

## Appendix 12: 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 Hari 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 Chaghcharān.   |
| 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 hilltop 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 Hari 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 <i>Gazetteer</i> ; it is possible to identify the outline of the palace and the tombs of ʿAbd 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).   |

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| 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 Qalca-i Ikhtiyāruddīn (1.25 ha) and Gawharshād complex and Ḥusayn Bayqara minarets.  |
| 468      | Jām                  |            |           |           | 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      | Qal' a-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      | Khawaja 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 Hilmand, 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.  |
| 683      | Larwand              |            |           |           | Impossible to identify without more precise co-ordinates, 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.  |

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|-----------------|------------------|-------------------|------------------|------------------|---|
| 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.  |
| 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 co-ordinates (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.   |