

## Appendices

### Appendix One: Google Earth Study Areas

#### Google Earth Study Areas 1-5 (Fig. 3:32)

The centre of Study Area 1 (SA1 – Fig. 3:37) is 70 km south of the Arghandāb and 55 km east of the Hilmand. It is located in the north-west centre of the Rīgistān desert, 70 km south-east of Bust. The area is characterised by sabkha in the west and gravelly desert in the east. The relatively small expanses of dunes in the east are orientated east-north-east to west-south-west. SA1 contains the only previously known archaeological site in the Rīgistān Google Earth Study Areas – Qal'a-i Hauz (Ball 1982 I: 207; Balsan 1972a: 169-73; see also Adamec: 1980: Map V-9-D and Soviet maps h\_41\_34\_4 and h\_41\_46\_2).

Study Area 2 (SA2) extends to the north of the Rūd-i Arghandāb, which flows through the south-west corner of the image (Fig. 3:33). The main road from Kāndahār to Girīshk is visible in the north-east of the image. The Study Area consists primarily of wadis flowing south-south-west or south-west to the Rūd-i Arghandāb from the low foothills of the Shāh Maḡsud range to the north-east. Cultivated and inhabited areas are sparse, other than in the immediate Arghandāb valley. The Study Area includes four un-numbered archaeological sites in Ball's Gazetteer (1982, Map 134; see also Adamec 1980: Map V-9-B and Soviet maps h\_41\_10\_4 and h\_41\_22\_2).

Study Area 3 (SA3), to the south of SA2, includes a 9.5 km stretch of the Rūd-i Arghandāb (in the north-east of the area – Fig. 3:34). Much of the rest of the area is stony desert plain, in places warped by tectonic folds. Wadis tend to follow these folds, flowing to the north-east towards the Rūd-i Arghandāb. An expanse of red dunes covers the south-east corner, extending south into Study Area 4 and to the east (see also Adamec 1980: Maps V-9-B and D, and Soviet map h\_41\_22\_4).

Study Area 4 (SA4 – Fig. 3:35) lies to the south of SA3, in the centre of the strip of five Google Earth Study Areas. An extensive area of red dunes covers just under half of the area (ca 125 km<sup>2</sup>). The dunes are orientated from south-west to north-east, indicating the prevailing winds. The north-west part of the area is covered by gravelly desert, with some folded ridge formations, while the other major geomorphological area consists of sandier deposits in the centre east. The wadis drain to the north-east in both the areas not covered by dunes (see also Adamec 1980: Map V-9-D and Soviet maps h\_41\_22\_4 and h\_41\_34\_2).

Study Area 5 (SA5 – Fig. 3:36) is located south of SA4, and north of SA1. The north-

eastern swathe of the area is covered by red dunes, decreasing in density to the south-east. This expanse of dunes is elevated relative to the surrounded terrain, as wadis flow to the south-west from it, cutting into a light brown desert plain. Two major *sebkha* (salt flats) are located in the north-west, but these geomorphological features are more common and extensive in the western half of SA1 to the south (see also Adamec 1980: Map V-9-D and Soviet maps h\_41\_34\_2 and h\_41\_34\_4).

### **Google Earth Study Areas 6-8**

In addition to our archaeological fieldwork at Djām, three Google Earth Study Areas in the mountainous heartland of Ghūr were investigated, as part of the broader archaeological remote sensing study (Figs 3:8, 3:11, Table 3:1; see Chapter 7.6). The Study Areas, 100 km east of Djām, were selected due to the existence of ancient routes in the region (one reportedly follows the banks of the Farāh Rūd as far as Sīstān – Holdich 1910: 221, 224; Trinkler 1928b: 79) and the numerous, largely undocumented and imprecisely located, Ghūrid forts and towers along the Alayār / Shīniya valley (Ball 1982: 33, 252-3; Kohzad 1951b: 21; 1952: 50; see also Adamec 1975: Maps III-11-B and D, and Soviet maps i\_41\_60\_1 and i\_41\_60\_3). The selected satellite images available through Google Earth extend to the north and south of the Harī Rūd, in order to assess the general distribution of sites relative to the river, and in particular to determine whether the distribution of known sites is an artefact of exploration – archaeologists such as Ali Kohzad, and other passersby rarely venture from the main valley at this point. These Study Areas also presented an ideal opportunity to test whether known, isolated, medieval ruined structures are visible in the satellite images, available through Google Earth and whether other unreported, pre-modern archaeological remains were visible in the vicinity.

Study Area 6 (SA6) consists of a heavily incised landscape to the north of the Harī Rūd (Fig. 3:12). A large dendritic river system covers much of the Study Area, draining south into the Harī Rūd, 5.3 km west of Dawlat Yār. Narrow strips of vegetation line the valley floors, but the majority of the Study Area consists of barren mountain slopes. No archaeological sites were previously known in this area.

Study Area 8 (SA8 – Fig. 3:13) lies to the south of SA6. This Study Area incorporates much of the Alayār valley; the river flows from the south-east corner of the Study Area west and then north to join the Harī Rūd. As in SA6, the barren, mountainous terrain is heavily incised, with predominantly north-south valleys feeding into the Alayār from the south. Little vegetation is visible, other than along streams and rivers in the narrow valley floors.

Visibility is quite good as a result, although the landscape has a ‘tiger-skin’ appearance due to the natural geology and clearance of slopes for dry-slope farming. Fortified farmsteads (*rustāk*) or ‘fortress dwelling compounds’ (*kaḥa* — Dupree 1980: 136-7) often with circular corner towers, which have dotted the central Afghan landscape for centuries (Ball 2008: 11, Pl. 7),<sup>1</sup> are visible on the edges of cultivated land and villages (Fig. 3:18).

The quality of the satellite images available through Google Earth permit the identification of brushwood corrals and associated dung-stained ground in some villages (Fig. 3:17), and even isolated black tents and flocks of grazing livestock dotted across the landscape (Fig. 3:15-16). This visual record of village spatial organization, combined with ethno-archaeological studies in Iran (Hole 1978; Kramer 1979; Watson 1979; *inter alia*), is useful in that it provides us with unequivocal analogies for similar abandoned and less distinct features elsewhere in the Google Earth Study Areas. The snap-shot of widely scattered, low density, modern nomad herding practice complements the data collected by non-governmental organizations such as the Food and Agriculture Organization (FAO)<sup>2</sup> and the Afghanistan Research and Evaluation Unit (AREU),<sup>3</sup> and provides an indication of the existence of sparse grazing in an apparently barren landscape, and the extent of its use. Two archaeological sites (Ball 1982: 33, 252-3; Map 104) are described in this area, and a further eight unnamed forts are marked along the Alayār.

The third of the Study Areas, Study Area 7 (SA7), is located south of SA8 (Fig. 3:14). It was selected to investigate mountainous landscape away from major river systems such as the Harī Rūd and its larger tributaries. Like SA6 and SA8, the terrain is heavily incised, but this time not by a single major river; rather SA7 is a watershed area comprising the headwaters of numerous small tributaries feeding into river systems to the north and south. Very few villages and little cultivation are evident in this isolated area, maximising the chances of preservation of pre-modern structures. Nomads’ tents, however, are visible (Fig. 3:16; see also Fig. 3:19) and their distribution again illustrates the extensive, if low density, use which is made of the landscape’s grazing potential. Nomad tents are primarily distributed in the south-western quarter of the Study Area, at the time the image was taken (25/07/2004); this relatively concentrated distribution pattern is probably indicative of a particular stage in the grazing cycles of the herders, rather than an accurate reflection of

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<sup>1</sup> Lynch notes 150 forts in the secluded Angori ‘valley paradise’, and numerous others, en route to the upper Arghandāb valley in 1841, which acted as refuges for the local inhabitants and their cattle (Markham 1875-76: 244).

<sup>2</sup> <http://www.fao.org/countryprofiles/index.asp?lang=en&iso3=AFG> [accessed 24/8/2011].

<sup>3</sup> See Mansfield (2006), for example.

grazing areas, although successive images over a series of weeks, and years, would be required to verify this. No archaeological sites are known in this area (see also Soviet map i\_41\_60\_3).

### **Google Earth Study Areas 9-10**

Study Area 9 (SA9) straddles the modern Afghan-Turkmen border, 120 km to the north-north-west of Harāt (Figs 3:28-9).<sup>4</sup> The landscape is relatively flat, semi-desert with shallow wadis feeding into the Rūd-i Gulrān, a tributary of the Kuṣhk which flows north and joins the Murghāb before disappearing in the sands around the Marw oasis. Holdich (1885, map) characterizes the landscape as consisting of “low rounded hills, sandy”, while Breckle (2006) categorizes the area’s vegetation as Ephemeral Desert. Little vegetation is apparent due to the autumnal date of the satellite image’s acquisition, making visibility excellent. Sand dunes on top of the stony desert are discernible in the north, orientated in a north-east / south-west alignment. No named archaeological sites are recorded in this area, although several indeterminate ruins are marked to the north of the Rūd-i Gulrān (Ball 1982, map 91; see also Adamec 1975: Map III-1-D and Soviet map i\_41\_16\_4).

Study Area 10 (SA10), 25 km south-east of SA9, also straddles the Afghan-Turkmen border, which forms a V-shape here, around the modern Turkmen town of Kuṣhka (Figs 3:30-1).<sup>5</sup> Like SA9, much of SA10 is covered in what Holdich describes as “low rounded hills” either side of the Kuṣhk Rūd, which runs north and forms the western part of the modern border. The river valley becomes increasingly broad to the north and provides water of irrigated fields along its banks. Only two archaeological sites are recorded in the area – Tūrghundi (Ḳarā Tepe, ‘Black Mound’, a 190 m diameter mound surmounted by a decaying mud-brick fort; Holdich 1885: 280), in the north, and Kizghundi (Surkh Tepe, ‘Red Mound’) in the south, neither of which have been investigated in detail (see also Adamec 1975: Map III-2-C and Soviet maps i\_41\_29\_2 and i\_41\_29\_4).

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<sup>4</sup> Just over 100 km<sup>2</sup> (or a third) of the southern part of the Study Area falls on the Afghan side of the border, although the whole square was analysed.

<sup>5</sup> 127 km<sup>2</sup> (nearly half) of the Study Area falls within Afghanistan, in two blocks either side of the triangular wedge of Turkmen territory.

## **Appendix Two: less well-known ethnies / dynasties**

This appendix provides brief definitions of, and supplementary information on, a few of the less well-known *ethnies* mentioned in the thesis. More detailed discussions are available in numerous publications, such as the *Encyclopaedia of Islam* and Vogelsang (2002).

### **Ḳarā Khitāy**

The Ḳarā Khitāy were nomads from China who were displaced westwards by the ascendant Jürchen (Manchurian invaders, who established the Chin dynasty which ruled northern China from 1115-1234 CE). The Ḳarā Khitāy differ from the other dynasties in central Asia in that they did not convert to Islam and retained many aspects of their Chinese heritage and culture. Local rulers were generally allowed to remain in their posts, thus ensuring continuity and stability, and enabling the Ḳarā Khitāy to remain aloof from their primarily Muslim subjects and retain their ‘alien’ identity and traditions (Biran 2005: 47).

### **Khaladj**

The Khaladj lived in the warm parts of what is now southern Afghanistan. They are classed as Turks, but Wink (1997: 116) describes them as “probably not ethnic Turks but a Turkicized group”. Jackson (2000a: 210) agrees that “their ethnicity is by no means certain”. They later merged with the Afghans (Wink 1991: 116).

### **Kh<sup>w</sup>ārazmian-Shāhs**

The Kh<sup>w</sup>ārazmian-Shāhs (490-628 / 1097-1231) were initially loyal vassals of the Ghaznawids, protecting their northern frontiers empire, recruiting auxiliary troops from nomadic Turk tribes on the steppe, and providing large numbers of slaves (Golden 1990: 366). They fulfilled a similar role for the Saldjūkids, who seized control of the province in 433 / 1042, but again proved to be increasingly “wearisome vassals” (Golden 1990: 368). Most seriously, the Kh<sup>w</sup>ārazm-Shāh Atsīz invited the Ḳarā Khitāy to invade Transoxania, resulting in the crushing defeat of Sultan Sandjar’s Saldjūkid army on the Ḳaṭwān steppe in Ushrūsana in 536 / 1141 (Barthold 2007 [1928]: 326).

## **Mongols**

Although much has been written about the Mongols, it is worth summarizing what little is known about their complex origins. The term Mongol is little used prior to the twelfth century CE, although it may be identifiable in Chinese sources from the T'ang period (Morgan 1987: 56). The twelfth-century tribes of Mongolia are more accurately defined as Turk-Mongol and the Mongol empire which Temujin (elected Čingiz Khān or 'Universal Ruler' in 1206 CE) created included a wide range of ethno-linguistic groups (*Secret History of the Mongols (Tobchi'an)*, hereafter SH 8: 202, tr. Onon 1990: 110; Boyle 1965a: 615-16; Gabriel 2004: 5; Morgan 1987: 56). Temujin (1162?-1227 CE) was the son of the leader of the Borjigid clan (Onon, in SH, tr. Onon 1990: xi), although his mother was kidnapped from the Ongirad clan and he was named after a captive Tatar enemy (SH 1: 59, tr. Onon 1990: 14). As is evident elsewhere, the simplistic ethno-linguistic appellations modern historians and others commonly apply often mask a wealth of subtleties that had meaning in the past (Flood 2009a: 3).

## **Oghuz or Ghuzz**

Oghuz or Ghuzz "derives from the Turkish appellation Toquz Oghuz, 'Nine Clans', and refers to a Turkish confederation of tribes in Central Asia from the seventh century AD onwards" (Vogelsang 2002: 196, fn. 19). The confederation included the better-known Saldjūqs, and the Tūrkmen or Turcoman, who eventually settled in Anatolia (Golden 2002: 116). Bosworth and Clauson (2007: 5) note that the relationships between the various clans were so fluid that the significance of the subtle differentiations recorded by the medieval historians is often difficult to determine.

## **Saldjūkids**

The Saldjūqs were nomadic Turks, who originated in central Asia and had converted to Islam in the fourth / tenth century. They seized al-Ḳuds (Jerusalem) from the Fatimids in 462 / 1070, and then won a decisive victory over Byzantine forces at Manzikert / Malāzگرد in 463 / 1071. The Saldjūkids' ascendancy in the region prompted the launch of a series of Crusades to liberate the 'Holy Land' (Lewis 1991; Maalouf 1984; *inter alia*).

## Appendix Three: Ghūrid sites

Note: the data in this appendix are largely derived from Ball's gazetteer, with additional information from more recent fieldwork / reports, where available (see Ball 1982 II for references). Some of the information has been transcribed verbatim, with just the source, rather than specific page numbers, listed, unless it contains an important quotation. I have generally followed Ball (1982) for the diacritics, where no *EI* transliterations are available. The principal fieldwork and references are listed, in chronological, rather than alphabetic order. Similarly, the *Site Descriptions* are in chronological order so that the reader can follow changes in the state of preservation at the sites.

Gaz. No.: No #\_1  
Site Type: Fort / Fortress  
Province: Bāmiyān  
Site Description:

Additional info.:  
Date: Ghūrid  
Core / Periphery: Upland periphery

Darra-i Sabzak

Lee: the remains of a Ghūrid fortress, located on a high spur of rock at the west entrance to the Sabzak valley. One of the north-facing bastions is visible from the Saighān road from the north.

Fieldwork:  
2004 – Lee

References:  
Lee 2006

Gaz. No.: No #\_2  
Site Type: Tower  
Province: Bādghīs  
Site Description:

Additional info.: not Gaz. No. 299 in Hilmand province  
Date: Ghūrid  
Core / Periphery: Ghūrid heartland

Dīwālak

Wannell: many baked-brick ruins; small brick wall with windows and machicolations blocking a hollow high up the cliff. Known as *Sorud-khāna-e parian* “the fairies’ music hall”, according to a local guide. “More probably a guard-post to secure the route of the Ghurid royal progress from Larwand, Purchaman to Shah Mashhad, Jawand”.

Fieldwork:  
2002 – Wannell

References:  
Wannell 2002

Gaz. No.: No #\_3  
Site Type: Fort / Fortress  
Province: Bāmiyān  
Site Description:

Additional info.:  
Date: Ghūrid  
Core / Periphery: Upland periphery

Ghūrāb

Lee: A site referred to as “tower and ruins” (probably a Ghūrid fortress) to the east of the village of “Ghūrāu” on the USDMA 1:100000 map. This valley is one of ancient

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### Appendix Three: Ghūrid sites

spurs of the N-S trade route between Bāmiyān and Samangān.

#### Fieldwork:

2004 - Lee

#### References:

Lee 2006

Gaz. No.: 15

Āhangarān

Additional info.: The Blacksmiths'

Site Type: Fort / Fortress

Date: Sāsānid; Ghūrid 12<sup>th</sup> C; Tīmūrid?

Province: Ghūr Core / Periphery: Ghūrid heartland

#### Site Description:

Kohzad: impressive fortress, "the foremost name of the great citadels of ancient Ghor" (1953: 59). Two stretches of ruined walls on large stone foundations, marking the inner and outer citadel walls, and earthen mounds. A tower stands in the centre of the site, with other towers along the outer walls.

Dupree: One of Maḥmūd of Ghazna's more persistent antagonists was Amīr Muḥammad Sūrī of Āhangarān, who withheld tribute and waylaid caravans. An army on horse and foot made little progress until Maḥmūd took to field – feigning retreat, he lured the Ghūrids out of their fortress and then wheeled around and swamped them. On his way to Ghazna, Amīr Muḥammad sucked poison from signet ring. Tribute flowed in and the Islamization of Ghūr began [but note the Amīr's Muslim name]. "One needs considerable imagination, however, to conjure up this once mighty fortress out of the small ruins which remain today" (1977: 474). Also historical reference to Činghiz Khān's army under Ōgedey reaching Pul-i Āhangarān near Firūzkūh (TN, tr. Raverty 1970 [1881] II: 1073).

Klujver: next to the main road from Čaghčārān to Harāt. Very few remains of a fortified building on a rocky outcrop. Mud-brick buildings have recently been built on top of the site. One can only see some remains of walls and towers along the sides of the outcrop. Most baked bricks have been re-used for modern buildings; one had the dimensions of a Tīmūrid brick. A part of the ancient walls does not absorb water; they seemed to have a high saltpetre content, being greasy and tasting a bit salty. Since this mineral (potassium nitrate) is not known to form naturally in this area, the fortress might have been used as a store for saltpetre (which constitutes 75% of the gunpowder mix). This site function would be in keeping with the blacksmiths that gave the place its name. According to local lore, the fortress belonged to the blacksmith that killed King Zuhāk. King Zuhāk needed to feed a human brain every day to each of the snakes that had grown out of his shoulders, and this human sacrifice bled the country of all its young people. One day it was the turn of a blacksmith's daughter. He fooled King Zuhāk, however, and before his daughter could be sacrificed he smashed the king's head with his hammer (the serpents quickly gobbled up the brain of their master). The thankful people then made him their king, and this was supposed to be his castle. It could however never have been a big castle. The remains of one of the towers stand on the south-west corner of the site. The site has been probed by locals but they appear to have found little.

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#### Fieldwork:

1946 – Kohzad; 1960 – Fischer; 1965 – Leshnik sondage

#### References:

Le Strange 1905 417; Kohzad 1951-4; Leshnik 1967; Fischer 1969; Klujver 2000



Appendix Three: Ghūrid sites

Gaz. No.: 39	Āna	Additional info.:
Site Type: Tower		Date: Ghūrid 12-13 <sup>th</sup> C
Province: Ghūr Core / Periphery: Ghūrid heartland		
Site Description:		
Lines of square and round mud-brick towers and many other remains on both sides of Āna valley. 23 km south-west of Taiwāra. Ball 2002: 14 km south from Taiwāra, on the road to Zarni, 4 km before fortifications of Āna, is a single tower, overlooking the road. Āna guards the approaches to Taiwāra and marks the route over to Yāmān.		
Fieldwork:		References:
1946 – Kohzad		Kohzad 1951-4; Fischer 1978a; Ball 2002
Gaz. No.: 100	Bāmiyān	Additional info.: see also Shahr-i Ghulghula
Site Type: Fortifications		Date: Graceo-Bactrian?; Kushan-Sāsānid; Turk - pre-Mongol Islamic (Ghūrid) 7-13 <sup>th</sup> C
Province: Bāmiyān		Core / Periphery: Upland periphery
Site Description:		
Extensive area of remains along the foot of cliffs; 750 artificial caves, part of an extensive Buddhist monastic centre, most famous for the now destroyed statues of Buddha. Many mounds cover structural remains. Series of Turk-Ghūrid fortifications.		
Fieldwork:		References:
1974-5 – Le Berre		Le Berre 1981 (ruins 13-16) describe the medieval fortifications along the foot of the cliffs.
Gaz. No.: 114	Bashura	Additional info.: see also Wurshak and Qal'a-i Malik Antar
Site Type: Fortifications		Date: Ghūrid? 12-13 <sup>th</sup> C
Province: Ghūr Core / Periphery: Ghūrid heartland		
Site Description:		
Ruins of many fortifications and other structures, with some more at the foot of the mountains to the south and east, 16 km from Yāmān on road to Zarni. Locals say they are pre-Islamic.		
Fieldwork:		References:
1946 – Kohzad		Kohzad 1951-54; Ball 2002

Appendix Three: Ghūrīd sites

Gaz. No.: 122	Begram	Additional info.: aka Kāpīsā
Site Type: Walled town / village		Date: Graeco-Bactrian; Indo-Greek-Indo-Parthian; Kushan; Sāsānid; Turki / Hindū Shāhi; Ghaznavid-Ghūrīd 11-13 <sup>th</sup> C
Province: Kāpīsā		Core / Periphery: Upland periphery
Site Description:		
Large urban site near confluence of Ghōrband and Pandjshīr rivers. Consists of a long fortified area made up of two walled enclosures: the Burj-i Abdallah to the north and 'new royal city' to the south, where most of French excavations took place between 1937-46. There is a third, mainly urban area to the south. In the 19 <sup>th</sup> C, the site of extensive coin collecting (Masson collected ca 7000 coins), including Ghūrīd ones.		
Dupree: a contingent of Čingiz Khān's army crossed the plain around Begram in 1222 to enter the Band-i-Pandjshīr.		
Fieldwork:		References:
1834-37 – Masson; 1937-40 – Hackin; 1941-42 – Ghirshman; 1946 - Meunié		Hackin 1938; Ghirshman 1943-45; Shakur 1947
Gaz. No.: 124	Bidmushki	Additional info.: Bid-i Mushkin
Site Type: Fort / Fortress		Date: Turk / pre-Mongol Islamic 7-13 <sup>th</sup> C; Ghūrīd
Province: Bāmiyān		Core / Periphery: Upland periphery
Site Description:		
Remains of several towers around the village on the Band-i Amīr river, 5 km west of Yakaulang.		
Lee: a Ghūrīd fortress constructed on a low mound on the north side of the Yakaulang airport road. The walls and bastions on the west and north are well preserved and made of mud-brick and have the standard geometric ornamentation and narrow, slit apertures for archers. The fortress commands excellent views of the valley and road both to the east and to the west as well as the right bank of the Band-i Amīr river. The surviving wall on the west is ca 8 m in length whilst that on the north is ca 10 m in length and between 1-2 m in height. Some 3 m of the bastion on the north-west side also remains. Local people state that on a ridge to the south of the fortress there were once also traces of ancient walls. On the right (north) bank of the Band-i Amīr a second, larger and more complex Ghūrīd fortress can be seen on a low mound.		
Fieldwork:		References:
1970 – Brett; 2002 – Lee		Brett 1970; Lee 2006

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Appendix Three: Ghūrīd sites

Gaz. No.: 149	Bust	Additional info.: see also Lashkar-i Bāzār
Site Type: Fort / Fortress		Date: Achaemenid; Sāsānid; Ghaznawid-Ghūrīd 11-13 <sup>th</sup> C
Province: Hilmand		Core / Periphery: Lowland periphery
Site Description: (Figs A3:1-2)		
<p>Bust forms the south end of the Lashkar-i Bāzār complex and is dominated by an immense citadel on a mound of uncertain date, surrounded by a high enclosure wall. On top of the citadel are the remains of many structures, both in mud-brick and baked-brick, most notable of which is a seven-storey galleried well. At the foot of the citadel is a free-standing Ghūrīd arch; outside the enclosure is a mud-brick Ghaznawid palace and probably later baked-brick shrine of Ghīyāth al-Dīn. Many important accidental finds from the site, including carved and inscribed bricks.</p> <p>Dupree: the site's gardens were still eulogized by contemporary chroniclers until Timūr ravaged the irrigation system. The well is 40 m deep, 5.5 m in diam. It has three tiers of four circular chambers looking out into the shaft. The magnificently decorated arch spans 24 m.</p>		
Fieldwork:		References:
1949 – De Cardi; 1949-51 – Schlumberger		Gardin 1963; Schlumberger 1978; Allen 1988; 1989; 1990
Gaz. No.: 183	Chashma-i Khūni	Additional info.: 'Khūni spring'
Site Type: Fort / Fortress		Date: Ghūrīd 12-13 <sup>th</sup> C
Province: Ghūr		Core / Periphery: Ghūrīd heartland
Site Description:		
<p>Remains of a large fort with many square towers. Built out of mud-brick on a stone foundation; walls contain elaborate plaster decorated with impressed triangles, flouriations and animal motifs.</p>		
Fieldwork:		References:
		Klimburg 1960
Gaz. No.: 188	Chehel Abdal	Additional info.: Chalap Dalan
Site Type: Fort / Fortress		Date: Ghūrīd?
Province: Ghūr		Core / Periphery: Ghūrīd heartland
Site Description:		
<p>Remains of a citadel at the foot of Chehel Abdal mountain, 12 km north of Taiwāra.</p> <p>Ball 2002: maps also mark many towers further to the north-west on the route to the upper Farāh Rūd basin.</p>		
Fieldwork:		References:
1885 – Imam Sharif; 1946 – Kohzad		Holdich 1887; Imam Sharif 1891; Kohzad 1951-54; Ball 2002





Appendix Three: Ghūrīd sites

Gaz. No.: 189

Chehel Burj

Additional info.: 'Forty towers'

Site Type: Fort / Fortress

Date: Turki-Shāh-i?; Ghūrīd? 12-13<sup>th</sup> C

Province: Bāmiyān

Core / Periphery: Upland periphery

Site Description: (Fig. A3:3)

Remains of a huge fortress commanding a fork in the road, consisting of three lines of walls completely surrounding a hill. Walls were reinforced by towers up to 20 m high, and have loopholes in the form of long slits surrounded by three distinctive triangular openings. Construction is of mud-brick throughout, on a stone foundation. To the west are the possible remains of small town / bazar, enclosed by a wall.

Klujiver: on the left side of the Band-i Amīr river, two hours drive from Yakaulang. It is perched upon a high hilltop like most other Turki-Shāh-i (or Ghūrīd?) fortresses in the area. To the north-west is a large flat plateau, a few hundred meters wide and about a kilometre long, which would be an ideal, strategic location for a town, defended by the fortress. On this plateau are the remains of a huge mud-brick enclosure which might have marked the site of the town, but it is difficult to determine its age. Brett counted "over 300 large towers"; that seems a bit of an exaggeration, but there are certainly more than the forty given by the site's name. The "three lines of walls completely surrounding a hill" must also be imagined, for only parts of the highest one remain; moreover, there are no traces of walls or towers of second and third defensive lines on the back side of the fortress (south and west). Many of the towers are still in good condition and retain their distinctive decorative elements. Most of the central part of the site is under a thick layer of earth (mud-brick rubble); the higher parts of the walls which are visible show no traces of plaster or wood. One area, a kind of lower courtyard on the east side of the site (but belonging to the central corps), has been partially excavated in recent years by treasure hunters. They had not continued because, our local guide told us, they had found nothing valuable enough. The treasure hunters have, however, unearthed frescoes in the blind arches of the courtyard, and on the sides of two archways leading to a hole in the wall on the east side and to a tower on the north side.

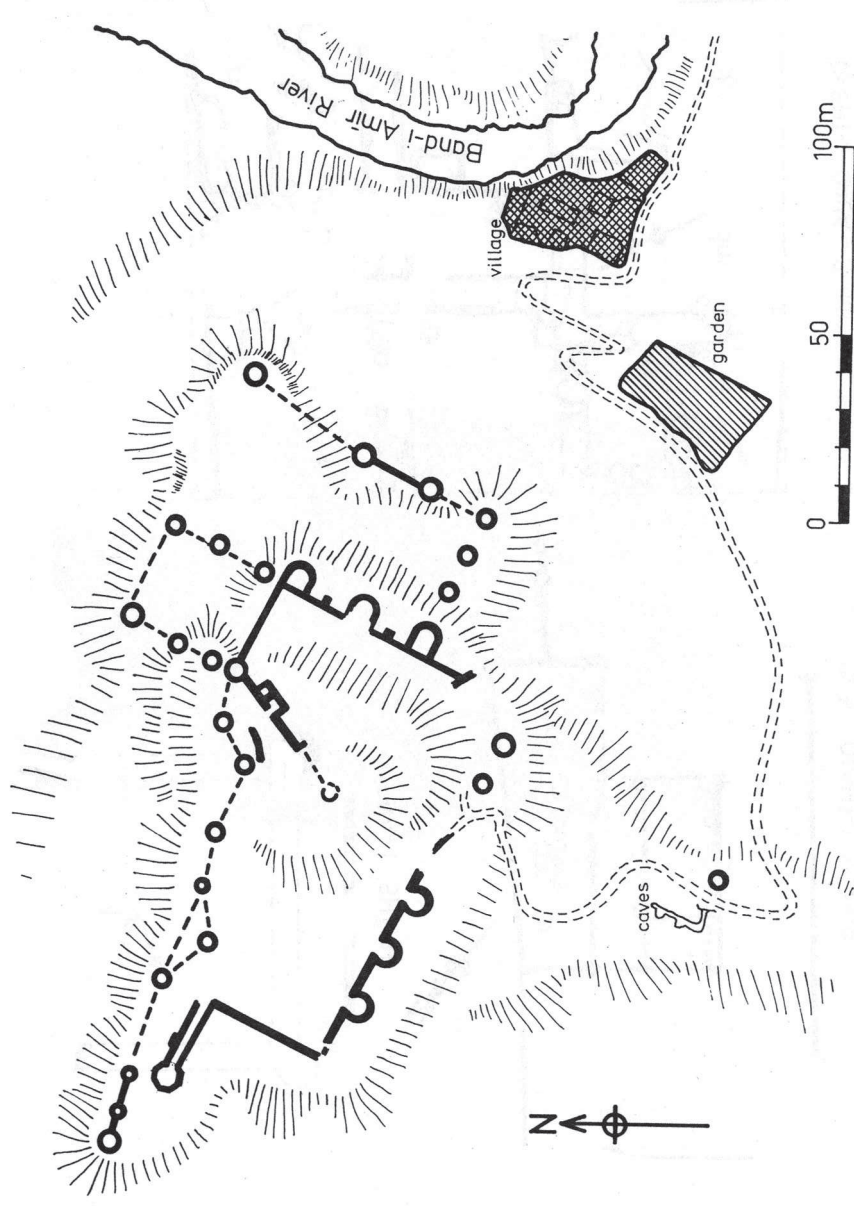
Summary of the frescoes:

Fresco #2, of which the central part was hewn out and the rest quite damaged, seems to represent a galloping horseman with a turban flying behind him.

Frescoes #3 and #4, on both sides of an archway leading to a precipice, show a couple of dancing women and the lower part of a much larger figure in a robe, walking. There are also many of the circular decorative patterns typical of the late Sāsānids in ochre-red paint.

Fresco #5, the largest one – apparently a portrait of King Zuhāk and an equal-sized woman holding his hand, with what seems to be an elephant behind them.

Kluyver argues that the 'un-Islamic' nature of the frescoes changes the date of the site to that of the Turk Khānates, 8-9<sup>th</sup> C – clearly somewhere between the Buddhist and the Islamic periods. The galloping horseman in Fresco #2 is reminiscent of one of the frescoes found at Balalyk Tepe (Uzbekistan). The dancing figures in Frescoes #3-4, "scantily dressed in tight pants with a veil around their breasts, make it quite unlikely that these frescoes were made in the Islamic period. One may even wonder whether the fort was subsequently occupied by the Ghurids, who would have probably destroyed these frescoes. It seems more likely that the fort was destroyed in the Islamic conquest (10th century)." The gaps above the shoulders of the main figure in Fresco #5 lend credence to the fact it was King Zuhāk, because this is where the



A3:3 Chehel Burj (Ball 1982 II: 430)

### Appendix Three: Ghūrīd sites

snakes must have been that, legend has it, had emerged from his shoulders when Hazrat °Alī damned him. Besides the giant Shahr-i Zuhak (or Red Fortress) in the Bāmiyān valley, there are at least two more places associated with his legend towards the west, in Ghūr province. Hazrat °Alī and Zuhāk symbolize the struggle between Good and Evil in these parts of Afghanistan.

Lee: an imposing and extremely well-preserved fortress situated on a steeply sloping hill on the left bank of the Band-i Amīr river. The fortress dominates the valley and the Yakaulang to the Darra-i Chasht road. The fortifications encompass the hill on all sides, but particularly to the east and south. At the apex of the site there are remains of what appears to have been an inner keep. Over the last decade, looters have exposed a series of chambers on the eastern face, below the keep and the first line of fortifications. On the north-west, on a spur of the hill there is a square tower which is stylistically typical of Ghūrīd fortifications. Beneath the fortress in the valley floor, to the west of the fortress, is an oblong enclosure with sub-surface structures clearly visible. It has been suggested this area either housed a large garrison and possibly a bazaar that serviced the fortress. The paintings were in much better condition when Kluyver described them in 2000; since then a great deal more damage has been done. The looters have hacked off the fragile paintings along with the mud and straw base using a variety of blunt instruments. Elements of the fortifications at Chehel Burj are stylistically typical of the Ghūrīd period, especially the structure on the extreme western ridge. Francfort, however, argues that the design of the fortifications suggests an earlier, Kushan or Kushano-Sāsānid date for the fortress. The discovery of the paintings seems to provide additional support for this earlier dating.

#### Fieldwork:

1885 – Maitland; 1970 – Brett

Gaz. No.: 195 Chehel Gazari

Site Type: Tower

Province: Ghūr

Site Description:

Fortified area consisting of three conical towers, 17 km west of Guzarpām on road from Čaghčārān to Shahrak.

#### Fieldwork:

1946 – Kohzad

Gaz. No.: 212 Čisht

Site Type: Isolated structure

Province: Harāt

Site Description: (Figs 5:26-7)

Two neighbouring brick monuments with abundant decoration, and vestiges of a probable *madrasa* whose walls have disappeared. The western building is square in plan (6.8 x 6.8 m); each internal face comprises a large niche covered by a broken arch, flanked by double engaged columns. Well-preserved band of epigraphy in

#### References:

Talbot *et al.* 1886; Brett 1970; Kluyver 2000; Lee 2006

#### Additional info.:

Date: Ghūrīd 12-13<sup>th</sup> C

Core / Periphery: Ghūrīd heartland

#### References:

Trinkler 1928; Kohzad 1951-54; Fischer 1978

#### Additional info.:

Date: Ghūrīd 12<sup>th</sup> C

Core / Periphery: Ghūrīd heartland



### Appendix Three: Ghūrīd sites

plaster. Door in the southern side, large windows in northern and eastern sides. The main facade, in the south, has geometric decoration in cut brick. The eastern building is rectangular in plan (8.11 x 5.6 m), also built of baked-bricks. *Mihrāb* in centre of west wall. Geometric decoration in brick on the interior of the arches, surrounded by finely worked plaster. Interior is well-preserved, despite the breach in the summit of the dome. Nothing remains of the other buildings apart from traces of walls extending from the northern, eastern and western walls.

Dupree: moulded terracotta brick deco is sadly damaged and the Kufic inscriptions mutilated; there is a finely preserved caravanserai to the south, 2 km from Āisht. Wannell: the domes belong to a *madrasa* built probably by Ghiyāth al-Dīn. The structure originally had twelve domes, housing 1000 students according to a local guide. Ghiyāth al-Dīn attempted to legitimize his conquest of Harāt by patronizing province's oldest religious family.

Franke & Urban: the south-western building is a badly preserved *madrasa*, the north-eastern one a mosque, but both belong to one complex.

#### Fieldwork:

1885 – Maitland; 1960 – Le Berre; 2006 – Franke & Urban

References:  
Dupree 1977; Samizay 1981; Wannell 2002  
Franke & Urban 2006

Gaz. No.: 231 Danistama  
Site Type: Isolated structure  
Province: Baghlān  
Site Description: (Fig. A3:4)  
Mud-brick structure, possibly a *madrasa* on a diaper masonry foundation in the Surkhāb Valley 12 km north of Tāiā. Fragments of elaborate stucco wall decoration were found, together with Ghaznawid slip-painted and Ghūrīd incised wares.

#### Fieldwork:

1960 – Le Berre

Gaz. No.: 239 Darra-i 'Alī

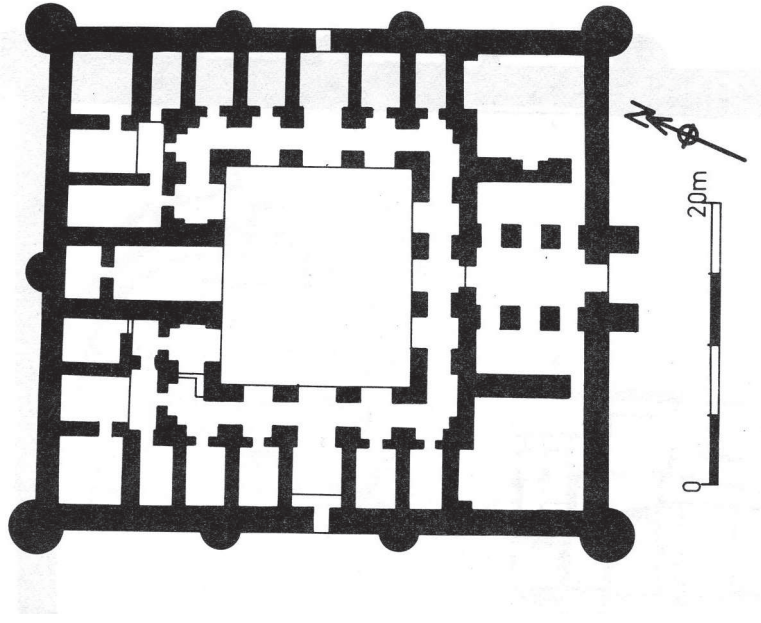
Site Type: Fort / Fortress

Province: Bāmiyān

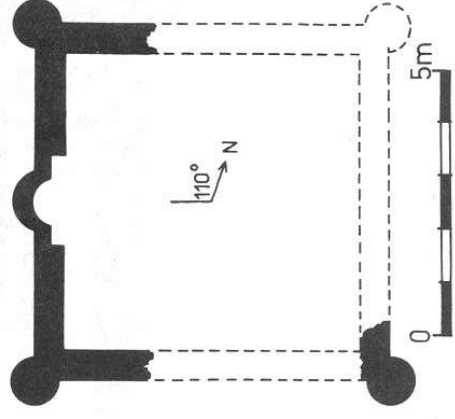
Site Description:

Lee: Darra-i 'Alī lies to the east of Yakaulang and to the west of Darra-i Gawhargīn. On the left bank of the river, on a low spur of rock set back from the road, is a single-room Ghūrīd fortress. A section of the bastion and part of the wall can be seen from the road. Below this fortress the valley is joined by a tributary running almost due south to the Kūh-i Bābā range. After following this tributary for some 2-3 km, this valley again forks and is joined from the west by another, secondary valley. The remains of the Ghūrīd fortress of Qash Qal'a lie on a high spur and pinnacle of rock some 300 m from the left bank of the west tributary. There are traces of a curtain wall running up to the apex of the ridge and the remains of two bastions, one on the apex of the ridge and another on a lower spur of the hillside to the east. The bastions

Appendix Three: Ghūrid sites



A3:4 Danistama (Ball 1982 II: 431)



A3:5 Darra-i Shākh (Ball 1982 II: 431)

### Appendix Three: Ghūrid sites

are incised with slits for archers and traces of simple incised triangular ornamentation can be seen on the lower bastion. The fortress commands an excellent view of both valleys, both up and downstream. The east (main) valley is reported to have once been used as a caravan (*kafilā*) route across the Kūh-i Bābā range to the south.

#### Fieldwork:

1885 – Maitland; 2002 – Lee

#### References:

Talbot *et al.* 1886; Lee 2006

Gaz. No.: 248 Darra-i Shākh

Additional info.: 'Valley of the Shaikh'

Site Type: Fort / Fortress

Date: Saljūqīd 1<sup>st</sup> half 12<sup>th</sup> C; Ghūrid 13<sup>th</sup> C

Province: Faryāb

Core / Periphery: Upland periphery

Site Description: (Fig. A3:5)

An extremely high mound with brick, stone and mortar remains, probably the ruins of a citadel. Many objects found locally at the site, including five Khwārazm-Shāhi coins dated 1200-1220 CE. On top of a hill, 1.5 km north-west of village are the remains of a mosque with its *kībla* wall still standing. It contains a *mīhrāb* with floral designs and a Kufic inscription.

#### Fieldwork:

1978 – Lee

#### References:

Lee 1980; Pinder-Wilson 1980

Gaz. No.: 251 Darwāza

Additional info.: 'Gate'

Site Type: Mound

Date: Late Sāsānid; Ghaznawid / Ghūrid 11-13<sup>th</sup> C

Province: Hilmand

Core / Periphery: Lowland periphery

Site Description:

Some mounds and ruins, in the desert ca 10 km east of the Hilmand, 13 km north-east of Safar.

#### Fieldwork:

1966 – Hammond

#### References:

Hammond 1970, sites 4 and 33

Gaz. No.: 255 Darzāb

Additional info.:

Site Type: Mound

Date: Ghūrid 12-13<sup>th</sup> C

Province: Ghūr

Core / Periphery: Ghūrid heartland

Site Description:

Many ruins in the form of mounds at the foot of hills to the south of the village. Reports of a small brass statuette of a man on a tiger, a cast metal pot and a Ghaznawid water container being found. See also Nili valley report in Ball 2002

#### Fieldwork:

1946 – Kohzad

#### References:

Kohzad 1951-54

Appendix Three: Ghūrid sites

Gaz. No.: 267	Dasht-i Qal'a	Additional info.:
Site Type: Mound		Date: Ghūrid? 12-13 <sup>th</sup> C
Province: FarāhCore / Periphery: Ghūrid heartland		
Site Description:		
Small site in a commanding position on a bluff overlooking the Larwand river, now covered by a village. Many objects said to have been found here, including pottery, coins and a monumental Ghūrid inscription.		
Ball 2002: quarter inch survey of India maps mark several forts that are no longer extant. Local sources said that it was the site of a large fortress, the capital of one of the Ghūrid sultans, which was completely destroyed by the Mongols. Also reportedly the site of a <i>čaharbagh</i> (gardens) built by Ghīyāth al-Dīn, by the river. Also the site of a monumental inscription brought from Qal'a-i Qaisar.		
Fieldwork:		References:
1977 – Ball		Ball 2002
Gaz. No.: 273	Dawlat Yār	Additional info.:
Site Type: Mound		Date: Ghūrid 12-13 <sup>th</sup> C
Province: Ghūr Core / Periphery: Ghūrid heartland		
Site Description:		
Small isolated mound near the village. 60 km east of Čaghčārān.		
Fieldwork:		References:
1963 – Thompson		
Gaz. No.: 286	Deh Iman	Additional info.: Dehmān
Site Type: Fort / Fortress		Date: Ghūrid
Province: Bāmiyān		Core / Periphery: Upland periphery
Site Description:		
Lee: small fortification to the north. On a west spur of the hill are the remains of the stone foundations of a Ghūrid fortress and some 200 m further down the valley are the ruins of another smaller, Ghūrid fortress of which only one bastion and a trace of wall survives.		
Fieldwork:		References:
Le Berre, 2004 – Lee		Le Berre 1987; Lee 2006

<b>Appendix Three: Ghūrīd sites</b>	
Gaz. No.: 300	Dīwāl-i Khudaidād
Site Type: Unwalled town / village	Date: <u>Ghaznawid -Ghūrīd</u> 11-13 <sup>th</sup> C; Mongol-Timūrīd 13-15 <sup>th</sup> C
Province: Nīmrūz	Core / Periphery: Lowland periphery
Site Description: (Fig. A3:6)	
An extensive area of remains, consisting of many ruins, mounds, <i>īwān</i> houses and an ancient canal system. No fortifications apart from some one and two storeyed vaulted watch-towers.	
Fieldwork:	References: Fischer 1973
1970 – Fischer	
Gaz. No.: 311	Dust Muḥammad
Site Type: Mound	Date: Indo-Parthian; Sāsānid; Ghūrīd 12-13 <sup>th</sup> C
Province: Hīlmand	Core / Periphery: Lowland periphery
Site Description:	
A mound and some ruins, on left bank of Hīlmand.	
Fieldwork:	References: Hammond 1970
1966 – Hammond	
Gaz. No.: 331Fulākar	Additional info.: aka Gawhar
Site Type: Isolated structure	Date: Ghūrīd? 12-13 <sup>th</sup> C
Province: Ghūr Core / Periphery: Ghūrīd heartland	
Site Description:	
Some extensive brick remains of a palace complex on two mounds, visible from 50 km away.	
Fieldwork:	References: Holdich 1887
1886 – Hira Singh	
Gaz. No.: 358	Ghazna
Site Type: Walled town / village	Date: <u>Ghaznawid-Ghūrīd</u> 11-13 <sup>th</sup> C; Timūrīd 15-16 <sup>th</sup> C
Province: Ghazni	Core / Periphery: Upland periphery
Site Description: (Figs 5:22-3)	
Large urban site consisting of a vast area of mounds and ruins littered with sherds and building debris. The most conspicuous remains are two elaborately decorated brick minarets or towers, both of which have only the first storey still standing, capped with modern tin roofs. Other remains include many elaborately carved grave	

Appendix Three: Ghūrid sites



A3:6 Dīwāli-Khudaidād (Fischer et al. 1974-76 II: Kartenbeilage 5)

### Appendix Three: Ghūrid sites

stones. Excavations revealed a private house and a palace. The palace is a complex of buildings surrounding a central, marble paved courtyard with a 250 m long carved marble inscription.

#### Fieldwork:

1956-64 – Scerrato & Bombaci

#### References:

Byron 1935, 1937; Bombaci 1959; Scerrato 1959, 1962; Pinder-Wilson 1981

Gaz. No.: 373

Additional info.:

Site Type: Walled town / village

Date: Ghūrid 1198; Tīmūrid ca 1495

Province: Harāt Core / Periphery: Lowland periphery

#### Site Description:

Numerous remains of city walls and an old fort, 80 km west of Harāt, on south bank of Harī Rūd. The Early Islamic Friday Mosque is similar to, but smaller than, Ziyāratgāh and in very poor condition; much of what remains probably dates to the Tīmūrid period (Patel pers. comm. 8/8/2011). A three-part Hebrew funerary inscription was found in the region.

#### Fieldwork:

1885 – Griesbach; 1975 – O’Kane; 1978-79 – Samizay; Patel 2011

#### References:

Lal 1846; Samizay 1981

Gaz. No.: 393

Additional info.: aka Shaila Rud

Site Type: Unwalled town / village

Date: Ghūrid-Tīmūrid 12-15<sup>th</sup> C

Province: Nīmrūz

Core / Periphery: Lowland periphery

#### Site Description:

Some ruined mud-brick buildings and scatter of sherds on both sides of the river. The buildings have a decorated façade of blind arches and crosses.

#### Fieldwork:

1969, 1971-72 – Dales

#### References:

Yate 1900

Gaz. No.: 398

Additional info.: inc. Qal’a-i Sar-i Sang & Qurghan

Site Type: Fort / Fortress

Date: Turk / pre-Mongol Islamic 7-13<sup>th</sup> C; Ghūrid

Province: Bāmiyān

Core / Periphery: Upland periphery

#### Site Description:

Small fort, said locally to be very ancient, containing famous ziyārat dedicated to Muḥammad Ḥanīfa. Several more forts to north and south along the valley.

Lee: Le Berre wrongly refers to the site as “Qurghan”, after a village nearby; the villagers who live at the base of this fortress refer to it as Qal’a-i Ḥanīfa. This imposing fortress is perched high on a spur of rock dominating the north entrance to the Sūkhta Chinār valley, which even today remains the main route to Bāmiyān. The fort is constructed using a dry stone wall technique. It is well described by Le Berre, but his claim that the interior of the fortress is completely destroyed is not correct. A

### Appendix Three: Ghūrid sites

walkway carved into the rock on the south side of the fortress gave access to the river, but has been filled in. The fortress was first described and sketched by Charles Masson in ca 1834. The drawing shows the west and north walls of the fortress and reveals that at the time of his visit much of the wall on the north side of the fortress, which is now partly fallen, was still standing. An arched entrance is also visible on the west wall just behind the bastions. Stylistically, the fortress has elements of Ghūrid ornamentation and the bastions, particularly on the west wall, are similar in construction to other Ghūrid fortresses. However, unlike the majority of Ghūrid fortresses, the walls and bastions are dry stone walls rather than mud-brick.

#### Fieldwork:

1885 – Maitland; 1974-75 – Le Berre; 2004 – Lee

Gaz. No.: 403

Guzarpām

Site Type: Fort / Fortress

Province: Ghūr Core / Periphery: Ghūrid heartland

Site Description:

Ruined fortress.

#### Fieldwork:

References:

Klimberg 1960; Fischer 1969, 1978

Additional info.:

Date: Ghūrid 12<sup>th</sup> C

Gaz. No.: 419

Hauz-i Bangi

Site Type: Fort / Fortress

Province: Ghūr Core / Periphery: Ghūrid heartland

Site Description:

Remains of a fort.

#### Fieldwork:

References:

Dupree 1977

Additional info.: inc. Kuhandazh

Date: Achaemenid; Sāsānid?; Saljūkid, Ghūrid, Kart, Timūrid 11-16<sup>th</sup> C

Gaz. No.: 428

Harāt

Site Type: Walled town / village

Province: Harāt Core / Periphery: Lowland periphery

Site Description: (Figs 5:24-5)

Large urban area, the old part of which is still partly surrounded by the remains of massive mud walls. Standing monuments within these walls include the immense fortress-palace of Kaḷʿa-i Ikhtiyaruddīn, a mainly 15<sup>th</sup> C citadel of baked brick standing on a mound and protected by a glacis and the elaborate Friday Mosque, which, although largely modern, contains good examples of Islamic decoration from 12<sup>th</sup> C Ghūrid brick-work to 15-16<sup>th</sup> C Timūrid tilework.



Appendix Three: Ghūrīd sites

Fieldwork: 1975-9 – Bruno; Pagliero & Van Eenhooge; Franke & Urban / DAFA	References: Ferrier 1857; Yate 1888; Trinkler 1928; Byron 1938; Fyre 1948 (Ghūrīd parts of mosque); Lezine 1963-64 (Ghūrīd portal); Brandenberg 1977; Glatzer 1980 (mosque); Stuckert 1980 (mosque); Samizay 1981; Franke & Urban 2006
Gaz. No.: 433 Site Type: Tower Province: Farāh Core / Periphery: Ghūrīd heartland Site Description: 3 km from the mouth of the valley, east of Masjid-i Sangi, are the remains of a stone structure, locally known as a 'throne'; also two caves, 500m above the valley floor, in which coins were reportedly found. On top of the mountain above the caves are some baked bricks and sherds. Ball 2002: the remains of a signalling tower similar to that overlooking Nili?	Additional info.: Date: Ghūrīd?
Fieldwork: 1946 – Kohzad	References: Kohzad 1951-54; Ball 2002
Gaz. No.: 468 Site Type: Other Province: Ghūr Core / Periphery: Ghūrīd heartland Site Description: (Figs – Chapter Six) Minaret or victory tower, probably marking the site of the Ghūrīd capital Fīrūzkūh; 65 m high, 9 m in diam. at base, made up of four tapering cylindrical shafts on an octagonal base, with double spiral staircase. The exterior is completely covered in decorative brickwork, except for one band of blue tile inscription near top. Hebrew inscriptions have been found in a cemetery on the hill of Kushkak between Djām village and the minaret. South of the river are mud-brick watch-towers forming a fortification line. Another fortress with a brick-lined reservoir lies on the north side of the river. Several more mud remains are in immediate vicinity, including possibly a bazar and mosque, both to east and west of minaret. Ball 2002: minaret was also reported by Khalil Afghani in 1930 and Ahmad Ali Kohzad in 1954. Wannell: visited in 1989; on the north bank of river is the shrine of Sayyid Ḥasan Bukhārī. The saint's tomb was covered in fragments of carved white marble, probably looted from the dado of a ruined palace or mosque. Recently looted objects include a bronze statue of a seated bearded man with one hand raised as if teaching. Local tradition has it that there was once another minaret facing the surviving one, and that the Harī Rūd had been covered with a brick platform to make a mosque. More baked-brick ruins have been found on the banks of the Baydān.	Additional info.: inc. Kushkak Date: Ghūrīd 12 <sup>th</sup> C

Appendix Three: Ghūrid sites

Fieldwork: 1956 – Maricq & Le Berre; 1959 – Fischer; 1961-62 – Bruno; 1971 – Scarcia; 1973 – Herberg; 2003, 2005 – Thomas <i>et al.</i>	References: Maricq & Wiet 1959; Ball 2002; Wannell 2002; Sourdel-Thomine 2004; Thomas 2007; Thomas <i>et al.</i> 2004; 2006
Gaz. No.: 485 Kachi Gird	Additional info.: Date: Ghūrid? 12 <sup>th</sup> C
Site Type: Fort / Fortress Province: Ghūr Core / Periphery: Ghūrid heartland	
Site Description: Ancient fortress and many other ruins and towers extending for some distance. Ball 2002: Fig. 2.5. No further information.	
Fieldwork: 1946 Kohzad	References: Kohzad 1951-54; Ball 2002
Gaz. No.: 489 Kāfir Qal'a Deh Imām	Additional info.:
Site Type: Fort / Fortress Province: Bāmiyān	Date: Turk / pre-Mongol Islamic 9-13 <sup>th</sup> C; Ghūrid Core / Periphery: Upland periphery
Site Description: Remains of a fortress, consisting of ruins of high mud walls and towers, on two spurs on the side of the valley. Lee: Two impressive, extensive and well-preserved Ghūrid fortresses on either side of the road to the Dandān Shikān pass some 5 km west of Saighān township. Le Berre wrongly refers to this site as "Kafari". Both sites are referred to by villagers as Kāfir Qal'a. They have reportedly been heavily looted following the chance discovery of a statue or figurine. A large pan, plate or pot was uncovered around the same time. During the diggings a system of tunnels had also been uncovered. This is probably a covered shaft in the rock face leading down to either a spring or the river and is a common feature of many of the larger Ghūrid fortresses.	
Fieldwork: 1885 – Maitland; 1974-75 – Le Berre; 2004 – Lee Kak-i Kuhzad	References: Maitland 1888; Le Berre 1981 – A2, Darya-i Saighan 4; Lee 2006
Gaz. No.: 507	Additional info.: aka Kāfir Qal'a
Site Type: Fort / Fortress Province: Farāh Core / Periphery: Lowland periphery	Date: Ghaznawid & Ghūrid 11-13 <sup>th</sup> C
Site Description: Stone-built fortifications with bastions defending a hill-fort. Some sections of baked brick masonry (50 x 40 x 6 cm) noted near summit. Outline of a rectangular enclosure with towers midway along each side visible in evening light on plain below hill-fort. Pottery included <i>sgraffiato</i> , embossed / moulded and glazed wares, glass	

Appendix Three: Ghūrid sites and fragments of stone (?) mortar. Fieldwork: 1949 – De Cardi; 1952 – Le Berre; 1960-70 – Fischer Gaz. No.: 521 Site Type: Mound Province: Hilmand Site Description: A mound. Fieldwork: 1966 – Hammond Gaz. No.: 556 Site Type: Fortifications Province: Bāmiyān Site Description: Remains of some fortifications, 3 km south-east of Chehel Burj, on east bank of Band-i Amīr river. Fieldwork: 1886 – Maitland; 1970 – Brett Gaz. No.: 560 Site Type: Scatter Province: Nīmrūz Site Description: Extensive sherd scatter on east bank of Hilmand between Safar and Gawharkhan. Fieldwork: 1966 – Hammond Gaz. No.: 608 Site Type: Walled town / village	Kamtudi Wakīl Khān Date: Indo-Parthian; Sāsānid; Ghaznawid -Ghūrid 11-13 <sup>th</sup> C Core / Periphery: Lowland periphery References: Fischer <i>et al.</i> 1974-76; Dupree 1977 Additional info.: Date: Indo-Parthian; Sāsānid; Ghaznawid -Ghūrid 11-13 <sup>th</sup> C Core / Periphery: Lowland periphery References: Hammond 1970 Additional info.: 'Place of the Jews' Date: Ghūrid? 12-13 <sup>th</sup> C Core / Periphery: Upland periphery References: Holdich 1910; Brett 1970 Additional info.: Date: Achaemenid; Indo-Parthian; Sāsānid; Samanid-Ghūrid 10-13 <sup>th</sup> C; Tīmūrid 15-16 <sup>th</sup> C Core / Periphery: Lowland periphery References: Hammond 1970 Additional info.: aka Qal'a-i Sultān Date: Seleucid; Parthian & Indo-Parthian; Sāsānid; Samanid-Ghūrid 10-13 <sup>th</sup> C; Tīmūrid 15-16 <sup>th</sup> C
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### Appendix Three: Ghūrīd sites

Province: Hilimand	Core / Periphery: Lowland periphery
Site Description: Extensive remains and mounds, dominated by a huge fortress mound in a walled enclosure. Baked brick tower on opposite side of river.	
Fieldwork: 1966 – Hammond	References: Hammond 1970
Gaz. No.: 620	Additional info.: Ghundi Paisa
Site Type: Scatter	Date: Kushan, Sāsānid, Turki Shahi (1 <sup>st</sup> -9 <sup>th</sup> C); Ghaznawid or Ghūrīd (11-13 <sup>th</sup> C)
Province: Kāpīsā	Core / Periphery: Upland periphery
Site Description: Remains of a stupa, with a few Islamic sherds.	
Fieldwork: Masson – 1834	References: Masson 1842; Gardin & Lyonnet 1980
Gaz. No.: 658	Additional info.: Date: Turk and/or Ghūrīd, 7-13 <sup>th</sup> C
Site Type: Fort / Fortress	Core / Periphery: Upland periphery
Province: Sar-i Pul	
Site Description: Ruins of two mud-brick forts on stone footings. Inside are remains of vaulted rooms, and outside are arrow slits surmounted by three impressed triangles, as at Chehel Burj.	
Fieldwork:	References: Miriq & Wiet 1959
Gaz. No.: 683	Additional info.: aka Malikān, Masjid-i Sangi, Ziyārat-i Malikān
Site Type: Isolated structure	Date: Ghūrīd 12-13 <sup>th</sup> C
Province: FarahCore / Periphery: Ghūrīd heartland	
Site Description: (Fig. A3:7) Small building ca 2.5 m square, 3 m high, of very carefully fitted masonry blocks. Very elaborately decorated façade and the remains of a dome inside. Architecture is entirely in the style of north-west India. Nearby is the outline of a huge rectangular enclosure. Ball 2002: one of the most important monuments in Ghūr. Wannell: small ruined stone mosque; fine stone masonry carved in Indo-Muslim style associated with north-west India. Above the entrance arch is carved a heraldic	

Appendix Three: Ghūrīd sites

device of horned candlestick, or crescent moon on a cone. The same design is found on a mud-plastered defensive tower, Sang-i Mazār (Gaz. No. 987). Khwāja Khezr irrigation tunnel on pass between Larwand and Tulī is also built of fine stone masonry.

Fieldwork:

1946 – Kohzad; 1969 – Scarcia; 1977 – Ball

References:

Kohzad 1951-54; Klimberg 1958, 1960, 1963; Scarcia & Taddei 1973; Ball 1990; Ball 2002; Wannell 2002; Flood 2009a

Gaz. No.: 685                      Lashkar-i Bāzār

Site Type: Unwalled town / village

Province: Hilmand

Site Description: (Figs A3:8, 5:20-1)

Vast concentration of palatial residences and public buildings stretching along the banks of the Hilmand between Bust and the modern town of Lashkargah for 6.5 km. The remains include three palaces on a bluff overlooking the river, a Friday Mosque, *bāzār*, kilns with extensive local production and many other buildings. The most important finds were many decorative elements from the main palace – frescoes, stuccoes, inscriptions – see Schlumberger 1978.

Fieldwork:

1949-52 – Schlumberger

References:

Kohzad 1949, 1951; Schlumberger 1949, 1952, 1978; Gardin 1963; Allen 1988, 1989, 1990

Gaz. No.: 693                      Mahdi Khēl

Site Type: Fort / Fortress

Province: Paktya

Site Description:

Very ruined old fort. Hoard of gold coins found in 1969, most of them Khwārazm-Shāhi.

Fieldwork:

References:  
Bivar 1975

Gaz. No.: 704                      Manāra

Site Type: Fort / Fortress

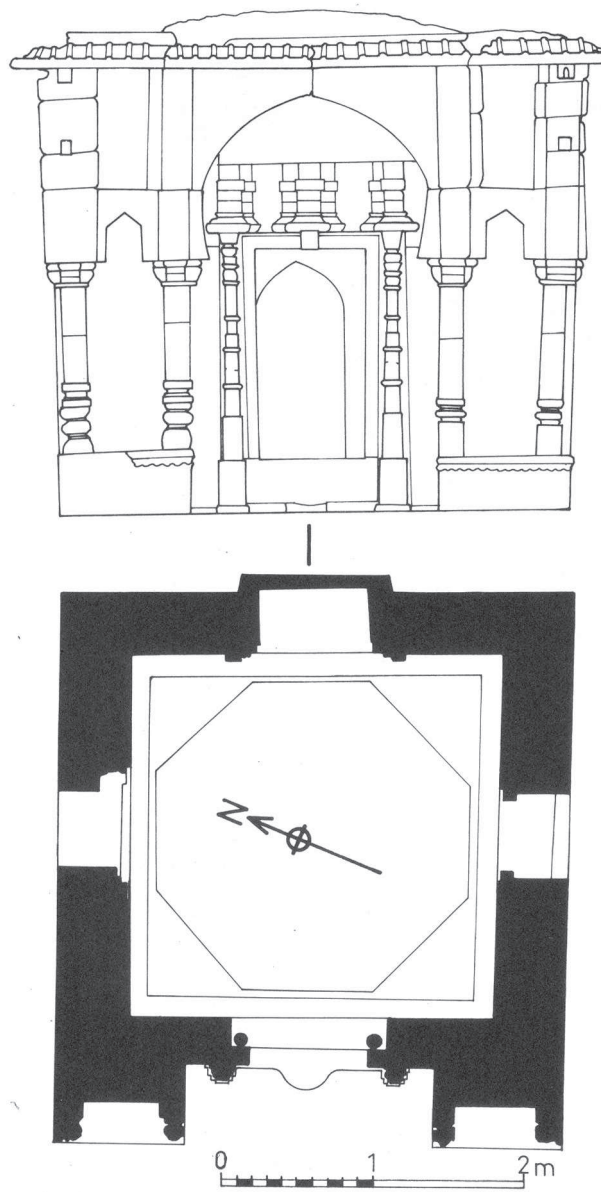
Province: Ghūr Core / Periphery: Ghūrīd heartland

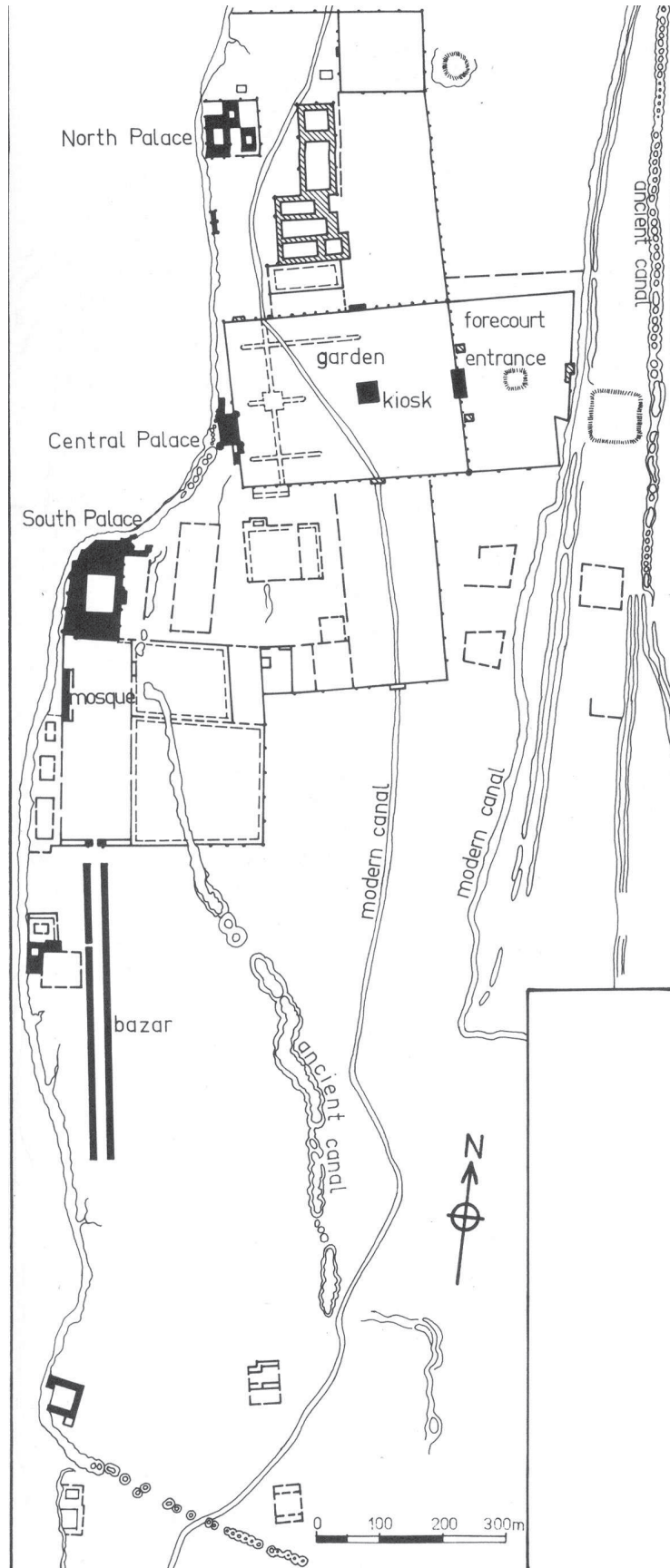
Site Description:

Remains of a castle, 5 km east of Gazari on the Čaghčārān / Taiwāra road.

Additional info.:

Date: Ghūrīd 12-13<sup>th</sup> C





A3:8 Lashkar-i Bāzār (Ball 1982 II: 457)

### Appendix Three: Ghūrid sites

Fieldwork: 1946 – Kohzad	References: Kohzad 1951-54
Gaz. No.: 707	Additional info.: Mang Qal'a
Site Type: Mound	Date: Saldjūkid / Ghūrid 12 <sup>th</sup> C
Province: Samangān	Core / Periphery: Upland periphery
Site Description: Large mound, 10 m high; probably remains of a fort and associated settlement. Islamic sherds on top, but prehistoric sherds at lower levels. 12 <sup>th</sup> C green glazed bowl found by chance.	
Fieldwork: 1885 – Maitland; 1946 – Wheeler	References: Maitland 1888; Wheeler 1947
Gaz. No.: 717	Additional info.: Mināra
Site Type: Tower	Date: Ghūrid 12-13 <sup>th</sup> C
Province: Ghūr Core / Periphery: Ghūrid heartland	
Site Description: Kästner 1968: Well preserved 13 m high tower on a ca 1 m high stone footing; walls are at least 1 m thick, built out of mud-bricks measuring ca 40 x 20 x 10 cm. On the east face of the tower is a 6 m vertical line of plaster, protruding ca 30 cm from the wall. The tower is rectangular and orientated east-west, with apses in the north and south. The apses have large niches and the structures' walls are pierced with numerous loopholes. A putative mosque is located 500 m west of the tower. Ball 1982: Remains of many mud-brick towers to east and west of the village, including one with a spiral staircase. Ball 2002: The route west from <u>Shahrak</u> towards <u>Harāt</u> is guarded by lines of towers and fortifications at Pul-i Zuhak, Mināra, Palangkhāna and Nalbandān, and eroded artificial mounds at Kata Chashma might mark more.	
Fieldwork: Kästner 1963	References: Kästner 1968; Ball 2002
Gaz. No.: 742	Additional info.: aka Mullāh 'Alā' / Mala Alau
Site Type: Fort / Fortress	Date: Ghūrid 12-13 <sup>th</sup> C
Province: Ghūr Core / Periphery: Ghūrid heartland	
Site Description: Group of ruined mud-brick forts and towers on stone foundations, some standing to a height of 10 m. The outside walls are decorated in simple geometric patterns. Ball 2002: 11 km south-west of Taiwāra; eight towers in two groups on either side of the road overlooking the valley. One of the towers has quite elaborate decoration	



### Appendix Three: Ghūrid sites

in moulded plaster, as well as the more familiar impressed wedges – possibly those referred to as Muhalla by Wannell.

#### Fieldwork:

1885 – Sahibdad Khan; 1946 – Kohzad; 1977 – Ball

Gaz. No.: 751

Mushkan

Site Type: Isolated structure

Province: Farāh Core / Periphery: Ghūrid heartland

Site Description:

Modern mosque of Abū Bakr contains a re-used ancient *mihṛāb* and two wooden pillars. The *mihṛāb*, although damaged by modern re-working, has a horseshoe arch niche head and a Kufic inscription. The two pillars are completely covered with carved geometric patterns.

Ball 2002: three areas of ruins are marked on the map, 20 km south on the road towards Gulistān / Farāh.

#### Fieldwork:

Klimberg 1958; Ball 2002

Gaz. No.: 759

Nalbandān

Site Type: Tower

Province: Ghūr Core / Periphery: Ghūrid heartland

Site Description:

Ruins of two mud-brick towers on either side of a gully.

#### Fieldwork:

Kästner 1968; Ball 2002

Gaz. No.: 767

Nawrak

Site Type: Fort / Fortress

Province: Ghūr Core / Periphery: Ghūrid heartland

Site Description:

Ball 2002: very ruined castle and several towers, 61 km north of Taiwāra. The castle consists of mud-brick walls on stone footings. The north end is comparatively well preserved, consisting of a square projection flanked by two circular corner buttresses. It has four openings in the wall, one above the other, which may originally have been windows, as well as a line of four arrow slits about a quarter of the way up. The east face has some mud plaster surviving on which were impressed characteristic lozenge patterns. The remains of five further towers, completely separated from the main castle itself, extend to the west – badly ruined, but where discernible, they appear to be square. ca 1 km to the east, where the *dasht* opens out, there were three more, very ruined towers stretching for about a kilometre.

Appendix Three: Ghūrid sites

Fieldwork: 1946 – Kohzad; 1977 – Ball	References: Kohzad 1951-54; Ball 2002
Gaz. No.: 775	Nili
Site Type: Fortifications	Date: Ghūrid 12-13 <sup>th</sup> C
Province: Ghūr Core / Periphery: Ghūrid heartland	
Site Description: Very extensive remains of fortifications and towers defending the route from Zarni to Yāmān, in the area south-east of Taiwāra. Ball 2002: reports of an ancient 'city' in the Nili Valley, to north-east of route leading to Yāmān. Nili refers to the valley, rather than a specific village. Large tower-like structure (a signal tower?) on top of mountain west of Zalargak (11 km from Zarni). The <i>wakil</i> (imam's agent) claimed the tower was part of a signalling system which could carry a message from Čaghčārān to Farāh in a day. Tower 1: north-west of village of Sanglech, 14 km from Zarni – small, square mud tower, possibly later than others. Tower 2: several hundred metres to north-east – a circular tower 10-12 m in height, constructed of mud-brick on rough stone and mud footing ca 2 m high. Inside, two tiers of slits surrounded by semi-circular reveals. 4 km further up valley is a series of low mounds forming a rough square measuring ca 80 x 82 m. Stump of a mud wall survives to a height of 1 m in one corner. Tower 3: 6 km east of Mahalla – same construction as others, ca 6 m high with lozenge patterns impressed on exterior mud plaster. Remains of a second circular tower just visible to east – originally joined? Other towers recently destroyed for cultivation. Remains of one visible 3 km north-east further up valley towards Yāmān (Darzab?), and remains of 12? more visible further down the valley between T3 and Mahalla. Coins have been found in these towers. At Darzab, Kohzad reported ruins in form of mounds, where metal objects have been found.	
Fieldwork: 1977 – Ball	References: Klimberg 1960; Ball 2002; Wannell 2002
Gaz. No.: 783	Pai Hisār
Site Type: Other	Date: Ghūrid
Province: Ghūr Core / Periphery: Ghūrid heartland	
Site Description: Some Ghūrid remains; no further details.	
Fieldwork:	References: Rafat 1980

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Appendix Three: Ghūrid sites

Gaz. No.: 787	Pā'īn Mazār	Additional info.: inc. Qal'a-i Chāhar Baradar & Qal'a-i Zuhak
Site Type: Fortifications		Date: Ghūrid 12-13 <sup>th</sup> C
Province: Ghūr Core / Periphery: Ghūrid heartland		
Site Description:		
<p>Two large complexes of ruined forts and towers known respectively as Qal'a-i Chāhar Baradar and Qal'a-i Zuhak. Towers are mostly square and are constructed out of mud-brick and <i>paḵḥsa</i> on a stone foundation. Many of the exterior walls have decorative panels of elaborate floriated patterns in mud plaster.</p> <p>Ball 2002: 11 km south from Āna is a single square tower; another 3 km further on is the extensive series of fortifications in and around Pā'īn Mazār. The main concentration is a series of nine towers on either side of the river, originally perhaps forming two forts, although any inter-connecting walls have disappeared. There are the remains of 3-4 towers further to the west that may originally have been a third fort. All appear parts of what originally must have formed a single extensive fortified complex. The most elaborate towers are those four comprising Qal'a-i Chāhar Baradar.</p> <p>Tower 1 is square with four circular corner towers and a fifth semi-circular buttress on the north side. Construction is of stone and mud for the first 3 m, thence mud-brick. North side is better preserved, with the remains of four storeys of semi-circular, very low (1.3 m high) vaulted rooms visible. Both interior and exterior surfaces are plastered with thickly straw-tempered mud plaster, with impressed lozenge patterns on the exterior. There is a revetment wall, possibly incorporating an external staircase up to the entrance at the south-west corner.</p> <p>Tower 2 is similar to Tower 1, but without any intermediate buttress and generally better preserved. The corner towers do not appear to be attached to the main body of the central square tower. The interior is divide into two by a mud-brick arch, the springing of which survives on one side.</p> <p>Tower 3 is square with a semi-circular salient on one side and semi-circular buttresses on two other sides. It is very well preserved, although the interior is completely ruined. There are remains of a possible circular tower at the north-west corner.</p> <p>Tower 4 is square with a square salient on one side and a semi-circular buttress on the opposite side. It is also very well preserved on the exterior although very ruined inside. Curvilinear decoration is cut into the mud plaster on the west and south sides. ca 1.5 km upstream further north is another series of towers, Qal'a -i Zuhak, which probably formed another (unvisited) fort.</p>		
Fieldwork:		References:
1977 – Ball		Ball 2002
Gaz. No.: 793	Palangkhāna	Additional info.: see also Mināra and Nalbandān
Site Type: Tower		Date: Ghūrid 12-13 <sup>th</sup> C
Province: Ghūr Core / Periphery: Ghūrid heartland		
Site Description:		
<p>Remains of two towers on opposite sides of the valley.</p>		

### Appendix Three: Ghūrid sites

Fieldwork:	References: Kästner 1968; Ball 2002
Gaz. No.: 803	Additional info.: Pasāngan
Site Type: Fort / Fortress	Date: Ghūrid?
Province: Ghūr Core / Periphery: Ghūrid heartland	
Site Description:	
Remains of a citadel to east of the road from Čaghčārān to Taiwāra; also the tomb of Khwāja Wajduddīn, which is believed to be early.	
Fieldwork:	References: Kohzad 1951-54; Ball 2002
Gaz. No.: 845	Additional info.: Qal'a-i Gawhargīn
Site Type: Fort / Fortress	Date: Turki-Shah 9-10 <sup>th</sup> C?; Ghūrid
Province: Bāmiyān	Core / Periphery: Upland periphery
Site Description:	
Remains of an ancient mud-brick fort, built in a very inaccessible position with a ravine on two sides. Several towers; inside is a rock-cut staircase descending below ground level. Just below the fort is a mound resembling a stupa.	
Ključer: in the fertile Firūzbihar valley, about 20 min. south of the road from Bāmiyān to Yakaulang. Not much remains of this curious fortress; all buildings are on a north-west-south-east line. There probably used to be a footpath from one end of the fortress to the other, linking the various defensive buildings, and there might have been terraces in stone to support some buildings; as it is now, it is very difficult to get from one end to the other, and it seems quite impossible that any major building could have been built on this steep, irregular terrain. The remains are in mud-brick and of similar construction to Chehel Burj or Saighān; they probably date from the same, Turkish period. They are mostly towers, and there is one slightly bigger building (multi-storeyed) with some blind arches. No traces of decorative elements, except the usual mud-brick patterns. On the very top of a rocky ridge a wall still stands, overlooking a cliff on the Firūzbihar side, and a steep rocky slope on the south-east side; maybe a building or sentinel path was built on this steep slope using stone terracing. Even more mysterious is a staircase hewn in the rock, which descends to the centre of the mountain. First you drop down a 6 m high shaft, and then descend 99 high steps. No traces of decoration remain on the walls or ceiling. The end has caved in. Local legend has it that the underground passage goes far towards Bāmiyān. I reckoned that the staircase probably used to go to ground level, offering easy access to the people wanting to reach and leave the fortress, because the climb up the cliff is very difficult. It may also have led to a well. Nearby, a cliff at least 20 m high is entirely covered in straw-plaster. Why would a cliff be plastered over? The only reason I can think of is that there must have been a huge painting or fresco adorning the side of this fortress. Ball does not give a date to this fortress; I venture it must be from the 9-10 <sup>th</sup> century like the other fortresses in the area.	
Lee: minor fortress at confluence of main and subsidiary valley. The main fort is an imposing, multi-roomed Ghūrid fortress. On the northern face of the subsidiary	

### Appendix Three: Ghūrid sites

valley to the north-east is a single roomed fortress located on a low ridge overlooking this secondary valley. A third fortress of similar design to the second, lies at the confluence of this minor valley with the Darra-i Gawargīn. The main fortress of Gawargīn consists of a large central keep with a round, three-quarter circle, bastion at the apex of the ridge with two large rooms to the west. High walls run along the southern face of the ridge which are punctuated by three bastions. The walls and bastions are made of mud-brick and are ornamented with the characteristic Ghūrid geometrical pattern composed of lines of incised triangles. There are a series of narrow arrow slits used as fire points for archers. Arched doorways provide access to the interior of the keep.

#### Fieldwork:

Talbot & Maitland – 1885; 2000 – Klujver; 2002 – Lee

Gaz. No.: 864

Qal'a-i Malik Antar

Site Type: Fort / Fortress

Province: Ghūr Core / Periphery: Ghūrid heartland

Site Description:

A 10 m high square stone fort with snake-like decoration on the eastern and southern walls. There are remains of several more stone and mud-brick forts on either side of the valley.

#### Fieldwork:

1946 – Kohzad

Gaz. No.: 869

Qal'a-i Naqshi

Site Type: Fort / Fortress

Province: Ghūr Core / Periphery: Ghūrid heartland

Site Description:

Remains of an ancient baked brick fortress with baked brick patterns on the walls, in the mountains south of the Band-i Bayan, south of Čaghčārān.

#### Fieldwork:

1885 – Maitland

Gaz. No.: 875

Qal'a-i Qaisār

Site Type: Fort / Fortress

Province: Ghūr Core / Periphery: Ghūrid heartland

Site Description:

Large, well-preserved stone fortress in a high position guarding the route. Consists of an inner and outer enclosure surrounded by walls 4 m thick and round and hexagonal towers up to 8 m high. Main entrance defended by two towers to the north. Inside, the walls have decorative bands of impressed triangles in yellow plaster,

Appendix Three: Ghūrid sites

ca 20 cm wide. In the west enclosure are the remains of a mosque. The fortress is said by local tradition to have been built by ʿAlāʾ al-Dīn and completed by Ghiyāth al-Dīn. “2 hrs march” to the south are many more ruins and fortifications known as Fakhrābād, where some gold and silver coins were reported to have been found in the early 19<sup>th</sup> C.

Ball 2002: one of the largest, most elaborate fortifications in Ghūr, constructed out of mud on high stone footings.

Wannell: the fort commands the whole valley largely populated by “Mongols”; its mud-rendered walls are carved in the form of dumpings and sickles. Similar ornaments are found on the towers at Mullahā, Galla Cheshma and Sarmazur in Nili, at Kaji in Chahār Dar and Yakhān Bālā in the upper Taiwāra valley (Gaz. No. 1236). Therefore built at the same time and by the same people – Ghūrids or conquering Mongols?

Fieldwork:

1885 – Imam Sharif; 1946 – Kohzad

References:

Kohzad 1951-54; Klimberg 1960; Fischer 1978; Wannell 2002

Gaz. No.: 879 Qalʾa-i Sangi

Additional info.:

Date: Ghūrid 12-13<sup>th</sup> C

Site Type: Fort / Fortress

Province: Ghūr Core / Periphery: Ghūrid heartland

Site Description:

Remains of a fortress on top of a hill, on the opposite side of valley from Qalʾa-i Qaisār. Built out of large, roughly cut stones without mortar; originally had an aqueduct leading into an immense central cistern.

Fieldwork:

References:

Ferrier 1857

Gaz. No.: 882 Qalʾa-i Sultān

Additional info.:

Date: Ghūrid 12-13<sup>th</sup> C

Site Type: Fort / Fortress

Province: Ghūr Core / Periphery: Ghūrid heartland

Site Description:

Remains of a fort associated with Qalʾa-i Zarmurgh / ‘lost minaret’ at Sakhar.

Fieldwork:

References:

Kohzad 1959

Gaz. No.: 938 Qūri

Additional info.:

Date: Parthian - Saka; Indo-Parthian; Sāsānid; Ghūrid 12-13<sup>th</sup> C

Site Type: Mound

Province: Hilmand

Site Description:

Core / Periphery: Lowland periphery

Appendix Three: Ghūrid sites

Mound and Islamic cemetery, ca 23 km south-west of Bust, in the desert between Nad-i and the Hilmand.

Fieldwork:

1966 – Hammond

References:

Hammond 1970

Gaz. No.: 970

Sain

Additional info.:

Site Type: Tower

Date: Ghūrid 12-13<sup>th</sup> C

Province: Ghūr Core / Periphery: Ghūrid heartland

Site Description:

Very small group of towers defending the road (35 km south-east of Taiwāra on road to Zarni).

Ball 2002: two towers overlooking the village of Sain, 3 km south of Pā'in Mazār (Gaz. No. 787).

Tower 1 is rectangular, standing above the valley to the west, ca 8 m high. Construction is of mud heavily tempered with twigs, on a stone footing 2.3 m high. It has a semi-circular salient on one side, surviving only at stone footing level.

Tower 2 is a very ruined tower on an adjacent hill just to the east; probably same plan as Tower 1.

Tower 3 is 4 km to south-west.

Fieldwork:

1977 – Ball

References:

Ball 2002

Gaz. No.: 974

Sakhar

Additional info.: aka Saghar / Qal'a-i Zarmurgh

Site Type: Isolated structure

Date: Ghūrid 12-13<sup>th</sup> C

Province: Ghūr Core / Periphery: Ghūrid heartland

Site Description:

Remains of a Ghūrid palace that includes a baked brick minaret 30 m high.

Ball 2002: Kohzad does not seem to have visited the place, but the existence of the minaret was confirmed by hearsay by Rafat and in the 1970s by Zeymal Haidari (pers. comm.). Kohzad also mentioned another fort, Qal'a-i Sultān, associated with Qal'a-i Zarmurgh.

DCT: in 2005, Muḥammad Sarwar Azad, of MoICT in Čaghčārān confirmed that the minaret is still standing.

Fieldwork:

References:

Sahibdad Khan 1891; Kohzad 1959; Rafat 1980; Ball 2002

Gaz. No.: 987

Sang-i Mazār

Additional info.: aka Sarmazur?

Site Type: Tower

Date: Ghūrid 12-13<sup>th</sup> C

Province: Ghūr Core / Periphery: Ghūrid heartland

### Appendix Three: Ghūrid sites

#### Site Description:

A line of five watch towers guarding the road for almost 2 km between 37-39 km north of Sar-i Mushkan on the road to Zarni and Taiwāra, at the northern foot of the low pass between Mushkan and Zarni valleys. Most are round and *paḵhsa* construction on a stone foundation.

Ball 2002: Tower 1: possibly a fort, very ruined, now only a single line of very rough stone wall bonded with mud, up to 1.5 m high.

Tower 2: originally a round tower, now consisting of a fragment of round mud wall on a stone footing, up to 3 m high, several hundred metres downstream from Tower 1. Pierced by regular slits that are opened up inside by a series of semi-circular reveals to form elaborate and distinctive niches, decorated by square and lozenge-shaped impressions on either side.

Towers 3 and 4: ca 1.5 km further north-east. Tower 3 consists of two parallel stumps of mud walls, probably originally forming a square tower. Tower 4 is a semi-circle of rough stone wall footings, originally forming a circular tower. Some slight mud remains connecting the two suggest that they might have formed a small fort.

Tower 5 is a few hundred metres from Tower 4. It is the most impressive and best preserved, a circular tower, only about half still standing. Well-constructed with bricks measuring 24 x 40 x 13 cm, standing on a large stone footing 3.1 m high. Total height is ca 12.4 m. The exterior is plastered with straw-tempered mud plaster, ca 5 cm thick, decorated with stamped wedges forming lozenge patterns. It has two windows measuring 24 x 52 cm.

Wannell: the tower at Sarmazur, at the top of the Nili valley, has a motif of horned candlestick / sickle moon astride a cone, almost identical to that above the door in Larwand (Gaz. No. 683). Bivar thinks these heraldic motifs could be derived from Sāsānid cattle-brands. Illicit excavations have uncovered rough medieval earthenware, a silver bracelet with paired birds in roundels and cursive Arabic script and a remarkable bronze tripod vase (Bronze Age?).

#### Fieldwork:

1977 – Ball

References:

Ball 2002; Wannell 2002

Gaz. No.: 1004 Sarkhushak

Additional info.:

Date: Ghūrid 12-13<sup>th</sup> C

Site Type: Fort / Fortress

Core / Periphery: Upland periphery

Province: Bāmiyān

Site Description: (Figs 5:18, 7:33)

An immense mud-brick fortified complex on a bluff overlooking west bank of Bāmiyān river, 31 km from Bāmiyān. The whole area is completed walled. Baker and Alchin: the complex is located on a 550 m long spur overlooking good grazing in a broadening of the Bāmiyān valley. It includes an imposing three-storey high, 40 x 40 m residential structure (Building A) in the south-east, a rectangular fort / refuge with corner towers in the west (Building D, measuring 20 x 17.5 m), and two mosques (Buildings E and F) and a small structure with vaults and a small domed room with a fine white-plastered finish (Building C – possibly a *ḥammām*), within an enceinte.

#### Fieldwork:

1951 – Alchin & Codrington; 1956 – Ramachandran & Sharma

References:

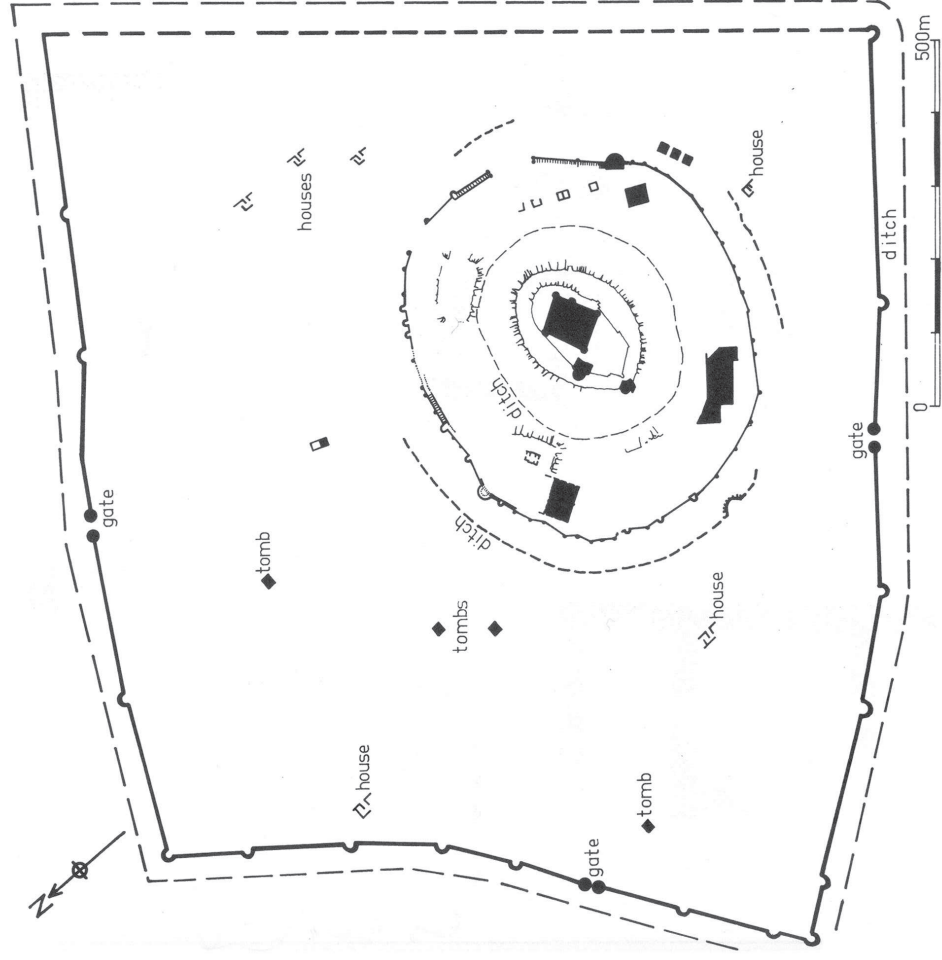
Dupree 1967; Brett *et al.* 1970; Le Berre 1981 A1, ruins 7 & 8;



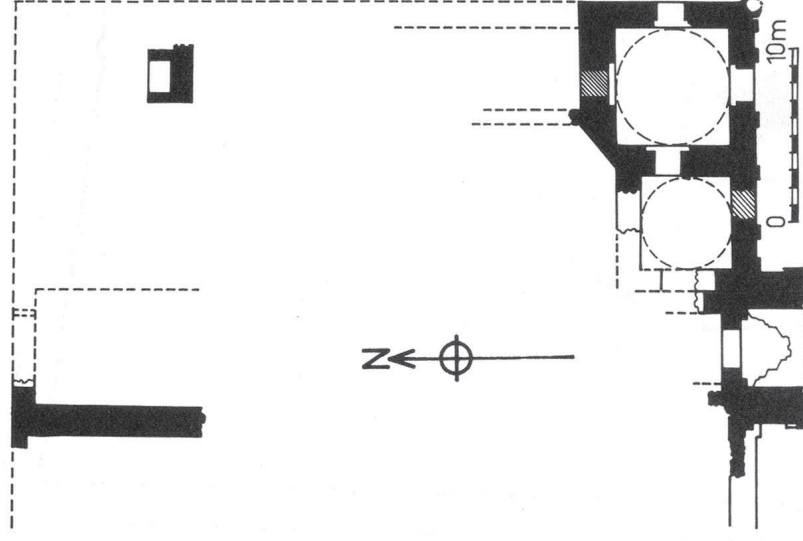
Appendix Three: Ghūrīd sites

1970 – Brett <i>et al.</i> ; Le Berre	Baker & Allchin 1991
Gaz. No.: 1006	Additional info.: aka Tar-o Sar / Shahr-i Ghulghula
Site Type: Walled town / village	Date: Parthian; Indo-Parthian & Sāsānid; Šaffārid; Ghaznawid 11-12 <sup>th</sup> C; Ghūrīd 12-13 <sup>th</sup> C; Tīmūrīd 15-16 <sup>th</sup> C
Province: Nimrūz	Core / Periphery: Lowland periphery
Site Description: (Fig. A3:9)	
Vast area of remains and ancient cultivation stretching for several km. in middle of dunes 86 km south-east of Zarang. Main part of remains are Shahr-i Ghulghula itself, a large fortified urban site covering ca 1 km <sup>2</sup> . It consists of a first square enclosure and ditch, with remains of many houses and graves inside it. There is then a second circular enclosure and ditch with a third innermost pentagonal enclosure and ditch marking a probable palatial complex. This stands on a mound 25 m high, and includes the remains of a mosque and over 100 rooms, many of them domed and containing stucco decoration. Most of the fortifications are built out of mud, although there is extensive baked-brick construction as well. Finds from the area include many Parthian, Sāsānid and Early Islamic coins and a hoard of 406 copper coins dated 1167-1221 CE from the mosque.	
Fieldwork:	References:
1903-05 – Tate; 1936 – Hackin & Meunié; 1951 – Fairservis;	Le Strange 1905; Tate 1909, 1910; Gardin 1959; Hackin 1959;
1968-71 – Dales; 1971-76 – Trousdale	Trousdale 1976
Gaz. No.: 1011	Additional info.:
Site Type: Fort / Fortress	Date: Ghūrīd? 12-13 <sup>th</sup> C
Province: Baghlān	Core / Periphery: Upland periphery
Site Description:	
Reports of remains of a fortress, locally attributed to Ghīyāth al-Dīn, in a branch of the Andarāb valley, 10 km north-east of Banu.	References:
Fieldwork:	Maitland 1888
Gaz. No.: 1023	Additional info.: Jawand
Site Type: Isolated structure	Date: Ghūrīd, 571 / 1175-6
Province: Bādghīs	Core / Periphery: Ghūrīd heartland
Site Description: (Fig. A3:10)	
Ruins of an elaborately decorated baked brick <i>madrasa</i> . Only parts of the north and east sides are still standing, the best preserved of which is the east part of the	

Appendix Three: Ghūrid sites



A3:9 Saro Tar (Ball 1982 II: 465)



A3:10 Shāh-i Mashhad (Ball 1982 II: 466)

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façade. This includes an entrance *īwān* and two originally domed rooms. Fifteen bands of Kufic and Naskhi inscriptions. Some scattered *sgraffiato* sherds on the surface.

Wannell: the *madrasa* carried the *Sura al-Faṭh*, the Victory chapter; the benedictions are in Arabic, to a female patron. The arch of the central bay of the entrance has collapsed since it was discovered by Glatzer and Casimir. Many of the flat bricks have been re-used to cover tombs in the local cemetery or to build the walls of farmhouses of recently arrived Pashtuns. The site also includes the ruins of a fort or palace with heaps of baked brick and carved unglazed tiles. Just above the confluence of the Kucha and Murghāb are the ruins of another probable Ghūrid fort defending the approach to *Shāh-i Mashhad*. Possibly the *madrasa* of the wisest Kārimī divine during the reign of *Ghiyāth al-Dīn, Sadreddīn ʿAlī Haitham of Nīshāpūr*, at *Afshin*, capital of *Ghardjestān*.

Fieldwork:

1886 – Hira Singh; 1970 – Casimir & Glatzer

Gaz. No.: 1039

Casimir & Glatzer 1971; Glatzer 1973; Herberg 1978; Samizay 1981; Wannell 2002

Shahr-i Barbar

Additional info.: Qal'a-i Barbar

Site Type: Walled town / village

Date: Turk and / or Ghūrid 7-13<sup>th</sup> C

Province: Bāmiyān

Core / Periphery: Upland periphery

Site Description:

Not to be confused with *Chehel Burj*, which is also known as *Shahr-i Barbar* (and is ca 53 km downstream). Remains of a fortified town on an escarpment ca 400 m above the valley. Consists of a curtain wall, 2.5 m thick and up to 4 m high, in rough stone courses around the north side of the escarpment. Some domed chambers are built into the thickness of the walls. Inside are various remains constructed out of stone and baked brick, including four cisterns. The site is traditionally said to be the capital of the kingdom of *Gurgin*, pre-dating the Mongol conquest.

Lee: viewed from the main road – traces of low walls and bastions of a fortification on the eastern edge of the plateau on the Bāmiyān side. Local sources state there are extensive surface remains on the top of the plateau, including walls. The remains of a smaller Ghūrid fortress are located in the floor of the valley on the west side somewhat south of the village, at the confluence of the two valleys.

Fieldwork:

1885 – Talbot & Maitland

References:

Talbot *et al.* 1886; Holdich 1910; Lee 2006

Gaz. No.: 1042

Additional info.: inc. Qal'a-i Dukhtar; see also Bāmiyān

Site Type: Walled town / village

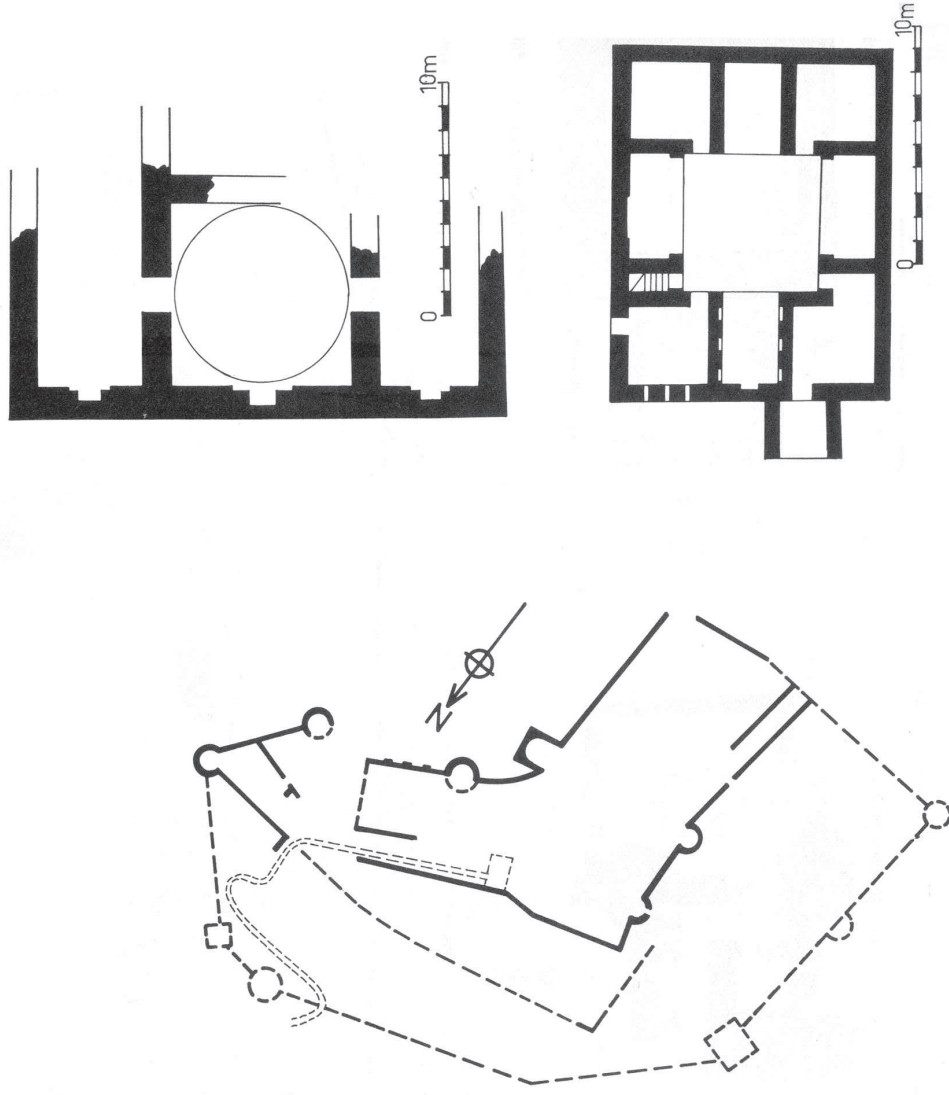
Date: Late Sāsānid-Turk; Ghaznawid 11-12<sup>th</sup> C; Ghūrid 12-13<sup>th</sup> C

Province: Bāmiyān

Core / Periphery: Upland periphery

Site Description: (Fig. A3:11)

Moorcroft & Trebeck 1971 (1837): ancient city on and around a detached conical hill, covered with extensive ruins; remains of buildings strewn across valley. "Utensils of copper and brass, and coins are frequently found, and writings, said to be in Persian and Arabic, as well as some unknown language, are sometimes discovered."



A3:11 Shahr-i Ghulghula; plans of mosques to the right (Ball 1982 II: 466)

Appendix Three: Ghūrid sites

Said to have been built by Djalāl al-Dīn Khwārazm-Shāh but probably of greater antiquity. The hill is fortified and its interior pierced with caves and remains of reservoirs. Ball 1982: remains of a fortified urban site 3 km south-east of Bāmiyān, with a mud-brick fort, Qal'a-i Dukhtar, 1 km to the east. Construction is mostly of mud. The remains including two early Islamic mosques, and accidental finds have including an elaborately carved Ghaznawid brass bowl and an early 13<sup>th</sup> C carved wooden door.

Fieldwork:

1951 – Allchin & Codrington; 1970 – Brett  
References:  
Masson 1833, 1842; Le Strange 1905; Kohzad 1950, 1955/56; Godard 1951; Gardin 1957; Brett 1970; Le Berre 1981 B1

Gaz. No.: 1049 Shahr-i Sagān

Site Type: Unwalled town / village

Province: Baghlān

Site Description:

Extensive mud and stone remains, with many cave dwellings in the hillside. The site is said locally to have been destroyed by Mongols.

Fieldwork:

1886 – Peacocke; 1974-75 – Le Berre

Gaz. No.: 1081 Shīniya

Site Type: Tower

Province: Ghūr Core / Periphery: Ghūrid heartland

Site Description:

Many circular and square towers on the hills to the east and west of Shīniya. They are usually made out of stone with loopholes towards the top.

Fieldwork:

1946 – Kohzad

Gaz. No.: 1103 Sibak

Site Type: Tower

Province: Ghūr Core / Periphery: Ghūrid heartland

Site Description:

Remains of towers and other structures at the foot of Kuh-i Pasangān, 5 km west of Yāmān.

Fieldwork:

1946 – Kohzad  
References:  
Kohzad 1951-54; Ball 2002

Appendix Three: Ghūrīd sites

Gaz. No.: 1127	Tagau Dehtai	Additional info.:
Site Type: Tower		Date: Ghūrīd?
Province: Ghūr Core / Periphery: Ghūrīd heartland		
Site Description:		
Remains of several ancient towers, 10 km east of Sab Talkh, on road from Deh Tīrān to Taiwāra.		
Fieldwork:		References:
1885 – Sahibdad Khan		Sahibdad Khan 1891; Ball 2002
Gaz. No.: 1130	Taiwāra	Additional info.:
Site Type: Tower		Date: Ghūrīd?
Province: Ghūr Core / Periphery: Ghūrīd heartland		
Site Description:		
Local reports of ancient remains on the hill now occupied by modern fort, 185 km south-west of Čaghčārān, on the road to Dilārām. There are also many towers in the vicinity.		
Ball 2002: small mosque inside fort decorated with stamped plaster designs on the interior surfaces, and a 19 <sup>th</sup> C?, richly decorated <i>mihrāb</i> . The route to the north-east towards Shahrak is guarded by occasional single towers, one just 10 km out of Taiwāra, another at the end of the valley where the road begins the ascent of the Kotal-i Ghachi, and another in the village of Ghachi, midway between the Taiwāra and Nawrak valleys. The route south towards Larwand and Zarni is particularly well fortified by several series of tower complexes.		
Fieldwork:		References:
1946 – Kohzad		Kohzad 1951-54; Ball 2002
Gaz. No.: 1140	Tālā Begum	Additional info.:
Site Type: Isolated structure		Date: Ghūrīd (12-13 <sup>th</sup> C) or Tīmūrīd (15-16 <sup>th</sup> C)
Province: Ghazni		Core / Periphery: Upland periphery
Site Description:		
Small polygonal tomb tower of baked brick, 33 km west of Ghazni on the road to Dasht-i Nāwar. Some simple decoration and a slightly pointed dome.		
Fieldwork:		References:
		Verardi 1977

Appendix Three: Ghūrid sites

Gaz. No.: 1144	Tang-i Azau	Additional info.:
Site Type: Other		Date: 1299-1300 ?
Province: Ghūr	Core / Periphery: Ghūrid heartland	
Site Description:		
Henning gives the first detailed reading of the inscription, based on photographs provided by the Oxford University Hertford-Wadham Afghanistan Expedition of 1956 (Henning 1957: 336). He correctly identifies it as a medieval Judaeo-Persian inscription rather than a Parthian one. His proposed date of 752-3 CE (Henning 1957: 338), however, was revised by Rapp (1967: 56) to the considerably later date of ca 1299-1300 CE.		
Ball: roughly carved, badly eroded Hebrew inscription cut into a boulder. Consists of three lines on one side and five or six on the other.		
Wannell: at the mouth of the Tang-i Azau gorge are the ruins of Shahr-i Malik Antar, where medieval metalwork (including a long-handled spoon made from a hard un-corroding metal alloy) has been dug up. The area had long been a centre for iron-mining.		
Fieldwork:		References:
1885 – Talbot & Maitland; 1946 – Kohzad; 1952 – Ghirshman & Frye;		Talbot <i>et al.</i> 1886; Kohzad 1951-54; Frye 1954; Henning 1957;
1959 – Fischer <i>et al.</i>		Fischer <i>et al.</i> 1959; Rapp 1967, 1973; Wannell 2002
Gaz. No.: 1163	Tepe Buland	Additional info.:
Site Type: Mound		Date: Parthian & Saka; Indo-Parthian; Sāsānid; Ghūrid 12-13 <sup>th</sup> C
Province: Hilmand		Core / Periphery: Lowland periphery
Site Description:		
A series of mounds on a river terrace opposite Lashkargāh.		
Fieldwork:		References:
1956 – Ramachandran & Sharma; 1966 – Hammond		Ramachandran & Sharma 1956; Hammond 1970
Gaz. No.: 1234	Wurshak	Additional info.:
Site Type: Fort / Fortress		see also Bashura & Qal'a-i Malik Antar
Province: Ghūr	Core / Periphery: Ghūrid heartland	Date: Ghūrid 12-13 <sup>th</sup> C
Site Description:		
Remains of substantial square fort on a hill overlooking the village, 13 km south-west of Yamān. The foundations, up to 3 m high, are built of large stones; the mud-brick superstructure is covered in a yellow clay plaster.		
Fieldwork:		References:
1946 – Kohzad		Kohzad 1951-54; Ball 2002

Appendix Three: Ghūrid sites

Gaz. No.: 1236  
Site Type: Fortifications  
Province: Ghūr Core / Periphery: Ghūrid heartland  
Site Description:

Additional info.: aka Yahan  
Date: Ghūrid 12-13<sup>th</sup> C

Ruins of many mud-brick forts and towers up to 12 m high, connecting with a line of watchtowers. North of the ruins are the remains of some tombs.  
Ball 2002: 4 km south-west from Muna 'Alā; further south-west on this road is the great fortress of Qal'a-i Qaisār.

Fieldwork:

1885 – Imam Sharif

Holdich 1887; Klimberg 1958, 1960; Fischer 1978; Ball 2002

Gaz. No.: 1239  
Site Type: Fortifications  
Province: Ghūr Core / Periphery: Ghūrid heartland  
Site Description:

Additional info.:  
Date: Ghūrid? 12-13<sup>th</sup> C

Ruins consisting of isolated, unconnected towers and small forts, covering a very extensive area. Each is separated by ca 100 m – they do not appear to form any pattern. They are round or square, with plain arched entrances. Construction is generally of mud-brick, although stone and even wood are sometimes used. There are also many, unusual burials with brass burials cups at their heads and feet.

Ball 2002: the Yāmān Valley lies at the centre of communications between the Upper Harī Rūd Valley (Āghčārān / Dawlat Yār), the central Ghūrāt (Taiwāra), the Hazārājāt and Zamīn-Dāwar. It is well fortified, especially on routes leading west to Taiwāra and south-west to Zarni, through the Nili Valley. The only fortification recorded before the Farāh Rūd on the route to Āghčārān to the north is the citadel of Pasāband; south-east, towards Zamīn-Dāwar, maps mark vast number of ruins, particularly around the upper Hilmand, but this area remains largely unexplored. A little more is known of the remains in and beyond the upper Yāmān Valley. On the route to Nili there is a concentration of remains around Wurshak 13 km south-west of Yāmān.

Fieldwork:

1885 Imam Sharif; 1946 – Kohzad

Holdich 1887; Kohzad 1951-54; Klimberg 1958, 1960; Ball 2002

Gaz. No.: 1257  
Site Type: Tower  
Province: Ghūr Core / Periphery: Ghūrid heartland  
Site Description:

Additional info.:  
Date: Ghūrid?

A ruined tower just outside the village, 190 km north of Dīārām, on the road to Taiwāra.

Ball 2002: Ferrier mentions ruin upon ruin, but his description and routes are notoriously unreliable. The existing tower is of similar construction to Sang-i Mazār Tower



Appendix Three: Ghūrid sites

5, with exterior impressed lozenge decoration.

Fieldwork:

1885 – Imam Sharif

References:

Ferrier 1857; Holdich 1886; Klimburg 1960; Ball 2002

Gaz. No.: 1283

Dīwāl-i Mahmta

Additional info.:

Site Type: Unwalled town / village

Date: Ghūrid (12-13<sup>th</sup> C)

Province: Nīmrūz

Core / Periphery: Lowland periphery

Site Description:

Mud-brick ruins (including true vaultings and well preserved wall decoration) of *īwān* courtyard-houses in the character of a village-like *rustāk*. Baked bricks on surface from wall decoration.

Fieldwork:

1974 – Fischer

References:

Gaz. No.: 1284

Jauru

Additional info.:

Site Type: Unwalled town / village

Date: Ghaznawid & Ghūrid (11-13<sup>th</sup> C)

Province: Nīmrūz

Core / Periphery: Lowland periphery

Site Description:

Open settlement of rural *īwān* courtyard-houses adjacent to now abandoned canals and fields; a kind of *rustāk*. Ruins of mud-brick houses with remains of vaultings and wall decoration. Abundant pottery on surface in open courtyards, *īwān* and rooms.

Fieldwork:

1969, 1970, 1974 – Fischer

References:

Gaz. No.: 1285

Kharāba-i Yārmuḥammad Khān

Additional info.:

Site Type: Unwalled town / village

Date: Ghūrid (12-13<sup>th</sup> C)

Province: Nīmrūz

Core / Periphery: Lowland periphery

Site Description:

Mud-brick ruins (including true vaultings and well preserved wall decoration) of *īwān* courtyard-houses in the character of a village-like *rustāk*. Baked bricks on surface from wall decoration.

Fieldwork:

1974 – Fischer

References:

Appendix Three: Ghūrid sites

Gaz. No.: 1286

Mashgahi

Site Type: Unwalled town / village

Province: Nīmrūz

Site Description:

Scattered ruins of mud-brick *īwān* courtyard-houses and low mud walls for the protection of cattle. Strewn with fragments of baked bricks and coarse and fine-glazed ceramics.

Fieldwork:

1974 – Fischer

Additional info.:

Date: Ghūrid (12-13<sup>th</sup> C); Tīmūrid (14-15<sup>th</sup> C)

Core / Periphery: Lowland periphery

References:

## Appendix Four: *Sūra XIX, the Sūrat Maryam, from the Qur'ān*

Source: <http://submission.org/#/d/Quran.html> [accessed 24/8/2011]

Order of Revelation 44, Verses: 98

[19:0] In the name of God, Most Gracious, Most Merciful

[19:1] K. H. Y. `A. S. (Kaaf Haa Yaa `Ayn Saad)

### *Zachariah*

[19:2] A narration about your Lord's mercy towards His servant Zachariah.

[19:3] He called his Lord, a secret call.

[19:4] He said, "My Lord, the bones have turned brittle in my body, and my hair is aflame with gray. As I implore You, my Lord, I never despair.

[19:5] "I worry about my dependants after me, and my wife has been sterile. Grant me, from You, an heir.

[19:6] "Let him be my heir and the heir of Jacob's clan, and make him, my Lord, acceptable."

### *John*

[19:7] "O Zachariah, we give you good news; a boy whose name shall be John (Yahya). We never created anyone like him before."

[19:8] He said, "My Lord, will I have a son despite my wife's sterility, and despite my old age?"

[19:9] He said, "Thus said your Lord: `It is easy for Me to do. I created you before that, and you were nothing.' "

[19:10] He said, "My Lord, give me a sign." He said, "Your sign is that you will not speak to the people for three consecutive nights."

[19:11] He came out to his family, from the sanctuary, and signaled to them: "Meditate (on God) day and night."

[19:12] "O John, you shall uphold the scripture, strongly." We endowed him with wisdom, even in his youth.

[19:13] And (we endowed him with) kindness from us and purity, for he was righteous.

[19:14] He honored his parents, and was never a disobedient tyrant.

[19:15] Peace be upon him the day he was born, the day he dies, and the day he is resurrected back to life.

### *Mary*

[19:16] Mention in the scripture Mary. She isolated herself from her family, into an eastern location.

[19:17] While a barrier separated her from them, we sent to her our Spirit. He went to her in the form of a human being.

[19:18] She said, "I seek refuge in the Most Gracious, that you may be righteous."

[19:19] He said, "I am the messenger of your Lord, to grant you a pure son."

[19:20] She said, "How can I have a son, when no man has touched me; I have never been unchaste."

[19:21] He said, "Thus said your Lord, `It is easy for Me. We will render him a sign for the people, and mercy from us. This is a predestined matter.' "

### *The Birth of Jesus*

[19:22] When she bore him, she isolated herself to a faraway place.

[19:23] The birth process came to her by the trunk of a palm tree. She said, "(I am so ashamed;) I wish I were dead before this happened, and completely forgotten."

[19:24] (The infant) called her from beneath her, saying, "Do not grieve. Your Lord has provided you with a stream.

#### Appendix Four: *Sūra XIX*

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[19:25] "If you shake the trunk of this palm tree, it will drop ripe dates for you.

[19:26] "Eat and drink, and be happy. When you see anyone, say, 'I have made a vow of silence [to the Most Gracious]\*; I am not talking today to anyone.' "

[19:27] She came to her family, carrying him. They said, "O Mary, you have committed something that is totally unexpected.

[19:28] "O descendant of Aaron, your father was not a bad man, nor was your mother unchaste."

#### *The Infant Makes a Statement*

[19:29] She pointed to him. They said, "How can we talk with an infant in the crib?"

[19:30] (The infant spoke and) said, "I am a servant of GOD. He has given me the scripture, and has appointed me a prophet.

[19:31] "He made me blessed wherever I go, and enjoined me to observe the Contact Prayers (Salat) and the obligatory charity (Zakat) for as long as I live.

[19:32] "I am to honor my mother; He did not make me a disobedient rebel.

[19:33] And peace be upon me the day I was born, the day I die, and the day I get resurrected."

#### *The Proven Truth*

[19:34] That was Jesus, the son of Mary, and this is the truth of this matter, about which they continue to doubt.

[19:35] It does not befit GOD that He begets a son, be He glorified. To have anything done, He simply says to it, "Be," and it is.

[19:36] He also proclaimed, "GOD is my Lord and your Lord; you shall worship Him alone. This is the right path."

[19:37] The various parties disputed among themselves (regarding the identity of Jesus). Therefore, woe to those who disbelieve from the sight of a terrible day.

[19:38] Wait till you hear them and see them when they come to face us. The transgressors on that day will be totally lost.

[19:39] Warn them about the day of remorse, when judgment will be issued. They are totally oblivious; they do not believe.

[19:40] We are the ones who inherit the earth and everyone on it; to us everyone will be returned.

#### *Abraham*

[19:41] Mention in the scripture Abraham; he was a saint, a prophet.

[19:42] He said to his father, "O my father, why do you worship what can neither hear, nor see, nor help you in any way?

[19:43] "O my father, I have received certain knowledge that you did not receive. Follow me, and I will guide you in a straight path.

[19:44] "O my father, do not worship the devil. The devil has rebelled against the Most Gracious.

[19:45] "O my father, I fear lest you incur retribution from the Most Gracious, then become an ally of the devil."

[19:46] He said, "Have you forsaken my gods, O Abraham? Unless you stop, I will stone you. Leave me alone."

[19:47] He said, "Peace be upon you. I will implore my Lord to forgive you; He has been Most Kind to me.

[19:48] "I will abandon you and the gods you worship beside GOD. I will worship only my Lord. By imploring my Lord alone, I cannot go wrong."

[19:49] Because he abandoned them and the gods they worshipped beside GOD, we granted him Isaac and Jacob, and we made each of them a prophet.

[19:50] We showered them with our mercy, and we granted them an honorable position in history.

*Moses*

- [19:51] Mention in the scripture Moses. He was devoted, and he was a messenger prophet.  
[19:52] We called him from the right side of Mount Sinai. We brought him close, to confer with him.  
[19:53] And we granted him, out of our mercy, his brother Aaron as a prophet.  
[19:54] And mention in the scripture Ismail. He was truthful when he made a promise, and he was a messenger prophet.  
[19:55] He used to enjoin his family to observe the Contact Prayers (Salat) and the obligatory charity (Zakat); he was acceptable to his Lord.  
[19:56] And mention in the scripture Idris. He was a saint, a prophet.  
[19:57] We raised him to an honorable rank.  
[19:58] These are some of the prophets whom GOD blessed. They were chosen from among the descendants of Adam, and the descendants of those whom we carried with Noah, and the descendants of Abraham and Israel, and from among those whom we guided and selected. When the revelations of the Most Gracious are recited to them, they fall prostrate, weeping.

*Losing the Contact Prayers (Salat)*

- [19:59] After them, He substituted generations who lost the Contact Prayers (Salat), and pursued their lusts. They will suffer the consequences.  
[19:60] Only those who repent, believe, and lead a righteous life will enter Paradise, without the least injustice.  
[19:61] The gardens of Eden await them, as promised by the Most Gracious for those who worship Him, even in privacy. Certainly, His promise must come to pass.  
[19:62] They will not hear any nonsense therein; only peace. They receive their provisions therein, day and night.  
[19:63] Such is Paradise; we grant it to those among our servants who are righteous.  
[19:64] We do not come down except by the command of your Lord. To Him belongs our past, our future, and everything between them. Your Lord is never forgetful.  
[19:65] The Lord of the heavens and the earth, and everything between them; you shall worship Him and steadfastly persevere in worshipping Him. Do you know of anyone who equals Him?  
[19:66] The human being asks, "After I die, do I come back to life?"  
[19:67] Did the human being forget that we created him already, and he was nothing?

*Special Warning to the Leaders*

- [19:68] By your Lord, we will certainly summon them, together with the devils, and will gather them around Hell, humiliated.  
[19:69] Then we will pick out from each group the most ardent opponent of the Most Gracious.  
[19:70] We know full well those who are most deserving of burning therein.

*Everyone Sees Hell*

- [19:71] Every single one of you must see it; this is an irrevocable decision of your Lord.  
[19:72] Then we rescue the righteous, and leave the transgressors in it, humiliated.

*The Majority*

- [19:73] When our revelations are recited to them, clearly, those who disbelieve say to those who believe, "Which of us is more prosperous? Which of us is in the majority?"  
[19:74] Many a generation have we annihilated before them; they were more powerful, and more prosperous.  
[19:75] Say, "Those who choose to go astray, the Most Gracious will lead them on, until they see

what is promised for them - either the retribution or the Hour. That is when they find out who really is worse off, and weaker in power.”

[19:76] GOD augments the guidance of those who choose to be guided. For the good deeds are eternally rewarded by your Lord, and bring far better returns.

[19:77] Have you noted the one who rejected our revelations then said, “I will be given wealth and children”?!

[19:78] Has he seen the future? Has he taken such a pledge from the Most Gracious?

[19:79] Indeed, we will record what he utters, then commit him to ever-increasing retribution.

[19:80] Then we inherit everything he possessed, and he comes back to us all alone.

[19:81] They worship beside GOD other gods that (they think) may be of help to them.

*The Idols Disown Their Worshipers*

[19:82] On the contrary, they will reject their idolatry, and will be their enemies.

[19:83] Do you not see how we unleash the devils upon the disbelievers to stir them up?

[19:84] Do not be impatient; we are preparing for them some preparation.

[19:85] The day will come when we summon the righteous before the Most Gracious in a group.

[19:86] And we will herd the guilty to Hell, to be their eternal abode.

[19:87] No one will possess the power to intercede, except those who conform to the laws of the Most Gracious.

*Gross Blasphemy*

[19:88] They said, “The Most Gracious has begotten a son”!

[19:89] You have uttered a gross blasphemy.

[19:90] The heavens are about to shatter, the earth is about to tear asunder, and the mountains are about to crumble.

[19:91] Because they claim that the Most Gracious has begotten a son.

[19:92] It is not befitting the Most Gracious that He should beget a son.

[19:93] Every single one in the heavens and the earth is a servant of the Most Gracious.

[19:94] He has encompassed them, and has counted them one by one.

[19:95] All of them will come before Him on the Day of Resurrection as individuals.

[19:96] Surely, those who believe and lead a righteous life, the Most Gracious will shower them with love.

[19:97] We thus made this (Quran) elucidated in your tongue, in order to deliver good news to the righteous, and to warn with it the opponents.

[19:98] Many a generation before them we annihilated; can you perceive any of them, or hear from them any sound?

**Appendix Five: MJAP robber hole data**

RH	Location	N-S (m)	E-W (m)	Area (m <sup>2</sup> )	Depth (m)	Estimated Volume (m <sup>3</sup> )	RH Sherds / m <sup>2</sup>	Spoil Sherds / m <sup>2</sup>	Architecture?
RH001	WBJR	4.00	3.00	12.00	2.00	12.00			Yes
RH002	WBJR	4.10	3.50	14.35					Yes
RH003	WBJR	3.00	3.00	9.00					Yes
RH004	WBJR	6.50	5.50	35.75					Yes
RH005	WBJR	2.90	2.90	8.41					Yes
RH006	WBJR	1.60	1.40	2.24					Yes
RH007	WBJR	2.10	1.70	3.57					Yes
RH008	WBJR	2.30	2.20	5.06	1.20	3.04			No
RH009	WBJR	1.20	1.20	1.44	0.90	0.65			No
RH010	WBJR	no data							Yes
RH011	WBJR	no data							No
RH012	WBJR	no data							No
RH013	WBJR	no data							No
RH014	SBHR	1.40	1.25	1.75	1.15	1.01			Yes
RH015	Khār Khūdīj	no data							Yes
RH016	NBHR	1.60	2.00	3.20	1.50	2.40	4		No
RH017	NBHR	2.50	3.60	9.00	1.30	5.85	14		No
RH018	NBHR	2.70	3.70	9.99	1.50	7.49	2	18	No
RH019	NBHR	2.60	3.20	8.32	1.80	7.49	1	14	Yes
RH020	NBHR	2.00	2.40	4.80	1.60	3.84	16		No
RH021	NBHR	1.90	1.40	2.66	1.60	2.13	1	2	No

Appendix Five: MJAP robber hole data

RH	Location	N-S (m)	E-W (m)	Area (m <sup>2</sup> )	Depth (m)	Estimated Volume (m <sup>3</sup> )	RH Sherds / m <sup>2</sup>	Spoil Sherds / m <sup>2</sup>	Architecture?
RH022	NBHR	2.50	1.65	4.13	2.00	4.13	3	15	Yes
RH023	NBHR	2.90	2.80	8.12	1.60	6.50	3	5	No
RH024	NBHR	2.40	2.20	5.28	1.50	3.96	2	2	Yes
RH025	NBHR	5.50	2.70	14.85	1.90	14.11	9	2	No
RH026	NBHR	3.00	2.70	8.10	1.60	6.48	3	5	No
RH027	NBHR	9.50	6.50	61.75	3.00	92.63	10	3	Yes
RH028	NBHR	7.50	3.00	22.50	2.55	28.69	4		Yes
RH029	NBHR	4.75	6.00	28.50	2.30	32.78	3		Yes
RH030	NBHR	4.00	4.00	16.00	1.20	9.60	7		No
RH031	NBHR	3.50	2.25	7.88	1.90	7.48	2	6	Yes
RH032	NBHR	5.10	3.00	15.30	1.70	13.01	2		Yes
RH033	NBHR	2.70	2.60	7.02	2.00	7.02	3	5	Yes
RH034	NBHR	7.00	1.45	10.15	1.00	5.08	2		Yes
RH035	NBHR	3.20	2.00	6.40	1.30	4.16	1	6	No
RH036	NBHR	1.60	5.00	8.00	1.90	7.60	3		Yes
RH037	NBHR	4.80	5.30	25.44	1.00	12.72	2	2	?
RH038	NBHR	3.75	2.60	9.75	1.10	5.36			Yes
RH039	NBHR	2.00	2.90	5.80	1.40	4.06		6	Yes
RH040	NBHR	missing data							No
RH041	NBHR	2.70	2.90	7.83	1.40	5.48	9	5	Yes
RH042	NBHR	3.50	2.70	9.45	2.30	10.87	4	2	Yes
RH043	NBHR	4.10	2.30	9.43	2.70	12.73	4	1	Yes



Appendix Five: MJAP robber hole data

RH	Location	N-S (m)	E-W (m)	Area (m <sup>2</sup> )	Depth (m)	Estimated Volume (m <sup>3</sup> )	RH Sherds / m <sup>2</sup>	Spoil Sherds / m <sup>2</sup>	Architecture?
RH044	NBHR	2.90	2.30	6.67	1.80	6.00	4	1	Yes
RH045	NBHR	3.50	2.70	9.45	1.80	8.51	2	1	Yes
RH046	NBHR	2.90	2.30	6.67	2.10	7.00	7	2	Yes
RH047	NBHR	1.90	4.10	7.79	1.60	6.23	6	2	Yes
RH048	NBHR	3.30	4.50	14.85	2.70	20.05	4	3	Yes
RH049	NBHR	2.90	4.20	12.18	2.10	12.79	0	1	Yes
RH050	NBHR	2.57	0.83	2.13	0.95	1.01	3	7	No
RH051	NBHR	1.20	1.70	2.04	1.35	1.38	2		No
RH052	NBHR	1.00	1.70	1.70	0.50	0.43	4	2	No
RH053	NBHR	1.50	1.30	1.95	0.60	0.59	1	11	No
RH054	NBHR	5.20	3.60	18.72	1.30	12.17	0	12	Yes
RH055	NBHR	2.90	3.20	9.28	0.80	3.71	0	7	No
RH056	NBHR	5.50	5.00	27.50	2.10	28.88	2	9	Yes
RH057	NBHR	0.90	1.00	0.90	1.00	0.45	0	4	Yes
RH058	NBHR	7.10	4.80	34.08	3.80	64.75	9	16	Yes
RH059	NBHR	0.90	1.20	1.08	0.50	0.27	1	9	No
RH060	NBHR	2.00	1.70	3.40	1.00	1.70	11	15	No
RH061	NBHR	1.90	1.60	3.04	1.20	1.82	2	15	No
RH062	NBHR	3.00	1.90	5.70	0.90	2.57	0	6	Yes
RH063	NBHR	2.30	2.40	5.52	1.10	3.04	0	11	Yes
RH064	NBHR	2.30	0.90	2.07	0.80	0.83	0	11	Yes
RH065	NBHR	2.10	1.30	2.73	1.20	1.64	3	4	Yes

Appendix Five: MJAP robber hole data

RH	Location	N-S (m)	E-W (m)	Area (m <sup>2</sup> )	Depth (m)	Estimated Volume (m <sup>3</sup> )	RH Sherds / m <sup>2</sup>	Spoil Sherds / m <sup>2</sup>	Architecture?
RH066	NBHR	2.30	2.90	6.67	1.40	4.67	8	3	Yes
RH067	NBHR	2.60	2.80	7.28	1.30	4.73	3	0	No
RH068	NBHR	1.60	2.50	4.00	1.00	2.00	4	2	No
RH069	NBHR	2.30	2.30	5.29	1.40	3.70	0	4	No
RH070	NBHR	2.30	3.20	7.36	1.30	4.78	2	3	No
RH071	NBHR	2.40	1.80	4.32	0.90	1.94	1	13	Yes
RH072	NBHR	2.10	2.30	4.83	1.20	2.90	6	4	Yes
RH073	NBHR	4.20	2.50	10.50	2.30	12.08	6	11	Yes
RH074	NBHR	2.90	1.70	4.93	1.30	3.20	5	5	Yes
RH075	NBHR	2.40	1.70	4.08	0.90	1.84	5	2	Yes
RH076	NBHR	1.40	1.20	1.68	0.70	0.59	3	3	Yes
RH077	NBHR	3.00	3.20	9.60	1.60	7.68	10	1	Yes
RH078	NBHR	2.10	1.90	3.99	1.70	3.39	6	8	No
RH079	NBHR	2.50	2.20	5.50	1.70	4.68	4	2	Yes
RH080	NBHR	2.60	2.60	6.76	1.80	6.08	2	6	No
RH081	NBHR	1.80	1.40	2.52	1.60	2.02	1	1	No
RH082	NBHR	2.10	1.70	3.57	1.50	2.68	1	4	No
RH083	NBHR	2.90	2.30	6.67	2.00	6.67	3		No
RH084	NBHR	4.00	1.10	4.40	1.60	3.52	5	6	Yes
RH085	NBHR	missing data							No
RH086	NBHR	1.90	1.90	3.61	1.60	2.89	2	2	No
RH087	NBHR	1.60	1.80	2.88	0.90	1.30	3	3	No

Appendix Five: MJAP robber hole data

RH	Location	N-S (m)	E-W (m)	Area (m <sup>2</sup> )	Depth (m)	Estimated Volume (m <sup>3</sup> )	RH Sherds / m <sup>2</sup>	Spoil Sherds / m <sup>2</sup>	Architecture?
RH088	NBHR	2.80	1.60	4.48	2.20	4.93	12	2	Yes
RH089	NBHR	4.50	4.70	21.15	2.30	24.32	9	9	Yes
RH090	NBHR	2.60	3.20	8.32	1.50	6.24	3	2	Yes
RH091	NBHR	3.40	3.20	10.88	1.90	10.34	0	12	Yes
RH092	NBHR	3.00	3.30	9.90	1.60	7.92	6	3	Yes
RH093	NBHR	2.50	2.20	5.50	1.70	4.68	2	4	Yes
RH094	NBHR	3.20	4.50	14.40	2.20	15.84	3	3	Yes
RH095	NBHR	2.60	3.00	7.80	1.70	6.63	4	6	Yes
RH096	NBHR	3.70	2.60	9.62	2.10	10.10	4	4	Yes
RH097	NBHR	2.40	2.50	6.00	1.40	4.20	1	13	?
RH098	NBHR	6.20	2.60	16.12	1.60	12.90	3	3	Yes
RH099	NBHR	4.90	5.20	25.48	2.00	25.48	2	3	Yes
RH100	Sang-i Manār	no data							?
RH101	NBHR	3.80	4.60	17.48	2.30	20.10	0	0	Yes
RH102	NBHR	2.30	3.00	6.90	0.90	3.11	0	5	No
RH103	NBHR	2.50	3.20	8.00	1.70	6.80	2	1	Yes
RH104	NBHR	8.90	4.70	41.83	1.10	23.01	7	5	Yes
RH105	NBHR	5.50	1.80	9.90	1.40	6.93	3	5	Yes
RH106	NBHR	3.40	2.50	8.50	1.70	7.23	3	4	Yes
RH107	NBHR	3.50	4.40	15.40	1.90	14.63	1	3	Yes
RH108	NBHR	3.80	4.20	15.96	1.60	12.77	5	6	Yes
RH109	NBHR	2.60	3.30	8.58	1.70	7.29	6	4	Yes

Appendix Five: MJAP robber hole data

RH	Location	N-S (m)	E-W (m)	Area (m <sup>2</sup> )	Depth (m)	Estimated Volume (m <sup>3</sup> )	RH Sherds / m <sup>2</sup>	Spoil Sherds / m <sup>2</sup>	Architecture?
RH110	NBHR	1.90	2.70	5.13	1.20	3.08	1	1	Yes
RH111	NBHR	2.20	3.80	8.36	1.80	7.52	0	2	Yes
RH112	NBHR	2.60	3.70	9.62	1.70	8.18	2	0	No
RH113	NBHR	4.20	3.80	15.96	2.40	19.15	8	3	Yes
RH114	NBHR	5.00	7.50	37.50	2.60	48.75	4	4	No
RH115	NBHR	4.30	2.10	9.03	1.70	7.68	2	4	Yes
RH116	NBHR	1.20	1.00	1.20	1.20	0.72	2	1	No
RH117	NBHR	3.70	2.30	8.51	1.60	6.81	1	2	Yes
RH118	NBHR	2.70	1.70	4.59	1.40	3.21	1	0	Yes
RH119	NBHR	2.80	2.70	7.56	1.60	6.05	1	1	No
RH120	NBHR	5.20	5.10	26.52	2.70	35.80	3	0	Yes
RH121	NBHR	2.30	1.80	4.14	1.40	2.90	0	2	Yes
RH122	NBHR	2.30	1.90	4.37	1.80	3.93	3	2	Yes
RH123	NBHR	7.70	3.40	26.18	4.20	54.98	4	6	Yes
RH124	NBHR	5.20	4.50	23.40	2.60	30.42	4	2	Yes
RH125	NBHR	3.60	2.50	9.00	2.10	9.45	1	0	Yes
RH126	NBHR	1.90	1.40	2.66	1.50	2.00	0	2	?
RH127	NBHR	3.40	2.60	8.84	2.10	9.28	2	1	Yes
RH128	NBHR	3.60	2.50	9.00	2.10	9.45	0	1	Yes
RH129	NBHR	7.00	2.80	19.60	3.00	29.40	2	0	Yes
RH130	scrapped								
RH131	NBHR	2.60	2.20	5.72	1.80	5.15	0	2	Yes

Appendix Five: MJAP robber hole data

RH	Location	N-S (m)	E-W (m)	Area (m <sup>2</sup> )	Depth (m)	Estimated Volume (m <sup>3</sup> )	RH Sherds / m <sup>2</sup>	Spoil Sherds / m <sup>2</sup>	Architecture?	
RH132	NBHR	2.60	2.50	6.50	1.60	5.20	1	0	Yes	
RH133	NBHR	2.90	2.60	7.54	1.80	6.79	0	5	Yes	
RH134	NBHR	3.40	3.30	11.22	1.80	10.10	2	3	Yes	
RH135	NBHR	2.60	2.90	7.54	2.20	8.29	1	5	Yes	
RH136	NBHR	7.60	4.50	34.20	6.20	106.02	0	1	Yes	
RH137	NBHR	3.60	3.80	13.68	2.20	15.05	7	3	Yes	
RH138	NBHR	3.60	4.30	15.48	2.70	20.90	1	2	Yes	
RH139	NBHR	2.10	2.90	6.09	1.40	4.26	2	1	Yes	
RH140	NBHR	2.70	1.60	4.32	0.80	1.73	0	1	?	
RH200	NBHR	no data							No	
RH201	NBHR	4.50	4.90	22.05	1.50	16.54	1		Yes	
RH202	SBHR	2.30	2.15	4.95	3.00	7.42	0	2	Yes	
RH203	NBHR	2.50	2.50	6.25	1.00	3.13	0	0	?	
<b>Totals</b>							<b>1372.01</b>	<b>387</b>	<b>487</b>	

## Appendix Six: MJAP robber holes

This catalogue of the robber holes recorded in and around Djām by MJAP in 2003 and 2005 includes data on the size and characteristics of the robber holes, and the architecture and artefacts they exposed (see also Appendix Five and Table 6:2 for tabulated data and summary statistics). Robber holes in the West Bank of the Djām Rūd (WBJR) were excavated and recorded in 2003, while those on the North Bank of the Harī Rūd (NBHR) were measured, described and sketched using a robber hole recording form in 2005.<sup>1</sup> Vegetation growth is noted as a possible indicator of how recently the robber hole has been dug.

The volume of the robber hole is calculated as half the area multiplied by the depth, due to the steep slope. In some cases the lack of data or variable size of the robber hole renders such estimates impossible or meaningless.

The average sherd density per metre square was counted in NBHR robber holes, within the robber hole, and on the surrounding spoil, before diagnostic sherds were briefly recorded. Note that these are field observations by non-ceramics specialists and should be considered accordingly. Selected sherds were collected for specialist study by Alison Gascoigne (2010).

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<sup>1</sup> I have retained the original location abbreviations assigned in the field (NBHR – North Bank Hari Rud; SBHR – South Bank Hari Rud; WBJR – West Bank Jam Rud), rather than applying diacritics to them.

Appendix Six: MJAP robber hole descriptions

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<b>RH001</b>	<b>Location: WBJR</b>	<b>Architecture</b>
N-S: 4.00 m	E-W: >3.00 m	Area: >12.00 m <sup>2</sup>
Description: Large robber hole filled with a deep layer of mixed deposits, consisting of scree, collapse and spoil. Mud-bricks, baked-bricks, and many pieces of white and coloured plaster could be seen in the southern section, as well as stone architecture. A 1 m wide slit trench was excavated parallel to wall 1000, which seems to have acted as a stable frame against which a series of smaller, less substantial structures were built using a variety of constructional techniques.		
Finds: copper and iron artefacts, painted and incised plaster (SF0337).		
<b>RH002</b>	<b>Location: WBJR</b>	<b>Architecture</b>
N-S: 4.10 m	E-W: 3.50 m	Area: 14.35 m <sup>2</sup>
Description: Two walls (1003 and 1004) were visible running west-east, prior to the start of work. Wall 1003 was well-preserved and had some plaster on it. A series of slit trenches revealed surfaces and sub-surface packing overlying bedrock.		
Finds: glass shards		
<b>RH003</b>	<b>Location: WBJR</b>	<b>Architecture</b>
N-S: 3.00 m	E-W: 3.00 m	Area: 9.00 m <sup>2</sup>
Description: excavated in 2003, with a slit trench excavated in 2005 to collect stratified remains from <i>in situ</i> deposits for flotation.		
Mud-brick walls were visible in its northern and western sides; robbers had burrowed through one of these walls before hitting bedrock.		
Small patches of stratified surfaces remained in the west of RH3. 10 cm of occupation deposits separate the distinct, grey surfaces, which represent the original surface the walls were built on (1063) and a subsequent occupation surface (1055). Thicker <i>in situ</i> deposits were exposed in the rest of the robber hole to the east. These deposits, the only <i>in situ</i> occupation deposits found in any of the robber holes, appeared to be rich in organic and faunal remains, and were consequently left unexcavated in 2003.		
Finds: decorated ceramic spout (SF0301-2 – Fig. 6:98); two coins (SF0314-15 – Fig. 6:102); tiny fragments of fine, painted plaster (white, blue, red and black – SF05075); copper (SF05062 – Fig. 6:105-6); iron fragments; 1 bead (SF05077 – Fig. 6:103); 5 pieces of jointed wood (SF05079); grinding stones.		
<b>RH004</b>	<b>Location: WBJR</b>	<b>Architecture</b>
N-S: 6.50 m	E-W: 5.50 m	Area: 35.75 m <sup>2</sup>
Description: A well-preserved stone wall (1028) running south-north was found, with a corridor separating it from wall 1037. Robbers had evidently started excavating the corridor but stopped, possibly for safety reasons. While cleaning the corridor we exposed remains of the original light grey, compact, thin <i>pakhṣa</i> surface (1036) and its sub-surface packing (1048), along wall 1028, which also had patches of plaster on it. Unfortunately, most of the surface elsewhere had been dug out by robbers, although a small patch of surface was still visible in the southern section.		
Finds: glass, iron, copper, burnt wood joints and painted plaster with gold flecks (SF05076 – Fig. 6:56).		
<b>RH005</b>	<b>Location: WBJR</b>	<b>Architecture</b>
N-S: 2.90 m	E-W: 2.90 m	Area: 8.41 m <sup>2</sup>
Description: A medium-sized stone wall (1056), retaining small to medium-sized stone scree/packing, between it and bedrock.		
Finds: glass shard		

- RH006**                **Location: WBJR**                                 **Architecture**  
N-S: 1.60 m     E-W: 1.40 m                 Area: 2.24 m<sup>2</sup>  
Description: A rough stone wall (1046) running roughly parallel to the river; seems likely to have been a terrace wall. Few finds were recovered. An even more ambiguous wall (1057) was the only structure found in the neighbouring robber hole, RH007 – it probably fulfilled the same function as 1046.
- RH007**                **Location: WBJR**                                 **Architecture**  
N-S: 2.10 m     E-W: 1.70 m                 Area: 3.57 m<sup>2</sup>  
Description: About 18 m to the north of RH007, a 20 cm thick horizontal strata of olive-grey and light brown mud-bricks was noted in the overhanging section of RH10. A comparable layer of stones was evident in the robber hole to the north, so we decided to excavate the intervening deposits. This revealed a distinct stone wall (1061), running approximately parallel to the Djām Rūd. To the east of the wall, an uneven stony surface/deposit was exposed, possibly the remains of a cobbled alley outside the wall. To the west of the wall, a single course of flat stones may represent an internal surface, or a footing for a mud-brick wall.
- RH008**                **Location: WBJR**  
N-S: 2.30 m     E-W: 2.20 m                 Area: 5.06 m<sup>2</sup>                 Depth: 1.20 m                 Vol.: 3.04 m<sup>3</sup>
- RH009**                **Location: WBJR**  
N-S: 1.20 m     E-W: 1.20 m                 Area: 1.44 m<sup>2</sup>                 Depth: 0.90 m                 Vol.: 0.65 m<sup>3</sup>
- RH010**                **Location: WBJR**                                 **Architecture**  
Description: See robber hole RH007 above.
- RH011**                **Location: WBJR – GPS point WBJR3**  
Description: no data
- RH012**                **Location: WBJR – GPS point WBJR5**  
Description: no data
- RH013**                **Location: WBJR**  
Description: No data – assigned a number in 2007 because of the collection of samples / ceramics from a possible fire installation (see micromorphological analysis of plaster sample – Fig. 6:74).
- RH014**                **Location: SBHR**                                 **Architecture**  
N-S: 1.40 m     E-W: 1.25 m                 Area: 1.75 m<sup>2</sup>                 Depth: 1.15 m                 Vol.: 1.01 m<sup>3</sup>  
Description: SBHR 2, 22 m north of rest-house; filled with gravel backfill. Primarily a vertical cut into alluvial deposits, but not penetrating baked brick paving. See Context 1202.
- RH015**                **Location: Khar Khūdj**                                 **Architecture**  
Description: Building north of tomb at Khar Khūdj, assigned a number in 2007. The building has stone foundations with 14-15 courses of brick extant above this. These remains stand 2.35 m high, 0.45 m of which is foundation. Bricks in section vary in size, but measured ones were 30 x 5 cm and 39 x 7 cm. 3.6m of wall was measured to the north of the robber hole; it is 0.9 m thick.



Appendix Six: MJAP robber hole descriptions

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**RH016**                      **Location: NBHR**

N-S: 1.60 m      E-W: 2.00 m                      Area: 3.20 m<sup>2</sup>                      Depth: 1.50 m                      Vol.: 2.40 m<sup>3</sup>

Description: Includes wash coming from the west.

RH sherds: 4

RH sherds details: 1 glazed; 1 unglazed rim collected

**RH017**                      **Location: NBHR**

N-S: 2.50 m      E-W: 3.60 m                      Area: 9.00 m<sup>2</sup>                      Depth: 1.30 m                      Vol.: 5.85 m<sup>3</sup>

Description: Dug through scree (top 1.5 m?).

RH sherds: 14

RH sherds details: 13 unglazed body sherds; 1 painted(?) body sherd

Other finds: Ceramics from lower down in the robber hole or washed in from above

**RH018**                      **Location: NBHR**

N-S: 2.70 m      E-W: 3.70 m                      Area: 9.99 m<sup>2</sup>                      Depth: 1.50 m                      Vol.: 7.49 m<sup>3</sup>

Description: Very large robber hole which extends ca 2 m north into the hillside. Much spoil wash from RH019 to the north-west and stony debris in north-east.

RH sherds: 2

Spoil sherds: 18

RH sherds details: 1 glazed; 1 base

Spoil sherd details: 3 glazed, 1 rim

Other finds: 1 brick

**RH019**                      **Location: NBHR**

**Architecture**

N-S: 2.60 m      E-W: 3.20 m                      Area: 8.32 m<sup>2</sup>                      Depth: 1.80 m                      Vol.: 7.49 m<sup>3</sup>

Description: Lots of surface vegetation; debris inside the robber hole is from the wall outside. The exposed wall consists of grey mud-bricks (ca 27 x 8 cm), with small stone inclusions and 2-3 cm of light brown mortar between courses. Up to 3 cm of coarse plaster (light olive grey) beneath multiple applications of fine white chalky plaster (ca 0.5 cm thick in total). The wall turns east at a grey / white plastered corner (Fig. 6:61); thereafter it is constructed of stones ca 19 x 6 cm in size. The core of the stone wall is not well constructed, although the southern face, which is robbed, was presumably better laid.

RH sherds: 1

Spoil sherds: 14

RH sherds details: collected – handmade

Spoil sherd details: 8 glazed

Other finds: 5 bricks

**RH020**                      **Location: NBHR**

N-S: 2.00 m      E-W: 2.40 m                      Area: 4.80 m<sup>2</sup>                      Depth: 1.60 m                      Vol.: 3.84 m<sup>3</sup>

Description: Discrete scoop through stony fill / scree; wash down slope into RH018.

RH sherds: 16

RH sherds details: 1 champleve of 3-4 glazed

Other finds: 1 bone

**RH021**                      **Location: NBHR**

N-S: 1.90 m      E-W: 1.40 m                      Area: 2.66 m<sup>2</sup>                      Depth: 1.60 m                      Vol.: 2.13 m<sup>3</sup>

Description: Discrete scoop into stony fill / scree; wash from above and into RH018 below.

RH sherds: 1

Spoil sherds: 2

Other finds: 1 bone

Appendix Six: MJAP robber hole descriptions

<b>RH022</b>	<b>Location: NBHR</b>			<b>Architecture</b>
N-S: 2.50 m	E-W: 1.65 m	Area: 4.13 m <sup>2</sup>	Depth: 2.00 m	Vol.: 4.13 m <sup>3</sup>
Description: Deep robber hole with three 'chambers' inside, one exposing possible corner of a stone wall (1.5 m long). Lot of stone debris in mouth of robber hole, suggesting wall removal.				
RH sherds: 3		Spoil sherds: 15		
RH sherds details: 1 collected				
Spoil sherd details: 2 glazed (1 rim); 1 painted				
Other finds: 2 glass shards (SF 05045-6) were found downslope				
<b>RH023</b>	<b>Location: NBHR</b>			<b>Architecture</b>
N-S: 2.90 m	E-W: 2.80 m	Area: 8.12 m <sup>2</sup>	Depth: 1.60 m	Vol.: 6.50 m <sup>3</sup>
Description: Vegetation in the robber hole; large spoil heap.				
RH sherds: 3		Spoil sherds: 5		
RH sherds details: 2 glazed				
Other finds: 1 bone; 5 baked bricks				
<b>RH024</b>	<b>Location: NBHR</b>			<b>Architecture</b>
N-S: 2.40 m	E-W: 2.20 m	Area: 5.28 m <sup>2</sup>	Depth: 1.50 m	Vol.: 3.96 m <sup>3</sup>
Description: Lot of spoil, slumped in from above, and large spoil heap to south. Relatively dense vegetation, so difficult to see sherds. Roughly laid stone wall 1.6 m long, 0.80 m wide; stones range from ca 12 x 14 cm to 28 x 22 cm in size; grey bricky tumble in the east section?				
RH sherds: 2		Spoil sherds: 2		
RH sherds details: (wash from above?); 1 glazed				
Other finds: Bone; 1 brick				
<b>RH025</b>	<b>Location: NBHR</b>			<b>Architecture</b>
N-S: 5.50 m	E-W: 2.70 m	Area: 14.85 m <sup>2</sup>	Depth: 1.90 m	Vol.: 14.11 m <sup>3</sup>
Description: Large robber hole which extends several metres to the west in the north-west corner through a small hole.				
RH sherds: 9		Spoil sherds: 2		
Other finds: Bone; baked brick				
<b>RH026</b>	<b>Location: NBHR</b>			<b>Architecture</b>
N-S: 3.00 m	E-W: 2.70 m	Area: 8.10 m <sup>2</sup>	Depth: 1.60 m	Vol.: 6.48 m <sup>3</sup>
Description: Plenty of vegetation where the spoil from the hole stops.				
RH sherds: 3		Spoil sherds: 5		
Spoil sherd details: 3 turquoise glazed				
Other finds: Several pieces of bone; 1 water-pipe fragment (22 cm long x 9 cm)				
<b>RH027</b>	<b>Location: NBHR</b>			<b>Architecture</b>
N-S: 9.50 m	E-W: 6.50 m	Area: 61.75 m <sup>2</sup>	Depth: 3.00 m	Vol.: 92.63 m <sup>3</sup>
Description: Very large robber hole – in fact multiple robber holes, dug in the east and north, cut into stone and baked brick walls. Contains a large heap of spoil which spills out of the breach in the 'bazaar' wall to the south. Architecture includes vaulting (Fig. 6:43).				
RH sherds: 10		Spoil sherds: 3		
Other finds: Samples 05001, 05005; glass base (SF05039) and glass rim (SF05044); plaster / glass window (?) fragment (SF05038); fragment of bone				

Appendix Six: MJAP robber hole descriptions

<b>RH028</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 7.50 m	E-W: 3.00 m	Area: 22.50 m <sup>2</sup>	Depth: 2.55 m	Vol.: 28.69 m <sup>3</sup>	
Description: Large robber hole dug into the 'arcade' wall; stone and brick wall in the west.					
RH sherds: 4					
RH sherds details: 1 glazed					
<b>RH029</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 4.75 m	E-W: 6.00 m	Area: 28.50 m <sup>2</sup>	Depth: 2.30 m	Vol.: 32.78 m <sup>3</sup>	
Description: Large scoop out of deposits north of the 'arcade' wall and subsequent erosion gullies and stone reinforcements. Distinct inner faces of 'arcade' wall and possible bricks visible in the west, but heavily concreted with mud 'dribble'.					
RH sherds: 3					
RH sherds details: 2 glazed, 1 frit, 1 <i>sgraffiato</i>					
Other finds: Bone					
<b>RH030</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 4.00 m	E-W: 4.00 m	Area: 16.00 m <sup>2</sup>	Depth: 1.20 m	Vol.: 9.60 m <sup>3</sup>	
Description: Mostly filled with wash (except in the south-west); some vegetation growing on the wash.					
RH sherds: 7					
RH sherds details: 5 glazed					
Other finds: 1 baked brick; some bone fragments.					
<b>RH031</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 3.50 m	E-W: 2.25 m	Area: 7.88 m <sup>2</sup>	Depth: 1.90 m	Vol.: 7.48 m <sup>3</sup>	
Description: Rough stone wall, ca 1.2 m high and at least 0.7 m wide in the north-west corner; cut by robber hole and obscured by spoil and concreted mud 'dribble'. Stones in the centre of the hole may originate from it. Average stone size: 35 x 12 x 10 cm.					
RH sherds: 2					
Spoil sherds: 6					
Spoil sherd details: 5 glazed					
<b>RH032</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 5.10 m	E-W: 3.00 m	Area: 15.30 m <sup>2</sup>	Depth: 1.70 m	Vol.: 13.01 m <sup>3</sup>	
Description: Broad robber hole with quite a lot of spoil and stones still in it, but no interpretable architecture. The sections show at least two layers of destruction debris (ca 1.3 m long in section; sample 05002) in section above stones (Fig. 6:71). The layer is ca 5 cm thick, ashy-grey, with lots of charcoal. It seems to lie between floors.					
Sample 05003 is from an internal fireplace, at the same level, just to the east. The deposit is ca 35 cm long, 15 cm thick.					
Sample 05004 is ca 10 cm lower, further to the east – a small burnt (very ashy) horizon.					
RH sherds: 2					
Spoil sherds:					
RH sherds details: 2 glazed collected; painted					
Other finds: Samples 05002-4; bone					
<b>RH033</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 2.70 m	E-W: 2.60 m	Area: 7.02 m <sup>2</sup>	Depth: 2.00 m	Vol.: 7.02 m <sup>3</sup>	
Description: Quite deep robber hole with stony fill from possible walls in the west and north-east; stone and mud-brick wall in the east. Large stones; spoil heap to south.					
RH sherds: 3					
Spoil sherds: 5					

## Appendix Six: MJAP robber hole descriptions

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Other finds: Bone; 1 sherd collected; stone jar base 18 x 11 cm

**RH034**                      **Location: NBHR**    **Architecture**  
N-S: 7.00 m      E-W: 1.45 m                      Area: 10.15 m<sup>2</sup>      Depth: 1.00 m                      Vol.: 5.07 m<sup>3</sup>  
Description: Long robber hole to east of RH033. Short stub of mud-brick wall ca >0.4 m thick, 0.6 m long east-west in the east corner, running towards RH033. ca 3 cm coarse plaster on south, possible stone component to north. Like RH033, seems largely dug into scree.  
RH sherds: 2  
RH sherds details: 1 base collected  
Other finds: Bone; baked brick 25.5 x 25.5 x 6.5 cm

**RH035**                      **Location: NBHR**  
N-S: 3.20 m      E-W: 2.00 m                      Area: 6.40 m<sup>2</sup>                      Depth: 1.30 m                      Vol.: 4.16 m<sup>3</sup>  
Description: Quite large robber hole with wash to the north and east, spoil (from RH034) to the west, and its own spoil to the south.  
RH sherds: 1    Spoil sherds: 6  
Spoil sherd details: 2 glazed; 1 frit  
Other finds: Bone; quernstone (22 x 17 x 5 cm)

**RH036**                      **Location: NBHR**    **Architecture**  
N-S: 1.60 m      E-W: 5.00 m                      Area: 8.00 m<sup>2</sup>                      Depth: 1.90 m                      Vol.: 7.60 m<sup>3</sup>  
Description: >5 m long wall running east-west in the north of robber hole; multiple layers of white plaster in the east; purpley-brown brick and light brown mortar. 1.8 m long mud-brick wall; the stone wall in the west is 2.8 m long, with multiple layers of mud plaster, possibly painted bluey-grey. The mud-bricks are 5 cm thick, the mortar 4 cm thick. An artificial ridge separates RH036 from RH037 to the south.  
RH sherds: 3  
RH sherds details: 1 collected  
Other finds: Bone

**RH037**                      **Location: NBHR**  
N-S: 4.80 m      E-W: 5.30 m                      Area: 25.44 m<sup>2</sup>                      Depth: 1.00 m                      Vol.: 12.72 m<sup>3</sup>  
Description: Large robber hole south of RH036, east of RH038.  
RH sherds: 2    Spoil sherds: 2

**RH038**                      **Location: NBHR**    **Architecture?**  
N-S: 3.75 m      E-W: 2.60 m                      Area: 9.75 m<sup>2</sup>                      Depth: 1.10 m                      Vol.: 5.36 m<sup>3</sup>  
Description: Large, undercut robber hole containing a short remnant of a wall with pinky-brown plaster. Tumbled brick debris (some baked brick, but mostly mud-brick); fragments of green plaster.  
Other finds: Bone; baked brick; plaster

**RH039**                      **Location: NBHR**    **Architecture**  
N-S: 2.00 m      E-W: 2.90 m                      Area: 5.80 m<sup>2</sup>                      Depth: 1.40 m                      Vol.: 4.06 m<sup>3</sup>  
Description: Long robber hole undercut into bedrock to the north. It is outside the 50 m wide survey area, but seems to contain destruction debris, so we took samples for flotation, C14 and it should be sampled for thin section of possible occupation deposits and surfaces below destruction.  
Spoil sherds: 6  
Spoil sherd details: 4 glazed  
Other finds: Samples 05006-8; glass; bone; iron button / stud (SF05078) from flotation sample

05008

**RH040            Location: NBHR**

Description: Missing data.

**RH041            Location: NBHR**

N-S: 2.70 m	E-W: 2.90 m	Area: 7.83 m <sup>2</sup>	Depth: 1.40 m	<b>Architecture</b> Vol.: 5.48 m <sup>3</sup>
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Description: Cut rock masonry and baked mud-brick along north-east corner of shaft. Masonry measures on average 32+ x 14+ x 15+ cm.

RH sherds: 9	Spoil sherds: 5
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Other finds: Baked brick fragments surface (average size 14+ x 13+ x 4+ cm)

**RH042            Location: NBHR**

N-S: 3.50 m	E-W: 2.70 m	Area: 9.45 m <sup>2</sup>	Depth: 2.30 m	<b>Architecture</b> Vol.: 10.87 m <sup>3</sup>
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Description: A wall 0.9 m wide, with cut rock masonry facing, bisects robber hole. Small amount of rubble / degraded mud-brick in the interior. Possible degraded plaster on lower faces of south side of wall. Stones average 34+ x 11+ x 16 cm. Some wash from slope above in upper section.

RH sherds: 4	Spoil sherds: 2
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Other finds: Bone

**RH043            Location: NBHR**

N-S: 4.10 m	E-W: 2.30 m	Area: 9.43 m <sup>2</sup>	Depth: 2.70 m	<b>Architecture</b> Vol.: 12.73 m <sup>3</sup>
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Description: Possible continuation of wall from RH042; runs east-west half way through the robber hole. Large amount of slump from slope above; some fragments of masonry on robber hole floor.

RH sherds: 4	Spoil sherds: 1
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Other finds: Worked stone

**RH044            Location: NBHR**

N-S: 2.90 m	E-W: 2.30 m	Area: 6.67 m <sup>2</sup>	Depth: 1.80 m	<b>Architecture</b> Vol.: 6.00 m <sup>3</sup>
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Description: Masonry 1.3 m from edge of feature, running east-west; badly eroded, 0.7 m high.

RH sherds: 4	Spoil sherds: 1
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Other finds: Bone; ceramic bovine(?) figurine head (SF05056); masonry fragments (average size: 18+ x 8+ x 17+ cm); fragments of baked bricks (average size: 23+ x 17+ x 6 cm).

**RH045            Location: NBHR**

N-S: 3.50 m	E-W: 2.70 m	Area: 9.45 m <sup>2</sup>	Depth: 1.80 m	<b>Architecture</b> Vol.: 8.51 m <sup>3</sup>
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Description: Badly degraded baked brick and rock rubble wall along north face of robber hole, which is dug into the north-west corner; large number of rock fragments; spoil on base of robber hole, possibly from slope above.

RH sherds: 2	Spoil sherds: 1
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Other finds: Baked brick fragment (SF05064) – part of a column?

**RH046            Location: NBHR**

N-S: 2.90 m	E-W: 2.30 m	Area: 6.67 m <sup>2</sup>	Depth: 2.10 m	<b>Architecture</b> Vol.: 7.00 m <sup>3</sup>
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Description: East face has masonry (average stone size: 24+ x 17+ x 9 cm); pick marks in north wall; buttress of masonry separating west and east 'alcoves'.

RH sherds: 7	Spoil sherds: 2
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<b>RH047</b>	<b>Location: NBHR</b>			<b>Architecture</b>
N-S: 1.90 m	E-W: 4.10 m	Area: 7.79 m <sup>2</sup>	Depth: 1.60 m	Vol.: 6.23 m <sup>3</sup>
Description: Possible degraded mud-brick along north face; cut rock masonry (possibly tumble) from above. Slight overhang.				
RH sherds: 6		Spoil sherds: 2		
Other finds: Bone; worked stone				
<b>RH048</b>	<b>Location: NBHR</b>			<b>Architecture</b>
N-S: 3.30 m	E-W: 4.50 m	Area: 14.85 m <sup>2</sup>	Depth: 2.70 m	Vol.: 20.05 m <sup>3</sup>
Description: Two east-west walls, with a south return in the east of the southern wall. Masonry wall (average stone size: 34+ x 28+ x 5 cm) inside the robber hole. The wall is 8 courses high in the north-west corner of the 'alcove'. Pick marks inside 'alcove'. Masonry on north wall (outside part): 13 courses, with 4 further courses above a gap.				
RH sherds: 4		Spoil sherds: 3		
Other finds: Bone; plaster inside 'alcove'				
<b>RH049</b>	<b>Location: NBHR</b>			<b>Architecture</b>
N-S: 2.90 m	E-W: 4.20 m	Area: 12.18 m <sup>2</sup>	Depth: 2.10 m	Vol.: 12.79 m <sup>3</sup>
Description: Masonry in north-east and north-west corner (average stone size: 33+ x 17+ x 14+ cm). Spoil sherds: 1				
Other finds: Bone; baked brick fragments				
<b>RH050</b>	<b>Location: NBHR</b>			<b>Architecture</b>
N-S: 2.57 m	E-W: 0.83 m	Area: 2.13 m <sup>2</sup>	Depth: 0.95 m	Vol.: 1.01 m <sup>3</sup>
Description: Gully running north-south through robber hole RH051 to the south-east. Grave to south-west.				
RH sherds: 3		Spoil sherds: 7		
Other finds: 1 vertebra and 2 ribs in section, presumably related to the grave.				
<b>RH051</b>	<b>Location: NBHR</b>			<b>Architecture</b>
N-S: 1.20 m	E-W: 1.70 m	Area: 2.04 m <sup>2</sup>	Depth: 1.35 m	Vol.: 1.38 m <sup>3</sup>
Description: Relatively small robber hole, sandwiched between RH050 and RH052; extends a further 1.4 m north into the hillslope. Light vegetation, small stones.				
RH sherds: 2		RH sherds details: 1 glazed		
<b>RH052</b>	<b>Location: NBHR</b>			<b>Architecture</b>
N-S: 1.00 m	E-W: 1.70 m	Area: 1.70 m <sup>2</sup>	Depth: 0.50 m	Vol.: 0.43 m <sup>3</sup>
Description: Located to the east of RH051; undercut.				
RH sherds: 4		Spoil sherds: 2		
Other finds: Bone				
<b>RH053</b>	<b>Location: NBHR</b>			<b>Architecture</b>
N-S: 1.50 m	E-W: 1.30 m	Area: 1.95 m <sup>2</sup>	Depth: 0.60 m	Vol.: 0.58 m <sup>3</sup>
Description: L-shaped robber hole (Fig. 6:59)				
RH sherds: 1		Spoil sherds: 11		
Other finds: Bone				

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<b>RH054</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 5.20 m	E-W: 3.60 m	Area: 18.72 m <sup>2</sup>	Depth: 1.30 m	Vol.: 12.17 m <sup>3</sup>	
Description: Baked bricks in north-east corner and large rock masonry.					
Spoil sherds: 12					
Spoil sherd details: 2 glazed sherds, including a base; 1 painted sherd					
Other finds: Blue glazed tile fragment (SF05059); bone; small glass shards					
<b>RH055</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 2.90 m	E-W: 3.20 m	Area: 9.28 m <sup>2</sup>	Depth: 0.80 m	Vol.: 3.71 m <sup>3</sup>	
Description: Northern 1.5 m is undercut.					
Spoil sherds: 7					
Spoil sherd details: 2 glazed; 1 "inscribed"					
Other finds: Bone; glass fragments					
<b>RH056</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 5.50 m	E-W: 5.00 m	Area: 27.50 m <sup>2</sup>	Depth: 2.10 m	Vol.: 28.88 m <sup>3</sup>	
Description: Large robber hole with sections of masonry in the north-east and north-west, and a mud-brick wall stub in the south-east. Horizontal timber in north-west corner.					
RH sherds: 2		Spoil sherds: 9			
Other finds: Glass fragments; wood					
<b>RH057</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 0.90 m	E-W: 1.00 m	Area: 0.90 m <sup>2</sup>	Depth: 1.00 m	Vol.: 0.45 m <sup>3</sup>	
Description: Small robber hole, with a possible washed out robber hole to the west. RH054 to the south-west.					
Spoil sherds: 4					
Spoil sherd details: 1 embossed sherd and rim, collected					
Other finds: Bone					
<b>RH058</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 7.10 m	E-W: 4.80 m	Area: 34.08 m <sup>2</sup>	Depth: 3.80 m	Vol.: 64.75 m <sup>3</sup>	
Description: Located east of RH057; possible masonry wall on east side.					
RH sherds: 9		Spoil sherds: 16			
Spoil sherd details: Jar neck; 2 green glazed sherds					
<b>RH059</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 0.90 m	E-W: 1.20 m	Area: 1.08 m <sup>2</sup>	Depth: 0.50 m	Vol.: 0.27 m <sup>3</sup>	
Description: Small robber hole north-west of RH057, south-west of RH060.					
RH sherds: 1		Spoil sherds: 9			
Spoil sherd details: 1 yellow glazed sherd; 1 blue glazed sherd					
<b>RH060</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 2.00 m	E-W: 1.70 m	Area: 3.40 m <sup>2</sup>	Depth: 1.00 m	Vol.: 1.70 m <sup>3</sup>	
Description: Irregular-shaped robber hole between RH058 and RH059.					
RH sherds: 11		Spoil sherds: 15			
Spoil sherd details: 3 rims; 1 neck					
Other finds: Bone					

Appendix Six: MJAP robber hole descriptions

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**RH061**                      **Location: NBHR**

N-S: 1.90 m      E-W: 1.60 m                      Area: 3.04 m<sup>2</sup>                      Depth: 1.20 m                      Vol.: 1.82 m<sup>3</sup>

Description: Rectangular-shaped robber hole, between RH058 and RH062. Small cut, intersected by erosion channel from above.

RH sherds: 2    Spoil sherds: 15

Other finds: Bone

**RH062**                      **Location: NBHR**

**Architecture**

N-S: 3.00 m      E-W: 1.90 m                      Area: 5.70 m<sup>2</sup>                      Depth: 0.90 m                      Vol.: 2.57 m<sup>3</sup>

Description: Cut into masonry wall (in north), with loose bricks in the middle. Adjacent to 2 more similar-sized robber holes (RH061 and RH063).

Spoil sherds: 6

Other finds: Bricks (average size 14+ x 12 x 5cm)

**RH063**                      **Location: NBHR**

**Architecture**

N-S: 2.30 m      E-W: 2.40 m                      Area: 5.52 m<sup>2</sup>                      Depth: 1.10 m                      Vol.: 3.04 m<sup>3</sup>

Description: Square-shaped robber hole, between RH062 and RH064. Baked brick wall on north robber hole.

Spoil sherds: 11

Other finds: Bone; glass fragments

**RH064**                      **Location: NBHR**

**Architecture**

N-S: 2.30 m      E-W: 0.90 m                      Area: 2.07 m<sup>2</sup>                      Depth: 0.80 m                      Vol.: 0.83 m<sup>3</sup>

Description: Thin robber hole east of RH063. Continuation of masonry wall, separated from RH063 by a mud-brick pillar / cut wall. Average brick size: 20+ x 11 x 4-5 cm. Wood in north-west and east side.

Spoil sherds: 11

Other finds: Bone; wood

**RH065**                      **Location: NBHR**

**Architecture**

N-S: 2.10 m      E-W: 1.30 m                      Area: 2.73 m<sup>2</sup>                      Depth: 1.20 m                      Vol.: 1.64 m<sup>3</sup>

Description: Rectangular robber hole with 6 course high masonry wall in north side; the robbers cut into mud-brick walls in the east and west, creating an overhang. RH066 to the east.

RH sherds: 3    Spoil sherds: 4

Other finds: Bone

**RH066**                      **Location: NBHR**

**Architecture**

N-S: 2.30 m      E-W: 2.90 m                      Area: 6.67 m<sup>2</sup>                      Depth: 1.40 m                      Vol.: 4.67 m<sup>3</sup>

Description: Rock masonry wall along north wall, lower section of face consists of 4 courses, with mud-brick above. Also rock and brick tumble and vegetation.

RH sherds: 8    Spoil sherds: 3

Other finds: Bone; worked stone

**RH067**                      **Location: NBHR**

N-S: 2.60 m      E-W: 2.80 m                      Area: 7.28 m<sup>2</sup>                      Depth: 1.30 m                      Vol.: 4.73 m<sup>3</sup>

Description: Located east of RH068, north of path. Cut in north-west corner by run-off channel from steep slope above. Water pooled on robber hole surface – dried, cracked mud. Some vegetation.

RH sherds: 3

Other finds: Bone



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**RH068**                      **Location: NBHR**

N-S: 1.60 m      E-W: 2.50 m                      Area: 4.00 m<sup>2</sup>                      Depth: 1.00 m                      Vol.: 2.00 m<sup>3</sup>

Description: Robber hole directly above path – spoil across it.

RH sherds: 4                                      Spoil sherds: 2

Other finds: Bone; glass fragments

**RH069**                      **Location: NBHR**

N-S: 2.30 m      E-W: 2.30 m                      Area: 5.29 m<sup>2</sup>                      Depth: 1.40 m                      Vol.: 3.70 m<sup>3</sup>

Description: Deep, circular robber hole, spoil covered by rock rubble from upslope. RH071 to the east.

Spoil sherds: 4

Other finds: Bone

**RH070**                      **Location: NBHR**

N-S: 2.30 m      E-W: 3.20 m                      Area: 7.36 m<sup>2</sup>                      Depth: 1.30 m                      Vol.: 4.78 m<sup>3</sup>

Description: Located north of the 50 m point and path, east of RH068. Much rock rubble from further upslope. Bush in front of the robber hole.

RH sherds: 2                                      Spoil sherds: 3

Spoil sherd details: 1 handle; 1 rim, snapped in 2

Other finds: Bone

**RH071**                      **Location: NBHR**

**Architecture**

N-S: 2.40 m      E-W: 1.80 m                      Area: 4.32 m<sup>2</sup>                      Depth: 0.90 m                      Vol.: 1.94 m<sup>3</sup>

Description: Rectangular robber hole between RH069 and RH072, undercut in N, rock rubble in the south-east; possible mud-brick and stone wall foundation in north. Old root systems intertwined with masonry.

RH sherds: 1                                      Spoil sherds: 13

Other finds: Bone

**RH072**                      **Location: NBHR**

**Architecture**

N-S: 2.10 m      E-W: 2.30 m                      Area: 4.83 m<sup>2</sup>                      Depth: 1.20 m                      Vol.: 2.90 m<sup>3</sup>

Description: Possible architecture in north, and pick marks; possible mud-brick and stone pillar separating the robber hole from RH071 to the west. Spoil heap in front, and in the centre, of the robber hole, rock rubble in front of robber hole. Human faeces.

RH sherds: 6                                      Spoil sherds: 4

Other finds: Bone

**RH073**                      **Location: NBHR**

**Architecture**

N-S: 4.20 m      E-W: 2.50 m                      Area: 10.50 m<sup>2</sup>                      Depth: 2.30 m                      Vol.: 12.07 m<sup>3</sup>

Description: Large robber hole with architecture in all sides. Low course of large rocks and stones, 1.2 m high from robber hole base; above that, mud-brick, small pebbles, small rocks in mortar and overhang. Masonry runs from south-east corner along back wall to north-west corner, separated from RH072 by possible stone and mud-brick pillar / cut wall. Bushes in centre of robber hole, rock rubble in the front. Human faeces.

RH sherds: 6                                      Spoil sherds: 11

Other finds: Bone

Appendix Six: MJAP robber hole descriptions

<b>RH074</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 2.90 m	E-W: 1.70 m	Area: 4.93 m <sup>2</sup>	Depth: 1.30 m	Vol.: 3.20 m <sup>3</sup>	
Description: Rock masonry wall in north-east above a more recent robber hole. Erosion gully in the north-west, with run-off rubble in the north-west corner of the RH; path to the north, robber hole RH075 to the east.					
RH sherds: 5		Spoil sherds: 5			
RH sherds details:					
Spoil sherd details:					
Other finds: Bone; loose bricks					
<b>RH075</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 2.40 m	E-W: 1.70 m	Area: 4.08 m <sup>2</sup>	Depth: 0.90 m	Vol.: 1.84 m <sup>3</sup>	
Description: Rectangular robber hole between RH074 and RH075; overhang in the north. North side consists of a wall with small pebble and rock masonry; the lower courses are revealed, topped by degrading mud-brick; average stone size: 10 x 8 x 3 cm; larger rock masonry fallen from above, possibly modern. A lot of rubble.					
RH sherds: 5		Spoil sherds: 2			
Other finds: Bone; bricks					
<b>RH076</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 1.40 m	E-W: 1.20 m	Area: 1.68 m <sup>2</sup>	Depth: 0.70 m	Vol.: 0.59 m <sup>3</sup>	
Description: Small robber hole east of RH075, south of path; river to south. Rock masonry on spoil from above – probably modern from path reinforcement.					
RH sherds: 3		Spoil sherds: 3			
Other finds: Bone					
<b>RH077</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 3.00 m	E-W: 3.20 m	Area: 9.60 m <sup>2</sup>	Depth: 1.60 m	Vol.: 7.68 m <sup>3</sup>	
Description: Located east of RH086. Possible rock masonry wall inside a deep hole in the north side. Much of the run-off spill in the robber hole is from the slope above.					
RH sherds: 10		Spoil sherds: 1			
Other finds: Bone; plaster fragments					
<b>RH078</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 2.10 m	E-W: 1.90 m	Area: 3.99 m <sup>2</sup>	Depth: 1.70 m	Vol.: 3.39 m <sup>3</sup>	
Description: Irregularly shaped robber hole, north-east of RH077; spoil heap to south. Wasps' nest in north.					
RH sherds: 6		Spoil sherds: 8			
Other finds: Bone; baked brick fragments					
<b>RH079</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 2.50 m	E-W: 2.20 m	Area: 5.50 m <sup>2</sup>	Depth: 1.70 m	Vol.: 4.68 m <sup>3</sup>	
Description: Undercut, with mud-brick wall 4 courses high in north. RH078 to the north-west.					
RH sherds: 4		Spoil sherds: 2			
Other finds: 1 painted neck/rim handle sherd collected					
<b>RH080</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 2.60 m	E-W: 2.60 m	Area: 6.76 m <sup>2</sup>	Depth: 1.80 m	Vol.: 6.08 m <sup>3</sup>	
Description: Roughly circular robber hole, south-east of RH081; pick marks in north-west side.					

## Appendix Six: MJAP robber hole descriptions

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Possible rock masonry to south-west.

RH sherds: 2 Spoil sherds: 6

Other finds: Bone; plaster lump?

### **RH081 Location: NBHR**

N-S: 1.80 m E-W: 1.40 m Area: 2.52 m<sup>2</sup> Depth: 1.60 m Vol.: 2.02 m<sup>3</sup>

Description: Small robber hole between RH080 and RH081, north of RH031. Heavily washed out, with 'melted' mud along north side and spoil downslope to south.

RH sherds: 1 Spoil sherds: 1

### **RH082 Location: NBHR**

N-S: 2.10 m E-W: 1.70 m Area: 3.57 m<sup>2</sup> Depth: 1.50 m Vol.: 2.68 m<sup>3</sup>

Description: Circular robber hole between RH081 and RH083; overhang in north, spoil heap to south. Pick marks along north side.

RH sherds: 1 Spoil sherds: 4

Other finds: Bone; plaster fragments

### **RH083 Location: NBHR**

N-S: 2.90 m E-W: 2.30 m Area: 6.67 m<sup>2</sup> Depth: 2.00 m Vol.: 6.67 m<sup>3</sup>

Description: Arc-shaped robber hole east of RH082. Slight overhang in north. Large quantities of pottery, bone and timber protected by overhang – *in situ*, not washed out / in.

RH sherds: 3

RH sherds details: 7 embedded in north side

Other finds: Bone; wood; possible unworked marble fragment

### **RH084 Location: NBHR**

### **Architecture**

N-S: 4.00 m E-W: 1.10 m Area: 4.40 m<sup>2</sup> Depth: 1.60 m Vol.: 3.52 m<sup>3</sup>

Description: Long robber hole, orientated north-south between RH083 and RH086. Four complete baked bricks on spoil heap, probably from RH084 and not washed down from above. Masonry walls in north-east and east, under long overhang; spoil to south; 3 bagged samples of ceramics and stucco.

RH sherds: 5 Spoil sherds: 6

Other finds: Stucco fragments (SF05001); possible gaming token cut from glazed ceramic (SF05050); baked bricks

### **RH085 Location: NBHR**

Description: Missing data. Located to north-west of RH086 on RH086 sketch plan – possibly confused with RH084, whose sketch shows RH086 to the south-east.

### **RH086 Location: NBHR**

N-S: 1.90 m E-W: 1.90 m Area: 3.61 m<sup>2</sup> Depth: 1.60 m Vol.: 2.89 m<sup>3</sup>

Description: Semi-circular robber hole, south-east of RH085, east of RH084. Run-off pours into the north-west corner from the slope above. Possible robber hole filled with run-off directly to the west.

RH sherds: 2 Spoil sherds: 2

Other finds: Bone

### **RH087 Location: NBHR**

N-S: 1.60 m E-W: 1.80 m Area: 2.88 m<sup>2</sup> Depth: 0.90 m Vol.: 1.30 m<sup>3</sup>

Description: Smallish robber hole located east of RH078 and RH088. Large amount of run-off fill

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from above; spoil extending to south into RH079.

RH sherds: 3 Spoil sherds: 3

Other finds: Brick fragments

**RH088 Location: NBHR Architecture**

N-S: 2.80 m E-W: 1.60 m Area: 4.48 m<sup>2</sup> Depth: 2.20 m Vol.: 4.93 m<sup>3</sup>

Description: Rectangular robber hole located north-east of RH078; possible masonry wall in north-west corner; large worked stone slab running north-south in west side (73 x 26+ x 16 cm) – it appears to be *in situ*. Masonry in north-west corner averages 13 x 8 x 4 cm. Worked stone on base of robber hole in south-west corner; pick marks on overhang and western, northern and eastern sides.

RH sherds: 12 Spoil sherds: 2

Other finds: Bone; brick fragments; worked stone

**RH089 Location: NBHR Architecture**

N-S: 4.50 m E-W: 4.70 m Area: 21.15 m<sup>2</sup> Depth: 2.30 m Vol.: 24.32 m<sup>3</sup>

Description: Two distinct robbing episodes – the robbers dug through a masonry wall in the north-west; possibly did not find much here, since they did not dig out much here. Large amount of spill from above. Pick marks on north-west bulge.

RH sherds: 9 Spoil sherds: 9

Other finds: Baked brick fragments, worked stone masonry; bone

**RH090 Location: NBHR Architecture**

N-S: 2.60 m E-W: 3.20 m Area: 8.32 m<sup>2</sup> Depth: 1.50 m Vol.: 6.24 m<sup>3</sup>

Description: Baked brick wall (average brick size: 25 x 8 x 14+ cm) along north face – possible continuation of masonry from RH089. Large worked stone across spoil.

RH sherds: 3 Spoil sherds: 2

Other finds: Virtually robbed clean other than for a small bone fragment; worked stone

**RH091 Location: NBHR Architecture**

N-S: 3.40 m E-W: 3.20 m Area: 10.88 m<sup>2</sup> Depth: 1.90 m Vol.: 10.34 m<sup>3</sup>

Description: Baked brick wall along north side; masonry wall in north-east corner, along east side and loose stones on robber hole floor (average stone size: 26 x 14 x 10 cm). Two gouges in north separated by earth / brick column, as in RH003; slight overhang in north-east bulge.

Spoil sherds: 12

Other finds: Bone

**RH092 Location: NBHR Architecture**

N-S: 3.00 m E-W: 3.30 m Area: 9.90 m<sup>2</sup> Depth: 1.60 m Vol.: 7.92 m<sup>3</sup>

Description: Baked brick in north-east corner; masonry in north side, and loose stones in spoil (average size stone 38+ x 15 x 14 cm). Two bushes in the robber hole; RH019 to the NE.

RH sherds: 6 Spoil sherds: 3

Other finds: Wood on spoil heap (possibly modern); worked stone

**RH093 Location: NBHR Architecture**

N-S: 2.50 m E-W: 2.20 m Area: 5.50 m<sup>2</sup> Depth: 1.70 m Vol.: 4.68 m<sup>3</sup>

Description: Masonry in north-west corner; baked brick fragments on base of robber hole; fragments of plaster in spoil heap (see micromorphological analysis of plaster sample – Fig. 6:74). Average brick size: 20+ x 5 x 12 cm.



Other finds: Bone; mud-brick fragments.

**RH100**                      **Location: North Face Sang-i Manār**                      **Architecture?**  
Description: A large robber hole ca 15 m to the south of the rest-house. It is reported to be over 3 m deep and to contain a rounded structure (possibly a column), although its current fill of refuse prevented us from verifying this. A couple of ceramic artefacts were recovered from its section (assigned Context 1300), during a brief investigation, including an equid figurine head (see SF0323 – Fig. 6:99).

**RH101**                      **Location: NBHR**                      **Architecture**  
N-S: 3.80 m    E-W: 4.60 m                      Area: 17.48 m<sup>2</sup>    Depth: 2.30 m                      Vol.: 20.10 m<sup>3</sup>  
Description: North side has masonry and baked brick walls; large amount of spill from slope above. RH099 is to the west; rock rubble in the south-west.  
Other finds: Bone; fragments of baked brick (26+ x 17 x 4cm); worked stone (20+ x 12+ x 14 cm).

**RH102**                      **Location: NBHR**  
N-S: 2.30 m    E-W: 3.00 m                      Area: 6.90 m<sup>2</sup>    Depth: 0.90 m                      Vol.: 3.11 m<sup>3</sup>  
Description: Shallow robber hole largely filled with spill from above; south of RH101.  
Spoil sherds: 5  
Other finds: Bone; baked brick fragments

**RH103**                      **Location: NBHR**                      **Architecture**  
N-S: 2.50 m    E-W: 3.20 m                      Area: 8.00 m<sup>2</sup>    Depth: 1.70 m                      Vol.: 6.80 m<sup>3</sup>  
Description: Wide robber hole between RH102 and RH104. Baked brick and rock masonry wall in north-east corner. Some spill from above.  
RH sherds: 2                                      Spoil sherds: 1  
Other finds: Bone; baked brick; worked stone (44+ x 14 x 13+ cm)

**RH104**                      **Location: NBHR**                      **Architecture**  
N-S: 8.90 m    E-W: 4.70 m                      Area: 41.83 m<sup>2</sup>    Depth: 1.10 m                      Vol.: 23.01 m<sup>3</sup>  
Description: Large robber hole cut into badly eroded baked brick and masonry in north side. Large amount of spill from upslope.  
RH sherds: 7                                      Spoil sherds: 5  
Other finds: Bone; baked brick; ceramic game counters (?) – SF05048-9

**RH105**                      **Location: NBHR**                      **Architecture**  
N-S: 5.50 m    E-W: 1.80 m                      Area: 9.90 m<sup>2</sup>    Depth: 1.40 m                      Vol.: 6.93 m<sup>3</sup>  
Description: Deep shaft (the entrance measures 0.9 m east-west and is 0.4 m deep) with masonry in it, running north; also masonry in the north-east corner of the robber hole. Stone rubble in the front.  
RH sherds: 3                                      Spoil sherds: 5  
Other finds: Bone; worked stone (24+ x 16+ x 15 cm); glass shard (SF05047) was found to the north of RH105

**RH106**                      **Location: NBHR**                      **Architecture**  
N-S: 3.40 m    E-W: 2.50 m                      Area: 8.50 m<sup>2</sup>    Depth: 1.70 m                      Vol.: 7.22 m<sup>3</sup>  
Description: Medium-sized robber hole between RH105 and RH107; masonry along the north side.  
RH sherds: 3                                      Spoil sherds: 4  
Other finds: Worked stone (28+ x 23+ x 8+ cm); baked brick (20+ x 15+ x 4 cm) in the spoil

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<b>RH107</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 3.50 m	E-W: 4.40 m	Area: 15.40 m <sup>2</sup>	Depth: 1.90 m	Vol.: 14.63 m <sup>3</sup>	
Description: Large robber hole, with another one immediately to the north-east, but outside the survey area. The north side has baked brick and worked stone (28+ x 12+ x 19+ cm) masonry. Fragments of baked brick in the spoil.					
RH sherds: 1		Spoil sherds: 3			
Other finds: Baked brick; worked stone					
<b>RH108</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 3.80 m	E-W: 4.20 m	Area: 15.96 m <sup>2</sup>	Depth: 1.60 m	Vol.: 12.77 m <sup>3</sup>	
Description: Large robber hole, east of RH109. Some masonry visible in the north-east; mud-brick and worked stone in spoil.					
RH sherds: 5		Spoil sherds: 6			
Other finds: Bone; worked stone (12+ x 6+ x 14+ cm)					
<b>RH109</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 2.60 m	E-W: 3.30 m	Area: 8.58 m <sup>2</sup>	Depth: 1.70 m	Vol.: 7.29 m <sup>3</sup>	
Description: Medium-sized robber hole between RH110 and RH108. Pick marks along sides; possible 'melted' mud-brick. Large amount of run-off from slope above on base of robber hole.					
RH sherds: 6		Spoil sherds: 4			
<b>RH110</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 1.90 m	E-W: 2.70 m	Area: 5.13 m <sup>2</sup>	Depth: 1.20 m	Vol.: 3.08 m <sup>3</sup>	
Description: Rectangular robber hole west of RH109, with clear evidence of structures. Worked stone masonry along north side, 2 'alcoves' separated by a narrow masonry buttress.					
RH sherds: 1		Spoil sherds: 1			
Other finds: Baked brick					
<b>RH111</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 2.20 m	E-W: 3.80 m	Area: 8.36 m <sup>2</sup>	Depth: 1.80 m	Vol.: 7.52 m <sup>3</sup>	
Description: L-shaped robber hole burrowing into a baked brick-walled space, with bricks on 3 sides. The overhung area measures 1.6 m north-south, 2.6 m east-west with a 1.2 m wide robbed gap in the south-west. Pick marks on north side.					
Spoil sherds: 2					
Other finds: Bone					
<b>RH112</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 2.60 m	E-W: 3.70 m	Area: 9.62 m <sup>2</sup>	Depth: 1.70 m	Vol.: 8.18 m <sup>3</sup>	
Description: Irregular-shaped robber hole with spoil from above in the north-west and rock rubble in the south-east.					
RH sherds: 2					
Other finds: Bone; worked stone; baked brick (16+ x 13+ x 4 cm)					
<b>RH113</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 4.20 m	E-W: 3.80 m	Area: 15.96 m <sup>2</sup>	Depth: 2.40 m	Vol.: 19.15 m <sup>3</sup>	
Description: Large robber hole east of RH114. Masonry wall in south-east corner (average stone size: 30 x 22 x 9 cm). Large amount of spoil (including worked stone) from above. Heavily eroded.					
RH sherds: 8		Spoil sherds: 3			

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Other finds: Stone vessel fragment; baked brick

### **RH114**                      **Location: NBHR**

N-S: 5.00 m      E-W: 7.50 m                      Area: 37.50 m<sup>2</sup>      Depth: 2.60 m                      Vol.: 48.75 m<sup>3</sup>

Description: Large, badly eroded robber hole with a large amount of spoil from upslope.

RH sherds: 4    Spoil sherds: 4

Other finds: Bone; charcoal; baked brick (21 x 21 x 4 cm); worked stone (13+ x 13+ x 15 cm)

### **RH115**                      **Location: NBHR**

### **Architecture**

N-S: 4.30 m      E-W: 2.10 m                      Area: 9.03 m<sup>2</sup>      Depth: 1.70 m                      Vol.: 7.68 m<sup>3</sup>

Description: Rectangular robber hole with overhang in north exposing worked stone masonry. Lots of worked stone (15+ x 17+ x 15 cm) and baked brick in spoil. A shaft, which extends to the north, measures 2.1 m, the overhang 2.2 m wide east-west.

RH sherds: 2    Spoil sherds: 4

Other finds: Worked stone; baked brick; window plaster (SF05044) was found on the surface half way between RH095 and RH115

### **RH116**                      **Location: NBHR**

N-S: 1.20 m      E-W: 1.00 m                      Area: 1.20 m<sup>2</sup>      Depth: 1.20 m                      Vol.: 0.72 m<sup>3</sup>

Description: Small robber hole, between RH117 and RH114. Rock rubble in the south – possibly a wall.

RH sherds: 2    Spoil sherds: 1

Other finds: Copper disc / coin (SF05051); masonry fragments (average size: 30+ x 9 x 5+ cm); baked brick (25+ x 12+ x 4 cm).

### **RH117**                      **Location: NBHR**

### **Architecture**

N-S: 3.70 m      E-W: 2.30 m                      Area: 8.51 m<sup>2</sup>      Depth: 1.60 m                      Vol.: 6.81 m<sup>3</sup>

Description: Combination of masonry and baked brick wall along north face between western and north-eastern corner. fragments of cut rock in spoil. Large amount of spoil from upslope. Eastern, western and southern edges are badly eroded.

RH sherds: 1    Spoil sherds: 2

Other finds: Masonry fragments (35+ x 24+ x 20+ cm); baked brick (20+ x 15+ x 5 cm)

### **RH118**                      **Location: NBHR**

### **Architecture**

N-S: 2.70 m      E-W: 1.70 m                      Area: 4.59 m<sup>2</sup>      Depth: 1.40 m                      Vol.: 3.21 m<sup>3</sup>

Description: Rectangular robber hole east of RH119. Pick marks on eastern and northern sides. Masonry wall along west side.

RH sherds: 1

Other finds: Masonry fragments (30+ x 12+ x 12+cm); baked brick (21+ x 14+ x 4 cm)

### **RH119**                      **Location: NBHR**

N-S: 2.80 m      E-W: 2.70 m                      Area: 7.56 m<sup>2</sup>      Depth: 1.60 m                      Vol.: 6.05 m<sup>3</sup>

Description: Arc-shaped robber hole west of RH118. Fragments of masonry, probably from upslope. Bedrock forms the north side.

RH sherds: 1    Spoil sherds: 1

Other finds: Bone; worked stone



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<b>RH120</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 5.20 m	E-W: 5.10 m	Area: 26.52 m <sup>2</sup>	Depth: 2.70 m	Vol.: 35.80 m <sup>3</sup>	
Description: Large, irregularly shaped robber hole, with a line of masonry – possibly the base of a wall.					
RH sherds: 3					
RH sherds details: one moulded with a smiling face motif (Fig. 6:102; Gascoigne 2010: 126-7)					
Other finds: Bone; worked stone; wood (probably modern)					
<b>RH121</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 2.30 m	E-W: 1.80 m	Area: 4.14 m <sup>2</sup>	Depth: 1.40 m	Vol.: 2.90 m <sup>3</sup>	
Description: Rectangular robber hole south-west of RH122, north of RH120. Masonry and baked brick along north side and on base of robber hole. Large amount of spill from upslope.					
Spoil sherds: 2					
Other finds: Bone; wood (modern?); worked stone; baked brick					
<b>RH122</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 2.30 m	E-W: 1.90 m	Area: 4.37 m <sup>2</sup>	Depth: 1.80 m	Vol.: 3.93 m <sup>3</sup>	
Description: Relatively small robber hole north of RH121. Masonry (18 x 20 x 10 cm) along northern and western sides; some baked bricks in western side. Small overhang in north-west.					
RH sherds: 3			Spoil sherds: 2		
Other finds: Baked brick					
<b>RH123</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 7.70 m	E-W: 3.40 m	Area: 26.18 m <sup>2</sup>	Depth: 4.20 m	Vol.: 54.98 m <sup>3</sup>	
Description: Substantial rectangular robber hole, separated from RH124 (to the east, in the north) by thin buttress of masonry. Steep slope from north-south; slight overhang in north-east, rock rubble in south.					
RH sherds: 4			Spoil sherds: 6		
Other finds: Bone					
<b>RH124</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 5.20 m	E-W: 4.50 m	Area: 23.40 m <sup>2</sup>	Depth: 2.60 m	Vol.: 30.42 m <sup>3</sup>	
Description: Large robber hole to north-east of RH123. Thin wall of masonry bisects the robber hole, running north-south. Loose rubble along north-east corner; bushes in the south-east.					
RH sherds: 4			Spoil sherds: 2		
Other finds: Bone; worked stone (35+ x 11+ x 13+ cm); baked brick (25+ x 14+ x 22+ cm); lapis lazuli (SF05070) was found to the north of RH124					
<b>RH125</b>	<b>Location: NBHR</b>			<b>Architecture</b>	
N-S: 3.60 m	E-W: 2.50 m	Area: 9.00 m <sup>2</sup>	Depth: 2.10 m	Vol.: 9.45 m <sup>3</sup>	
Description: Medium-sized robber hole to south-east of RH126, west of RH49. Masonry (14 x 16+ x 21+ cm) on eastern and northern faces. Large amount of masonry spill from above on robber hole base.					
RH sherds: 1					
Other finds: Bone; mortar; baked brick; worked stone					
<b>RH126</b>	<b>Location: NBHR</b>			<b>Architecture?</b>	
N-S: 1.90 m	E-W: 1.40 m	Area: 2.66 m <sup>2</sup>	Depth: 1.50 m	Vol.: 2.00 m <sup>3</sup>	
Description: Small robber hole between RH127 and RH125. Loose rubble fill on eastern, northern					

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and western sides. Baked brick fragments in spoil and robber hole base – probably spill from above.

Spoil sherds: 2

Other finds: Masonry fragments (average size: 26+ x 31+ x 9 cm); baked brick

**RH127**                      **Location: NBHR**

**Architecture**

N-S: 3.40 m    E-W: 2.60 m                      Area: 8.84 m<sup>2</sup>                      Depth: 2.10 m                      Vol.: 9.28 m<sup>3</sup>

Description: Medium-sized, T-shaped robber hole protruding 1.2 m north-south (1.1 m east-west at its widest in the south) into the hillslope to the north. Loose rubble and mud-brick faced wall in north, which the robber hole has cut through.

RH sherds: 2    Spoil sherds: 1

Other finds: Bone; masonry fragments (average size: 45+ x 8+ x 24+ cm)

**RH128**                      **Location: NBHR**

**Architecture**

N-S: 3.60 m    E-W: 2.50 m                      Area: 9.00 m<sup>2</sup>                      Depth: 2.10 m                      Vol.: 9.45 m<sup>3</sup>

Description: Pick marks all around a gouge in the valley slope measuring 1.8 m north-south by 0.9 m east-west. Loose rock rubble and mud-brick on the north side.

Spoil sherds: 1

Other finds: Bone; plaster; baked brick (22+ x 20+ x 5cm)

**RH129**                      **Location: NBHR**

**Architecture**

N-S: 7.00 m    E-W: 2.80 m                      Area: 19.60 m<sup>2</sup>                      Depth: 3.00 m                      Vol.: 29.40 m<sup>3</sup>

Description: Long robber hole tapering to the north; RH128 to the east. 8 courses of mud-brick and masonry above an arch; baked brick on north and south faces of shaft to the west.

RH sherds: 2

Other finds: Plaster; mortar; baked brick; masonry fragments (average size: 22 x 15 x 10 cm); mud-brick (22 x 8 cm).

**RH130**                      **number scrapped**

**RH131**                      **Location: NBHR**

**Architecture**

N-S: 2.60 m    E-W: 2.20 m                      Area: 5.72 m<sup>2</sup>                      Depth: 1.80 m                      Vol.: 5.15 m<sup>3</sup>

Description: Medium-sized robber hole, south-east of RH132. Masonry wall along western and northern sides, which has been dug into, revealing inner skin of mud-brick and loose rock rubble. The facing from the north wall can be seen lying on the robber hole base, as well as mud-brick fragments.

Spoil sherds: 2

Other finds: Masonry fragments (average size: 25 x 8 x 15 cm); baked brick (29+ x 12 x 4 cm)

**RH132**                      **Location: NBHR**

**Architecture**

N-S: 2.60 m    E-W: 2.50 m                      Area: 6.50 m<sup>2</sup>                      Depth: 1.60 m                      Vol.: 5.20 m<sup>3</sup>

Description: L-shaped robber hole between bedrock and RH133 (to the north-east) and RH131 (to the south-east). Gouge at the eastern end measures 1.3 m north-south by 1.0 m east-west. Masonry walls along north-west corner, eastern and western sides. The masonry in the north has been dug into, revealing inner skin of mud-brick and loose rock rubble.

RH sherds: 1

Other finds: Plaster; masonry fragments (average size: 30 x 18 x 16 cm)



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**RH139**            **Location: NBHR**            **Architecture**  
 N-S: 2.10 m    E-W: 2.90 m            Area: 6.09 m<sup>2</sup>    Depth: 1.40 m            Vol.: 4.26 m<sup>3</sup>  
 Description: Medium-sized rectangular robber hole, between RH140 to the north and RH135 to the south. Cuts masonry in the north side.  
 RH sherds: 2    Spoil sherds: 1  
 Other finds: Masonry fragments; baked brick

**RH140**            **Location: NBHR**            **Architecture?**  
 N-S: 2.70 m    E-W: 1.60 m            Area: 4.32 m<sup>2</sup>    Depth: 0.80 m            Vol.: 1.73 m<sup>3</sup>  
 Description: Relatively small robber hole to the north of RH139, near Kaşr Zarafshān; orientated north-west to south-east.  
 Spoil sherds: 1  
 Other finds: Plaster

**RH200**            **Location: NBHR**  
 Description: missing data

**RH201**            **Location: NBHR**            **Architecture**  
 N-S: 4.50 m    E-W: 4.90 m            Area: 22.05 m<sup>2</sup>    Depth: 1.50 m            Vol.: 16.54 m<sup>3</sup>  
 Description: Robber hole exposing the 'Lamp Alcove' room (Figs. 6:67-70); one of a series of large robber hole reported to have yielded a lot of finds. 6 cm of plaster over stone walls in the north, east and west: 2 cm of grey coarse plaster, 1.5 cm of brown plaster, 1.5 cm of grey plaster (all with a lot of chaff) and 4 mm of multiple layers of a white chalky finish (see micromorphological analysis of plaster sample – Fig. 6:73). The room had a baked brick roof, with 25 x 25 cm bricks, lying flat; a mud-brick vault is visible in the north wall, where the plaster has been removed. The bricks in the vault stand on end, and measure 18 x 8 cm with 1.5 cm of grey / brown mortar. The roof is 1.5 m above the current base of the spoil-filled room and a stone-lined possible window ledge was found in the west wall.  
 A 2.6 m deep robber hole lies to the south-east, east of a tree. It has a large stone wall in it.  
 RH sherds: 1  
 Other finds: Baked brick; glazed tile (SF05058 – see Figs 6:94-5: sample 19); lamp (Gascoigne 2010: 126-7, Table 7:8, Fig. 6:8); 5 pieces of jointed wood (SF05069); copper fragments; glass shards

**RH202**            **Location: SBHR**            **Architecture**  
 N-S: 2.30 m    E-W: 2.15 m            Area: 4.95 m<sup>2</sup>    Depth: 3.00 m            Vol.: 7.42 m<sup>3</sup>  
 Description: Two levels of walls (the lower with mud-brick) and ca 3 m of gravelly deposits above. A 3.8 x 0.8 x 0.8 m 'tunnel' extends into the valley side to the south, following a low stone wall with red mud-brick courses above the stone. The wall is ca 1.2 m wide and 0.75 m high, the upper 0.25 m consisting of mud-brick. The stone footing is built out of small-medium sized stones, ca 35 x 34 cm. One of the walls in the vicinity might be part of the river defences.  
 Spoil sherds: 2  
 Other finds: Bone

**RH203**            **Location: NBHR**            **Architecture?**  
 N-S: 2.50 m    E-W: 2.50 m            Area: 6.25 m<sup>2</sup>    Depth: 1.00 m            Vol.: 3.13 m<sup>3</sup>  
 Description: This is the eastern-most robber hole; it is located above a large, possibly modern, stone wall (river defences?), but it has sherds and possibly mud-bricks in section.

## Appendix Seven: excavated contexts, MJAP 2003 and 2005

This appendix is sorted by Site and then Context Number. It is an edited version of the excavation records of numerous excavators, most of whom did not speak English as their first language. I am grateful for their hard work and diligence during the 2003 and 2005 seasons.

Site	Context Number	Type	Description
RH001	0100	Surface scrape	Scraping revealed a major E-W stone and mud-brick wall (1000), exposed in section, 9+ courses of stone. Possible stone cross wall and mud-brick extension to E along edge of square. Occasional baked brick frags and loose stones. Bedrock exposed to N and W; RH001 to S, cleaned as 0101.
RH001	0101	Surface scrape	Collapse and spoil in RH. Kept distinct from topsoil material outside RH (0100). Scraping reveals a large splurge of tumbled angular stones and occasional baked bricks which will be removed as 0103.
RH001	0102	Surface scrape	Largely consists of spoil from a RH to the W. Removal of 0102 reveals a mass of tumbled stone and occasional bricks. The stones are generally medium in size (ca 10-25cm); baked bricks are ca 25 x 25 x 4cm and more frequent at the top (W) of the square. NB: some of the finds came from downslope depression / robber hole
RH001	0103	Wall collapse	Collapsed wall and debris - removed as 1005
RH001	0104	Fill	Loose collapse in W of RH001; excavated as 1007
RH001	1000	Wall	Large stone wall, running E-W built on bedrock, abutted by 1001 and 1024
RH001	1001	Wall	N-S stone wall, built on bedrock, abutting 1000?
RH001	1002	Fill	Deposit against southern face of wall 1000, removed rapidly because of the danger of collapse, after robbing undermined it. Impossible to relate to other deposits because of the robbing. The stucco may belong to excavated spoil 0104.
RH001	1007	Fill	Loose collapse W of wall 1001; same as 1005
RH001	1008	Natural	Bedrock on W side of RH001, W of wall 1001
RH001	1009	Natural	Bedrock foundation of wall 1001
RH001	1011	Fill	Deposit covering bedrock (1009), below fill 1005; 2 bags of archaeo-zoological remains collected
RH001	1014	Plaster	White plaster on wall 1001 and over bedrock 1009
RH001	1015	Topsoil	Topsoil covering wall 1000 and extending to the N of it
RH001	1016	Fill	Pakhsa between wall 1001 and bedrock 1008
RH001	1017	Fill	Loose, soft ash(?) between wall 1001 and bedrock 1008, beneath fill 1007

Context Number	Stratigraphic Reliability	Interpretation	Width	Depth	Earlier than	Later than
0100	Mixed	Surface scrape	5.00	0.05		1000, 1015
0101	Mixed	Surface scrape	4.40	0.10		0103, 0104
0102	Mixed	Surface scrape	3.90	0.15		
0103	Mixed	Wall collapse			0101	
0104	Mixed	Collapse			0101	
1000	Good	Large wall			0100, 1015	1009, 1042
1001	Good	Wall			0104	1009
1002	Mixed	Fill against face of wall 1000	0.35	1.00	0100	1000
1007	Mixed	Collapse			0104	
1008	Excellent	Bedrock			1007, 1016	
1009	Excellent	Bedrock			1000, 1001, 1005, 1011, 1020, 1023	
1011	Good	Fill			1005	1009, 1020, 1023, 1025
1014	Good	Plaster			1005	1009
1015	Mixed	Topsoil			0100	1000, 1064
1016	Good	Collapsed pakhsa			1017	1008
1017	Good	Ashy fill?			1007	1016

Site	Context Number	Type	Description
RH001	1020	Surface	Levelled white surface, 1m lower than plaster 1014, lying on bedrock
RH001	1023	Wall	Stone wall E of 1001, built on bedrock 1009
RH001	1024	Wall	Pakhsa / stone wall, running N-S, overlying wall 1042.
RH001	1025	Wall	Wall' - stone foundation abutted by a levelled pakhsa surface, E of wall 1023
RH001	1030	Fill	Deposit W of wall 1000; continues 1007-1011
RH001	1031	Fill	Top layer of the deposit, 0.8m W of wall 1000. Continuation of deposit 1030
RH001	1033	Fill	Loose earth below 1031
RH001	1042	Wall	Wall extending 1.50m east of wall 1000, which used it as a foundation. Constructed out of large stones (ca 55 x 30cm) and packed earth
RH001	1043	Fill	Red earth deposit E of 1024 and below top level of 1042
RH001	1044	Surface	White plaster surface, starting from E corner of wall 1000 (niche)
RH001	1064	Wall	Rapidly constructed wall, abutting wall 1000; built out of re-used materials
RH001	1065	Plaster	Thick white plaster/mortar, lapping around and up wall 1063, possibly indicating steps
RH002	0105	Surface scrape	Cleaning deposit. The huge amount of dust, fallen rocks and looting activity left a thick deposit of debris covering all of the area. The matrix is very mixed, earth, small stones and large stones from wall collapse intermingling with artefacts and roots. The deposit yielded an orange bead. Excavated as 1006.
RH002	1003	Wall	Well-preserved stone wall with plaster on it, running E-W in the N side of the RH. It is the northern borderline of the RH and is partially sealed by a huge stone fallen from the mountain. It is well preserved and has some plaster still on it. Due to its precarious position real measurements cannot be taken apart from the height (1.90m). It has been exposed for 2.05 m long.
RH002	1004	Wall	Poorly preserved stone wall in the S side of the RH - collapsed stones from the wall were encountered during surface scraping. The foundation has not been exposed. It probably was the southern house wall, now badly damaged by looting. At the moment, its collapse is prevented by the plant roots growing between the stones. Many of the stones collected during the surface scraping and excavating context 1006 are from it.
RH002	1006	Fill	Spoil from RH002 - a mixed deposit of earth and stones covering the whole of the RH. Uneven (0.4-0.8m), higher in the E. 2 bags of archaeo-zoological remains collected.

Context Number	Stratigraphic Reliability	Interpretation	Width	Depth	Earlier than	Later than
1020	Excellent	Earliest surface			1011	1009
1023	Good	Wall built on bedrock			1011	1009
1024	Good	Pakhisa / stone wall			1011?, 1025?	1042
1025	Good	Wall			1011	1024
1030	OK	Fill				1033
1031	OK	Fill			1031	
1033	OK	Fill			1000, 1024, 1064	1043?
1042	Good	Wall, foundation for wall 1000				
1043	Good	Fill			1042?	
1044	Excellent	Plaster surface, associated with wall 1000				
1064	Good	Rapidly built wall			1015	1042
1065	Good	Plastered surface				
0105	Mixed	Surface scrape	5.00	0.15	1006	
1003	Excellent	Plastered wall		1.90	0105, 1006, 1012, 1013, 1009 1026, 1052	
1004	OK	Wall	1.00	1.30	0105, 1006, 1012, 1013, 1026, 1052	
1006	Mixed	Spoil from RH002	3.50	0.81	0105	1003, 1004, 1009, 1012, 1013



Site	Context Number	Type	Description
RH002	1012	Surface	Small part of a hard trampled surface near wall 1003; includes very small charcoal frags. Same as 1013 (a whitish surface); 2 bags of archaeo-zoological remains collected. Overlain by yellow and reddish brick frags, initially thin, later thick. It seems to be a later trample surface, or in situ layer. Fewer finds than 1006, including a very small amount of charcoal. The integrity of the deposit is compromised by the soft section of 1006 next to it.
RH002	1013	Surface	Whitish layer covering the surface of the trench; same as 1012; 2 bags of archaeo-zoological remains collected.
RH002	1026	Surface	Well-preserved, thin, light grey, hard pakhsa surface above a yellow preparation layer. Associated with wall 1003. 1026 is the main surface reached in RH002. Eroded in the E. It is missing in the eastern part of the trench, probably it sloped down.
RH002	1034	Wall	Pakhsa layer / wall (?) in E side of the trench. Very different consistency to 1026 - possibly a parapet wall? Unable to be measured, due to its location.
RH002	1052	Sub-surface packing	Sub-surface packing beneath surface 1026. Small stones in the matrix. Only visible in the E part of the trench; poorly preserved, although it is better preserved where protected by 1026. It has a fragile consistency due to the small river stones in it. It is only visible in the eastern part of the trench where there is no more floor.
RH003	0106	Surface scrape	Cleaned a 3m wide strip to the S of RH003, as preparation for continuing the slit trench. In reality it was little more than a trowel and brush, to reveal the surface of the large spoil heap extending down from RH001. Some medium-sized stones were exposed, but little else.
RH003	0107	Mixed	Cleaning - removing collapse / scree and spoil in RH; some material has slipped down from work / dumping above, hence we are initially treating this as surface work.
RH003	1010	Fill	Mixed fill in upper part of RH003 - includes stones from walls above or in the building, degraded mud-brick clumps and soil that has slid down the slope. Changed to 1021 when the deposit became more compact.
RH003	1018	Wall	Mud-brick wall consisting of at least 16 courses of 7cm thick bricks, with ca 3cm of brown mortar between courses; built on bedrock. N wall of room. Encased by pakhsa 1019. The purple bricks have stone and clay clast inclusions.

Context Number	Stratigraphic Reliability	Interpretation	Width	Depth	Earlier than	Later than
1012	OK	Surface associated with wall 1003; same as 1013	2.30	0.34	1006	1013, 1026, 1052
1013	Good	Surface?			1006	1026, 1034, 1052
1026	Excellent	Thin earthen surface, above a preparation layer	1.50		1012, 1013	1052
1034	Excellent	Wall? It does not seem to have any sort of upper portion, so it could be a levelled wall prior to the laying of pavement 1026.			1013	
1052	Good	Sub-surface packing beneath surface 1026	0.80		1026	1003
0106	Mixed	Surface scrape	3.00	0.05		
0107	Mixed	Cleaning deposit	2.50	0.05		1010
1010	Mixed	Slumped collapse; at one stage I thought we might have a cross-wall, but I am convinced that it is just collapse from above, floating in smaller debris / scree.	2.00	0.50	0107	1021
1018	OK	Mud-brick wall that originally extended to the S	0.70	1.80	1019	unexcavated

Site	Context Number	Type	Description
RH003	1019	Wall	Pakhsa (compact, relatively homogenous deposit) wall enclosing wall 1018 - clear interface. Weathered, so not as compact as standard pakhsa. Largely obscured by spoil from RH001 excavations above, so we could not trace its full extent to the N, but it only extends 0.6m to the E of 1018. Laid over ca 1.1m of very loose fill (levelling?).
RH003	1021	Wall collapse	Collapse below, and similar to, 1010 - differentiated because a horizon seemed to have been reached. Medium-sized and small stones - more stones in the S, more mud-brick in the N, presumably due to the collapse of 1018.
RH003	1022	Fill	Silty fill / collapse, with white flecks and some pieces of plaster. Probably derived at least in part from degraded mud-brick and spoil from RH upslope. Comes down onto a bricky horizon. The plaster frag. includes a small piece of blue painted plaster. Possible wall line appearing beneath; quite a lot of bone - 2 bags collected.
RH003	1032	Wall collapse	A pick-run of mixed deposit consisting largely of scree, frags of mud-bricks (yellow, red-brown and grey). Relatively loose beneath the compact upper horizon. 3 loose baked bricks (24 x 12 x 4cm) and associated lumps of plaster were removed as I was recording elsewhere. One brick was curved. The possible wall-line in the E turned out to be tumble. 2 bags of archaeo-zoological remains collected.
RH003	1035	Fill	Mixed deposit including some degraded mud-brick and small clay clumps. Frags of blue and white plaster, 1-2 baked bricks, larger stones and pieces of grey / white mortar / plaster (ca 14 x 12 x 7cm). More mud-brick in the N near 1018, but generally appeared to be a loose fill / scree / spoil and collapse deposit. Removed in a couple of pick runs, as the deposit seemed to be the same mixed fill. Arbitray division between 1032 and 1035 after cleaning; comes down onto <i>in situ</i> deposits (1040) and robbed fill (1041).
RH003	1040	Fill	Unexcavated strip of deposits, initially thought to be a wall with room fill on either side, but on closer inspection it seems to be remnant <i>in situ</i> deposits, robbed to the N and S. Very distinct from fill 1041 to the N. Prone to collapse. Gently undulating strata with some white flecked horizons, bone, brick frags, etc. similar to the <i>in situ</i> deposits seen in the section to the W. Sampled in 2005? About 0.6m of deposits remain before a surface (1045) is reached to the N.
RH003	1041	Fill	Distinctive disturbed / loose fill to N of <i>in situ</i> strip of deposits 1040 and other <i>in situ</i> deposits to the W. Plaster includes pieces of blue, white, red and black paint - very smashed up. Becomes quite bricky (olive grey) for ca 0.6-0.7m N of 1040, immediately above a distinct surface, 1045. The bricky material may be collapse or <i>in situ</i> , but I removed it with 1041 anyway, to expose the surface. Elsewhere, 1041 comes down onto bedrock. 2 bags of archaeo-zoological remains were collected.

Context Number	Stratigraphic Reliability	Interpretation	Width	Depth	Earlier than	Later than
1019	Good	Thick pakhsa casing added to mud-brick wall 1018, presumably for structural reasons	1.00			1018
1021	Mixed	Stone and brick collapse, compacted by the weight of scree / spoil above.	2.20	0.25	1010	1022
1022	OK	Collapsed and degraded mud-brick and stone / spoil from upslope	2.80	0.20	1021	1035, 1054, 1055
1032	Mixed	Largely mixed scree and collapse, possibly with some <i>in situ</i> deposits in the W	3.25	0.10	1022	1035
1035	Mixed	Mixed mud-brick collapse and scree / spoil	1.70	0.50	1032	1040, 1041
1040	OK	Narrow strip of <i>in situ</i> occupation deposits, robbed to the N and S	0.35		1035	unexcavated
1041	Mixed	Spoil / fill in a robber hole within RH003	1.75	0.60	1035	1045

Site	Context Number	Type	Description
RH003	1045	Surface	Distinct surface beneath ca 10-12cm of olive grey mud-brick collapse in the S, near 1040 and below loose fill in a robber cut. Appears to be laid on bedrock (in the NW at least, where it is only ca 2cm thick).
RH003	1053	Wall	Remains of a mud-brick wall, scooped out by robbers; built on a stone footing. 1053 has indistinct courses of mud-brick in it, unlike the other walls in the RH, where the bands of generally purple mud-brick and brown mortar are relatively clear.
RH003	1054	Wall	17+ course high mud-brick wall, built of 7cm thick purple bricks and ca 4cm mortar. Extends to W where it has been gouged by RH and probably continues as 1053. 3 bricks are visible in the E. Seems to have a stone footing in the E.
RH003	1055	Surface	Distinct surfaces to the N of 1054, lapping up to 1053. Metallic sounding when trowelled. ca 10cm of occupation deposits between the upper and lower surfaces, which both slope to the SE. Only a small area was exposed and half-sectioned.
RH003	1063	Surface	Lower of 2 distinct surfaces, separated by ca 10cm of occupation fill, below 'pillar' (wall) 1053 (upper surface is 1055). Seems to run beneath stone footing for 1053. May be lying directly on bedrock - unexcavated: only really exposed in section.
RH003	1080	Fill	5-25cm of collapse / fill in slit trench being excavated to retrieve stratified <i>in situ</i> samples for flotation and archaeological analysis.
RH003	1081	Fill	Distinct horizon with 1081 above, but arbitrary divide with 1082 below (possibly more greeny grey). Includes occasional mud-brick, small frags of bone and lumps of charcoal. Charcoal and phytolith samples taken.
RH003	1082	Fill	Arbitrary split with slightly greyer 1081 above. Dips to E less markedly than deposits above. Phytolith sample taken.
RH003	1083	Fill	More bricky deposit than those above, thicker in the S than N. At its base, I have removed a total of ca 28cm of deposits, down to a white speckled possible surface.
RH003	1084	Surface	Possible surface / sub-surface packing beneath bricky fill. Peels off a distinct light olive / cream mud-bricky (unexcavated?) deposit. Charcoal flecked; phytolith sample taken.
RH003	1085	Fill	Fill rich in faunal remains, to E of a more bricky, light olive / cream deposit. Phytolith sample taken.
RH003	1086	Fill	Distinct horizon of charcoal and phytoliths

Context Number	Stratigraphic Reliability	Interpretation	Width	Depth	Earlier than	Later than
1045	Good	Compact unexcavated surface	1.75		1041	unexcavated
1053	OK	Mud-brick wall, gouged by 2 RHs - I originally thought the scoops were niches and that 1053 was a pillar separating them; presumably related to comparable mud-brick walls 1018 to N and 1054 to the S, and surfaces 1055.	0.60	2.50		1063, unex
1054	Good	Mud-brick wall built on bedrock and partly gouged by RHs; probably associated with wall 1018 in the N, and with, or built on, one of the surfaces removed as 1055 to the N.	1.50	1.90	0106, 1022	unexcavated, 1055?
1055	Excellent	Occupation surfaces prob. assoc. with walls 1053 and 1054, but cannot be certain until excavated	0.45		1022	unexcavated, 1063
1063	Good	Unexcavated lower surface below 1055	0.70		1053, 1055	unexcavated
1080	OK	Bricky collapse	0.50	0.25	2003 deposits	1081
1081	Good	Charcoal flecked fill	0.50	0.08	1080	1082
1082	Good	Charcoal-flecked fill	0.50	0.16	1081	1083
1083	Good	Bricky fill overlying a possible surface	0.50	0.22	1082	1084
1084	Good	Possible surface / sub-surface	0.50	0.15	1083	1085
1085	Good	Fill rich in faunal remains, possibly in a cut	0.40	0.06	1084	1086
1086	Good	Fill in a possible cut	0.40	0.02	1085	1087

Site	Context Number	Type	Description
RH003	1087	Fill	Distinct horizon of phytoliths above; another clear horizon below, removed as 1088, although probably essentially the same sort of deposit. Includes uncarbonised (melon?) seeds.
RH003	1088	Fill	Essentially the same as 1087 above, although separated by a distinct horizon.
RH004	0108	Mixed	Cleaning deposit, removing the first 15-20cm, before assigning a new context number. Essentially the same as 1027 below.
			The huge amount of dust, fallen rocks and looting activity left a thick deposit of dust over all of the area. The matrix is very mixed: earth, small stones and large stones from wall collapse are mixed with ceramics, plaster, bones, bricks and roots.
RH004	0113	Mixed	Cleaning deposit
RH004	1005	Fill	Stone collapse on N side of RH, E of wall 1001
RH004	1027	Fill	Robber spoil covering the whole surface of RH4. Its matrix is very mixed, almost the same as 0108. 2 bags of archaeological remains collected.
RH004	1028	Wall	Well-preserved stone wall, running N-S, built on bedrock, on W side of RH. It still has some plaster on it.
RH004	1036	Fill	A thin layer of 'pakhsa' / compacted earth surface, associated with wall 1028; laid on top of 1048. It is only preserved along the western side of the RH, and in a small patch on southern section, measuring 0.7 x 0.2m.
RH004	1037	Wall	Stone wall running E-W along the N section of the trench; forms corridor with wall 1028. It is well preserved but for some collapsed rock in the upper portion - probably due to the robbers' activity. It is formed of large and small stones, and mortar. The E portion is missing; it probably sloped downhill in the past. The foundation has not been reached for safety reasons.
RH004	1048	Sub-surface packing	Packing layer for pakhsa floor (1036). Due to the hill slope, its height increases towards east. Its matrix is full of small stones, the earth is slightly compressed.
RH004	1049	Wall	Mud-brick wall in the S section
RH004	1050	Wall collapse	A patch of a pakhsa wall collapsed from above. The pakhsa wall collapse sealed the parapet wall (1049), with its thin (2cm) layer of plaster still intact and separating the two of them. The matrix includes plaster and ceramic, probably not belonging to the original matrix but there due to the collapse.
RH004	1051	Wall	Poorly preserved, stone wall with mortar (no plaster) - possible parapet wall in the S corridor, running E-W(?). It is not well preserved because of the robbers' activity and due to the lack of a real foundation (see 1062). Since it is lower than surface 1036, it is probably the foundation for 1050.

Context Number	Stratigraphic Reliability	Interpretation	Width	Depth	Earlier than	Later than
1087	Good	Fill in a cut?	0.40	0.03	1086	1088
1088	Good	Fill in a possible cut	0.40	0.03	1087	unexcavated
0108	Mixed	Cleaning deposit	2.40	0.20	1027	
0113	Mixed	Cleaning deposit				
1005	Mixed	Collapse			0103	1009, 1011, 1014
1027	Mixed	Robber spoil			0108	1037, 1050
1028	Good	Plastered stone wall, built on bedrock				
1036	Good	Pakh <sub>h</sub> sa floor	2.80	0.02	1027	1048, 1049
1037	Excellent	Stone wall	1.10	2.40	1027	1062
1048	Good	Packing layer for pakh <sub>h</sub> sa floor (1036); includes a large amount of mixed small stones to create a level surface for the pakh <sub>h</sub> sa surface.			1036	1051
1049	Good	Probably a parapet connected to (1051)			1036, 1050	1051
1050	OK	A collapsed plastered pakh <sub>h</sub> sa wall - probably the upper part of wall (1028).			1027	1036, 1049
1051	Good	Wall stone, probably the lower part of parapet (1049)	1.10		1049	1062



Site	Context Number	Type	Description
RH004	1062	Fill	A row of large stones running N-S. No mortar, only soft earth; no real foundation.
RH005	0109	Mixed	Cleaning deposit - not that many stones, in and around what is a relatively small robber hole. Possibly predates RH004 upslope; bedrock to the S.
RH005	1029	Fill	Stony fill with crumbly spoil in RH005, exposed after the area was scraped / cleaned. Decided to lay out a slit trench through the middle of the RH and against its apparent N limit. This trench yielded nothing of significance, before reaching bedrock - this is possibly why the RH was small. Slump from RH004 upslope suggests that RH005 predates it. 1029 is probably largely derived from RH004 above. No archaeological deposits visible in section.
RH005	1056	Wall	Medium-sized stone wall, running E-W, built on bedrock; 9, possibly 11 courses high, with light brown mortar of varying thickness (up to ca 10cm). Constructed of medium to large stones (av. 40 x 18 cm) with small-medium sized stone scree / packing to the W. Bricky fill to the E but no clear strata. No sign of a plastered face. Not excavated or traced further. Built directly on bedrock, parallel to the cliff. Runs due W.
RH006	0110	Mixed	Cleaning around (to the SW of) RH006/RH007, as much for safety, to remove loose stones, etc. as out of any expectation of finding informative surface marks.
RH006	1038	Fill	Collapsed fill from cleaning out RH006, an unpromising looking RH near the <u>Djām Rūd</u> . Comes down onto plunging bedrock. After cleaning, a slit trench was excavated - 1039.
RH006	1039	Fill	Largely consists of spoil in RH006, heaped to the E. Dug a slit trench through the spoil until we exposed a section of rough wall (1046). 2 bags of archaeo-zoological remains were collected.
RH006	1046	Wall	Rough, 2 course high, stone, terrace wall, running N-S. Exposed in a slit trench. Good W face, eroded E face (possibly by flood water).
RH007	1047	Mixed	Removal of loose, stony fill in the centre of RH007, until the exposure and definition of wall 1057.
RH007	1057	Wall	Possible stone wall beneath scree / spoil. Not hugely convincing, perhaps due to river erosion during floods. Could just be tumble or a jumble of stones, but it has a relatively coherent W face (i.e. away from the river).
RH008	1059	Mixed	Removed ca 1m of deposit from RH008, but revealed nothing other than large boulders and light grey small stone scree, so we abandoned excavations without reaching bedrock, although it probably is not much further down.

Context Number	Stratigraphic Reliability	Interpretation	Width	Depth	Earlier than	Later than
1062	OK	Probably fill for parapet wall (1051)			1051	1037
0109	Mixed	Cleaning deposit	3.80	0.10	1029	
1029	Mixed	Mixture of collapse, slumped spoil from RH004 and scree deposits	1.50	0.80	0109	1009
1056	Good	Stone retaining wall, possibly as much as 2m high	0.50	1.65		unexcavated
0110	Mixed	Cleaning deposit	4.00	0.05		1038, 1039, 1046
1038	Mixed	Collapse / scree / spoil in a small RH	1.40	0.60	0110	1039
1039	Mixed	Spoil	1.00		0110	1046
1046	OK	Terrace wall relating to <u>Djām Rūd</u> ; indeterminate date	0.80	0.40	1039	unexcavated
1047	Mixed	Cleaning - mixed accumulation of scree, slump and spoil from RHs upslope	1.70		0110	1057
1057	OK	Terrace wall? Impossible to date without larger exposure.	0.60	0.40	1047	unexcavated
1059	Mixed	Cleaning - general accumulation of scree and slump	2.20	1.00		unexcavated

Site	Context Number	Type	Description
RH008	1060	Fill	General deposits N of RH010, above wall 1061. In section, after the removal of 1060, you can see 0.38m of mud-brick packing in the N above flat stones which continue to the W in the RH section - possible wall and footing or paved surface? It comes down onto a rough stony horizon to the E of wall 1061 - a possible alley surface, but not very flat. It may originally have had packed mud over the stones.
RH008	1061	Wall	Double line of medium-sized, rounded stones, with smaller stone fill running roughly N-S, but cut by RHs in the N and S (RH010). Possible stone footing return or paving at N end to the W, with possible alley to E. Av. stone 29 x 15 x 8cm; distinct W face, more irregular in E, possibly due to river erosion. 3 courses visible in S section. May have terracing to the E to reinforce it.
RH009	1058	Mixed	Removed up to 0.9m of accumulated deposits in RH009 until we exposed bands of multi-coloured mud-brick in section. Individual mud-brick are recognisable but not in an informative way. The RH appears to be dug into by a relatively modern, largely degraded mud-brick building (wall stubs still standing, at least 4 courses high). 35cm of mud-brick - ca 6cm thick purple and brown m-bs with ca 2cm of olive mortar between the courses. Not excavated / investigated further.
RH013	1089	Fire place	Charcoal-rich possible fireplace, in an alcove cut into bedrock 4.3m to N of RH003. Not a very secure provenance, with modern-looking organics in a tiny stone deposit above, but sampled anyway.
RH027	3002		2 bags of archaeo-zoological remains collected, from flot (S05005)
RH039	3000	Fill	3 samples of archaeo-zoological remains collected from flot samples of destruction debris (S05007, S05008)
RH083	3001		Archaeo-zoological remains collected from NE corner
RH100	1300	Mixed	Context assigned because of finds noted extruding from the robber hole section. Not excavated
RH201	1240	Fill	Debris in the robber hole; assigned a context due to the collection of 3 bags of archaeo-zoological remains
EBJR TP	1100	Topsoil	Topsoil; some stones and roots. Churned by cultivation. Possible terrace wall to the S. TP is 20.32m from the minaret.
EBJR TP	1101	Wall	Short stretch of relatively clear line of E-W stone wall in S half of TP. May originally have been 3+ courses high, judging from the W section, although these stones may be tumbled from the terrace wall to the S (natural looking small stones occur between the larger stones). Av. stone size ca 35 x 20cm. Backfilled at the end of the season.
EBJR TP	1102	Fill	Stony fill N of wall 1101. May include some ploughed lower topsoil, since it is only 10cm below the extant surface in the N.

Context Number	Stratigraphic Reliability	Interpretation	Width	Depth	Earlier than	Later than
1060	Mixed	Mixed fill above wall 1061 - mud-brick packing / collapse from a wall?	2.40			1061
1061	Good	Stone wall with possible stone surface / wall return at N and in RH section	0.70	0.52	1060	unexcavated
1058	Mixed	Cleaning, exposing courses of mud-brick in section	1.20	0.90		unexcavated
1089	Mixed	Possible fireplace	0.15	0.12	n/a	unexcavated
3002		Context assigned due to collection of samples				
3000		Context assigned due to collection of samples				
3001		Context assigned due to collection of samples				
1300	Mixed	Context assigned due to collection of samples				
1240	Mixed	Fill in robber hole				
1100	Mixed	Topsoil	1.00	0.50		1101, 1102
1101	OK	Possibly a lower level to terrace wall	0.45		1100, 1102	unexcavated
1102	OK	Fill	0.60		1100	1101, unexcavated

Site	Context Number	Type	Description
SBHR TP	1200	Mixed	Excavating a test pit in the SW corner of an expanse of grey gravel, which Bau'uddin says is backfill in a robber hole. Removed as an arbitrary spit, supervised by Najeeb, recorded by DCT. About half of what was removed as gravel backfill, the rest is 'natural' brown soil, inc. small stones. Brick frags are visible in section, in the gravel. The SW corner of the test pit is 22.55m from the NE corner of the Resthouse, measuring N in line with its W end.
SBHR TP	1201	Fill	Very distinct sand horizon which is ca 30cm deep in its purest form. The lower 20cm is a coarser brown deposit and includes occasional clay lenses and a piece of slag (in S section). Clear RH cut (1202), cutting into the sand.
SBHR TP	1202	Cut	Robber cut, filled by 1203. Mainly vertical cut; into alluvial deposits but not penetrating baked brick paving 1204. Subsequently backfilled with gravel. Dimensions are not of the hole cut.
SBHR TP	1203	Fill	Stony fill in robber cut 1202, cut into sandy alluvial deposits - i.e. distinct. Includes a scatter of ca 12 bricks. Two dipping layers of fill were noted in the E section, with discernible differences in the quantity of stones (progressively fewer, lower down), but it was removed as one. NB: some of this deposit was removed as 1200, which was excavated as a spit, rather than stratigraphically.
SBHR TP	1204	Surface	Herring-bone pattern of baked brick paving. The bricks (23 x 14 x 5cm) are laid on their narrow side, in contrast to the brick paving in SBHR SC, where the bricks are laid flat. About 88 mainly whole bricks remain in the exposed part of the paving - the robbers have ripped out a ca 0.85 x 0.85m area, to the NE. Small broken bricks have been used to fill the gaps / irregularities in the pattern. Little evidence of occupation material above the bricks - you would expect a courtyard to be swept clean anyway. The surface is virtually horizontal; eroded edges of some bricks indicate wear.
SBHR TP	1205	Sub-surface packing	Horizontal packed surface of crushed frags of (baked?) bricks, yellow matrix and some small chips of blue / grey stone, on which the brick paving of 1204 was laid. Largely unexcavated, other than for a small sounding to test its depth. This 30 x 30cm sounding found that the yellow surface is 1-2cm thick, below which there is ca 16cm of dark purple / brown gravel and clayey fill. This lifts off a more clayey horizon, at which point excavation stopped.

Context Number	Stratigraphic Reliability	Interpretation	Width	Depth	Earlier than	Later than
1200	Mixed	Backfill in robber hole RH014	1.50	0.90		1201, 1202, 1203
1201	Good	A series of alluvial deposits		0.30	1200, 1202	1204
1202	OK	Robber cut	1.25	1.15	1200, 1203	1201, 1204
1203	Mixed	Fill of robber cut; sand covers the surface beneath (1205), suggesting that the robbers pulled bricks out of the sand, rather than digging all the way down.	1.25	0.40	1200	1202
1204	Excellent	Baked brick courtyard paving - the clear investment in time and effort suggests an important building. According to Bahu'uddin, there are 3 brick paving patterns in the vicinity - herring bone, intertwined 'figure of 8' and circular arrangements.	1.20	0.15	1201, 1202	1205
1205	Excellent	Packing beneath brick paving	0.85		1204	unexcavated

Site	Context Number	Type	Description
SBHR 1	1206	Surface	Horizontal level of baked brick paving, noted eroding out of the Hari Rud river bank section. The bricks are laid flat, unlike the paving (1204) to the S. Extends of >4m E-W, 2.75m N-S, in a diagonal line, ca 1.1m below the current surface and 0.25m higher than the paving 2.25m to the S. A complete brick measures 26 x 24 x 4cm; 16 bricks are visible along the section, which has had spoil heaped against it to protect it. The bricks are laid in rows, with no apparent pattern. Ca 10cm of coarse sandy alluvium overlies the bricks, then topsoil. A ca 10m long baked brick wall, 9 courses high, is exposed in the river bank, ca 5m to the W. Further investigated in 2005.
SBHR 1	1207	Topsoil	Topsoil - loose, light brown, small stone inclusions, no finds
SBHR 1	1208	Topsoil	Lower topsoil; distinct horizon between 1207 above and this lower topsoil deposit - more compact, browner in section; small stones, no finds other than tumbled baked bricks, inc. triangular ones; comes down onto bricky deposits
SBHR 1	1209	Fill	Fill including ceramics, plaster and more elaborately shaped baked bricks / tiles
SBHR 1	1210	Fill	Fill E of bricky fill 1209 - characterized by lower quantities of bricks, although 5 of these are 'scroll' bricks (see Fig. 6:101 for an example); brown deposit; relatively moist; includes clay, small stones and roots
SBHR 1	1211	Fill	Comparable to 1210, N of bricky deposit 1209; drier, light grey brown; includes a relatively large flat baked brick (25 x 24cm)
SBHR 1	1212	Fill	Tumbled bricks and column lying in relatively loose brown fill which includes a variety of shaped baked bricks; column is 23cm in diam. and 23cm long; 5 courses of triangular bricks lying on their side. Comes down onto more tumbled yellow and salmon pink baked bricks
SBHR 1	1213	Fill	Silty mixed fill beneath bricky fill; brown, loose deposit including numerous yellow baked bricks; comes down onto distinct silty deposit
SBHR 1	1214	Fill	Silty fill beneath tumbled bricks, sealing baked brick courtyard; distinct layer of coarse, light grey sand (12cm thick) seals the paving; above this is a gradual change to a finer, browner sand, in places 25cm thick, which has been cut by a robber hole
SBHR 2	1220	Topsoil	Topsoil; no finds
SBHR 2	1221	Fill	Unremarkable spit of deposits - coarse brown silty clay, including roots, 5 sherds and a couple of pieces of baked bricks
SBHR 2	1222	Fill	Light grey brown fill, small stones; occasional fragments of baked brick. Arbitrary change from 1221 above.
SBHR 2	1223	Fill	Gravelly deposit to the S and W of a short stretch of paving / truncated wall

Context Number	Stratigraphic Reliability	Interpretation	Width	Depth	Earlier than	Later than
1206	Good	Baked brick paving, presumably part of the same building as 1204	0.40	0.04	topsoil	unexcavated
1207	Mixed	Topsoil	2.00	0.15	n/a	1208
1208	Mixed	Lower topsoil	2.00	0.40	1207	1209
1209	Mixed	Bricky fill	1.00	0.05	1208	1210, 1211, 1212
1210	Mixed	Fill	1.20	0.07	1209	1213
1211	Mixed	Fill	0.55	0.05	1209	1213
1212	Mixed	Fill	1.10	0.10	1209	1213
1213	Mixed	Fill	2.10	0.13	1210, 1211, 1212	1214
1214	Mixed	Alluvial deposit, sealed by bricky collapse	2.50	0.22	1213	Paving
1220	Mixed	Topsoil	1.50	0.35	n/a	1221
1221	Mixed	Fill	1.50	0.25	1220	1222
1222	Mixed	Fill	2.00	0.20	1221	1223, paving
1223		Possibly sub-paving foundation deposit	1.10		1222	unexcavated



Site	Context Number	Type	Description
SBHR 3	1230	Surface scrape	Cleaning spit prior to excavation
SBHR 3	1231	Fill	Fairly loose, light brown fill S of wall 1232
SBHR 3	1232	Wall	Pakhsa wall running E-W parallel to the Harī Rūd; 8 courses of baked bricks and 1 of stones act as a foundation (0.47m high) for the pakhsa superstructure (surviving 0.4m high). Well constructed, but eroded in the E. The brick / stone foundation stands 0.35m proud of the paving with a 0.24m gap between the two - this curious feature does not appear to be a foundation trench. May extend to the N, but less well built here, suggesting a massive structure designed to withstand fluvial erosion, but only neatly finished on the visible S face.
SBHR 3	1233	Fill	Compact, light brown fill S of wall 1232; excavated in a slit trench due to time constraints; comes down onto baked brick paving; no evidence of fluvial deposition as in SBHR1 to the east

Context Number	Stratigraphic Reliability	Interpretation	Width	Depth	Earlier than	Later than
1230	Mixed		1.50		n/a	1231, 1232
1231	Mixed	Fill	0.78		1230	1232
1232	Excellent	N wall of the courtyard building	0.65	0.87	1230	
1233	Good	Fill to S of courtyard building wall, overlying baked brick paving	0.70	0.18	1231	Paving

**Appendix Eight: small finds, MJAP 2003 and 2005**

Small Find No.	Find location	Small Find type	Length (cm)	Width (cm)	Thickness (cm)	Material	Description of artefact	Storage location	Drawn?	Photo?
SF03001	RH003	Spout	12.00	4.50	2.40	Ceramic	Brown painted design on a cream slip, possibly imitating ivory; bits to repair and possible conjoin with SF03002. Design shows 2 birds (swans or ducks) and abstract pattern.	Ghazni Museum	Yes	Yes
SF03002	RH003	Spout				Ceramic	Another piece of a spout? Conjoin with SF03001?	Ghazni Museum	Yes	Yes
SF03003	RH001	Metal strip	3.20	0.60	0.10	Copper	Tapers to 0.20 cm; corroded, bent	Djām		
SF03004	RH004	Glass frag.				Glass	6 shards	Djām		
SF03005	RH004	Metal objects	6.80	2.70	1.60	Iron	Blade, heavily corroded; also 1 button / tack 2.5 x 2.1 x 1.8 cm.	Djām		
SF03006	RH002	Glass frag.				Glass	1 shard and flakes - clear glass, possibly originally painted, now patinated 'mother of pearl'	Djām		
SF03007	RH001	Metal point	1.30	0.40	0.40	Copper	2 pieces, corroding	Djām		
SF03008	RH003	Glass frag.				Glass	3 pieces of moulded glass, green/blue in colour	Djām		
SF03009	RH001	Metal fastener	4.40	2.30	0.90	Iron	Bent, shaped fastener; heavily corroded, metal is 0.4 cm thick	Djām		Yes
SF03010	RH003	Metal lump	3.50	1.70	1.60	Iron	Part of a nail or point? Tapers slightly to 1.5 cm	Djām		
SF03011	RH004	Metal ring	2.90	2.00	0.40	Copper	1/2 of a hoop or ring; quite well preserved	Djām		
SF03012	RH003	Metal objects	2.90	2.80	1.10	Iron	3 heavily corroded objects - 1 button / tack (listed measurements); 2 stems - 2.5 x 1.4 x 1.1 cm	Djām		
SF03013	RH004	Glass frag.				Glass	4 shards of glass, 1 ribbed clear glass with black applique ribs, 3 watery blue patinated shards	Djām		

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Small Find No.	Find location	Small Find type	Length (cm)	Width (cm)	Thickness (cm)	Material	Description of artefact	Storage location	Drawn?	Photo?
SF03014	RH003	Coin	1.40	1.40	0.30	Copper	Small coin, corrosion obscuring design	Ghazni Museum	Yes	Yes
SF03015	RH003	Coin	2.00	2.00	0.10	Copper	Very thin coin in good condition, made from an alloy of bronze and gold; pierced on the left hand side possibly after it ceased to be used as currency. Traces of design visible. The date of issue is unclear: the hundreds certainly correspond to the year 400 for the style of the coin and the epigraphy is definitely of that period. The decade and the digit are badly written and they could correspond to either 97 AH, or 99 AH (497 AH/AD 1103-1104, or 499 AH/AD 1105-1106 - see Giunta, in Thomas <i>et al.</i> 2004).	Ghazni Museum	Yes	Yes
SF03016	RH003	Metal rosette	1.00	0.80	0.10	Copper	Tiny rosette - corroded and fragile	Djām		
SF03017	RH003	Metal ringlet	0.70	0.60	0.10	Copper	Tiny ringlet, in quite good condition	Djām		
SF03018	RH003	Metal strip	1.70	0.20	0.10	Copper	Very thin strip	Djām		
SF03019	RH003	Organic	2.60	2.00	1.00	Plum stone?	Half a fruit stone	Djām		
SF03020	RH003	Metal object	1.10	1.10	0.20	Copper	Toggle? In good condition, tapers slightly to 1.0 cm	Djām		Yes
SF03021	RH003	Metal object	1.40	1.30	0.30	Copper	Fragment of flat copper object	Djām		
SF03022	RH004	Metal object	2.10	1.90	1.30	Iron	Button / tack head; mushroom shaped - 0.4 cm thick at 'stalk' end	Djām		Yes
SF03023	RH100	Figurine head				Ceramic	Equid figurine head with applique eyes and halter - salmon pink ceramic	Ghazni Museum	Yes	Yes

Appendix Eight: small finds, MJAP 2003 and 2005

Small Find No.	Find location	Small Find type	Length (cm)	Width (cm)	Thickness (cm)	Material	Description of artefact	Storage location	Drawn?	Photo?
SF03024	RH003	Rubber	10.80	8.70	4.40	Stone	Grey / black quadrilateral rubbing stone with thin white veins; one corner chipped	Djām		
SF03025	RH003	Rubbers	6.40	6.80	5.30	Stone	1 cube poulder, blue grey stone with white veins; 1 elongated rubber, white stone with dark speckles - 13.2 x 5.5 x 2.8 cm.	Djām		
SF03026	Baydān	Glass frag.				Glass	54 green glass shards	Djām		
SF03027	Baydān	Metal object	2.70	1.30	0.10	Copper	Comb' serations at wider end, slightly corroded	Djām		Yes
SF03028	SBHR 2	Brick	10.00	9.10	4.10	Baked brick	Sample of 2 curved, fired bricks from paving; finer example is salmon pink; coarser one is yellow with numerous inclusions and chaff temper	Djām		Yes
SF03029	SBHR 1	Brick	10.00	9.80	3.80	Baked brick	Yellow, roughly triangular object with S shaped swirl at wider end	Djām		
SF03030	RH003	Brick	11.70	11.90	2.20	Baked brick	Corner of a flat-faced brick paver	Djām		
SF03031	Surface 5	Quern	22.00	10.60	7.30	Stone	Rough saddle quern - grey, fine sandstone?	Djām		
SF03032	Surface 4	Bead	0.70	0.70	0.30	Stone	Small orange bead, 0.2 cm diam. hole	Djām		Yes
SF03033	Surface 3	Glass frag.				Glass	2 shards of glass	Djām		
SF03034	RH005	Glass frag.				Glass	Very thin, clear translucent rim with black paint - 12 cm diam.	Djām		

Appendix Eight: small finds, MJAP 2003 and 2005

Small Find No.	Find location	Small Find type	Length (cm)	Width (cm)	Thickness (cm)	Material	Description of artefact	Storage location	Drawn?	Photo?
SF03035	Surface 2	Cupped stone	32.00	27.00	15.00	Stone	Cup marks on several faces - large shallow cup mark on 'top', 10 cm diam., 2 cm deep; 3 smaller deeper depressions in a line on the bottom, 6.5 cm diam., 3 cm deep, 2 medium sized cup marks on 1 side, 8.5 cm diam. 3.5 cm deep and 9.0 diam. 2.0 cm deep, and an oval depression on the opposite side 11 x 5.5 x 1.0 cm.	Djām		Yes
SF03036	Surface 1	Architectural feature	12.40	9.80	5.20	Plaster	Incised decoration	Djām		Yes
SF03037	RH001	Architectural feature	9.20	9.80	6.80	Plaster	Incised decoration	Djām		
SF05001	RH084	Stucco frag.	3.60	3.30	1.80	Stucco	Carved stucco fragment found on spoil at edge of RH. 2 'V' shapes carved on both sides of fragment and highlighted in raised stucco	Djām	Yes	Yes
SF05002	Kūh-i Khāra	Metal frag.	4.40	4.50	0.40	Iron?	Badly corroded iron?	Djām	Yes	
SF05003	Kūh-i Khāra	Metal disc	2.00	1.80	0.10	Copper?	Small metal disc, very badly corroded in centre	Djām	Yes	
SF05004	Kūh-i Khāra	Metal frag.	2.30	1.60	0.60	Iron?	Small corroded metal fragment	Djām	Yes	
SF05005	Kūh-i Khāra	Glass frag.	5.00	2.70	0.50	Glass	Curved green fragment	Djām	Yes	
SF05006	Kūh-i Khāra	Glass frag.	3.80	3.20	0.20	Glass	Green glass; curved marks on surface	Djām	Yes	

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Small Find No.	Find location	Small Find type	Length (cm)	Width (cm)	Thickness (cm)	Material	Description of artefact	Storage location	Drawn?	Photo?
SF05007	Kūh-i Khāra	Glass frag.	3.70	1.60	1.50	Glass	Green glass; raised decoration on surface	Djām	Yes	
SF05008	Kūh-i Khāra	Glass frag.	2.90	3.10	0.80	Glass	Green glass; raised decoration on surface; vessel (0.3 cm thick) with glass decoration (0.5 cm thick)	Djām	Yes	
SF05009	Kūh-i Khāra	Glass frag.	3.70	2.70	1.50	Glass	Green glass; raised decoration on surface; main vessel 0.4 cm thick	Djām	Yes	
SF05010	Kūh-i Khāra	Glass frag.	2.90	2.40	1.60	Glass	Green glass; raised decoration on surface; main vessel 0.6 cm thick	Djām	Yes	
SF05011	Kūh-i Khāra	Glass frag.	2.40	2.20	0.20	Glass	Green glass vessel neck?	Djām	Yes	
SF05012	Kūh-i Khāra	Glass frag.	2.40	1.40	0.10	Glass	Green glass rim; diam. 17 cm, 5 %	Djām	Yes	
SF05013	Kūh-i Khāra	Glass frag.	3.20	2.20	0.20	Glass	Green vessel neck; patinated	Djām	Yes	
SF05014-26	Kūh-i Khāra	Glass frag.				Glass	Small green glass fragments; thickest 0.5 cm, thinnest 0.1 cm	Djām		
SF05027	Kūh-i Khāra	Glass frag.	11.2	6.7	0.4	Glass	Bottle neck with raised decoration (0.4-0.8 cm thick); diam. at top 3-4 cm	Djām	Yes	Yes
SF05028	Kūh-i Khāra	Bone frag.	3.30	1.20	0.05	Bone	Small fragment of bone	Djām		
SF05029	Kūh-i Khāra	Bone frag.	2.40	0.80	0.10	Bone	Small fragment of bone	Djām		
SF05030	Kūh-i Khāra	Stone vessel frag.	6.20	10.40	0.80	Steatite	Diam. 19 cm, 7%; 3 repair holes with metal rivets	Djām	Yes	Yes

Appendix Eight: small finds, MJAP 2003 and 2005

Small Find No.	Find location	Small Find type	Length (cm)	Width (cm)	Thickness (cm)	Material	Description of artefact	Storage location	Drawn?	Photo?
SF05031	Kūh-i Khāra	Stone vessel frag.	8.80	1.40	0.80	Steatite	Fragment of neck / rim; incised decoration	Djām	Yes	Yes
SF05032	Kūh-i Khāra	Stone vessel frag.	4.80	3.90	1.00	Steatite	Fragment with incised and raised decoration	Djām	Yes	
SF05033	Kūh-i Khāra	Stone vessel frag.	3.30	3.60	1.70	Steatite	Fragment with incised and raised decoration; incised ellipses cover surface, but very badly worn in places	Djām	Yes	
SF05034	Kūh-i Khāra	Stone vessel frag.	3.60	3.20	0.40	Steatite	Fragment with decoration; low ridges and incised decoration on raised band	Djām	Yes	
SF05035	Kūh-i Khāra	Stone vessel frag.	7.30	2.40	1.00	Steatite	Undecorated fragment	Djām		
SF05036	RH039	Glass frag.	4.60	4.30	0.10	Glass	Vessel base, 2.2 cm high; patinated	Djām	Yes	Yes
SF05037	RH039	Glass frag.	2.50	1.00	0.05	Glass	Rolled rim; very friable; broke during drawing	Djām	Yes	
SF05038	RH039	Window frag.				Plaster/glass	Plaster with layer of flat glass with rolled rim sandwiched within it	Djām	Yes	Yes
SF05039	RH027	Glass frag.	4.20	3.10	0.40	Glass	Blue-green base	Djām	Yes	
SF05040	RH032	Token	0.90	0.80	0.60	Ceramic	Gaming counter made from sherd of Bāmiyān sgraffito ware; darker green band at top, pale green lower part	Djām	Yes	
SF05041	RH096	Shell	1.60	0.70		Shell	Snail: land or aquatic? Disintegrated in transit	Djām	Yes	
SF05042	RH093	Plaster	2.40	1.50	1.20	Plaster	Fragment of white plaster; painted?	Djām	Yes	



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Small Find No.	Find location	Small Find type	Length (cm)	Width (cm)	Thickness (cm)	Material	Description of artefact	Storage location	Drawn?	Photo?
SF05043	EBJR	Gravestone	17.00	32.20	13.50	Stone	Inscribed with Hebrew script on one face; inscription dimensions: 18.7 x 12 cm; 18.7 x 6 cm. Found by workmen repairing gabions. Probably carried down <u>Djām Rūd</u> by spring meltwaters after eroding out of cemetery.	<u>Djām</u>	Yes	Yes
SF05044	NBHR 2	Window frag.	8.30	6.20	2.80	Plaster/ glass	White plaster with layer of glass in middle	<u>Djām</u>	Yes	Yes
SF05045	NBHR 3	Glass frag.	4.40	1.90	0.10	Glass	Green glass fragment	<u>Djām</u>		
SF05046	NBHR 3	Glass frag.	3.00	1.80	0.20	Glass	Green glass fragment	<u>Djām</u>		
SF05047	NBHR 5	Glass frag.	4.00	2.60	0.10	Glass	Green glass fragment	<u>Djām</u>		
SF05048	RH104	Token	1.80	1.50	0.30	Ceramic	Bāmiyān sgraffito fragment - game piece?	<u>Djām</u>	Yes	Yes
SF05049	RH104	Token	1.80	1.30	0.20	Ceramic	Fritware fragment - game piece?	<u>Djām</u>	Yes	Yes
SF05050	RH084	Token	1.40	1.10	0.40	Ceramic	Bāmiyān sgraffito fragment - game piece?	<u>Djām</u>	Yes	Yes
SF05051	RH116	Coin?	1.40	1.40	0.20	Copper?	Badly corroded, no legend or design visible	Kābul Museum	Yes	Yes
SF05052	RH201	Glass frag.	2.80	1.40	0.10	Glass	Pale blue-green	<u>Djām</u>	Yes	
SF05053	RH201	Glass frag.	2.30	2.10	0.10	Glass	Pale blue-green; patinated	<u>Djām</u>	Yes	
SF05054	RH201	Metal frag.	5.50	2.20	0.40	Iron	Iron nail embedded in plaster/corroded material	<u>Djām</u>	Yes	Yes
SF05055	RH201	Metal frag.	0.40	0.70	0.30	Copper	Three pieces of corroded copper; other two: 1: 0.6 x 0.4 x 0.3; 2: 0.3 x 0.3 x 0.2	<u>Djām</u>	Yes	
SF05056	RH044	Spout	3.70	3.50	2.60	Ceramic	Head of small, hollow animal - cow or horse?	<u>Djām</u>	Yes	Yes
SF05057	RH201	Glass frag.	4.10	2.00	0.10	Glass	Pale blue-green	<u>Djām</u>	Yes	
SF05058	RH201	Glazed tile frag.				Ceramic	AF1; S05033 - sampled by Prof. Fabbri	<u>Djām</u>	Yes	Yes

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Small Find No.	Find location	Small Find type	Length (cm)	Width (cm)	Thickness (cm)	Material	Description of artefact	Storage location	Drawn?	Photo?
SF05059	RH054	Glazed tile frag.	8.90	7.10	3.30	Ceramic	Blue	Djām	Yes	
SF05060	Bridge	Stone vessel frag.	8.60	7.00	0.80	Steatite	Bowl fragment	Djām	Yes	
SF05061	Bridge	Stone vessel frag.	10.90	9.90	0.90	Steatite	Bowl rim fragment; chisel marks on exterior	Djām	Yes	
SF05062	RH003	Metal frag.	1.90	2.20	0.10	Tin bronze	Small, tarnished piece of tin bronze, analysed by Prof. Rehren	Djām	Yes	Yes
SF05063	RH032	Metal frag.	2.40	2.10	0.10	Copper	Small, tarnished piece of copper alloy	Djām	Yes	Yes
SF05064	RH045	Column frag.	10.90	10.80	3.80	Baked brick	Baked brick fragment with circular depressions	Djām	Yes	
SF05065	Surface 7	Stone vessel frag.	7.90	7.20	0.80	Steatite	Shaped with holes and remains of metal rivets	Djām	Yes	Yes
SF05066	Surface 7	Pin	11.70	3.90	0.40	Iron	Long pin with thin round, flat top piece (roundel?); shallow depressions on roundel. MJAP03	Kābul Museum	Yes	Yes
SF05067	Surface 7	Glass frag.	5.40	2.50	1.00	Glass	Green	Djām	Yes	
SF05068	Surface 7	Stone vessel frag.	10.70	8.50	0.80	Steatite	Large rim fragment of a bowl with horizontal and vertical exterior chisel marks and a lug; diam. 19 cm, 16%	Djām	Yes	Yes
SF05069	RH201	Wood frag.	17.00	4.50	2.50	Wood	Five jointed pieces of wood; dimensions given are those of the largest piece	Djām	Yes	Yes
SF05070	NBHR 6	Lapis lazuli	2.90	1.40	0.60	Lapis lazuli	Unworked lump	Djām	Yes	Yes

Appendix Eight: small finds, MJAP 2003 and 2005

Small Find No.	Find location	Small Find type	Length (cm)	Width (cm)	Thickness (cm)	Material	Description of artefact	Storage location	Drawn?	Photo?
SF05071	<u>Khar Khūdj</u>	Slag	5.50	4.20	1.90	Slag	3 pieces of green glass or ceramic slag; dimensions of other two pieces: 8.1 x 6.8 x 2.6; 10.3 x 8.5 x 2.8	<u>Djām</u>	Yes	
SF05072	Surface 7	Architectural feature	9.50	9.00	7.60	Plaster	Cone-shaped artefact, similar to SF05074	<u>Djām</u>	Yes	
SF05073	SBHR 2	Architectural feature	12.00	11.00	3.60	Baked brick	Parallelogram shaped, with 'teeth' along one edge; one corner broken	<u>Djām</u>	Yes	Yes
SF05074	NBHR 4	Architectural feature	17.20	18.50	16.60	Plaster	Large plaster cone, similar to SF05072; architectural decoration - flat piece at the base indicates it protruded from a surface / wall.	<u>Djām</u>	Yes	Yes
SF05075	RH003	Painted plaster frag.	2.20	2.30	1.60	Plaster	Two fragments of green, red and blue painted plaster; dimensions of second: 2,3 x 2,2 x 1,2 cm. MJAP03	<u>Djām</u>	Yes	Yes
SF05076	RH001	Painted plaster frag.	4.70	3.20	5.20	Plaster	Two fragments, the second of which has two gold flecks in it; dimensions of second frag.: 3.8 x 3.4 x 2.4 cm. MJAP03	<u>Djām</u>	Yes	Yes
SF05077	RH003	Bead	0.90	0.90	0.70	Frit?	Flower"-shaped bead, now whitish / patinated, but originally blue in colour? From flotation	<u>Djām</u>	Yes	
SF05078	RH039	Button / stud	1.80	2.30	1.90	Iron	Badly corroded; circular top with 'stem' (snapped off but retained); from flotation sample S05008	<u>Djām</u>	Yes	
SF05079	RH004	Wood frag.	4.40	3.40	1.80	Wood	5 fragments of wood, scorched, with cuts / joins. Dimensions of other four fragments: 4.2 x 2.0 x 1.3; 8.7 x 4.2 x 2.4; 5.5 x 4.4 x 1.7; 6.1 x 4.5 x 3.0 cm. MJAP03	<u>Djām</u>	Yes	

Appendix Eight: small finds, MJAP 2003 and 2005

Small Find No.	Find location	Small Find type	Length (cm)	Width (cm)	Thickness (cm)	Material	Description of artefact	Storage location	Drawn?	Photo?
SF05080	SBHR 1	Bricks	9.8	8.1	3.4	Baked brick	3 assorted bricks from fill over paving. 1: 'wedge'-shaped, broken at bottom, yellowish; 2: Peachy / terracotta in colour, triangular 'teeth' on one edge - similar to SF05073? 8.8 x 10.2 x 2.5; 3: yellowish, eroded example of form similar to SF05073? 20.1 x 9.5 x 3.2	Djām	Yes	Yes
SF05081	SBHR 2	Architectural feature	28.00	14.60	8.30	Plaster	Plastered corner	Djām	Yes	Yes
SF05082	SBHR 2	Bricks	14.5	8.4	3.9	Baked brick	3 shaped bricks from section above modern stone wall, i.e. not <i>in situ</i> . 1: curved wedge with raised segments at sides; 2: 'toothed' design, on both edges forming 'diamond' pattern: 10.6 x 9.8 x 4.1; 3: 'toothed' pattern, one-sided: 18.1 x 10.3 x 3.5	Djām	Yes	Yes
SF05083	SBHR 1	Brick	12.00	10.50	4.40	Baked brick	Wedge-shaped brick with curl design on end; designed to be set into a wall with end exposed?	Djām	Yes	Yes
SF05084	SBHR 1	Brick	12.30	11.40	3.80	Baked brick	Wedge-shaped brick, two-tone (red and yellow), in three fragments	Djām	Yes	Yes
SF05085	SBHR 1	Brick/paving	23.00	23.00	5.00	Baked brick	Square paving slab, pale yellowish, with terracotta-colour patches	Djām	Yes	Yes
SF05086	RH201	Ceramic lamp	7.10	5.20	2.80	Ceramic	Green glazed lamp, from alcove; residue sampled. See Gascoigne (2010) for further details.	Kābul Museum	Yes	Yes
SF05087	Minaret	Glazed tile frag.				Ceramic	From base of the minaret; AF2; S05035 - sampled by Prof. Fabbri	Djām		

Index	Sample	Sample_details	Element	Part tested	Barium Ba	Tin Sn	Cadmium Cd	Palladium Pd	Silver Ag	Niobium Nb
19	1	HF1_i_Jam01	Interior surface	Interior surface	258.14	0.00	0.00	0.00	0.00	15.00
18	2	HF2_s_Jam02	Snipped fabric	Snipped fabric	481.25	0.00	0.00	0.00	73.00	11.64
4	3	HF3_i_Jam03	Interior surface	Interior surface	301.63	0.00	0.00	0.00	44.06	14.03
20	4	WF1_s_Jam04	Snipped fabric	Snipped fabric	306.47	0.00	0.00	0.00	51.59	14.46
3	5	WF1/2_i_Jam05	Interior surface	Interior surface	340.89	0.00	0.00	0.00	54.29	14.49
17	6	WF2_i_Jam06	Interior surface	Interior surface	272.59	0.00	0.00	0.00	44.95	14.61
15	7	WF2_i_Jam07	Interior surface	Interior surface	374.46	0.00	0.00	0.00	72.92	14.63
13	7	WF2_s_Jam07	Snipped fabric	Snipped fabric	336.38	0.00	0.00	0.00	53.43	14.19
14	8	WF6_i_Jam08	Interior surface	Interior surface	295.15	0.00	0.00	0.00	0.00	14.07
16	9	WF2_i_Jam09	Interior surface	Interior surface	257.47	0.00	0.00	0.00	0.00	12.37
21	10	WF2_i_Jam10	Interior surface	Interior surface	224.27	0.00	0.00	0.00	0.00	12.62
6	11	WF6?_i_Jam11	Interior surface	Interior surface	432.32	0.00	0.00	0.00	0.00	12.49
5	11	WF6?_s_Jam11	Snipped fabric	Snipped fabric	598.66	0.00	0.00	0.00	52.38	10.41
7	12	WF6_g_Jam12	Glaze	Glaze	1634.55	493.84	483.18	87.85	652.53	0.00
8	12	WF6_s_Jam12	Snipped fabric	Snipped fabric	359.48	31.79	0.00	0.00	59.82	14.15
9	13	WF6_g_Jam13	Glaze	Glaze	1792.07	718.96	679.57	142.30	692.49	0.00
10	13	WF6_s_Jam13	Snipped fabric	Snipped fabric	325.11	0.00	0.00	0.00	31.40	14.76
11	14	WF6_g_Jam14	Glaze	Glaze	964.79	561.58	584.28	137.93	510.22	0.00
12	14	WF6_s_Jam14	Snipped fabric	Snipped fabric	495.74	23.06	0.00	0.00	43.64	15.56
2	15	WF5_g_Jam15	Glaze	Glaze	964.41	194.23	191.21	34.29	308.07	0.00
1	15	WF5_i_Jam15	Interior surface	Interior surface	410.67	25.57	0.00	0.00	70.85	13.05
23	16	F_g_Jam16	Glaze	Glaze	532.84	61583.88	142.78	0.00	292.02	0.00
24	16	F_i_Jam16	Interior surface	Interior surface	67.27	1491.58	0.00	0.00	0.00	12.78
29	17	WF5_g_Jam17	Glaze	Glaze	1054.91	317.17	291.10	60.43	308.87	0.00
30	17	WF5_s_Jam17	Snipped fabric	Snipped fabric	377.62	38.31	0.00	0.00	55.45	11.65
27	18	Tile_g_Jam18	Glaze	Glaze	383.96	64622.19	239.51	39.52	269.68	0.00
28	18	Tile_s_Jam18	Snipped fabric	Snipped fabric	202.09	848.47	0.00	0.00	0.00	12.59
26	19	Tile_g_Jam19	Glaze	Glaze	178.14	63.71	0.00	0.00	51.38	0.00
25	19	Tile_s_Jam19	Snipped fabric	Snipped fabric	100.12	26.77	0.00	0.00	0.00	0.00
22	22	slag_Jam22	Snipped fabric	Snipped fabric	469.02	45.28	0.00	0.00	104.33	14.74
	Total				14792.47	131086.39	2611.63	502.32	3897.37	284.29
	%				0.11	0.94	0.02	0.00	0.03	0.00

Index	Sample	Zirconium Zr	Strontium Sr	Rubidium Rb	Arsenic As	Lead Pb	Tungsten W	Zinc Zn	Copper Cu	Nickel Ni
19	1	167.44	81.61	52.60	30.68	0.00	69.38	80.63	46.82	0.00
18	2	158.44	210.74	48.21	17.56	0.00	0.00	65.53	41.18	78.13
4	3	147.69	356.57	67.23	25.63	0.00	0.00	103.26	54.53	60.69
20	4	158.30	241.88	65.37	27.63	0.00	0.00	141.54	59.54	131.71
3	5	155.55	206.92	71.26	27.76	0.00	0.00	102.46	42.57	66.60
17	6	157.11	258.31	74.41	25.73	0.00	0.00	125.09	63.09	48.54
15	7	154.11	247.93	70.79	33.57	74.01	0.00	220.31	69.59	84.21
13	7	152.45	247.14	71.65	38.48	43.01	79.44	120.22	56.08	90.51
14	8	167.06	185.39	37.91	20.28	0.00	0.00	69.42	40.68	0.00
16	9	135.69	297.12	53.86	23.50	0.00	0.00	135.05	54.89	60.36
21	10	149.84	264.96	62.58	27.38	0.00	0.00	96.91	34.43	0.00
6	11	155.70	310.03	41.74	29.94	0.00	0.00	71.07	61.51	62.13
5	11	143.27	309.19	42.12	22.20	0.00	0.00	81.77	45.02	72.20
7	12	0.00	0.00	0.00	17577.26	349394.50	0.00	787.18	404.27	0.00
8	12	204.45	147.73	42.65	0.00	8389.08	134.56	80.60	100.54	61.12
9	13	0.00	0.00	0.00	19851.39	415974.72	0.00	1060.15	293.51	169.75
10	13	212.75	148.87	43.69	0.00	6375.41	102.09	82.06	56.05	68.76
11	14	0.00	0.00	0.00	17917.94	388608.75	0.00	2082.74	5422.52	0.00
12	14	154.95	344.64	63.98	0.00	1642.60	0.00	163.47	54.86	101.50
2	15	0.00	0.00	0.00	10649.41	188853.36	737.52	131.50	20151.95	89.73
1	15	146.59	358.32	39.02	257.65	5553.21	100.09	97.73	463.52	74.16
23	16	0.00	187.06	0.00	2081.13	159005.58	0.00	132.89	12514.34	0.00
24	16	249.97	753.83	9.60	67.59	2695.87	77.85	14.28	442.11	0.00
29	17	0.00	50.23	0.00	14745.47	244227.31	545.80	78.01	16483.74	0.00
30	17	147.23	334.80	27.51	0.00	21727.19	182.06	64.25	1784.24	0.00
27	18	0.00	38.24	0.00	8379.46	235519.69	0.00	249.65	29979.50	0.00
28	18	130.88	363.21	54.76	0.00	173.04	0.00	102.08	64.02	0.00
26	19	8.60	183.74	9.59	139.24	10245.49	140.72	39.85	29153.98	37.71
25	19	32.83	100.34	8.03	0.00	1038.64	71.13	0.00	231.64	0.00
22	22	152.80	466.35	72.66	27.80	0.00	0.00	147.20	42.75	116.15
Total		3443.70	6695.15	1131.22	92044.68	2039541.46	2240.64	6726.90	118313.47	1473.96
%		0.02	0.05	0.01	0.66	14.55	0.02	0.05	0.84	0.01

Appendix Nine: results of XRF analysis of sherd samples from Dīām (Eccleston and Thomas)

Index	Sample	Cobalt Co	Iron Fe	Manganese Mn	Chromium Cr	Vanadium V	Titanium Ti	Calcium Ca	Potassium K	Antimony Sb
19	1	0.00	51241.09	953.10	171.90	240.04	3449.17	24474.33	23161.10	0.00
18	2	0.00	37592.26	519.56	107.14	224.98	2447.73	74291.46	19286.15	0.00
4	3	0.00	46659.05	800.07	150.93	221.87	2926.09	61101.95	23289.75	0.00
20	4	0.00	50899.72	863.57	200.35	211.69	2986.42	39434.23	24625.29	0.00
3	5	0.00	46450.88	678.86	148.49	211.59	3040.85	44490.16	27128.64	0.00
17	6	0.00	49281.30	797.54	168.94	246.30	3380.49	52261.05	25520.74	0.00
15	7	0.00	40880.92	710.80	125.56	217.74	2441.15	127801.68	18842.03	0.00
13	7	0.00	49496.12	738.19	161.09	250.60	3030.64	57460.37	25086.36	0.00
14	8	0.00	40738.64	559.45	150.77	191.57	2587.30	68354.99	16358.42	0.00
16	9	0.00	42692.88	759.48	154.59	213.86	3047.63	52235.63	24083.27	0.00
21	10	0.00	39806.54	795.84	132.68	208.30	2796.03	70201.70	23361.65	0.00
6	11	0.00	49314.16	1130.66	176.41	281.09	4775.57	52573.51	21066.90	0.00
5	11	0.00	44503.66	944.51	133.86	265.79	2703.33	71390.09	18566.75	0.00
7	12	192.21	1988.01	0.00	0.00	59.27	247.58	5193.13	1282.16	0.00
8	12	0.00	40635.19	917.52	139.41	222.45	3035.82	64297.65	16020.01	0.00
9	13	154.88	3476.81	4699.89	0.00	77.91	232.22	5692.27	2260.65	0.00
10	13	0.00	40509.89	945.41	135.85	213.08	2886.19	58060.04	15154.13	0.00
11	14	133.44	1367.12	0.00	0.00	57.03	221.51	7619.45	2861.81	109.16
12	14	0.00	49701.93	1061.97	155.98	233.15	3087.53	54152.29	23669.33	0.00
2	15	0.00	4165.98	0.00	0.00	31.86	401.98	16230.16	9726.06	81.06
1	15	0.00	43469.88	1295.63	162.30	237.03	3065.59	78189.89	23892.29	0.00
23	16	0.00	20059.77	301.19	79.73	173.78	2804.18	48490.07	23690.78	0.00
24	16	0.00	16586.79	320.77	53.32	142.81	3273.15	45278.08	12843.59	0.00
29	17	0.00	914.70	0.00	0.00	48.12	458.49	13577.37	7248.66	185.07
30	17	0.00	30149.01	611.77	75.62	166.73	2167.57	97873.67	14354.04	34.13
27	18	0.00	1663.76	0.00	0.00	152.82	293.55	19577.25	6627.55	0.00
28	18	0.00	36894.80	928.39	109.56	190.90	2119.66	108276.04	11372.72	0.00
26	19	0.00	4870.39	166.40	0.00	36.09	476.78	22316.56	9606.59	0.00
25	19	0.00	9250.46	229.11	21.74	61.49	797.46	29805.13	8458.47	0.00
22	22	0.00	38599.32	1023.76	131.57	209.95	2752.72	102692.34	25944.70	0.00
Total		480.53	933861.03	22753.44	3047.79	5299.89	67934.38	1573392.54	505390.59	409.42
%		0.00	6.66	0.16	0.02	0.04	0.48	11.23	3.61	0.00

Index	Sample	Aluminum Al	Phosphorus P	Silicon Si	Chlorine Cl	Sulfur S	Total Elements	Balance	Total
19	1	49633.95	1029.12	173770.25	1099.90	30980.74	361006.99	638956.38	999963.37
18	2	62111.73	0.00	263132.53	1953.49	11773.06	474625.77	525312.13	999937.90
4	3	56741.14	0.00	211673.27	1104.86	7174.52	413018.82	586720.69	999739.51
20	4	70131.55	2403.17	250693.97	524.99	7141.53	451314.97	548605.19	999920.16
3	5	62174.89	0.00	225604.36	1237.62	3192.34	415441.47	584508.44	999949.91
17	6	77690.96	0.00	268021.31	634.43	756.38	479843.87	519665.38	999509.25
15	7	65729.75	0.00	211275.34	392.71	6854.37	476688.58	512932.66	989621.24
13	7	69000.30	0.00	241443.33	578.94	12561.47	461110.39	538787.44	999897.83
14	8	37943.91	4049.92	173622.89	3605.41	3132.06	352125.29	647774.75	999900.04
16	9	56835.23	682.70	232279.77	528.93	367.47	414911.75	584995.88	999907.63
21	10	48307.04	1088.05	194792.06	1115.81	16258.18	399736.87	600162.19	999899.06
6	11	72103.90	3069.33	255869.23	579.03	0.00	462116.72	537589.94	999706.66
5	11	62051.43	0.00	259851.84	491.74	835.34	463115.56	536809.69	999925.25
7	12	25798.90	0.00	117682.05	291.44	0.00	524249.91	474462.69	998712.60
8	12	66453.21	0.00	283015.63	430.79	672.86	485466.51	514494.91	999961.42
9	13	36017.61	0.00	129718.83	287.12	0.00	623993.10	374908.06	998901.16
10	13	57819.42	0.00	256844.58	543.45	1234.47	441807.46	557651.81	999459.27
11	14	33082.45	0.00	115206.92	723.82	0.00	578173.46	420416.44	998589.90
12	14	80893.73	0.00	265631.41	868.43	7920.77	490480.52	509444.59	999925.11
2	15	12561.46	735.43	199355.36	1222.23	0.00	466817.26	532992.00	999809.26
1	15	65155.34	0.00	226672.55	480.41	8569.68	458801.02	541090.00	999891.02
23	16	89669.00	0.00	218919.92	680.83	1096.22	642437.99	357165.88	999603.87
24	16	44767.00	0.00	259345.70	622.13	838.05	389954.12	609717.00	999671.12
29	17	17768.58	1344.05	186822.95	902.63	0.00	507433.66	492219.28	999652.94
30	17	50653.80	0.00	242295.88	612.05	3742.81	467487.39	532491.06	999978.45
27	18	7874.86	2393.20	168377.09	1766.76	0.00	548448.24	451367.25	999815.49
28	18	53695.42	0.00	213318.33	762.44	25688.39	455307.79	544556.63	999864.42
26	19	22000.36	0.00	282280.06	6475.51	10266.10	398746.99	599775.00	998521.99
25	19	26876.75	0.00	310400.78	905.70	6117.06	394533.65	605436.00	999969.65
22	22	74252.95	0.00	255834.00	1129.67	10767.61	514997.67	484930.47	999928.14
Total		1555796.62	16794.97	6693752.19	32553.27	177941.48	14014193.79	15965939.83	29980133.62
%		11.10	0.12	47.76	0.23	1.27	46.74		

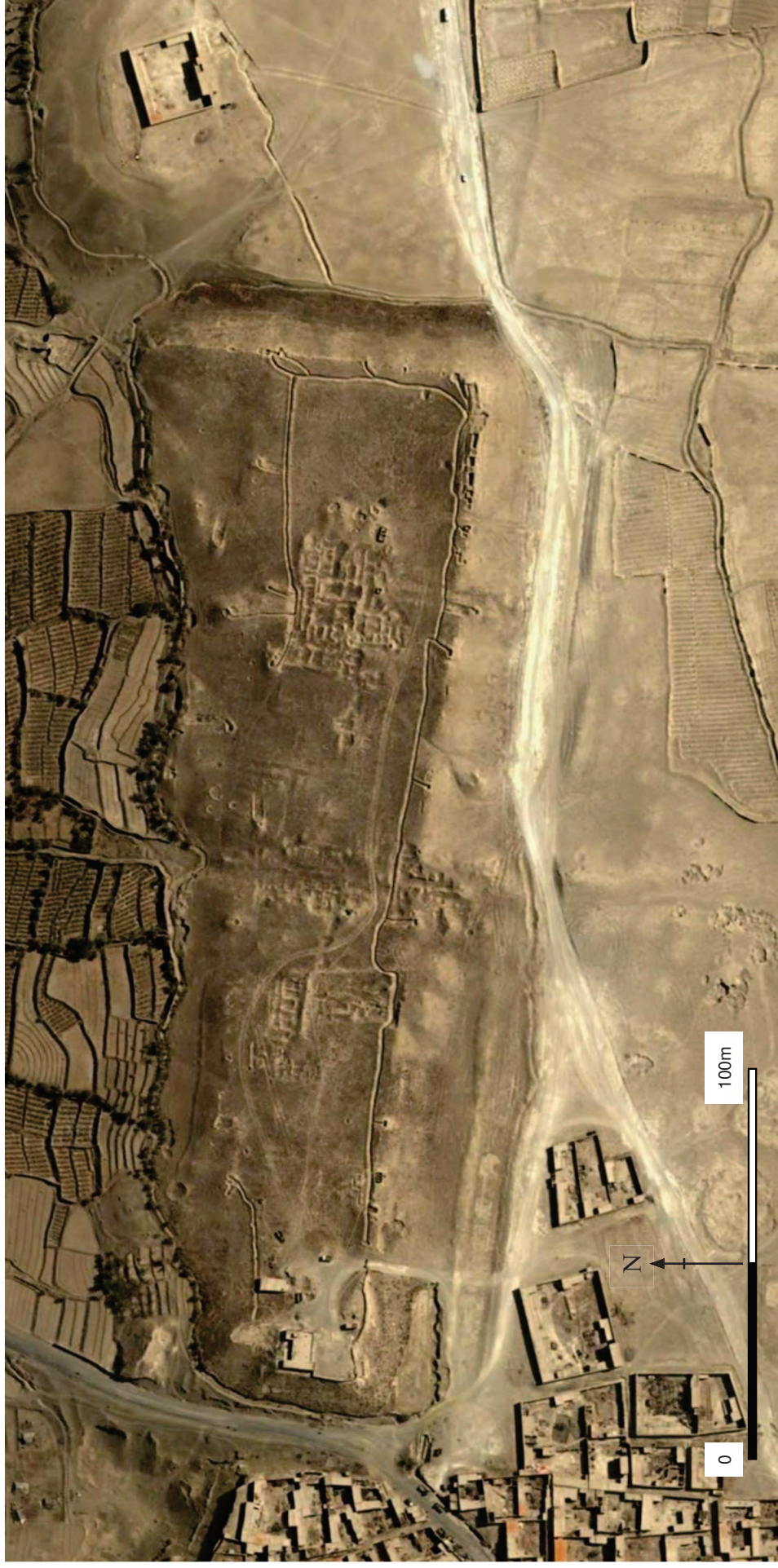
Appendix Nine: results of XRF analysis of sherd samples from Dīām (Eccleston and Thomas)



## Appendix Ten: descriptions of Ghūrīd sites analysed in high resolution satellite images available through Google Earth

Gaz. No.	Description derived from satellite image available through Google Earth
100	<p><b>Bāmiyān:</b> The fort at Bāmiyān is 2.2 km to the north-west of <b>Shahr-i Gholghola</b> but it has distinct fortifications, suggesting that it is currently in use. It overlooks the valley from the north-west. At its feet is an expanse of uneven ground which may represent a ruin-field, although in the east it is covered by alluvial fans disgorging from valleys to the north. 250 m to the south is a cemetery with two modern domed tombs. The intensive occupation and agriculture, and the unclear features (this is a winter image, with no vegetation, and snow in places) make interpretation difficult. <b>Not planned.</b></p>
122	<p>The site of <b>Begram</b> (Figs A10:1-2), 4.7 km north-east of the current airport and military base, is best known as the Kushan capital Kāpīsā, excavated by a French team from 1937-46 (Ghirshman 1946). Although Ghūrīd and other Islamic coins were found at the site in the nineteenth century CE, the trenches and ramparts presumably relate in the main to the earlier periods, so the site was <b>not planned</b>. The main mound (the 'New Royal City') measures 566 x 205 m and is orientated east-west. The mound covers an area of 9.4 ha. In the south it has been cut by tracks, while fields are encroaching from the north. The site was mined during the recent conflicts – during our visit in 2007, we were unable to leave a narrow path and there is little to see in the overgrown trenches (cf. Ghirshman 1946: Pl. I, XXIV). A clear central division is visible between the east and west halves. Trenches and fox-holes seem to line the south rampart, indicating the fighting in the area in recent decades. 560 m to the north-north-west is the <b>Burj-i Abdullāh</b> (Fig. A10:2), a fortified enclosure on a promontory overlooking a bridge at a bend in the river. It measures 208 x 147 m and covers an area of 3.4 ha. The steep ramparts here appear to be relatively well preserved although they are again incised with trenches and foxholes and the interior of the site is currently being used as a military base, highlighting the enduring strategic significance of the site's location.</p>
149	<p>The pre-Islamic and Ghaznawid / Ghūrīd site of <b>Bust</b> (or Greater Bust, as Terry Allen terms it – 1988: 56) stretches for roughly one third of the distance along the east bank of the Hilmand towards the palaces of <b>Lashkar-i Bāzār</b>. The French mission primarily focussed on the Ghaznawid palaces and the most prominent of the other standing structures. I therefore decided to concentrate our research on the southern 2.5 km of the <b>Bust</b> / <b>Lashkar-i Bāzār</b> conurbation, around the citadel at <b>Bust</b> (Figs A10:3-4; see also Fig. 7:25 for a montage of how the stitched satellite images available through Google Earth described below relate to each other). Many individual buildings are discernible in the high resolution satellite images available through Google Earth, amongst the cultivation and abandoned fields of this massive urban site. Other sites, not listed in Ball's gazetteer, are visible on the west bank of the Hilmand.</p>

Appendix Ten: descriptions of Ghurid sites analysed in high resolution satellite images available through Google Earth



A10:1 Gazetteer Site 122 – Begram

A122

Appendix Ten: descriptions of Ghurid sites analysed in high resolution satellite images available through Google Earth

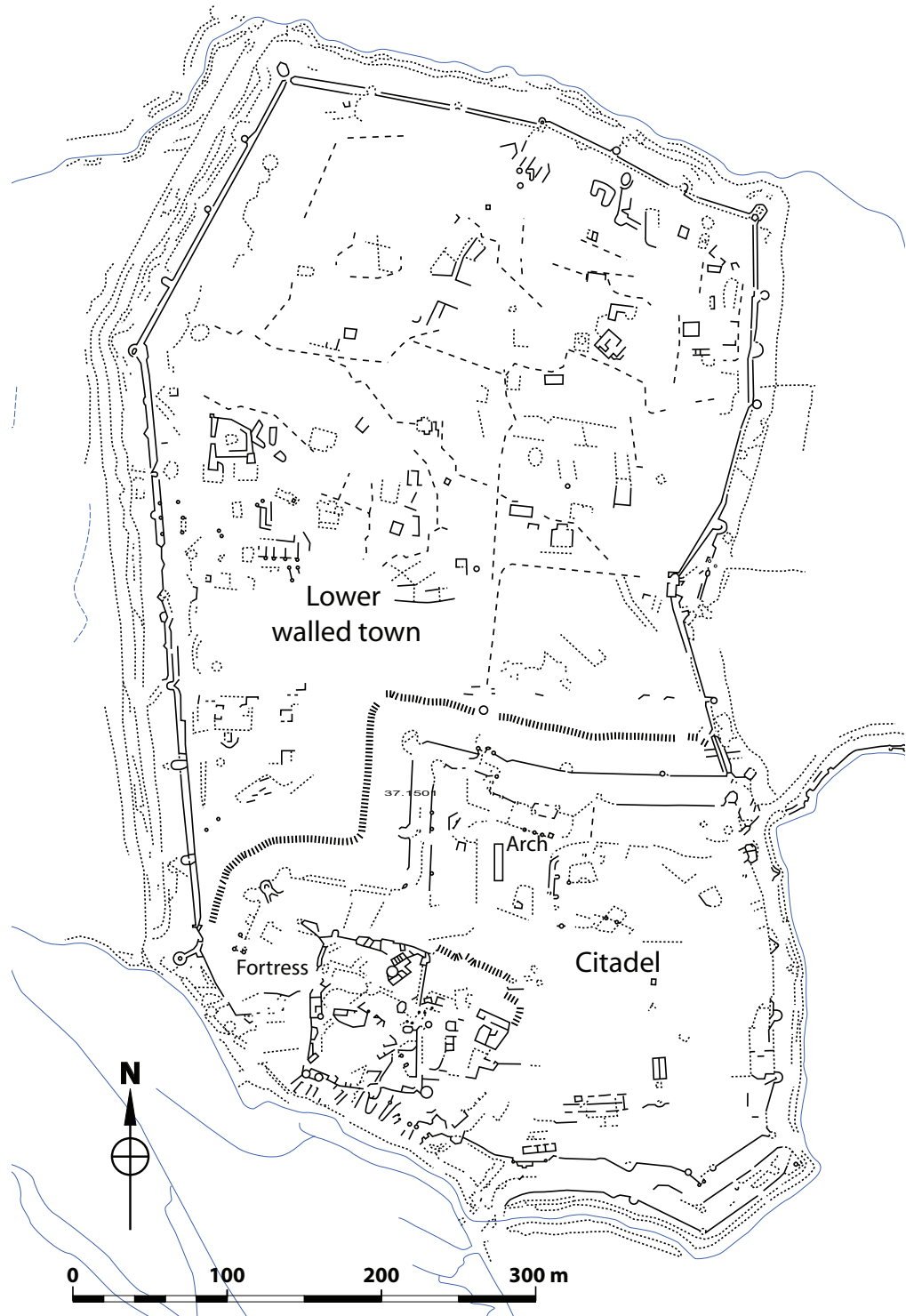


A10:2 Gazetteer Site 122 – Burji-i Abdullah (Begram). Note the military vehicles parked in the centre of the site

A123



A10:3 Gazetteer Site 149 – Bust citadel



A10:4 Sketch plan of the Bust citadel derived from satellite images available through Google Earth

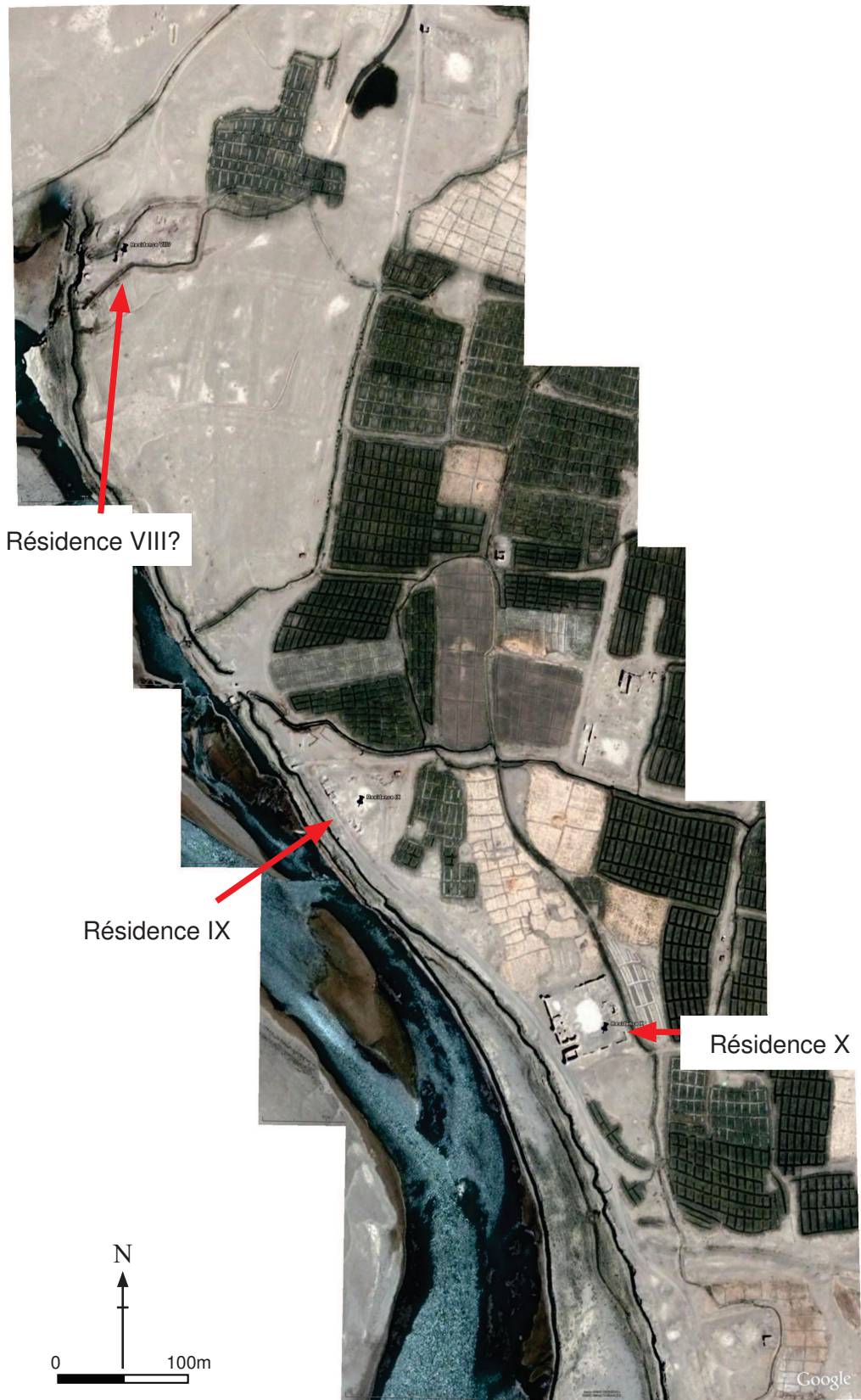
Appendix Ten: descriptions of Ghūrid sites analysed in high resolution satellite images available through Google Earth

Gaz. No.	Description derived from satellite image available through Google Earth
	<p><b>Bust Citadel</b> (Figs A10:3-4): the fortifications of the fortress, citadel and lower walled town, and the monumental arch stand out dramatically in the satellite images of the <b>Bust Citadel</b>, available through Google Earth despite the different exposures of the stitched images. The remnants of a major earlier (Parthian?) wall, which is sketched on Schlumberger's Planche 2, are evident to the west of the lower walled town. An array of 'residences', courtyard buildings, walled enclosures (gardens?), canals and other less identifiable structures are visible in the satellite images available throughout Google Earth, particularly within the lower walled town at the foot of the citadel, and to the north of the citadel, and to the west may indicate the pooling of water in formerly open spaces.</p>
	<p><b>Bust SW</b> (Fig. A10:5): this strip of images covers a 770 m (north-south) area along the bank of the Hilmand, to the west of the citadel. The principal structure is <b>Residence XI</b>, which measures 93 x 72 m and is orientated north-south. Its west wall is relatively well preserved, particularly the south part, where towers are extant. The 7 m long gap in the west wall may indicate an entrance, leading to the river. The rest of the perimeter wall outlines are generally visible, but little detail can be discerned. Similarly, few internal structures are readily recognisable. The large rectangular white patch in the centre (41 x 23 m) may reflect (literally) silting. Cultivation is currently not very prevalent on this part of the site, but extensive, relatively recent field systems are evident in several areas. In the south, the outline of ramparts are visible (they are light coloured, probably indicating a lack of vegetation growing on the packed earth), but again, these are poorly preserved. Allen (1988: 58) argues that these date to the Parthian period and enclose the Parthian city. Trenches F2 and F3 might be identifiable in this area, but they would probably not be recognised as such were it not for Planche 2. To the south of <b>Residence XI</b> is an area of what appears to be walled gardens, which might be confused for structures if it were not for the vegetation. Further east, rectilinear marks may indicate similar cultivation features, or possibly ancient structures. Several small, grey 'rough' areas might indicate low mounds, possibly covered with graves.</p>



A127

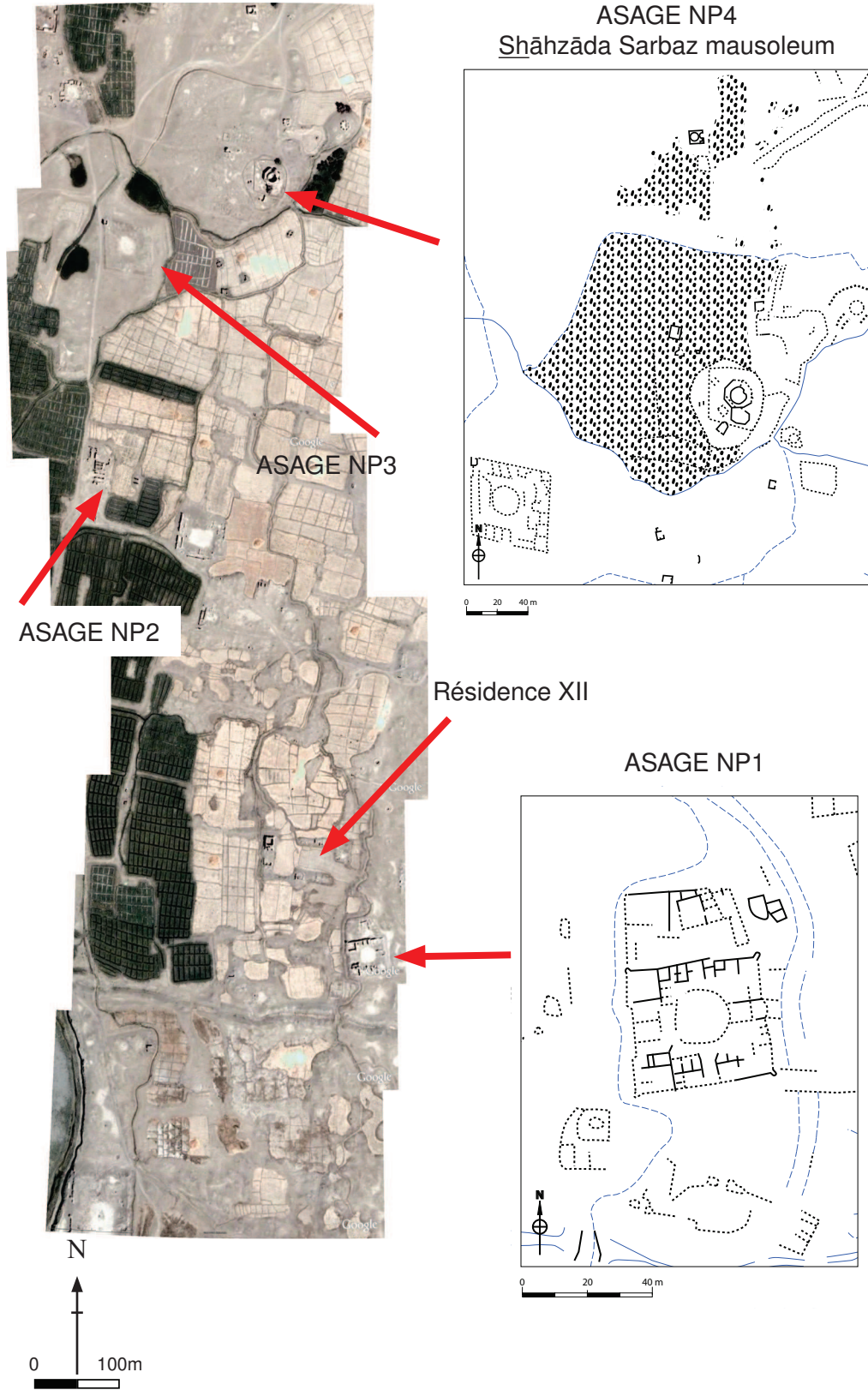
A10:5 Bust SW – Schlumberger's Résidence XI, north of the putative walled Parthian city



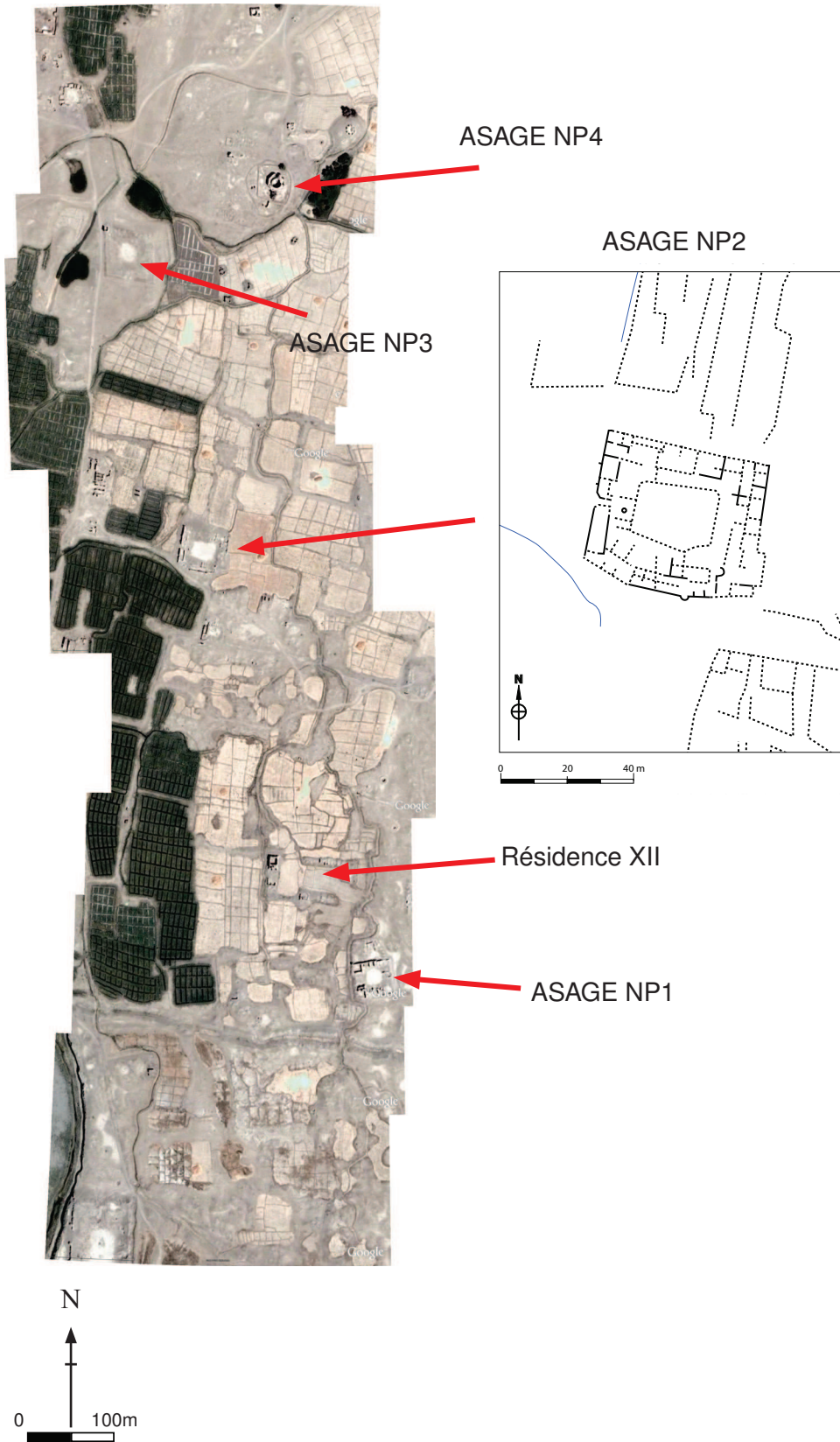
A10:6 Bust NW – Schlumberger’s Résidences IX and X, situated between the Hilmand and encroaching cultivation



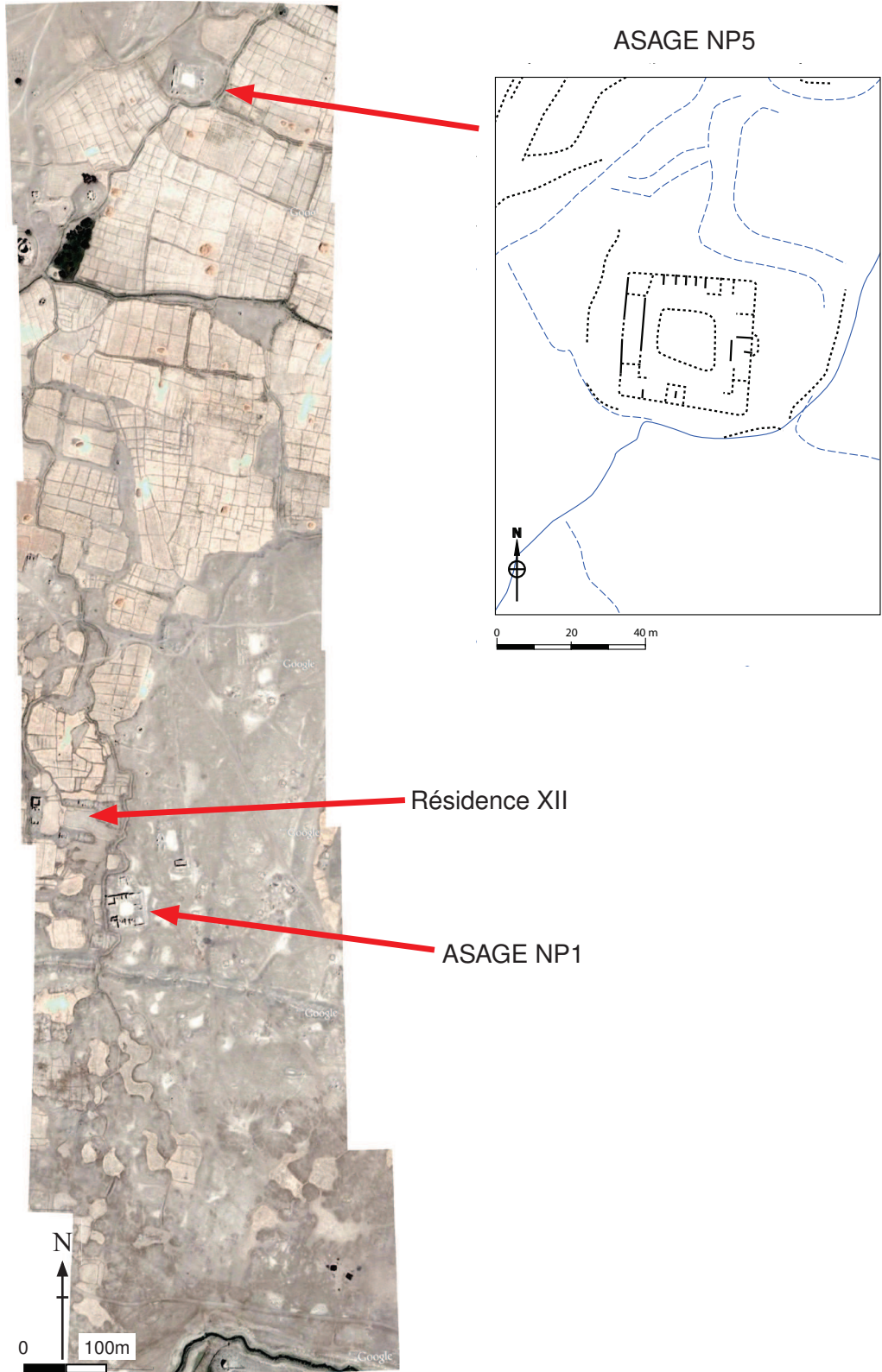
Gaz. No.	Description derived from satellite image available through Google Earth
	<p><b>Bust NW</b> (Fig. A10:6): the north-west section of the site is sandwiched between the east bank of the Hilmand and a heavily cultivated area, yet it contains several major structures which the French planned. This part of the site is comparable to the 'prime real estate' of riverbank properties near the caliph's palaces in the °Abbāsid capitals (Kennedy 2006: 133).</p> <p><b>Résidence X</b> is a 'caravanserai', covering 2,600 m<sup>2</sup>. It is orientated north-west to south-east and measures 52 x 50 m. The west wall and internal structures are best preserved; protruding circular corner towers are still clearly visible in all but the north-east corner. A gateway is evident in the south-west, with a 'guardhouse' measuring 9 x 7 m (orientated north-east to south-west) – the position of the entrance is presumably dictated by the desirability to access the river. Other rooms are less clear, but they appear to be arranged around a large central courtyard.</p> <p>To the north are various crop marks which may indicate the foundations of buildings, or old field systems. Little remains of <b>Résidence IX</b>, 205 m to the north-west, while 175 m to the north-north-east is another large building (or possibly two buildings) which have not been planned. In the south is the outline of a rectangular structure, orientated north-west to south-east and measuring 44 x 36 m. Again, the west wall is the best preserved, although in this case it appears to be the internal west wall that is standing. Little else can be said about this structure. 30 m to the north are the remains of another building, with an 'outhouse' (which may be more recent). It measures 16 x 15 m and is orientated north-north-east to south-south-west. The west room is the best preserved. It is difficult to be certain whether the surrounding subtle soil marks represent other rooms of a larger structure. If not, the long thin nature of the room(s) suggests a storage function.</p> <p>280 m north-north-west of <b>Résidence IX</b> is the faint outline of a very large building, just to the south-east of <b>Résidence VIII</b>. This appears to be a double-walled enclosure, covering 14 ha. It measures 119 x 117 m; the double line of walls / ramparts are 6 m apart. Various enigmatic outlines are visible within and related to the enclosure – those in the west may be an old quay. Some of the internal lines may be old field systems – canals and agriculture have truncated the east part of the enclosure. Little can be said about <b>Résidence VIII</b> – it is surrounded by canals (the ones to the north may be a moat) and little standing architecture is visible.</p>



A10:7 Bust WCentral – ASAGE sites NP1, NP3 and NP4  
(Shāhzāda Sarbaz mausoleum - see Fig. 7:32)



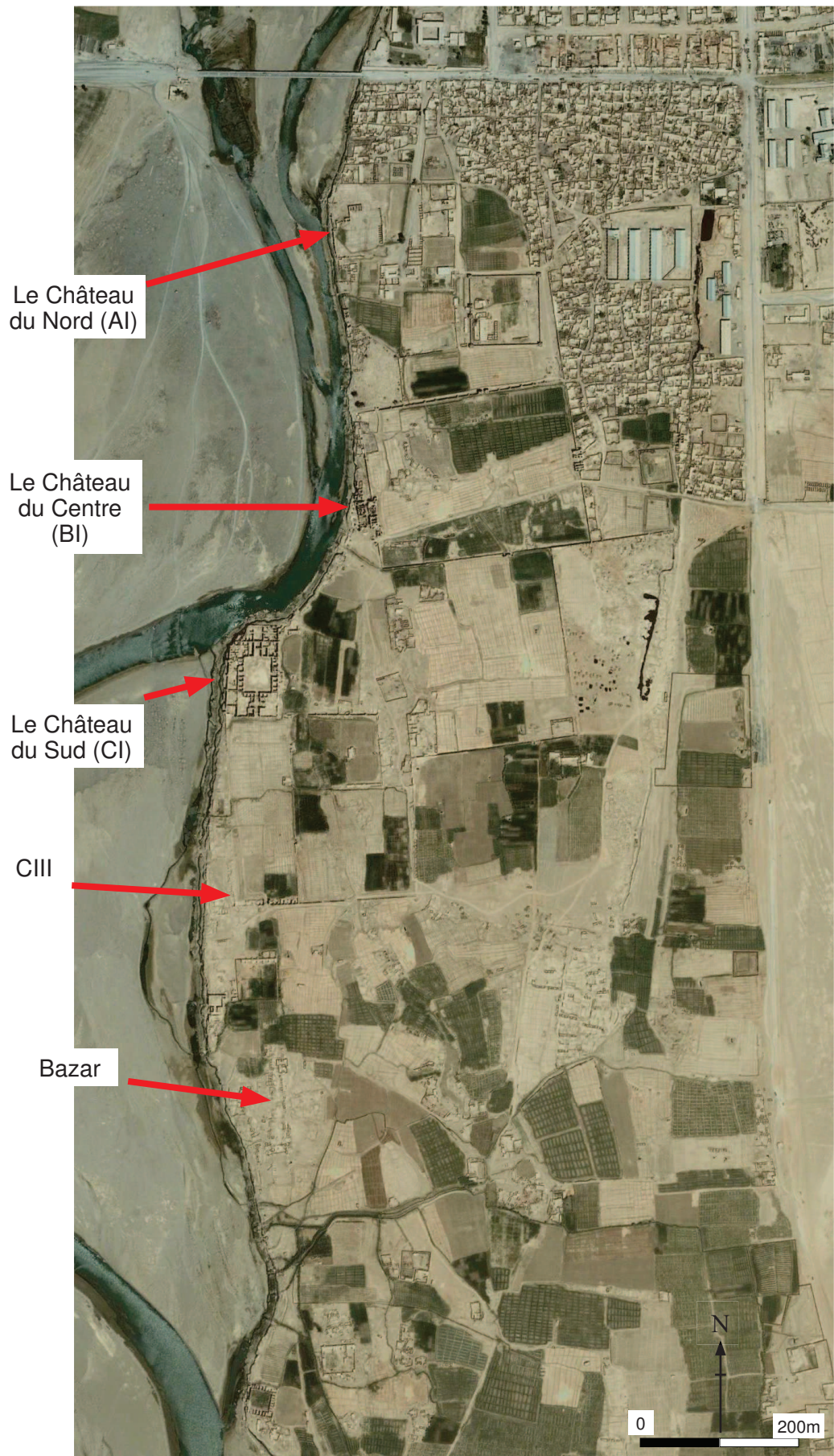
Gaz. No.	Description derived from satellite image available through Google Earth
	<p data-bbox="399 154 438 1937">Description derived from satellite image available through Google Earth</p> <p data-bbox="438 154 694 1937"><b>Bust WCentral</b> (Figs A10:7-8): this 1600 m long strip partly overlaps with <b>Bust NW</b> (to the west) and <b>Bust Central</b> (to the east). In the south, <b>Résidence XI</b> is visible (see <b>Bust SW</b>). The central section of this strip is heavily cultivated; green irrigated fields and light brown, recently harvested fields, with haystacks are visible. The cultivation hems in several of the structures marked on Planche 2. Most of these, however, are not numbered, and so were presumably not planned during the French mission. To the north of an east-west ancient canal is the first of these structures (<b>ASAGE NP1</b>), with ephemeral wall-lines to the west of it between the fields. <b>ASAGE NP1</b> measures 43 x 41 m and is orientated east-north-east to west-south-west. The north-west and south-west quarters are best preserved, although the perimeter wall is incomplete. The central area was presumably a courtyard and is currently white / silty. A corner tower is visible in the north-west, where there is a 10 x 9 m 'room' / store or possible animal pen. The other walls and enclosed spaces are more intricate, suggesting domestic structures rather than merely enclosed space. It is comparable to <b>Résidence V</b>.</p> <p data-bbox="694 154 1013 1937">125 m to the north-west of <b>ASAGE NP1</b> is (unplanned?) <b>Résidence XII</b>. It measures 35 x 10 m, the north part being best preserved. Again, here the large enclosed area (10 x 9 m) indicates a courtyard building, with smaller rooms to the south. To the north-west, a curious grey blotch may mark Trench (?) F1 – possible trench edges are visible and if this was a significantly sunken area it might explain why it is not covered in stubble. Other ephemeral wall-lines can be seen to the north, but none are particularly coherent until <b>ASAGE NP2</b> is reached, 350 m north-north-west of <b>Résidence XII</b>. This structure measures 56 x 50 m and is orientated north-west to south-east. It appears to be 'caravanserai' comparable to <b>Résidence II</b> – a large, central (white, silted) courtyard surrounded by rooms / cells built against the partly preserved external wall. The west rooms appear to have been narrower than the others; a gap in the middle of the wall here may indicate collapse rather than an entrance, due to the direction of the prevailing winds. 105 m to the north-west is a more linear structure, although the limited preservation makes it difficult to be certain of its dimensions. Three rooms, however, are visible, measuring ca 12 x 6 m and aligned north-west to south-east. Smaller, similarly orientated rooms to the north look like later additions.</p> <p data-bbox="1013 154 1332 1937">85 m to the north-north-west are the remains of a 'rampart enclosure', measuring ca 33 m square. Its south and west ramparts are better preserved than the north and east. A further 100 m to the north-north-east is a better preserved squarish enclosure (<b>ASAGE NP3</b>), which has been distorted by the satellite image available through Google Earth, if the outline in Planche 2 is correct. It appears to consist of a double perimeter wall (or rooms against the inner face of the perimeter wall), but this time with the traces of a squarish courtyard area which is defined by walls and white silted. This suggests that the internal walls between the perimeter and the courtyard walls are no longer evident on the surface – the building may be comparable to <b>Résidence V</b> or <b>VI</b>. It measures 58 m square, the courtyard 24 x 20 m. In the north-west corner is a square standing structure / tower, with the possible remnant of another discernible in the north-east corner. The standing tower measures 5 m square. An entrance may be visible in the middle of the south wall (or possible in the middle of the east wall).</p> <p data-bbox="1332 154 1339 1937">130 m to the north-east is a domed structure, the Shāhẓāda Sarbaz mausoleum (<b>ASAGE NP 4</b>), surrounded by a wall and possible graveyard. The dome is built on a hexagonal base and measures 11 m in diam. (the hexagon is 20 x 18 m, orientated north-north-west to south-south-east).</p>





A10:10 Bust ECentral (left) and Bust East (right)

Gaz. No.	Description derived from satellite image available through Google Earth
	<p><b>Bust Central</b> (Fig. A10:9): about one third of this strip is covered by <b>Bust WCentral</b> to the west. In the north, the course of an old canal can still be seen, running north-east to south-west past a large 'caravanserai' <b>ASAGE NP5</b>. This site is comparable to, but not as well preserved as, <b>ASAGE NP1</b>. In the west, sections of the outer wall are still upstanding; ephemeral traces of internal divisions are visible along the north wall and in the centre of the east wall (a possible gateway) and in the south-west. The site measures 37 m east-west by 34 m north-south. An inner wall is visible in the west, 5 m from the outer, delineating the usual central courtyard with a white silty area. The site measures 1,314 m<sup>2</sup> in area and is slightly off north-south in alignment.</p> <p>250 m to the south-south-east are ephemeral wall-lines in the fields which cover the north half of this strip, with other crop marks 525 m south of <b>ASAGE NP5</b>. This faint site appears to be rectangular, orientated north-west to south-east and about 33 x 21 m in size.</p> <p>Where the cultivation ends, many more sites / the outlines of possible structures are visible, although a significant number of these may be relatively recent animal pens. The structures which appear older stretch north from near <b>ASAGE NP1</b> and may be aligned along a street. At the north end are two poorly preserved 'caravanserais'; the west one partly cut by tracks. The larger site measures roughly 51 x 44 m. 44 m to the north-east of <b>ASAGE NP1</b> is a small rectangular structure, orientated east-west. It measures 14 x 8 m and covers an area of 99 m<sup>2</sup>. Its walls are virtually intact. Immediately to the north is a less well-preserved rectangular structure, orientated north-south. Virtually none of its walls are still standing, but a double row of walls running north-south is clearly visible. The site measures 2319 m<sup>2</sup> in area, 56 x 39 m. The double row of walls are 7-8 m apart. Faint internal divisions are visible in the north.</p> <p>140 m to the south of this site are the remnants of another major canal. The cluster of 'pens' in this area makes sense if the canal collects again rainfall or kāfīz / well holes in the area are still operational. Two faint, rectilinear crop marks are visible in this area, but little other detail. A suspiciously regular circular feature is visible, surrounded by lighter (silty?) deposits – it may relate to an ancient pond. Just to the north of the citadel walls are a couple of mounds topped by what appear to be graves.</p>
	<p><b>Bust ECentral</b> (Fig. A10:10): the nomad camp in the south-east of this image provides a useful explanation of some of the nearby sub-circular features that are visible in this strip. As in <b>Bust Central</b>, their concentration along ancient canal lines and lines of karez spoil-heaps / wells is also indicative of their probable function as recent animal pens. Some of the darker patches around the light silty areas probably represent vegetation which would have grown longer in these damper areas and provided fodder. Elsewhere, however, intense small dark spots may indicate ancient industrial refuse / slag heaps. In general, the archaeological remains in this area are not well preserved. Little is visible in the north where harvested fields dominate and the plethora of 'dried up lagoons / ponding' features in the centre make the identification of building outlines difficult. If this interpretation is correct, however, and this was a perennially damp / marshy area, occupation in this part of the site may have been limited anyway. In the south, a couple of rectilinear outlines are noticeable close to the citadel walls, but little can be said about these, and several other possible structures to the north. Only when we reach the vicinity of <b>Résidence XIII</b> are building outlines clearer, but even here, few have the upstanding architecture of <b>Résidence XIII</b> and only rough outlines can be delineated. Given these limitations, measurements of these structures were not taken.</p>



A10:11 Lashkar-i Bāzār (cf. Schlumberger 1978: Planche 3)



Appendix Ten: descriptions of Ghūrid sites analysed in high resolution satellite images available through Google Earth

Gaz. No.	Description derived from satellite image available through Google Earth
	<p><b>Bust E</b> (Fig. A10:10): the principal feature of this eastern-most strip of stitched images available through Google Earth is Schlumberger's <b>Building XIII</b>, the standing architecture of which is clearly visible. Other smaller, less well defined clusters of ruins are visible around BXIII (see Schlumberger 1978 Planche 2), as well as the old canal and more ephemeral channels. Modern cultivation, including in the midst of BXIII has complicated the picture, although some of the channels appear more clearly in Google Earth than in Planche 2. Other modern / complicating features of note are the nomad camps and probable modern animal pens (possibly re-using older structures) and a possible brick kiln (a black circle with a plume of smoke rising from it) as well as the usual haystacks. In the north, a large domed structure, the Siyāh Ćar icehouse, is visible; it does not appear on Schlumberger's Planche 2.</p>
311	<p><b>Dūst Muhammad</b> is a small mound in the middle of dense agriculture. The uncultivated area around the site measures 68 m (east-west) by 61 m (north-south; 0.3 ha), although the fields have probably encroached on the lower slopes of the site. Roughly in the centre of the site is a rectilinear 'fort' measuring 27 x 19 m and orientated north-west to south-east. It appears to be more elevated in the west, possibly reflecting towers flanking an entrance, or the natural topography here. A single structure, orientated north-north-west to south-south-east, stands within the fort. It measures 8 x 5 m and appears to have an entrance in the north-west and a possible well outside its east wall. No other features are clearly discernible.</p>
521	<p><b>Kamtudi Wakīl Khān</b> is a low mound, 0.4 ha in area, surrounded (and being encroached?) by agriculture. Little is visible on the surface other than a central circular feature (a well?) and white rectilinear lines, presumably indicating buried wall-lines. The mound measures 83 x 63 m and is orientated north-east to south-west. The clearest of these features measures 5 x 3 m. The north side of the mound has some vegetation on it.</p>
685	<p>The Ghaznawid and Ghūrid remains at <b>Lashkar-i Bāzār</b> (Soldiers' Bazar) stretch for over 1.7 km, primarily along the east bank of the Hilmand (Fig. A10:11), and are intrinsically linked with the site of <b>Bust</b>, a further 4 km to the south. As mentioned above, a French expedition worked at both sites from 1949-53 and recorded numerous standing structures as well as excavating remains. Many of the extant structures visible in the stitched levels letter image can be identified on the French plan (Schlumberger 1978 Planche 2) – from the <b>Northern Palace C1</b> in the north to <b>Structure III</b> in the south. A considerable amount of duplication would result from planning and describing these sites as they survive in the satellite images, given the extensive French work at the site. The ravages of time, conflict and agricultural expansion probably account for any small discrepancies between the French plans and the extant (visible) remains. The combined ruins of <b>Bust</b> / <b>Lashkar-i Bāzār</b> (to the north of the citadel at <b>Bust</b>) cover an estimated 930 ha.</p>

Appendix Ten: descriptions of Ghūrid sites analysed in high resolution satellite images available through Google Earth

Gaz. No.	Description derived from satellite image available through Google Earth
938	<p>Description derived from satellite image, which is much paler than normal. Consequently, some of the structures in what appears to be a re-visited camp site are difficult to discern. Most of the structures are rectangular and orientated south-west to north-east, with the short side to the south-west, presumably because of the prevailing wind. Several of the larger structures have clear internal divisions / rooms; the smaller, simpler buildings may be for animals. The camp lacks a clear pattern of organisation; it may, therefore, represent multiple visits, possibly over a considerable amount of time. One of the larger buildings measures 10 x 7 m, while one of the 'animal structures' measures 8 x 4 m. The structures are scattered over an area of ca 7 ha, measuring 200 x 180 m, on a promontory between two rivers. The lighter coloured deposits around the structures suggest clearance of rocks from the surface, both to build the structures and to facilitate habitation.</p> <p>620 m to the north-west is another, less dense cluster of structures covering ca 3 ha, on a slope overlooking a canal. These structures are clearer and so probably more recent. Three of the structures are simple rectangles, although one oval corral is visible, with an opening to the south-south-east. The corral measures 12 x 10 m, while the rectangles measure 12 x 8 m on average. A curious, elaborate C-shaped walled structure in the west, measuring 18 x 6 m, may represent a mosque due to its orientation and possible colonnade on the eastern side. Again the short side generally faces west due to the prevailing wind. To the north is a linear feature (possibly a bulldozed bank) marking the south extent of irrigated fields; other, thinner, longer linear features are probably old route-ways. On the opposite side of the canal, 420 m to the south-west, are other structures (not planned due to the proximity of a hamlet and their probable recent date / re-use).</p>

Appendix Ten: descriptions of Ghūrid sites analysed in high resolution satellite images available through Google Earth

Gaz. No.	Description derived from satellite image available through Google Earth
1042	<p><b>Shahr-i Gholghola</b> is located on a large, steep, conical hill overlooking the Bāmiyān valley and the junction of a valley leading to the north-west and another valley leading south towards Dokani. The strategic importance of the site is evident and it has yielded ceramics from the Late Sāsānid / Turk period through to the Ghūrid period (Ball 1982 i: 244). According to the historical sources, the site was systematically destroyed and its population massacred by Činghiz Khān's forces, following the death of his favourite grandson during the siege of <b>Bāmiyān</b> (hence its name, which means 'The Town of Wailing'). More recently, the site suffered from looting and was heavily mined (<a href="http://spach.info/ephotosbamiyanshahrehgola.htm">http://spach.info/ephotosbamiyanshahrehgola.htm</a> [accessed 05/04/2011]), although modern houses are identifiable in the north. The hill measures 435 x 420 m and covers an area of 12.7 ha. Although the site falls within a high resolution area, the definition of ruins is difficult, for historical and other reasons, which is unfortunate given the fact that no accurate plan of this major fortified urban site exists. In addition to the problem of identifying structures on steep slopes, ruined eight hundred years ago, the topography of the mound and time / date of the image have further hindered the process – much of the north / west part of the mound is in shadow and snow further obscures remains in this area. Rocky outcrops, erosion and spoil heaps are further complicating factors.</p> <p>A long fortification wall, however, is visible running south-west along a ridge to the summit of the hill. It is periodically interrupted by small towers although none are particularly distinct and some of the structures on the summit are presumably modern, as are the buildings in the south-west. That said, the steep slopes probably necessitated some form of terracing, doubtless re-using existing foundations where possible. Clusters of rectilinear wall-lines can be delineated in places, but fieldwork is required to verify and date these. Those in the south-west may relate to the mosque (Ball 1982 II: 466); the larger sketch plan of the fortifications in the Gazetteer is, in the main, difficult to correlate with the image.</p> <p>The site of <b>Qal'a-i Dukhtar</b> is supposed to be 1 km east of <b>Shahr-i Gholghola</b>, but I have yet to identify it on the satellite images (possibly due to the winter snow, brown colour of the landscape, and the severe destruction wrought by the Mongols).</p>
1081	<p><b>Shiniya 1</b>: small, isolated circular tower on a ridge overlooking an east-west valley entering the main north-south Alayār valley. The tower measures about 3 m in diam. The only other possible structures nearby are an enigmatic 'satellite' feature 200 m to the east-north-east and neighbouring rectilinear soil marks, although these are too large to be anything other than enclosures (if that). Considering how clear the tower is, and how ephemeral the other features, they are unlikely to be related. Not planned.</p> <p><b>Shiniya 2</b>: another isolated tower, located on a ridge overlooking two valleys entering the Alayār valley from the south-west. This structure is rectilinear in shape and measures 4 x 3 m. It is orientated north-east to south-west and does not seem to be associated with any other architecture, although a possible circular depression 30 m to the south-west may be related to it. Not planned.</p>

Appendix Ten: descriptions of Ghūrid sites analysed in high resolution satellite images available through Google Earth

Gaz. No. 1163	<p>Description derived from satellite image available through Google Earth</p> <p><b>Tepe Buland 1</b> is a large fortified site on the edge of the irrigated fields on the west bank of the Hilimand. A canal loops around the site on three sides, with desert to the west. A large, presumably military complex has been built on top of the fortress, rendering any attempts to identify ancient structures futile. The fortress has steep slopes in the west, but those in the east appear gentler. A possible fortified entrance is located in the south-west, but again this may be recent. The mound measures 245 x 177 m (orientated north-west to south-east) and covers an area of 3.3 ha. Not planned.</p> <p><b>Tepe Buland 2:</b> 265 m to the south is an area to the west of the canal that can best be described as lumpy. The undulations and indentations may be indicative of a ruin field; if this is what it is, it has presumably been significantly modified in recent times by locals. The site appears to be slightly raised above the surrounding land (especially in the south-west where a track runs past it). It extends for 260 x 140 m and covers an area of 1.7 ha. No distinct wall-lines are visible, so the interpretation of the site is highly speculative – it may merely be the result of digging / dredging the canal. Not planned.</p>
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## Appendix Eleven: descriptions of selected Ghūrid sites analysed using upgraded satellite images available through Google Earth

Gaz. No.	Site Name	Length (m)	Width (m)	Area (ha)	Description derived from satellite images available through Google Earth
15	Ahangaran	95	80	0.75	Possibly modern, rectangular fort with corner towers at confluence of stream and Harī Rūd. Other sites 790 m to south-west and possibly 480 m to south-east; site is 18 km as the crow flies, 23 km by track west-south-west of Ġaghčārān.
183	Chashma-i Khuni				Impossible to identify from the description and given the geology of the area.
189	Chehel Burj	1170	350	23.5	Fortified hill-top 1.65 ha in area, with towers visible, as well as walls of a fortified enclosure 110 m to west. This is a 150 m <sup>2</sup> central structure with additional walls in north-east and south-east (5.2 ha in total); a further L-shaped enclosure (6.3 ha in size up against the river bank in the north) is located 140 m to north-west.
212	Chisht				The two mausolea are just discernible, if you know what to look for, on promontory overlooking confluence of irrigated north-south valley and Harī Rūd. Areas whited out for national security?
231	Danistama	40	37	1.6	Blurry outline with internal subdivisions just visible, on the flood plain of the left bank of the Surkhāb river, 95 m east of ruined settlement / track.
300	Diwal-i Khudaidad	695	515	29	Concentration of ruined structures, sand-filled reservoirs and canal system in the desert; canal banks stretch for over 14 km to north-east before joining wadi. Numerous tracks, some of which are presumably modern.
358	Ghazna				Citadel (520 x 470 m, 21.5 ha) is distinct, with ruins to north-east identifiable in conjunction with the plan in Ball's gazetteer; it is possible to identify the outline of the palace and the tombs of °Abd al-Razzaq and Maḥmūd, and, faintly, the minarets.
373	Ghuriyan				Two forts are visible; older rectangular one in west (180 x 95 m, 1.8 ha), more recent trapezoidal one 20 m to east (204 x 190 m, 3.8 ha). Newer fort has corner towers and three towers in between there along the north, west and south walls (east wall is less distinct). Unclear where the mosque is, unless it is in open ground just to east of newer fort.
393	Gumbad-i Sar-i Shaila				Nothing visible; poor visibility in Gaud-i Zirra Depression (sands).

Appendix Eleven: descriptions of selected Ghūrīd sites

Gaz. No.	Site Name	Length (m)	Width (m)	Area (ha)	Description derived from satellite images available through Google Earth
398	Gurgurawa				Possible identification of small rectangular fort on east bank of Darra-i Gurgurawa, but difficult to be sure given limited description, modern remains, other forts and geomorphology. Strategic location guarding valley.
403	Guzar-i Pam				Reasonably clear image and little vegetation cover, but difficult to identify from brief description. Rectangular fort located 3.4 km to north-east overlooking river (85 x 80 m, 0.7 ha); orientated north-east to south-west with central division and possible corner towers.
428	Harāt				Major sites scattered across the city identifiable with aid of gazetteer plan; particularly visible are Kaḷa-i Ikhtiyāruddīn (1.25 ha) and Gawharshād complex and Husayn Baykara minarets.
468	Djām				Minaret visible, but little else on image available through Google Earth.
485	Kachi Gird				Strategic location overlooking confluence of wadis; a couple of semi-circular towers may be identifiable but it is difficult to distinguish between other eroded fortifications and natural formations.
489	Kafir Qal'a Deh Imam				Outline of fortifications along a ridge on south side of east-west valley, but it is difficult to determine the site's extent, given the local geomorphology.
507	Kak-i Kuhzad				Nothing clearly visible in supposed location; possible outline of fort on hill to south-east which matches description better, but is not certain.
845	Kaḷa-i Gāwargīn				Difficult to identify with certainty given limited description and local geography.
556	Khana Yahuda	50	50	0.15	Faint outline of roughly square structure at east end of flat-topped spur with cliffs to south, overlooking Band-i Amir river, 3 km south-east of Chehel Burj.
608	Khwaja Sultan	585	370	17.9	Large walled enclosure with citadel (97 x 75 m, 0.6 ha) in north-west; 1.3 km east of Hillmand, with other possible ruins / low mounds obscured by surrounding cultivation and canal.
658	Kushk-i Agha Bahar				Difficult to identify, given shadows; two possible circular structures visible.

Appendix Eleven: descriptions of selected Ghūrid sites

Gaz. No.	Site Name	Length (m)	Width (m)	Area (ha)	Description derived from satellite images available through Google Earth
683	Larwand				Impossible to identify without more precise coordinates, given the small size of the structure and numerous bushes in the area.
742	Muna Ala				Impossible to identify the forts / towers with certainty.
787	Pa'in Mazar				Possible identification of the two complexes of forts / towers described by Ball, but no real detail evident.
864	Qal'a-i Malik Antar				Impossible to identify the fort with certainty, given several possible light-coloured signatures in the area.
869	Qal'a-i Naqshi	130	40	0.4	Probable outline of a small fort with towers on a ridge on the east side of valley, but resolution is not good enough to provide more details.
875	Qal'a-i Qaisar	220	95	1.1	Large fort on mountain top with faint walls and towers visible; the reported entrance in north is unclear. Overlooks fertile valley 1 km to north-west.
879	Qal'a-i Sangi	135	35	0.3	Faint outline of a fort with towers to north-west of fertile valley and guarding route to the valley in north; mentioned by Ferrier as having an immense central cistern, but nothing visible on the surface.
882	Qal'a-i Sultan				Difficult to identify the fort with certainty from the brief description in gazetteer, given several possible rectilinear signatures in the area.
970	Sain				Several possible signatures of this "very small group of towers defending the road" but cannot be certain, given the grainy image.
974	Sakhar				Difficult to identify with certainty given numerous ruins in the area and limited description, but there is a possible grey walled area on the north side of the valley / village with a circular lump that might be the 'lost' minaret.
987	Sang-i Mazar				This line of (small?) watchtowers is difficult to identify with certainty, despite a clear image and lack of vegetation on barren mountain slopes, in part due to the geomorphology.

Appendix Eleven: descriptions of selected Ghūrīd sites

Gaz. No.	Site Name	Length (m)	Width (m)	Area (ha)	Description derived from satellite images available through Google Earth
1004	Sarkhushak	355	160	4.4	Large fortified site at prominent position overlooking west bank of Bāmiyān river; tributaries enter the Bāmiyān to the north and south, making it an ideal defensive position, accessible only along a narrow ridge in the west. Possible lines of fortifications are visible, and a large rectangular structure with corner towers in the centre-north (45 x 40 m, 0.2 ha).
1006	Sar-o Tar	1190	1065	116	Large site with double walls evident in places, especially in the N and S where less covered by dunes. The clearest feature is an oval walled area in the south-east (520 x 445m, 19ha) with a large central (excavated?) structure. 800m to the N is a square structure (80 x 80m, 0.6ha) with distinct corner towers and towers midway along its walls. 110m N of the N walls of the main site is another stretch of double wall protruding from the dunes and running for at least 1km - possibly indicating another large walled town to the N? There is a curious dune-free NW-SE orientated strip, 1500 x 155m to the S - possible cleared as a temporary run-way for illicit purposes?
1023	Shah-i Mashhad	50	45	0.3	Rectangular outline of madrasa on south bank of Murghāb river, identified in part thanks to Glatzer's more precise coordinates (the structure is quite blurry and along an image stitch line). Possible other ruins to the south and west.
1049	Shahr-i Sagan				Difficult to identify site with certainty given the local geomorphology and grainy image.
1103	Sibak				Numerous possible sites in small north-south valley, 5 km east of Yaman, but difficult to distinguish from natural geomorphological features and more recently abandoned structures, given the limited description.
1236	Yakhan-i Pa'in				Numerous possible structures but difficult to distinguish from modern habitation and local geomorphological features.
1239	Yaman				As with Sibak, 5 km to the west, numerous possible sites, but difficult to distinguish from natural geomorphological features and more recently abandoned structures.



## Appendix Twelve: ASAGE sites referred to in Chapter Seven

Data on the other 664 identified sites will be published in the future, but are available to *bona fide* researchers

Site	Site Type	Description	Stars (1-3)	Dating	Length (m)	Breadth (m)	Area (m <sup>2</sup> )	Orientation	Location
SA01_058	other	Group of three well-defined structures on north edge of <i>sebkha</i> ; the eastern one (52 x 24 m) may be related to water collection; the central structure (80 x 29 m) appears to have niches in its W wall and may be a 'caravanserai'; the W structure (25 x 23 m) consists of two parallel side walls - possible a reservoir	3	possibly pre-modern	272	83	22576	E-W	mud flat
SA01_072	dam	T-shaped double-walled dam with small rectilinear structures to the west (hides?)	3	possibly pre-modern	207	136	28152	NE-SW	mud flat
SA01_094	fort	Qal'a-i Hauz; quadrilateral Early Islamic fort, with rectangular reservoir to south.	3	probably pre-modern	139	114	15846	N-S	mud flat
		Qal'a-i Hauz description: The fort is trapezoidal (albeit roughly square), with standing walls and circular corner towers which cast long shadows. The entrance (currently ca 2 m wide) appears to be in the south, with an additional circular tower opposite it in the middle of the north wall. The towers, although difficult to discern due to the shadows, are roughly 4-5 m in diam.; those in the south may be multi-chambered, or have additional structures abutting them. Sand has collected inside the fort, obscuring most of the presumed internal structures, although several rectangular rooms / wall lines are visible along the west wall. Additional rectangular structures have been added (presumably at a later date, and possibly relatively recently) to the exterior of the south and west walls of the fort, abutting the southern towers. The walls measure 46 x 41 (ext.) m and are orientated west-south-west to east-north-east; they enclose an area of 1,170 msq. The rectangular reservoir to the south has much lower extant walls, indicating a different building material or function.							

**Appendix Twelve: ASAGE sites referred to in Chapter Seven**

Site	Site Type	Description	Stars (1-3)	Dating	Length (m)	Breadth (m)	Area (m <sup>2</sup> )	Orientation	Location
		It measures 108 x 68 (ext.) m and is orientated north-east to south-west. Double wall lines are clearly visible in most places, with a possible entrance, 4 m wide, in the middle of the north-east wall. The gap between the walls ranges from roughly 3-5 m. The centre of the structure is largely flat, suggesting a lack of internal dividing walls, other than possibly along the west wall. Enigmatic small features are visible in the southern and eastern corners. The latter is circular, 5 m in diam. The large open space within the walls measures 5,850 msq (the whole structure is 7,325 msq in size). 405 m to the east of the entrance is another small U-shaped or rectangular structure, orientated north-east to south-west, open in the north-east and measuring 17 x 15 m, while 535 m to the north-east of the entrance is another U-shaped wall line, orientated north-south, with an apparent opening in the north. It measures 14 x 15.5 m.							
SA02_101	<i>tepe</i>	Small quadrilateral banked mound with two small conical peaks (probably towers in a fortified entrance) in west	3	probably pre-modern	52	40	2080	NW-SE	<i>wadi</i>
SA02_512	fort	Sub-circular banked enclosure with a small circular central mound; possible secondary mound to north-west	2	probably pre-modern	60	54	3240	N-S	plain
SA02_513	<i>kāriẓ</i>	148 m of freshly dug <i>kāriẓ</i> spoil holes, snaking to south as a narrow canal running around fort SA2_512; 187 m sand-filled canal on north side of fort	1	probably modern	461	-		NE-SW	plain
SA02_533	enclosure	Large, semi-circular banked enclosure / fort south of metalled road; northern half bulldozed during road construction. Other small mounds nearby, including rectangular one immediately to south-east	2	probably pre-modern	70	66	4620	n/a	plain

**Appendix Twelve: ASAGE sites referred to in Chapter Seven**

Site	Site Type	Description	Stars (1-3)	Dating	Length (m)	Breadth (m)	Area (m <sup>2</sup> )	Orientation	Location
SA02_569	fort	Circular enclosure with low perimeter bank and small central conical mound / fort, beside shallow wadi	2	probably pre-modern	55	55	3025	n/a	plain
SA02_570	dwelling	Ruined but relatively well-preserved, sand-filled three courtyard farmstead with internal rooms visible; cut by track; several outlying structures (pens?) nearby to south and west	3	possibly pre-modern	51	45	2295	NW-SE	plain
SA03_499	hamlet	19+ sand-filled rectilinear structures (some with double rooms) and associated sub-circular corrals around an oblong mosque; dam SA3_500 to west	2	possibly modern	475	314	149150	NW-SE	plain
SA03_520	hamlet	Large scatter of 35+ sand-filled, rectilinear structures (some with double rooms), and associated sub-circular corral structures around two narrow structures (mosques?). The smaller one may have been used more recently. Several larger rectangular and circular enclosures; multiple period occupations - some structures more ephemeral / buried than others	2	possibly pre-modern	600	522	313200	NW-SE	plain

**Appendix Twelve: ASAGE sites referred to in Chapter Seven**

Site	Site Type	Description	Stars (1-3)	Dating	Length (m)	Breadth (m)	Area (m <sup>2</sup> )	Orientation	Location
SA05_191	reservoir	Large, rectilinear tiered reservoir with inflow from north-west and south-east; smaller (28 x 15 m) sand-filled feature 45 m to south, and another (18 x 10 m) 250 m to south-west; modern tracks 75 m to south-west	3	possibly modern	117	79	9243	NW-SE	mud flat
SA05_196	reservoir	Remarkable cluster of 20 reservoirs / enclosures in south-east half of <i>sebkha</i> ; most are rectilinear, although a couple are circular; some more vegetated / ephemeral / weathered / sand-filled than others, indicating multiple periods of use, and probably different functions; modern tracks weave between several of features; others have internal divisions, like SA5_179	3	possibly pre-modern	1219	1118	1362842	NW-SE	mud flat
SA07_024	tents	Modern tents, placemarked to illustrate the quality of the image resolution (not catalogued as a site)	1	modern					
SA10_321	fort	Square caravanserai on north bank of wadi; internal sub-divisions clear around a central courtyard; possible entrance in south	3	possibly pre-modern	26	26	676	N-S	wadi

**Appendix Twelve: ASAGE sites referred to in Chapter Seven**

Site	Site Type	Description	Stars (1-3)	Dating	Length (m)	Breadth (m)	Area (m <sup>2</sup> )	Orientation	Location
SA10_360	camp site	Scatter of campsite remnants around an unusual rectangular enclosure (31 x 24 m), opening in east wall	2	possibly modern	178	142	25276	E-W	stony desert