Akrotiri-Dreamer's Bay (*Nissarouin*) Excavation & Survey, Spring 2019

Interim Report

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Contents

On the cover: Excavators in the hilltop complex, Area 7, revealing ceramic flooring, April 2019.

Summary

During spring 2019 the Ancient Akrotiri Project (AAP) conducted a fifth and final season of fieldwork on the ancient port at Dreamers Bay (*Nissarouin*), Akrotiri, at the southern tip of Cyprus. This involved a campaign of excavation and survey by a field team from the University of Leicester, with participation from colleagues from the Universities of Cyprus and Athens. The work as generously funded by the Honor Frost Foundation.

This year, excavation was completed of the hilltop structural complex overlooking the low shoreline structures west of Dreamer's Bay; these structures represent multiple phases, with occupation stretching into at least the sixth century.

During the season further detailed survey was also undertaken of the ancient conglomerate quarries overlooking the harbour in Dreamer's Bay itself. Trial trenching was also undertaken of masonry structures previously identified towards the eastern end of the quarry complex. These proved to be more substantial than expected, with painted wall plaster, and of imperial Roman date. The piped water supply previously identified apparently belonged to this presumed clifftop residence. Smaller masonry structures were also identified close to the water's edge at the bottom of the quarry dump/ramp.

This season also saw important steps in the project outreach programme, including an archaeological hike and public open day for residents of the airbase, and installation of new interpretative signage at Dreamer's Bay and other sites.

This fifth interim report on the onshore fieldwork at Dreamer's Bay includes a summary overview the results of the five years' work.

Introduction

From 5-24 April 2019 the Ancient Akrotiri Project, Cyprus (AAP) conducted further terrestrial excavations and archaeological survey at and around Dreamer's Bay, RAF Akrotiri (Figs 1 and 2). This was effectively the second of three phases of AAP fieldwork taking place during its final year of operations. It was preceded in January 2019 by a walkover survey, undertaken by a University of Leicester team seeking, on behalf of UK Ministry of Defence and in pursuit of the project's research aims, to fix the location and assess the condition of all known archaeological sites on the peninsula. September saw a further AAP expedition, comprising a second season of underwater survey and related activities in and around the known ancient harbour at Dreamer's Bay (Blue forthcoming; for the first season, see Blue 2019).

The fieldwork was conducted by a team of archaeologists from the School of Archaeology & Ancient History, University of Leicester (SAAH, UoL), UK. It was conducted with the approval of both the UK Sovereign Base Areas Administration and the Republic of Cyrus Department of Antiquities; with active support from the UK MOD's Defence Infrastructure Organisation; and with 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 Prof. Simon James (SAAH: project director) and volunteer professional field archaeologists mostly from SAAH's contracting company, University of Leicester Archaeological Services (ULAS): Vicki Score (ULAS Deputy Director: Akrotiri field director), Donald Clark, Andy Hyam, George Issitt, Andy McLeish, Joe Peters, Dr Mireya Gonzalez Rodriguez, Dr Anna Walas, and Jodie Hannis. These also supervised a group of undergraduate students from SAAH and the University of Cyprus. Sgt Graham Moore, RAF, kindly joined the team to help with logistics and on site. Dr Adam Rogers (also SAAH) attended as research assistant to SJ for planned project publications, not least this report.

The field season was designed to continue and develop work undertaken over the previous four years (James & Score 2015; 2016; 2017; 2018), to investigate and record threatened archaeological remains along the shoreline at the location known as Dreamer's Bay; (the vicinity is known as *Nissarouin*, 'the islet' in Greek Cypriot dialect: E. Procopiou, pers. comm.). The AAP seeks to understand them as components of the wider ancient port, and to put these into the context of the settlement history of the Akrotiri peninsula as a whole.

During the field season, AAP research partner Dr Lucy Blue (LB: University of Southampton) visited to discuss project progress, and planning for the second underwater season. Miltiadis Polidorou, PhD candidate geologist at the University of Athens, also joined to undertake geomorphological tasks and to discuss the planned underwater work.

The project's wider public outreach programme was also further developed, to maximise the social value of the archaeological fieldwork to local communities, both military and local civilian.

The Landscape context of Dreamer's Bay

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

Dreamer's Bay lies 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 (WSBA), 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 west to Cape Gata in the east, and about 3.5km north-south. The land rises gently from north to south, reaching 60m above sea level, and terminating on its southern edge in cliffs, except for a stretch of low shoreline at Dreamer's Bay. Akrotiri is now connected to Cyprus proper on the west side by a massive tombolo beach of large pebbles, and on the east side by a broad sand beach which runs into the outskirts of Limassol. The beaches frame a salt lake, famed for its flamingos.

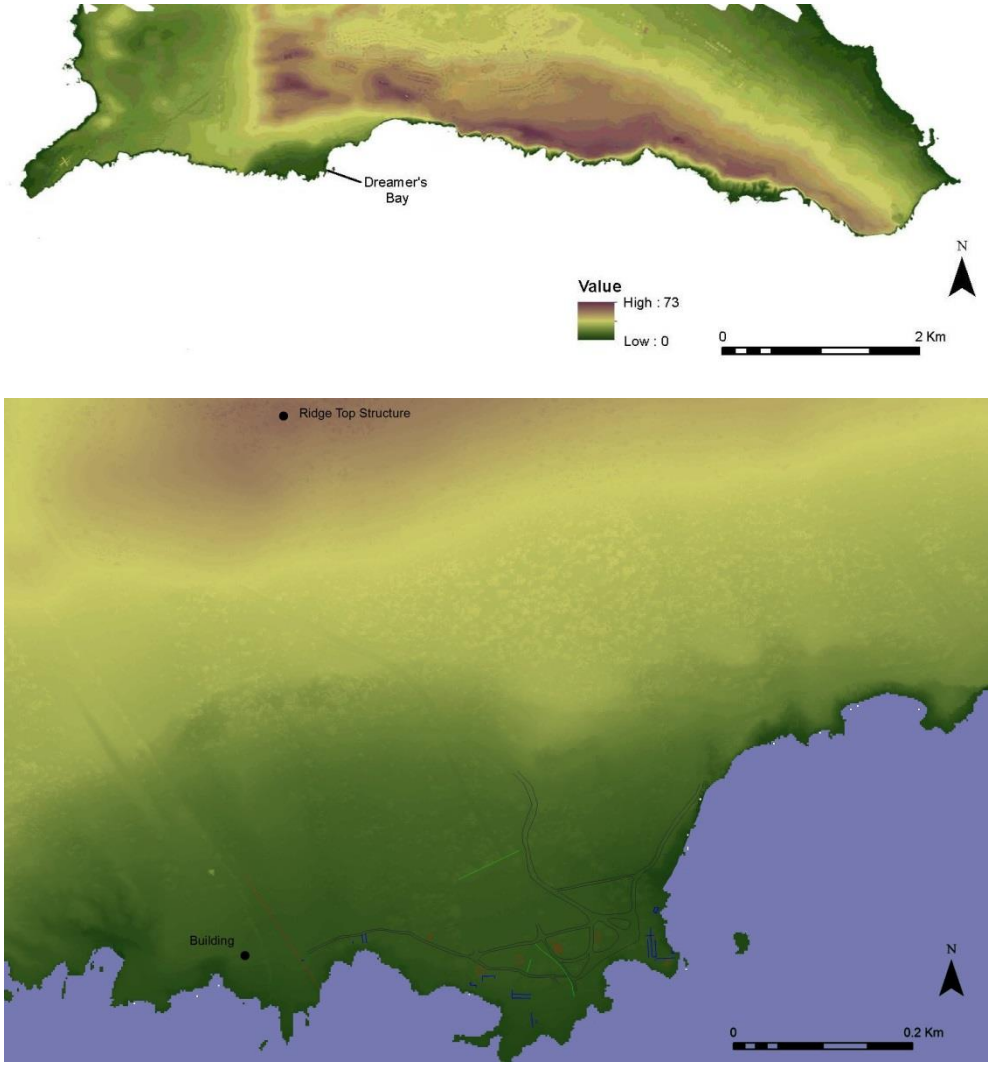

Fig. 2: Digital terrain model of the Dreamers Bay locality, with low ground at left, and the ancient anchorage in the bay itself at right.

The southern coast of the peninsula (Fig. 2) consists of high cliffs or very steep eroding slopes except for one area in the west about 600m long, where a stretch 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 eroding 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 to the east formed a practicable natural anchorage, its use confirmed by the submerged ancient artificial breakwater, anchors and other archaeological remains known on the sea floor.

This part of the southern coast has been largely protected from human interference 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 vehicle tracks and some surface features, it is largely undisturbed. However, its location on the coast and the soft bedrock has resulted in erosion and many of the walls are visible in wave-scoured surfaces and cliff edges eroding into the sea.

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 along the east-west shoreline.

In the 1980s, in the cliff-lined bay east 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 subject to preliminary survey work by local avocational archaeology workers which identified ancient anchors and ceramic concentrations thought to attest wrecks (Leonard and Demesticha 2004). The breakwater remains undated, but it has been suggested it is Hellenistic (Leonard *et al.* 2007).

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 (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, some 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 noted. The structures were identified as probably warehouses (*horrea*) rather than residential.

The Ancient Akrotiri Project: objectives and previous work

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 were under immediate threat, due to intense rainfall runoff and waves during winter storms eroding them into the sea. The School of Archaeology & Ancient History has broad expertise in Mediterranean archaeology, although not previously in Cyprus. 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).

Even as plans were developed to investigate the remains at Dreamer's Bay, it was soon apparent these could only be understood in relation to the rest of the archaeology of the peninsula, in the setting of the wider region of south central Cyprus, especially the contemporaneous city-states of Kourion and Amathous; hence the choice of project name. The project has also been a collaboration from the outset. While led by the University of Leicester, the planned comprehensive study of the ancient port required underwater research, and so the UK's leading centre of maritime archaeological expertise, the University of Southampton, was invited to participate. Led by Dr Lucy Blue, Southampton's contribution also included geomorphological aspects, now undertaken by Miltiadis Polidorou of the

University of Athens. In 2018, Prof Stella Demesticha of the University of Cyprus also kindly joined the project, bringing her ceramics expertise. Just as important as the academic partnerships are the close collaborations with UK MOD and the Dept of Antiquities, the Akrotiri Environmental Education Centre and the WSBA Archaeological Society, which make the project possible.

The research questions at Dreamer's Bay include:

- What is the nature and extent of the occupation? It clearly involved harbour works and apparently had peripheral cemeteries, but how large was the built-up area, and what can we discover about its layout and nature?
- When was it established, how and why did it develop? Was it indeed a Hellenistic foundation as has been posited? Was its flourishing related to the silting up of the channel which turned Akrotiri from island to peninsula, creating a need or opportunity for a harbour at the site? Did the earthquake which devastated Kourion and its region around the AD360s play any role?
- What trading functions did the site have, and with which Mediterranean trade routes did it engage?
- How did it meet its end?
- What might be done to preserve the archaeological remains, and to present the evidence to public audiences?

Results of the onshore field seasons are detailed in the previous interim reports (James & Score 2015; 2016; 2017; 2018), and below. The two seasons of underwater work, led by LB in September 2018 and September 2019, are reported separately by Lucy Blue (2019; forthcoming).

Overview of the onshore excavations, 2015-2019

Table 1: Areas excavated between 2015-2019

UoL Area	**Description of Archaeology**	**UoL Season**	**Work undertaken**
Area 1	**Structure 1:** Long 'warehouse' type structure 4m x 24m +	2015	Cleaned and recorded. Some sample excavation.
Area 2	**Structure 3:** North-south oriented building (4m x ?m), very eroded only a few fragments left.	2015	Recorded.
	Structure 4: East-west oriented 2 celled building (4m x ?m).	2015-2018	Recorded. Geophysical Survey Trial pits for clarification.
	Structure 5: East-west oriented structure. Internal walls, collapsed and external courtyard.	2015 - 2018	Excavated and recorded over 4 seasons. Geophysical Survey (2018) Trial pits for clarification (2017-8).
Area 2/Trench 5	Windblown cover sands but no archaeological features	2016	Trench excavated
Area 3	**Structure 6:** Three walls eroding out of the cliff edge and further fragments of wall to the west.	2015-2016	Cleaned and recorded. Geophysical Survey (2018) Test-pit excavations to test the geophysical anomalies (2018).
Area 3/Trench 6	Possible **Structure 9**: Robber trenches suggesting possible buildings on a different NE – SW alignment to the other coastal structures.	2016	Trenches 6a and 6b, sample excavation and recording of robber trenches.
Area 4	**Structure 2:** Multiphased building possibly linked to Structure 1.	2015-2018	Fully excavated and recorded over 4 seasons.
Area 7	**Hill top Structure 8:** High status structure overlooking Dreamer's Bay. Hints that this is a structure or complex of some size.	2016-2019	Main room cleaned and recorded. 2 x trenches to look at extents of the building.
Area 8	**Structure 7:** Rectangular building on raised area.	2016-2018	Cleaned and part excavated.
Area 10	**Quarry**	2018-9	Survey of quarry and part excavation of buildings and rock cut drain.

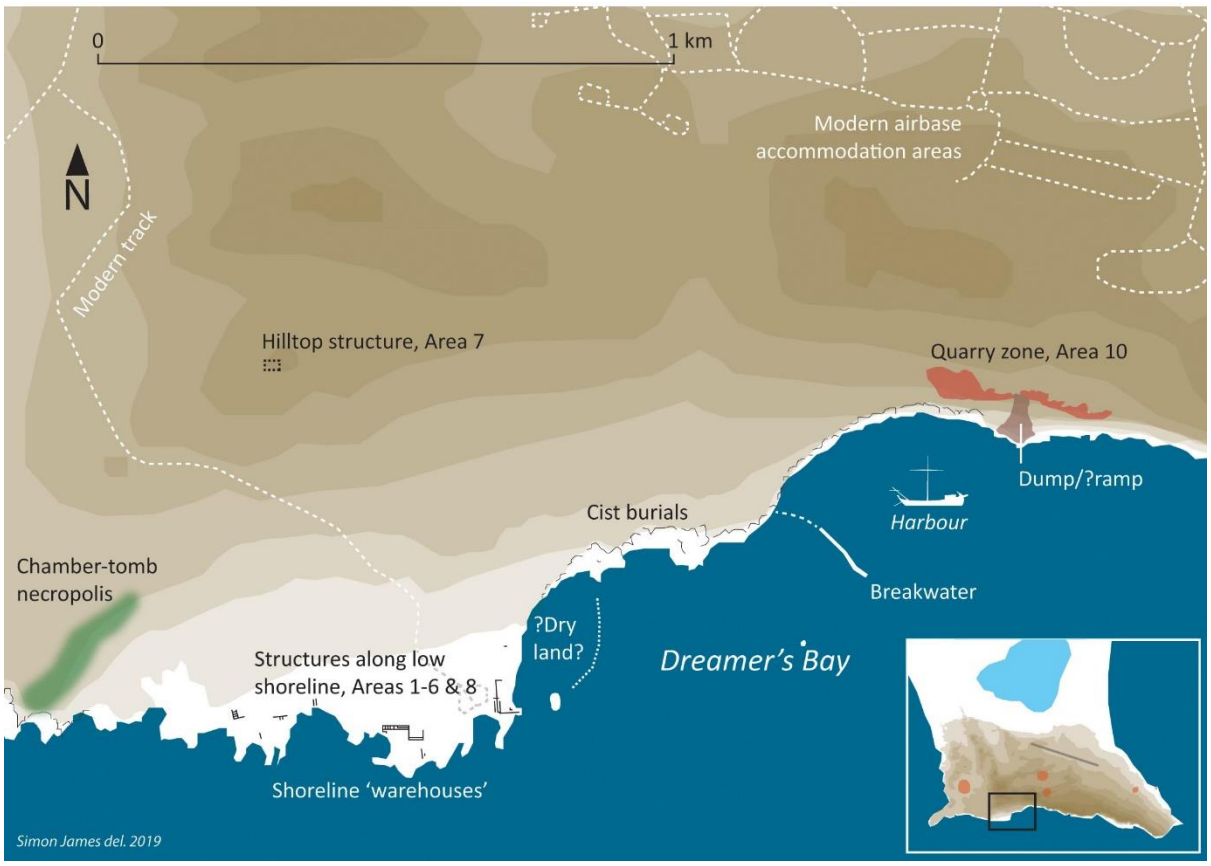

Fig. 3, top: Location of excavated areas at and around Dreamer's Bay. Below: Areas and structures west of Dreamer Bay itself identified 2015-2017, overlain on Google Earth

2015 Excavations

The initial 2015 season involved the inspection and recording of the remains visible on the surface along the shoreline from around the Dreamer's Bay road head to just within the firing range (Fig. 3). A number of areas were cleaned, and small trial trenches opened. It became evident that the remains were more extensive than had been appreciated and that further work would be needed to fully document the immediately threatened remains, discover the full extent of the harbour settlement, and to place it into its landscape and maritime context (James and Score 2015).

SJ had also for several years been in partnership with the Defence Archaeology Group which contributes to Operation Nightingale, a programme to help injured UK Service personnel and veterans recover through engaging them in archaeological fieldwork. The 2015 season laid the groundwork for larger-scale fieldwork, with Operation Nightingale participation, to be undertaken the following year. The 2015 work comprised:

Area 1: This area contained a structure (Structure 1) on the Dreamer's Bay south-eastern headland that was already partially exposed. This was cleaned, and some small test-pits excavated to look for possible buried stratigraphy. **Structure 1** comprised a long narrow structure orientated north-south, approximately 4m x at least 24m long but continuing to the north. Walls were also identified to the west and the south possibly forming an external courtyard. A number of shallow pits containing burning were visible within this 'courtyard' area. Test-pits in the interior of the building found no evidence for floors. Along the eastern coast were the remnants of a revetment wall built against the cliff edge and at least one rock cut slot feature possibly associated with the structure.

Area 2: Three structures were identified in this area. **Structure 3** orientated north-south on the southern coast comprised two parallel lines of stone (approximately 4m apart). This area is characterised by uneven bedrock and cleaning and trial excavation of the area suggests that the rest of this structure has eroded into the sea. **Structure 4** to the northwest was orientated east-west and appeared to comprise a narrow building with a possible 2nd cell to the north. **Structure 5** appeared to be the best preserved and comprised a similar narrow building to Structure 1 but with internal divisions and a zig-zag wall to the south following the line of the coast, possibly a similar external 'courtyard' area as seen in Structure 1.

Area 3: Three walls were visible eroding out of the section possibly indicating another north-south structure (**Structure 6**).

Area 4: Remnants of a second structure (**Structure 2**) including a wall, areas of burning and rock-cut features were identified approximately 25m north of Structure 1. Although only quickly cleaned it was evident that the archaeological deposits in this area were much more complex and extensive than in Areas 1 and 3.

Area 7: A building on the higher ground inland to the north (Fig. 3) had been previously identified (**Structure 8**), in a disused, fenced rubbish dump. It was inspected, and the previous excavations were easily located.

Area 8: Another coastal building was identified to the west (**Structure 7**) and photographed.

2016 Excavations

Six Areas were identified for further work during the 2016 season. In addition, permanent stations were located around the area by Differential GPS to provide a fixed grid for recording (James and Score 2016).

Area 2: Structure 5 was further cleaned. Following the identification of a large amphora potentially still in situ, a trench was excavated across the building. This found several internal walls and two other pottery vessels in situ, suggesting that Structure 5 was more complex and contained possible preserved features and finds within the interior.

Trench 5: A single trench was machine excavated to determine if archaeology in Area 2 continued northwards. No evidence for any archaeology was identified although a significant depth of sand was seen suggesting windblown cover sands.

Area 3/Trench 6: Two trenches were machine excavated to the north of the coastline to try and find the extents of the walls identified in Area 3 and further possible buildings. In the event no further evidence for **Structure 6** was identified and it seems that the majority of this building has been lost to coastal erosion. Instead evidence for other walls in the form of robber trenches, on a very different alignment to the rest of the structures were recorded running north-east to south-west (**Structure 9**).

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

Area 7: This area lies on top of the hill overlooking Dreamers Bay. **Structure 8** comprises a building with at least one room, covered in stone rubble (presumably much of this demolition rubble). This potentially multiphase building possessed plastered walls, high quality gypsum flooring, ceramic tile roofing and an enigmatic semicircular masonry feature on the south-east corner.

Area 8: This area lies within the Rifle Range Area, west of the fence. **Structure 7**, a rectangular building with rooms approximately 4m wide on a north-south alignment was surveyed and photographed.

2017 Excavations

Four areas were looked at during the 2017 season (James and Score 2017).

Area 2: Trial pits were excavated at certain points of **Structure 4** to attempt to identify the plan of the structure. Test-pits identified further wall sections of the building.

Full excavation of **Structure 5** was undertaken, using a JCB to clear the overburden with hand excavation of the interior of the building. This recorded a rectangular east-west building with several interior divisions and an external walled courtyard to the south. The walls were constructed on top of the natural bedrock with a fine sand and crushed bedrock layer used to level the ground before construction. There were at least two different styles of wall construction with the western wall containing tile fragments as well as stone suggesting that this wall had either been replaced or

represents a different phase of construction. Several gaps in the walls hinted at entrances or a more complex building.

It was apparent that the north-eastern walls of the main room had collapsed inwards. This had preserved several pottery vessels beneath the tumbled stone; the proximity of the vessels to the internal walls suggesting they had been leant against these walls and there were hints that some may have been counters rather than full-height walls and some upside-down vessels may have fallen from their surface, with a fragment of flat marble possibly representing the counter top.

Area 4: The area excavated in 2016 was reopened and expanded by JCB and excavation continued to try and determine the character, date and extent of the structure. Further walls of **Structure 2** were recorded suggesting it was much larger than previously thought, and it became evident that there were earlier phases to the building including walls and rock cut features. This area contained large amounts of pottery and burnt deposits suggesting significant activity in this area. The building is on the same alignment as Structure 1 and possibly part of the same complex sharing one or two north-south orientated walls

Area 7: The wall lines and floor levels of hill top **Structure 8** had been identified and cleaned in 2016. In 2017 two small trenches were opened outside the main building by machine to determine if the structure continued to the north and west. The southern wall was traced, and its return identified marking the westernmost extent of the building. The second trench looking to identify the northern extent of the building, however, found what appears to be either a separate room or building, with a curving wall and a plaster floor laid on a layer of pea-grit gravel.

Area 8: Structure 7 within the Rifle Range Area to the west was investigated to determine the condition and preservation of the structure. It was initially thought that this building was badly eroded. However, several small test-pits proved that at least part of the structure had well preserved walls.

2018 Excavations

The strategy for Easter 2018 was to prioritise completion of work on shoreline buildings, and to conduct the initial phase of fieldwork on the other element of the Dreamer's Bay port landscape, the quarries and associated features above the protected harbour; this would lay the groundwork for detailed survey and any excavation in the quarry zone for the projected fifth and final season in 2019. To this end, it was decided to temporarily suspend work on the hilltop structure, area 7, the intention being to make a concentrated effort on this, too, in 2019.

The planned 2018 work therefore comprised, first and foremost, completion of surveying, excavating and recording of the Roman/Byzantine structural remains along the shoreline. The geophysics results from this area (James *et al.* 2018) detected multiple electromagnetic anomalies indicating the hidden extent of some known structures and the possible existence of others. Small trenches were therefore planned around areas 2, 3 and 8, 'ground-truthing' to check whether they represent ancient buildings.

The main excavation effort was to comprise continued work on structural remains and associated sealed contexts in Area 4, at the eastern end of the low ground facing Dreamer's Bay itself, and in Area 8 at the western end, inside the rifle ranges.

On top of the cliffs overlooking Dreamer's Bay itself are extensive ancient quarries, with clear evidence of cutting of orthogonal blocks and round mill stones. Some of the products of the site were probably moved inland by visible track-ways, but probably most were transported by sea from the anchorage below the quarries, perhaps an important reason for establishment and maintenance of the harbour. The 2018 objective was to survey the quarries, and associated or interspersed archaeological remains (already known, from previous amateur surveys by Haggerty and recent informal inspection, to include a water channel, rock-cut steps, track-ways, and now one or more buildings have been identified in the area). The geology of the area and the output materials of the quarries was to be characterised by Miltiadis Polidorou.

In addition to manual survey in the quarries, use of a camera drone was also proposed as the fastest and safest way to record the cliff-edge evidence, graphically and photographically. However, in the event permission to undertake this—which we knew was asking a lot within a busy, high-security airbase—was not forthcoming from MOD.

2019 Excavations

The 2019 season saw excavation take place within two areas: Area 7 and Area 10 (the quarry site). Summarised here, they are reported in more detail below.

Area 7: attention was returned to the hilltop structure, to clarify its nature, extent and conformation. The surrounding land was quite heavily overgrown but gaps in this overgrowth permitted two thin strips to the north and east of Building 1 to be opened. The area to the east of Building 1 contained a wall which may have been an outer courtyard wall. There were traces of gypsum on the floor which may have been the courtyard surface. This gypsum floor had been robbed or destroyed and it was covered in layers of decay or destruction debris. The area to the north contained a circular-shaped room or structure of uncertain function. Traces of walls projecting from Building 1 may have once joined with this structure, but they appear to have been largely destroyed or robbed. There was a destruction or decay layer lying over this area. The immediate area around the northeast corner of Building 1 was also excavated and here there were traces of possible later repairs or rebuildings with tiles and stone slabs placed on the floor and a millstone lodged in the corner of two walls.

Area 10: Following the survey of the quarry area in 2018, the 2019 season saw the excavation of part of the quarry site including 12 small trenches and the excavation of a rock-cut drain which ran along the cliff edge. The 12 trenches were dig back behind the drain and uncovered what may have been a boundary wall to a building complex and the building or buildings constructed behind it and built into the edge of the quarry slope. It was unclear whether the walls represented a single building or different buildings. Some rooms contained traces of painted wall plaster with black and red stripes. The building appears to have been at the same alignment as the water tank and steps on the quarry site and so it

may have been contemporary with these features. The structure may have been associated with the use of the quarry or constructed afterwards. It is unclear whether it had a low roof, like a shelter, or a more substantial higher roof. The painted wall plaster may suggest that there was a more substantial building here, but this is as yet unclear.

Methodology

Excavation was generally 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 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. Although the students were trained using conventional recording, Surface from Motion (SfM) technology was also used to produce 3D photogrammetric models in addition to traditional recording techniques.

All excavations were tied into the previous work using a Total Station and the permanent stations located using DGPS.

Site restoration

As most of the remains excavated were fragmentary, friable, and in many cases vulnerable to marine erosion and the trenches were potential hazards to passers-by, the general practice was to backfill trenches at the end of each season. The exception was the hilltop site, which a already a significant excavation at the start of the project, and which lay inside a secure, fenced area. However, following completion of the 2019 season this, too, was backfilled, leaving markers to indicate excavated areas, to protect the remains.

April 2019 Excavation and Survey Results

Hilltop structures overlooking Dreamer's Bay: Area 7

Initial exploration, 2016-17

Ancient structures on the hilltop were reportedly first identified in the 1980s, before the area became a disused and fenced-off rubbish dump. WSBAAS and the Buffalo project undertook initial investigations and uncovered part of a substantial masonry building on the crest of the hill. In 2016 the AAP commenced further work in this area. Iit became clear that the room was part of a larger multi-phased structure (Fig. 4) with gypsum floors and wall plaster on the walls (Fig. 5). 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. 6).

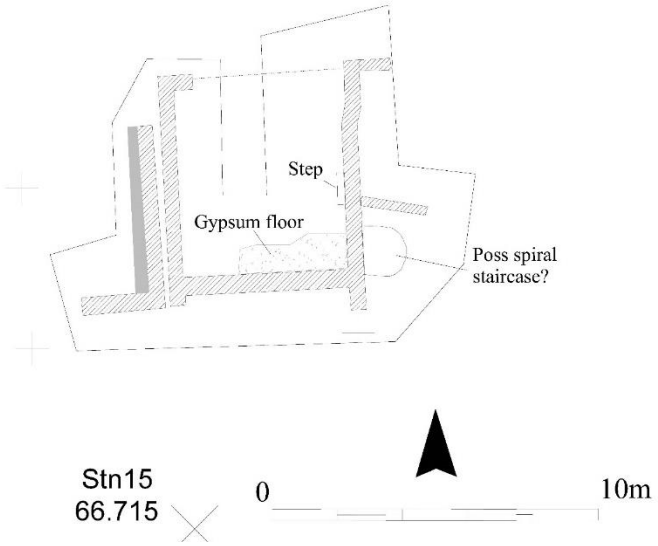

Fig.4: 2016 Plan of the hill-top structure

Fig. 5: The south-east corner showing the remains of the wall plaster and the gypsum floor.

Fig. 6: The semicircular structure on the south-east corner. Looking west.

In 2017 two small trenches were excavated, one to the west and one to the north, to try to determine the extent of the structure(s) (Fig. #7). The western trench traced the line of the southern wall down-slope. Unfortunately, this section was quite badly disturbed by modern activity; however, a junction was identified with a possible corner and wall running north (Fig. 7). Further west bedrock was uncovered suggesting that this wall represents the westernmost limit of the building.

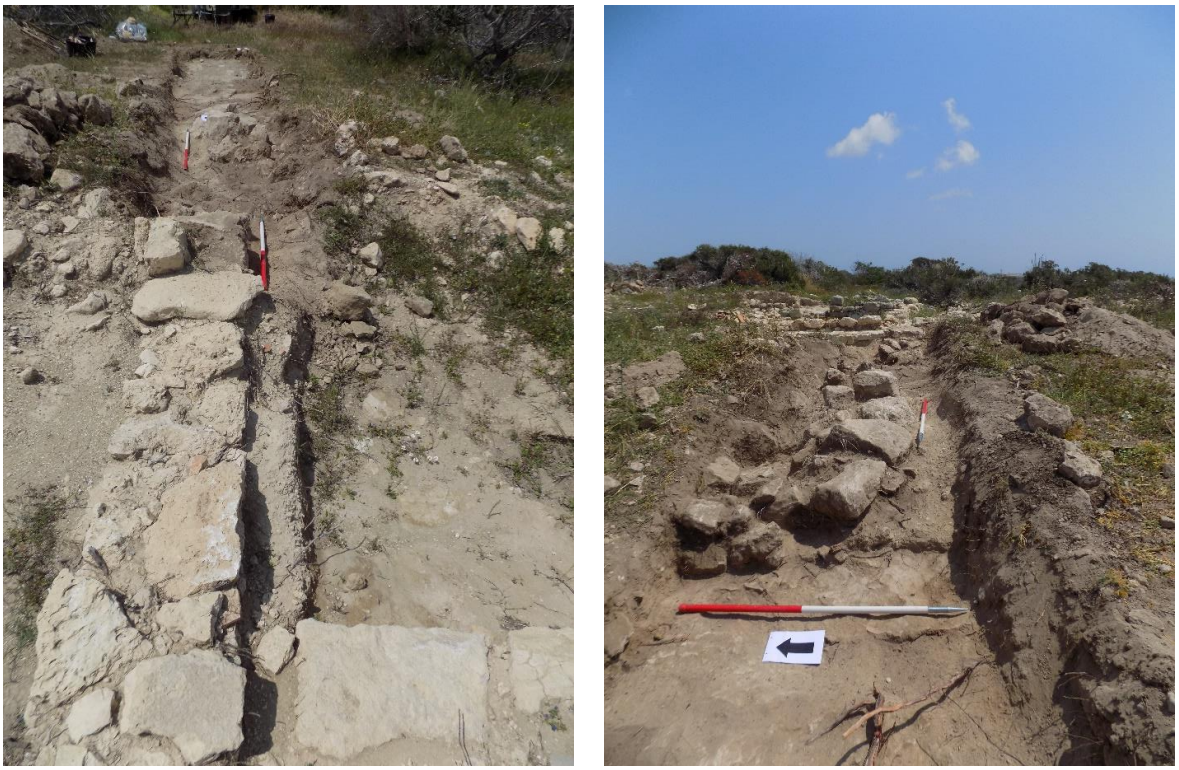

Fig. 7: Area 7: tracing the line of the southern wall to the west.

Fig. 8: Area 7 northern trench showing the curved wall and floor looking west.

The northern trench was located to seek the northern extent of the building. Although a wall was revealed, it did not seem to be associated with the main building. Rather it was curving westwards across the trench (Fig. 8). On the south side a plaster floor overlay a layer of pea-grit gravel. The features in this trench seemed more likely to represent a separate building or room structure on the northern side of the main building and its function remains unknown.

2019 Excavations

In 2019 work in Area 7 (Fig. 9) focused on three main areas: the northeast corner of hilltop structure Building 1, a long trench extending to the east (7E), and extension of the existing trench to the north (7N). The northeast corner of Building 1 revealed a possible later phase or phases of repair or rebuilding along with evidence of demolition or decay. Area 7E revealed a wall which it seems possible was the wall enclosing a courtyard of the building which had an internal gypsum floor that had been partially robbed or destroyed. There were also decay or demolition layers here. Area 7N revealed a circular structure of uncertain function which may have been joined to Building 1 through walls that have now been lost. There was evidence of decay or destruction which could be associated with an event such as an earthquake or perhaps more gradual decay or deliberate destruction and robbing.

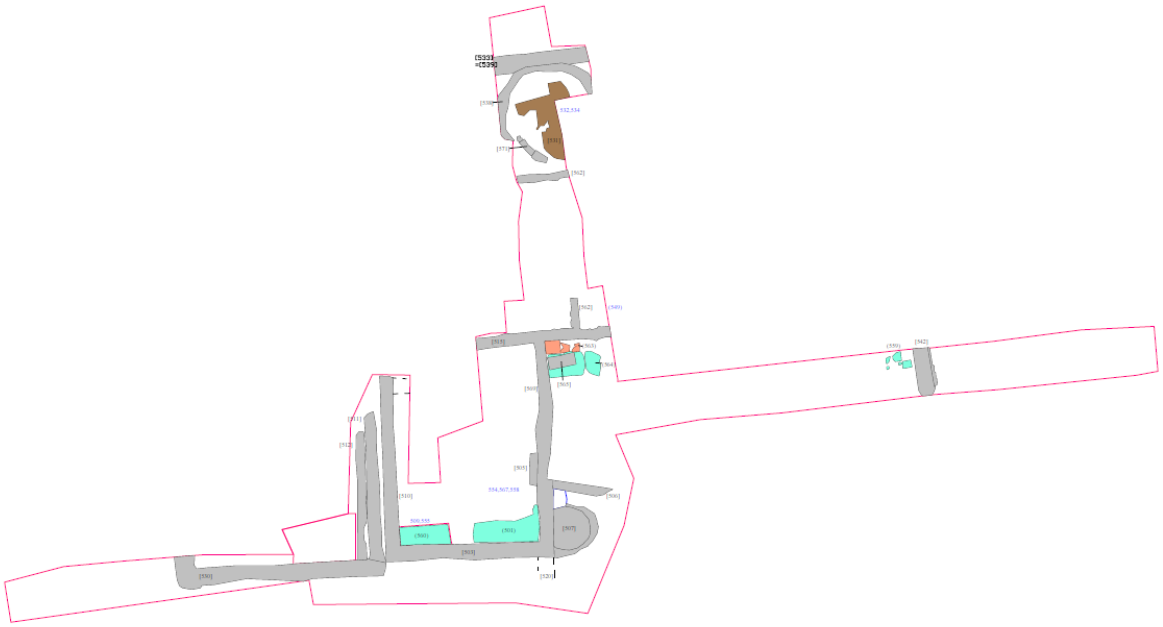

Fig. 9: Area 7 with the main features labelled.

Area 7E

In 7E a long thin area was opened about 21 m long E-W and 2 m wide N-S. At 11.5m along the length of the area was the remains of a N-S wall (542) below the top-soil (Fig. #10). Within the exposed area the wall measured 160 cm long, 55-70 cm wide and 60-65 cm high. The Wall was composed of upper courses of large to medium sized boulders with some pieces of roof tile in places. The foundation layer consisted of more irregular smaller stone. On the Western side of the Wall were traces of wall plaster. The tile within the Wall may indicate that it was constructed at a late date, but it is not possible to confirm this as yet.

Fig. 10: Wall (542), mixed deposit (548) and gypsum floor tiles (559). (Photo ADB15_0803)

To the immediate West of the wall (542), and up against it, was a mixed deposit (548) which appeared to represent a dump or decay layer and contained pieces of pottery and roof tile as well as shells possibly representing food waste. This deposit lay on top of a layer of gypsum floor tiles (559). These tiles came up to the edge of the Wall (542) and they represent a floor laid down in the area (Fig. 10). It seems likely that the gypsum tiles originally covered a large area but they had been robbed or destroyed at some later stage. The probable continuation of the gypsum floor (547) was uncovered around 3 m to the West of (559) (Fig. 11). Across the 7E area above the gypsum floor were deposits of demolition, decay or rubbish material. The material included stones of various sizes and mortar which may have been decayed or destroyed building material. Deposit (540) also included a number of Small Finds including a copper alloy Byzantine coin, a copper alloy buckle plate and a number of possible iron nails. These finds could be indicative of rubbish deposits rather than use of the gypsum floor area.

Fig. 11: Ggypsum floor (547) and deposit (550). (Photo ADB15_0816)

To the East of the Wall a sondage around 50 cm wide was dug the length of the Wall in order to attempt to reach the bottom of the wall and bedrock was reached and no gypsum tiles were found. This would suggest that there was no gypsum flooring on the east side of the wall unless it had been robbed out or lost. Leaving a space of around 50 cm another sondage to the West was dug and here also no gypsum floor was found. In both of these sondages there appears to have been a similar layer of what may have been destruction or decay material including pieces of mortar.

Overall the features in the 7E may represent a section of outer boundary wall of the building complex which surrounded an inner courtyard which was paved with gypsum tiles. Much of this flooring was later robbed or destroyed and there was an accumulated rubbish, destruction or decay layer over it.

Area 7N

Stretching off to the north of the structure was an area around 17 m long and between 3.5-2 m wide (7N). At the north end of the area were a number of walls which were part of a circular structure or room about 3 m wide. The northern most wall (533) was an E-W Wall composed of mainly limestone/sandstone blocks with some smaller stones and a rubble core (Fig. 12). Parallel to this Wall was another Wall (537) running E-W 3 m to the south also constructed of limestone and sandstone

blocks (Fig. 13). In between these two walls was a curved wall possibly representing a circular room or structure. The Wall was composed of a rubble foundation (538) and the inner facing (571) of limestone blocks. Within the circular structure was a floor layer (531) of clay tiles or inscribed clay. It was very friable and cracked and possible tiles of around 60 cm square were identified. The clay floor lay on top of a pea grit make-up layer (532) which in turn lay on top of a loose sand and stone make-up layer (534). Above the clay floor was a rubble infill (535) which may have been a collapse, demolition or decay layer. Cutting into the floor was a feature with a dark fill (551) and possibly beneath the curved wall (538) representing another phase of activity but the fill was not excavated.

Fig. 12: Wall 533 and the curved wall and the interior tiled floor. (Photo ADB15_0777)

Fig. 13: Wall (537) looking north towards the circular structure (Photo ADB15_0808).

South of Wall (537) was a layer of sand and rubble (536) stretching for about 6 m to the south. This deposit contained a large ashlar block and gypsum slab fragments as well as a number of pottery fragments. This deposit may represent tumbled stone or collapse or robbing deposits. One possibility may be earthquake damage but there are many other possibilities for the cause of this material. It is possible that in this area was once connecting walls between Building 1 and the circular building or room. Remains of Walls (562) and (566) connected to Building 1 and running north may have been part

of these connecting walls but this is as yet unclear. The function of the circular room or structure is also uncertain at this point.

Central Area

Work also took place in the northeast corner of Building 1 around the area of the E-W wall (515). A N-S wall (562) was identified abutting against the north side of Wall 515 and running into the rubble layer (536) to the north (Fig. 14). This wall ran for about 230 cm and was around 40 cm wide. The wall was composed of limestone blocks and stones. Its function is unclear, but it may have been a connecting wall with the circular structure to the north with the middle section now lost through robbing or destruction. To the east of the wall was deposit (549) which may represent rubble collapse or decay and contained some large blocks including cut and faced stone with the finer sand deposit.

Fig. 14: Wall (515) running east-west and Wall (652) abutting it, running north-south. The rubble layer (536) is also shown as is the edge of Wall (566) and the millstone (568). Also in the photograph is the tile layer (563) and gypsum layer (564). (Photo ADB15_0818).

Also on the north side of (515) was another possible wall (566) of limestone and mortar running N-S and parallel to wall (562) and 150 cm to its west. The surviving section of wall was also around 230 cm long. In the western corner connecting walls (515) and (566) was a carved basalt millstone (568) which seems to be lying within, or perhaps under, the (536) rubble layer (Fig. 15). It was jammed into the corner of the walls and may represent either structural disturbance or it may have been deliberately placed there as a way of strengthening the walls or formed part of later structural repair of the building where stone was reused from elsewhere. The stone was cone shaped indicating that it was the lower part of the millstone and was 22 cm in length and 13.5 cm in diameter.

Fig. 15: Millstone (568) and Walls (566) and (515). (Photo ADB15_0839)

On the south side of Wall (515) excavations identified traces of gypsum wall plaster (561) applied to the Wall like other walls in the building. Against the south side of the wall was a mixed deposit containing sandy silts and crushed wall plaster suggesting collapsed wall or robbing. The N-S wall (504) abuts the south side of Wall (515) within the western corner of these walls was what appears to be another decay or destruction layer (545) consisting of mixed stone/masonry fragments and crushed mortar and sandy loam. It is in the vicinity of this layer that there appears to have been a new section or phase of wall (569) constructed which was altering, replacing or adding to Wall (504) and ran for about 3 m (Fig. 16). It was constructed of mortared limestone blocks with the occasional conglomerate block and some gypsum tiles used as levelling layers. There was a kink on the west face of the wall which may indicate a possible extension or enlargement of the room or a phase of structural change or repair. This may correspond with a possible change in Wall (510) on the western side of the Building. Here a lump of conglomerate (570) seems to correspond with the kink in 504/569 and may indicate an enlargement of this room but sequencing is difficult as only the top of it was exposed.

On the south side of Wall 515 and in the eastern corner with Wall 504/569 was what appears to be a later phase of activity represented by the later reuse of material above and/or replacing areas of the gypsum floor of what may have been the courtyard area or possibly a small room. Two blocks of conglomerate (565) around 18 cm thick, 40 cm wide and 45 cm long each were found at the edge of the wall and placed over the gypsum floor. Adjacent to these blocks to the north, against Wall 515, were Roman period roof tiles (563) laid on the floor apparently reused as floor tile. They were cracked, perhaps due to destruction material on top, and one tile had an X pattern on the tile made through finger marks. The surviving gypsum slabs (564) had traces of mortar on top which may suggest that stone blocks or other material had also covered them at some point, but this is uncertain. The material would seem to represent structural alterations or repairs. In the southwest corner of the room of Building 1 was a surviving layer of gypsum tile floor (560) beneath a layer of possible destruction and roof collapse (555) (Fig. 17).

Fig. 16: Wall (504) and (569) and the interior of the room. (Photograph ADB15_0824)

Fig. 17: The gypsum floor surface (560) against the southern Wall (503). (Photo ADB15_0813)

Building 2?

To the west of Building 1 a number of walls were documented on the same alignment as Building 1 and running parallel to wall (510/570) of Building 1. These walls, (511) and (512), run parallel with each other and overlap, but little can be said about what they represent. The sequence of these walls is difficult to interpret but they may represent different phases of building activity and use of this structure. They may represent a separate building or part of the same complex of structures.

The extent of the hilltop complex

Inspection of the hilltop permitted hand-held GPS plotting of the approximate extent of the low rubble mound left by the part-excavated structures (Fig. 18).

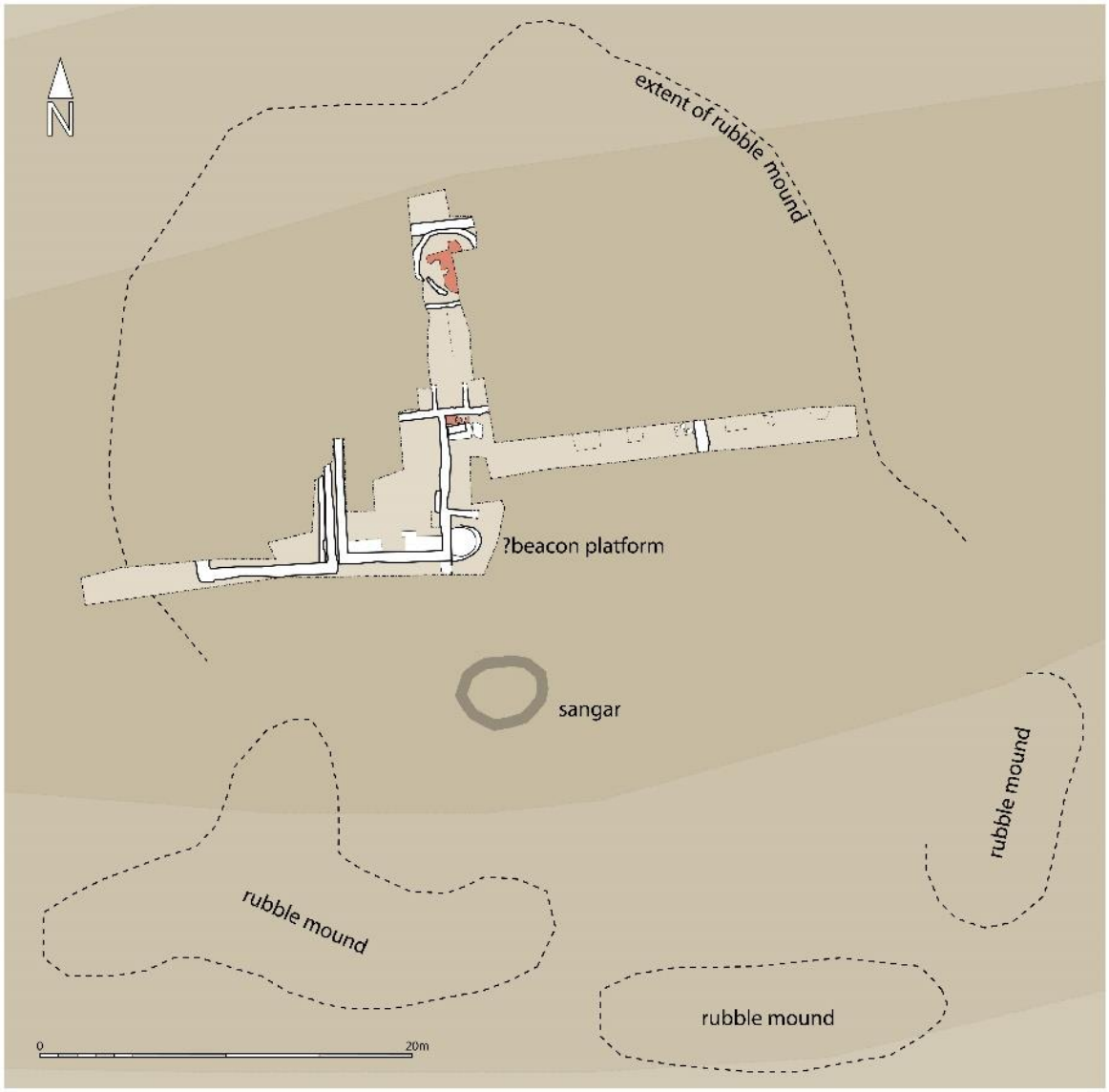

Fig. 18: The apparent extent of the hilltop site, indicated by the extent of rubble mounds. Also plotted is one of the sangars (excavated defensive emplacements), digging of which apparently initially revealed the ancient structures.

Dating

Initial dating indications from the limited quantities of pottery, roof tile, the very few coins, and a copper alloy belt plate (Fig. 19), are of late occupation, through at least the sixth century. However, structural indications of multiple phases suggest possibly earlier foundation, perhaps contemporary with the shoreline buildings.

Fig. 19: a copper alloy buckle plate of sixth-century type from Area 7. It was found in a demolition deposit (540).

The quarry zone above Dreamer's Bay: Area 10

Initial exploration, 2018

Area 10 comprised the extensive zone of ancient quarries on top of the cliffs overlooking Dreamer's Bay, more than a kilometre east of hilltop Area 7. In 2018 a survey was undertaken of the quarry area to record features that had long been identified but never fully documented (James and Score 2018). Features included cuts of circular millstones, stone-cut steps, cistern-type features and a linear channel (Figs 20 and 22). The other major element of the landscape is a huge eroded pile of distinctive brown sandy earth on the steep natural slope below the quarried area. This represents re-deposition of thousands of tons of material which had originally overlain all or part of the strata targeted for human exploitation. Militiadis Polidorou has identified this as cemented ancient sand-dune material. It is clear that the material reached its present position as a result of human, not natural processes: it appears to have been tipped over the edge from a single point.

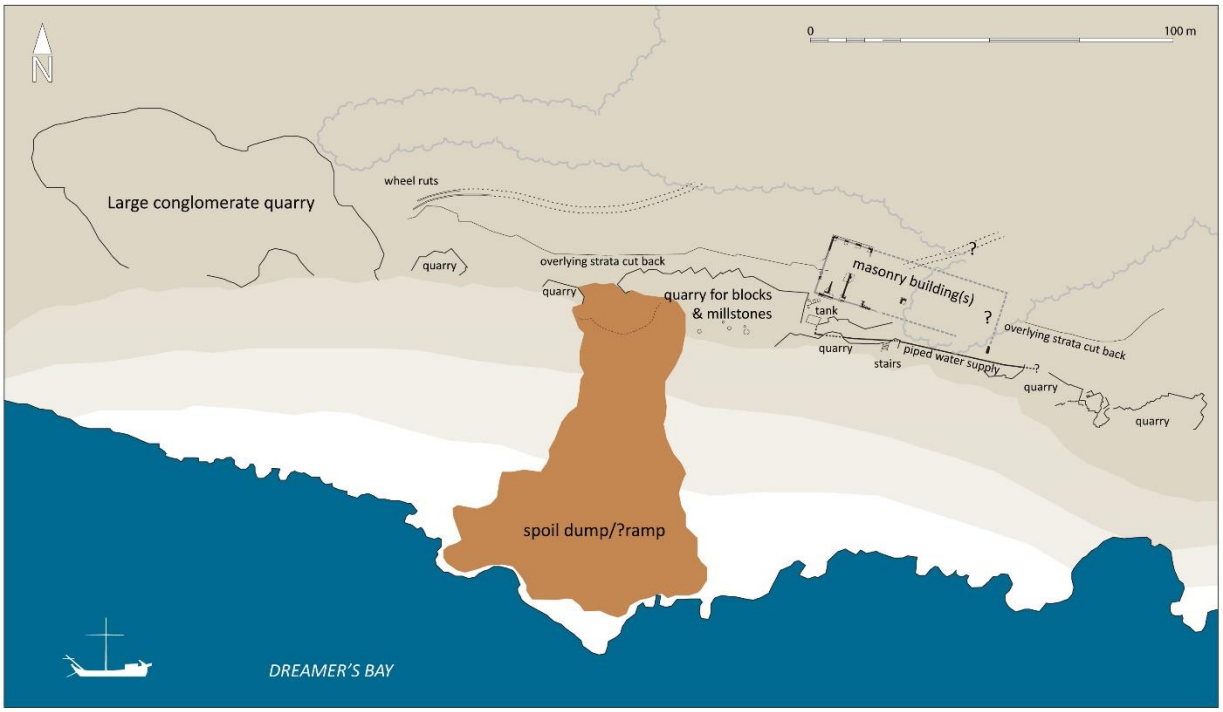

Fig. 20: The quarry zone overlooking Dreamer's Bay (Area 10).

Fig. 21: The quarry by the top of the dump/ramp. Foreground, traces of millstone cutting, with a 'dogtooth' quarry face left by cutting orthogonal blocks in the background.

2019 excavations

Following on from the 2018 survey of the quarry zone, 12 small trenches were opened in 2019 within an area of around 100 m by 75 m set back about 50 m from the cliff edge and associated with the cut ridge edge top. Outside this area, along the cliff edge, a rock cut channel or drain was also excavated (Fig. 22). The trenches revealed what appears to have been one main structure built into the edge of the quarry with a boundary wall separating it from the cliff edge. Other walls may represent additional structures, or they may have formed part of the same complex. Some of the walls had preserved lines of painted wall plaster.

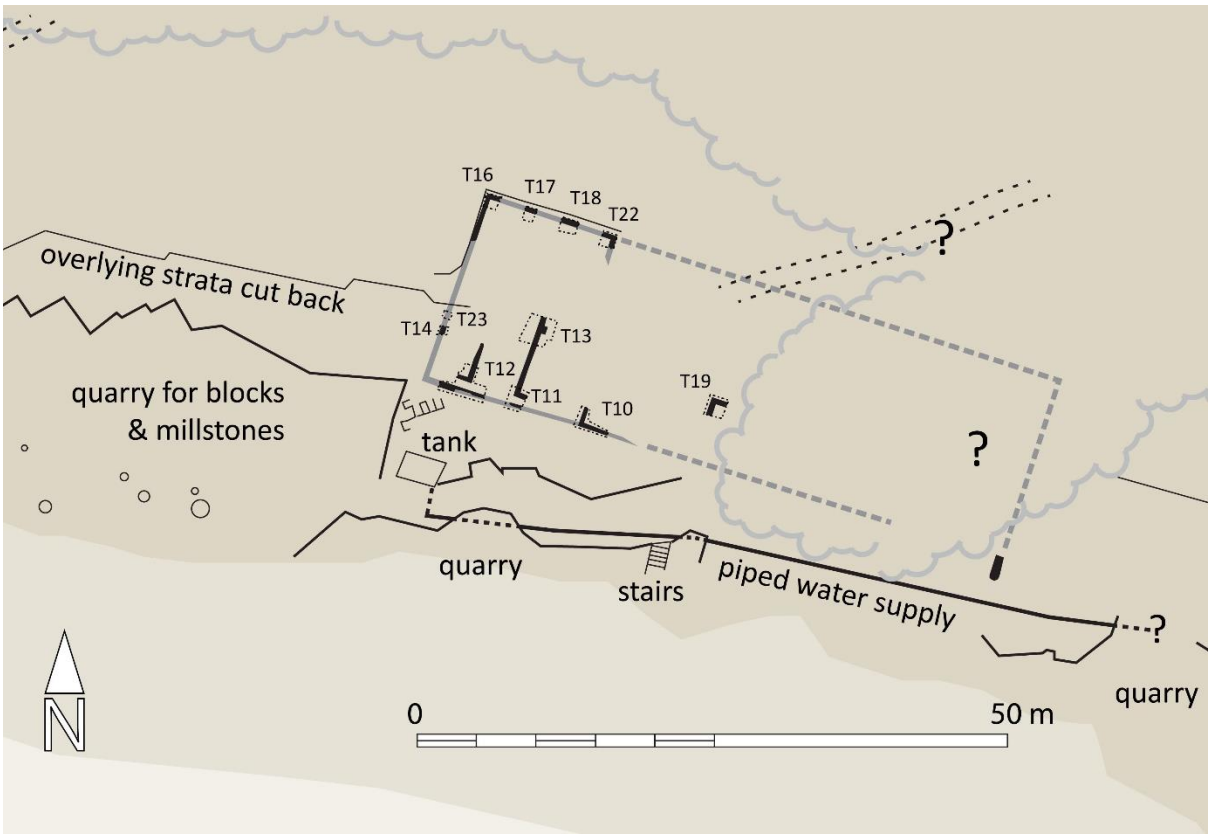

Fig. 22: Plan of the central quarry area with the 12 trenches over the building complex and the rock-cut water supply channel.

The rock cut channel or drain (590) was identified running for about 300 m along the cliff edge but in some areas it had been eroded away as the cliff edge eroded. The feature was excavated in two sections (T20 and T21) along its length and was found to be filled with natural silt (573) containing pottery, mortar and clay pipe fragments (Fig. 23). The drain was around 20 cm wide and 16 cm deep and it may have been cut as a hydraulic feature associated with work at the quarry and perhaps associated with a cistern.

Fig. 23: Photograph ADB15_0896 the rock cut drain and Trench 20.

Set back from the cliff edge, the trenches identified traces of a building or buildings which post-date quarry activity: the southwest corner of the complex overlies grooves left by cutting of orthogonal blocks. The building(s) was, however, broadly on the same alignment as the header-tank and steps recorded during the survey work and these features may be contemporary with the use of the building(s). Most of the trenches were not excavated to the fullest depth with only Trench 16 going deeper to a possible floor layer.

Most of these trenches contained the same upper layer (572) over the walls which appears to have been blown sand and debris. It was silty sand matrix with frequent large and small limestone blocks. It has the appearance of more natural decay and hillwash than demolition.

Trenches 10-12 were placed at points along the length of a wall that had been traced for about 100 m running east-west parallel with the cliff-edge and it is possible that this was a boundary wall to the building complex. The wall was constructed of conglomerate but was heavily eroded and consequently had a width of between around 27 cm and 62 cm and height of around 13 cm. At the western end of the boundary wall was a kink in the wall which would suggest perhaps a boundary rather than a building.

Trench 10 also contained a N-S Wall (578) in T-junction with Wall (575) constructed of limestone and conglomerate. Wall footings here may also represent an entrance way into the structure. Trench 11 lay around 25 m to the west of Trench 10 along the length of Wall (575). In the northeast corner of T11 was

also the angle corner of another Wall (577 and 576) composed of large granite blocks and seem to represent the corner of a room or building behind the boundary wall (Fig. 24). This wall was traced 25 m north into Trench 13 (Fig. 25) which also had traces of a wall abutting it running eastwards. Further along the length of the boundary wall Trench 12 (Fig. 26) also contained the corner wall (580) of a room or building and Trenches 14 and 23 contained the remains of the same north-south wall (581). Trench 19 measuring around 0.85 m by 1 m also contained the corner of a building or room with Walls 584 and 585 (Fig. 27). This trench was set to the east of the other trenches and it is not clear how these structural remains relate to the other trenches. They could indicate another structure or perhaps part of the same complex.

Fig. 24: Photograph ADB15_0859 wall structures (576) and (577) within Trench 11.

Fig. 25: Photograph ADB15_0865 wall (577) within Trench 13.

Fig. 26: Photograph ADB15_0862 walls (575) and (580) within Trench 12.

Fig. 27: Photograph ADB15_0890 walls (584) and (585) within Trench 19.

The back wall of the building(s) complex was built into the ledge of the quarry and was traced in Trenches 16, 17, 18 and 22 (583). It appears to have been all one single wall within these trenches. It was constructed of large granite blocks in linear formation. Within Trench 16 the wall survived to a maximum height of around 140 cm (Fig. 28). A north-south Wall (582) provided a corner to (583) within Trench 16 and against the edge of the quarry. The wall was plastered and so it was difficult to identify stone courses in the wall, but it would appear to have been constructed mainly of conglomerate. The plaster had a black painted border 8mm wide. Trench 22 also contained a N-S Wall (586) abutting Wall (583) and was constructed of large granite blocks. This wall was also plastered with traces of black and red stripes (Fig. 29).

Fig. 28: Photograph ADB15_0871 walls (852) and (853) within Trench 16.

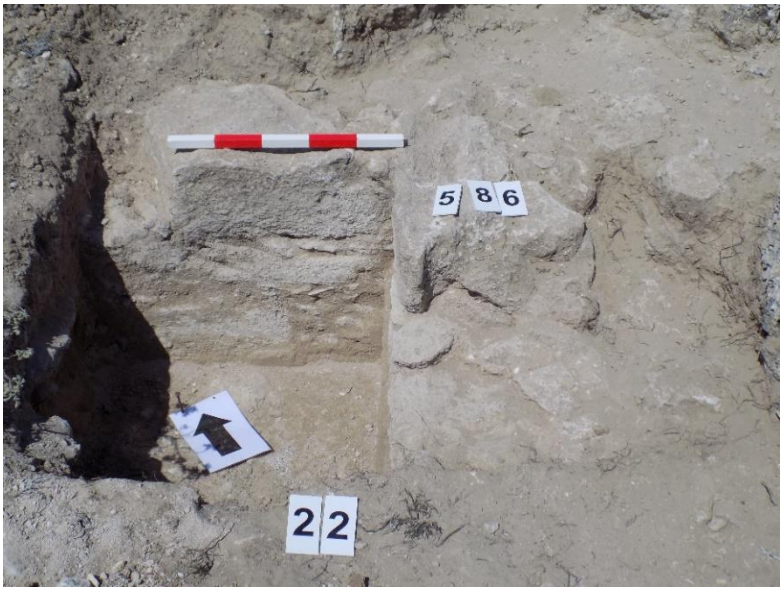

Fig. 29: Photograph ADB15_0888 walls (583) and (586) of Trench 22.

Trench 16 was excavated to a greater depth than the other trenches in order to understand more of the stratigraphy of the building. A small sondage around 80x80cm was dug within the corner of the trench against the corner of the two walls. Here a layer of fine sandy silt (574), perhaps blown up against the walls, was found above a possible beaten floor surface (588). A burnt area of burnt posthole (589) was identified cutting into the floor surface but this feature was not excavated (Fig. 30). There was no evidence of sooting or burning on the wall plaster here. The sondage would suggest that traces of activity do survive within the building.

Fig. 30: Photograph ADB15_0874 showing the burnt area in the floor of Trench 16 and the black lines of the wall plaster on the wall.

The nature of the structure represented by these walls and wall plaster is difficult to discern. If the structure is associated with the working of the quarry, then it could be a simple shelter with a fairly low roof above the walls. The wall plaster, however, suggests that the building had a higher status. d. Pottery found within the debris over the walls (572) included patterned ware but it is unclear whether this can be associated with the use of the building or not. The nature of the inner area between the boundary wall and the back wall of the building also remains largely unclear.

On an initial assessment of the limited finds, the complex is probably of imperial Roman date. The fact that it in part overlies traces of cutting of orthogonal blocks, while the water supply channel which almost certainly relates to it is itself cut by further quarrying activity (probably grinding conglomerate away for aggregate) provides valuable stratigraphic and so relative dating evidence indicating a prolonged and complex sequence of industrial and potentially residential activity at this point.

Outreach and community engagement

Mireya González Rodríguez

This report is a summary of the community outreach activities carried out during the Ancient Akrotiri Project April season in 2019. Community outreach is an essential component of the Ancient Akrotiri Project which aims to raise awareness of the cultural heritage of the area among both the military community and the civilian Cypriot population as well as promoting its protection. This year our field season coincided with the end of the school term and be first week of the Easter holidays, and the Outreach and Community Engagement programme focused on an afternoon session at RAF Akrotiri Primary School, an Archaeology Workshop for primary school children from SBA and local Cypriot schools. Wider community engagement was achieved through an Archaeological Trail which provided the opportunity to walk and talk about the cultural heritage on the base, promoting knowledge and interest of the archaeological sites of the peninsula, emphasising the importance of its protection and encouraging the local communities to engage with the archaeology and historical heritage of Akrotiri.

Fig. 34. BFBS Cyprus Twitter reporting on our Archaeology Trail

Prior to our arrival to Cyprus and in order to promote these evets, information leaflets and posters were created and distributed to the Akrotiri Environmental Education Centre (and through them to local Cypriot schools), BFBS, The Hive, Episkopi Primary and Akrotiri Primary schools (both schools

informed pupils of the events through their assemblies). Once at the base, to encourage participation and promote these events, Simon James and Mireya González Rodríguez were interviewed by Jade Callaway on the Breakfast show. During and following the Archaeology Trail, Jade carried out further interviews and video chats which will be accessible online through the BSBF website and the base's social media.

Akrotiri Primary School

Continuing our work at the SBA schools, I was requested to deliver a talk at Akrotiri Primary for Year 6 students. This event took place on 11th of April 2019 and 40 children engaged in the activity. The aim of the afternoon session was to enhance pupils' understanding of scientific enquiry and archaeological method. Using our fieldwork, including the geophysical survey and the work carried out by the University of Southampton underwater archaeologists, we discussed the process of archaeological investigation and the collaborative and multi-disciplinary nature of archaeology. from desk-based assessments, cartographic enquiry and satellite imagery to post-excavation conservation and archiving, as well as the on the field techniques.

The structure of the afternoon was designed to allow maximum engagement through questions and answers, and stretch the pupils by exploring, experiencing and learning about the archaeology of Akrotiri. The session concluded with a discussion about the importance of preservation and protection of the cultural heritage in general, and of the base in particular, and the significance of archaeological context.

At the end of the day, the children were able to explain how and why archaeology is almost always destructive, an unrepeatable experiment. They understood that properly conducted archaeological fieldwork is usually slow and methodical, and that recording of the site is perhaps the most important part of the archaeological method. We all agreed to the importance of being 'custodians' of the base's archaeological remains, particularly of those tempting pottery scatters, and passing on the knowledge they acquired during this session.

Archaeology Workshop

As stated above the Community Engagement and Outreach Programme aims to raise awareness of the cultural heritage of the area among both the military community and the civilian Cypriot population as well as promoting positive relationships between both communities. The aim of the Archaeology Workshop was to facilitate a space for interaction and building up new friendships through archaeology-related activities. Due to Health and Safety restrictions, the workshop had a maximum capacity of 30 children. The workshop was advertised through schools and the AEEC, and twenty-two parents filled in the question "How did you hear about the workshop?" in the registration form. 50% of the respondents found out about this event through the AEEC or school (27%, 23% respectively). 36% had found out through word of mouth, most of them citing 'friends from school'.

Fig. 35. Archaeology Workshop at the AEEC April 2019. Introductions and Icebreakers

In total, 29 children participated in the first Archaeology Workshop held at the Akrotiri Environmental Education Centre (AEEC) on the 14th of April 2019. The workshop was delivered in collaboration with the Cyprus Institute of Pedagogy. The activities were delivered with the support of Cristiana Christodoulou a local archaeology MA student at the University of Cyprus Koula Michael and Sophie Kamenou, educators from the AEEC, and Sophie Bradley, undergraduate student of the School of Archaeology and Ancient History of the University of Leicester. Vakis Michael was, as always, a hugely valuable support during the day, photographing the sessions and helping out setting up. The workshop doubled as an opportunity for Koula and Sophie to practice the delivery of activities that will form part of the archaeology courses offered by the AEEC to British and Cypriot schools alongside the natural environment ones from September 2020.

The workshop aimed to introduce primary school children to archaeology and the work of an archaeologist through interactive and enquiry-based activities. These activities were based on the four main areas of archaeology methodology:

- Research (maps, literature, photography)
- Survey and Excavation (site formation, stratigraphy, recording)
- Finds processing (sorting, cataloguing, mending)
- Interpretation (creating the story)

The day was organised as a set of tried and tested activities ready for teachers and education officers to lead. The activities were all held indoors at Akrotiri Environmental Education Centre, with the exception of the relay race. The whole programme for the day was cross-curricular enhancing previous knowledge in subjects like geography, history, science, mathematics, and English.

The day started with ice-breakers, asking students to find various ways of organising themselves, which provided an opportunity to discuss how archaeologists think in terms of categorising artefacts by fabric, decoration, date, etc. The children discovered how categorising helps archaeologists interpret evidence∝ observations (what we can see) as oppose to inferences (stories we tell).

After discussing how archaeologists learn through material culture, the children had an opportunity to analyse a modern assemblage. The children discovered how we can interpret modern 'rubbish' to learn about people today in the same way archaeologists use ancient garbage as evidence for people's lives in the past. We discussed how archaeologists answer questions about a culture by studying the things people used and discarded, and build upon initial facts and solve problems working together. We concluded by summarizing questions still unanswered questions that may require further research or excavation.

The workshop aimed to correct some of the many misconceptions about archaeology, often confused with fields such as geology or palaeontology, and the misrepresentations of archaeology in the media and film which also provide a distorted image about the discipline, the activities' objectives were to enable the children to define archaeological terms and basic concepts. We introduced the children to archaeology-specific terminology, concepts like Harris Matrix, stratigraphy, archaeobotany or geophysics. The children had an opportunity to consolidate these terms through crossword puzzle-solving, and a relay race where each word was placed in word-banks that the children, working in groups, had to retrieved and place in the appropriate space on the crossword before they send someone else to get another word.

Fig. 36. Learning about the past through objects

After a much-welcomed break, where the children from both communities interacted through play, we resumed the indoor activities. The second half of the day involved the children examining the principle of stratigraphy by building an edible archaeological site. The children successfully followed the archaeological story of Akrotiri, including floods (chocolate spread) and depopulation of areas (bread), some invasions and quiet impressive building skills with marshmallows and white chocolate chips, with plenty of pottery scatters, postholes and firepits (colourful cake sprinkles became multipurpose). A very thorough analysis through the cross-section of their 'sites' literally put a sweet end to our day.

Of the 29 children that took part (Fig. 34), 62% were Greek Cypriot, from 5 different schools (and one kindergarten!) from Akrotiri village and its vicinity, including 16th Elementary Limassol. The British children came mainly from both MoD primary schools, Episkopi and Akrotiri, and one boy joined us from The Heritage Private School in Limassol. 66% of the participants were male, 34% female. One child was visually impaired. At the beginning of the day, before we started the activities, the children were asked to answer a series of questions about their knowledge and understanding of archaeology (see fig.5). More than half of the children had some ideas about learning about the past, they refer to history and archaeology but could not explain how archaeology aided our understanding of the past. We got similarly responses with regards to what archaeologists do, again when questioned, they could only think of excavation. Special terminology, site formation, recording, material culture, etc. was unknown to 90% of the children at the beginning of the workshop. When questioned again at the end

of the workshop (by a show of thumbs up (confident), thumbs middle (some idea), thumbs down (do not know), we have an overwhelming thumbs up for all questions, with the exception of the younger group of children who struggled to understand specialist terminology (although all of them were able to recall at least three new terms).

One of the most challenging aspects of the day was the wide age-range (3-12) (Fig. 36), with Greek Cypriot pre-school children wanting to join their older siblings. We embraced the challenge, which provided the opportunity to merge the older Cypriot children, who had a basic understanding of English, with the British children allowing the time and space finish the day working together.

Fig. 37. Stratigraphy and site formations, a highlight of the day!

Fig. 38. Questionnaires given to children to fill in before and after the workshop

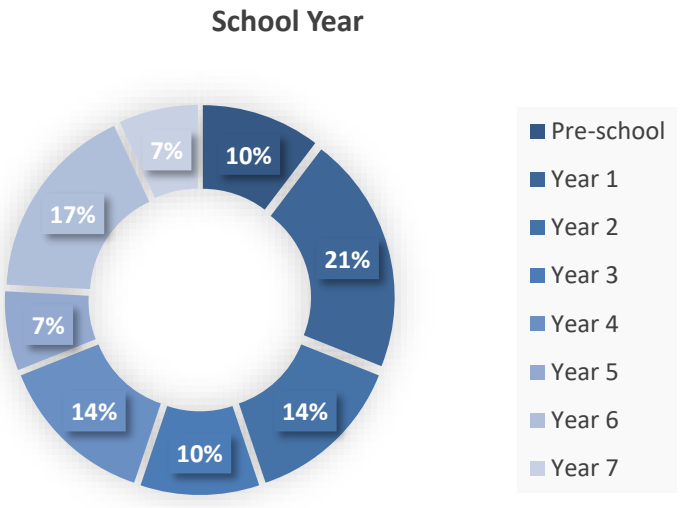

Fig. 39. Pie chart showing the range of participants by year of study

Archaeology Trail – Walk and Talk

On Wednesday 17th of April we held a 'Walk and Talk' Archaeology Trail (Figs 37 and 38). The 10-kilometre circular walk along the base was designed to see the most significant archaeological sites within RAF Akrotiri, including a visit to the excavation sites in the ancient quarries about Dreamer's Bay. This event was restricted to SBA passholders, and it gathered 49 members of the military community, and two local Cypriots. Thirty-seven adult participants filled in the questionnaire, providing a 90% sample of the visitors (9 children accompanied the party).

Fig. 310. Advertising Archaeological Trail at RAF Akrotiri

Fig. 311. Participants walking through RAF Akrotiri

The 'Walk and Talk' archaeological trail was led by Professor Simon James and Dr Mireya González Rodríguez, who provided explanations of the known archaeological sites within the base. We visited two ancient Roman villages, and the Lania rock-cut chamber tombs (Fig. 39). We then proceeded to the southern cliffs to see further ancient funerary monuments (Fig. 40) and the location of the earliest known archaeological site in Cyprus, Aetokremnos.

Fig. 312. Visiting Lania rock-cut chambers and quarry

All of the participants indicated that not only the Archaeology Trail had increased their understanding of the importance of protecting the heritage but that the Archaeology Trail had increased their interest in learning more about the archaeological sites in the area and how to protect them.

Simon James and Mireya González Rodríguez along with other participants were recorded for a video interview for British Forces Radio to review the day.

Fig 40: visiting monuments along the southern cliffs

New archaeological heritage signage

Just as the April 2019 field season came to an end, contractors installed the first tranche of new archaeological heritage interpretation signage at Dreamer's Bay roadhead and quarries, at Aetokremnos pygmy hippo site, and at the Lania chambers site (Fig. 41). Funded by the University of Leicester and the Honor Frost Foundation, this new signage is in English and Greek, and comprises adhesive graphics on stainless steel panels. The graphics can easily be replaced if they fade, are damaged, or the content needs correction.

It is hoped that further panels can be created at other sites, while a new archaeological map/trail for those with access to the base is in preparation.

Fig. 41: Top, the old derelict heritage signage at Lania quarries and artificial chambers, Akrotiri. Bottom, the old signage was removed and replaced by a new interpretation panel.

Discussion, conclusions and prospect

The spring 2019 season at Dreamer's Bay successfully achieved all its primary objectives.

In the quarry complex on the scarp edge overlooking Dreamer's Bay's artificially-enhanced harbour, excavations in the recently identified masonry building complex (Area 10) produced surprising results. The masonry walls visible on the surface had been hypothesised to represent simple, low-status structures probably associated with the quarries: e.g. shelters, stores, or workshops for finishing items. However, while heavily eroded, the walls proved to be well-built and faced with high-quality plaster bearing simple painted decoration. Rather than industrial sheds, this looks more likely a residential complex of some wealth. Further, identification of another wall on the same orthogonal alignment well to the east suggested the complex was much larger than hitherto realised (Fig. 22). These indications also potentially explain other puzzles in the vicinity: a flight of neatly-made rock-cut steps and a pressurised water supply system. It was not clear why such an elaborate hydraulic installation of rock-cut channel, ceramic pipes and collection tank was constructed in a quarry. However, this is now seen to run along the front of the probable residence, debouching before its western end, while the steps are also seen to be in front of the building(s).

This newly-identified residential phase, which lay in what was otherwise an industrial landscape is provisionally dated to the imperial Roman era. Its spatial and stratigraphic evidence also shows that the conglomerate quarrying comprised multiple episodes both before and after the life of the building(s).

On the hilltop overlooking the low shoreline west of the bay with its warehouses and pottery concentrations, the extent of the built complex (Area 7) was established, partly through excavation, and partly through survey of the extent of the concentration of rubble (Fig. 18). Here on the very crest of the hill had stood a substantial and somewhat pretentious orthogonal structure, with plastered walls and gypsum flooring. Additional structures surrounded it on its north, west and especially south sides, where rubble mounds suggest further buildings down the seaward slope. More can now be said about the nature of this complex. There is no evidence that it was ever a sanctuary or church. Its purpose is strongly suggested by its location, with a panoramic, almost 270° view from the acropolis of Kourion in the north, along the coast towards Paphos, over Cape Zevgari to the West, right round to the southern cliffs in the east: the entire arc of approach for sailing vessels making for Dreamer's Bay or to weather Cape Zevgari. As a large building on the skyline, it doubtless also served as a daytime landmark for shipping—and perhaps a nighttime beacon, if that was the function of the enigmatic rounded masonry structure.

Analysis is not yet complete, but it is clear that the hilltop complex comprised not just multiple buildings but also existed long enough to undergo substantial modifications. Material recovered appears to belong to the late Roman and earlier Byzantine periods. The excavated areas revealed

evidence of systematic removal of materials at an unknown date; much of the gypsum flooring was at some stage deliberately lifted.

An especially interesting find in 2019 was the copper alloy belt plate (Fig. 19). This is of a known c. sixth-century Byzantine type and is probably military—an especially fitting discovery in a modern military base. While for most of the apparent life of Dreamer's Bay's maritime facilities the Mediterranean was a Roman lake, especially from the fourth century AD society was increasingly militarised, with soldiers and naval vessels on security duties monitoring state logistics and trade communications. However, in the 610s the Sasanian Persians conquered the Holy Land and Egypt, and a generation later Islam erupted onto the scene. Thereafter the Mediterranean became once more vulnerable to maritime raiding and warfare. The Dreamer's Bay belt plate may well attest Byzantine military use of the hilltop site as a coastal watch-post, in the years before virtual abandonment of the peninsula, sometime during the seventh century.

The only real disappointment of the season related to a planned supplementary exercise in funerary archaeology. For completeness, it had been hoped to conduct a detailed GPS survey of the other important archaeological feature of the Dreamer's Bay zone, the chamber-tomb cemetery on the crest of the hill west of the low shoreline with its warehouse structures (Fig. 3, top). However, in April following a very wet winter, the vegetation proved too dense for this to be practicable.

The spring 2019 season of onshore fieldwork reported here, with the second marine research season conducted the following September (Blue forthcoming), complete the planned campaign of field research at Dreamer's Bay. The course to the programme has led to a completely new understanding of what was, prior to the work, thought to be a nucleated port town. Rather it is now seen to be an aggregation of maritime facilities, including a harbour which appears to have been for industrial purposes (exportation of locally quarried conglomerate) at least as much as for the trading activities attested on the low western shoreline. But apart from the newly-discovered apparent residence in the quarry zone, there is no sign that the people who operated the maritime facilities actually lived there. There was no 'port town' at Dreamer's Bay. However, there are several substantial nearby settlement sites which appear to be of Roman-Byzantine date: Pano and Kato Katalymata, and Katalymata ton Plakoton lie inland, out of sight of the coastal facilities, but within 20-30-minutes' walk of them. Dreamer's Bay's quarry and port workers, fishermen and mariners, are presumed to have lived in these village-sized settlements—which underlines the reality that Dreamer's Bay has to be understood in terms of the wider peninsular context.

As the name of the Ancient Akrotiri Project encapsulates, the human history of the peninsula can only be understood as a whole. The multiple villages across the centre of the rocky former island looked to the sea, especially through Dreamer's Bay, but it is increasingly clear also across its other shores. In particular, antique remains have long been known on Akrotiri's low, usually-sheltered north-eastern shoreline, where in 2019 development work led to discovery of structural remains of apparently Roman date: a second ancient port site? The projected Phase II of the AAP will seek to properly contexualise

Dreamer's Bay by exploring the marine, coastal, settlement and funerary archaeology of Akrotiri as a whole, to build a holistic picture of this unique block of Cypriot maritime landscape.

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