are a storage room and laboratories for the expedition. In the east side, there are a rest room and a kitchen, part of it was open to the river. As for the western side, there is a big hall dedicated for studies and meetings. Two small rooms are adjacent to it from the north and a double room from the south. It has one outer entrance opens to the hall with a side get way (administration room). In regards to the facilities, they are located outside the palace in the northwest corner and are now called (Bait Ameian).

As soon as Ashur archaeological revival expedition supervised by Dr. Tariq Madhloom began its work, it found that the palace is neglected, that's why they gave priority to the conservation of Andrae Palace and make it the residence of the Iraqi expedition.

The palace was conserved with some modifications, and it became a property of the State Board of Antiquities and Heritage.

When ISIS occupied the city, they took Walter Andrae Palace as a residence, so they vandalized the palace, dismantling its gates, windows, and parts of its ceilings and floors, leaving it rack and ruin covered with rubble and waste.

The State Board of Antiquities and Heritage- International Organizations Department directed the site administration at the end of 2021 to clean the palace and close its entrances and ground floor windows temporarily until finishing its conservation. It is worth noting that the palace impresses everyone who visited it due to its strategic location on the Tigris River. Mr. Paolo Fontani, Director of UNESCO in Iraq, upon his visit to Ashur on 12/12/2021, advised to conserve it and making it a museum for the city.

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#### The Parthian Palace (the Palace of Al-Awawin)

It is one of the German expedition discoveries, that worked in Ashur (1903 - 1914 AD), located in the southeast part of the city. It is one of the cultural landmarks included in the revival project within the table of the Iraqi expedition, which began on 6/3/1978 and assigned a team to excavate the Parthian palace which was uncovered since nine decades.

Before talking about the results of the archaeological revival expedition's work, we must first know the palace, its era and names, and then move on to the planning and archaeological finds left to us by the German expedition. Accordingly, we say:

The palace dates back to the era of the Parthian control over the country, which took place in 126 BC. The palace was the center of power synchronized the foundation of Hatra. In regards to its names, it was called by three names:

**The Parthian palace: it is attributed to the political authority** that directed the palace work, and the palace became responsible for issuing the political decisions of the Parthian state.

Attributed to its planning: it is a square open yard, four (Awawin) were opened to the yard; each Iwan faces one of the four directions.

**Arab Palace**: this name is connected to the second name [Awawin], due to its Arabic architecture.

The German expedition provided us with three drafts for the three layers of the palace; each one represents a historical stage.

The archaeological revival project gave the priority to the palace excavation and conserve. The excavations and removing the rubble were in III layer (the newest one).

There were excavations belong to old expeditions that left in 1914 in a hurry, leaving behind excavations exposed to weathering. Then, in 1978, the archaeological revival expedition continued the work on the third layer. They uncovered a layer which was completely destroyed and only one or two brick courses remained in few areas which represent fragments of brick walls, measuring  $(36 \times 36 \times 10 \text{ cm})$ 

We searched the second layer, it was also destroyed but it was better than the previous one. The northern iwan was destroyed also, and only one raw of brick remained.

In the southern iwan, we found its structural foundations and some fragments of stucco.

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As for the western iwan, its features have not been determined yet, but we found stucco also. Concerning the eastern iwan, we did not uncover its foundations, but we identified its exact location.

# Anu-Adad Temple / Sin - Shamash

Let's move to the temples and talk about the double temple - the temple of the two deities - Anu and Adad - the temple of the two ziggurats which discovered by the German expedition and were decided to be one of the cultural buildings included in the conservation and revival as a model of the Assyrian temples in the city.

Its foundations were uncovered again as a temple and the foundations of the two ziggurats as well. However, the foundations of the ziggurats were carved with prominent stone, but the hidden foundations were made of non-carved alabaster stone. As for the eastern ziggurat, it was removed except the subterranean foundations.

In respect to the temple, the façade of the western side was conserved with the same material, and that was in the 1982 and 1983 seasons, provided that the entire temple would be conserved in later seasons, but that was not achieved.

The conservation in the temple was partial (only in the western side) that can be applied to the front façade and the eastern side of the temple. As for the adjacent temple (**Sin – Shamash**), it is only an old hole in which there are fragments of limestone from which we do not understand anything other than that it was the foundations of the temple, but we are sure that the temple **Sin – Shamash** was here in this place.

#### **Old Palace / New Palace**

This old palace (Assyrian Palace - Royal Palace), which has been reexcavated and conserved with mud and bricks varies in height between (100-120 cm), but the conservation was not perfect, though it gave a sufficient indication of the shape and plan of the palace.

Let us compare this palace that was conserved in a simple method with the New Palace / Tukilti **Ninurta** I Palace, which was re-uncovered within the re-uncovered sites in the State Board's working plan (reuncovering the previously uncovered sites), but it was not conserved. So it became ruined to the degree that we did not understand anything from it.

Finally, we would like to thank the archaeological expert (Dr. Mohamed Ajaj Gerges) for his assistance in completing the conservation plan.

### **Director and Representative, Iraq-UNESCO visit**

On Sunday morning 12/12/2021, Mr. Paolo Fontani, Director and representative, Iraq- UNESCO, visited the city of Ashur accompanied by

Mr. Riyad Hatem, Director of the Remote Sensing Department- State Board of Antiquities and Heritage. We gave him a brief explanation about the city and the bad effects of Makhoul dam. Mr. Paolo asked for Ashur map , on which grid coordinates should be specified, indicating the most affected areas that the dam's reservoir water could reach in the future.

Mr. Paolo roamed around the city, entering the archive room, emphasized that documents should be saved electronically. Then he moved to Tabera Gate and looked at its conservation which was carried out by the AUIS. Then he moved to the Procession Street (Almawkib Street), and the New Palace in the temenos of Anu-Adad / Nabu / Ishtar, and then arrived at the Royal Cemetery and looked at the conservation that was completed two days ago before his arrival. We gave him an explanation about the historical importance of the cemetery, ISIS disastrous affect and the vandalism, especially that of on the glass cage (shade). Then he moved to the Old Palace and Al-Mashlallo Gate that located to the north of Ashur Ziggurat. He spotted a light on the difference between the Tabera gate and Al-Mashlallo. He explained that Tabera gate is erected but Al-Mashlallo is a mare paved stones. Then he moved to Walter Andrae Palace, which is free of rubble and waste. He liked the site of the palace very much and suggested that it should be conserved so that it would be a museum for the city. We were informed that an expedition from the

ECOMOS would arrive to Ashur at the beginning of next February. Finally, he emphasized the importance of the annual report to be submitted to World Heritage Committee.

After his visit to Farhan Pasha Palace, he emphasized the necessity of its and all the city's landmarks conservation. He entered the tunnel dug by Hormuzd Rassam in the body of the Ziggurat. He discussed also the effect of rainwater that reaches the tunnel.

We conclude that Mr. Paolo was satisfied and he expressed his happiness and complete satisfaction of the city. He promised that he will visit the city again and again and would do his best to ward off danger from it and he would talk to the World Heritage Committee in Paris about the city of Ashur and the problems, dangers and threats it suffers from.

He stressed that the Ministry of Water Resources should provide official responsible persons of the city of Ashur and the UNESCO with all documents and drafts related to protecting the city from Makhool Dam impact.

The report did not mention anything about the new conservation of the Parthian palace, which was carried out without getting the approval of the International Organizations Department-SBAH.

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The closure of the Tigris River branch adjacent to Sherqat Castle is currently under consideration for many reasons:

- There is an Assyrian harbor at the Assyrian buttress (Al-Misnah), which located in the area following the supposed embankment site. This harbor contains very important organic remains and antiquities that stayed submerged underwater.
- The harbor referred to in paragraph (1) above is the only harbor in Iraq.
- 3. A co-expedition from the State Board of Antiquities and Heritage and members from international parties specialized in the field of rivers that contain antiquities will visit the site next January to evaluate the situation and take a decision regarding the excavations, the Assyrian harbor and the buttress (Al-Misnah).
- 4. It is believed that the results of the excavations in this area will be valuable due to the possibility of the existence of dozens of sunken boats with full cargo, structures and organic remains such as wood, leather, tissues...etc., in addition to metals, pottery and stone.
- 5. Closing the river branch by an embankment will lead to drying the area, and expose it to the sun and weathering, and losing the organic materials, as a result, losing the only opportunity to obtain evidences

of the archaeological findings that lead us to these very important discoveries.

- 6. The team work will be accompanied by international specialists in the field of environmental impact assessment of the river reservoir in this area to study the possible negative effects on the site and the possibility of the archeological city cliff collapse due to drought in case of closing the river branch completely.
- 7. The existence of water treatment plant belonging to the municipality of Al-Sherqat district, 250 meters south of the archeological city, which fed with water from the river branch that will be closed. There should be prior coordination with the administration of the water station before taking the decision to construct the embankment, noting that the backwater flows into the same course which rejoins the main course of the Tigris River, that requires closing the canal from the north and south sides in case of taking the decision of closing it, with laying feeding and draining station pipelines and changing its main course to the Tigris River, in coordination with the Municipality of Al-Sherqat District.
- 8. It is important to conduct a study of the current heights of the holm adjacent to the site located south of the supposed location of the blocking embankment that extends to the end of the archaeological site from the east before taking a decision to close the river branch,

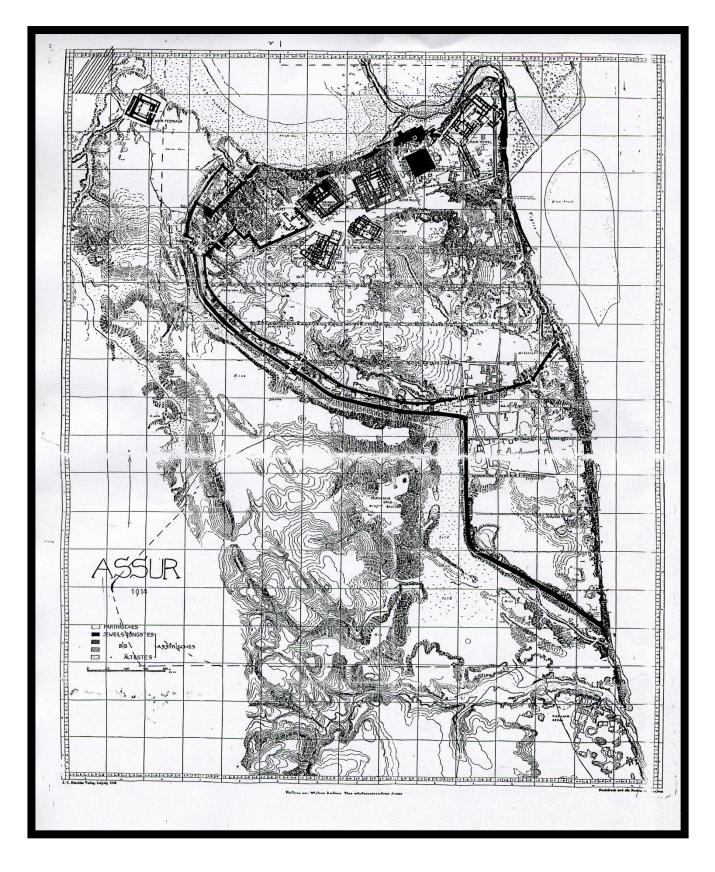
because closing it will inevitably lead to a rise in the level of the main course of the Tigris River. This leads to water leakage from the lowlying areas of the holm covered with natural plant, reeds and trees, which requires strengthening some of the low-lying areas, if any.

9. We agree that the river branch adjacent to the World Heritage Site of Ashur causes great damage during the flood seasons, and protection must be found for the site. We believe that the damages that will result from the closure would be disastrous for the site.

For the above and until the end of the study and assessment stages, we see the need to think about partially closure of the river branch by establishing gates to control the amount of water flowing from the embankment under study to ensure control of the water levels that flow in this section of the river to avoid damage caused during flood seasons and to preserve the arcnaeological value of the site.



# **Maps and Drafts**

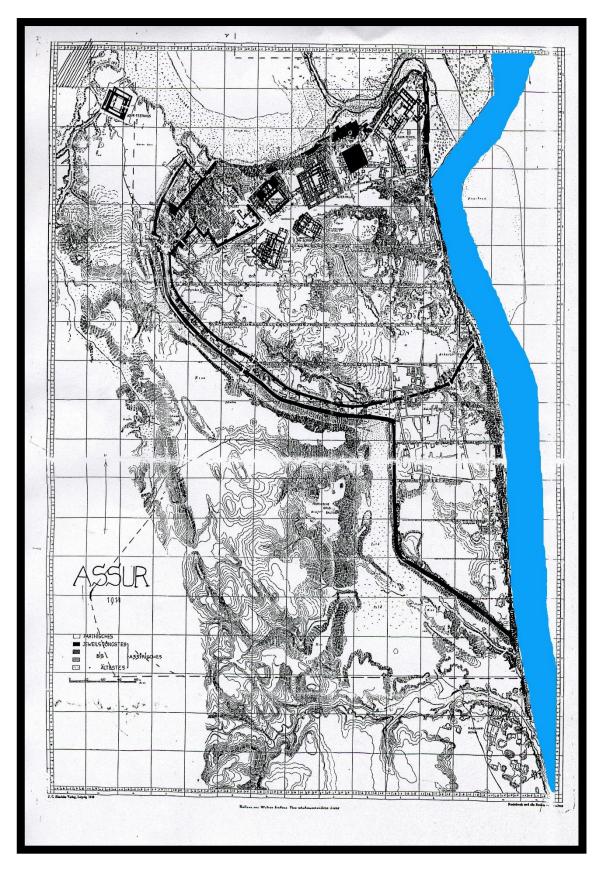


(Map No. 1) Assur (Ashur) City buildings map

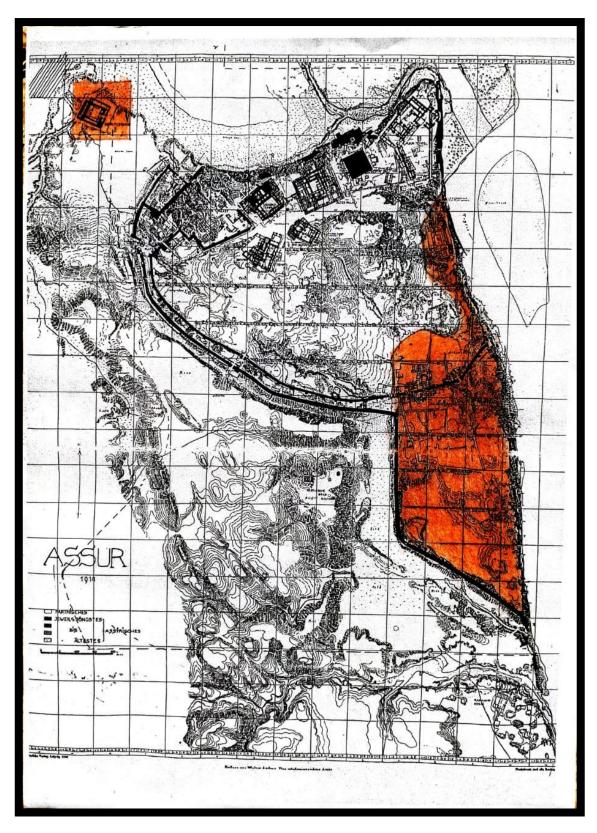


(Map No. 2)

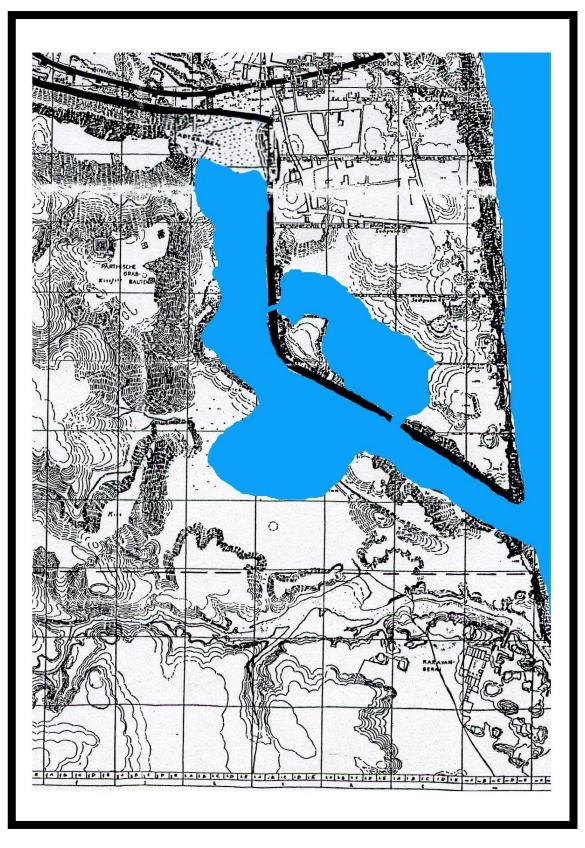
Assur (Ashur) / Ancient City / Possible dam effects



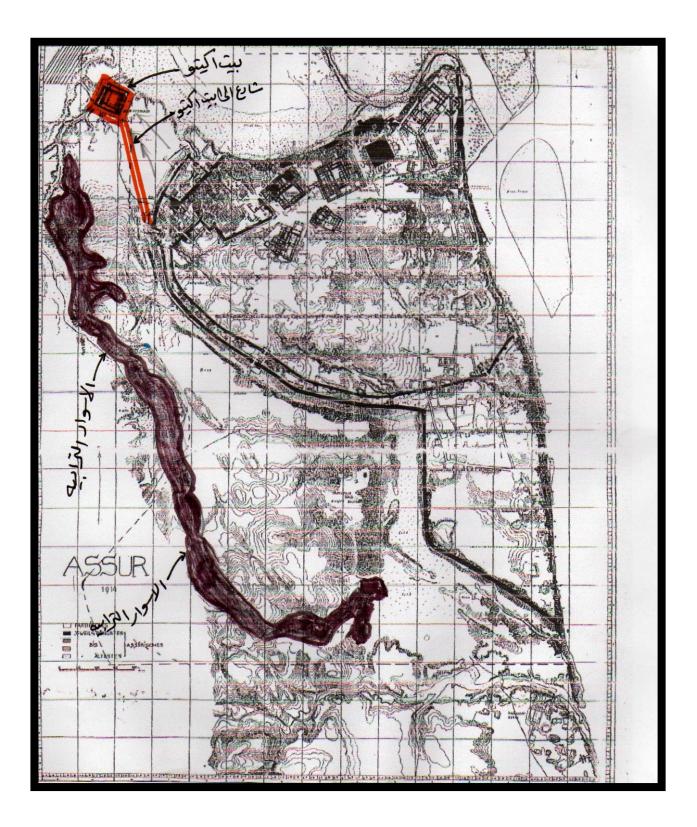
(Map No. 3) The city of Assur / the current course of Tigris River



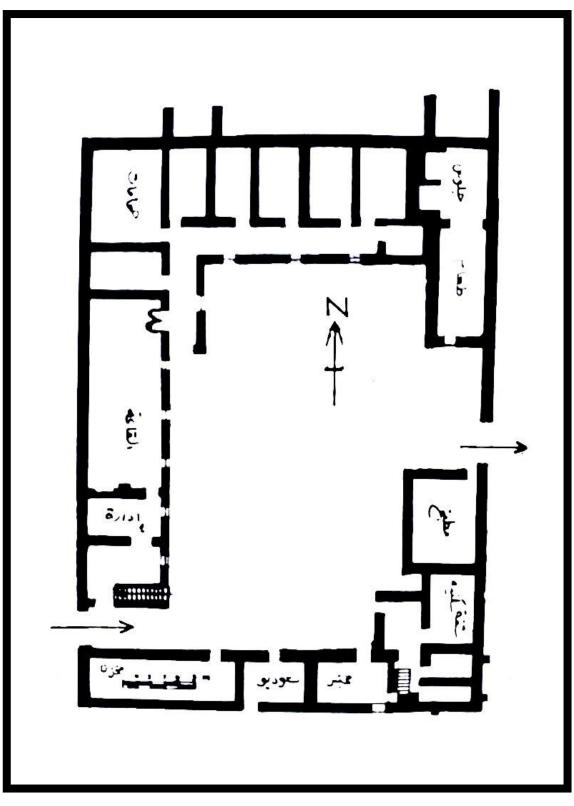
(Map No. 4) The city of Assur (Ashur) / the lowest areas



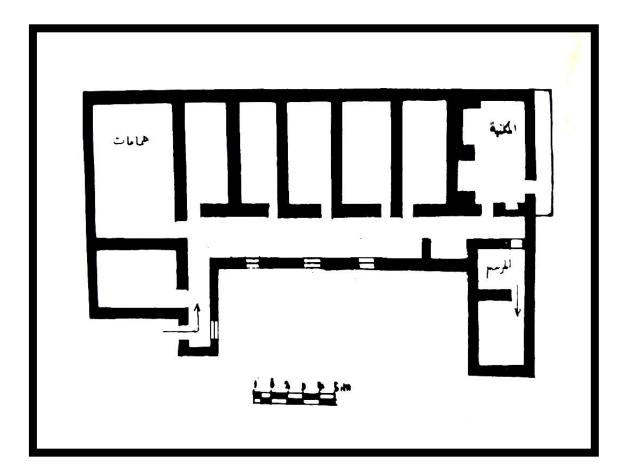
(Map No. 5) The city of Assur (Ashur) / the potential impact of the dam on the new southern city

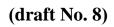


(Map No. 6) The city of Assur (Ashur) / earthen walls



(draft No. 7) Walter Andrae Palace / Ground Floor

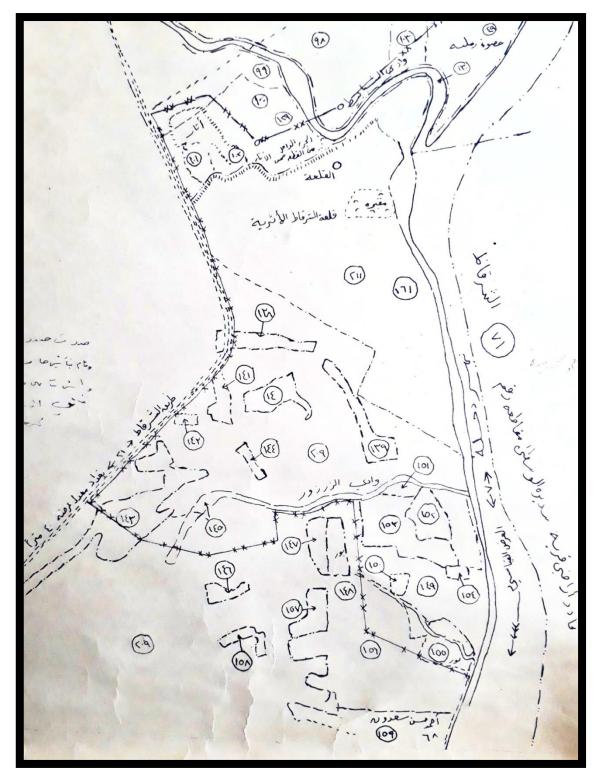




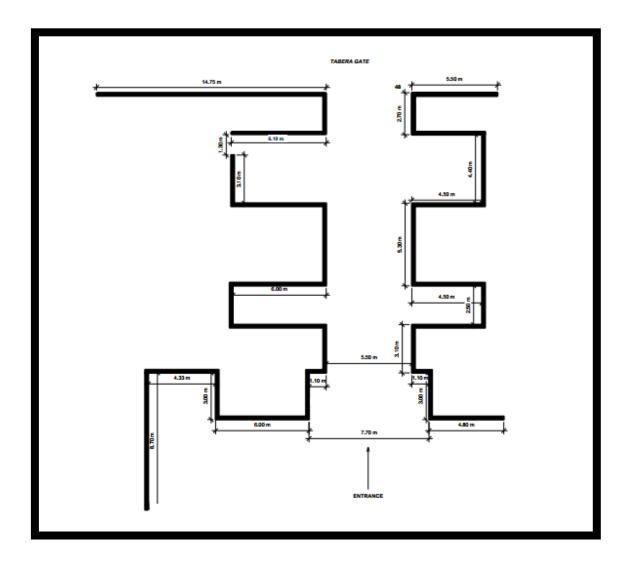
Walter Andre Palace / First Floor



(Map No. 9) The city of Assur (Ashur) / urban sprawl from the west, which has been stopped

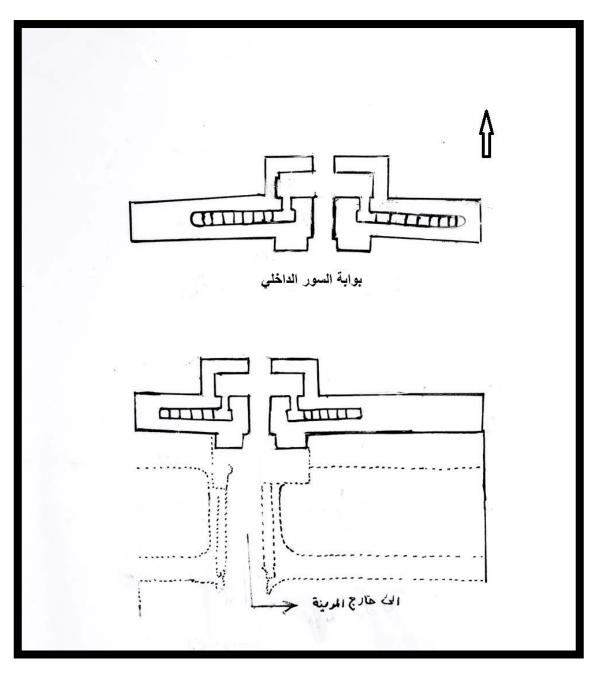


(Map No. 10) Baghdad- Mosul Old Street that passes between the city walls and the earthen wall installed on the cadastral maps



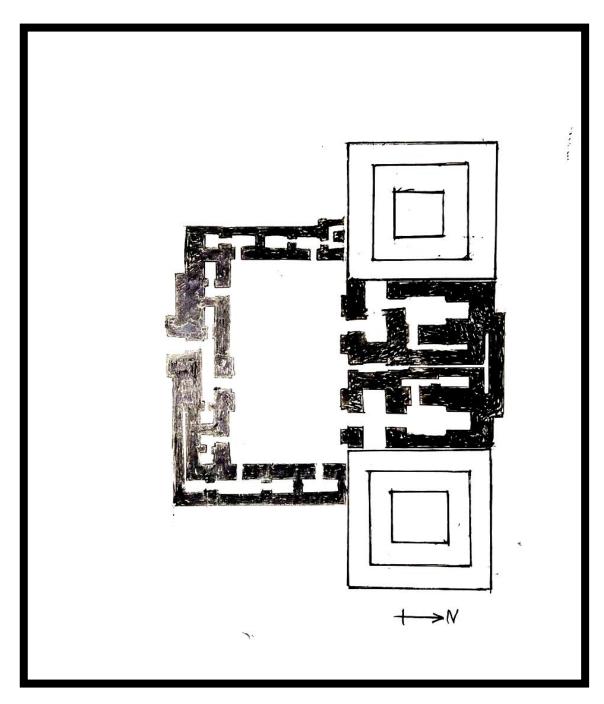
(Map No. 11)

Tabera Gate

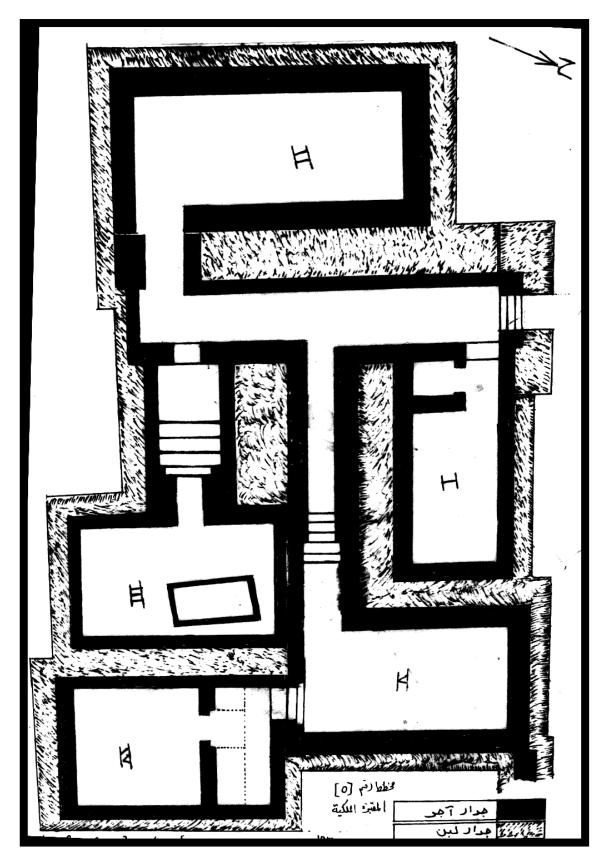


(Map No. 12)

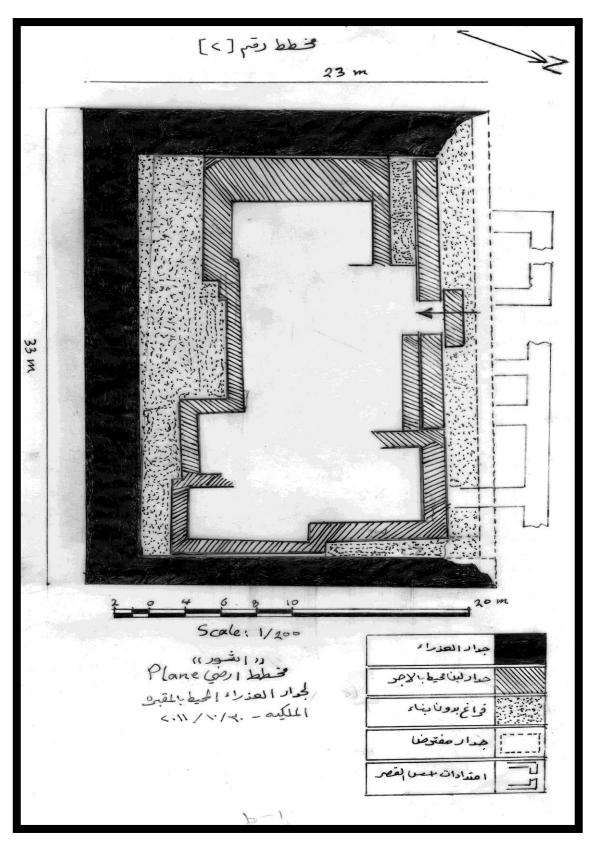
The city of Assur (Ashur) / the western gate during the reign of Shalmaneser III



(draft No. 13) City of Assur (Ashur) / Temple of Anu - Adad

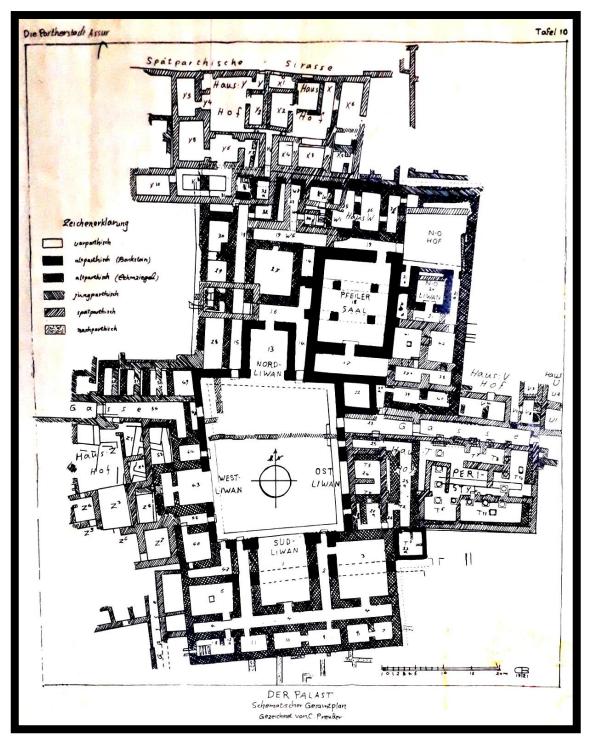


(draft No. 14) Assur (Ashur) / Royal Cemetery



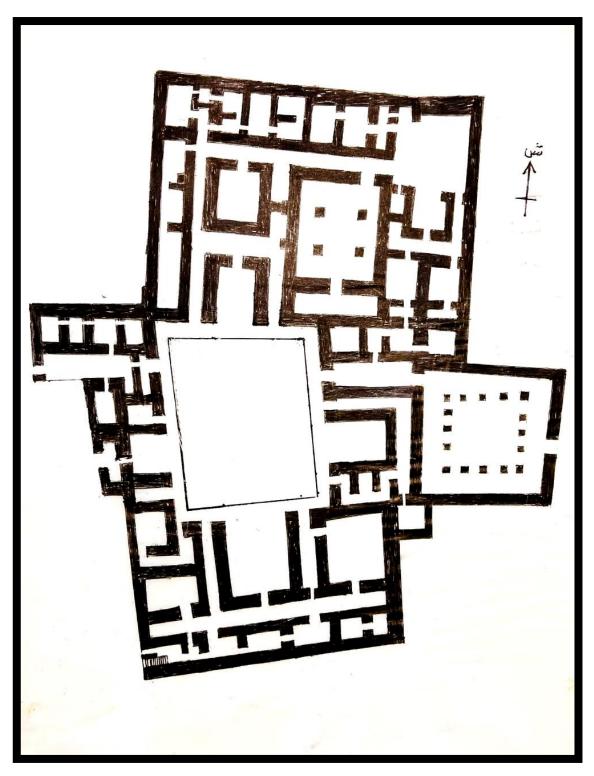
(draft No. 15)

The city of Assur (Ashur) / the Virgin wall surrounding the cemetery



(draft No. 16)

The city of Assur (Ashur)/ the Parthian Palace, 1st floor / 2nd floor



(Draft No. 17) Assur (Ashur) City / Parthian Palace / Newest Layer

## Images



(Figure 1) Ongoing Works in Makhoul Dam (Rehabilitation of the Service Bridge)



(Figure No. 2) Makhoul Dam / Service Bridge Rehabilitation Works



(Figure 3) Rehabilitation of houses specified for workers in the dam



(Figure No. 4)

The city of Assur (Ashur) / the northern side / the cavernous area of the wall



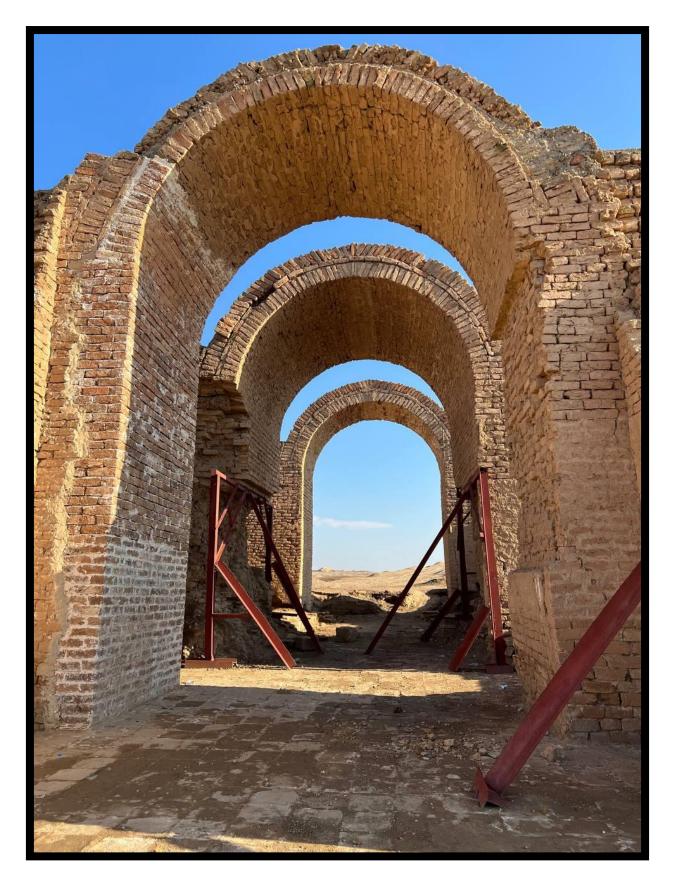
(Figure No. 5) / Al-Masnah / the cliff of the river / the danger is visible on Walter Andrae palace



(Figure no. 6) Tabera Gate / Iron supporter



(Figure no.7) Tabera Gate / Supporter elements



(Figure No. 8) Tabera Gate free of ruins

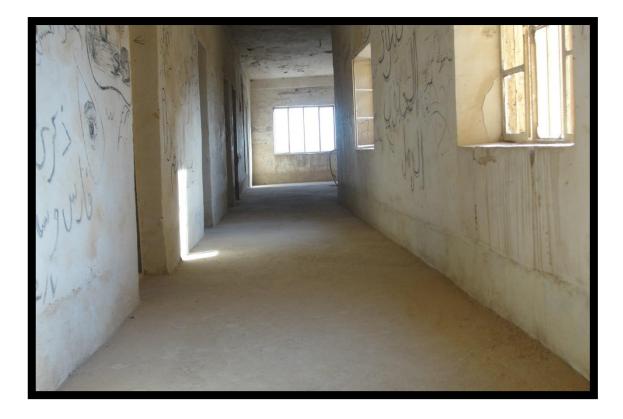


Figure no. 9

Walter Andrae Palace before cleaning



(Figure no. 10) Walter Andrae Palace after cleaning



(Figure No. 11) Walter Andrae Palace after cleaning

## (Figure no. 12) Walter Andrae Palace / Temporary closure of the doors and windows of the ground floor





Figure 13 Royal Cemetry before cleaning

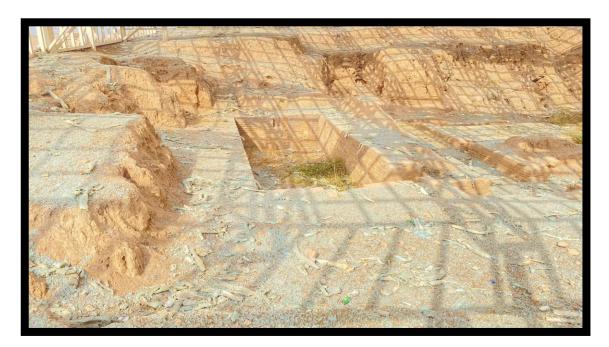


Figure No. 14 Assur (Ashur) / Royal Cemetery before cleaning



Figure No. 15 Assur (Ashur) / Royal Cemetery after cleaning



(Figure No. 16) Assur (Ashur) / Royal Cemetery after cleaning



(Figure No. 17) Royal Cemetery after work completion



(Figure No. 18) The Parthian palace after the completion of construction and conservation works



(Figure No. 19) The tunnel in the body of the ziggurat on its western side

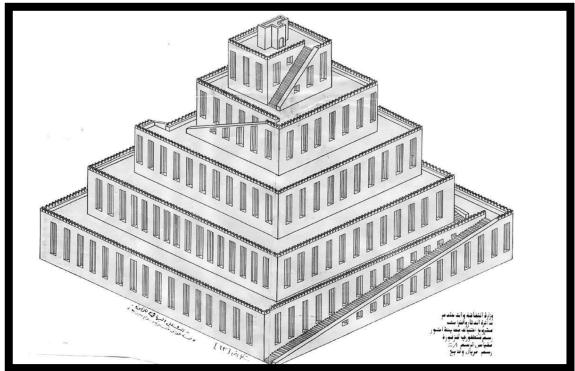


(Figure no. 20) The opening in the southern side of the ziggurat



(Figure No. 21)

## Ziggurat of the deity Assur (Ashur)



(Figure no. 22) (Layers of the ziggurat of Assur (Ashur)



(Figure no.23) Cracks in the body of the Tabera Gate after it was blown up



(Figure no.24) Tabera Gate / North Tower / Effects of the bombing



(Figure No. 25) Procession Street (Almawkib Street)



(Figure No. 26) The western gate with the conserved walls



(Figure No. 27) Temple of Anu - Adad



(Figure no.28) The Royal Cemetery / the glass box over the tomb



(Figure No. 29) Farhan Pasha Palace / before the bombing



(Figure no.30) Farhan Pasha Palace after the bombing

## The remains of the temple of Sin-Shamash

