Ancient Akrotiri Project

Dreamer's Bay excavation & survey, September 2016

Interim Report

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UNIVERSITY OF LEICESTER

CBRL

ROMA

Contents

On the cover: excavating an eroding building foundation at the water's edge in Area 2.

Introduction

From 1 to 20 September 2016 a team of archaeologists mostly from the School of Archaeology & Ancient History, University of Leicester, UK, supervising about a dozen students, military personnel and local volunteers, conducted fieldwork at and around Dreamer's Bay, RAF Akrotiri (Figs 1 and 2). This work, generously funded by the Council for British Research in the Levant and the Society for the Promotion of Roman Studies, was conducted with the permission of the UK Sovereign Base Areas Administration, and the approval of the Republic of Cyrus Department of Antiquities; with active support from the UK Ministry of Defence's Defence Infrastructure Organisation; and generous assistance from RAF Akrotiri, and the President of the Western Sovereign Base Areas Archaeological Society, Maj. Frank Garrod (ret.).

The work was conducted by University of Leicester staff Prof. Simon James (project director), Vicki Score (excavation director), Steve Baker, Andy Hyam, Andy McLeish, James Earley and Drs Mireya Gonzalez Rodriguez and Anna Walas. Also assisting on the excavation, and providing project logistics, was a team from the UK military, comprising a group of injured military personnel and support staff participating under Operation NIGHTINGALE (Ex ARTEMIS 16, led by Capt Les Richardson RAMC and Maj Michelle Richardson RAMC). Assistance was also provided by locally resident, archaeologically-experienced volunteers Kate Wilmot and Victoria Studley.

The field season was designed to continue and develop pilot work conducted in September 2015 (James & Score, 2015), to investigate and record threatened archaeological remains along the shoreline at Dreamer's Bay, and to put these into the context of the Dreamers Bay area, and the settlement history of the Akrotiri peninsula as a whole.

During the field season, colleagues from the University of Southampton Department of Archaeology again came to Akrotiri to undertake further investigation of the geomorphology of the peninsula (Dr Ferréol Salomon), and (Dr Lucy Blue) to discuss the underwater archaeological potential, especially in the bay immediately E of the known buildings, which includes an ancient artificial breakwater, anchors and apparent wrecks.

Dr Salomon successfully conducted geological coring in the salt lake to the north side. This is a separate project to be reported elsewhere, albeit with direct relevance to the Dreamers Bay archaeological work as it is hoped core analysis will provide information on ancient sea levels at the harbour, and at least as important for understanding the history of the site, fix much more precisely when Akrotiri island became a peninsula.

Discussions also continue with Cypriot colleagues to secure involvement of a pottery specialist for the project, ideally a Cypriot national.

The Landscape context of Dreamer's Bay

Figure 1: The location of Dreamer's Bay on the Akrotiri peninsula, Cyprus (Google Earth).

Dreamer's Bay is on the southern coast of the Akrotiri peninsula (*akrotiri* meaning 'promontory': Fig. 1). The peninsula is a unique and, by comparison with much of the rest of coastal Cyprus, exceptionally well-preserved block of coastal land, famed for its wildlife. It also contains extensive and important archaeological remains, most famously the Aetokremnos site with pygmy hippo bones and the earliest evidence of human activity on Cyprus (c.12,000 cal. BP: Simmons 2001, 2013).

Since the Republic of Cyprus gained independence from British rule in 1960, under the Treaty of Guarantee Akrotiri has been part of the UK's Western Sovereign Base Area (SBA), one of two military base areas retained indefinitely (the other being the Eastern SBA of Dhekelia, east of Larnaca). The peninsula comprises a rocky former island, 9.6km long from Cape Zevgari in the W to Cape Gata in the E, and about 3.5km N-S. The land rises gently from N to S, reaching only a modest 50m above sea level, and terminating on its S edge in cliffs, except for c.600m of low shoreline at Dreamer's Bay. Akrotiri is now connected to Cyprus proper on the W side by a massive tombolo beach of large pebbles, and on the E side by a broad sand beach which runs into the outskirts of Limassol. The beaches frame a salt lake, famed for its flamingos.

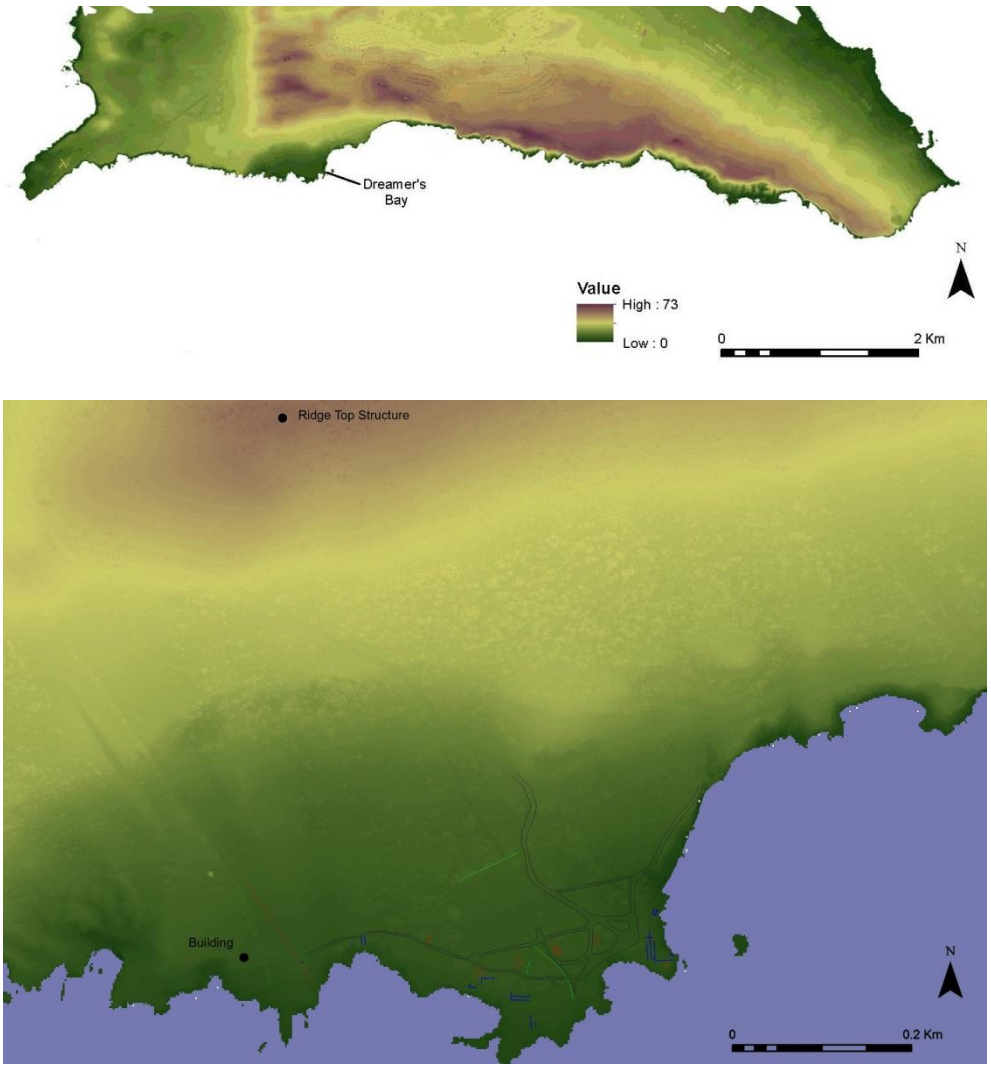

Figure 2: Digital terrain model of the southern part of the Akrotiri Peninsula showing the location of Dreamers Bay.

The southern coast (Fig. 2) consists of high cliffs or very steep eroding slopes except for one area about 600m long in the west, where a broad area of lower-lying land projects somewhat into the sea. Here, around Dreamer's Bay, the shoreline stands nowhere more than about 5m above sea level, with erode rocky ledges and inlets, some of which have accumulated tiny sandy beaches. In this area human communications between sea and land are practicable, especially as the bay immediately to the east formed a relatively deep natural anchorage, its use confirmed by the ancient artificial breakwater, anchors and other archaeology known on the sea floor.

This part of the southern coast has been protected by its location within the UK RAF base security perimeter, but in an area away from the main airfield complex and residential zone. With the exception of a few recent and current vehicle tracks and surface features, it is

largely undisturbed. However, its location on the coast and the soft sandstone bedrock has resulted in erosion and many of the walls are visible in wave-scoured surfaces and cliff edges eroding into the sea. These remains were the target of the fieldwork.

Previous work at Dreamer's Bay

Remains of masonry buildings along the shoreline at Dreamer's bay were reportedly first exposed during heavy rains *c.*1973-4 (Heywood 1982**,** p.167). The remains visible on the surface at the start of the project in 2015 comprised masonry wall foundations and scatters of pottery and other material at various points traced for more than 500m along the E-W shoreline.

In the 1980s, in the cliff-lined bay E of the known shoreline buildings, a submerged artificial breakwater, built on an existing area of reef, was spotted from the air, and subsequently captured by aerial photography. It was also subject to preliminary survey work by local avocational archaeology workers. Ancient anchors and ceramic concentrations thought to attest wrecks were also identified (Leonard and Demesticha 2004). The breakwater remains undated, but is thought likely to be Hellenistic (Leonard *et al.* 2007), and may have been initially built from the stone in the cliff-top quarries above, material apparently well suited to the purpose and perhaps also exported from here to build other harbour works elsewhere. The breakwater likely continued to help provide an anchorage sheltered from westerly winds for centuries after construction.

Since 2000, survey work conducted by John Leonard and Stella Demesticha (Leonard and Demesticha 2004) led to a wider US/Canadian project at Dreamer's Bay. This was unfortunately cut short due to funding problems and the tragic early death of Danielle Parks, leaving it to Brad Ault of the University of Buffalo to complete (Leonard *et al.* 2006; Leonard *et al.* 2007; Ault 2010; Ault and Leonard forthcoming). Work at the site was largely confined to cleaning and recording of some of the remains, limited experimental geophysical survey work, and a start on survey of the submerged archaeology. Examination of the onshore evidence indicated that the buildings appeared to be associated with extensive quantities of overwhelmingly late Roman/early Byzantine ceramics, although some Hellenistic and earlier Roman material was also identified. The structures were identified as probably warehouses (*horrea*) rather than residential. The Buffalo project effectively ended in 2010, and subsequently the fieldwork licences were relinquished.

Motivations for, and objectives of the Dreamers Bay fieldwork

Archaeological remains inside RAF Akrotiri and the wider UK Sovereign Base Areas in Cyprus are the responsibility of the Sovereign Base Areas Administration, and are monitored by DIO's archaeology team, specifically Philip Abramson. His inspection of the exposed shoreline remains confirmed they are under immediate threat, due to intense rainfall runoff and waves during winter storms eroding them into the sea. He identified elucidation and recording of the remains as an urgent cultural heritage management requirement, a view endorsed by Eleni Procopiou of the Department of Antiquities.

The School of Archaeology & Ancient History has broad expertise in Mediterranean archaeology, although not previously in Cyprus. It has also for several years been in partnership with the Defence Archaeology Group which runs Operation Nightingale, a programme to help injured UK Service personnel and veterans recover through engaging them in archaeological fieldwork. Following a request from Maj Gen Cripwell, the then commander British Forces Cyprus, for an Operation Nightingale exercise in the SBAs, the School entered discussions with DIO regarding undertaking the urgent archaeological rescue work at Dreamer's Bay as the potential first stage of a wider university research fieldwork scheme on the peninsula (the Ancient Akrotiri Project). This, following successful participation of injured personnel on Eleni Procopiou's nearby Byzantine church excavation at Katalymata ton Plakoton (Procopiou 2014; 2015), is intended also to form the context for an Op Nightingale exercise. On this basis, application was made to the Sovereign Base Areas Administration for a fieldwork licence for April 2015, which was granted.

Logistical difficulties obliged postponement, and an initial pilot season, comprising professional archaeologists only, was rescheduled for September 2015 and a modified licence for this was granted. The objectives were to undertake as much of the urgent rescue work as possible before the damage of a further winter, and to lay the groundwork for larger-scale fieldwork, with Op Nightingale participation, from 2016.

The results of the September 2015 fieldwork are detailed in the previous *Interim Report*. The remains visible on the surface along the shoreline from around the road head to just within the firing range were inspected and recorded, and a number of areas cleaned and small trial trenches opened. It became evident that the remains were more extensive than had been appreciated, and towards the end of the season what appeared to be intact floor levels were encountered in places. It was evident that, to fully document the immediately threatened remains, to discover the full extent of the harbour settlement, and to place it into its landscape and maritime context, further work would be needed.

The 2016 Excavation and Survey: programme, methodology and results

Fieldwork programme

Six areas were identified for further excavation and cleaning based on the results of the 2015 season. Work took place between Sunday 4th September and Monday 19th September. A 3x JCB was bought in to clear some areas of scrub and rubble prior to hand excavation. The fieldwork was monitored by Philip Abramson for DIO and SBAA.

The work was funded by a £7,200 grant from the CBRL, and £2,000 from the Roman Society's Donald Atkinson Fund. An overseas expedition on such a modest budget was made possible by the active support of the SBAA, DIO, and RAF Akrotiri which, through the agency of Maj Steven Smith (ret.), made available Camp Pinetrack to serve as base and accommodation, and loaned a great deal of excavation and domestic equipment. Capt Les Richardson for Defence Archaeology Group and Cpl Craig Griffiths worked tirelessly to move kit, set up and maintain camp, and sort numerous administrative matters, not least regarding security passes, and arranging access for the team to the Junior Ranks Diner, which was a huge assistance. Maj Frank Garrod (ret.) of the WSBA Archaeological Society again kindly lent much key equipment, by no means least provided access to very cheap vehicle hire. Eleni Procopiou also generously provided us with a valuable rocking sieve.

Methodology

A Differential GPS survey was commissioned to get accurate coordinates on the existing stations and a number of new stations. These stations were used to survey in the grids and features using a Leica TCP total station and the survey and site drawings were processed in a CAD package (Turbocad 21). The data was imported into a GIS using ARCGIS 10.3 and overlain onto the LiDAR data and a GIS map of the coastline and RAF Base Area (provided by the military, and using decimal degrees as units). The survey stations are listed in Appendix 1.

Excavation was conducted manually, although a JCB was used where scrub over or surrounding the planned trench areas needed to be cleared, and also where necessary to remove colluvium, modern redeposited material and rubble overlying the intact archaeology.

Recording was conducted using the standard context-sheet-based system employed by University of Leicester Archaeological Services, which is designed to cope with both simple and complex, deeply stratified sites.

Areas investigated

Eight areas of archaeology have been recorded in the study area of which were six were identified for further work during the 2016 season (Fig. 3):

Area 1: This area contained a structure (Structure 1) that had already been fully cleaned and excavated during the 2015 season. No further work was undertaken in this area.

Area 2: Lying on the coast to the west of Area 1, this contained 3 possible structures (Structures 3-5) which were cleaned and sample excavated by hand.

Area 3: This area comprised three walls eroding out of the cliff face (Structure 6) recorded during the 2015 season. In the event, no further work was undertaken in this area.

Area 4: Identified and recorded in 2015, it contains a building (Structure 2) and areas of burning. In 2016, the scrub and topsoil was cleared by JCB and the area hand excavated.

Trench 5: This single trench was machine excavated to determine if archaeology in Area 2 continued northwards.

Trench 6: These two trenches were machine excavated to try and find the extents of the walls identified in Area 3.

Area 7: This area lies on top of the hill overlooking Dreamers Bay (Fig. 2). It comprises a building with at least one room, covered in stone rubble (presumably much of this demolition rubble). This area was cleared by machine to identify the lines of the walls and its potential extent.

Area 8: This area lies within the Rifle Range Area, west of the fence. A building (Structure 7) had been identified previously and this was surveyed and recorded.

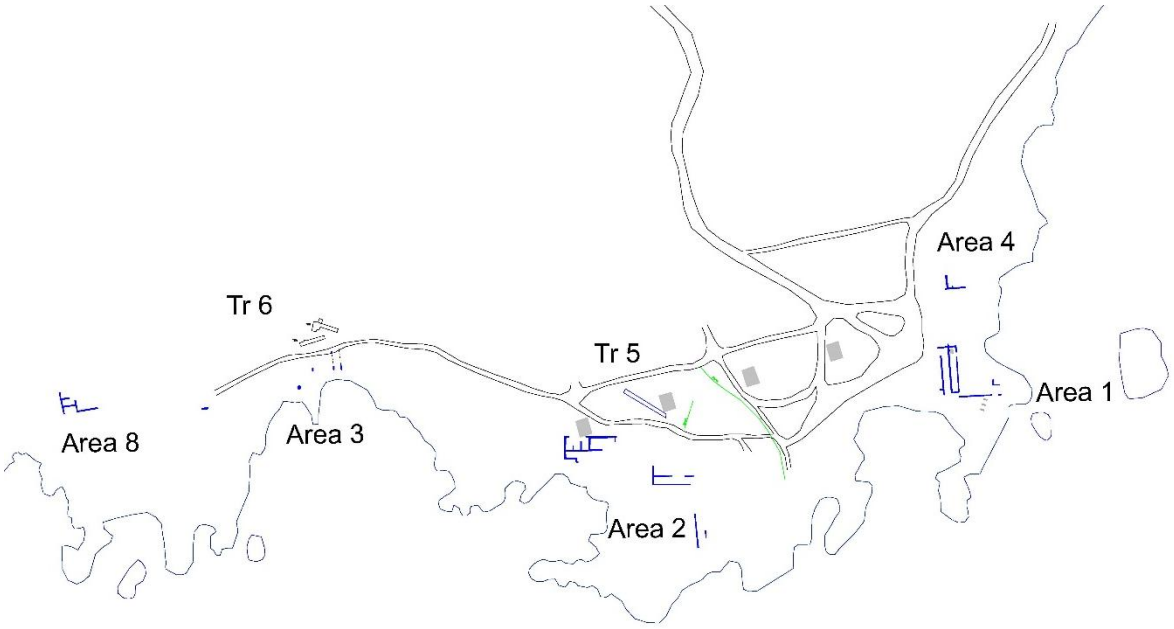

Figure 3: Detail of the Dreamers Bay area showing main excavations except Area 7 (see Fig. 2).

Objectives

The main objective for 2016, building on the work of the 2015 season, was to identify and record archaeological remains that were in danger of erosion, and to set them in context so that they could be fully understood. The Buffalo Project and subsequent observations by DIO and others had shown that erosion is a major problem on the site and the identification, recording and excavation of these areas was the main priority. Other aims were:

- To identify archaeological features and elucidate as far as possible their nature, form, function, date and condition of remains identified during the 2015 season
- To determine the best methods and equipment for further survey and excavation of the area
- To determine the extent of the buildings at Dreamers Bay, by investigating whether the structures like those partially exposed close to the water's edge also extend inland, in areas behind the shoreline still under scrub-covered colluvium
- To provide a report and archive of the results

Excavation and Survey Results

Trenches 6A and 6B

In 2015 three walls were recorded eroding out of the coastline at the western end of the study area close to the fence bounding the rifle range (Area 3). The coast here is characterised by wide ledges suggesting extensive marine erosion.

The walls had been initially identified by the Buffalo Survey in 2007 (Leonard *et al.* 2007) by spreads of pottery and stone eroding out of the edge of the coast. They lay beneath *c.* 0.35-0.4m of soil and scrubland and the stone from the walls and foundations appeared to have been mostly robbed out leaving a thin layer of degraded stone. The two eastern walls were visible in the modern vehicle track just to the north, and in 2015 it seemed likely that they formed a similar structure to those seen to the east (Structure 6) and continued northwards.

Trench 6B was excavated in the scrubland to the north with the objective of identifying if the features continued and if so whether they were better preserved in this area. The initial trench found no evidence for the two eastern walls continuing this far north, but did find a linear feature on a different alignment. A second trench was excavated to the south (Trench 6A) which found the continuation of the linear feature but no trace of the features identified in 2015 (Fig. 4).

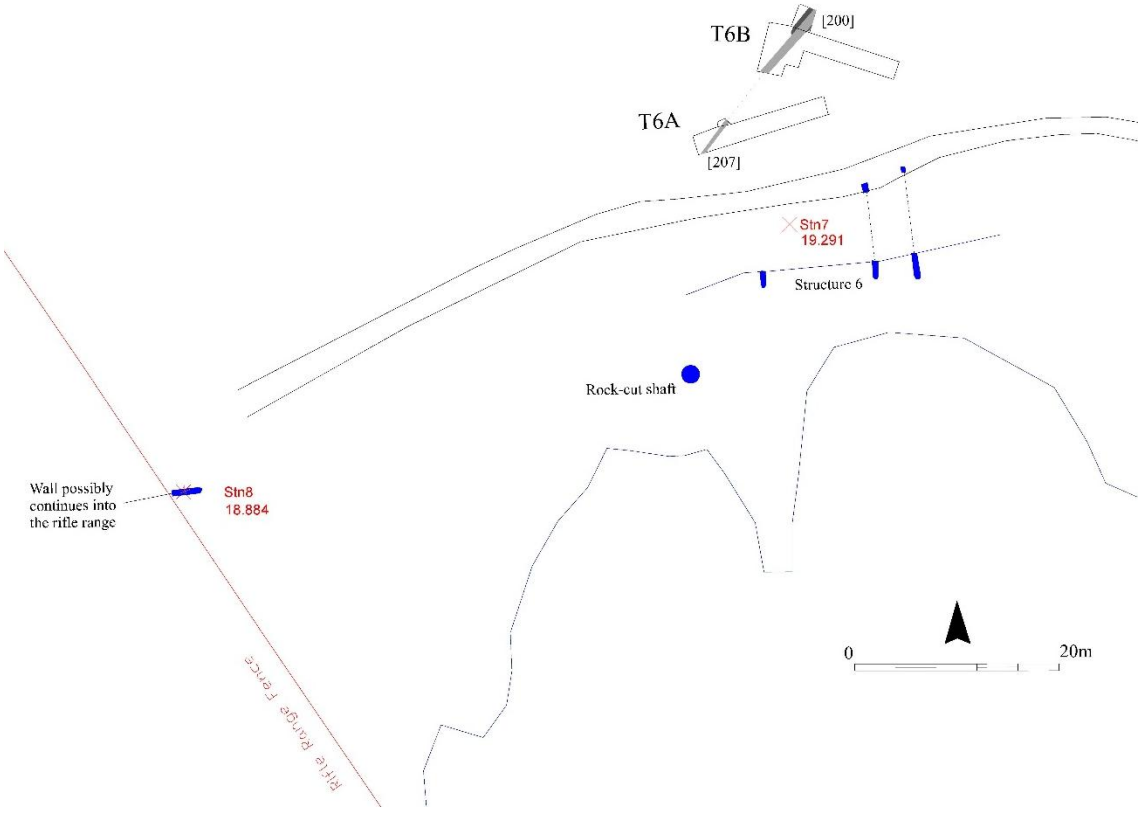

Figure 4: Area 3 and Trenches 6A and 6B.

The features lay beneath a thin topsoil (approximately 0.15m) and *c.* 0.4m of fine sandy colluvium, and ran north-east to south-west. Excavation identified two phases. The earliest phase comprised the butt end of a linear feature [200]. This was cut by a robber trench approximately (0.4m deep) with steep sides [207] filled with rubble backfill (Fig. 5). It appears that linear feature [200] may have been the construction cut for a wall, subsequently robbed out. Given that the robber trench continues to the south-west it seems likely that the robbing has obscured details of another feature on this alignment.

The walls identified in 2015 suggested that Structure 6 was a similar size and orientation to those buildings to the east. Trenches 6A and 6B show that Structure 6 does not extend into the scrubland to the north and that the bulk of the building has probably been lost to coastal erosion. Interestingly the buildings in this area, unlike the rest appear to be robbed out. The features that were identified in the trenches suggest that building foundations (albeit robbed) are preserved under the scrubland to the north on a completely different alignment. Pottery was recovered from the fill of the robber trench but no artefacts were recovered from the earlier feature to date this structure. Given the alignment it may be that this represents an earlier feature and that perhaps the robbed stone was used in the construction of some of the other buildings.

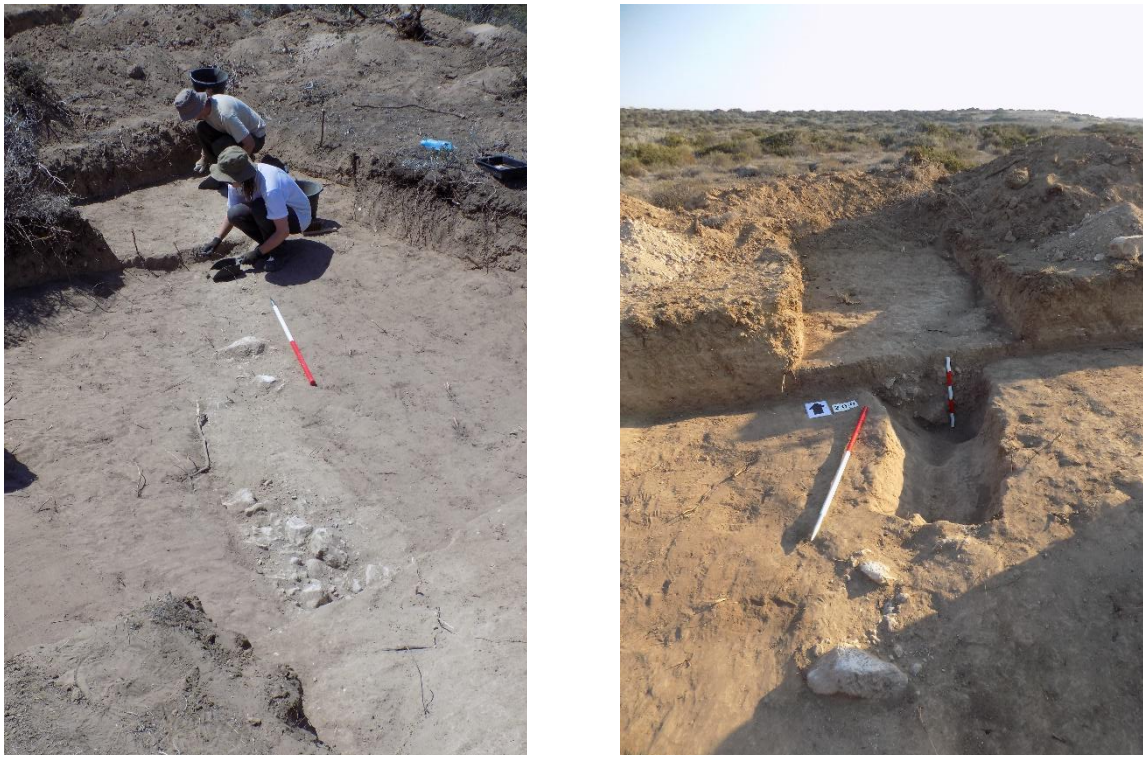

Figure 5: Robber trench [207] running north-east to south-west in Trench 6B. Looking north-east.

Trench 5

A trench was located in a flat area of scrubland, just north of Area 2 where buildings had previously been identified. The aim of the trench was to identify the depth of the stratigraphy and if features might be expected further inland from the coastline in this area (Fig. 7).

The stratigraphy comprised a thin layer of topsoil (approximately 0.15m deep). Below this was a fine sandy colluvium. A sump excavated at the south-west end showed this to be 1.5m deep overlying a coarser orange sand deposit (Fig, 6). No archaeological features were identified in the trench.

Figure 6: Stratigraphy in Trench 5. Looking north.

Area 2

In 2015 a rapid survey was done on the visible walls identified by the Buffalo Project in 2006. In 2016 further cleaning was done to confirm the existence of the walls and their extent although areas of thick scrub prevented full exposure of the walls by hand. Three structures were identified (Fig. 7). Structure 3 was orientated north – south close to the coast. Only two parallel lines of stone (approximately 4m apart) were visible. This area is characterised by uneven bedrock and it seems likely that the rest of this structure has eroded into the sea.

The building in the centre (Structure 4) was cleaned as far as possible - the north wall remained hidden beneath thick scrub. This building is very similar in form to Structure 1

excavated in 2015 in Area 1, comprising two units each approximately 4m wide orientated east-west (Fig. 7).

North-west of these two structures several other walls had been identified previously in an area characterised by a mass of broken pottery on the surface as well as two areas of stone rubble (Structure 5). The walls were cleaned to identify a building on the same alignment as Structure 4 but somewhat different in form. This building comprised a rectangle approximately 26m long x 6.5m wide but apparently continuing to the east. A number of north-south orientated walls divided the building into a several small rooms, each approximately 4m wide. To westernmost wall of the building continued towards the coast forming a zig-zag pattern along the coastline.

Two areas of rubble identified in 2015 were cleaned and were shown to be a large area of broken pottery and a large area of stone rubble within the westernmost room of the building. Further cleaning identified the top of a large broken amphora apparently *in situ* (Fig. 9) covered with blocks of stone rubble. Excavation identified a second broken amphora to the south also apparently *in situ*.

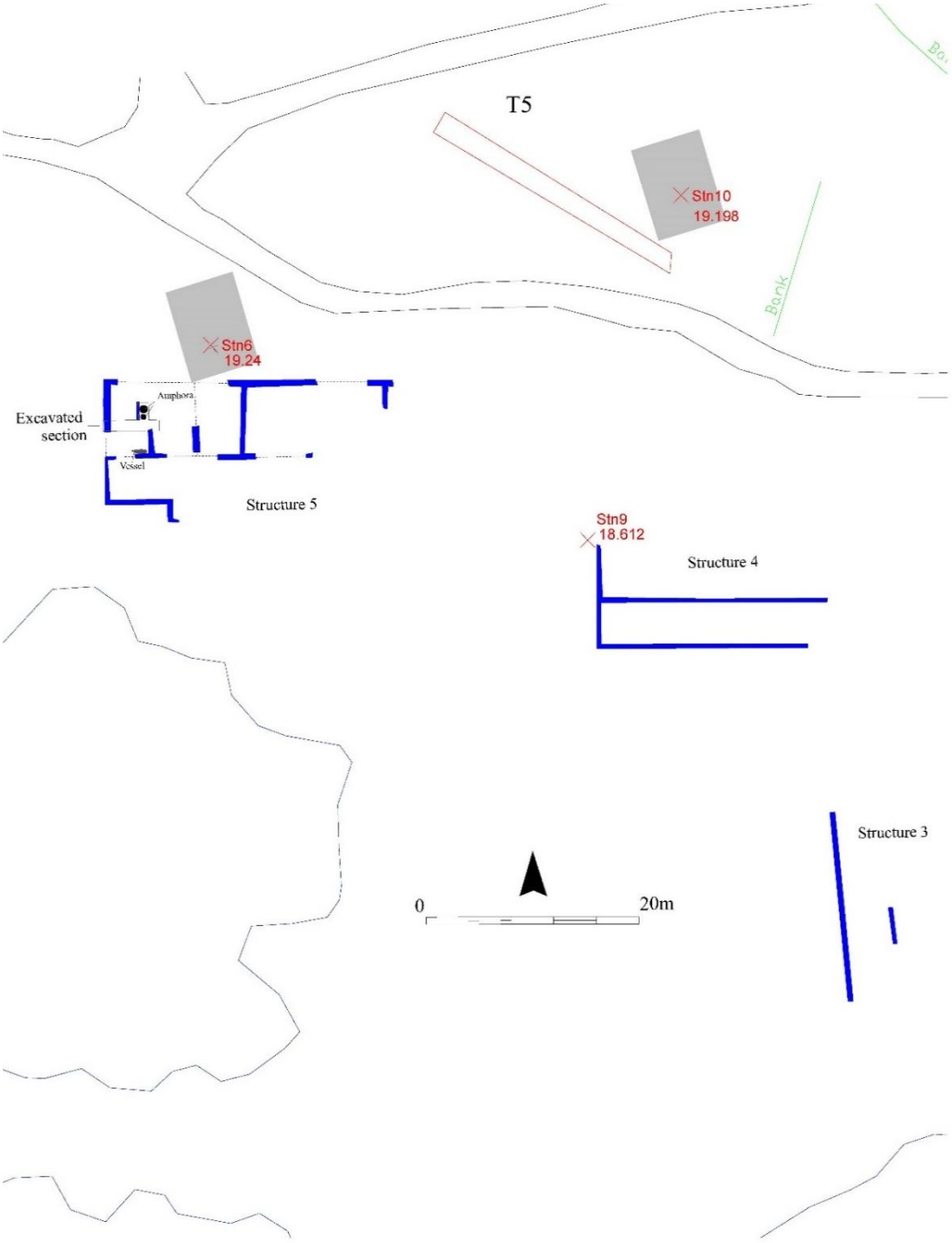

Figure 7: Plan of Area 2 showing structures 3-5 and Trench 5.

Figure 8: Structure 4 looking south-east.

Figure 9: Broken amphora in situ in the western room of Struture 5.

Excavation of a section across the room showed that the amphorae were within a room infilled with *c.* 0.5m of fine sand colluvium and rubble to the north-east. The walls were made of stone blocks constructed on top of the natural bedrock with a fine sand layer presumable used to level the ground before construction, with no obvious construction cuts

for the foundations (Figs 10-11). This was virtually identical to the walls of Structure 1 in Area 1. Unlike these walls however, tile fragments were used to fill the smaller gaps of the wall. This wall construction technique is similar to that seen at Kourion where ceramic fragments were used extensively in one of the rooms of the Earthquake House destroyed in the 4th century. It was suggested that the use of ceramic represents rapid repairs to walls following an earlier seismic event (Costello 2014, 36-37, Fig 4.7), although the small amount exposed here is not enough to confidently suggest a similar explanation for Structure 5.

Figure 10: Details of the western wall of Structure 5.

Figure 11: The north-east corner of the western room of Structure 5 appeared to have collapsed crushing the amphora (foreground). The rest of the building had become infilled with sand.

The two amphorae appeared to be leant up against a section of wall to their west, possibly an internal feature designed to support the vessels. All around this area were large tumbled stone blocks. Although the eastern wall was visible running northwards from the southern wall, all around the amphora was just a tumbled mass of stone and it appeared that the structure had either collapsed or been demolished falling on top of the amphorae and crushing them. Leaning against the southern wall was a smaller vessel lay on its side presumably where it had toppled over (Fig. 12). It appears that this building may have been a storage room, the subsequent collapse of which buried the pots.

Figure 12: Fallen vessel against the southern wall

Area 8

A structure had previously been identified in the rifle range to the west of the fence line (Structure 7). This was similar in size to Structure 5 – a rectangular building with rooms approximately 4m wide but on a north-south alignment (Figs 13-14). No further excavation was undertaken in this area in 2016.

These structure appears slightly different to that identified to the south and in Area 1.

Figure 13: Structure 7 in the Rifle Range. Looking south-west

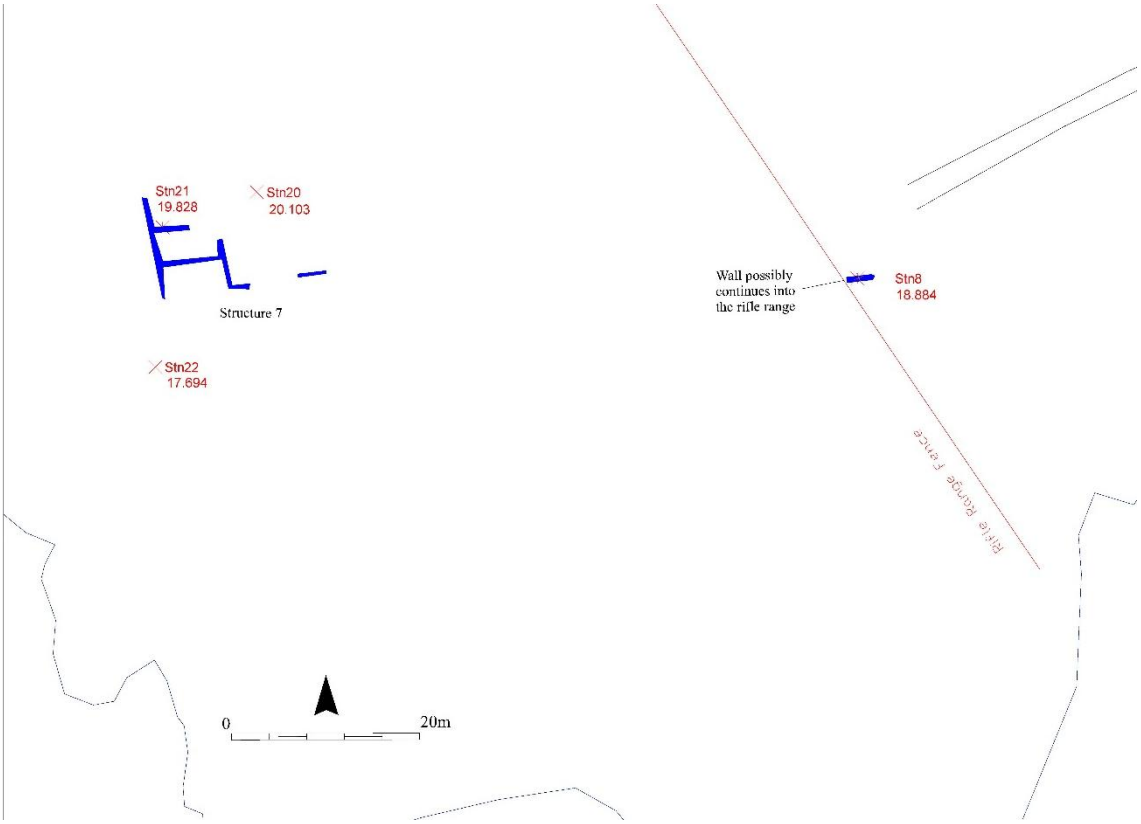

Figure 14: Structure 7 in the Rifle Range.

Area 4

At the end of the 2015 season in Area 1 the central and eastern walls of Structure 1 were seen to continue northwards. Some 25 m to the north another building was visible on the eastern shoreline. The area was quickly cleaned and recorded and appeared to revealed a previously unrecorded rectangular structure at least 7m x 3.5m (only partially uncovered) and running westwards under an area of scrub.

In 2016, the scrub and the thin topsoil was removed by JCB and the area cleaned. This was shown to be a much larger structure than previously identified with complex stratigraphy within the interior (Figs 15-16).

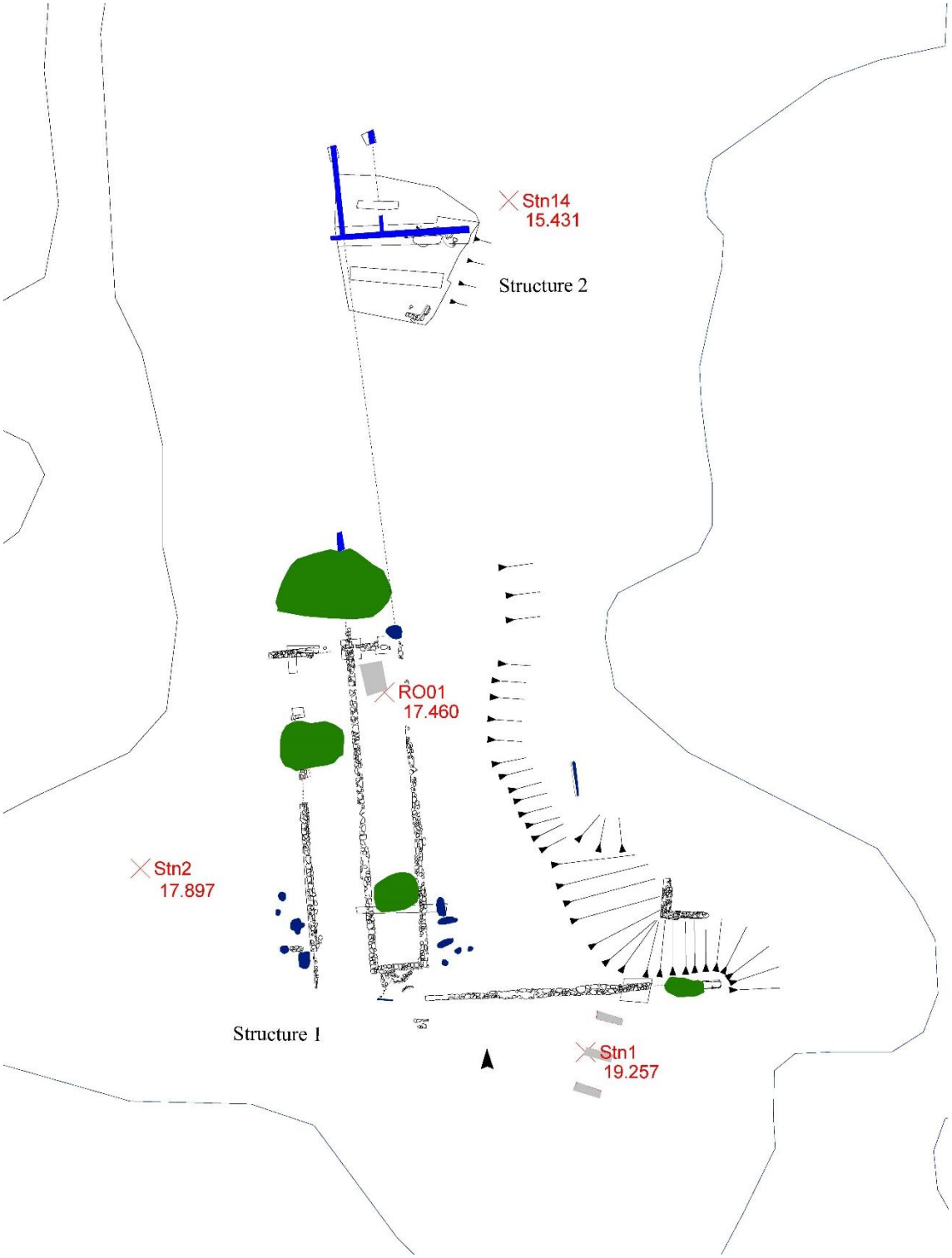

Figure 15: Plan of Structures 1 and 2

A north-south wall was identified running on exactly the same alignment as the eastern wall of Structure 1 (although the area in the middle on the edge of the coast was eroded). A second wall was recorded perpendicular to this running towards the coast. This wall continued to the west and it is possible that the central wall of Structure 1 also continues into Structure 2. A third wall was recorded running north and may be a possible interior wall creating a room approximately 3m wide. The northern wall was not identified (Fig. 17), although the continuation of the internal wall towards the north, as seen in an exploratory slot south of the gully may be indicative of the continuation of this structure further north into the shrub area.

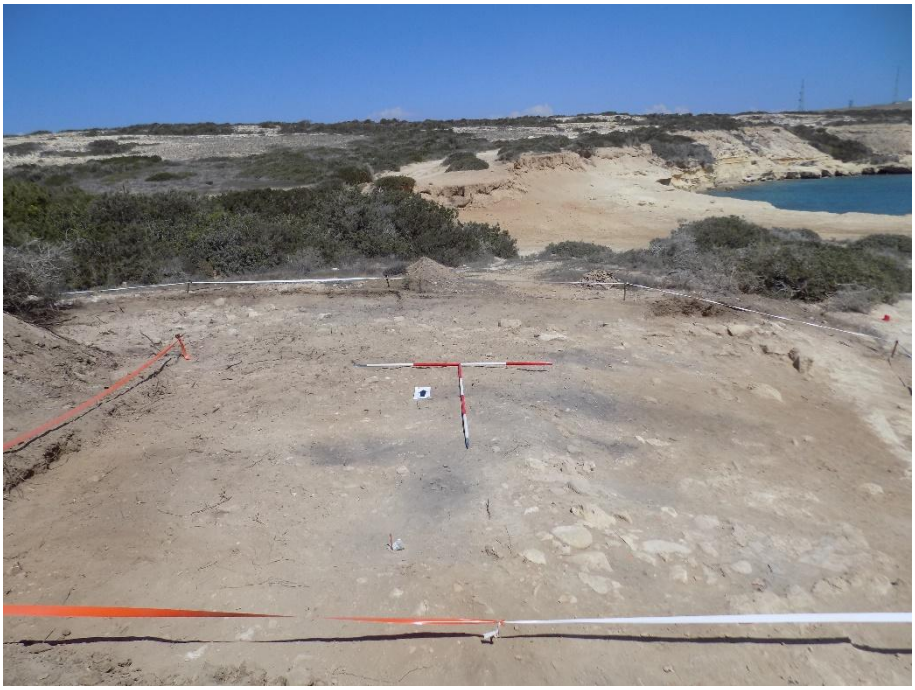

Figure 16: Area 4 showing the areas of burning prior to excavation, looking north.

Two exploratory slots were excavated in order to establish the depth of the deposits, exposing the main east-west wall and a large area of burning and pottery to the south (Fig. 17). The slot north of the east-west wall recorded a roughly cobbled area and a large pit cutting through it (Fig. 18).

Figure 17: The excavated slots showing the east-west wall (left) and a large area of burning with pottery. Looking east.

Figure 18: The possible cobbled surface north of the wall. Looking south.

This area appears to be another building on the same alignment as structure 1 and possibly part of the same complex sharing one or two north-south orientated walls. The complex appears to be more than 65m long although the northern extent was not found. This building however, was very different in nature to any of the others. It was multi-phased

with the possible surfaces and large amounts of pottery and areas of burning possibly indicating a domestic function.

Area 7

On top of the hill overlooking Dreamer's Bay to the north, structural remains had reportedly been accidentally revealed by training soldiers creating a sangar in the 1980s. This is now in a disused, fenced rubbish dump. The Buffalo project undertook initial investigations of remains which proved to comprise part of a room of a substantial masonry building on the crest of the hill (approximately 46m higher than the coastline overlooking the Dreamer's Bay shoreline structures (Fig. 19).

The east and south walls recorded by the Buffalo Project were located, and a JCB was used to carefully remove some of the rubble from the interior of the original room. It was quickly obvious that the room formed part of a much larger multi-phased structure (Fig. 20). The west wall was identified and the eastern wall continued north although the north wall was not determined. In the south-east corner, the remnants of a gypsum floor was visible along with white plaster on the walls (Fig. 21).

Figure 19: The hill-top structure during the Buffalo Project excavations.

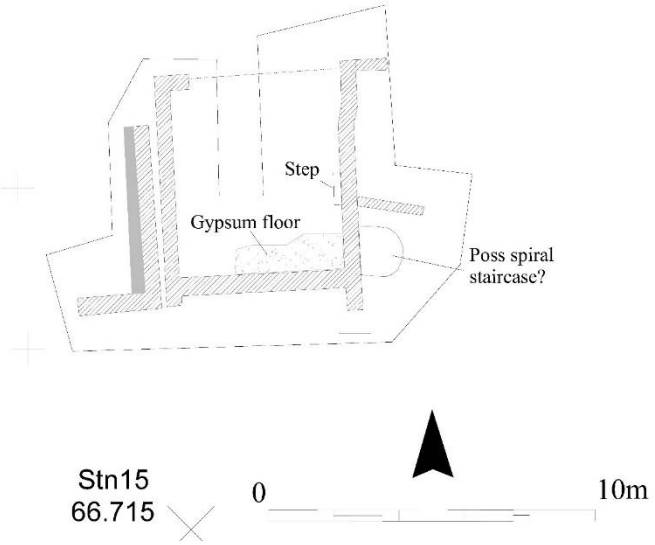

Figure 20: Plan of the hill-top structure.

Figure 21: The south-east corner showing the remains of the wall plaster and the gypsum floor. Looking south-east.

The western wall of the room was identified and although the northern wall was not visible, a possible return from the west wall might indicate its line which would make the room approximately 5.5m x 6.5m. Approximately halfway up the east wall was a threshold with a step (Fig. 22). The eastern wall had a slight kink in its northern half with another section of wall running eastwards suggesting a second room to the east. A possible rough surface was identified in this area along with a narrow wall leading from the threshold at a slight angle.

On the south-east corner was a semi-circular stone structure. The function of this feature is unknown but it may be the base of a spiral staircase (Fig. 23).

Figure 22: The east wall corner showing the threshold. Looking east.

Figure 23: The semicircular structure on the south-east corner. Looking west.

Parallel to the west wall was a second wall built on top of large foundation stones and excavation showed that these were cut into fine white natural sand (Fig. 24). A return suggests that this represents the beginning of another room to the west, although it is slightly offset to the main room and may be either an earlier or a later addition (Fig. 25).

Figure 24: The two parallel walls on the west side and detail of the foundation stones and the natural white sand (right). Looking east.

Figure 25: The west walls showing the continuation to the west and the offset. Looking north.

The excavations confirmed that the walls form part of a large hilltop structure extending to the east, west and south with more than one phase and, if the semi-circular feature is a staircase, with more than one floor or a tower.

Post-season securing of site and archive, and storage of finds

All excavated areas posing any safety hazard were backfilled before leaving the site. Finds from the season have been bagged, boxed and placed in secured storage at the Kourion Museum in Episkopi village, pending further study.

The site archive is held by University of Leicester under the site code ADB.2015 and comprises the following:

- 129 context sheets
- 15 A2 Drawing sheets
- High resolution digital site photos and working shots.
- 5 x environmental samples (retained at the stores in Cyprus)
- 7 x boxes of pottery, I box of metal and 1 box of glass small finds (retained at the stores in Cyprus). See Appendix 2
- Survey data processed into CAD drawings and a GIS.

Discussion, conclusions and prospect

The 2016 excavations have shown that the structural remains along the coast at Dreamer's Bay are more extensive and varied than originally thought. There appear to be three types of structure. Four are the long narrow buildings originally identified at the site and thought to be warehouses (Area 1, Structure 1; Area 2, Structures 3 and 4; Area 3, Structure 6). Probably two are rectangular buildings divided into smaller units (Area 2, Structure 5 and possibly Area 8, Structure 7). Finally, the stratified deposits including burning within Structure 2 in Area 4 appears to be a different type of building with a different function. Exactly what this and the other shoreline buildings were used for remains to be established. However, the 2016 data produced important clues, including copper alloy nails from the preserved stratigraphy in Structure 2, likely to be from boats or ships**.** In Area 2, the more complex Structure 5 also proved unexpectedly to preserve stratigraphy within at least its westernmost room, where complete vessels were found in situ. On an initial inspection, this material shows similarities to that from the 'earthquake house' at Kourion (Costello 2014), and indeed appears to have been crushed under a fallen wall. That this, and some or all of the other Dreamers Bay shoreline buildings may have been destroyed in the same earthquake as Kourion, i.e. during the AD360s, is a hypothesis to investigate through recovery and analysis of more stratified finds.

The hilltop structures in Area 7 were clearly of some pretension, with plastered walls, high quality flooring, ceramic tile roofing, and the enigmatic semicircular structure which might be a small tower or perhaps spiral stair foundation. The site is also surrounded by substantial piles of large stones cascading down the hill slopes which, as Eleni Procopiou pointed out, could attest defensive walls. The location of the site is not the highest point in the area, but the one which affords the best viewpoint overlooking the sea, commanding the horizon from Limassol Lighthouse near Cape Gata in the east, right around to Cape Zevgari to the west, to Kourion in the north and as far as Pissouri Bay in the northwest. The hilltop remains appear to be of broadly similar age to the coastal buildings, i.e. late Roman to early Byzantine, but as yet more precise dating evidence is lacking. Consequently, further work is needed to establish whether the hilltop complex was related to the shoreline facilities, or whether it might, for example, post-date them. This site clearly requires further work to elucidate its nature, extent, dating and purpose.

During the 2016 season we were also able to advance research collaboration with the University of Southampton, through providing logistic support to their core drilling in the salt lake, and further geomorphological reconnaissance around the peninsula. We also further developed close working relationships with the WSBAAS and RAF Akrotiri, especially through the auspices of our colleagues in DAG.

Funding permitting, further excavation is projected at Dreamers Bay for 2017, in April or September, to develop understanding of the nature and dating of the identified remains.

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Appendix 1: Survey stations

Station	East	North	Height	Description
STN01	196881.954	326535.021	19.257	Area 1: Original RO02 - middle concrete block, SW facing Area 1 (mid point)
STN02	196848.828	326548.705	17.897	Area 1: Immediate west of
STN03	LOST			
STN04				
STN05	196599.384	326520.408	17.195	Area 2: Western coast directly west of STN06
STN06	196673.129	326520.408	19.240	Eastern concrete base survey point
STN07	196533.637	326558.570	19.291	Area 3: Southern coast NE of STN08 next to metal peg
STN08	196474.255	326532.422	18.884	Far west against Range fence nail in wall stub
STN09	196708.514	326502.948	18.612	Area 2: Red Concrete SE of CB3, Old Buffalo STN3
STN10	196717.254	326535.304	19.198	Centre west concrete base survey point
STN11	196760.755	326547.713	18.942	Eastern concrete base survey point
STN12	196804.549	326560.923	18.786	Centre east concrete base survey point
STN13	196812.556	326486.991	16.495	Area 1: Red Concrete peg close to shore SW
STN14	196876.205	326598.398	15.431	Area 4: NE corner red concrete peg
STN15	196448.707	327133.147	66.715	Area 7: top of site South of excavation red concrete peg
STN16	196438.125	327105.882	63.534	Area 7: bottom of site South of excavation close to fence around dump red concrete peg
STN17	196076.632	326614.186	37.813	Ranges: Southern side of track Red concrete peg c. 10m back
STN18	195972.510	326601.826	38.842	Ranges: Southern side of track top of hill overlooking Bay Red concrete peg
STN19	196173.303	326639.508	29.187	Ranges: Northern side of track Red concrete peg
STN20	196410.388	326541.585	20.103	Area 8: Buffalo peg NE of building Red concrete peg
STN21	196400.372	326537.874	19.828	Area 8: NW corner of grid Red concrete peg
STN22	196399.591	326522.992	17.694	Area 8: South of STN22 Red concrete peg
STN23	196866.975	326561.800	17.460	Area 1:Original RO01:SE corner of concrete plinth of bench between Area 4 and 1
STN24	196866.556	326563.942	17.453	Area 1: NE corner of concrete plinth of bench between Area 4 and 1

Appendix 2: List of finds stored at the Kourion Museum

BULK FINDS							
Trench/Area	Context	Cut	Material	Object/Date	Amount	Location	Stored Location
1	01		Pot		1 x bag		Box 1
1	02		Pot		1 x bag		Box 1
1	09		Pot		1 x bag		Box 1
1	19		Pot		2 x bags		Box 1
1	24		Pot		1 x bag		Box 1
1	25		Pot		1 x bag		Box 1
1	26		Pot		2 x bags		Box 1
1	27		Pot		1 x bag		Box 1
1	28		Pot		1 x bag		Box 1
1	44		Pot		1 x bag		Box 1
4	50		Pot		1 x bag		Box 1
4	51		Pot		4 x bags		Box 1
4	52		Pot		1 x bag		Box 1
4	53		Pot		1 x bag		Box 1
4	58		Pot		1 x bag		Box 1
6B	201		Pot		1 x bag		Box 1
6A	208		Pot		1 x bag		Box 1
6B	212		Pot		1 x bag		Box 1
4	308		CBM		2 x bags roof tile		Box 1
4	309		CBM		2 x bags roof tile		Box 1
4	US		Pot		4 x bags		Box 1
8	US		Pot		1 x bag	Surface finds	Box 1
6	US		Pot		1 x bag		Box 1
4	305		Pot		4 x bags		Box 4
4	311		Pot		1 x bag		Box 4
4	US		Pot		1 x bag		Box 4
4	310		Pot		1 x bag		Box 4
4	304		Pot		2 x bags		Box 4
4	308		Pot		1 x bag		Box 4
4	318		Pot		1 x bag		Box 4
4	309		Pot		1 x bag		Box 4
4	307		Pot		4 x bags		Box 4
4	307		CBM		1 x bag		Box 4
4	302		Pot		1 x bag		Box 4
2	108		Pot	fine ware	2 x crystal boxes		Box 5
2	108		Pot	fine ware	2 x crystal boxes		Box 5
2	108		CBM	Roof tile	1 x bag		Box 5

Trench/Area	Context	Cut	Material	Object/Date	Amount	Location	Stored Location
2	108		Shell	Murex & others	1 x bag		Box 5
2	108		Pot		4 x bags		Box 5
2	108		Pot		3 x bags		Box 5
2	US		Pot		1 x bag		Box 5
2	110		Pot		1 x bag		Box 5
2	04		Pot		1 x bag		Box 5
2	109		Pot		1 x bag		Box 5
7	US		Pot		1 x bag		Box 5
7	500		Pot/CBM		1 x bag		Box 5
7	526		Pot		1 x bag		Box 5
1	52		Pot		1 x bag		Box 5
4	321		Pot		1 x bag		Box 5
4	322		Pot	Pottery handles	1 x bag		Box 5
4	303		Pot		1 x large bag		Box 7
1	04		Pot		1 x bag		Box 7
1	01		Pot		1 x bag		Box 7
1	03		Pot		1 x bag		Box 7
4	302		Pot		1 x bag		Box 7
4	305		Pot		1 x bag		Box 7
4	308		CBM		1 x bag		Box 7

Find no.	Area/ Trench	Context	Cut	Material	Description	Condition	Measurement (mm)	EDM File/Drawing	location	Photo?	checked by	Special instructions
10	2	100	T/S	Cu alloy	coin	corroded	20mm dia	16-09-16A	SF metal objects box	Yes	WR	
20	-	found on track between areas 2 & 4		Cu alloy	coin	corroded	13mm dia	16-09-16A	SF metal objects box	Yes	WR	
26	4	302		Cu alloy	coin	corroded	12mm dia		SF metal objects box	Yes	WR	
27	4	302 (sieving)		Cu alloy	coin	corroded	12mm dia		SF metal objects box	Yes	WR	
31	2	107		Cu alloy	coin	corroded	27mm dia		SF metal objects box	Yes	WR	

Find no.	Area/ Trench	Context	Cut	Material	Description	Condition	Measurement (mm)	EDM File/Drawing	location	Photo?	checked by	Special instructions
1	1	19	20	Fe	Object x 2	Very corroded	400/300 mm		SF metal objects box	Yes	AW	
2	1	1		Cu alloy	cu alloy nail	corroded	560mm		SF metal objects box	Yes	AW	
3	1	1		glass	vessel frag-curved				SF glass box	Yes	AW	
4	1	US from cleaning		glass	frag				SF glass box	Yes	AW	
5	1	9		Cu alloy	object				SF metal objects box	Yes	AW	
6	1	51		Fe	Object x 2	corroded			SF metal objects box	Yes	AW	
7	1	3		Fe	Object - nail?	corroded		P2.01	SF metal objects box	Yes	AW	
8	1	3		Cu alloy	frag			P2.01		Yes	AW	
9												
10	2	100	T/S	Cu alloy	coin	corroded	20mm dia	16-09-16A	SF metal objects box	Yes	WR	
11	4	US from cleaning		Cu alloy	nail	bent, patinated and slightly corroded	85mm		SF metal objects box	Yes	WR	
12	4	US from cleaning		Cu alloy	alloy nail	bent and corroded	65mm		SF metal objects box	Yes	WR	
13	4	US from cleaning		Fe	nail	corroded fragment	50mm		SF metal objects box	Yes	WR	
14	4	US from cleaning		Fe	object	corroded	25mm		SF metal objects box	Yes	WR	
15	4	US from cleaning		Fe	nail	corroded fragment	64mm		SF metal objects box	Yes	WR	
16	2	US from cleaning		Glass	frag	fragmentary	42mm thin		SF glass box	Yes	WR	
17	4	US from cleaning		Glass	bottle neck and rim	fragmentary	30mm dia, 38mm high		Triple bagged in SF glass box	Yes	WR	
18	4	US from cleaning		Cu alloy	nail head	fragmentary	32mm		SF metal objects box	Yes	WR	

Find no.	Area/ Trench	Context	Cut	Material	Description	Condition	Measurement (mm)	EDM File/Drawing	location	Photo?	checked by	Special instructions
19	4	US from cleaning		Fe	nail	corroded fragments	longest fragment 30mm		SF metal objects box	Yes	WR	
20	-	found on track between areas 2 & 4		Cu alloy	coin	corroded	13mm dia	16-09-16A	SF metal objects box	Yes	WR	
21		US from cleaning		Fe	nail	corroded fragmentary	42mm		SF metal objects box	Yes	WR	
22		US from cleaning		Fe	nail	corroded fragmentary	45mm		SF metal objects box	Yes	WR	
23		302		Charcoal	2 x frags		ca 10mm each		SF metal objects box		WR	
24		302		Fe	nail	complete but corroded	44mm		SF metal objects box	Yes	WR	
25		302		Glass	frag	fragmentary	15mm thin		SF glass box	Yes	WR	
26		302		Cu alloy	coin	corroded	12mm dia		SF metal objects box	Yes	WR	
27		302 (sieving)		Cu alloy	coin	corroded	12mm dia		SF metal objects box	Yes	WR	
28		302 (sieving)		Pb	fragment	corroded and folded backon itself	42mm		SF metal objects box	Yes	WR	
29		304 (sieving)		Glass	frag	Fragmentary	26mm, 6mm thick		SF glass box	Yes	WR	
30		304 (sieving)		Glass	frag	Fragmentary	27mm thin		SF glass box	Yes	WR	
31		107		Cu alloy	coin	corroded	27mm dia		SF metal objects box	Yes	WR	
32		108		Cu alloy	nail point	corroded fragment	33mm		SF metal objects box	Yes	WR	
33		305		Fe	Nail	corroded fragments	longest piece 50mm		SF metal objects box	Yes	WR	
34		303		Fe	nail	corroded but complete	110mm l, 29mm head		SF metal objects box	Yes	WR	
35	7	500		Glass	frag	Fragmentary	45mm thin		SF glass box	Yes	WR	
36		502		Pottery	small cup	broken but about	Ca 120mm			Yes	AW	

Find no.	Area/ Trench	Context	Cut	Material	Description	Condition	Measurement (mm)	EDM File/Drawing	location	Photo?	checked by	Special instructions
						80% present	h, 100mm dia					
37		107		Pottery	Amphora Vessel A	2 x vessels close together - sherds may be mixed			Boxes 2 & 3	Yes	AW	
38	4	307		Cu alloy	nail point	corroded fragment	45mm l, 7mm w		SF metal objects box	Yes	WR	
39	4	307		Cu alloy	nail point	Corroded fragment	47mm l, 4mm w		SF metal objects box	Yes	WR	
40	4	307		Cu alloy	nail point	Corroded fragment	39mm l, 6mm w		SF metal objects box	Yes	WR	
41	4	307		Fe	nail	Corroded fragment	66mm l, 16mm w		SF metal objects box	Yes	WR	
42	4	309		Cu alloy	nail head	corroded fragment	4mm l, 11mm w		SF metal objects box	Yes	WR	
43	7	US - spoil heap		Fe	nail head	Corroded fragment	55mm l, 27mm head		SF metal objects box	Yes	WR	
44		305		Fe	nail	Corroded fragment	45mm l, 23mm w		SF metal objects box	Yes	WR	
45		305		Fe	flat object	fragmentary	22mm l, 14mm w, ca 3mm thick		SF metal objects box	Yes	WR	
46		US - in surface rubble		Stone	saddle quern	about 80% complete	315x250 x110mm		Currently on desk	Yes	AW	
47		108		Stone	Spherical worked stone - shot?	complete	64mm dia			Yes	AW	
48		108		Fe	nail head	fragmentary	74mm l, 40mm head		SF metal objects box	Yes	WR	
49	4	309		Cu alloy	nail point	fragmentary	45mm l, 4mm w		SF metal objects box	Yes	WR	
50	4	310		Pb	sheet frag	corroded fragments	largest piece 100x30 mm ca 1mm thick		SF metal objects box	Yes	WR	
51												

Find no.	Area/ Trench	Context	Cut	Material	Description	Condition	Measurement (mm)	EDM File/Drawing	location	Photo?	checked by	Special instructions
52	4	305		Fe	Tip of nail	corroded fragment	33mm l, 5mm w		SF metal objects box	Yes	WR	
53	4	310		Fe	Iron door catch	complete but corroded	115mm l, 64mm h, 22mm w		SF metal objects box	Yes	WR	
54	4	310		Fe	Two iron nail heads	Corroded fragments	40mm l, 40mm head & 30mm head		SF metal objects box	Yes	WR	
55	4	321/308		Fe	Nail					Yes	AW	
56		321		Pottery	Large ceramic pithoi?				Box 6, 5 BAGS	Yes	AW	
57												
58	4	305		Cu alloy	object	Corroded	37mm l, 12mm w		SF metal objects box	Yes	WR	Needs stabilising to prevent corrosion
59	2	109		Cu alloy	pin or nail point	Corroded	26mm l, 6mm w		SF metal objects box	Yes	WR	Originally mislabelled as find 32
60	2	108		Glass	frag	fragment	22x8mm thin		SF glass box	Yes	WR	Originally mislabelled as find 32
61	2	107		Pottery	Amphora Vessel B	2 x vessels close together - sherds may be mixed			Boxes 2 & 3	Yes	AW	
62	4	305		Fe	Fe nail shank	corroded fragment	60mm l, 6mm w		SF metal objects box	Yes	WR	
63	4	US - spoil heap		Cu alloy	nail head	corroded fragment	43mm l, 17mm head		SF metal objects box		WR	
64	2	108		Fe	Fe nail shank	corroded fragment	60mm l, 9mm w		SF metal objects box	Yes	WR	
65	4	305		Metal?	metallic fragments or slag	corroded fragments	largest 68x45x28mm		SF metal objects box	Yes	WR	
66	4	311		Glass	frag	fragments	largest ca 8x10mm thin		SF glass box	Yes	WR	

Find no.	Area/ Trench	Context	Cut	Material	Description	Condition	Measurement (mm)	EDM File/Drawing	location	Photo?	checked by	Special instructions
67	2	107		Pottery	Small flagon with handle	broken but mostly complete except top & bottom			Finds Tray	Yes	Amc	