The Monash University group undertook field work as part of the Dakhleh Oasis Project between 5th January and 14th February in 2007. This period was divided equally between study of material from previous excavations at Ismant el-Kharab and Mut el-Kharab, and other locations within Dakhleh Oasis, and new excavations at Ismant el-Kharab. In general, the first two weeks and the last week were devoted to study of material, while the remainder were occupied with the excavation, though some study and drawing of material continued simultaneously with the latter activity.

I: Study of material from previous excavations

This may be summarized as follows:

- Sorting and recording of ceramics from the excavations at Mut el-Kharab with special reference to contexts of Ptolemaic Period date; a basic corpus of shapes and fabrics was established, and many contexts were sorted and washed preparatory to recording.
- Drawing of the main pieces from the cache of moulds used for inlays of an over life-size image of Seth in the form of a winged falcon, discovered at Mut el-Kharab.
- Final examination of all registered material from the excavations at Ismant el-Kharab from Houses 1-5, and the Large and Small East Churches and the West Church, and from the Kellis 2 cemetery; work on the publication of this material is well advanced.
- A detailed study of the glass from the excavations in Houses 1-5 at Ismant el-Kharab for inclusion in the publication of those structures.
- Detailed study of the textiles from Ismant el-Kharab, with special reference to the decorated pieces, also for use in the publication.
- Study of the painted cartonnage from the Kellis 1 cemetery.
- Reconstruction and drawing of the main pieces of stucco sculpture recovered from recent excavations at Ismant el-Kharab in structure B/3/1 Room 1; the most notable reconstruction was of a bust of the goddess Isis.
- Detailed study of ceramics from Ain Gazzareen, from the bakery and Structure C particularly, as part of the project to determine the date of the occupation at the site and analyze ceramics in relation to room/area functions.
- Preliminary recording of ceramics from the watch posts.

II: The Excavations at Ismant el-Kharab

Excavation was conducted within three structures at Ismant el-Kharab: the large painted residence of the second century, B/3/1, and its nearby columbarium, B/3/2, both commenced in previous seasons, and in structure A/11. The locations of these structures is shown in Figure 1.
Figure 1: Map of Ismant el-Kharab showing main excavation areas
Figure 2: Plan of Area B at Ismant el-Kharab
B/3/1

Background

The structure identified as B/3/1 is a large mud brick building located within a series of buildings in the northern area (Area B) of the site (Figure 2). Preliminary surface clearance in 2005 delineated the probable limits of this structure and many of the interior room divisions. B/3/1 appeared to contain a large central room (Room 1a/1b) surrounded by a series of corridors and smaller rooms (Figure 3). Excavation during 2005 investigated a number of the smaller rooms (Rooms 2, 3, 4, 9 and 10). In 2006 work focused upon the large central room, where trenches A and B were excavated, and illustrated that this space was in fact two distinct areas with large pillars and an east west orientated entranceway separating the southern space (Room 1a) from the northern space (Room 1b). Though there was no indication of an original door between these rooms there is a distinct step up from the floor in the southern room to the northern room. Elaborate painted gypsum wall plaster was preserved in all rooms excavated during 2005 and 2006. The height of wall preservation was variable to over one metre; no intact roof structures were preserved.

Figure 3: Plan of B/3/1 and B/3/2 after 2007 excavation season.
Figure 4: Trench C in Room 1a and Trench B in Room 1a at completion of excavation in 2007
**Trench C**

Trench C (Figure 4) is located within the southern area (Room 1a) and ran parallel to the eastern edge of the previously-excavated Trench A. It terminated at the northern face of the line of large brick piers, the transition point between the two rooms. Following the removal of wind blown sand from the surface, a large amount of structural collapse was evident (Figure 5, context 179; Plate 1). Within this collapse there was a significant amount of fragmentary, decorated gypsum plaster both painted (Plate 2) and moulded forms. The upper layer of collapse consisted of mud brick wall material and this deposit directly overlaid a distinct deposit of roofing collapse (context 196; Plate 2). The roofing collapse comprised palm-rib impressed mud fragments, fibre rope and fragments of palm-rib. It was clear from the nature of the rubble that Room 1a originally had a flat roof. Excavation of the roofing rubble exposed a floor deposit of straw and animal manure clearly representing re-use of the structure as an animal stabling area. Below this deposit the original floor was poorly preserved and constructed of white gypsum laid on a thin layer of coarse-grained sand, which in turn was laid onto a compacted mud surface. A large brick entranceway and step running east-west between the two piers (Plate 3) and leading from Room 1a to Room 1b was also revealed. A portion of the roofing collapse at the southern end of the Trench remains unexcavated (Plate 1) as it was found to contain multiple large sections of decorated ceiling plaster that will require conservation prior to removal.

![Figure 5: Trenches C and D, East Section](image)

In 2006 excavation in Trench A, adjacent to Trench C, had exposed architectural elements relating to an earlier building phase. In order to clarify the extent and nature of this building a sub-floor test area was excavated in Trench C. This test area demonstrated the presence of distinct activity surfaces associated with an east-west orientated wall clearly predating the construction of the floor in B/3/1 Room 1a. A compacted deposit of fragmentary and intact...
mud brick and mortar (Plates 1 and 4) had been purposefully laid over this early occupational phase to create a level surface for the construction of the floor of B/3/1 Room 1a. The earlier structure could be seen in section to continue beyond the excavation area and will be investigated further in future seasons.

*Figure 6: Trench C Harris Matrix (shaded boxes indicate architectural elements)*
Plate 1: Trench C, sub-floor packing against earlier wall over which is the deposit of decorated ceiling plaster; looking south-east.

Plate 2: Room 1 Trench C, fragment of painted ceiling plaster; the yellow motif on the green ground is part of a figure of either Isis or Serapis-Helios.
Plate 3: Room 1 Trench C, southern face of the square pier; looking north.

Plate 4: Room 1 Trench D looking south into Trench C; note brick platform north of the step into Trench C; looking south.
Trench D

Trench D extended the area of excavation in a direct northerly line to the southern edge of Trench B (Figure 3; Plate 4). Surface sand was removed across the entire trench revealing mud-brick structural collapse. The majority of the rubble deposits excavated from Trench D consisted of wall material (Figure 5). Any roofing fragments were restricted to the area immediately adjacent to the large pier and columns located to the west of the trench. The structural debris indicates that the central area of Room 1b was not roofed but that the area between the columns and the walls was originally roofed (Figure 3).

As in Trench C the removal of structural collapse from this Trench exposed a deposit related to reuse of Room 1b as an animal stabling area, which overlaid a poorly-preserved original gypsum floor. Sub-floor test excavation in Trench D revealed a mud brick platform providing structural support for the west column (Plate 4); the remnants of a gypsum floor were found on top of this platform. To the north of this platform structural rubble packing had been placed on top of the basal clay to create a level surface for the laying of the floor. This construction technique parallels that found during sub-floor excavation in Trench C; however, in Trench D there were no distinct activity surfaces nor in situ architecture in the investigated area relating to an earlier building phase.

Ceramics from Trenches C and D

The study of this material was commenced and the key forms are illustrated in Figures 8–11; provisional assessment indicates a date for activity with the constructional and early occupation phases of the first to second century CE.

Additional Excavation Areas

In addition to the main excavation in Room 1 preliminary clearance was undertaken in Room 7 and some additional surface clearance was undertaken to delineate further the limits of the structure as a whole.

Room 7

Only a small portion of this room was excavated with surface clearance to a depth of circa 20 cm across the entire room and a test cut in the southeast corner measuring 1.5 x 1.5 m to a depth of circa 60 cm. The removal of the upper level of wall and roofing collapse from this room revealed a doorway in the south wall and a niche or in the west wall. The structural collapse contained both wall material and elements from a flat palm-rib and mud roof; fragments from a mud-brick column were also found (Plate 5). On all four walls the upper register of decorated gypsum plastering was visible consisting of painted panels with floral and geometric motifs in an extremely good state of preservation. Time constraints prevented further excavation in this area.

Surface Clearance

This process involved the removal of circa 5–10 cm of surface sand overlying partially visible walls. The limits of Rooms 18, 19 and 20 were able to be clarified by this process. In addition a doorway leading into the structure was identified in the southeast corner of Room 11 (Figure 3).
Plate 5: Room 7 showing exposed area in southeast corner; note the remains of a collapsed mud-brick column in the room; looking southeast.

Figure 7: Harris Matrix for Trench D (shaded boxes indicate structural features)
Figure 8: B/3/1 Trench C, pottery from contexts 200, 208 and 214
Figure 9: B/3/1 Trench C, pottery from contexts 215 and 216
Figure 10: B/3/1, pottery from Trench C context 219 and Trench D contexts 197 and 201
Figure 11: B/3/1 Trench D, pottery from contexts 205 and 206
B/3/2: The Columbarium (Pigeon Loft)

This four-roomed building is situated at the north-western corner of an open area, to the east and south-east of which are situated three large residences, of which B/3/1 is the most southerly (Figure 2). It is probable that the building is part of the domestic arrangements connected with these residences, as are other structures to the south-west of the open area. Rooms 1 and 2 (Figure 12) were excavated with the result that the main rooms of the building have now all been examined. Some work had already begun on Room 1 during the 2006 season, but due to its insecure structural state this did not continue. The dimensions of the two rooms appear identical at 3 x 3 m and both incorporated barrel vaulting; the vault of Room 2 is 90% intact while that of Room 1 was poorly preserved.
Area 1:
In order to facilitate access to the rooms, Area 1 – a 2 x 5 m trench located directly on the north outer face of Room 1 – was established and excavated in conjunction with the rooms. This area contained mostly rubble (approximately 1.8 m deep; contexts 100 and 121) from collapse of the upper storey as well as a large quantity of pigeon nesting pots sherds (521 kg) and several intact examples (Figure 15a–c). The presence within this rubble of fragments of mud plastering still attached to brick that preserved the impressions of such pots on all sides clearly indicated that the upper storey walls did in fact incorporate the pigeon-pots. Based on the weight of a single pigeon-pot (8 kg) it is possible to estimate that, for the areas under excavation only, a number of 66 for the outside and 61 for the inside (see below) are represented by the sherds.

Room 1:
A substantial amount of rubble, equivalent to that which occurred in Area 1, covered the entire room for up to 1.2 m depth below windblown sand. It contained a further 423 kg of pigeon-pot sherds. Below the rubble in Room 1, 45 cm of stable deposits, containing donkey and camel excrement, were found above the floor. Pockets of ash as well as a pocket of yellow-red ochre mixed in with the stable matter were also encountered. This particular room fill at these levels was artefact-rich. It contained much ceramic, including complete and semi-complete pots, and items of glass, faience, textile, worked wood, flora, fauna, leather, basketry and footwear. Importantly, 19 fragments of Greek papyri, 6 Greek ostraka, 1 jar

![Figure 13: B/3/2 Area 1 Harris Matrix](image-url)
sealing with docket, a child’s silver ring and a decorated small mud seal were also located. The ring is engraved with a figure of Nefertum, while the seal carries a representation of Herakles and the Nemean lion. Diagnostic ceramics ranged in date from the second-early third century to the fourth century CE. Below this deposit, similar secondary flooring occurred for 15 cm and a further eight fragments of Greek papyri and 3 Greek ostraka were found amongst items of glass, faience, worked wood, leather, textile, basketry, flora and fauna. Underneath these deposits, the original mud-plastered floor remained in very good condition across the room. A test cut revealed it to be approximately 4 cm thick, laid directly on basal clay. Diagnostic ceramics associated with these earlier flooring levels (contexts 130 and 135) and a few complete vessels, one of which was embedded into the basal clay and made even with the original floor (Figure 15f), are of a second century CE date.

Figure 14: B/3/2 Room 1 Harris Matrix

Room 2:
Excavation of Room 2 could not begin until a section of the wall and doorway between both rooms was secured and rebuilt. Once this was completed work continued and Room 2 was found to contain windblown sand for at least 2 m depth. This deposit contained few ceramics but revealed a section from a rectangular faience dish. The sand fill of Room 2 also indicated that bats had once nested within it, apparent also from deposits on the vault. The pigeon-pot sherd count for these upper deposits was relatively modest at 63 kg. Below the sand, stable deposits were encountered as well as a significant coverage of ash and soot indicating that fires had been lit within the room. These deposits, occurring 25–30 cm above the remnants
of floor level, contained ceramic, glass, faience, textile, fauna, leather and basketry artefacts. Diagnostic ceramics are of a second-early third century date (Figure 15g–k). Only one Greek ostrakon was located in the room; surprisingly, three deposits of a yellow-green mineral (possibly jarosite) were encountered within the stabling deposit. The traces of original flooring found in conjunction with the wall foundations revealed that the height of the room reaches 3.3 m at the vault peak. The floor is set directly upon the basal clay.

![Figure 15: B/3/2 Room 2 Harris Matrix](image-url)
Figure 15: B/3/2 Ceramics
Structural Comments:
An examination of the foundations in both rooms revealed that the walls sat directly upon basal clay in a few places, but in other areas were clearly constructed within foundation cuts and upon foundation coursing. A *mastaba* (45 cm height) occurs along the north outer face of the structure where it was revealed in Area 1, and continues along the western side as revealed during the previous season’s excavations. The rubble in Area 1 appeared to cease at a point relatively level with the threshold and doorway into Room 1. Below this point hard compacted layering of rubble, clay and basal clay occurred. The construction of the door jambs and their plastering suggests that they may be a later phase of construction, or possibly repair to the adjacent walls. It is also evident that the outer east wall is a separate construction which butts the south and inner east walls. Moreover, the wall is distinguishable by its constituency of predominately grey brick as opposed to the red brick used throughout the south, west and north walls. Hence, it is now possible to propose that at least 3 construction phases took place in relation to the major elements of this eastern structure: the north, west, and south walls built together, then the east wall was added as well as the inner east walls, and lastly the doorway followed (Figure 16). The mud-plaster covering the outer surfaces appears to be consistent on all walls. It is also noteworthy that a number of vertical cracks are present at various points in some of these major walls raising the possibility that subsidence may be an issue or indeed was during construction. As the outer areas have not been excavated fully however, it is not yet possible to determine this further.

*Figure 16: Construction phases of the wall of B/3/2.*
Plate 6: B/3/2, view into Room 1 looking south.

Figure 17: Plan of Structure A/11
A/11: A water feature (Figure 17)

The structure designated A/11 is located about 25 metres south-east of North Tomb 1 and around 200 metres west of the fourth-century houses A/1–5 (Figure 1). It was erected on a low terrace which provided an unimpeded view of the building from the north. It comprises a colonnaded room with associated structures to the east and west, and a garden to the north. A well was dug immediately to the south-west of the colonnaded room and the debris from this covered most of the south wall and a substantial area in the south west (Plate 7). Excavation was restricted to the colonnaded room (Room 1) and a room opening off to its west (Room 2); the walls of other structures to the east were delineated. The structures have suffered from deflation and the maximum height of the exposed walls is 67 cm, which was encountered at the doorway connecting Rooms 1 and 2.

Plate 7: A/11: clearance of surface sand which extends to the edge of an intrusive well on the south, and parts of the east colonnade; looking south-west.

The colonnaded room is oriented north-south; the internal dimensions are 9.00 m east-west and 6.8 m north-south. The two north-south colonnades each comprise a triple column on the north, three single columns, each placed one metre apart, and one column and a half-column projecting 15 cm into the room from the south wall. The north-south aisles are 1.60 m wide. The triple columns on the north functioned as the extremities for the east-west colonnade, which comprises a further two single columns placed one metre apart, and two half columns erected to the east and west of the triple columns respectively. The eastern half-column is part of the east wall of Room 1 and that in the west is built into the east wall of Room 2. The north faces of the triple and eastern half-columns are flat and therefore served as pilasters. It would appear that this north colonnade originally functioned as the façade of the building and the central section may have been open. The principal northern access to the colonnaded
room is via two doorways located to the west and the east of the triple columns respectively; these opened directly into the aisles. The room could also be accessed from a door in the north end of the east wall, immediately to the south of the half column, and in the west by a doorway to the south of Room 2. There was no access to the room from the south. The external walls (60 cm wide) and the columns were built of red, chaff-rich mud bricks, which on average were 35 x 18 x 9 cm, laid with grey mortar. The column bricks were pie-shaped, four to the column, with a radius of about 20 cm. The internal walls and columns were coated with a layer of gypsum plaster, as was the facade; there is no evidence of painted decoration.

The central section of the room is divided roughly into two sections north and south. A baked-brick, almost-circular basin was constructed in the south of the room commencing some 20 cm from the south wall and extending to within about 30 cm of the north-south colonnades (Plate 8). The diameter of the basin east-west was 3.70 m. The bricks had been removed in antiquity but their outline, and that of the plaster coating used to waterproof them, was visible. Some baked bricks from the floor remained in situ in the north-western section of the basin (Figure 17, context 83). The basin had been constructed on clean sand that extended for a depth of around 1.10 m above the basal clay (Figures 18–19, contexts 90 and 113). The depth of the basin could not be determined but the hardened clay-like packing and crushed clay, which held the bricks in place, was up to 20 cm deep. The circle of the basin was deliberately interrupted in the northern section but damage caused to the surface by removal of the bricks prevented the architecture in this area being determined. The basin was designed to hold water which flowed into it at this point from two water channels.

Plate 8: A/11 showing the circular basin (surviving to one course in height) and remains of baked-brick flooring built upon sand, with the two channels to feed water into the feature from the north, and the eastern colonnade; looking north-east.
Figure 18: A/11 south section centre to east from cut to south wall from circular feature

Figure 19: A/11 Harris Matrix south section
Two baked-brick walls, or aqueducts, each three courses high occupy much of the north section of the room. They run diagonally from the base of the columns in the north colonnade, and were designed to meet at the entrance to the basin (the bricks are missing from the south section of the east wall). The walls abut the foundation wall of the north colonnade, the lowest three courses of which are also constructed of baked brick. Water was fed into the basin from ceramic channels placed on top of the diagonal baked brick walls, commencing at the north face of the north foundation wall. Only the one on the west survives. The open section of the channels, which were placed atop the foundation wall for the north colonnade, were covered with a piece of acacia (40 x 47 cm) and the mud-brick plinths for each of the single mud-brick columns was built on top of this timber (Plate 9); the wall between the plinths was constructed of both mud and baked brick. The source of the water was not determined but a baked brick wall located 1.20 north of the foundation wall of the north colonnade may have had some association with the water supply. This northernmost wall, which is 12 courses high, is set within a foundation trench, whereas the foundation wall for the northern colonnade is set directly upon a layer of potsherds (Figure 20, context 123). The top of the lower wall coincides with the top of the baked-brick section of the north colonnade foundation wall. As the other baked-brick walls were associated with the retention or transport of water, it is assumed that the northernmost wall was erected for a similar purpose. As no further excavation took place, its function remains unknown.

Plate 9: A/11: detail showing north end of the western channel that fed water into the central feature, and the northern baked-brick wall built upon a deposit of fourth century ceramics; looking south.
Figure 20: A/11 East section in area north of the north colonnade

Figure 21: A/11 Harris Matrix for contexts in north end
Room 2 is located to the north-west of the colonnaded room. The internal dimensions are 2.7 m east-west; as the north wall is built on an angle, the internal dimensions at the west wall are 3.4 m and the east wall is 2.57 m. The east wall of Room 2 also functions as the northern end of the west wall of the colonnaded room. The half-column that is built into this wall (discussed above) was integral to the design of the colonnaded room and therefore this wall was part of the original construction. The two rooms communicate by a door at the southernmost part of the east wall. Excavation in this room was limited to the upper floor, which is estimated to be some 40 cm plus above the original floor.

The extensive ceramic deposit upon which the baked-brick foundation wall of the north colonnade was built indicates that the structure was constructed in the late third or early fourth century. This date has been determined with reference to material found within the house to the east of A/11 which was found in association with large quantities of dated papyrus documents and coins.

The function of this building is unclear. The central section in its entirety is given over the water feature. The diagonal design of the water channels would inhibit activity in the north part of room and the southern section is occupied almost entirely by the basin. This focus upon the water feature, together with its classical façade, indicates a ritual function.

At some point during the fourth century modifications were made to the northern section of the colonnaded room. The east doorway was blocked, two mud-brick walls were built at right angles to the exterior of the triple columns and the complex extended to the east. An undulating wall, laid in header fashion, one mud brick thick, was constructed between the newly erected walls on the north. This undulating wall continued west to the north of Room 2 for about 2.5 m at which point it curved to the north. Brushing of the desert surface to the north of this wall revealed that the area had been used as a garden. The remains of six palm trees were uncovered. The garden extended for at least 50 metres to the east beyond the excavated structure. Brushing of the desert to the north-east of the excavated structure also uncovered the remains of a narrow mud wall into which palm fronds had been inserted. Such walls can be seen around garden enclosures in the oasis today and imply an informal use for the area. The aisles were used by squatters who constructed an oven against the east wall and built a hearth against the west wall; ash from fires was also found around the bases of the two central single columns in the west aisle, against the east wall and against the north-eastern doorway. The upper deposits comprised chaff-rich material and some donkey manure. A well was constructed to the south west of the structure and the debris spilled into that section of the room. Room 2 had also been reused; the floor deposits contained donkey manure. A late addition to the room was a single course of mud bricks that had been placed in the north-west corner of the room laid in an arc in stretcher fashion; the feature has a radius of around 75 cm. There was no indication of its use.

A well was excavated to the immediate south-west of A/11 in antiquity. The debris covered the south-west corner of the colonnaded room for a distance of 2.7 m at the west wall; it covered the southernmost single column in the west colonnade and at least a third of the basin on the south-west. The edge of the debris curved to the south leaving the east colonnade exposed. The baked bricks from the basin were removed before the debris from the well was thrown into the room. Several intact and broken baked bricks and pieces of gypsum were found in the sand above the region of the basin. The stratigraphy of the well is as follows. The topmost lens is red, basal clay which derives from the base of the well; its removal exposed rubble comprising baked and mud brick, pieces of gypsum and some stone. Beneath
this was a layer of hardened sand which has the appearance of clay; this was up to 70 cm deep. Beneath this was an articulated course of red mud bricks, presumably a collapsed wall; the bricks lay in rollock fashion with their widest (15 cm) side exposed. This extended from west to east across the southern end of the room. This collapsed wall is directly above clean sand.

Clean sand, presumably wind borne, was encountered on top of the south wall beneath the well debris and on the south eastern section of the west wall of the colonnaded room. The south wall was preserved only three courses above the floor of the basin; the gypsum plaster, however, was well preserved on both the south and the southern section of the west wall; that is, those walls that were beneath the well debris. This suggests that the plaster had not been damaged by animals or people who reused the structure in the fourth century. Although the section in the south west of the room was not excavated to floor level, there is no evidence for the lighting of fires in this area. This might argue for the well having been built in the fourth century. Structures were erected around the mouth of the well. These are of red, chaff-rich bricks similar to those from which A/11 was built. Fragments of many baked bricks were found in the well, as were a few baked pie-shaped column bricks.

The finds were few but included seven fourth-century coins. Only one could be positively identified: it dates to the reign of Constans, and was struck around 350. Nine ostraka or jar dockets written in Greek and possibly Coptic, and two copper loops were also found.

The excavations at Ismant el-Kharab during the 2007 excavation season have produced results that are of great significance both for the study of the village during is formative stage in the first to second centuries and in the century when Christianity dominated the religious beliefs of the occupants. The painted residence of B/3/1 indicates that the wealthy residents emulated both the building and decorative styles of major settlements elsewhere in the Roman world; the architecture recalls that of Roman atrium villas and is otherwise not attested amongst surviving structures excavated to date in Egypt. The exact function of the A/11 building has yet to be determined, but it also is within a classical tradition, resembling Nymphaea (shrines to the Nymphs) that were erected into the second century in other parts of the Roman world. Its location could imply some connection with the houses of the third to fourth century to the south and east, which are of the same date. Further excavation is necessary to clarify its function and explain its prominent location on the north of the village.