

# THE KERKENES PROJECT

## A PRELIMINARY REPORT ON THE 2011 SEASON



*Figure 1. Gold ornament from the Cappadocia Gate excavations.  
(11dpcg3232)*

**Geoffrey Summers**  
**Françoise Summers**  
**Scott Branting**  
**Dominique Langis-Barsetti**

## LOCATION

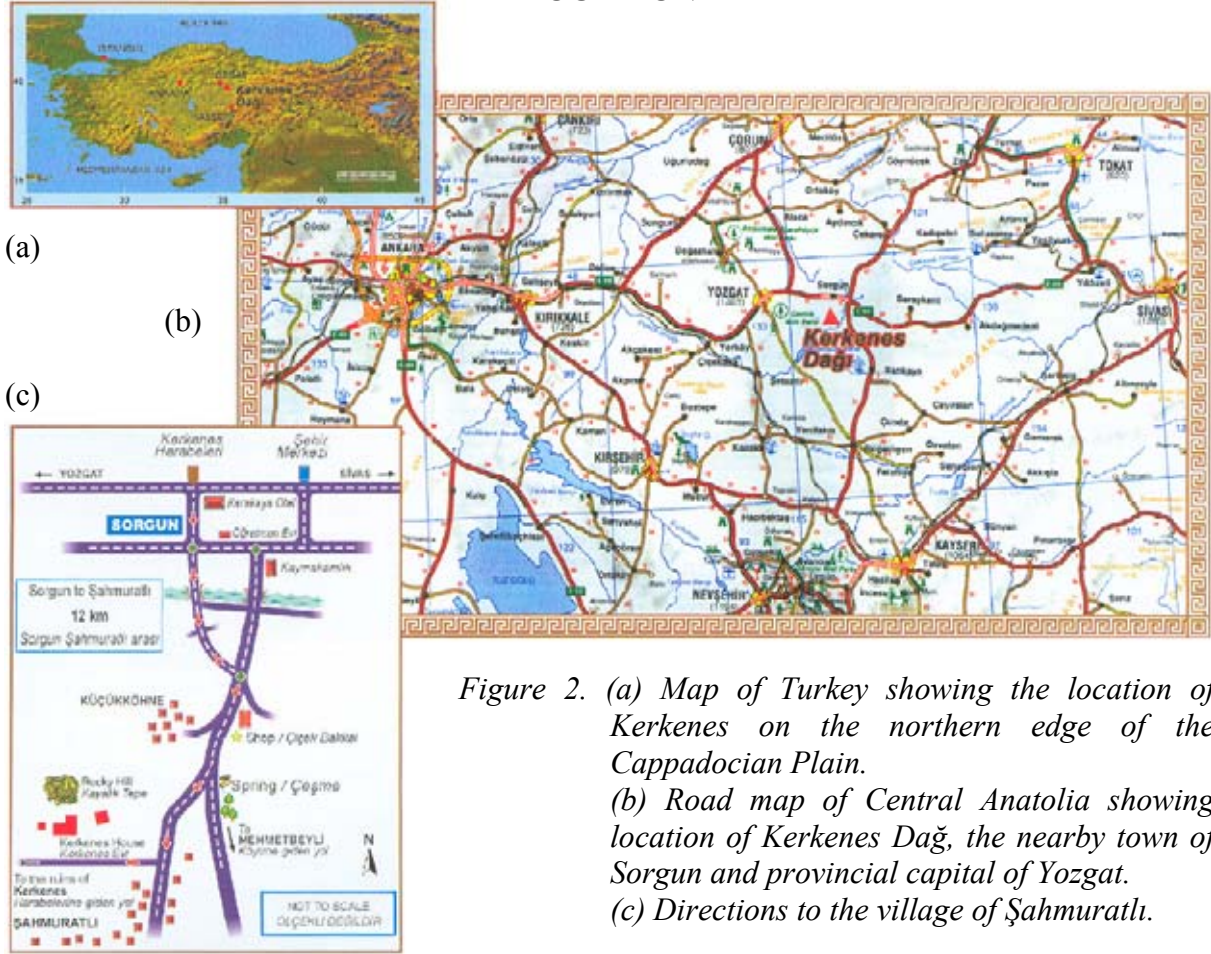


Figure 2. (a) Map of Turkey showing the location of Kerkenes on the northern edge of the Cappadocian Plain. (b) Road map of Central Anatolia showing location of Kerkenes Dağ, the nearby town of Sorgun and provincial capital of Yozgat. (c) Directions to the village of Şahmuratlı.

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**The Kerkenes Web Page**



<http://www.kerkenes.metu.edu.tr>



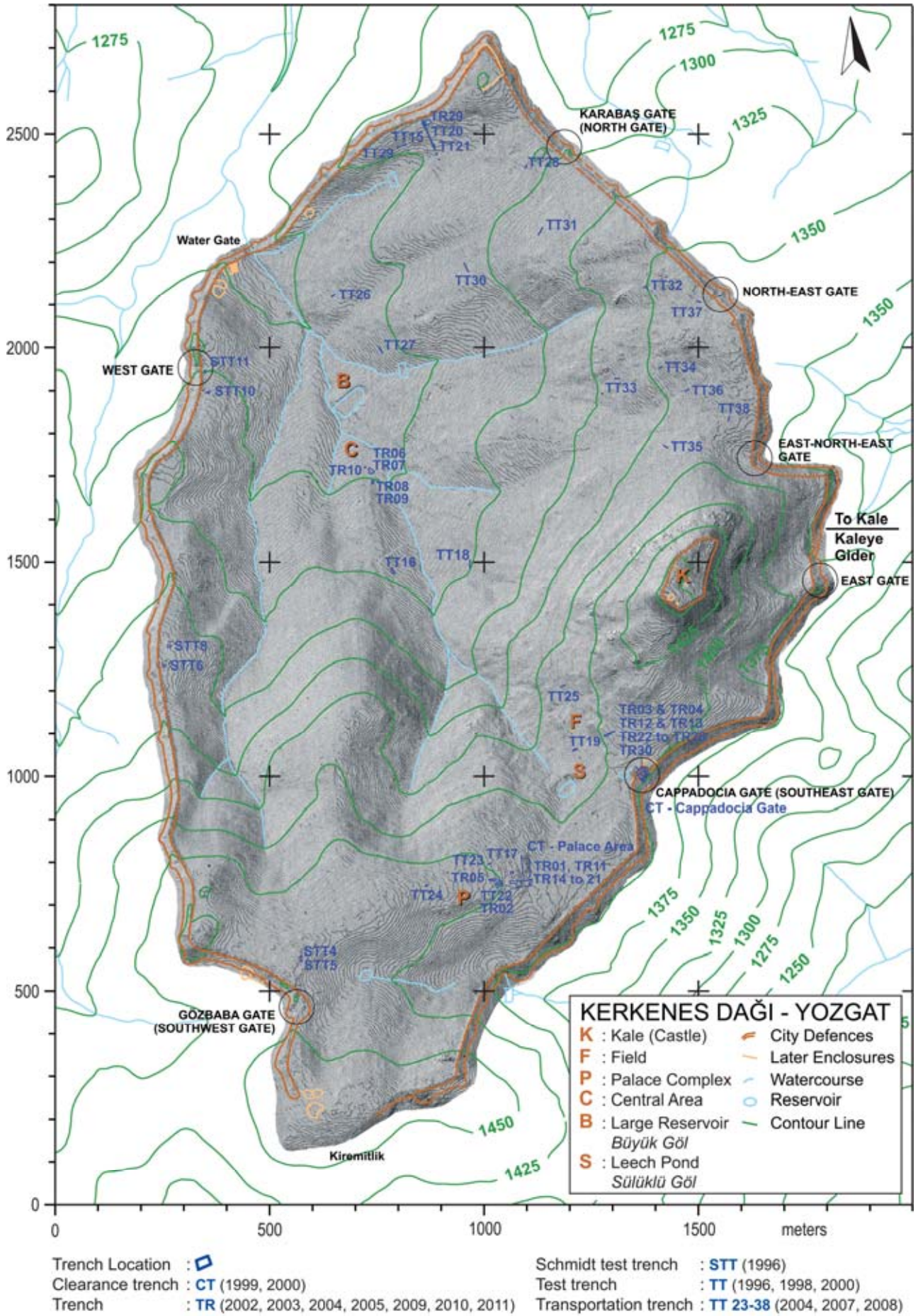


Figure 3. Digital Terrain Model (DTM) made by İşlem GIS, using ERDAS Imagine, from the GPS survey of Kerkenes.

## OVERVIEW



*Figure 4. Şahmuratlı village photographed in January 2011 with the Kale in the background. (11dpcg0122)*

In 2011 as the Cappadocia Gate excavation program came to an end, an exquisite gold ornament was found crushed under the burnt debris on the stone pavement inside the city gate inner doors (Fig. 1). The 19th fieldwork season at the Iron Age capital on the Kerkenes Dağ overlooking the village of Şahmuratlı (Figs 2, 3 and 4) started at the end of April with geophysical survey at the North End when the soil is full of moisture and conditions ideal for the electrical resistance survey. In September excavations at the Cappadocia Gate were completed and the Kerkenes 2011 Festival took place shortly after the closure of the fieldwork season.

## THE 2011 TEAM

### **Geoffrey D. Summers**

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Adjunct Associate Professor of Anthropology, State University of New York at Buffalo  
and  
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*Participants in the 2011 season of fieldwork and post-fieldwork*

Director:	Geoffrey Summers	
Co-director:	Scott Branting	
Co-director and Architect:	Françoise Summers	
Assistant Director:	Sevil Baltalı Tırpan	
Representatives:	Çiğdem Demiroğlu	
	Serpil Ölmez	
Archaeologists and assistants:	Iraz Alpay	Sergey Emeliyanov
	Pelin Ayter	Mete Göksaran
	Sema Bağcı	Robert Jennings
	Marco Barisic	Dominique Langis-Barsetti
	Ferhat Can	Anthony Lauricella
	Joshua Cannon	Joseph Lehner
	Evan Carlson	Bonnie Nilham
	Merve Demiröz	Yasemin Özarslan
	Güzin Eren	Susan Penacho
Geologists:	Nuretdin Kaymakçı	Pınar Kaymakçı
	Aslı Oflaz	
Conservator:	Noël Siver	
Architect:	Ahmet Çinici	
Epigraphist:	Susanne Berndt-Ersöz	
Archaeobotanists:	John Marston	Lucas Proctor
Archaeozoologist:	Evangelia Ioannidou Pişkin	
Physical Anthropologists	Yılmaz Selim Erdal	Burcu Yıldız
	Melis Koruyucu	
Illustrator:	Ben Claasz Coockson	

*Site Restoration and Preservation*

Restoration Architect:	Nilüfer B. Yöney
Restoration Project Architect:	Çıngı Salman
Site Architect for Restoration:	Erkan Kambek
Structural Engineer:	Ahmet Türer

*Post-fieldwork, research and publication, Turkey*

Graphic Designer:	Ali Çınk
Research Assistant:	Paul Kazo Kazaev

**The Kerkenes Eco-Center Project**

We would like to note that collaboration with the Kerkenes Eco-Center team plays a significant role in various aspects of the project and wish to acknowledge the contribution of the 2011 key team members.

Project Director:	Françoise Summers
Project Advisor:	Soofia Tahira Elias-Özkan
Project Co-ordinator:	Berrin Çakmaklı
Industrial Design:	Güner Mutaf and Korkut Mutaf
Environmental Architecture:	Özün Taner and Torkan Fazli

Reports on the activities for the Kerkenes Eco-Center Project appear separately.

<http://www.kerkenes.metu.edu.tr/keco/index.html>



ŞAHDER, the Kerkenes and Şahmuratlı Village Association, works closely with the Kerkenes Eco-Center Project team.

ŞAHDER Chairman: Sabri Erciyas



## ACKNOWLEDGMENTS

We thank the General Director, Murat Süslü, and the staff at the General Directorate of Cultural Resources and Museums for their support. Help and good advice has, as usual, been provided by Melik Ayaz. Thanks are also due to two successive representatives, Çiğdem Demiroğlu and Serpil Ölmez as well as to the Yozgat Museum Director Hasan Şenyurt and his staff. Mehmet Erciyas, the Kerkenes Guard, has gone beyond the call of duty to assume his responsibilities in guarding the site and taking care of the project's premises. We are most grateful to the Yozgat Governor Necati Şentürk, the Yozgat Director of Culture and Tourism, Lutfi İbiş, Sorgun District Governor Levent Kılıç, Yozgat Mayor Yusuf Başer and Sorgun Mayor Ahmet Şimşek, who, with their staff, continue to provide every possible support and encouragement to the project. We are grateful for assistance from local organisations, namely the Yozgat Provincial Administration (*İl Özel İdaresi*), TEDAŞ and Türk Telekom. Provision of heavy equipment from Sorgun and Belencumafakılı Municipalities greatly facilitated restoration work at the Cappadocia Gate. We are deeply indebted to the village of Şahmuratlı, and to Headman Turan Baştürk, for extending traditional Anatolian hospitality. ŞAHDER, the Kerkenes and Şahmuratlı Village Association, is involved in various project activities and Osman Muratdağı assures the team mobility with his minibus.

Based in office space provided by the Middle East Technical University, the Kerkenes Project collaborates with the Faculty of Architecture and the Faculty of Engineering. Research and publication of results, which progress all year round at METU, are made possible by generous donations channelled through the METU Development Foundation. The METU Computer Center provides technical assistance. Colleagues and students from the departments of Architecture, Civil Engineering, Metallurgical Engineering and Geological Engineering as well as from Graduate Programs in Settlement Archaeology and Archaeometry contribute to research and publication. Work is also in progress with colleagues from the Department of Anthropology at Hacettepe University.

The Kerkenes Project comes under the auspices of the British Institute at Ankara and we thank the director, Lutgarde Vandepuit, for her continuing support. Unfortunately the project no longer qualifies for BIAA funding but we are thankful to the BIAA for facilitating fieldwork and making equipment available. There is a formal agreement with the Oriental Institute of Chicago University represented by Co-director Scott Branting. International cooperation also includes the UCLA Cotsen Institute of Archaeology, the Malcolm and Carolyn Wiener Laboratory of Aegean and Near Eastern Dendrochronology at Cornell University, UC Berkeley, the University of Buffalo SUNY, Laboratoire de Géographie Physique - CNRS and the Anatolian Iron Age Ceramics Project. While conducting a survey at the nearby site of Kuşaklı, an Italian team, led by Stefania Mazzoni from the University of Florence, shared the Kerkenes Project facilities as well as information related to the region.

In 2011 sponsors for the different aspects of the project were Andrea Dudek, an anonymous US donor, the AICC, AKG Gazbeton, the Anglo-Turkish Society - Bernard and Innes Burrows Memorial Award, the Archaeocommunity Foundation, the Binks Trust, Catherine Novotny, the Charlotte Bonham-Carter Trust, Çimpor Yibitaş Yozgat Çimento, the Erdoğan M. Akdağ Foundation, Hazel Bertz, John Kelley, John Notz, the Loeb Classical Library Foundation, MESA, METU - BAP Grant, the Oriental Institute of the University of Chicago, UCLA Cotsen Institute of Archaeology, the US Ambassadors Fund for Cultural Preservation, and Yenigün. GEOSCAN and İşlem GIS assist with software. Finally to all the team, the house staff and workers from the village of Şahmuratlı, our heartfelt thanks. Little would have been achieved without their dedication, enthusiasm and hard work.

## PROJECT FACILITIES AND THE KERKENES ECO-CENTER

The Kerkenes Project has provided fieldwork experience to students of archaeology, architecture and related disciplines from Turkey and abroad since 1993. New facilities gradually added over the years permit an increasing variety of educational activities for visiting students and villagers. Thus the Kerkenes Eco-Center Project continues to develop at the same time as involving villagers in the daily running of the expedition. A team based in Ankara at METU, The Middle East Technical University, works in collaboration with ŞAHDER, the Kerkenes and Şahmuratlı Village Association for Public Relations, Prosperity, Help and Support, to promote sustainable rural development. The Kerkenes Eco-Center is a platform from which sustainable rural life through the development of renewable energy, drip-irrigated organic gardens, and building with appropriate materials and energy-efficient designs are promoted. METU students come to the Kerkenes Eco-Center to take part in 'Hands on Building' sessions which give them the opportunity to gain practical experience while at the same time contributing to improvements at the Eco-Center.

Thanks to the generosity of sponsors and friends, the Kerkenes Project is provided with facilities for teams of researchers, students and visitors. The Erdoğan Akdağ Center for Research and Education has a large meeting room with catering facilities (Fig. 5). The Solar House has a traditional *tandır* or village oven, as well as solar cookers and driers to promote the use of renewable energy (Fig. 6). The Strawbale House built in 2004 is used by ŞAHDER and accommodation of overnight visitors.



*Figure 5. The Erdoğan Akdağ Center for Research and Education provides facilities for project team members and visitors. From left to right: Françoise Summers, Şahmuratlı Muhtar Turan Baştürk, US Embassy Deputy Head of Mission Jess Baily, Dr Şevket Bağcı, Christine Biggs, Australian Ambassador Ian Biggs, Capie Baily. (11kecg1201)*



*Figure 6. Ladies from Şahmuratlı village posing by the new solar cooker with a motorised sun-tracking mechanism. (11kecg0109)*

### **Visitors**

Site access requires a four-wheel-drive vehicle with high clearance (Fig. 7). However, this visitor from a neighbouring village reminded us that Iron Age citizens would have been more accustomed to horses.



*Figure 7. The Project Land Rover is not as nimble over the rough terrain as more traditional forms of transport. (11dpcg0310)*



In May, colleagues from the Büyük Nefes Project working in the Yozgat Museum and students from the METU Settlement Archaeology Program visited the Kerkenes archaeological site (Fig. 8). A group from Andante Travel, which offers tours with a special focus on archaeology, also spent an entire day at Kerkenes in May (Fig. 9), while in June the Turco-British Association organised a day trip from Ankara (Fig. 10).



*Figure 8. The Büyük Nefes team and METU students in front of the restored Cappadocia Gate glaxis. (11dpnd0317)*



*Figure 9. The Andante Travel group well prepared for the spring rain visited the site in May. (11dpcg0424)*



*Figure 10 The Turco-British Association group experienced finer weather. (11dpcg0804)*

The chef from the Sorgun Büyük Termal Hotel served traditional *testi kebab* on a first occasion, in May, to the South Dakota State University 'Study Abroad' group (Figs 11 and 12) and on a second one, in June, to the Australian Ambassador Ian Biggs, Christine Biggs, Ian and Emma McGuirk and their son Sam (Figs 13 and 14).



*Figure 11. The South Dakota State University 'Study Abroad' group and METU students visiting in May. (11dpcg0503)*



*Figure 12. Berrin Çakmaklı translating the explanations given to Juliette Wasescha Temperli and Chris Briddick by the chef of the Sorgun Büyük Termal Hotel. (11kecg0435)*



*Figure 13. In front of the glacis, from left to right, Çiğdem Demiroğlu, Yılmaz Erdal, Burcu Yıldız, Melis Koruyucu, Ambassador Ian Biggs, Christine Biggs, Emma and Ian McGuirk and their son Sam. (11dpcg0711)*

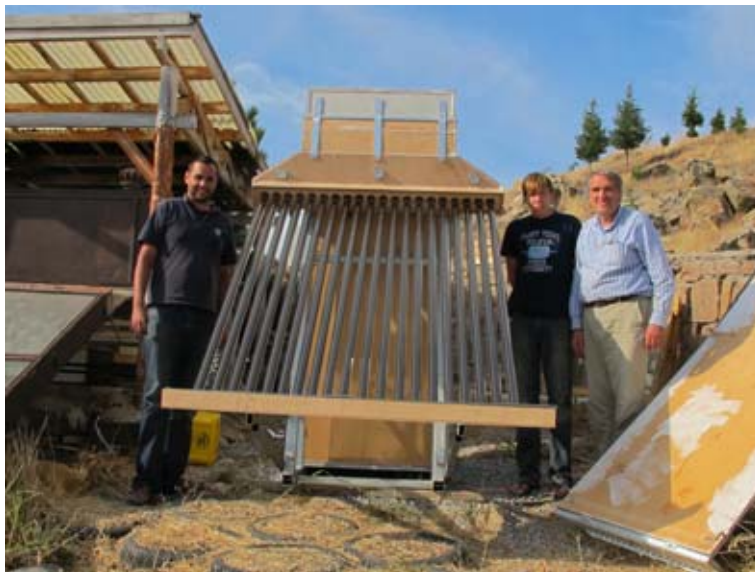


*Figure 14. The testi kebab simmering in clay jugs that have to be broken when ready to serve. (11dpcg0733)*

The Kerkenes Eco-Center has benefited from generous donations from the Ankara International Charities Committee (AICC). Visiting Kerkenes on the 16th of June, committee members saw improvements made to the solar drier designed by Güner Mutaf (Figs 15 and 16). Other parties and groups of schoolchildren toured the archaeological site and the Kerkenes Eco-Center (Fig. 17). Such visits contribute towards arousing the awareness of a younger generation that will be responsible for the preservation of the Turkey's cultural heritage and environment over the coming years.



*Figure 15. Members of the AICC and Kerkenes Project team. (11dpkc1018)*



*Figure 16. Korkut Mutaf, Sergey Emeliyanov and Güner Mutaf installing new solar drier components. (11kecg1102)*



*Figure 17. Several large groups of schoolchildren ended educative tours at the Kerkenes Eco-Center. (11kecg0702)*

On Saturday the 1st of October, the day of the 2011 Kerkenes Festival, the METU *Bilim Otobüsü* brought a large group of students, faculty and staff from Ankara to Kerkenes (Fig. 18). Amongst them were 17 students who stayed overnight to take part in the 'Hands on' session of the 'Architecture *in situ*' course (Figs 19 to 23).



*Figure 18. Dignitaries, guests and students arriving for the Kerkenes Festival tour of the ancient city. (11dpnd3703)*



*Figure 19. METU students of Architecture and local craftsmen at the Eco-Center. (11kecg1337)*



*Figure 20. Students helped by Mustafa Usta built a mud oven. (11kecg1338)*



*Figure 21. METU students and villagers making traditional mudbricks. (11kecg1332)*



*Figure 22. Architecture students combining traditional and modern materials in an experimental shelter. The Autoclave Aerated Concrete (AAC) blocks were donated by AKG Gazbeton. (11kecg1318)*



*Figure 23. Students, local artisans and the project guard working on their 'Hands on' project in the Kerkenes Solar House. (11kecg1306)*

### The 2011 Kerkenes Festival

Saturday 1st of October was the day chosen for the 2011 Kerkenes Festival during which the Governor of Yozgat welcomed many distinguished guests. The program started with a tour of the Yozgat Museum where the most important finds from Kerkenes are displayed. The museum visit was followed by a sumptuous breakfast hosted by the mayor of Yozgat, Yusuf Başer, at the *Hayrı İnal Konağı* (Fig. 22). At Kerkenes, a guided tour of the site (Figs 25 and 26), was followed by lunch and a folklore show (Figs 27 to 29). A *kermes* was organised by ŞAHDER to promote the solar-cooked and dried products (Fig. 30).

Sorgun District Governor, Levent Kılıç, and Sorgun Mayor, Ahmet Şimşek, have to be thanked for their generous contributions and support that made this afternoon at the Kerkenes Eco-Center a most memorable occasion.



*Figure 24. Breakfast hosted by the Mayor of Yozgat, Yusuf Başer. From left to right Mayor Yusuf Başer, Capie Baily, Jeff Baily, Governor Necati Şentürk, Australian Ambassador Ian Biggs, Christine Biggs, and Elif Barutcuoğlu-Wade. (11dpcg3409)*



*Figure 25. Dignitaries, distinguished guests, visitors and team members at the Cappadocia Gate during the Kerkenes Festival. (11dpcg3414)*



*Figure 26. The local paparazzi. (11dpnd3707)*



*Figure 27. Australian Ambassador Biggs and the Governor of Yozgat breaking open the testi kebab. (11kecg1204)*



*Figure 28. Village ladies gratefully thanked the Governor of Yozgat for his help in getting the roof of the solar building repaired and offered him and his guests the içli gözleme, the traditional village bread with fillings. (11kecg1230)*



*Figure 29. Folk dancing was a cultural highlight of the Kerkenes Festival. (11kecg1218)*



*Figure 30. Ali Kuluçarslan and Tahsin Baştürk were in charge of the display of solar-cooked and dried products. (11kend0209)*

## The Future

The 2011 Festival was also an opportunity for the project directors to thank the Yozgat Governor and his predecessors as well as all the local governmental organisations, sponsors and friends that have contributed to the achievements of the Kerkenes Project team since 1993. Assistant Director Sevil Tirpan explained some of the aspects of ongoing work to the guests (Fig. 31).

As the end of the excavation program at the Cappadocia Gate brings closer the time for the excavation director to retire, Geoffrey and Françoise Summers expressed their support for the director designate, Scott Branting, who has been part of the Kerkenes team since 1995.

Dr Scott Branting, Director of the Center for Ancient Middle Eastern Landscapes at the Oriental Institute of the University of Chicago, has initiated a long-term program of excavation at the North End of the site. His application to the Directorate of Museums and Cultural Assets for transfer of the excavation permit has all the necessary institutional backing. Scott himself has made many fundamental contributions to the development and progress of the project since his first involvement in 1995, his innovative doctoral thesis being devoted to a study of this Iron Age capital.

In December Scott visited the new and more spacious project office at METU (Fig. 32) while on a short trip to discuss future project development with the General Directorate at Ankara.



*Figure 31. Assistant Director Sevil Tirpan explaining aspects of the ongoing work to the Governor of Yozgat and other guests. (11dpnd3710)*



*Figure 32. Scott Branting and Geoffrey Summers in the new and more spacious project office at METU discussing the long term preservation of the Kerkenes archives. (11dpcg3706)*



## THE 2011 SEASON OF FIELDWORK AT KERKENES

In 2011, work at the Iron Age capital on the Kerkenes Dağ in central Turkey (Fig. 33) had five components:

1. Geophysical survey in the spring.
2. Excavation at the Cappadocia Gate in June and September.
3. Limited architectural conservation and repair at the Cappadocia Gate in September.
4. The start of long-term excavation of an entire urban block at the northern end of the site in June and July.
5. Finds conservation and recording.



*Figure 33. Viewed from the north, the site spreads over the opposite hill. (11dpnd1706)*

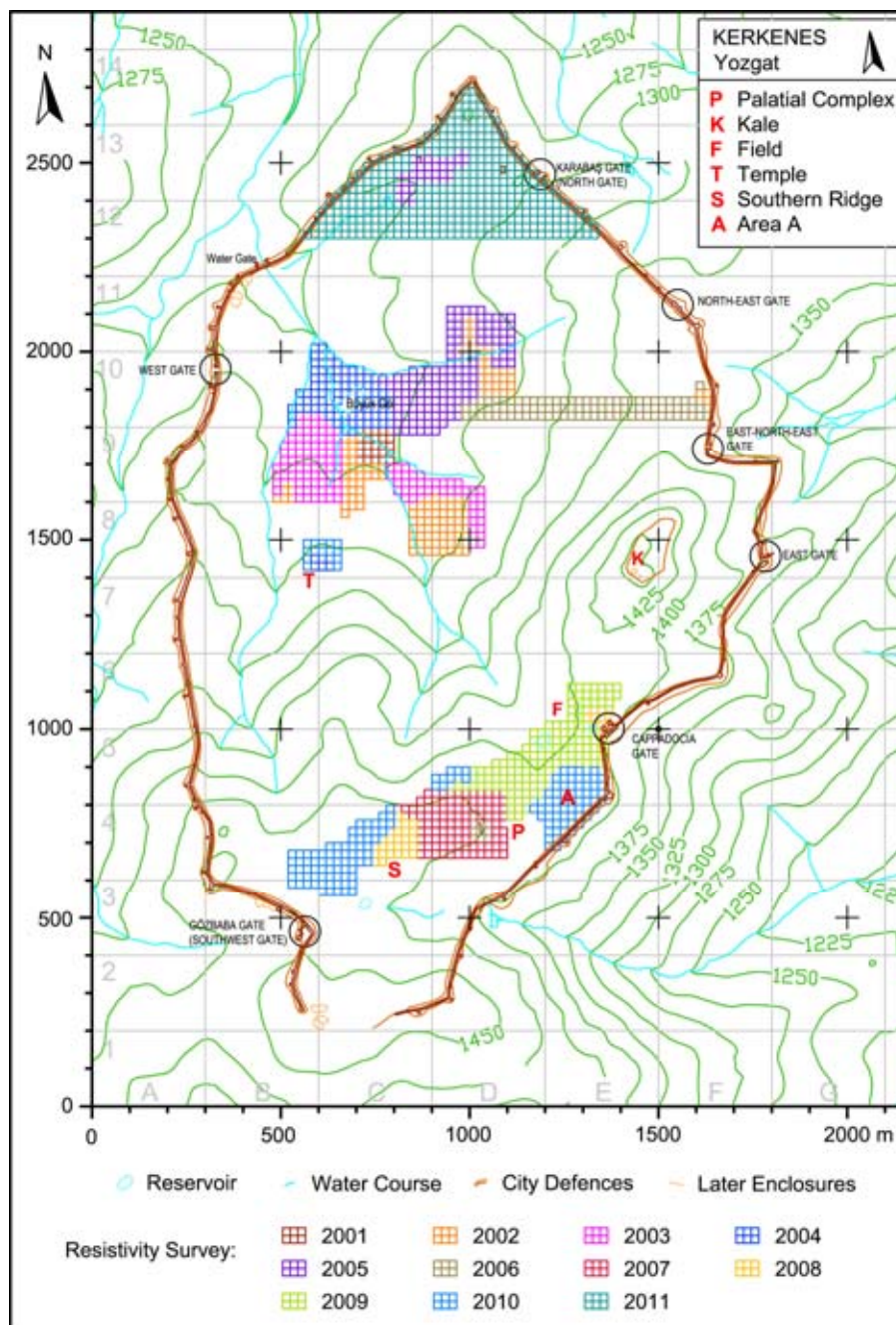
## THE SPRING GEOPHYSICAL SURVEY

*Geoffrey Summers, Françoise Summers and Dominique Langis-Barsetti*

### *Aims*

Electrical resistance survey was conducted at the northern end of the city (Fig. 34). There were two major reasons:

- (i) To investigate the northern tip of the city where it was thought possible that the large building partially visible on the surface and more fully revealed through geomagnetic survey in earlier years might have had some function related to the defensive wall and the large tower at the north point;
- (ii) To put into a wider urban context the large urban block (Figs 35 and 36), investigated by test excavations in 1996 and 1998, which has been selected by Dr Scott Branting, Chicago University, for a long-term program of excavation.



*Figure 34. Progress map showing the 2011 electrical resistance survey at Kerkenes.*

The whole of the northern sector was surveyed with a gradiometer in 1998, and with a resistivity meter over a small area around one of the “megarons” in 2005. Although the underlying geology obscured many of the details, this 2005 gradiometer survey revealed the presence of typical urban blocks, of the type observed over all of the city and which has come to be considered as the norm at Kerkenes. This year’s survey expanded and greatly clarified the results of previous years, furthering our understanding of the urban organisation in this portion of the city. Both structures of recognisable type and ones never observed before were detected.



*Figure 35. Oblique photograph of the northern sector of the city taken from a hot air balloon in 1993. (93slhb0125)*



*Figure 36. Northern portion of the Iron Age city on the Kerkenes Dağ from the aerial photography (top) and GPS data (bottom). The urban block selected by Dr Scott Branting for further investigations is located along the northwest stretch of wall. From Branting and Summers 2002: p.640.*

The survey concentrated on the north sector of the city, which extends from the tip of the city to the 2300m line. Exceptional conditions allowed the survey team (Fig. 37) to complete 45 days of work spread over less than eight weeks. Heavy rains and some late snow provided the adequately damp conditions for the obtainment of good images. A total of 356 grids, each measuring 20m by 20m, were surveyed with a Geoscan RM15 resistivity meter, for a combined area of 14.2 hectares (Fig. 34).

The grid established during previous survey campaigns was relocated and marked with wooden pegs and powdered lime. Where necessary, a total station was used to relocate points (Figs 38 to 41). Between four and five trained workmen from the village of Şahmuratlı operated the Geoscan RM15 resistivity meter (Fig. 42) under the supervision of the geophysical survey team. Forms were filled for each grid by archaeologists or assistants and note was taken of the features visible on the ground, be they outcrops of bedrock, wall remains or ponds.



*Figure 37. The geophysical survey team in May. Standing from left to right: Harun Erciyas, Mehmet Baştürk, Fatih Arslan, Dominique Langis-Barsetti, Murat Tataroğlu and Bonnie Nilhamn. In front: Sema Bağcı, Güzin Eren and Muhammed Babayiğit. (11dpkc0161)*

Collected data was processed and plotted on a daily basis using the Geoplot software. This allows the odd bad grids to be identified and resurveyed in the following days. Especially damp areas were covered last. An undetected breakage in the machine resulted in poor quality data and images for some of the grids. Electrical resistance and gradiometer survey maps, together with available satellite images, balloon photography from the 1993 and 1994 seasons and GPS microtopographic survey are carefully studied (Figs 43 to 49). Final images prepared for publication are enhanced in *Surfer*. Preliminary plans of urban blocks and structures can be drawn by combining the different data sets (Figs 50 and 51).



*Figure 38. Sema Bağcı repositioning grid corners with a total station for the electrical resistance survey. (11dpkc0146)*



*Figure 39. Güzin Eren setting up the backsight. (11dpnd0315)*



*Figure 40. Aslı Oflaz holding the prism while grid corners are marked with wooden pegs and powdered lime. (11dpnd0244)*



*Figure 41. Dominique Langis-Barsetti using the total station to extend grid southwards. (11dpcg0417)*

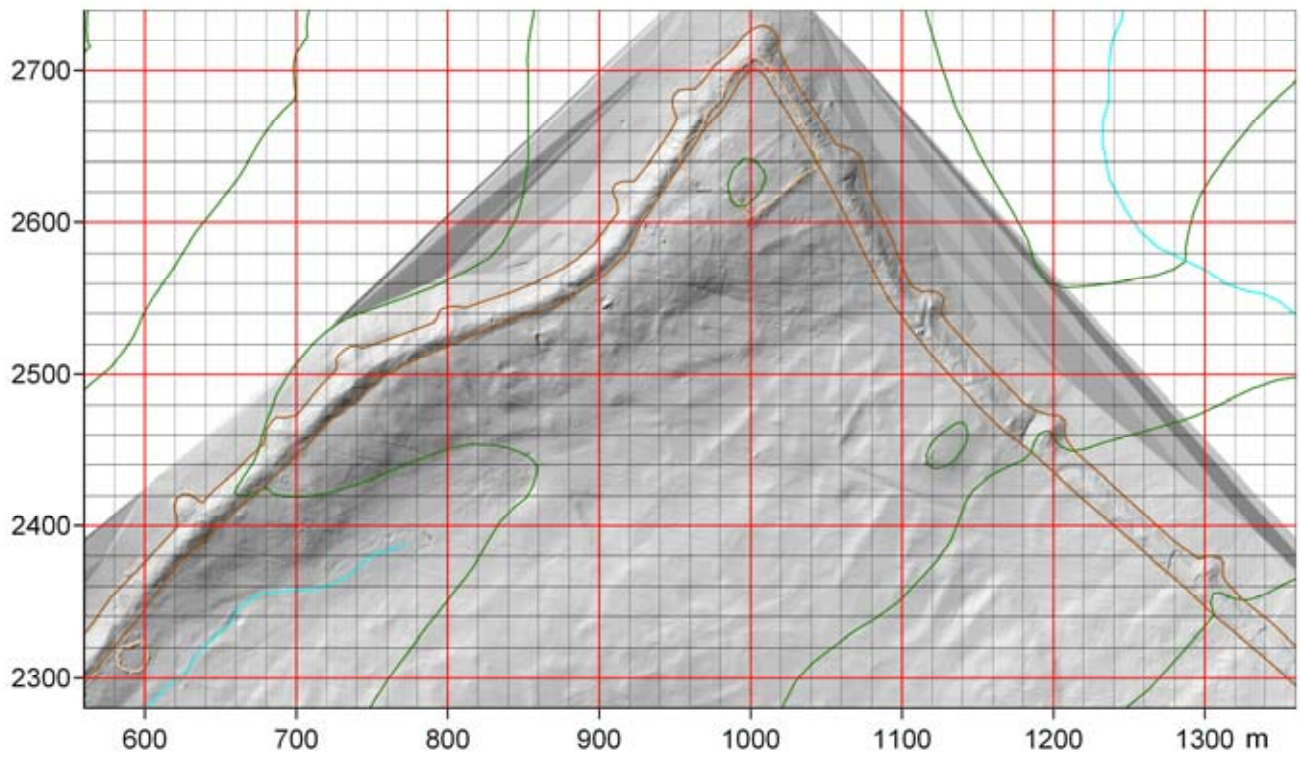


*Figure 42. Muhammed Babayiğit, Harun Erciyas and Mehmet Baştürk from Şahmuratlı Village conducting electrical resistance survey with a Geoscan RM15 resistivity meter. (11dpcg0409)*

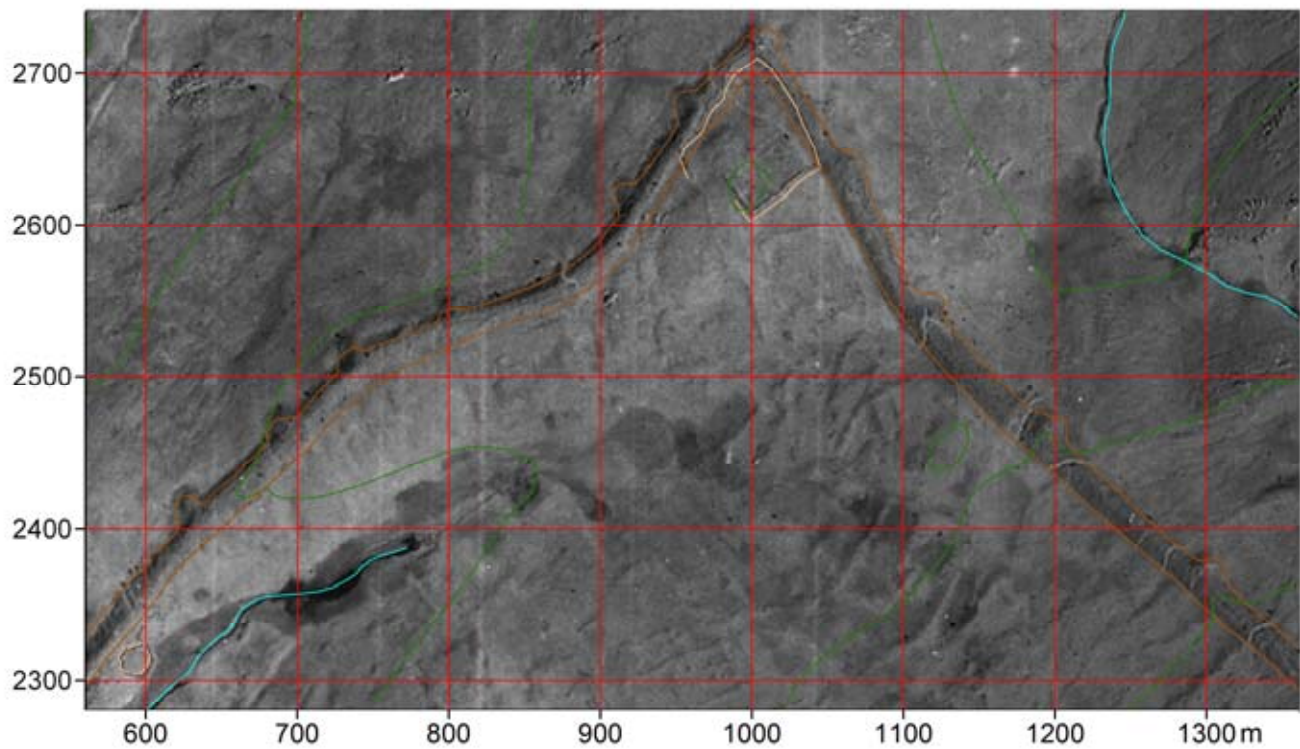


*Figure 43. The north portion of the city from a hot air balloon in 1993. (93slhb0403)*



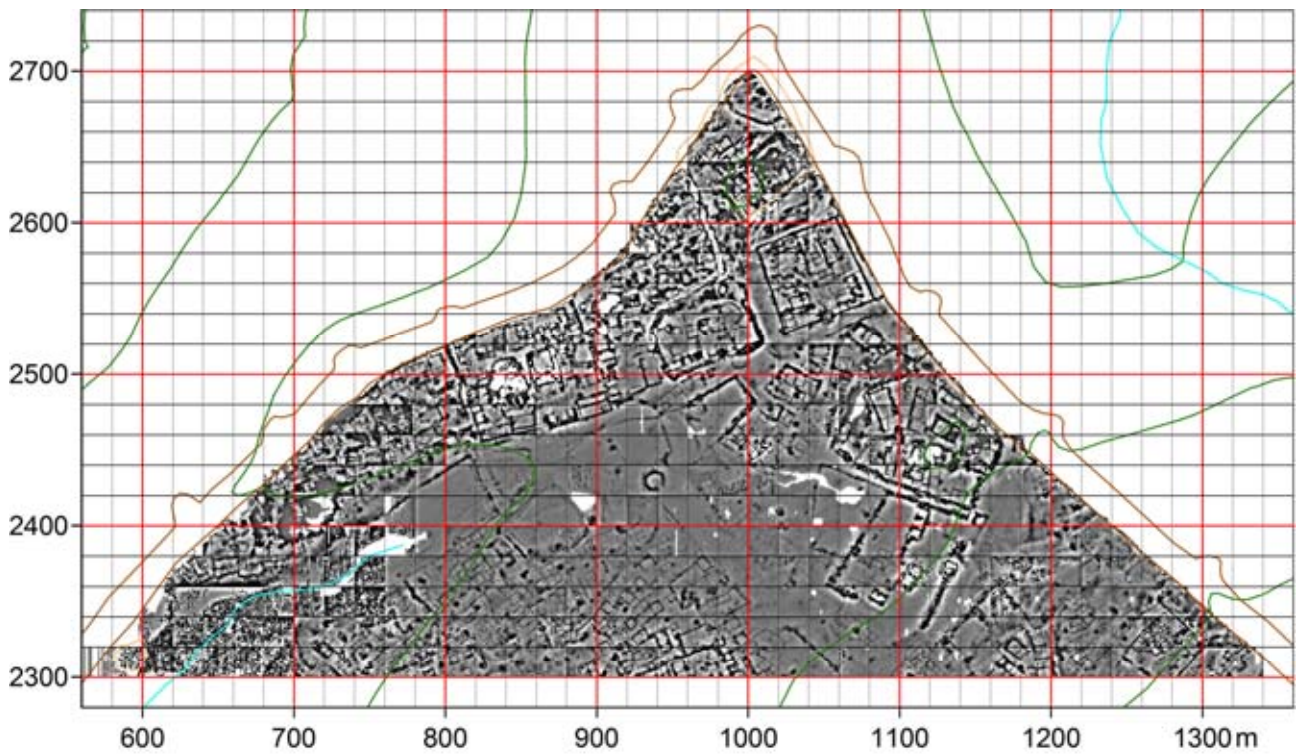


(a) GPS Microtopographic Survey

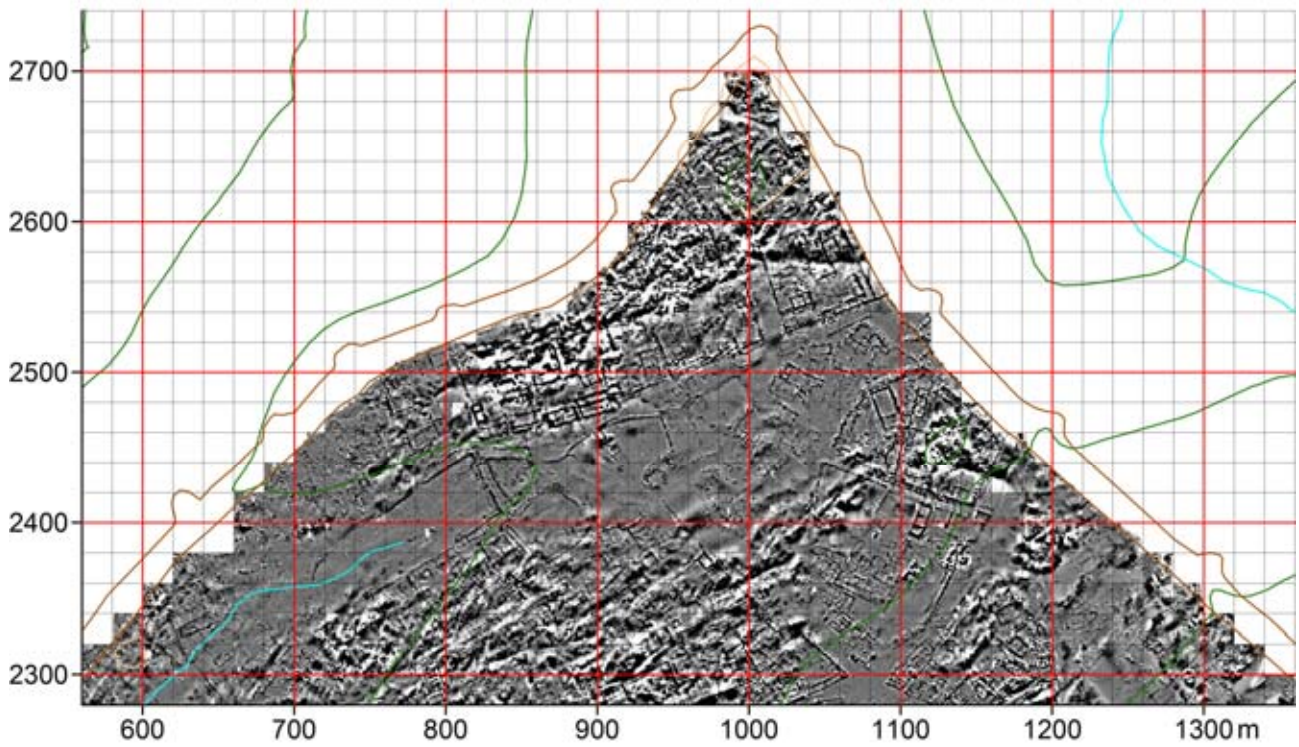


(b) Orthophoto

Figure 44. (a) GPS topographic survey map and (b) orthophoto of the northern end of the city.

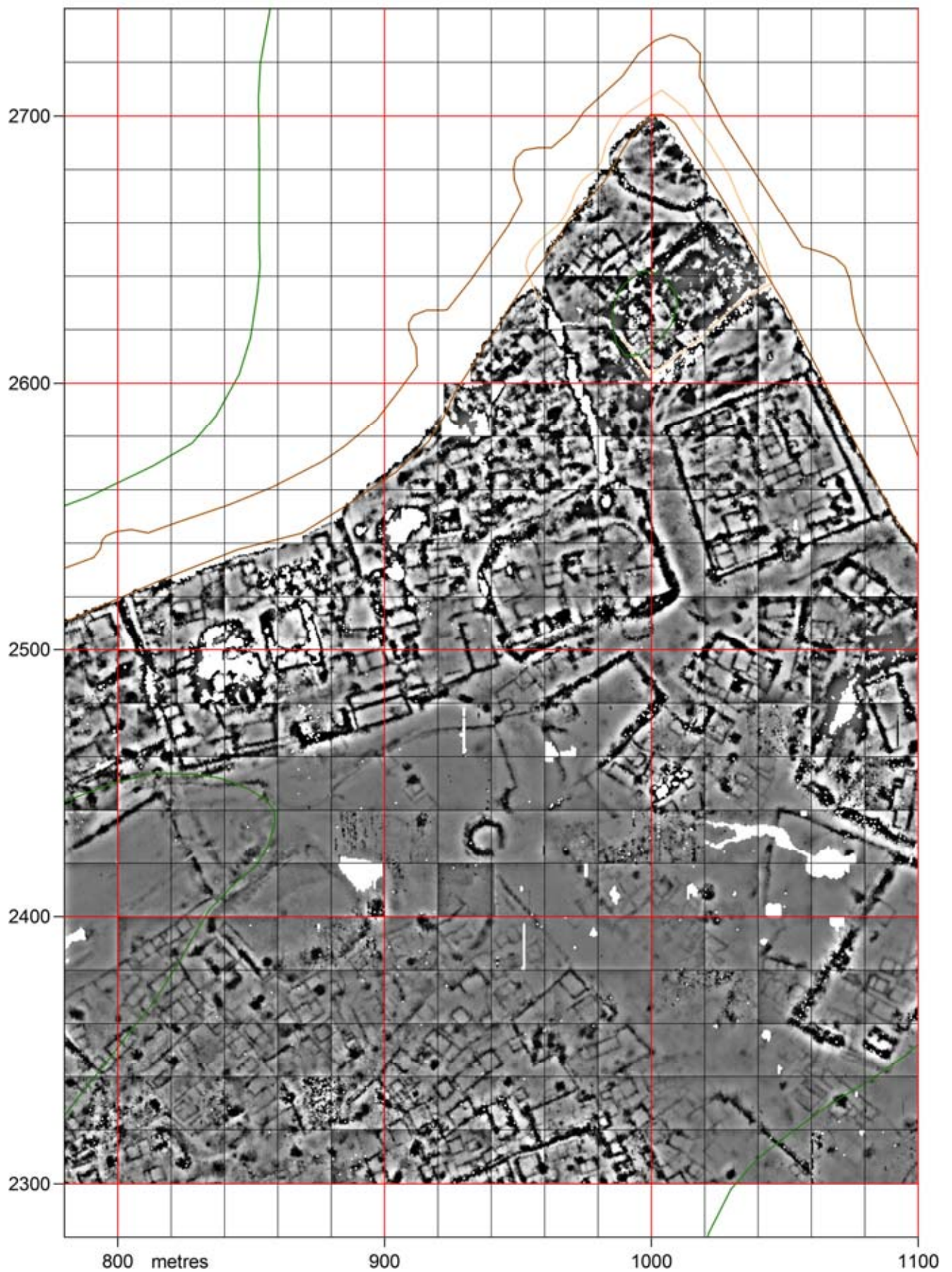


(a) Electrical Resistance Survey

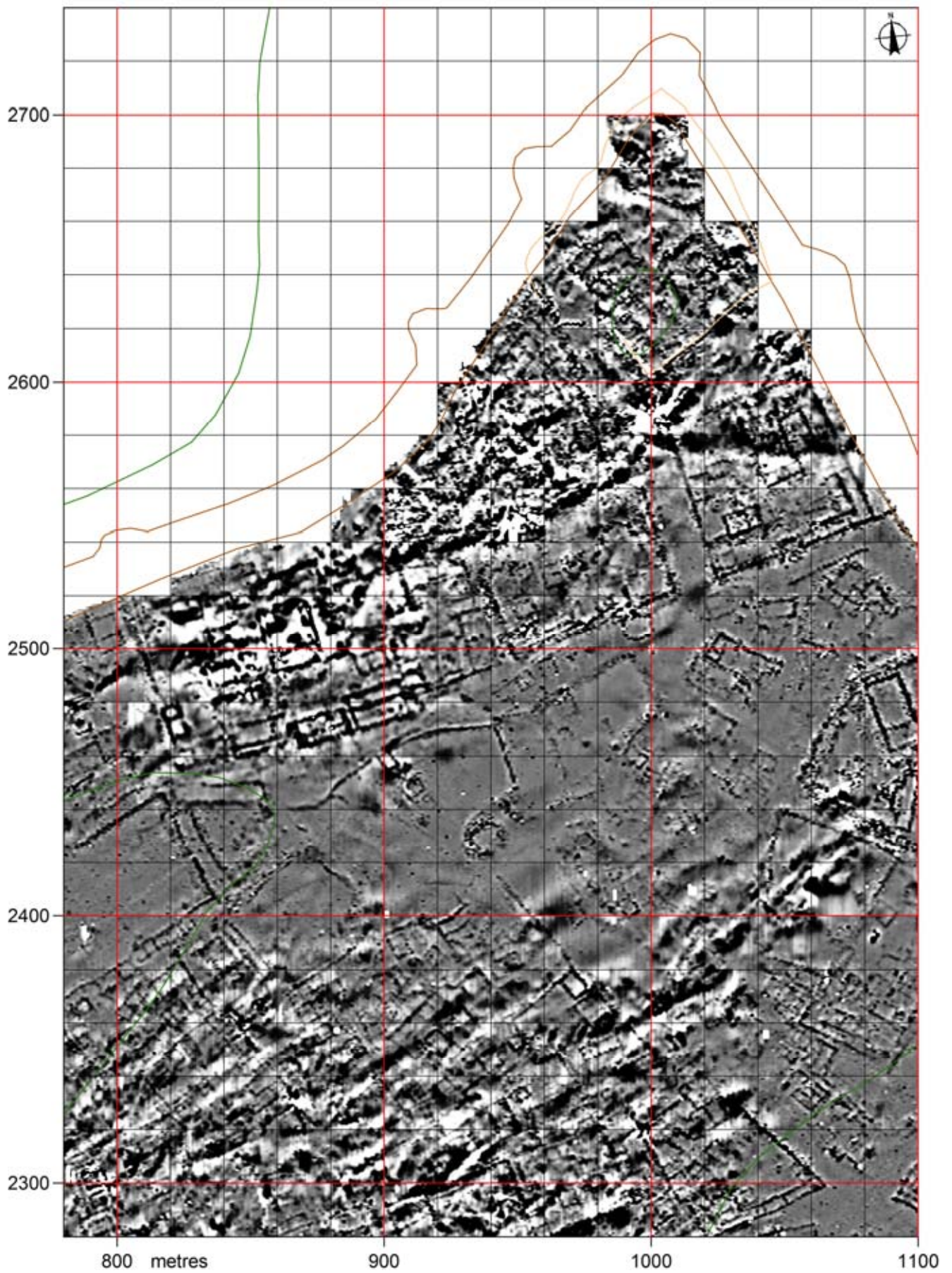


(b) Gradiometer Survey

Figure 45. (a) Electrical resistance survey map and (b) fluxgate gradiometer survey map of sub-surface features at the northern end of the site.



*Figure 46. The urban block selected for the new excavation program by the Oriental Institute team, located along the northwest stretch of city wall, can be seen in this 2011 electrical resistance survey map.*



*Figure 47. Fluxgate gradiometer survey map of the area shown in Figure 46.*



*Figure 48. Electrical resistance survey map from 2011 showing the area inside the North Gate.*

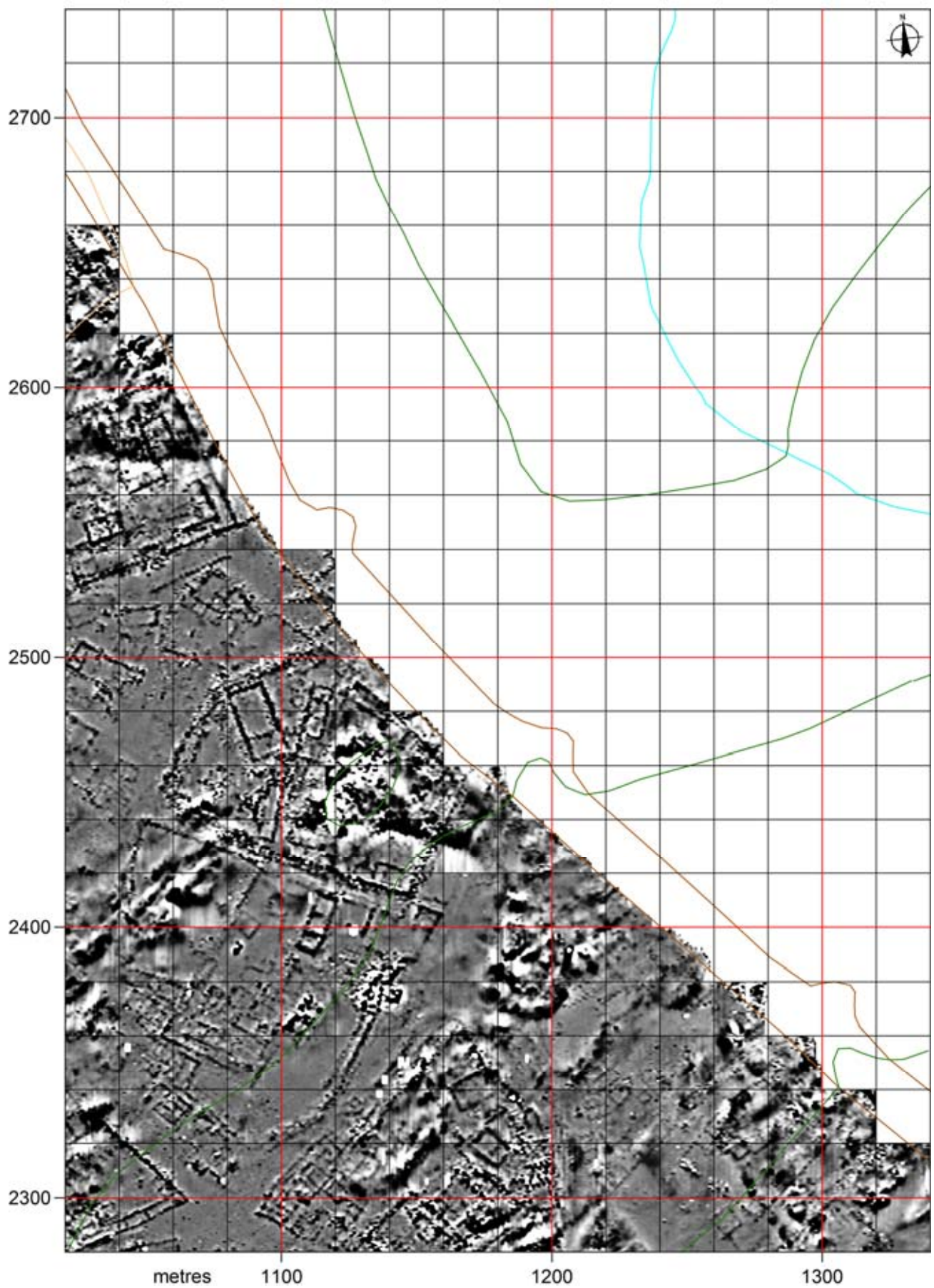
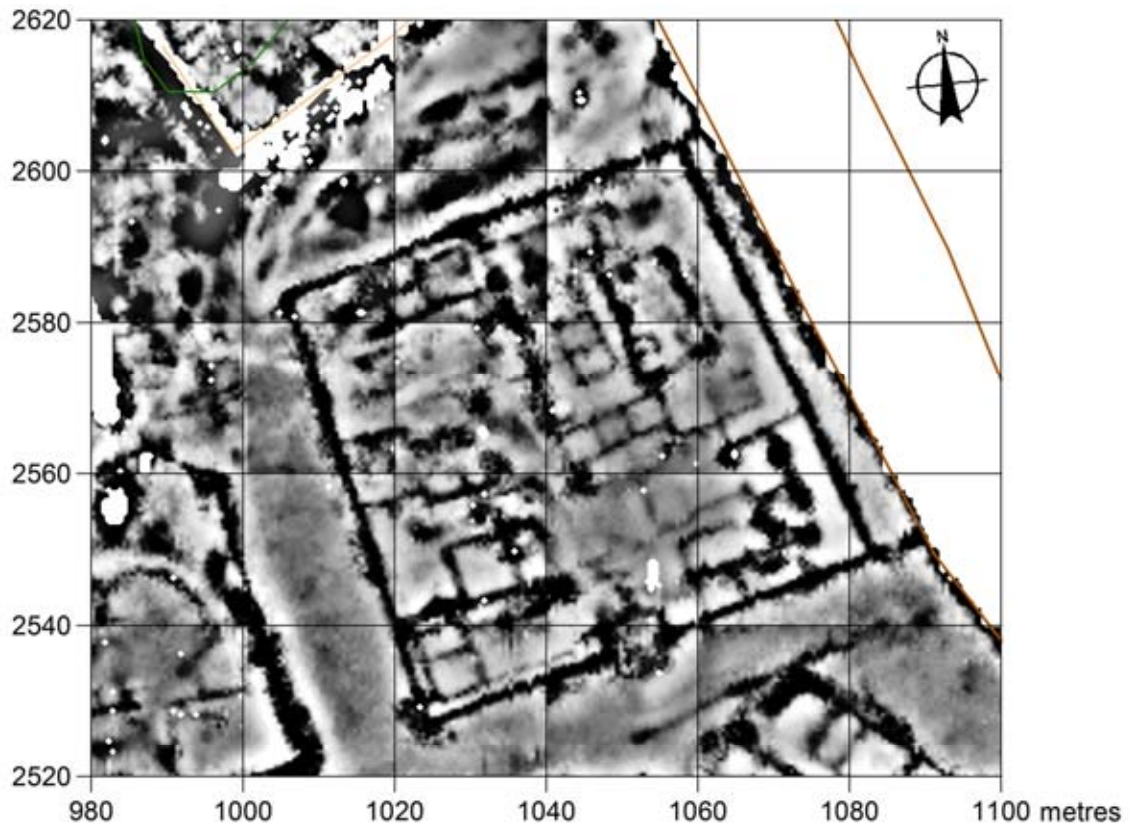
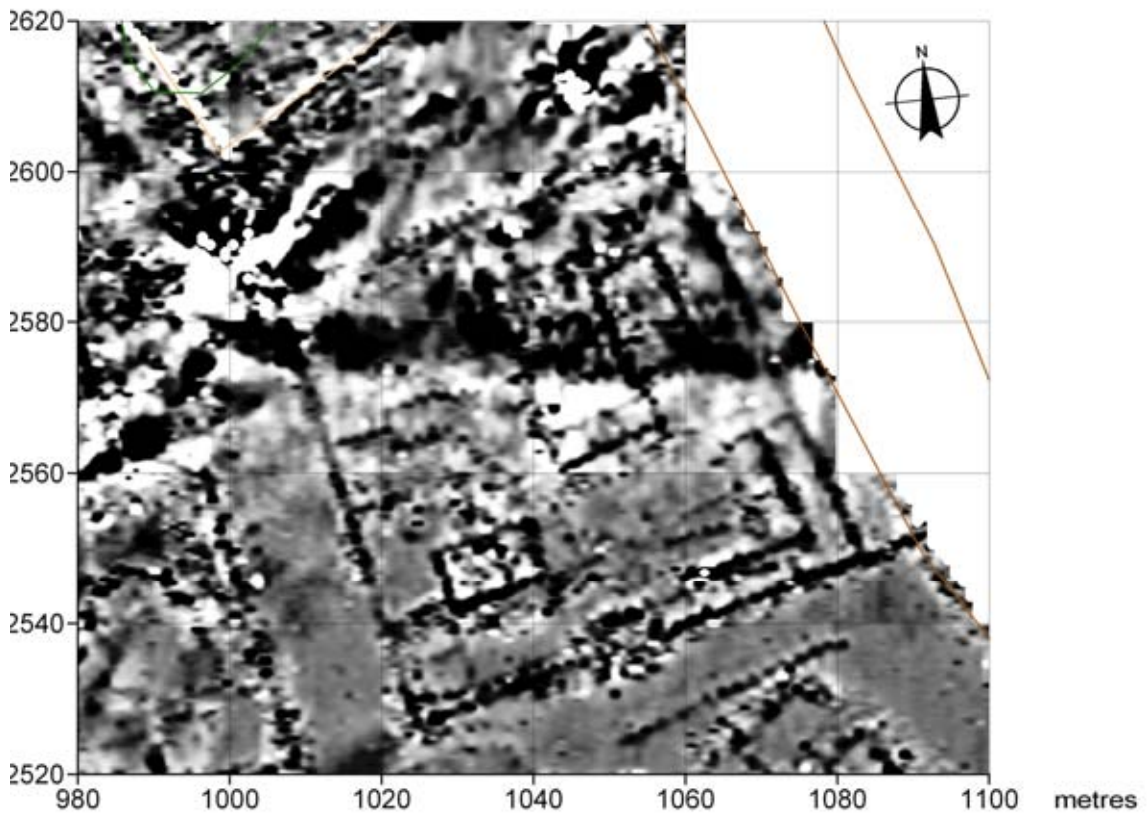


Figure 49. Fluxgate gradiometer survey map of the area shown in Figure 48.

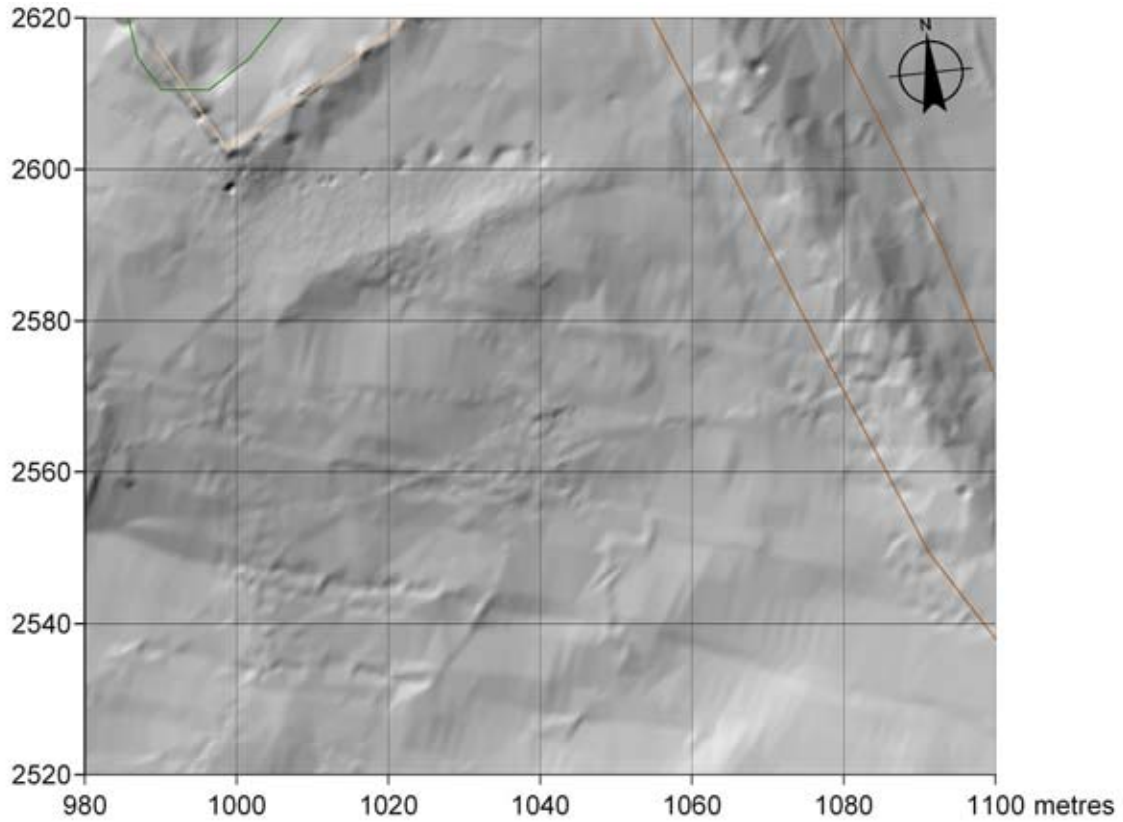


**(a) Electrical Resistance Survey**

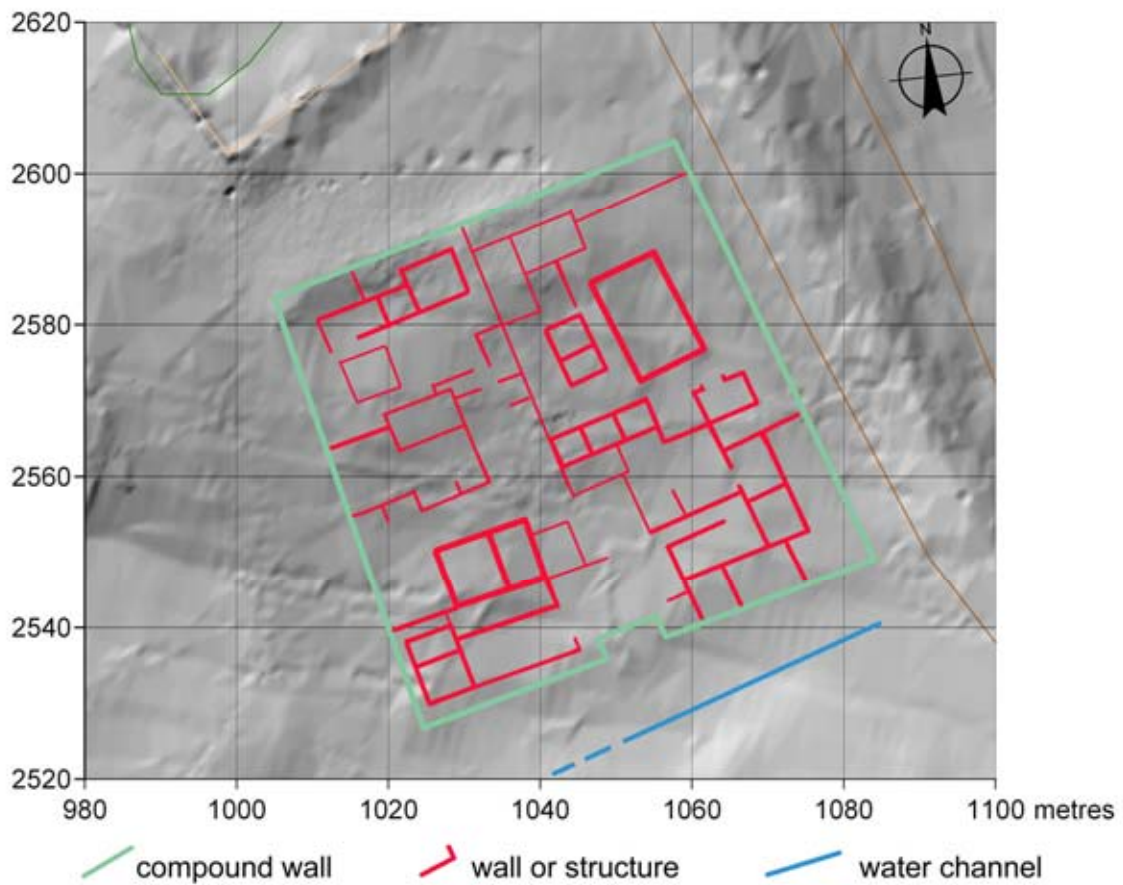


**(b) Gradiometer Survey**

*Figure 50. Geophysical survey map of the urban block within the northern end of the site adjacent to the northeast stretch of the city wall.*



**(a) GPS Microtopographic Survey**



**(b) Preliminary Interpretation of Survey Results**

*Figure 51. (a) GPS topographical survey map and (b) preliminary plan of structures drawn from geophysical survey imagery and groundtruthing of the urban block in the northern portion of the site.*



## Overview

1. At the northern tip it was found, as anticipated, that there was a large open area immediately inside the acute corner formed by the city walls. This can be most clearly seen at the top of Figure 46 where it is divided by the heavy curved line of a later animal pen. This space would seem to be related to the road running along the inside of the defences for the entire seven-kilometre circuit of the city wall. Such a military road would have been essential for the efficient movement of defending forces in the event of enemy assault. An open area at this strategic point would have obvious advantages in the mustering and rapid distribution of defenders and of weapons. However, the substantial stone foundations of structures immediately to the south of this open area appear to be those of an urban block of the general type seen across much of the city. There is no reason to think, from the plan revealed by this survey, that these walls belonged to a purpose-built military structure.

2. The urban areas inside the northwestern and northeastern sectors of the city walls are seen to be filled with large urban blocks. While these were known from earlier magnetic surveys and verification on the ground, as well as from test excavation conducted in 1996 and 1998, the new electrical resistivity results provide very much greater detail and clarity. This is especially true in areas where there is moisture-retaining soil cover. There was, however, an important and unexpected result that requires a significant re-evaluation of our understanding of the urban infrastructure in this northern sector of the city. Where it was anticipated that the geophysical imagery would reveal more urban blocks, each bounded by streets, as are seen along the inside of the city walls as well as over other portions of the lower portion of the city, there was found instead just one single "mega block" which fills much of the lower central and left portions of the imagery on Figures 46 and 47. The buildings within this large area are generally smaller than elsewhere and, by the time of the destruction of the city, had become crowded. There are discernable internal boundaries forming sub-blocks, and there are passageways or alleys, but no broad streets and no clear compound walls. Some considerable time and effort is required, together with further verification on the ground, in order to make a full assessment of these unexpected results and their implications.

3. The electrical resistance survey data collected sheds light on water management within the city and possibly on ways in which this was developed over time.

## THE CAPPADOCIA GATE

*Geoffrey and Françoise Summers*

The plan of the Cappadocia Gate is now fully revealed (Fig. 52). A slanted entrance passage gave way to a rectangular court in which a cultic idol and a stele were set up. In subsequent stages inclined stone paving was laid in the passage and court. The enclosed rear section of the gate, on the other hand, was provided with a central pavement from the beginning. The wide façades at both the front and the back of the rear section housed double doors of wood above which we may reconstruct elevated walkways behind parapets. An enemy force ascending the unroofed entrance passage would have found itself trapped in the court, assailed from above on all sides as it attempted to attack closed doors.

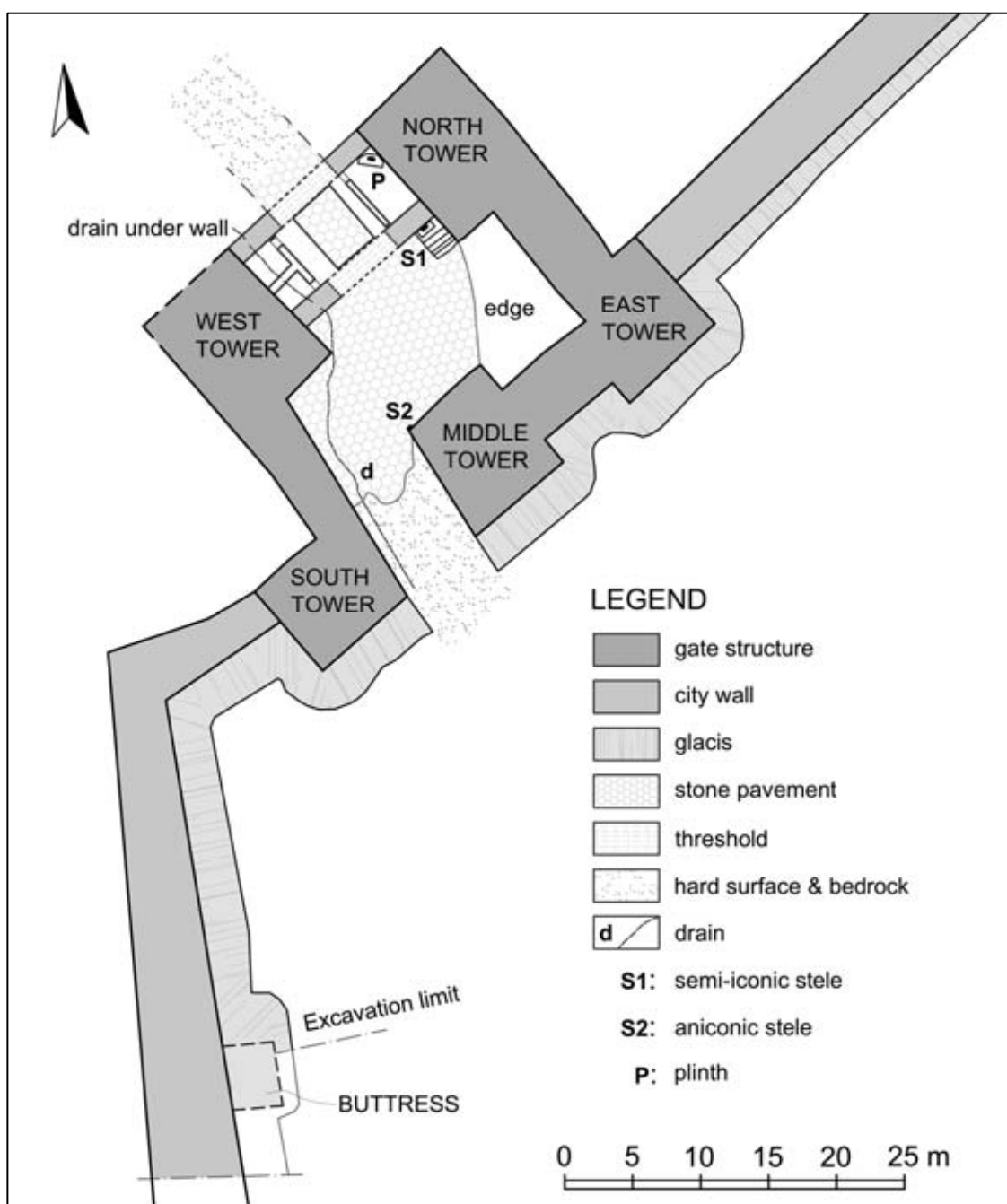


Figure 52. Plan of the Cappadocia Gate after completion of excavations in 2011.

### Completion of Excavations at the Cappadocia Gate

This sophisticated military architecture (Figs 52 to 55) is utterly different from that of Late Bronze Age, and indeed from the Iron Age gates of Neo-Hittite cities. However, the ninth-century citadel at Gordion and, contemporaneous with our gate, the city gate at Lydian Sardis, bear some resemblance that again demonstrates west Anatolian characteristics at Kerkenes. Although the Cappadocia Gate was destroyed by fire when the city was put to the torch, there is no evidence that the gate was taken by force when the city was captured.



*Figure 53. The Cappadocia Gate with the Kale behind. (11dpnd0703)*



*Figure 54. Visitors to the Cappadocia Gate provide a sense of scale. (11dpkc0971)*



*Figure 55. View through the court and two façades in the rear section of the gate with the sphinx block in situ in the room behind the stepped monument. (11dpcg1405pan)*

At the start of the season the remains of a person, crushed to death by falling masonry while attempting to flee through the burning gate, were lifted by Prof Yılmaz Erdal and his students (Figs 56 to 58). This skeleton, revealed in 2010 but reburied because of the danger of working beneath the tall walls of the gate in wet weather, is now in the anthropology laboratory at Hacettepe University. This brings the number of victims killed when the gate collapsed to two.

Excavation and recording of the gate rear passage proceeded in June (Figs 58 and 59). The slots in which the two façades that held large double doors controlling the entrance to the city were fully uncovered. It was subsequently understood that under the base of these two partitions there was a series of horizontal timbers (Fig. 60). Three iron straps that most probably held the door planks together were found amongst the burnt debris (Fig. 61).

Then came the discovery of an antithetical pair of crouching sphinxes, largely complete, carved on the front of a large sandstone plinth (Figs 62 and 63). A socket in the top of the plinth secured the tenon of an extraordinary sculpture carved from soft limestone, elements of which were covered with compass-cut scales (Fig. 64). Only a portion of this statue survives, and that was smashed into pieces. This discovery was made in the north corner of the rear section of the gate. The back corners were trimmed away so that the plinth fitted across the corner of the room leaving only a small triangular void behind, the waste fragments being packed under the plinth to level it (Fig. 65). At some stage before the fire this sculpture was closed off by a wall that was of very poor construction (Fig. 66), comprising footings of small stones below mudbrick and incorporating wooden uprights to support a flimsy roof. There seems to have been a narrow doorway in the northwestern end of this wall. Why should the sculpture have been hidden from view in this manner? It will not be possible to address that crucial question before the slow and arduous task of putting together enough of the incomplete three-dimensional jigsaw puzzle has revealed exactly what was represented.

Fragments of the plinth and statue were carefully packed and labelled (Fig. 67). It would have been impossible to drag the plinth out of the trench (Fig. 68) had it not been split into smaller sections as a result of the fire and collapse.

Finally, in the closing days of the excavation in September, an exquisite gold and electrum ornament was found (Fig. 1). This unique piece lay directly beneath the burnt doors of the rear façade in the centre of the entrance. Surely it was lost in the panic of flight as escapees dashed through the burning gate. Whether it was dropped by one or other of the two whose remains we found in the destruction, or by someone more fortunate, we shall never know.



*Figure 56. Cleaning the paved court. The skeleton ready to be lifted by Yilmaz Erdal and his team is to the left of the photographic scale. (11dpcg0617)*



*Figure 57. Yilmaz Selim Erdal with students Burcu Yıldız and Melis Koruyucu examining the skeletal remains of a person crushed when the burning gate collapsed. (11dpnd0983)*



*Figure 58. The rear passage between the two partitions was excavated in June. (11dpkc1641)*



*Figure 59. Ahmet Çinici holding the prism over control points surveyed to provide coordinates needed for photorectification. (11dpkc1441)*



*Figure 60. The foundations under the façades had slots in which timber was housed. (11dpnd2163)*



*Figure 61. Two large iron bands and nails, perhaps from a wooden door in the front façade. (11dpcg1015)*



*Figure 62. The threshold between the paved court and the rear section of the gate with the North Tower behind. (11dpkc1641*



*Figure 63. The sandstone plinth with relief carving of couchant sphinxes was fitted across the corner so as to face the entrance of the rear section. (11dpkc1644)*



*Figure 64. The sandstone plinth, partially burnt and broken during the fire, with antithetical couchant sphinxes carved in deep relief. The stub of the white limestone statue is in the central socket. (11dpkc1653)*



*Figure 65. The plinth was placed over a bed of stones. (11dpkc1901)*





*Figure 66. Looking across the rear section of the gate from the West Tower to the North Tower. The sphinx block is to the left of the vertical scale. (11dpcg1262)*



*Figure 67. Noël Siver, assisted by Pelin Ayter and Yasemin Özarlan, packaging and labeling the fragments from the plinth and statue. (11dpkc1524)*



*Figure 68. The core of the plinth was pulled out of the trench by the tractor. (11dpkc1928)*

A small sondage dug at the north corner of the Middle Tower was supervised by Ferhat Can (Fig. 69). The excavation revealed an unexpectedly deep base and well-stratified layers of deposit laid during the construction phase of the towers beneath a series of surfaces some of which were earlier than the stone pavement (Fig. 70).



*Figure 69. Trench supervisor Ferhat Can dug down to the base of the Middle Tower wall. (11dpkc2507)*



*Figure 70. Well-stratified layers related to the construction of the gate were found beneath a series of surfaces. (11dpkc2512)*

## Results

Excavations at the Cappadocia Gate were completed in September 2011. An unsuspected configuration of timber-framed partitions and doors was revealed between the two rear towers (Fig. 71). One can also imagine how daunting the array of front towers would have been to anyone approaching from the south (Fig. 72).



*Figure 71. The rear section of the gate with the uneven pavers of the back threshold at left, beyond which is the edge of the paved area inside the city. (11dpcg3035)*



*Figure 72. For those approaching the Cappadocia Gate from the south, the front towers reinforced by the glacis would have stood to a daunting height. (11dpcg3006)*

### **Architectural Conservation and Repair**

Architectural conservation is carried out at the Cappadocia Gate in order to preserve and enhance the monument and to improve visitor safety (Figs 73 and 74).



*Figure 73. The Cappadocia Gate photographed in 2000 after clearance of the fallen rubble. (00slvf2933)*



*Figure 74. The Cappadocia Gate in June 2011. The glacis of the East Tower was restored in 2010 with funding from the US Ambassadors Fund for Cultural Preservation. (11dpnd0701)*

There was an imperative need to reduce danger to visitors, as well as a desire to clear the Gate Court of stone that had fallen from the inner face of the Middle Tower in the autumn of 2010. Emergency conservation to stabilise the wall core, together with original facing stones on the southwest side of the tower that were in imminent danger of collapsing, was undertaken. Although the new facing did not stand up to the first heavy rain, the situation is currently stable and the court safe for visitors. Additionally, it proved possible to complete the stone-for-stone documentation of the walls and stone pavement that will be required for a comprehensive proposal for restoration as well as for archaeological publication.

Restoration Architects Dr Nilufer Yöney and Erkan Kambek, both from the Istanbul Technical University, with the team of professional stonemasons from Uşak, introduced new horizontal timber beams to replace those that had burnt out some 2,500 years ago (Figs 75 to 77). Wall facing in the North and West Towers was then replaced (Figs 79 and 80). This experimental and reversible approach appears to have been highly successful.



*Figure 75. Secondhand telephone posts were squared off before incorporation in the restored wall. (11dpnd2356)*



*Figure 76. Stones were packed around the horizontal timbers. (11dpnd2356)*



*Figure 77. Large stones were lifted with the help of the tractor and its hydraulic lifting system. (11dpnd2434)*



*Figure 78. Very large stones that had fallen onto the pavement from the tower corner could only be moved by more powerful machinery. (11dpcg2412)*



*Figure 79. Repair of the West Tower in progress. (11dpnd2434)*



*Figure 80. Final stages of cleaning the extensive stone pavement after repair of the West and East Towers. (11dpcg3029)*

### Finds Conservation and Recording

Conservator Noël Siver spent the greater part of the season working on the conservation of the sculpted sandstone plinth and the thousands of fragments from the smashed statue that stood on the plinth. Archaeological Illustrator Ben Claasz Cockson drew the sculpted plinth and the largest of the reassembled statue fragments. All other finds from the 2011 season were drawn and photographed, including the gold ornament (Figs 81 and 82) from the Cappadocia Gate. Additional photography, drawing, cataloguing and curation was done by members of the team.



Figure 81. Front and back of the gold ornament from the Cappadocia Gate. (11dpcg3232)

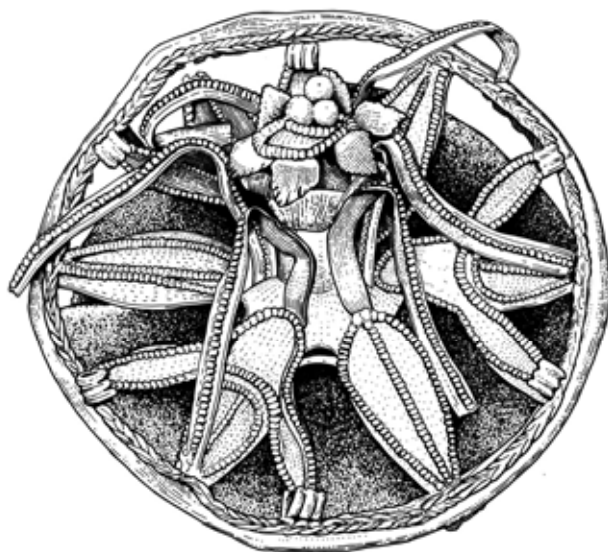


Figure 82. The gold ornament drawn by Ben Claasz Cockson.

Drawn by B. Claasz Cockson 2011



### *The Sandstone Plinth*

The large portion of the sandstone plinth (Fig. 83) which was discovered in situ was carefully recorded during excavation. Pieces which had been broken off the front were recovered from the destruction debris in which the plinth was buried. The upper part of the front face of the plinth stood proud of the destruction debris. This part was exposed to the elements for a considerable period of time, as evidenced by erosion and colour change of the broken surfaces. By the time that further tumble from the North Tower had come to bury the block entirely, most of the heads and wings of both sphinxes had been lost. A small number of fragments that had broken off the front of the plinth during the fire and collapse were recovered from the debris, but attempts to rejoin them in their original positions have yet to meet with success.

When the wall face of the North Tower fell in the course of the fire the front of the plinth was badly damaged. All the carving was broken away, with soil and plant roots filling the cracks. The front of the plinth was photographed in situ. As each carved fragment was removed it was numbered and the number marked on printouts of the photographs. This procedure was of great help in reassembling the fragments in the Stone Workshop.

In September Noël Siver worked on the restoration of the plinth while drawings were done by Ben Claasz Cooekson (Figs 84 to 87). The fragments have been carefully washed, but no attempt has been made to remove salts deposited on broken surfaces. This would be extremely difficult to do mechanically and, following the best practices of conservation, the pieces were not acid-cleaned.

At the end of the 2011 season this plinth, along with the aniconic granite stele from the Cappadocia Gate and other stones, were taken to the Yozgat museum (Figs 88 to 90). It had been hoped that the plinth could have been kept in the Kerkenes Stone Conservation Workshop until full restoration had been completed. However, because the workshop was designed for the restoration of large stone items that would normally be left in the open, it is not possible to make the building secure. A decision was therefore taken to transport the plinth to the Museum before restoration had been completed.



*Figure 83. The plinth with antithetical couchant sphinxes carved in relief. (11dpnd2727)*



*Figure 84. With the help of the stonemasons, the separate sections of the plinth core were brought together on the wheeled trolley. (11dpnd2008)*



*Figure 85. Conservator Noël Siver restoring the plinth. (11dpcg2922)*



*Figure 86. Ben Claasz Cooekson drawing the plinth onto glass. (11dpcg3202)*



*Figure 87. Ben Claasz Cooekson drawing the plinth helped by Iraz Alpay. (11dpcg3201)*



*Figure 88. Loading the plinth onto the lorry with a winch under the supervision of Yozgat Museum Director Hasan Şenyurt. (11dpcg3309).*



*Figure 89. The plinth was wrapped up and moved on the heavy-duty trolley. (11dpcg3309)*



*Figure 90. The Cappadocia Gate aniconic stele and two blocks with graffiti were also loaded onto the lorry and sent to the Yozgat Museum. (11dpcg3309).*

### *The Limestone Statue*

By the end of the season the only unfinished conservation and illustration task is the limestone statue (Fig. 91). At the moment it is difficult to assess how much more it will be possible to join together, or indeed to estimate how big the sculpture was and, therefore, what proportion of the original piece has survived. Considerable research in libraries in the autumn of 2011 has failed to find any convincing parallel, with the result that even the subject matter is unknown. A new assessment will be made in May 2012, when all the fragments can be laid out in the Stone Conservation Workshop. A decision will then be taken as to how much more join-finding can realistically be achieved before completing the photographic record and drawing of fragments that cannot be joined to the main body of the statue. There is no good reason to think that further significant advances can be made with this incomplete, fragmentary and poorly preserved material.



*Figure 91. Fragments of the soft limestone sculpture that stood on the sphinx block. (11dpkc2928)*

### *Other Architectural Stone*

Other architectural or carved stone, all from previous excavation seasons at the Palatial Complex, was reassessed. It has been decided that no more effort will be spent on join-finding and restoration. All effort in the proposed 2012 study season will be placed on final drawing and photography for publication. This assemblage includes numerous bolsters and the many fragments from an unknown number of semi-iconic idols, cuttings for wooden dove-tailed clamps, and several architectural fragments bearing enigmatic embellishment.

### **Archaeozoology**

Animal bones from the Cappadocia Gate, where a sealed deposit beneath a floor yielded material that was exceptionally well preserved for Kerkenes, were examined by Dr Evangelina Pişkin and then taken to METU for full analysis.

### **Physical Anthropology**

The human skeletal remains excavated at the Cappadocia Gate by Yılmaz Selim Erdal were taken to the physical anthropology laboratory at Hacettepe University for study.

## EXCAVATION WITHIN AN URBAN BLOCK AT THE NORTH END

*Scott Branting*

This portion of the 2011 season began on June 21st immediately following the excavations within the Cappadocia Gate.

The primary focus of this portion of the project was to begin long-term excavations within one of the main urban blocks of the ancient city (Fig. 92). Over the following six seasons the full extents of this over 6,000 m<sup>2</sup> area will be excavated and conservation and restoration measures within the urban block will be completed for site visitors. One initial trench was excavated this year exposing three rooms of a multi-room structure adjacent to a large hall within the urban block. As part of this work, the sampling of metals and paleobotanical remains from excavated contexts was accomplished.

In addition to the excavations, conservation and restoration work was begun on the stone relief, plinth, and material recovered from the excavations earlier in June at the Cappadocia Gate. The depot was closed on July 15th.

*The government representative:*

Çiğdem Demiroğlu

*Participants during the Chicago portion of research:*

Scott Branting, Co-Director

Sevil Baltalı Tırpan, Assistant Director

Marko Barisic, archaeologist and graduate student

Joshua Cannon, archaeologist and graduate student

Evan Carlson, archaeologist and graduate student

Robert Jennings, archaeologist and graduate student

Dominique Langis-Barsetti, illustrator and registrar

Anthony Lauricella, archaeologist and graduate student

Joseph Lehner, archaeologist and graduate student

John Marston, archaeobotanist

Yasemin Özarслан, archaeologist and graduate student

Susan Penacho, archaeologist and graduate student

Lucas Proctor, archaeobotanist

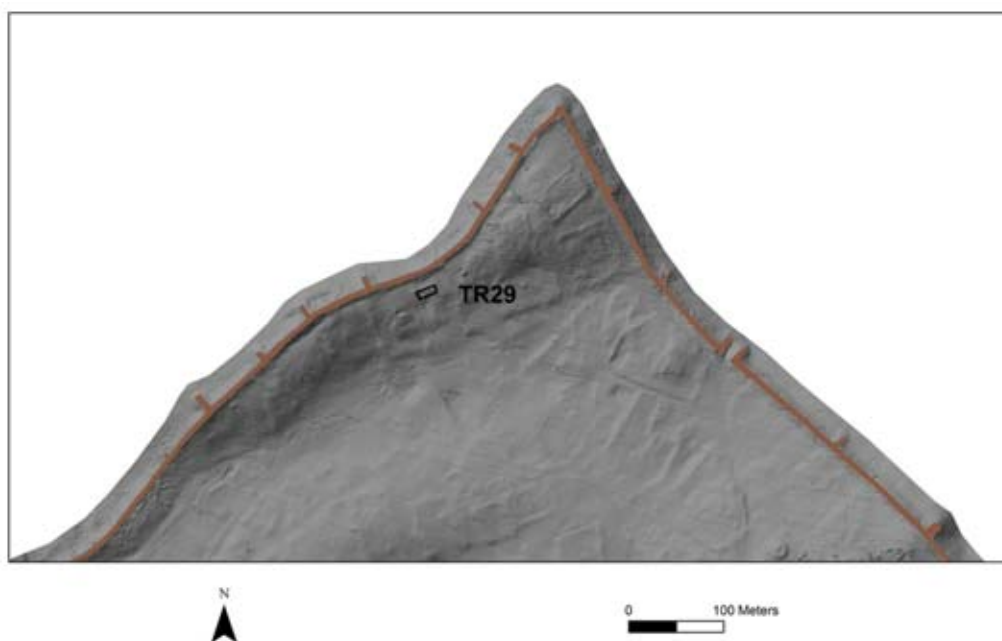
Noël Siver, conservator



*Figure 92.  
Excavation in  
progress in trench  
TR29. (11dpcc0201)*

### Location of Trench TR29

Following the conclusion of the excavations within the Cappadocia Gate, one trench was excavated during the second half of June and the first half of July in the northern portion of the city (Fig. 93). This trench, TR29, was situated to expose three rooms of a multi-roomed building revealed by the geophysical surveys and partially visible on the surface of the ground. The first room of this structure had been excavated in 1996 and 1998 and yielded the remarkable ivory plaque that is now in the Museum of Anatolian Civilizations in Ankara. The additional rooms and their contents were expected to provide information about not only this structure but also the large adjacent hall within the urban block.



*Figure 93. Map of trench location.*

### Excavation of Trench TR29

Trench TR29 was ca. 20m in length and 7.7m wide with a small 1m x 3.5m extension to the west. The trench exposed a total area of 159.33m<sup>2</sup> (Fig. 94). In addition to the three rooms and their doorways, TR29 exposed portions of a possible fourth room or porch to the west. Further excavation will be necessary to elucidate this fourth room, though fragments of plaster suggest that at least part of it was roofed. External thresholds for the doorways to the three fully exposed rooms and portions of external pavements leading up to the doors were also exposed in the southern portion of the trench (Fig. 95).

A single meter-wide wall defines the northern and eastern sides of the multi-room structure. It is preserved up to 4 courses of stone and just under 1m in height. As with most walls at Kerkenes Dağ, and all walls in TR29, it is built of large dry-laid uncut granitic facing stones with an interior fill of smaller stones. The base of the wall was laid on both protruding sections of granitic bedrock as well as on fill between them. Three interior walls were built abutting the primary wall. They were bonded with perpendicular segments of walls to the south to form the front of the building between the doorways. These secondary walls were built in a similar style to that of the primary structure wall, although the stones tended to be smaller and the walls on average are only 75cm wide. The two exceptions to this are the wider interior walls to the east and west of Room One which also measure an average of 1m in width.

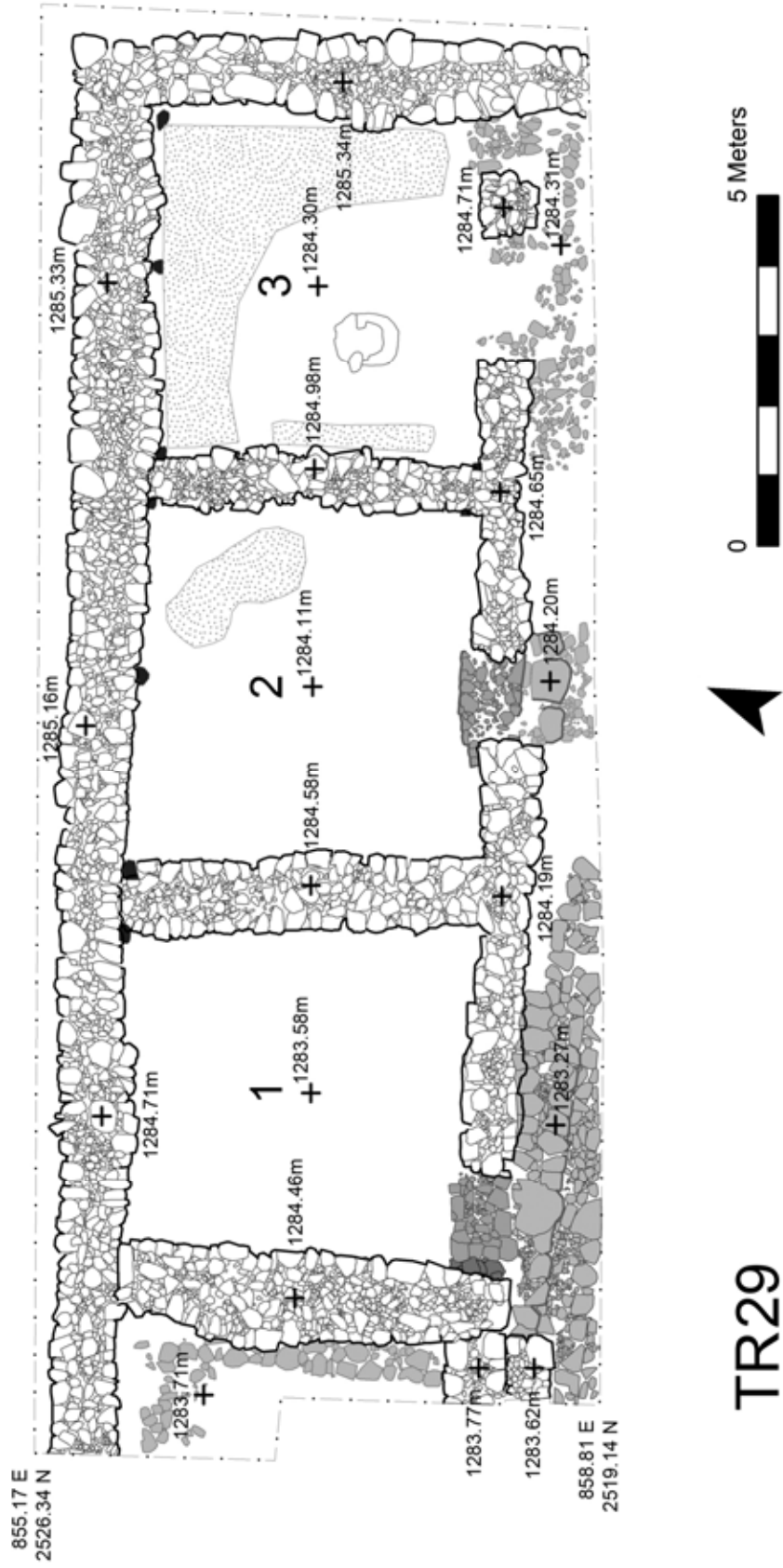


Figure 94. Plan of TR29.



*Figure 95. Photograph of TR29 after excavation. (11dpcc0405)*



### **Room One**

Room One measures 4.25m by 4.65m and encloses an area of 19.81m<sup>2</sup>. This room was previously excavated in 1996 and 1998. The room was cleared this year down to the level of original excavation (Fig. 96). The level of the floor in Room One was below that of the second and third rooms, though the downward sloping protrusions of bedrock upon which the eastern wall is partially set suggest that the floor levels of the entire multiroom building follow the levels of the undulating underlying bedrock. Two narrow slots for posts in the facing of the eastern wall of the room and one in the northeastern corner were re-exposed. This provides clear evidence for a timber-framed superstructure above the preserved stone foundations. Evidence of a plaster floor and traces of plain wall plaster on the interior wall faces were also found in 1998. The threshold into Room One was the most impressive of those excavated, with a stretch of multilevel pavement running up to a large threshold stone. A small socket for a door pivot was also found just to the west of the interior of the threshold, suggesting that a single-leaved door ca. 1.2m wide was used to close the room.



*Figure 96. Room One threshold and eastern wall. (11dpcc0461)*

### **Room Two**

Room Two measures 4.62m by 4.9m and encloses an area of 23.03m<sup>2</sup>. As in Room One there was evidence for the timber-framed superstructure in two narrow slots within the facing of the western wall and flat stone post bases in the corners of the room as well as in front of the center of the northern wall (Fig. 97). A section temporarily left through the middle of the room, as well as one through the middle of Room Three, showed no evidence for a second story to the structure in the collapse. Portions of the white plaster floor in the room were still preserved beneath this collapse (Fig. 98). Unlike Room One the doorway and threshold into Room Two are found in the center of the southern wall. No pivot hole was found for the door, though flat stones along the interior of the western portion of the southern wall may have served a similar purpose for a similar-sized door.



*Figure 97. Narrow post slot in the facing of the western wall of Room Two. (11dpcc0524)*



*Figure 98. Section of plaster floor in Room Two. (11dpcc0474)*

Near the center of Room 2, sherds from at least 6 large storage vessels were excavated. The size of the vessels and the distribution of their sherds point to the placement of these vessels on the floor of the room at the time that the structure was destroyed. Among the sherds one was found that bore an incised mark (Fig. 99). Preliminary analysis of soil samples taken from the floor indicates the presence of wheat, perhaps originally contained in the storage vessels.



*Figure 99. Sherd with incised mark from Room Two. (11dpcc0701)*

### Room Three

Room Three measures 4.47m by 4.81m and encloses an area of 21.5m<sup>2</sup>. Flat stone post bases in three corners of the room, along with one in the middle of the northern wall and a possible second small base along the western wall, once again provide evidence for the wooden superstructure (Fig. 100). Large sections of preserved plaster floor were found throughout the northern and eastern halves of the room. A line of black ash, all that remained of one of the vertical posts, was noted running across the floor back towards the post base in the northeastern corner of the room.

The floor is missing across much of the southwestern quadrant of the room, an area that would have seen extensive use due to the presence there of a 75cm wide U-shaped hearth. Evidence of plain white wall plaster was also found around the base of the inside faces of the east, north and west walls of the room.

Unlike Room One and Room Two the southern wall did not have a single entranceway into the room. Instead, a broad opening in the center of the wall is separated from a secondary opening right against the eastern wall by a very short stretch of stone walling. This suggests that the short stretch of wall may be an internal division within a two-room suite, with the other room yet to be excavated to the south of Room Three. Future excavation will clarify the relationship between Room Three and the remainder of the structure.



*Figure 100. The post bases, hearth, and plaster floor in Room Three. (11dpcc0444)*

## Artifacts

Several artifacts were recovered from the destruction layer within Room Three. These include a beautiful colored glass bead (Fig. 101), an iron blade (Fig. 102), and a partial copper alloy pin (Fig. 103). The artifacts were spread around the room and did not cluster in the immediate vicinity of the hearth.



*Figure 101. The glass bead found in Room Three. (11dpcc0712)*



*Figure 102. The iron blade from Room Three. (11dpcc0730)*



*Figure 103. Copper alloy pin found in Room Three. (11dpcc0722)*

### Soil Sampling

Preliminary analysis of soil samples taken from the hearth and adjacent areas indicates a heavy preponderance of wheat among the carbonized remains in the room, suggesting the hearth was used for cooking (Figs 104 and 105).



*Figure 104. Systematic soil sampling for flotation in Room Three. (11dpcc0214)*



*Figure 105. The flotation machine. (11dpcc0214)*

### Conservation and Illustration

All materials from the excavations in TR29 were conserved, photographed, and drawn during the season. In addition, considerable time was devoted to cleaning, conserving, join-finding, photographing, and drawing material excavated in the Cappadocia Gate.

## Results

The excavations of these three rooms show that different activities were undertaken in each of the rooms of this multiroom building. Room One, as evidenced by the ivory, might have been used for storage of important or prestige items. The well-formed doorway and threshold show a level of investment in the construction of the room that is not matched in the other rooms. Room Two offers clear evidence for the storage of grain and perhaps other foodstuffs. It may well have served as a pantry. Room Three appears to have cooking and food preparation functions, likely making use of the foodstuffs from Room Two. Future excavations in the other rooms within this building will better qualify the variety of activities that once took place within all its rooms and their relationship to the large adjacent hall.

## Backfilling

Following the excavation and recording of trench TR29, geotextile was laid over the tops of the exposed walls and on the floor surfaces. All the walls were then capped with two courses of stone to aid in their preservation (Fig. 106). The floor surfaces were covered with minimal clean backfill so as to protect the fragile surfaces. The southern portion of the trench outside of the walls of the structure was also backfilled so as to support the significantly leaning walls. In the future these walls will be buttressed and rebuilt as part of the restoration effort in this area. Visitors to the site can now clearly see the layout of the portions of the building so far excavated. Future years of excavations will uncover not only this building but the other buildings within this important urban block.



*Figure 106. After backfilling trench TR29 several courses of stones were added on top of the original wall remains thus protecting them as well as articulating the structure. (11dpcc0214)*

## ARCHEOMETALLURGY

### Sampling of Metals from Kerkenes Dağ

Metal objects and fragments uncovered at Kerkenes Dağ in 2011 were once again analysed by Joseph Lehner. Samples were taken for analysis at the Cotsen Institute of Archaeology at the University of California – Los Angeles (Fig. 107). Ongoing, innovative studies will help provide a much better understanding of where the metal in the objects originated. Preliminary analysis suggests that the main sources of copper were to the south and southeast, in the Taurus and the Anti-Taurus Mountains rather than from Pontic ores. Other studies, particularly of iron, are designed to examine metalworking technologies.



*Figure 107. Joseph Lehner analysing metal samples at the UCLA SEM laboratory. (11dpkc0876)*

## FUTURE WORK

### Geophysical Survey

Resistivity survey in the spring continues to produce valuable results and add clarity to the results obtained from previous gradiometer survey. Further survey will continue for a few weeks each spring, the exact duration depending on funding and weather.

### Excavations at Kerkenes

Work at the Cappadocia Gate having been completed in 2011 it will be possible to focus on the preparation of the final publication report. The new initiative launched by Dr Scott Branting focuses on a large urban block at the North End of the site. The large-scale excavation program within this 6,000m<sup>2</sup> urban block in the northern portion of Kerkenes Dağ is planned over the next six years. Soil samples will continue to be collected from excavated contexts for analysis of paleobotanical remains and to explore movement within the urban block as part of the ongoing program of transportation studies. Additional analysis will also continue to be undertaken on excavated metal and ceramic objects and fragments.

### Restoration Work at the Cappadocia Gate

Restoration work funded by the US Ambassadors Fund for Cultural Preservation is now completed. Monitoring of repaired and restored sections of the gate will continue and if necessary further measures will be taken to preserve this most important Iron Age structure.



## PUBLICATIONS

### Monograph Series

The preparation of final monographs is steadily progressing. The first volume focusing on the results of the remote sensing and associated test trenches is a dual-language publication in full colour.

Completion of the two monographs, one devoted to work done at the Cappadocia Gate, the other on survey and excavations in the Palatial Complex, will bring to a conclusion the exploration program directed by Geoffrey Summers since 1993. One of the idols from the Monumental Entrance to the Palatial Complex has been restored and is now on display at the Yozgat Museum (Fig. 108).



*Figure 108. Yozgat Museum Director Hasan Şenyurt standing by the restored idol from the Monumental Entrance to the Palatial Complex. (11dpcg0108)*

### Publication by the Oriental Institute Team

The program of research initiated by Scott Branting, Director of the Center for Ancient Middle Eastern Landscapes (CAMEL) of the Oriental Institute of the University of Chicago will include the preparation of monographs as described below.

#### *Simulations of Ancient Transportation at Kerkenes Dağ*

Work continues on analyzing the soil samples recovered in previous years from the streets at Kerkenes Dağ for publication within this monograph. This will allow testing and calibration of the simulations of pedestrian traffic patterns within the ancient city. Publication of this volume is expected by 2013.

#### *Excavations of an Urban Block at Kerkenes Dağ*

The excavations in TR29 are the start of an extensive program of excavation. Over the next six years the goal is to excavate the full extents of the urban block within which TR29 was situated. This work will be published following completion of the excavations in its own monograph.

## KERKENES DAĞ PROJECT PUBLICATIONS

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