



THE ANTIGUA NAVAL DOCKYARD AND RELATED ARCHAEOLOGICAL SITES





THE ANTIGUA NAVAL DOCKYARD AND RELATED ARCHAEOLOGICAL SITES

WORLD HERITAGE SITE NOMINATION DOCUMENT
2014



Figure 2. Sunset view of Nelsons Dockyard and beyond.



FOREWORD

Prime Minister of
Antigua and Barbuda



The Antigua Naval Dockyard, fondly known to all as the Nelson's Dockyard, had for centuries played a pivotal role in the military history of the Eastern Caribbean, and the development of Great Britain as an Empire. The role of the British Navy and its eventual dominance of the seas could not have been possible without the support of overseas stations like the Nelson's Dockyard at English Harbour. Despite its magnificence, those who worked on constructing the vast complex of buildings, wharves and workstations endured unimaginable hardships and even death. Thousands of enslaved African people, who toiled and died at this Naval Station, left only their mark of excellence on the Georgian architecture which endures today.

Today, the evidence of greatness is still visible. The dockyard and its many fortifications amaze even those who have little knowledge of the militaries and navies of the past. Its presence in Antigua made this island-nation a key component in the defense and development of the colony. It continues to play a very significant role in the island-state's heritage sites. The recognition of Nelson's Dockyard as a World Heritage site will mark its acceptance as a major landmark of outstanding universal value. Its designation would be a fitting tribute to the thousands of men and women who built, worked then died at this site.

I express my thanks to the organizations and their professionals who worked on the compilation of this dossier, and I extend my Government's full support to the nomination of the Antigua Naval Dockyard and its related Archaeological Sites for inscription on the UNESCO list of World Heritage Sites.



Honourable Gaston Browne
Prime Minister
Antigua and Barbuda





Figure 3. Main Gateway into Historic Nelsons Dockyard.



MESSAGE

Chairman of The World Heritage Committee



This nomination for the Antigua Naval Dockyard and its Related Archaeological Sites marks another chapter in the history of this amazing site that is steeped in history and natural beauty. From the earliest days of human occupation, English Harbour and its surrounding hills have provided a safe harbour and shelter during the hurricane season. It was a strategic position that was quickly utilized by the British Navy as it enabled them to keep and maintain a squadron of frigates on the front line during the competitive and violent days of colonization, sugar and slavery. But, with the rapidly changing technologies, industrialization and economic interests of the 19th century, the Antigua Naval Dockyard and its related sites were left behind; trapped in the “Age of Sail” and are today monuments of Georgian architecture, technology and history. The

Dockyard rose again to prominence in the mid 20th century, giving birth to the yachting industry and is today a sailing *mecca* and heritage tourism destination for the region. In stark comparison to the naval dockyard are the numerous ruins and the related archaeological sites on the hills, beaches and waters nearby. The rich archaeology of these related sites continue to stimulate our research and to provide insights into the lifeways of this former naval and military outpost.

This dossier is the culmination of years of hard work, research, and the writings of many scholars including the late Sir Kenneth Blackburne and Desmond V. Nicholson. It was achieved through the vision and encouragement of many persons in the community, the graduate students and management of the National Parks and Government of Antigua Barbuda. The nomination of the Antigua Naval Dockyard and Related Archaeological Sites is a timely and important step for this Small Island Developing State in a region that is under represented on the world stage of sites. In this respect, this nomination dossier is a tribute to all who shared the dream and vision.

Dr A Reg Murphy



Figure 4. Clarence House arch, looking south to the Dockyard.

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EXECUTIVE SUMMARY

Nomination of The Antigua Naval Dockyard and Related Archaeological Sites

COUNTRY

Antigua and Barbuda

REGION

Eastern Caribbean, West Indies

NAME OF PROPERTY

The Antigua Naval Dockyard and Related Archaeological Sites

GEOGRAPHIC COORDINATES

N17°00' 29.01" W61° 45' 51.62"

TEXTUAL DESCRIPTION OF THE BOUNDARY (IES) OF THE NOMINATED PROPERTY

The site encloses the historical compound of the former Naval Dockyard. It is partially bounded by a brick perimeter wall on the west, Fort Berkeley to the south, Clarence House to the northeast, and the old naval dockyard at St. Helena. It continues uphill along "The Ridge" to include the related archaeological sites, fortifications, barracks, residential compounds, water cisterns and graveyards of the British Army who were stationed on the surrounding hills to protect the Naval Dockyard. The proposed site of 255 hectares, is the historical core of the Nelson's Dockyard National Park. The National Park is a protected area of approximately 15.94 square miles (41.28 sq. km, or 4,128 hectares) on the south coast of Antigua, the boundaries of which comprises the Buffer Zone.

BRIEF SYNTHESIS

The Antigua Naval Dockyard and Related Archaeological Sites consists of a purpose built group of Georgian Naval structures, set within a walled enclosure, on a naturally occurring series of bays surrounded by highlands on which defensive fortifications

were constructed. The Dockyard and its related sites were built at a time when European nations were battling for supremacy of the seas in a bid to control the lucrative sugar producing Islands of the Eastern Caribbean. Antigua's location as a front line naval dockyard facility gave Britain's navy a huge strategic advantage over its rivals at a pivotal point in world history. The continued use of the Dockyard today by the charter yacht industry as a place of repair, provisioning and hurricane shelter, and of its workforce of highly skilled craftsmen, the descendants of British sailors and enslaved Africans make up a continuing cultural landscape.

CRITERIA

Criteria(IV):

The Antigua Naval Dockyard and its related archaeological sites are an outstanding example of a type of building, architectural or technological ensemble or landscape, which illustrates a significant stage in human history. The impressive assemblage of Georgian Period British naval structures, enclosed within a walled historic compound and the associated military complexes that surrounded it, were developed at a time when European powers were rapidly expanding their spheres of influence and thus constantly at war. The natural attributes of the deep waters of English Harbour, surrounded by steep protective hills and a narrow entrance facilitated the development of a naval dockyard, which could be utilized year round, including the hurricane season. Collectively, the Antigua naval dockyard and its archaeological sites today represent an outstanding example of a Georgian naval facility within a Caribbean context.

STATEMENT OF INTEGRITY

The boundaries of the nominated site are primarily based on those of the original Naval Dockyard and the military complexes of Shirley Heights and Middle Ground strategically located on the hills surrounding the Dockyard. These military complexes were built entirely to protect the vital naval facility. At Shirley Heights and Middle Ground the boundaries closely follow the “Kings Lines” which delineated the original site; the Dockyard itself is a walled compound. The rest of the site primarily follows the coastline, diverging slightly to include the Ordnance structures, thus encapsulating all relevant areas for protecting the Outstanding Universal Value. All of the structures within the Dockyard are in a good state of repair having been restored to varying degrees using authentic materials and following the original plans. Despite the military complexes surrounding the Dockyard being in various degrees of decay, the fact that there has been no modern construction within the area, has allowed these structures and their physical setting on top of the ridge and steep cliffs to retain and convey their story and has enormous potential for archaeological research key to our understanding of past lifeways.

STATEMENT OF AUTHENTICITY

The Dockyard and its related archaeological sites fulfill all the criteria for authenticity as laid out by UNESCO’s Operational Guidelines. It has a high degree of authenticity as the only surviving example of a Georgian period Dockyard established by the British navy within the Eastern Caribbean during the 18th and 19th centuries, where the majority of original structures are still represented. Much as the military complexes overlooking the Dockyard are in various stages of decay, there are sufficient remains and large intact archaeological deposits to convey their story and therefore does not negatively affect the OUV.

PROTECTION AND MANAGEMENT REQUIREMENTS

The National Parks Act, 1984, and its Amendment 2004 protect the OUV, the authenticity and integrity of the nominated property, and its buffer zone.

The Antigua Naval Dockyard and surrounding fortifications are located at the core of Nelson’s Dockyard National Park, a declared protected area under the *National Park Act 1984, Regulations 2013, Statutory Instrument No. 48*. Management and Development Plans, Zoning regulations, building guidelines are in effect. Revisions to the Act and new heritage legislation for compliance with the *2001 Underwater Heritage Convention* is now under Cabinet review. The Act provides for the appointment of a Board of Directors and a professional management team to manage the affairs of the site. *The Physical Planning Act of 2003* adds additional protection and the Chief Town and Country Planner of the Development Control Authority (DCA) has a permanent seat on the Board.

NAME AND CONTACT INFORMATION OF OFFICIAL LOCAL INSTITUTION/ AGENCY

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E-mail: regmurphyantigua@gmail.com

Name: Mrs. Ann Marie Martin

Affiliation/Title:

National Parks Commissioner

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St. John’s

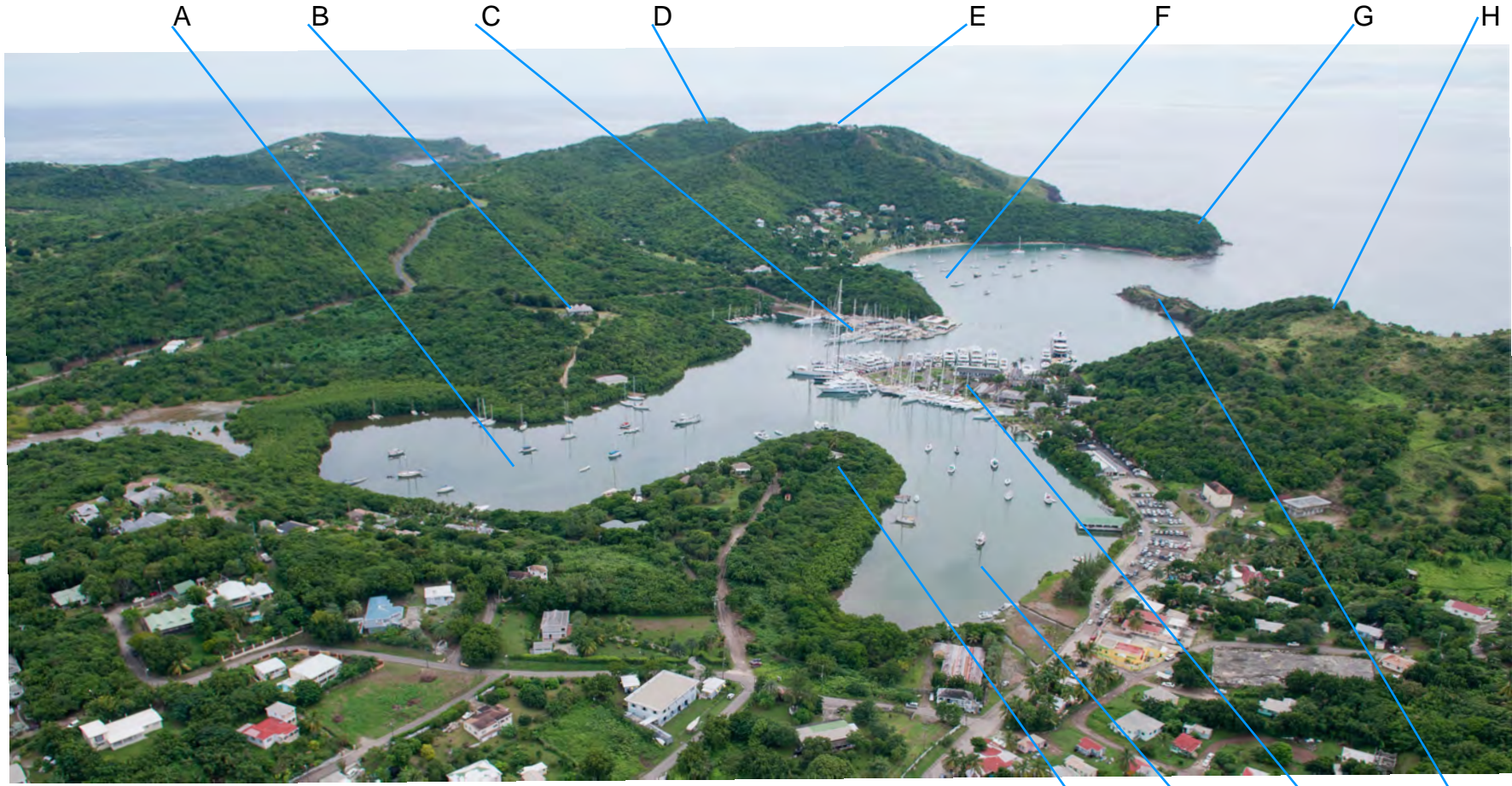
Antigua

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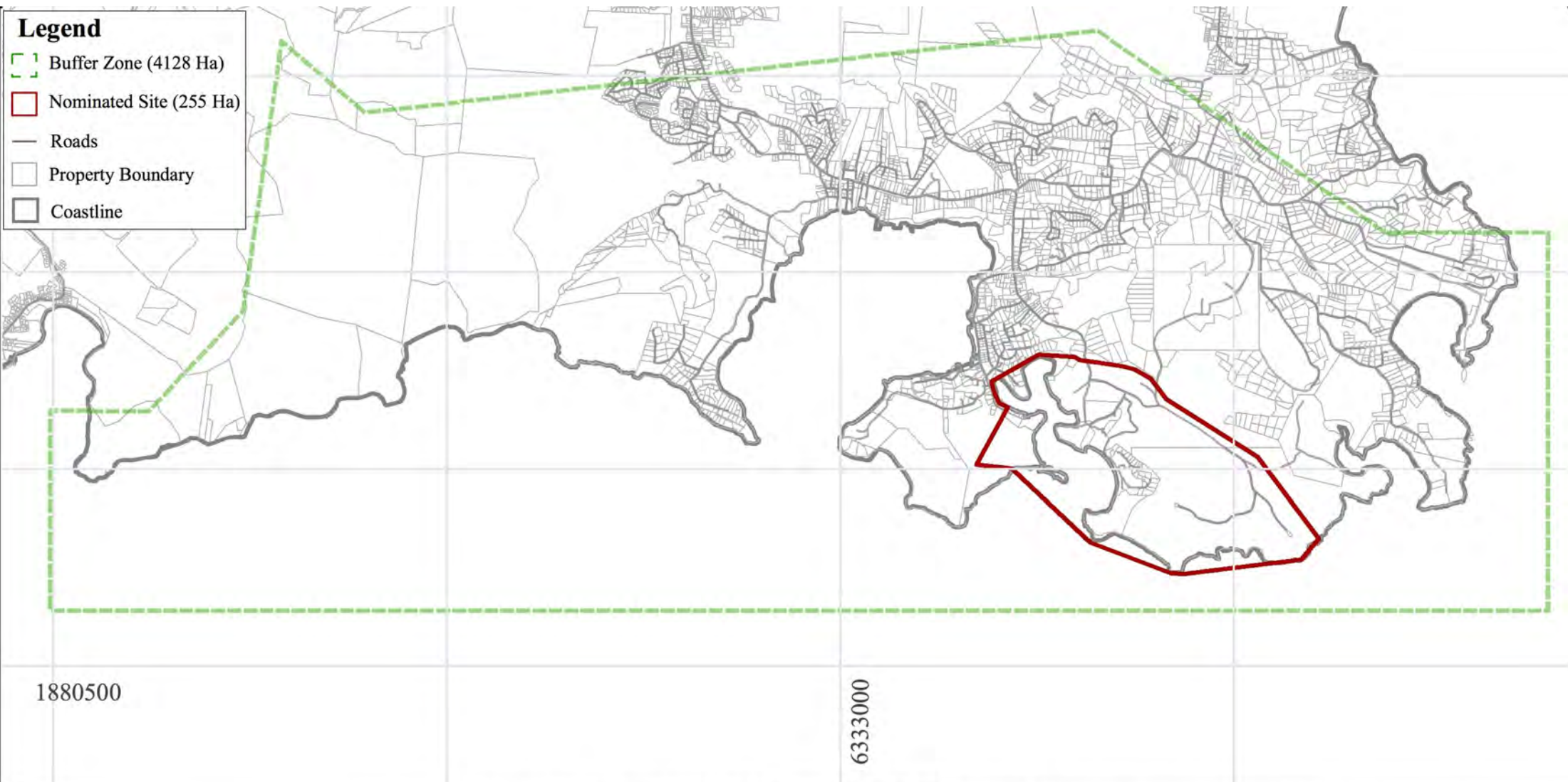
E-mail: ann-marie@nationalparksantigua.com



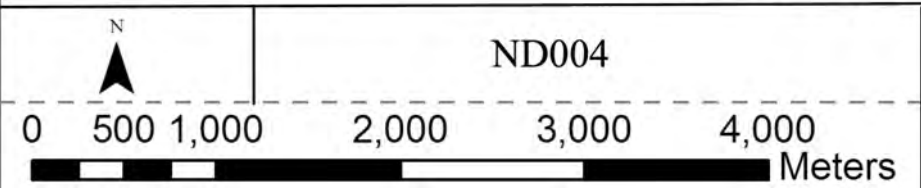
- A- Ordnance Bay
- B- Clarence House
- C- St. Helena
- D- Block House
- E- The Lookout
- F- Freeman's Bay
- G- Fort Charlotte

- H- Middle Ground
- I- Navy Ordnance Powder Magazine
- J- Tank Bay
- K- The Dockyard
- L- Fort Berkeley

Figure 5. Aerial view of The Antigua Naval Dockyard and Related Archaeological Sites.



Cadastral Map within the Buffer and Nominated Property



Nomination Dossier for The Naval Dockyard
and Related Archaeological Sites

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SECTION ONE

Identification of the Property

1A. COUNTRY

Antigua and Barbuda

1B. REGION

Leeward Islands, West Indies (Eastern Caribbean)

1C. NAME OF PROPERTY

The Antigua Naval Dockyard and Related
Archaeological Sites

1D. UTM CORDINATES, WGS 84

North 1880930 East 631696



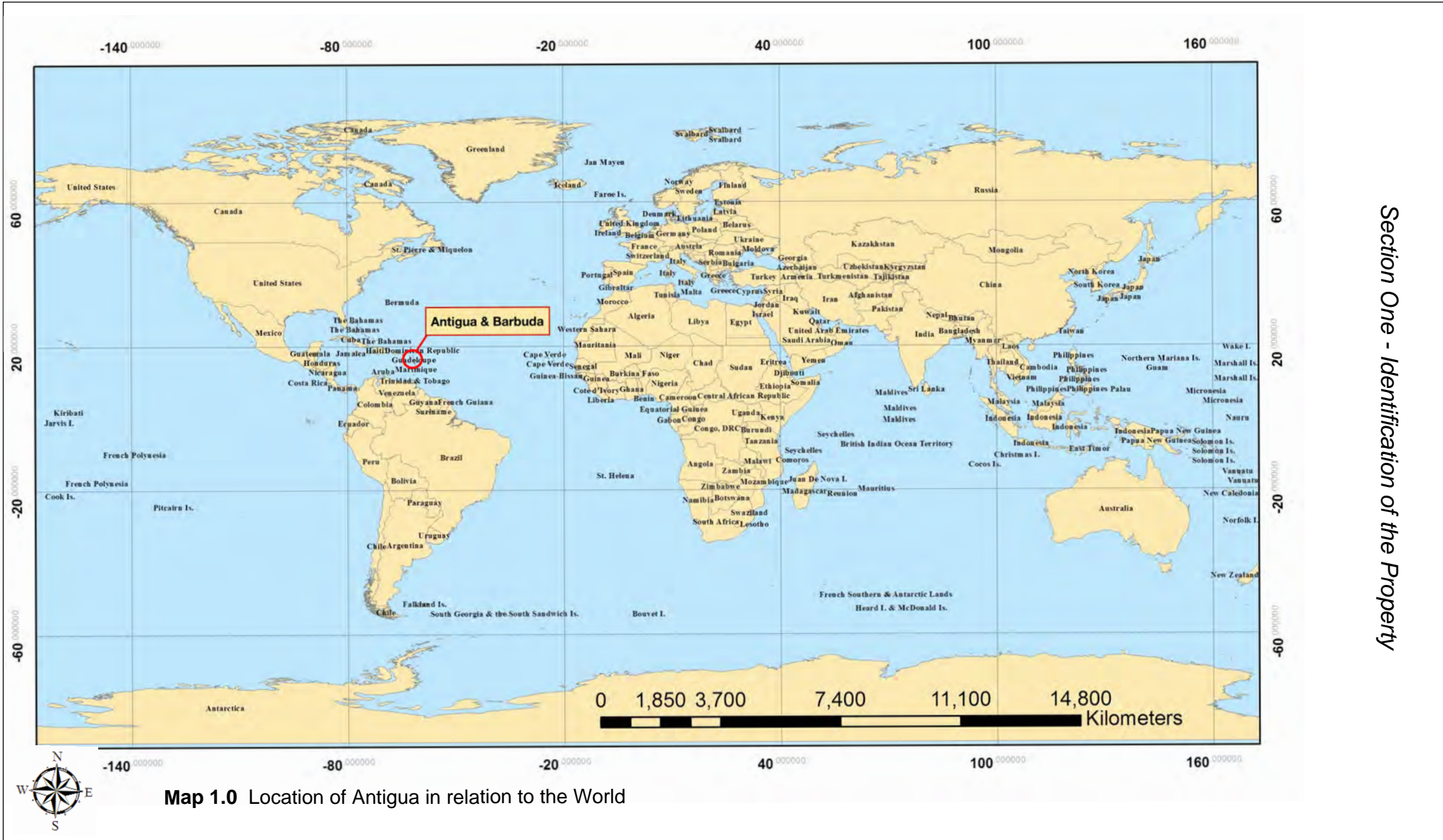
Figure 6. View of Dockyard from Clarence House

Section One - Identification of the Property

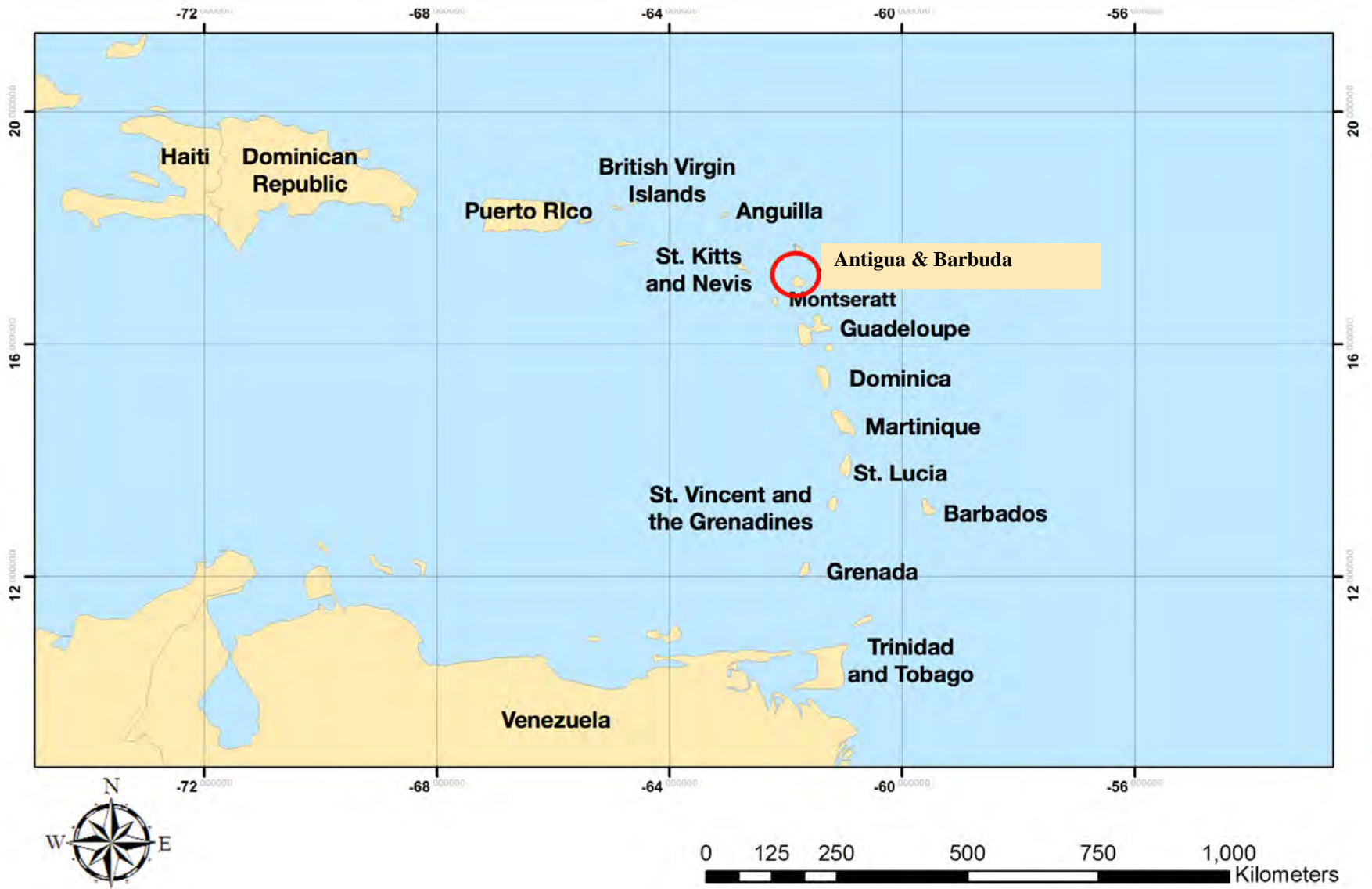
1E. MAPS AND PLANS SHOWING BOUNDARIES OF THE PROPERTY AND BUFFER ZONE

Maps and plans are inserted hereunder and also as A2 rolled attachments

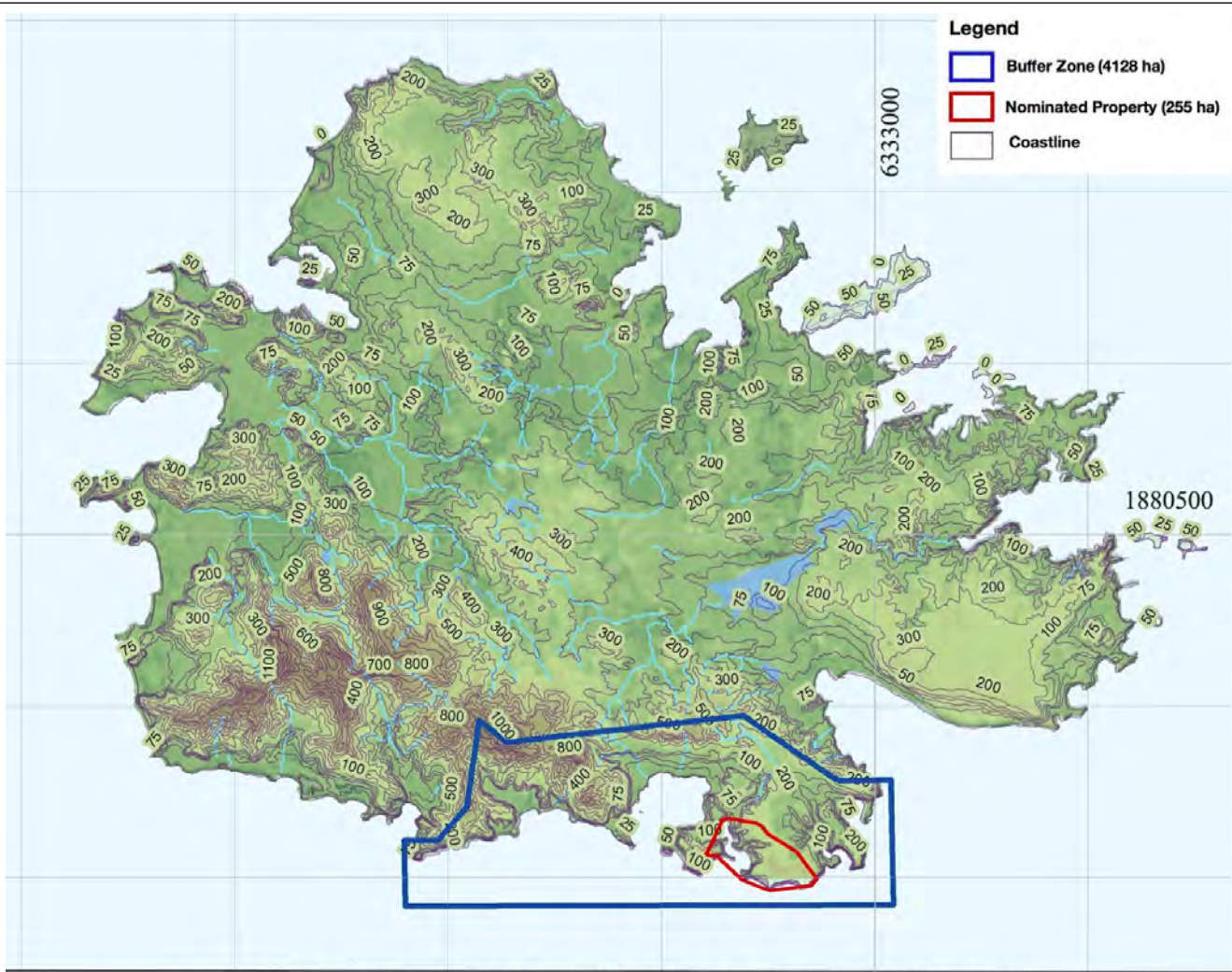
MAP NO.	NAME OF MAP/PLAN	PAGE	ALSO FOUND IN ANNEX
ND001	WORLD Location of Antigua in relation to the World	17	(No Annex)
ND002	CARIBBEAN Map of Antigua in relation to the Caribbean	18	(No Annex)
ND003	ANTIGUA ISLAND (TOPOGRAPHICAL) Nominated property and Buffer Zone in relation to Antigua on topographic map	19	Map 3.0 Annex 14 A2 Size
ND004	NOMINATED PROPERTY(CADASTRAL) Cadastral Map with Nominated Property within Buffer Zone	20	Map 4.0 Annex 14 A2 & A1 Size
ND005	BUFFER ZONE(CADASTRAL) Cadastral Map with Buffer Zone	21	Map 5.0 Annex 14 A2 & A1 Size
ND006	NOMINATED PROPERTY (AERIAL) Nominated property overlay with aerial imagery	22	Map 6.0 Annex 14 A2 & A1 Size
ND007	NOMINATED PROPERTY (CADASTRAL, HISTORICAL AND NATURAL FEATURES) Nominated property overlay with historical, natural features and cadastral layers	23	(No Annex)
ND008	NOMINATED PROPERTY (HERITAGE FEATURES AND SURROUNDING ARCHAEOLOGICAL MILITARY COMPLEX) Historical Buildings (1776-1859) of the Naval Dockyard and related archaeological sites with topographic layers	24	(No Annex)
ND009	THE DOCKYARD (HERITAGE FEATURES) Historical buildings at the Naval Dockyard	25	Map 9.0 Annex 14 A2 Size
ND010	THE DOCKYARD (AERIAL) Historical buildings at the Naval Dockyard with aerial imagery	26	Map 10.0 Annex 14 A2 Size




Map 1.0 Location of Antigua in relation to the World

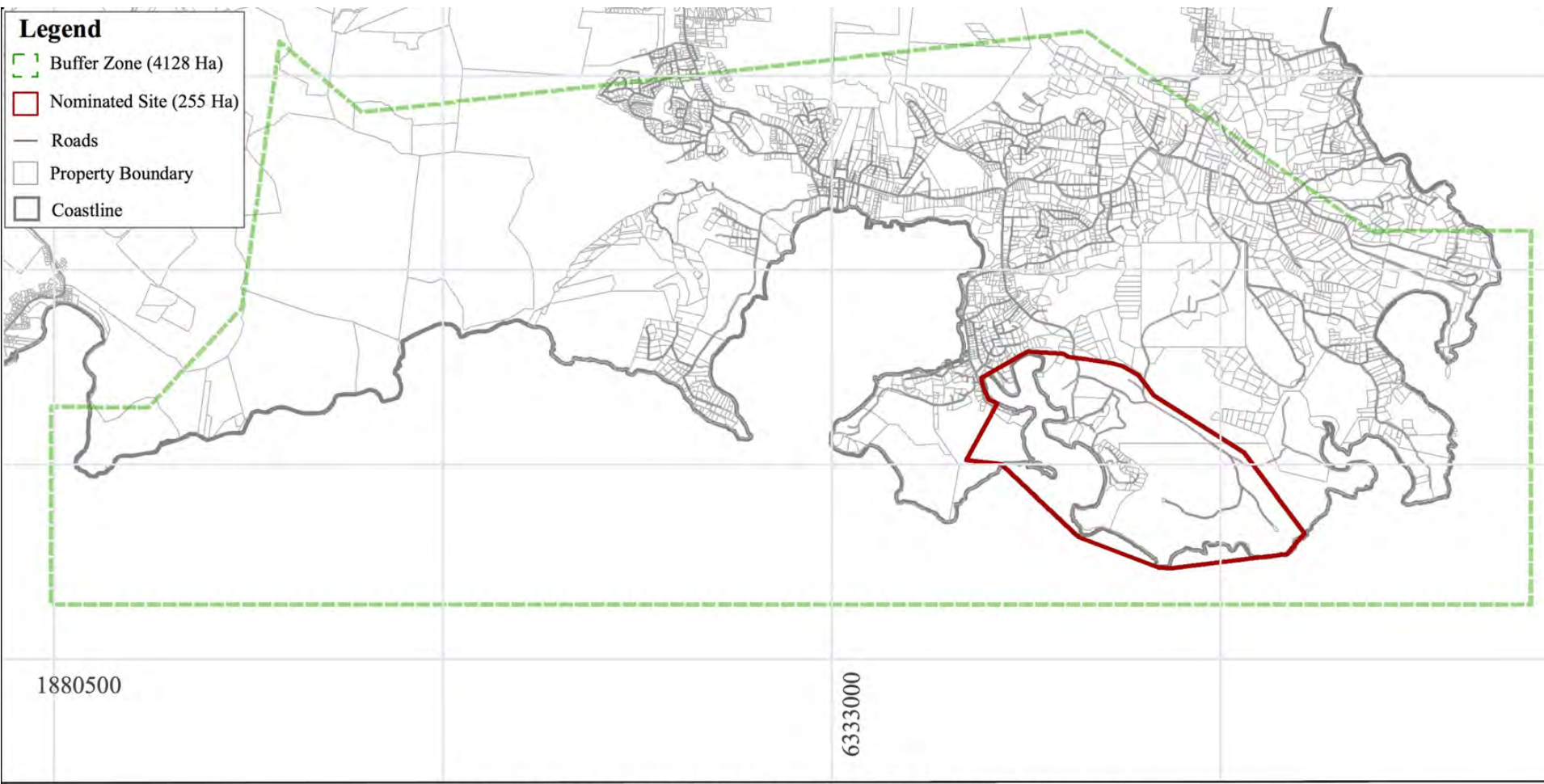


Map 2.0 Location of Antigua in relation to the Caribbean

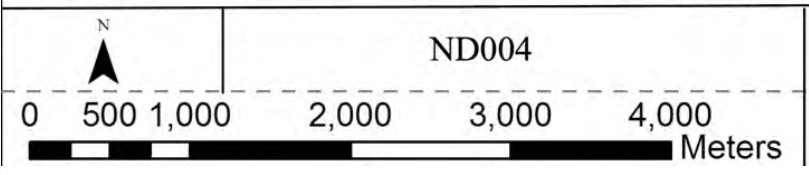


Topographic Map with the Buffer Zone and Nominated Property

	<p>ND003</p>	<p>Nomination Dossier for The Naval Dockyard and Related Archaeological Sites</p> <p>Reproduced from the Surveys Section of the Antigua Archaeological Society (C) Copyright of The Nelson's Dockyard Museum</p>
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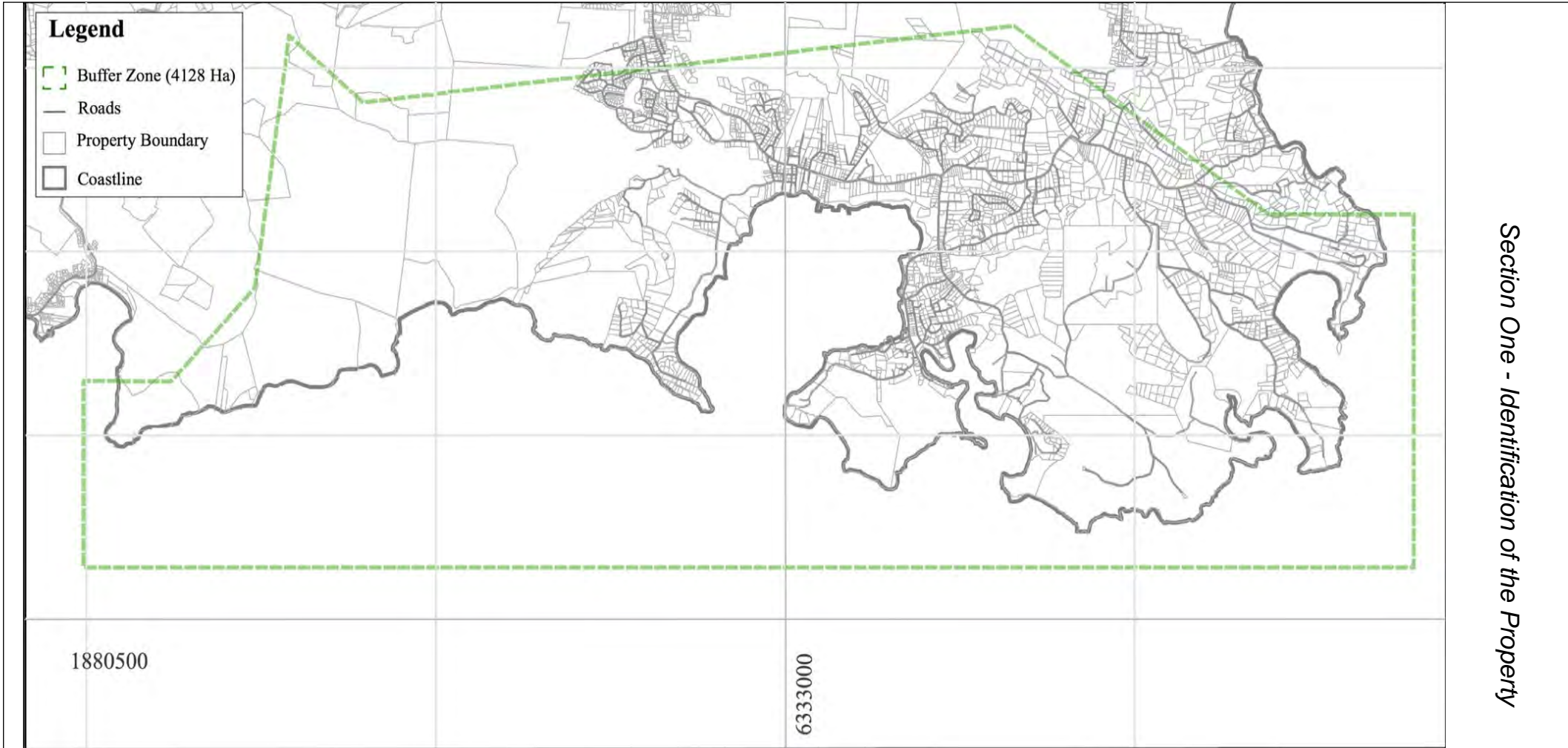
Cadastral Map within the Buffer and Nominated Property



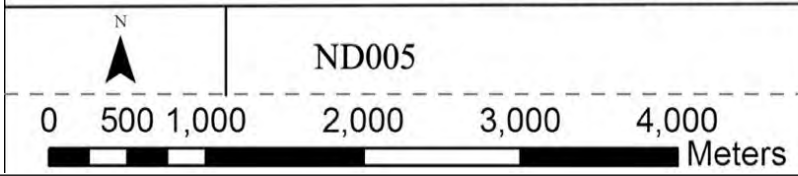
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Section One - Identification of the Property



Cadastral Map and Buffer Zone Surrounding the Nominated Property



Nomination Dossier for The Naval Dockyard
and Related Archaeological Sites

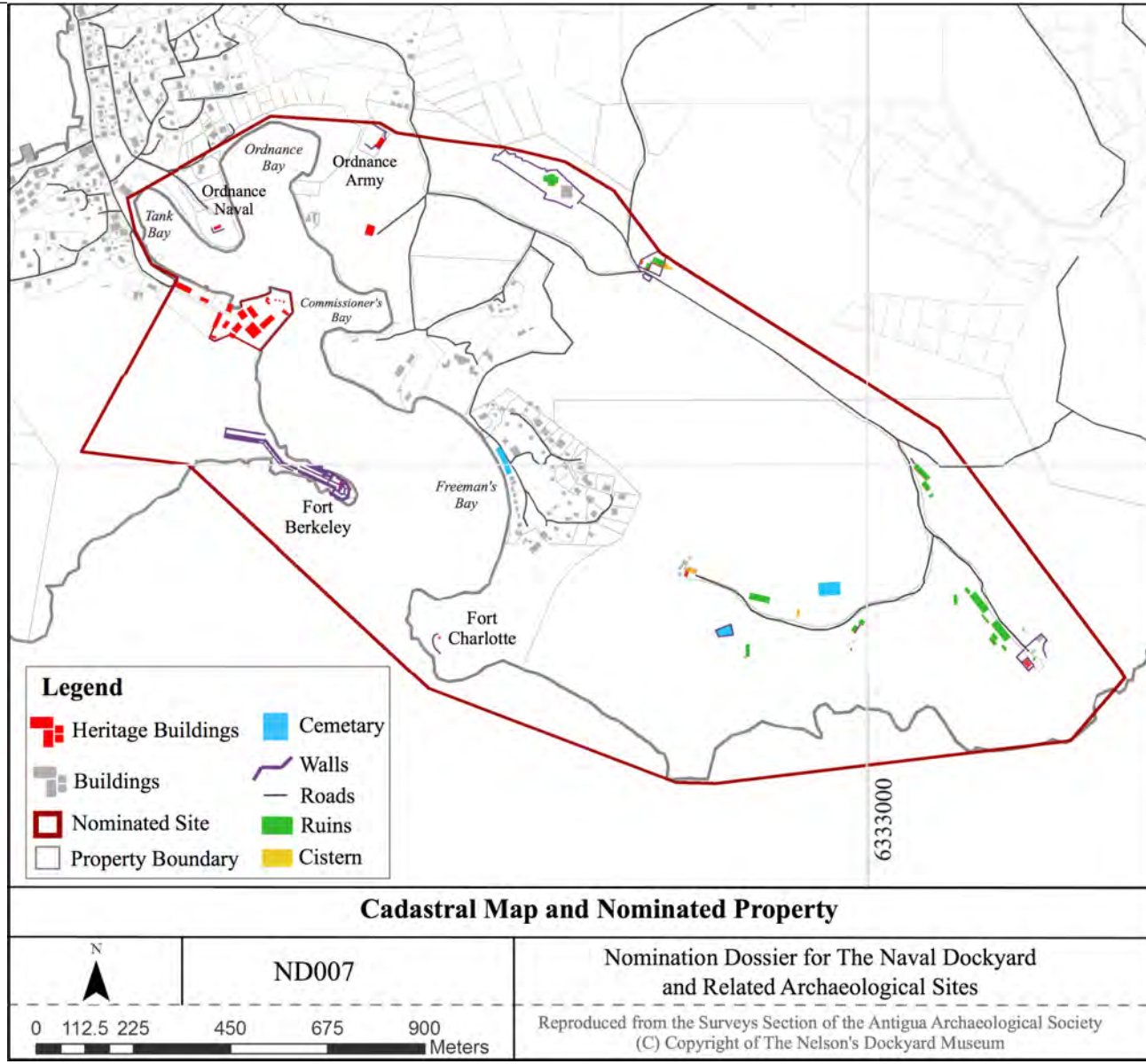
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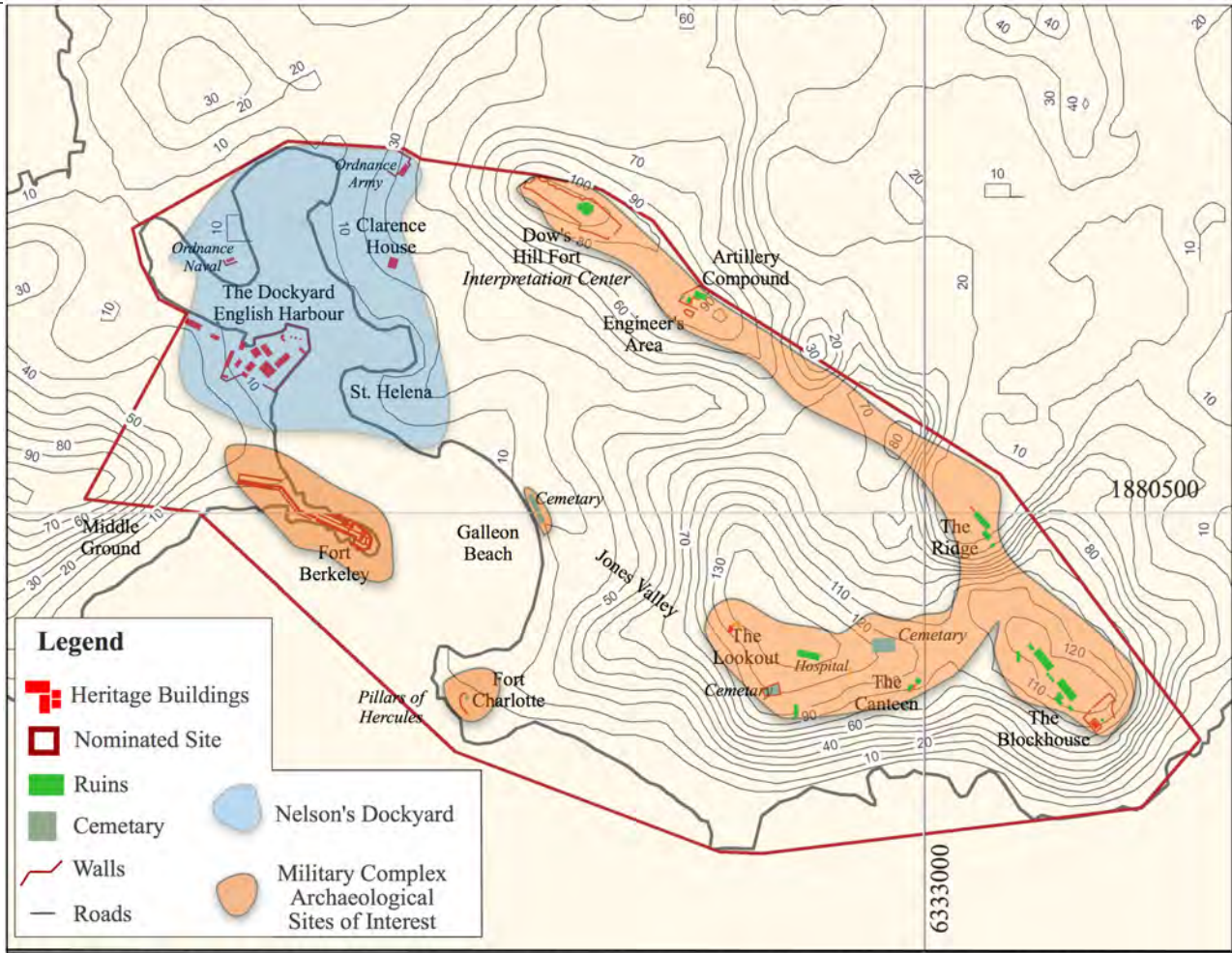


Aerial Map and Nominated Property

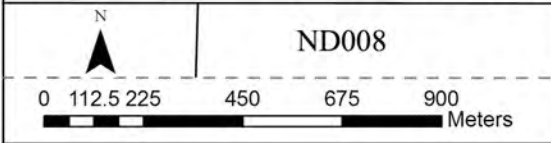
<p>N</p>	<p>ND006</p>	<p>Nomination Dossier for The Naval Dockyard and Related Archaeological Sites</p>
<p>0 112.5 225 450 675 900 Meters</p>	<p>Reproduced from the Surveys Section of the Antigua Archaeological Society (C) Copyright of The Nelson's Dockyard Museum</p>	

Section One - Identification of the Property



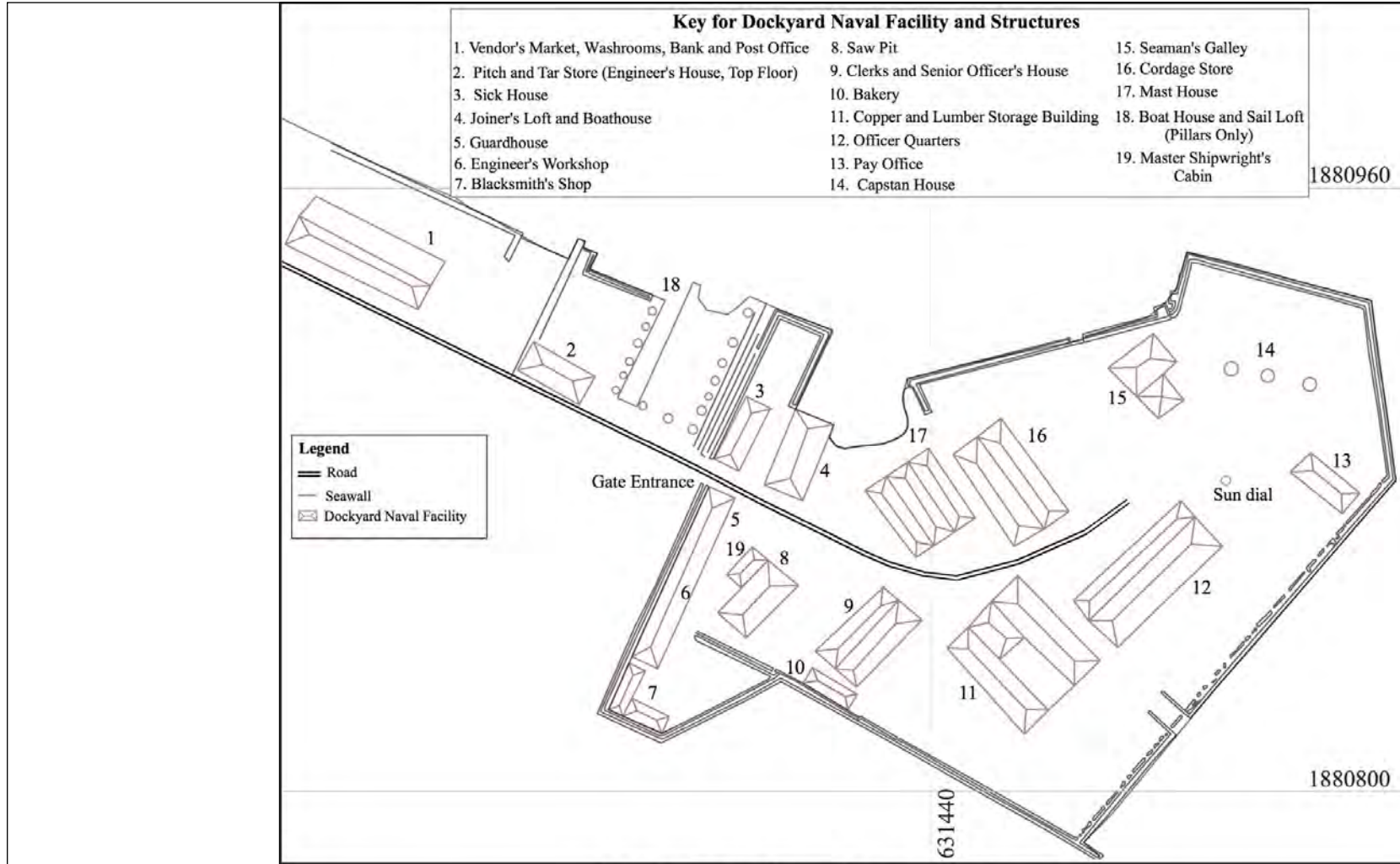


Heritage Features and Surrounding Archaeological Military Complex and Nominated Property

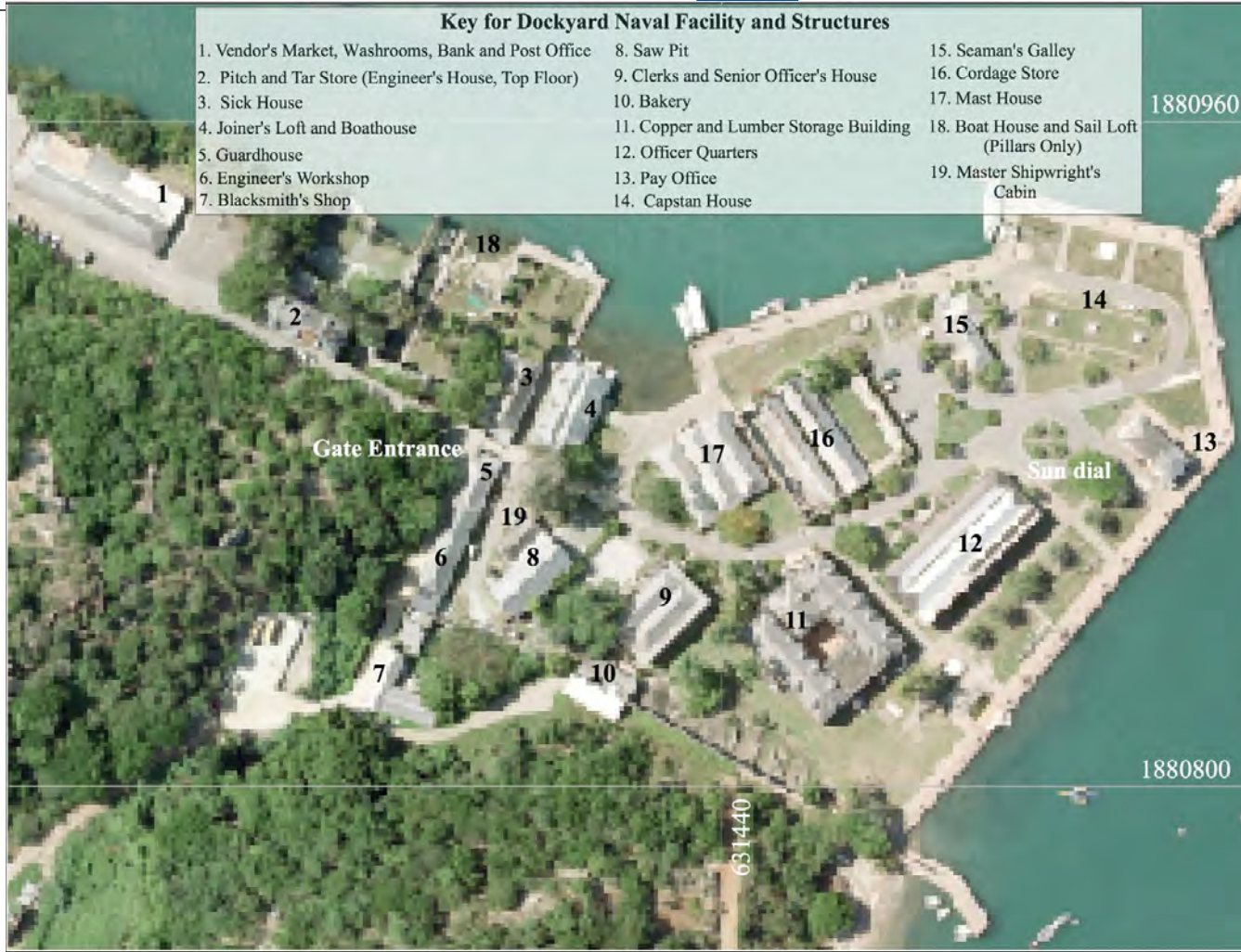


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Section One - Identification of the Property

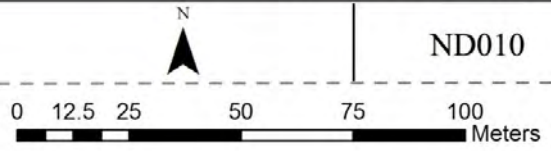


	<p>ND009</p>	<p>Nomination Dossier for The Naval Dockyard and Related Archaeological Sites</p>
	<p>Reproduced from the Surveys Section of the Antigua Archaeological Society (C) Copyright of The Nelson's Dockyard Museum</p>	



- Key for Dockyard Naval Facility and Structures**
- | | | |
|--|--|---|
| 1. Vendor's Market, Washrooms, Bank and Post Office | 8. Saw Pit | 15. Seaman's Galley |
| 2. Pitch and Tar Store (Engineer's House, Top Floor) | 9. Clerks and Senior Officer's House | 16. Cordage Store |
| 3. Sick House | 10. Bakery | 17. Mast House |
| 4. Joiner's Loft and Boathouse | 11. Copper and Lumber Storage Building | 18. Boat House and Sail Loft (Pillars Only) |
| 5. Guardhouse | 12. Officer Quarters | 19. Master Shipwright's Cabin |
| 6. Engineer's Workshop | 13. Pay Office | |
| 7. Blacksmith's Shop | 14. Capstan House | |

Aerial of The Dockyard Naval Facility and Structures



ND010

Nomination Dossier for The Naval Dockyard and Related Archaeological Sites

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Section One - Identification of the Property

Section One - Identification of the Property

1F. AREA OF THE NOMINATED PROPERTY AND PROPOSED BUFFER ZONE

ID NO.	PROPERTY NAME	PARISH	ZONE	AREA (ha)
001	The Antigua Naval Dockyard and Related Archaeological Sites	Saint Paul	Nominated Property	255
002	Nelson's Dockyard National Park Buffer	Saint Paul	Buffer	3,873
			Total	4,128



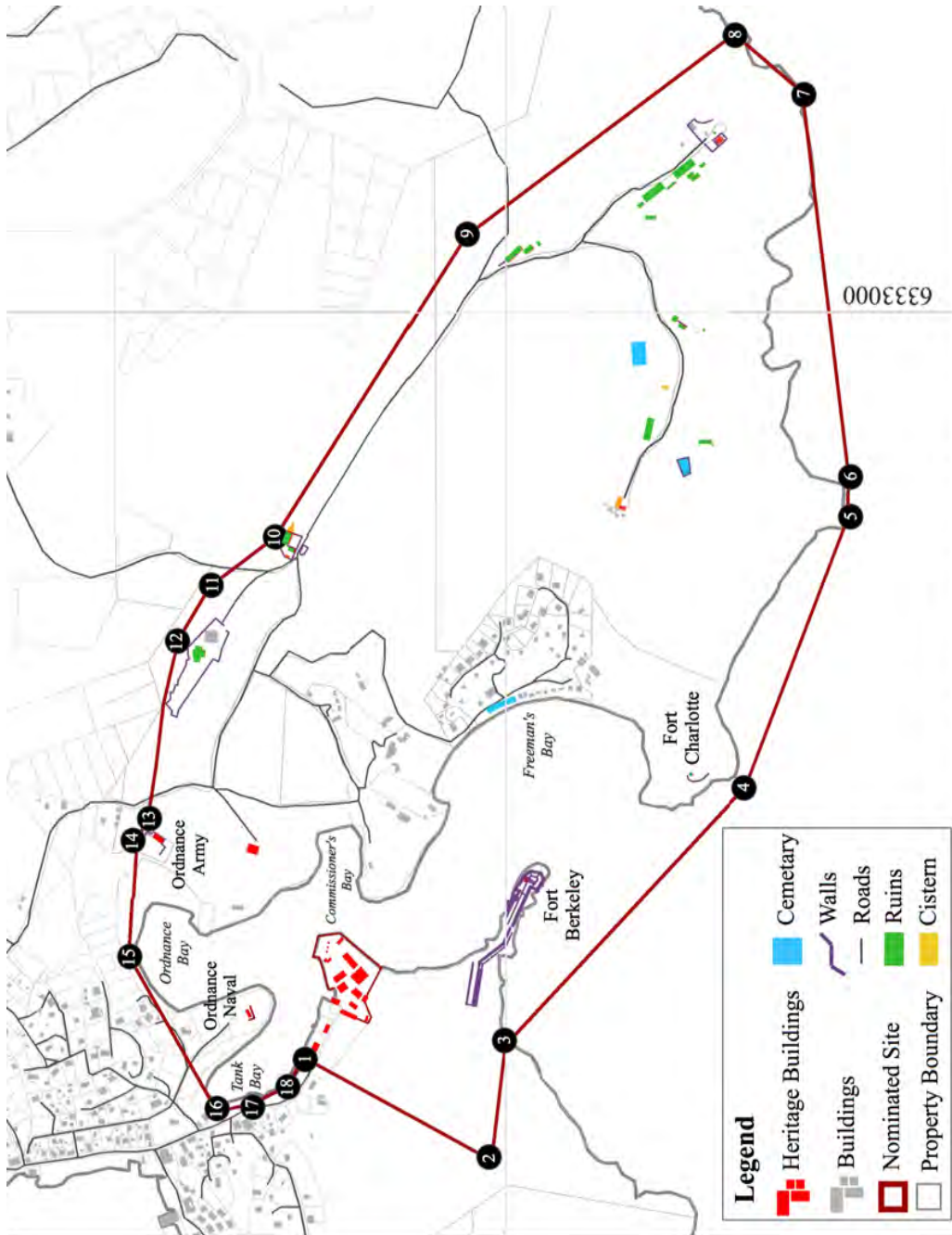
Figure 7. The Sail Loft Columns with the Engineers House in the Background

Section One - Identification of the Property

Description of Boundary of proposed Site: Distance between Points

Beginning Vertex	Ending Vertex	Distance (M)
1	2	496
2	3	268
3	4	826.6
4	5	661.4
5	6	100
6	7	894
7	8	210
8	9	779
9	10	823

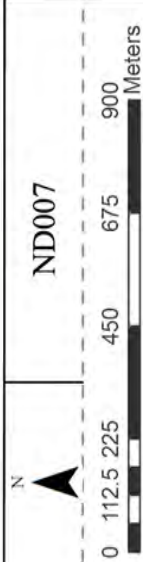
Beginning Vertex	Ending Vertex	Distance (M)
10	11	193
11	12	141
12	13	428
13	14	48
14	15	273
15	16	415
16	17	84.4
17	18	92.7
18	1	74.2



Cadastral Map and Nominated Property

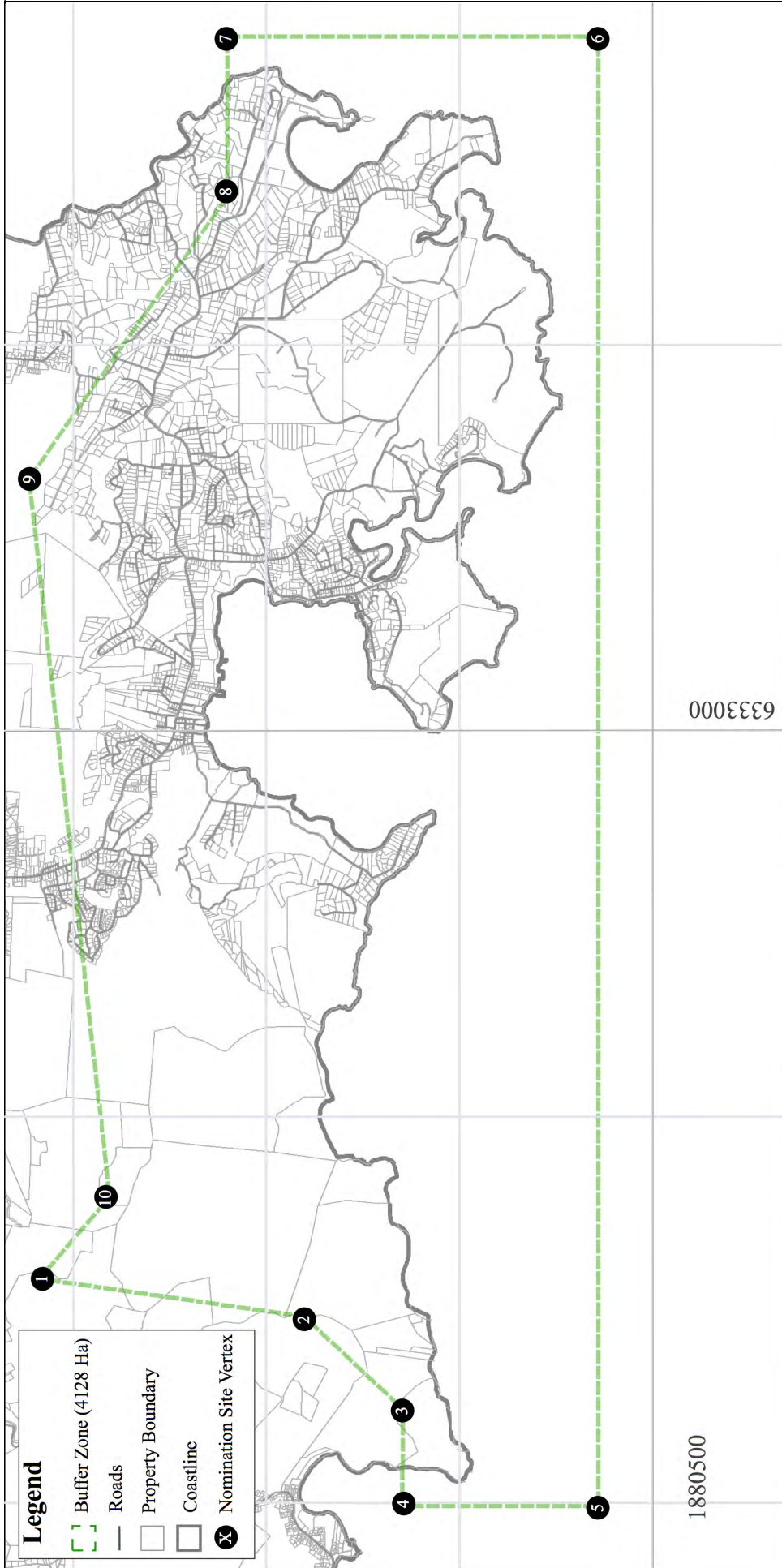
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ND007

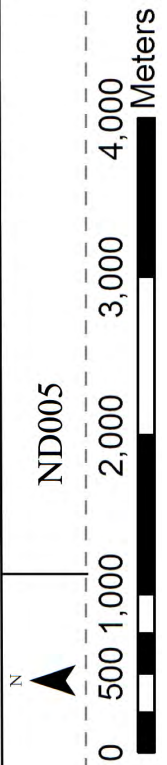
Section One - Identification of the Property



Cadastral Map and Buffer Zone Surrounding the Nominated Property

Nomination Dossier for The Naval Dockyard
and Related Archaeological Sites

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Section One - Identification of the Property



Figure 8. Officers Quarters in Naval Dockyard.



SECTION TWO

Description of the Property

The proposed site encloses the historical compound of the former Naval Dockyard. It is partially bounded by a historical brick perimeter wall on the west, Fort Berkeley to the south, Clarence House to the northeast, and the old naval dockyard at St. Helena, due east of the current Nelson's Dockyard. It continues uphill along "The Ridge" to include the related archaeological sites, fortifications, barracks, residential compounds, water cisterns and graveyards of the British Army who were stationed on the surrounding hills to protect the Naval Dockyard. The site is located within the historical core of the Nelson's Dockyard National Park; a protected area of approximately 15.94 square miles (41.28 sq. km, or 4,128 hectares) on the south coast of Antigua the boundaries of which comprises the buffer zone (Map 3).



Figure 9. Historical map of English Harbour before 1750

Section Two - Description of the Property

PLAN
of
His Majesty's Dock Yard
ANTIGUA

Reference.

- | | | | |
|----|-----------------------------------|----|---------------------------------------|
| 1 | Commander in Chief's House | 11 | Officers' House and Office |
| 2 | Junk House | 12 | Kitchen etc to Dotts |
| 3 | Storehouses | 13 | Smith's Shop |
| 4 | Boathouse with Sail Loft over | 14 | Porters Provision Store |
| 5 | House for Sick Seamen | 15 | Stable etc for the Commander in Chief |
| 6 | Provision Store | 16 | Kitchen for the use of Ships Crew |
| 7 | Porters Lodge and Yard Gates | 17 | West Captain House |
| 8 | Guard Room etc. | 18 | Office |
| 9 | Boathouse with Joiner's Shop over | 19 | East Captain House |
| 10 | Working Masthouse | 20 | Careening Wharf |
| 11 | Store Cabin | 21 | Shed for Careening Gear |
| 12 | Sawpits | 22 | Storehouse for Masts |
| 13 | Office etc. | | Content 2A 1 R. 50 P. |

X.P. The Careening Wharf and Storehouse for Masts are not so near the Yard as here shown... It is done to show the three Objects at one view.



Figure 10. Plan of the Dockyard ca. 1831

Section Two - Description of the Property

English Harbour, on the southern coast of Antigua comprises a series of deep narrow bays that are almost completely surrounded by hills. It is accessible through a narrow channel flanked by the protective rock outcrops of Fort Berkerly peninsula and Fort Charlotte Point. The inner bays, comprising Tank Bay, Ordnance Bay and Commissioner's Bay are well sheltered and secured from view; only the sandy beach of Freeman's Bay is visible from outside the harbour. This natural setting was ideally suited as a hurricane shelter and a place for careening and repairing wooden ships in the Age of Sail; protected by the fortified surrounding highlands. These strategic values were exploited by the British Navy from the late 17th century until the late 19th century; however, the peak period of most importance can be defined as Georgian when most of the facilities in and around the Antigua Naval Dockyard were built.

The Naval Dockyard today is an ensemble of Georgian Caribbean buildings that were built specifically for and by the Royal Navy. Nearly all of the materials used, with the exception of the lime mortar and stones were brought out from England and other British colonies for constructing and maintaining the yard and support facilities.

As the importance of the Dockyard grew, fortifications, hospitals, barracks, water catchments and other supporting British army facilities were built on the surrounding highlands nearby and along the "Ridge". These include the significant military compounds and defense platforms of Blockhouse, Lookout Point, Dow's Hill and on the west side of the harbour, the ruins of the Middle Ground barracks. Other important and related naval facilities built outside this enclosure include the Palladian style Clarence House and Ordnance storage buildings.

These enclosed bays and waters that comprise English Harbour, were the prime reason that led to its development as a Naval dockyard of strategic importance during the 17th to 20th centuries.

Today the bays are rich with the underwater cultural heritage of the ages including sunken wrecks and vast quantities of discarded objects. All are essential aspects of this site.

The description of the site will be presented below in the following areas:

- *The Dockyard Naval Facility and Structures*
- *The Archaeology and Features of English Harbour*
- *The Fortifications Surrounding the Dockyard*
- *Clarence (The Commissioner's) House*



Figure 11. Entry Gate and Mast Shed area of the Dockyard.

Section Two - Description of the Property



Figure 12. Copper and Lumber Store.



Figure 13. Fort Berkeley and Dockyard from Fort Charlotte.

Section Two - Description of the Property

The Dockyard Naval Facility and Structures

The first dockyard was established at St. Helena across the narrow channel from the present day dockyard (Map 12). Few original 1725 structures remain at this site, which continues to function as a modern slipway and yacht repair facility. In 1734 the yard was expanded across the bay to the west side, the site of the current facilities of today. This core naval site is surrounded by a ten foot high brick wall and includes the following structures:

	BUILDINGS / SITES	CURRENT USE
The Dockyard Naval Facility and Structures	The Engineers House	Admiral's Inn Hotel
	Guard Station and Engineer's Building	Storage and Rental Space
	Blacksmith's Shop	Storage for Maintenance
	Sick House	Hotel
	Boathouse	Hotel/ Charter Office
	Joiner's Loft	Hotel
	Mast Shed	Workspace, Retail
	Canvas and Cordage Building	Offices, Storerooms
	Copper and Lumber Storage	Hotel, Pub
	Clerks or Senior Officer's House	The Museum
	The Bakery	Bakery
	The Pay Office	Office, Cafe, Shop
	The Galley	Restaurant / Giftshop
	Officers Quarters	Offices, Restaurant
	Sawpit Shed	Sail Loft
Blacksmith's Shop Master Shipwrights Cabin	Giftshop, Office	

Section Two - Description of the Property

The Dockyard Naval Facility and Structures



Figure 13. Map of English Harbour with St. Helena highlighted in red.



Figure 14. St Helena now the Antigua Slipway

Section Two - Description of the Property

St. Helena

St. Helena, the site of the original 1725 Dockyard is today a modern dry dock facility for the repair of yachts. While little remains above ground of the original structures, this site continues to function in its original capacity; the repair and refitting of ships. The administration building, and the chandlery are modified versions of the ancient workshops. Old cannons and anchors are still visible on site and, at the entry the stonewall remains in place. Underwater, many of the original wood pilings that date to the late 1700s can still be seen. St. Helena, now known as the Antigua Slipway, also offers a fuel dock, restaurants, chandlery, electronic and engineering services.

The Engineers House (1785)

This structure is a two-storey brick building with a finished attic providing three storeys for its current use as a (18 room) boutique hotel (Admiral's Inn). The structure was historically used as offices and residences for the engineers on the upper floors and a storeroom for pitch/tar, lead, paint and turpentine on the main or ground floor. It was built directly onto the exterior perimeter wall on the southwestern corner of the compound, in 1785. Architecturally, it is Georgian in style and is built primarily of red bricks that were brought to Antigua as ballast in the holds and bilges of merchant ships coming out from England.

The interior wood framing support is post and beam style. The high hip-styled roof has dormer windows on all four sides, heavy storm shutters on all windows, a low parapet wall, and wood shingles. There is a band or single course of white limestone set horizontally between the first and second floors.

The Guard Station (1778) and Engineer's Storage and Workshop (1776)

The Guard Station and the Engineer's Workshop is a long single storey brick building situated on the western perimeter wall of the Dockyard compound. It was built in two phases: the rear section or Engineers Storage (iron and nails etc.) and Workshop in 1776 and the Guard Station two years later, in 1778. The building has a stone floor and a shingle-clad, steeply pitched hip roof. The Guards were stationed at the northern end; which is also the location of the main entry gate to the compound. The engineer's working area included, post 1843, a blacksmith shop and forge at the extreme southern end. The entry doors have stone ramps to permit the rolling of barrels into the structure. There are two chimneys that served the forge and blacksmiths. The structure is currently used for storage of building materials by the Dockyard maintenance department.



Figure 15. The Guard Station and Engineer's Storage and Workshop

Section Two - Description of the Property



Figure 16. The Engineers House - Admirals Inn



Figure 17. The Engineers House West elevation

Section Two - Description of the Property

The Clerks or Senior Officer's House (1855)

Built in 1857, to house the senior naval officer or the clerk/accountant of the Dockyard, this two-storey wooden building is the newest building in the facility. It is architecturally interesting as it reflects its Georgian neighbours but stylistically has many elements of Caribbean Vernacular, as can be seen in the finishing details, such as the screen-louvered room dividers. Both floors of the Clerk's House have large wrap-around verandahs on three sides in order to capture the prevailing winds. It is used today as the Dockyard Museum, Gift Shop, and the office of the Environmental Unit of the National Parks. This building is commonly called the Admiral's House by Antiguans as it exhibits collections dedicated to Admiral Horatio Nelson and the numerous officers and men who lived and died in this former naval Dockyard in English Harbour.



Figure 18. Gallery in Museum



Figure 19. Gallery in Museum



Figure 20. Clerks or Senior Officer's House - The Dockyard Museum

Section Two - Description of the Property

The Bakery (1772)

The Bakery is a small stone and brick structure located south of the Clerk's House. It was built directly onto the stone perimeter wall of the yard. The Bakery was built much earlier than the Clerk's House and at one time had structures attached to it on both sides along the south wall. It has three ovens of various designs that supplied bread and cooked meals for the officers and senior men of the yard. Today it continues to make and provide bread and pastries for the yard workers and visiting yachtsmen. A small addition to the structure was built in the late 1980's on the exterior of the stone perimeter wall to house additional services and storage. It does not compromise the physical appearance of the building within the Dockyard. In front of the bakery are two small barrel vaulted cisterns that were restored in 2001 and are in good condition.



Figure 21. The Bakery



Figure 22. The Porters Lodge, Sick House and Condemned Articles Store

The Porter's Lodge, Sick House and Condemned Articles Store (1778)

The Porter's Lodge was built in 1778 on the north side of the entry gate. The Marine Guards used it until 1783, when it was converted to a victualing store. In 1785 it was used as a provisioning storehouse with an area partitioned off for the Porter. In 1797, it was again partitioned to include a sick house. It continued in this joint capacity until 1853 when the Sick House became the Condemned Articles Store. It is similar in construction and style to the Engineer's Building on the other side of the gate, being a single story structure built of mixed red and yellow bricks. Currently it has been converted into additional rooms for the Admirals Inn Hotel as it shares an inner enclosed waterfront courtyard.



Figure 23. Main Entry gate into the walled compound next to the Porters Lodge

Section Two - Description of the Property

Copper and Lumber Store Building (1789)

The Copper and Lumber Store building is the centrepiece structure within the historical compound. It is a picturesque two-storey yellow brick building with a low parapet wall, and white limestone band, laid horizontal midway between the first and second floor. The building has an inner courtyard that is open to the elements. Access to the courtyard is via a series of brick arches. This open space provided ventilation to the lumber stored within and light into the interior living spaces on the upper floor of the structure .

It's interior support framing is typical "post and beam style", with large 8 inch by 8 inch square posts and "knee braces" placed to support the upper wooden floor. The building is used today as a hotel (14 rooms/suites) and venue for events, such as weddings and cocktail receptions. There is also a popular English Pub on the ground floor. The roof has 24 dormer windows and is clad with wooden shingles. Heavy shutters protect the wood sash windows. There are four brick cisterns attached to the building on the east and west sides that once provided water for the sailors staying within.



Figure 24. The Copper and Lumber Store

Section Two - Description of the Property



Figure 25. The Pay Office

The Officers Quarters (1821)

The Officers Quarters was built in 1821 to provide accommodation for officers of ships being careened in the Dockyard. It is a two-story structure built of wood, stone and brick. The first floor is a series of 12 large cisterns capable of holding a total of 240,000 gallons or 1,200,000 liters of rain water collected from the roof. The upper story is framed with 8" posts and beams, with the spaces between the frames filled with bricks and lime mortar.

There are many structural issues with this building, the result of age and termite damage, and it is scheduled for extensive repair and restoration in the near future. The rooms or apartments that once housed the naval officers are now used as offices and a restaurant.



Figure 26. Main Passage in Officers Quarters

The Pay Offices (ca. 1807)

The Pay Office was built of stone and wood close to the waterfront on the northeast area of the Dockyard. It is a simple styled "wooden cabin" set atop a spacious open cellar. It has heavy hurricane shutters and no overhanging eaves, a common design for hurricane-resistant housing today. In the mid-19th century the structure was extended to provide additional space. It was used as the office for payment of workers in the Dockyard, particularly in the post emancipation period. The structure was divided into four small offices. These included the Commissioner's Office, the Storekeeper's Office, the Master Shipwright's Office and the Master Attendant's Office. The wooden upper structure has been repaired on three occasions and today serves as the office of National Commission UNESCO Antigua Barbuda and marine electronic equipment sales and repair office for yachts. The restored cellar is now used as a waterfront café and convenience food and alcohol store.



Figure 27. The Officers Quarters

Section Two - Description of the Property

The Canvas and Cordage Building (1792)

The Canvas and Cordage building was at one time the largest structure in the Dockyard. It was a two-storey brick building built in 1792 alongside the Mast Shed on the northwest side of the yard. The roof was a series of clipped hips that was essentially an attic space that was adapted to provide living space. In design it resembled the Joiners Loft set atop a brick single-storey building. The main floor was a large storeroom for rope, cordage, clothing and canvas. The hurricanes of 1950 severely damaged the building and the roof and two supporting walls were removed for public safety. Today a number of shed-style enclosures have been built along the inner walls for use as offices of Customs, Immigration, Port Authority, and for storage. Its complete restoration is being considered.



Figure 28. Remaining Walls of Canvas and Cordage Building

The Seamen's Galley (1778)

The Seamen's Galley is a single-storey stone building that contains ovens and fireplaces where the seamen and yard workers could cook and prepare their meals while their ships were careened. It is located on the northern wharf waterfront between the two careening heave down blocks.

It was a popular central social place within the Dockyard, as workers gathered there to collect and prepare their mess rations. The building is today a restaurant that continues to provide meals to seafarers. The storage end of the building, however, has been converted into a small boutique.



Figure 29. The Seamen's Galley

Section Two - Description of the Property

The Mast Shed (ca. 1789)

The Mast Shed is an open structure that provides a covered shaded space for securing and working on masts and spars. Broken masts were brought into the shed by floating them from their ships and then dragged up the ramp into the shed. New timber could be cut at the nearby Saw pit Shed, then shaped and fitted in the Mast Shed before floating them back to their ships moored out in the harbour.

The Joiner's Loft and Boat House (1778)

The Joiner's Loft is a single floored wooden structure built directly on the waterfront. The upper enclosed floor has a hipped roof set on low exterior walls, resembling a finished attic space. It is of post-and-beam construction framed by 12" square timbers open on the ground level. At high tide the bases of the first row of posts are underwater, which facilitated the dragging of small boats and dinghies up under the structure for repair. The joiners lived and worked upstairs. Much of the fine detailing and joinery was done at this site. It is a fine example of joinery as it is built with mortis and tenon joints, and wooden pegs, dowels and bolts, similar to the Saw Pit Shed, the Mast House and the Copper and Lumber Store buildings. It was extensively restored in 1972 and again in 2009.



Figure 30. The Mast Shed



Figure 31. Signage



Figure 32. The Joiners Loft and Boat House

Section Two - Description of the Property



Figure 33. Saw Pit Shed and Master Shipwright's Cabin

The Saw Pit Shed (1769)

The Saw Pit Shed is the oldest standing building in the Dockyard. It is a single-storey structure that was built with an open pit below and was used to cut large pieces of timber to the required sizes. Timber was cut by two men each pulling the two-handed saws in turns, vertically up and down. The building is fronted by an inclined ramp that provided access for rolling or dragging logs and large timbers into position and out again after cutting. There is currently a plywood floor over the pit, enabling the building to function as a sail loft.

The Master Shipwrights Cabin (1769)

In close proximity to the Saw Pit was the Master Shipwrights Cabin. It is a two-story brick structure that was the home of the master shipwright responsible for all repairs to the ships. He reported to the Commissioner or senior naval officer and carried much responsibility in keeping the ships in good condition. The cabin is considered a special place in the intangible cultural heritage of Antigua and indeed the world of Methodism as one of the key persons to preach and bring Methodism to the Caribbean was the master shipwright John Baxter who was sent out from Chatham in 1778.

Baxter was a Methodist preacher and did much to spread the faith and to educate the slaves on Antigua. Today Baxter's Master Shipwrights Cabin is in good condition and serves as a gift shop, office and high security center for the CCTV system of the National Park.



Figure 34. Master Shipwright's Cabin



Figure 35. John Baxter Plaque

Section Two - Description of the Property



Figure 36. The Saw Pit Shed



Figure 37. Ramp up to the saw Pit Shed

Section Two - Description of the Property

	BUILDINGS / SITES
Other Structures of Significance	Sun Dial (1777)
	Brick and stone wall of compound
	Sail Loft Columns
	Stone Wharf walls and Heave-down blocks
	The Capstan House

The Sun Dial (1777)

The sundial is one of the oldest structures in the Dockyard. It was installed in 1777 fairly close to the Pay Offices.



Figure 38. Stone Wall, south side.



Figure 39. Sundial

The Brick and Stonewall of the compound

The wall that encloses the Dockyard was built to prevent illicit activities within the yard. Desertion, theft of supplies, and the smuggling in of rum were major issues. It is in places 10 feet in height and made of a mixture of yellow bricks and cut stone quarried in the vicinity of the site. The wall expanded over time and was capped with broken glass bottles that were set in the mortar on the top.



Figure 40. Brick Wall enclosing compound

Section Two - Description of the Property

The Sail Loft Columns (1797)

Within the enclosed yard of the Engineer's and Pitch Storage area, is a cluster of 14 round stone columns. These columns once supported the Sail Loft Building. This structure was similar in design to the Saw Pit Building, as large wooden trusses supported the roof that covered a large open workspace for spreading out and repairing sails. Beneath the loft is a narrow channel or canal that runs under the structure. The ships longboats carried the sails that needed mending into the canal. The sails were then hoisted up into the structure where they could then be repaired. The building was damaged severely in the great earthquake of 1843, then finally destroyed in 1871 by a hurricane. As the Age of Sail was passing, the Sail Loft was not rebuilt so the stone columns were capped to seal and protect them.



Figure 41. Sail Loft Columns



Figure 42. Sail Loft Columns and Canal

Section Two - Description of the Property

The Stone Wharf and Heave Down Blocks (1820s)

The function of the Dockyard heavily depended on a stable work platform or wharf. The earliest wharf was made of wooden piles that were wrapped in copper sheeting and coated in tar. They had iron tipped points and were driven deep into the seabed. In 1820 Boatswain Francis Fox and a crew of enslaved Africans (11 stonemasons and 23 labourers) began construction on a new stone wharf that expanded the work platform and dock space; in the process, the old wooden pile wharf was enclosed within the new stone structure. (See Annex 3: Sea Wall Project, 2004.) It is unclear when the two large stone heave down blocks were built, but they preceded the stone wharf wall. Each block contains three large Admiralty long-shank anchors. The ring end of the central anchor protruded out of the seaward end of the block onto which the masts of careened ships were secured.



Figure 43. Heave Down Block

The Capstan House (ca. 1807)

A central Capstan House was built around 1807 to heave down ships for careening. Prior to this, capstans mounted on the hulk of a decommissioned ship moored along the waterfront were used as a careening pit. Capstans were simply large winches. Ropes from the ships masts were wrapped around them, the ships crew then turned the capstans, pulling the ship down onto its side. When in position, the main mast was secured to the stone heave down blocks nearby.



Figure 44. Original Piles sheathed in copper

Section Two - Description of the Property



Figure 45. Capstan being removed for restoration 1950

It is reported that the turning of the capstans was accompanied by a fiddler who played sea shanties to keep the men in time. The Capstan House was built in the post-and-beam style, typical of the other wooden structures in the Dockyard. The ground floor was open to allow the working of the capstans, but the roof above had a floor creating a loft above where the seamen were quartered during the careening of their ships. The Capstan House became a place of relaxation and social activities for the sailors as it was situated close to the galley or cookhouse, their temporary place of accommodation, and their ship. It would also have been the place where the daily rum ration was consumed.

The Capstan House was destroyed by a hurricane in 1925 and never rebuilt; only its low brick foundation and base for mounting the three capstans survive. In 1950 the old wooden capstans were removed by the crew of the visiting Canadian frigate HMCS *Ontario*. New replicas were built shortly

thereafter and installed in 1952 by sailors from HMS Devonshire and HMS *Enard Bay*. In 2004 they were again rebuilt by shipwright Jerry “Chippy” Bardoe of Cobb’s Cross.

Underwater archeology along the wharf in front of the Capstan House uncovered large numbers of broken china bowls, glass bottles, pewter spoons, along with the discarded remains of the ships being repaired, providing useful insights into the activities and daily life in this interesting area (see Annex 3).



Figure 46. Present day capstans.

Section Two - Description of the Property

	BUILDINGS	EASTING (m)	NORTHING (m)	AREA (m ²)
Buildings within Proposed World Heritage Site Coordinates are in UTM20N WGS 84	Fort Berkerly	631861	1880570	2656
	Slipway Restaurant Building	631909	1880846	543
	Fort Berkerly Barracks	631667	1880870	66
	Slipway Shed	631880	1880889	84
	Slipway Annex	631950	1880908	208
	Dockyard Bakery	631645	1880922	62
	Engineers Annex	631593	1880918	110
	Blacksmiths	631598	1880935	88
	Copper and Lumber Storage	631696	1880930	863
	Sawpit Shed	631626	1880945	202
	Carpenters Office	631623	1880954	67
	Officers Quarters	631729	1880952	666
	Guard House/ Engineers House	631609	1880958	231
	Pay Office	631775	1880976	151
	Mast Shed	631669	1880972	439
	Master Shipwrights House	631622	1880988	92
	Joiners Loft	631636	1880985	307
	Canvas and Storage	631696	1880979	899
	Capstan Buildings	631761	1881007	292
	Engineers House	631572	1881005	194
The Galley	631730	1881005	159	
The Sail Loft	631605	1881011	873	
Clarence House	631991	1881178	425	
Senior Officers/Clerks	631426	1881839	302	

UTM Coordinates of Buildings within Proposed Heritage Sites

Section Two - Description of the Property

The Archaeology and Associated Features of English Harbour

English Harbour consists of Tank Bay, Ordnance Bay and Commissioner's Bay, which make up the inner harbour, and Freeman's Bay, which is closest to the entrance to the harbour. Within this area are numerous natural and historical features of importance that contribute to the socio-cultural and scenic landscape of English Harbour.

Ordnance Powder Magazines

Two important features of English Harbour are the Ordnance Powder Magazines. These large stone structures were built in 1807 and 1823 respectively, to replace previous structures that were made of wood. Each was capable of housing 700 to 750 barrels of black powder within their massive "bomb-proof" walls. Powder from ships being careened was stored here and ships on active service were replenished. The British Army used the northern magazine complex on inner Ordnance Bay for supplying the fortifications and small coastal batteries nearby. In the early 1960s, the Ordnance lands were leased for residential use.

The Navy Ordnance is the centerpiece on the grounds of the Admiral's Inn Hotel Annex, and the Army Ordnance complex is the home of Mr. Hans Schmidt. Their original block-houses or bunkers are still intact and well preserved.



Figure 47. Army Ordnance complex

The Pillars of Hercules

The east side of the entry into the harbour is a geological formation of eroded volcanic ash columns known as the "Pillars of Hercules". The deep water in front of the Pillars is today a popular recreational dive site. Nearby inside the harbour entrance, a large Admiralty long-shank anchor can still be seen lying on the seabed. It was originally used to moor ships just inside the harbour entrance.



Figure 48. Navy Ordnance powder magazine

For more information and pictures of the historic structures within the Naval Dockyard please see Annex 1

Section Two - Description of the Property

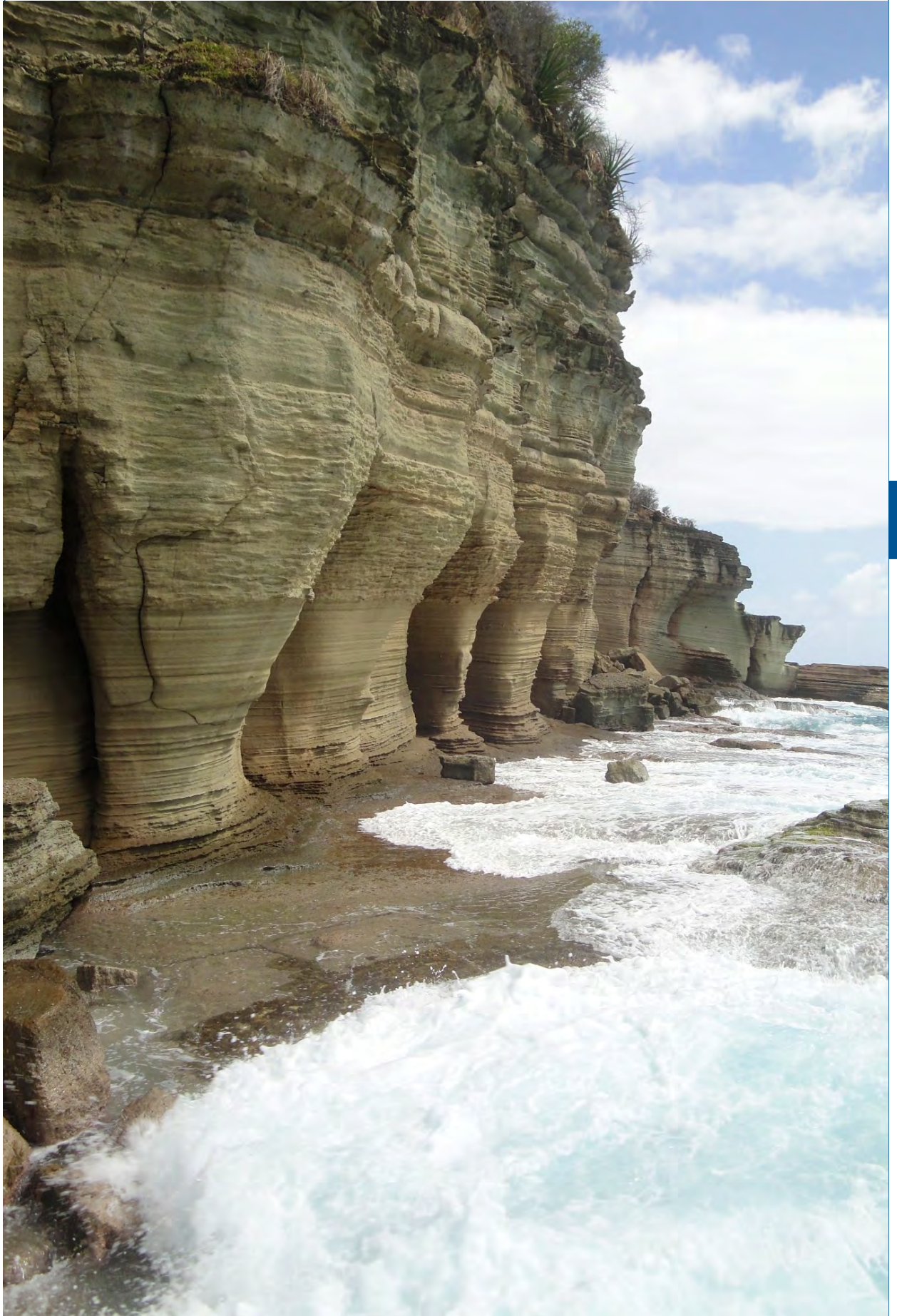


Figure 49. The Pillars of Hercules below Fort Charlotte, east of the entrance to English Harbour.

Section Two - Description of the Property



Figure 50. Map of Freeman's Bay with Beach Mooring Positions, Beach Defences and Fort Charlotte on the right and Fort Berkerly on the left.



Figure 51. Aerial view of Fort Berkerly in the foreground and Fort Charlotte Point on the left.

Section Two - Description of the Property

Forts Berkerly and Charlotte

Fort Berkeley was built on the west side of the harbour entrance, on a rocky finger-like point of land that extends eastwards protecting the inner harbours. Initial construction began in 1704 and continued throughout the development of Dockyard. Today the remains include the powder magazine, the guard house, and the crenelated defence walls. Fort Charlotte was built on the opposite side of the harbour entrance in 1745, and consisted initially of two levels of gun platforms, a guard house, kitchen and latrines. Little remains of the lower section, and on the upper level only the semicircular platform and foundations of the guard house can be seen. An iron chain was slung across the harbour entrance from Fort Charlotte to Fort Berkerly and raised to prevent the entry of unwelcome vessels, particularly at night. (see Annex 4)



Figure 52. Fort Charlotte bastion wall



Figure 53. Fort Berkerly

Section Two - Description of the Property

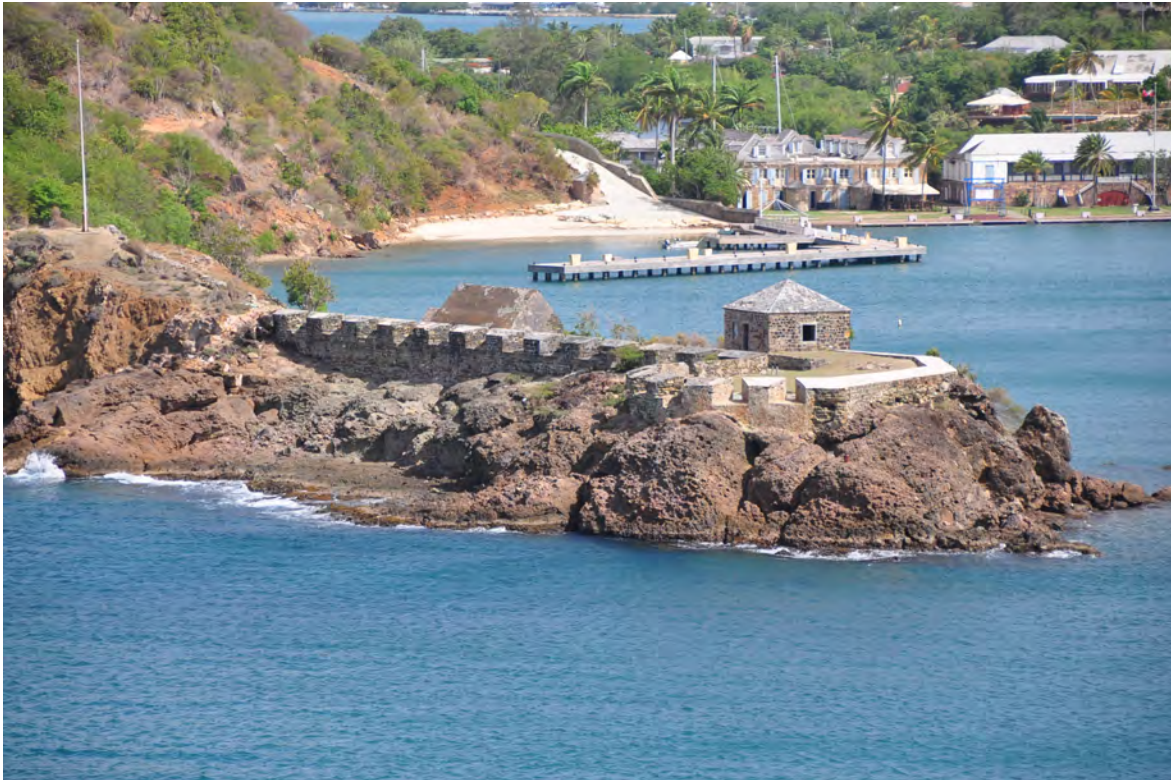


Figure 54. Fort Berkerley viewed from Fort Charlotte.



Figure 55. Fort Charlotte gun platform

Section Two - Description of the Property

Freeman's Bay

The coastline of Freeman's Bay is comprised of several sandy beaches behind which are the Inn Hotel, Galleon Beach Resort and a number of residential villas. Ships ready for service were positioned stern to the beach, as can be seen in 1779 maps by Naval Dockyard Commissioner Laforie (Figure 50). One of the stern mooring anchors can still be seen on the beach at Freeman's Bay. The largest of the beaches was used by the Royal Navy as a cemetery for sailors who died on board ship at anchor and is now an archaeological site. (See Annex 2 for details on excavations and BBC documentary.) Naval vessels were placed in different positions within the harbour depending on their needs for repair or shelter. Ships being repaired were placed either on the wharfs or in Ordnance, Tank or Commissioner's Bay. Underwater archaeological surveys in Freeman's Bay near to the mooring points uncovered evidence of ships refuse of daily life, such as bottles, clay smoking pipes, ceramics, cannon balls and much more, that confirms the position of ships (Cambridge University document: Dockyard Museum).

There were also iron chains laid on the seabed and large anchors set on the shore at Freeman's Bay and around the coastline within English Harbour. Naval vessels used the chains to aid in mooring and the anchors for maneuvering about the inner harbours. The importance of English Harbour for shelter in the hurricane months cannot be understated as shown by the fact that in 1958, new chains for moorings were brought out by the HMS Troubridge even though English Harbour had been abandoned by the Navy since 1895. Additional work on hurricane mooring chains was done by HMCS Brockville in 1959. In October 1960 the HMS Rothesay laid two 1,000-pound and three 500-pound anchors off the Pay Office for use by yachts and visiting ships. These are still in use today.



Figure 56. Admiralty long shank anchor at Freeman's Bay

Section Two - Description of the Property

The Underwater Cultural Heritage

English Harbour has a rich historical and archaeological legacy that began in the prehistoric period about four thousand years ago. With the arrival of the English settlers and the subsequent development of the island into a sugar colony, the harbour and surrounding hills grew in military importance. The sheltered bays not only provided refuge and a work space but also a convenient place for the disposal of ship and shore refuse. Most unwanted items were thrown overboard but many good ones were also dropped accidentally into the sea. In addition, several ships were lost in English Harbour, including hulks of older decommissioned vessels that were used as floating prisons or for accommodating seamen whose ships were being repaired. These sunken vessels, and the meters of accumulated debris of daily life, represent a rich archaeological underwater cultural heritage.

Underwater archaeological surveys were conducted on four occasions to gain insights into the archaeological deposition, such as the locations, depth, condition and state of preservation.



Figure 57. Artifacts from Seawall

In 1988, graduate students from Cambridge University carried out the first scientific survey. This team successfully located major deposits in Freeman's Bay where the ships were moored. Dr. Reg. Murphy and students from the University of Calgary did underwater excavations and surveys in July 2001 and June 2002 near the Seawall along the east dock prior to the start of the Seawall Restoration Project in 2003 (Annex 3). The latter dig was essentially a limited rescue or salvage project but the findings were significant and are still being analyzed over a decade later. In early 2013, a hydrographic survey of English Harbour located the remains of a shipwreck within Tank Bay. In addition, three frigates are known to have been lost within the harbour and their locations mapped. Research to confirm their location and to assess the condition and potential of these wrecks will be conducted in the summer of 2014. The major issue that currently limits underwater archaeology is the lack of conservation facilities and trained conservationists on Antigua. This will be addressed now that the 2001 UNESCO Convention for Protection of the Underwater Cultural Heritage has been ratified by the Government of Antigua Barbuda in April 2013. A conservation lab is now planned for English Harbour to support research activities under this Convention.



Figure 58. Glass artifacts found in the Dockyard.

Section Two - Description of the Property

Archaeological Research

Land-based archaeological excavations and surveys have been conducted in the Dockyard and surrounding hills. Although these have been small in scale, they have resulted in a number of doctoral dissertations and master's theses. Other excavations include salvage projects following natural disasters, such as landslides or hurricane erosion, and a few implemented prior to restoration or development. However, most archaeological research in the area of the proposed site has been restricted to survey and evaluating the associated sites. The most significant results of this archaeological research include:

- In search of the old naval dockyard: Archaeological excavations at the Copper and Lumber Store Building (Murphy and Knapman 2002 and 2007).*
- Archaeological survey of Shirley Heights (Ferland 2003).*
- Archaeological excavations at Blockhouse north midden (Cripps and Murphy 2005).*
- Archaeological excavations at Lookout Barracks (Cripps 2004).*
- Archaeological survey of the Artillery Barracks (de Mille and Varney 2004)*
- Underwater archaeology in English Harbour, the Seawall Project (Murphy 2003)*
- Archaeological Excavations of the Galleon Beach British Naval Cemetery (Murphy 2013; BBC 4: Documentary)*



Figure 59. Excavating Workshop area from the 1750's.



Figure 60. Personal items found during excavations of the Officers Quarters at Block House

For more in-depth descriptions of the Fortifications and associated features of English Harbour, please see Annex 4.

Section Two - Description of the Property

The Fortifications and Related Structures Surrounding the Dockyard

With the departure of the British army from Antigua in the late 1850's, the fortifications, and supporting facilities (remote, isolated positions away from population centers) were abandoned. Over time hurricanes, earthquakes and general neglect have reduced many to ruins, although some structures, such as powder magazines, gun platforms and water catchments remained in a better state of repair. Today these areas are most valuable for the information gleaned from archaeological study. Deep middens, rich with artifacts associated with all of the former inhabitants of these structures have enormous potential for archaeological research that will enrich our knowledge of the life and times of both British soldiers and their "local" supporting staff. Of the many regiments that were sent to garrison the forts, over 40 percent did not make the return voyage, falling victim to malaria, yellow fever, and dysentery. Archaeological research has been conducted periodically on the highlands overlooking the Dockyard, at the Ridge and Middle Ground, with the following goals in mind:

1. Support restoration efforts.
2. To gain insights into the past.
3. To document and map structures, middens or historical refuse dumps, gravestones, flora and fauna.
4. To determine and understand the use or purpose of the ruined structures.
5. To compare the material culture of the officers, the enlisted men and enslaved soldiers of the West India regiments.
6. To recover information on which specific regiments served at the various sites over time.
7. For forensic archaeology to understand the life ways, health, diet, medical practices, and causes of the high mortality rates of the past residents/military (i.e., Swanson et al. 2013; Varney 2003, 2013).



Figure 61. Ruin of Officers Quarters at Block House Complex



Figure 62. North Bastion Wall at Dow's Hill Fort in an excellent state of repair

Section Two - Description of the Property



Figure 63. Ariel view of Blockhouse complex with Cistern, Gun Platforms and Powder Magazine within the stabilized stone walls; Washroom facilities located outside enclosing walls.



Figure 64. Lookout Guard House now a restaurant

Section Two - Description of the Property

	BUILDINGS / SITES	CURRENT STATE
Fortifications and Related Structures Surrounding the Dockyard	Fort Charlotte	Ruin
	Blockhouse	Partially Restored
	Artillery Quarters/complex	Partially Restored
	Engineers Complex	Ruin
	Lookout Fort	Restaurant (restored)
	Hospital	Ruin
	Officers Quarters	Ruins
	The Canteen and Annex	Ruin
	Cemetaries (3)	Historic Cemetery
	Married Soldiers Quarters	Ruin
	Kitchen and Latrine Blockhouse	Ruin
	Quartermaster House and storage	Ruin
	Guard House and Barracks	Ruin
	Jones Valley Dam	Ruin
	Jones Valley	Nature reserve tropical dry forest
	Dow's Hill Fort	Interpretation Center Partially restored
	Fort Berekly	Partially restored
Middle Ground Barracks	Ruin	
Powder Magazines	Good condition	

Section Two - Description of the Property



Figure 65. Ariel view of Blockhouse Powder Magazine with Ruins of Officers Quarters in the back ground.



Figure 66. Store rooms for the Artillery Complex now used as the Archaeological research center.

Section Two - Description of the Property



Figure 67. Entry Gate to Army Ordnance Complex



Figure 68. Hospital and Canteen Complex Latrines.



Figure 69. The Cemetery at the Lookout.



Figure 70. View from Lookout Cemetery.

Section Two - Description of the Property



Figure 71. Ruin of the Officers Barracks at Blockhouse.

Section Two - Description of the Property

Clarence House



Figure 72. Clarence House Antigua ca. 1980 (Caribbean Style)

The Commissioner's House, more commonly known on Antigua as Clarence House, is without a doubt, one of the finest examples of a Georgian Period formal, country residence in the Lesser Antilles. Popular legend holds that stonemasons sent out from England, built Clarence House around 1786 as the intended residence for Prince William Henry the Duke of Clarence who was on active service in the Royal Navy, in Antigua in 1787, on HMS *Pegasus*. The location of this early structure is unknown but the house we know today was built by the Navy Board between 1804 and 1806, as the home of the Commissioner of the Antigua Dockyard, and it saw service in that capacity until the end of the Napoleonic Wars in 1815. In 1816, the naval dockyard no longer had a resident commissioner, and the house became the residence of the senior dockyard supervisors until 1856, when it was leased to the Governor of Antigua, Kerr Baillie Hamilton. Clarence House continued to serve as the

Governor-Generals of Antigua and Barbuda's country residence until its demise in the 1990s hurricanes. Many dignitaries have been entertained at Clarence House, but to Antiguan, the most memorable event was that Princess Margaret chose to spend her honeymoon at Clarence House. The original structure was built by John Foster; the "Foreman of House Carpenters" at the Dockyard. In 1871, it was severely damaged in a hurricane and was subsequently rebuilt. Major repairs and alterations were again conducted in 1951, by Governor Sir Kenneth Blackburn in the wake of the two hurricanes in 1950. In the 1990s, hurricanes, Luis, Marilyn and Georges devastated the residence and outer buildings. In 1996 Governor-General Sir James Carlisle initiated a major conservation project for restoration of the house. The restoration project was finally started in 2013 with funding from the Sir Peter Harrison Heritage Foundation, and should be completed in 2015.

Section Two - Description of the Property



Figure 73. Princess Margaret and Lord Snowdon visit the Dockyard 1960



Figure 74. Interior of Clarence House ca. 1980's (Caribbean Style)

Section Two - Description of the Property

An update on the progress on the restoration of Clarence House

The restoration project is well under way, with progress being made on many fronts. All of the greenheart joists and beams for the floor have been cut and dressed and are now installed. Many limestone blocks have been quarried, cut to size and dressed by hand and are in the process of being installed. About 70% of the limestone cladding of the walls on the main floor are complete. The repair of the interior stone walls are also complete, and work is now focused on placement of the electrical, plumbing and other essential services. Windows and doors along with the wood for interior panels have been ordered and contracts prepared. Selective clearing of the surrounding bush is underway, including the court yard in preparation for the next phase in the restoration.



Figure 75. East wall of Clarence House.



Figure 76. Greenheart beams and joists of main floor seen from lower level.

Section Two - Description of the Property



Figure 77. Replica furniture



Figure 78. Replica table.



Figure 79. Carving coffee table.



Figure 80. Local carpenter at work

Local craftsmen have started replicating the Georgian Period, Caribbean style mahogany furnishings. All pieces are being carved and constructed by hand.

Section Two - Description of the Property

2.b. History and Development



Figure 81. View of the Dockyard from the Lookout Shirley Heights early 1900s.

The Antigua Naval Dockyard was the foremost naval dockyard for the British Navy in the Eastern Caribbean. It was formerly established in English Harbour in the late 1720s and closed as a military installation in 1895. However, English Harbour has had a long and continuous history that began more than five thousand years ago.

Archaeological research on the site of the Naval Dockyard and the surrounding areas indicate that “English Harbour” has been continuously occupied by humans for over 5,000 years (Nicholson 2002). Evidence of Archaic Age (3,100 BC – 250 BC) period material culture, stone tools and shell midden deposition has been found in and around the Dockyard. These earliest sites were small and scattered along the coastline and little evidence remains of them today. The early Amerindian settlers were undoubtedly attracted to the rich marine resources in the mangroves and waters of the inner harbours, as these provided the base of their subsistence (Murphy 1995, 1999).

By the middle of the first millennium B.C., Ceramic Age Arawak (500 BC- 1493 AD) speaking people began to migrate up the archipelago of the Eastern Caribbean from their homelands in South America (Rouse 1992). They soon replaced the Archaic Age peoples and the remains of their settlements lie buried beneath the Georgian Naval Dockyard and at Freeman’s Bay nearby (Murphy 2013). The Arawak people remained in the area until the arrival of the European explorers in the late fifteenth century. In 1632 English colonists settled Antigua and the lands on the south coast of Falmouth and English Harbour were the first to be cleared and cultivated.

The early English settlers quickly recognized the importance of English Harbour as a sheltered harbour with narrow deep bays that are almost completely enclosed by hills. This provided safe anchorage within an easily defensible harbour and as ships secured in the inner harbours could not be seen from the sea, it was an excellent position of security when they were most vulnerable.

Section Two - Description of the Property

With the introduction of sugarcane cultivation in the mid 17th century, and the subsequent enormous profits that were made from the growing industry and emerging Triangle of Trade, the now valuable sugar-colonies of the Eastern Caribbean could not be left unprotected.

Britain was an island nation that was fully aware that its security, safety, economic survival and trade depended entirely on the sea. Its merchant fleets ensured its economic growth while its navy protected its interests and defence. For all European nations in the 17th to 19th centuries the vehicle of empire building was a strong disciplined professional navy. The British Navy's expansion, development and strategy was extremely successful, in part, due to the strategic location of dockyards for refit and repair in the field of operation.

Between 1689 and 1713, with a small period of peace between 1697 and 1702, Britain was at war with France; from 1713, for nearly a hundred years, the Caribbean was the scene of a struggle for naval supremacy in which Britain, Spain, Holland and France were all competing. Even when peace was temporarily declared, as at the Peace of Paris in 1763, privateers were at large in the Caribbean anxious to seize the valuable cargoes of sugar and other products being sent from the West Indies to Europe. This confused situation was still further complicated by the American War of Independence and by the attempts of Britain in the last quarter of the eighteenth century to restrict trade with her former American Colonies under the Navigation Act. It is against this background of world unrest and competition that English Harbour was developed into Britain's main naval dockyard in the Eastern Caribbean.

The first reference to the defence of English Harbour against attacks occurs in 1704 when it is listed as one of the twenty

"forts" established around the coast of Antigua. This particular fort was Fort Berkeley at the entrance to the Harbour. Some years earlier a "*Platforme with about six guns*" had been established at Falmouth, which was a town of equal importance with St. John's and Parham at the beginning of the eighteenth century. However, the importance of Falmouth quickly declined, mainly owing to the shallowness of the water in Falmouth Harbour and competition with the more favourably located emerging capital St. John's. English Harbour with its favourable attributes as a hurricane shelter and place for careening and repair came into its own as a naval establishment.

By 1707, Sir Charles Wheeler's advice was taken and English Harbour was used by naval ships for shelter and "self-repairs". Tents were setup for the men and supplies from the ship. The cannons from the ship were removed and placed in defensive positions and to weigh down the ship for careening. A letter from Captain Robert Clarke of the *Adventure*, a fifth-rate of 44 guns, addressed to the Secretaries of His Royal Highness, the Lord High Admiral, on the 2nd January 1707 reads:

"I must also take the liberty to inform you of some stores that are not allowed by the Navy Board, which is actually necessary for those ships which are to attend on the Leeward Islands (I mean careening gear) that, in the absence of men-of-war may be lodged with Mr. Collins, Agent at Antegoa. On that Island is a very good harbour called English Harbour, not above one quarter of a mile over, and a mile long from the entrance; three fathom or more water close to the Bank—so that you may lay your ships close to it and have down by your guns".

Careening is the process of pulling a sailing ship over onto its side, thereby exposing its hull or bottom.

Section Two - Description of the Property

The practice in those days was to careen the ships by hoisting out some of the guns and hanging them to the masts.

By 1723 English Harbour was in regular use by His Majesty's ships, and gained further respect in September of that year when a powerful hurricane swept ashore 35 ships lying in other ports in Antigua, while His Majesty's Ships *Hector* and *Winchelsea* in the Harbour suffered no harm.

Two years later the pressure of naval warfare in the Caribbean made it necessary for the Britain to establish a naval base where men-of-war could be completely re-fitted. In 1725 Captain Francis Cooper of HMS *Lynn* and Captain Arthur Delgarno of HMS *South Sea Castle* reported that,

“English Harbour might be made a very proper place for careening and re-fitting, and so save H.M. ships the trouble of going to the Northern Colonies for that purpose.” (in Nicholson 2002:5).

The report was adopted, and twenty acres of land were acquired for wharves, magazines and storehouses. During the next two years development of the first Dockyard, known as St. Helena and lying on the opposite side of the Harbour to the present Dockyard, proceeded apace; for on the 5th of January 1728, the Antigua Legislature voted 200 guineas to Captain Delgarno for his services in constructing the *“wharf and platform.”*

The cost of the work was met partly by the Government of Antigua, and partly by His Majesty. By November 1728, the Assembly of Antigua reported that it had already spent £1,250 sterling at English Harbour. However they had still further expenditure to meet; for an Act of the Antigua House of Assembly dated the 8th February 1733, has the following preamble:

“Whereas English Harbour in this Island is by nature a port of the utmost safety and security for His Majesty's ships against violent storms and tempests, and at the same time a most convenient and commodious place for refitting and cleaning any number of ships that His Majesty may think fit to send to these his American plantations, either for protecting them or annoying his enemies in these parts, the which being taken into consideration by the Legislature of this Island, they, out of duty to His Majesty and regard to their country, have, at very great charge and expense to the public of this Island, caused a wharf to be built at the said harbour for the use of His Majesty's ships and erected a fort at the entrance of the harbour to defend the same, of which His Majesty in his great wisdom hath already so far approved that he has at his own charge been graciously pleased to cause storehouses to be built there, and withal to supply us with cannon and several stores of war for the use of the said fort, for which, as well as the rest of his tender and paternal care of us his distant and remote subjects, we the Governor-in-Chief of these his Leeward Caribbee Islands in America, and the Council and Assembly of Antigua (with hearts of unshaken duty and loyalty) do humbly beg leave to return our most unfeigned and hearty thanks” (Blackburne 1951:9-10).

An Act was passed soon after by the Assembly of Antigua to provide for the construction of water tanks and a catchment (the catchment which stands today at the entrance to the present Dockyard) at the expense of the Island.

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Figure 82. Plan of English Harbour ca. 1748.

Section Two - Description of the Property



Figure 83. View of Ordnance Bay in the foreground looking towards the Dockyard.

During the next ten years warfare at sea, and particularly the depredations of French privateers, increased; and it soon became clear that the facilities of English Harbour would have to be increased. Plans obtained from the Admiralty archives covering the subsequent work show that some major developments had been completed by 1745.

St. Helena, the first dockyard, consisted only of a capstan house, a stone storehouse, and three wooden sheds for the storage of careening gear. There were no quarters for dockyard workers, and the seamen themselves did all work on the ships. By 1745, the facility had been extended by excavating the hill behind the careening wharf. A capstan house, “Pitts” for careening blocks, a storehouse, and a watch house had been erected. A warping anchor, lying to the south of St. Helena, can be seen on the plans of this date, and the wooden piles for the frontage of the wharves (made in those days with local mangrove wood) had been placed in position. Many of these original piles are still visible underwater today.

The fortifications around the Harbour were also improved. Fort Berkeley (originally established as part of the general defence system for Antigua) had been extended to provide for two “lines” of 12 and 10 guns respectively, and a magazine and a guardhouse had been built.

Opposite Fort Berkeley, work had begun to create Ft. Charlotte and a new battery of 11 guns had been established, together with a rampart for small arms fire extending from the the earlier waterfront battery to the new gun platform higher up the hill. Two anchors were also fixed at Fort Charlotte; one for assistance to vessels wishing to warp themselves into the Harbour, and the other to serve as a mooring for the chain boom which ran across the entrance to prevent the entry of intruders. The latter is still visible on the sea bed at the mouth of the harbour.

During the period prior to 1745 the present main Dockyard was also developed extensively. A line of wooden storehouses (on the site of the present Copper and Lumber Store)

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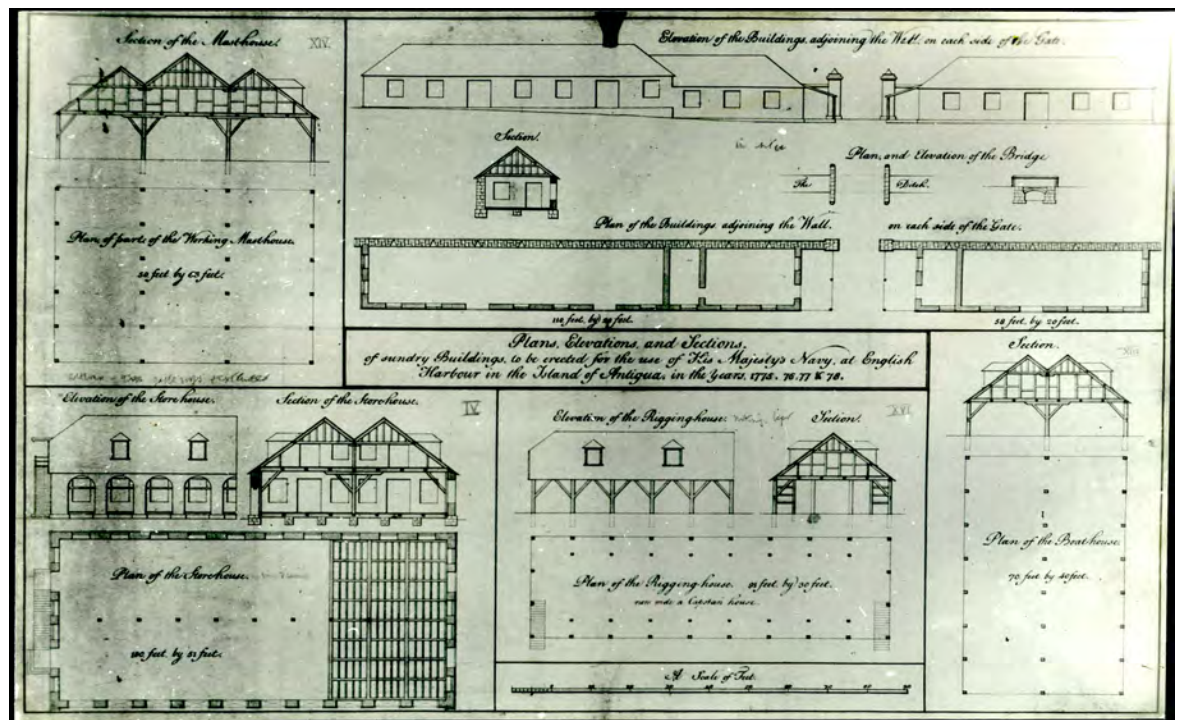


Figure 84. Plans of Structures within the Dockyard

had been built and the reclamation of land to provide adequate wharves had commenced. None the less, large ships could still not lie alongside the present Dockyard, and a plan of this period shows that a hulk, the “Ludlow Castle”, was moored alongside the north edge of the yard and was fitted with two large capstans and a “pitt” for the careening of British ships (Nicholson 2002:11; Documents Dockyard Museum).

The improvements in English Harbour were undertaken just in time. The public in Antigua was becoming restive at the failure of the Navy to protect the merchant ships, and in July, 1746, a petition was addressed to the King by the Council and Assembly stating that over 100 ships had been lost during the previous ten months and that the Hon. Fitzroy Henry Lee, the commanding officer, was greatly to blame. A private letter from Antigua written at the same time says: “*French privateers are so thick about this island, from the indolence of his majesty’s ships, that people don’t care to send out their boats.*” The Admiralty in disgrace recalled commodore Lee a notorious drunkard who acquired the dubious nickname of Captain Bottle.



Figure 85. Replica frigate, The Rose



Figure 86. Cannon outside of Dockyard Museum

Section Two - Description of the Property

Criticism of the Navy continued unabated during the following years, however, with the next recorded incident being in 1755 when allegations were made that English Harbour was silting up and that no ships over 50 guns could safely enter. A chart of the harbour prepared in 1757 by James Johnson “pursuant to an order from Thomas Frankland Esquire, Rear Admiral of the Redd” bears the following quaint inscription:

“This Plan with the soundings was taken by Order of Admiral Frankland, to detect the Falsehood of the Publick Assertion of the President of the Councile and Speaker of the Assembly of Antigua; That there were at least 24 Feet Water, at the side of the Wharf”.

A report on this incident records that “Mr. Baker swears that the surroundings are the same as in 1722 when he piloted in H.M.S. Hector, and in 1748 when he published his map of Antigua.”

Whether because of this civilian criticism or because international events demanded greater naval facilities in the area, the development of the Dockyard and of English Harbour continued steadily during the years between 1755 and 1765. Plans from this

period show that in the present Dockyard, quarters were built for the Commander-in-Chief (on the site now occupied by the Officers’ Quarters), together with storerooms, a kitchen and even a shelter for his “chaise” (on the site of the present Galley). The first part of the present Saw Pit was constructed (the side nearest to the Naval Officer and Clerk’s House); the reclamation of the wharves and their facing with wooden piles was continued, and the Dockyard was enclosed by a stone wall.

In the general area of the harbour there were further improvements. A battery with 20 guns was established on the beach in Freeman’s Bay facing the entrance to the harbour —the “Fascien Battery” (of which there is no trace to-day). The first warping anchor was established in front of this Battery, and the careening wharf at St. Helena was improved by the replacement of the mangrove piles, which had “given but little service”. A plan of 1765 gives instructions for future work and refers to “Capping on the old piles, which is so much decayed, as to let their Stones and Earth fall into the Water, and will in a very short time prevent the Ships coming close to the Careening Wharf.” (Documents, museum archives). The year 1765 also saw the first of two grandiose plans for development neither of which was carried out.

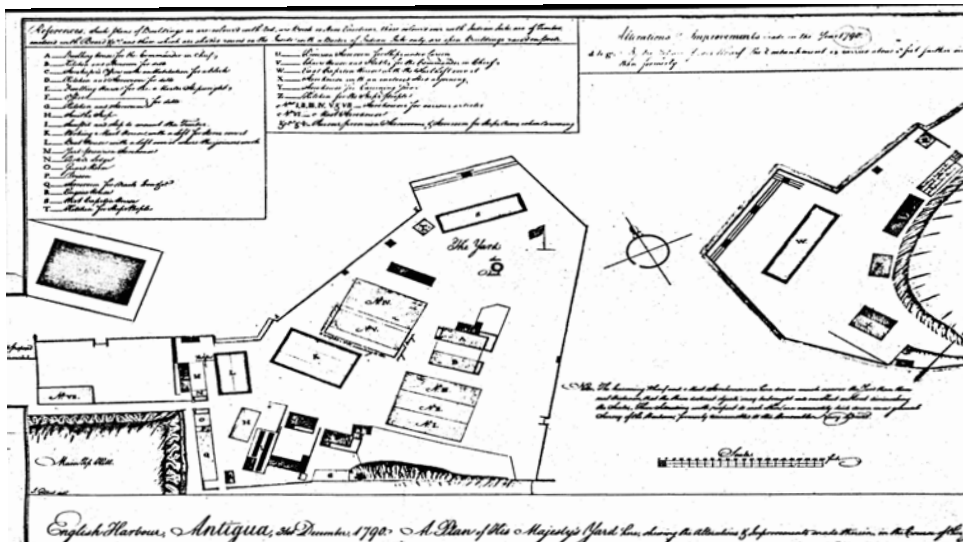


Figure 87. Plans of Structures within the Dockyard

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The first plan, prepared by one A. Anderson, Master Shipwright, called for the reclamation of the whole shore from the outer point of the present Dockyard down to the isthmus between English Harbour and Falmouth Harbour. His estimate read as follows:

- *No. 1 intending as a Careening Wharf
Expence at one Shilling Sterling pr
Cubic foot.*
- *Under Water No. 104,895
£5244.15.0*
- *Above Water 4 feet No. 47, 172 ...
£2358.12.0*
- *To 36000 feet of hard Wood felled by
our own people at Tobago at 2
Shillings ... £1800. 0.0*
- ***Total of No. 1 £9403. 7.0***

- *No. 2 Cubic feet under water and 3
feet above No. 311774*
- *Expence at one Shilling pr foot
£15588.14.0*
- *No. 3 Cubic feet under water and 3
feet above No. 1551825*
- *Expence at 1 Shilling pr. Foot
£77591. 5.*
- ***Total £102583. 6.0***

This was indeed considerable expenditure for those days, and the fact that such a plan was even prepared shows the importance of the Dockyard to the British Navy in the 18th century.

Although this extensive reclamation project was not executed, the years 1773-1778 saw great building activity. The boundary walls were extended to their present position; the Guard House, the Porter's Lodge, the two Mast Houses, the Capstan House and the first bay of the Canvas and Clothing Store all date from this period.

In addition, the first Naval Hospital was built outside the Dockyard on the site of "*Stanleys Taverne.*"

With the improvement of the facilities for His Majesty's ships, the harbour became the recognized port for naval vessels during the annual hurricane seasons from July to September. There was a setback in 1772 when a hurricane struck Antigua and blew HMS *Chatham* (flagship of Rear-Admiral Parry), the frigates HMS *Active*, and HMS *Seahorse* and the sloop HMS *Falcon* ashore. The Governor, Sir Ralph Payne reported:

"At English Harbour deemed storm-proof there was a squadron under Adml Parry, whose flagship with others drove ashore, and the Hospital there was leveled to the ground crushing in its fall the unfortunate patients and attendants" (Blackburne 1951:13).

This incident, one of the only two occasions when vessels are reported to have suffered damage in English Harbour throughout its long history, did not interfere with the use of the Dockyard, which indeed saw the most important period of its history in the last quarter of the eighteenth century. This was the period when Admirals Rodney and Hood were fighting the closing and decisive stages of the long struggle for mastery of the seas in the Caribbean, and so throughout the world. During this period there was a constant stream of naval frigates being warped into English Harbour for repair and overhaul.



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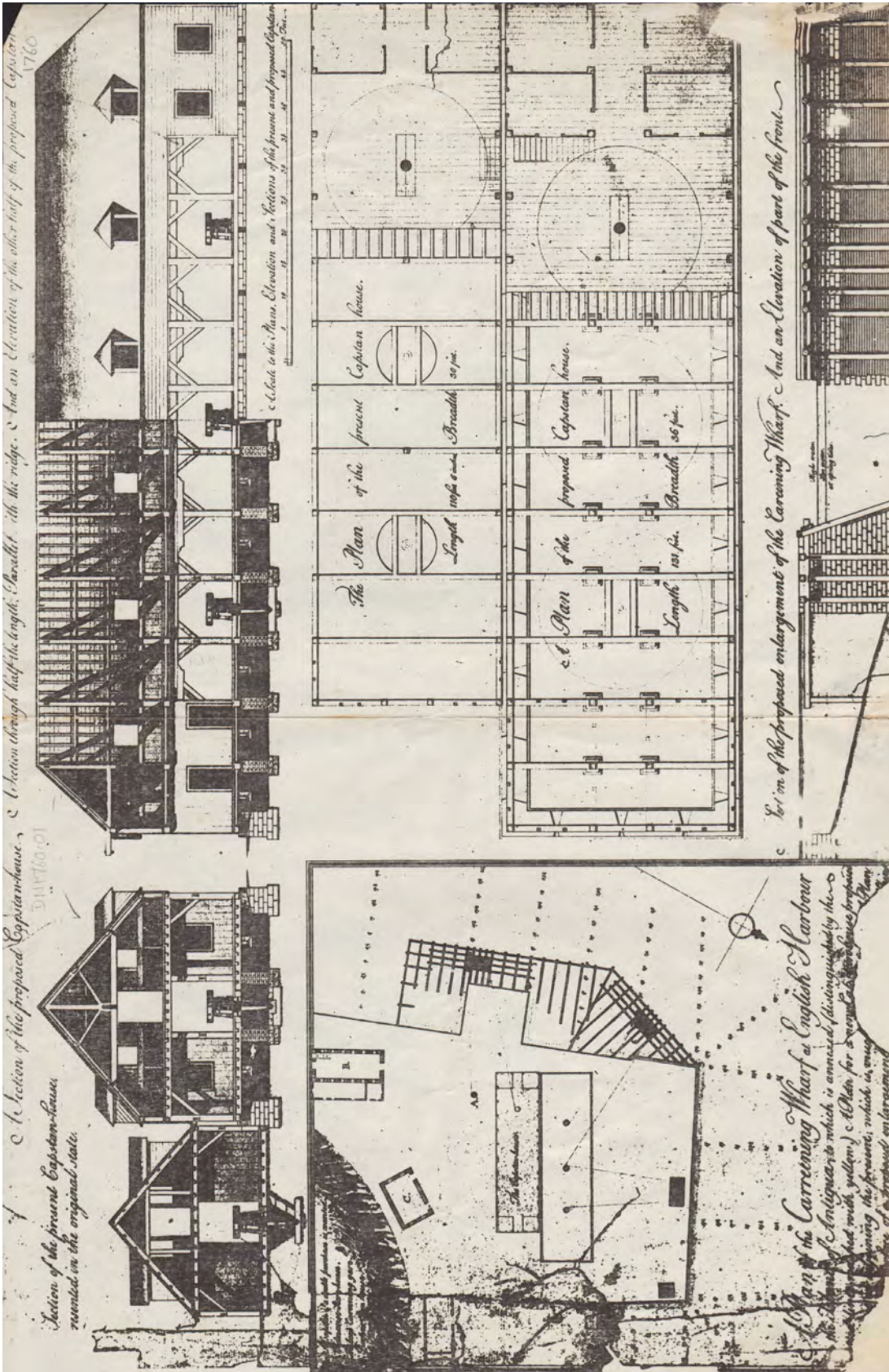


Figure 88. Plans for the Capstan House

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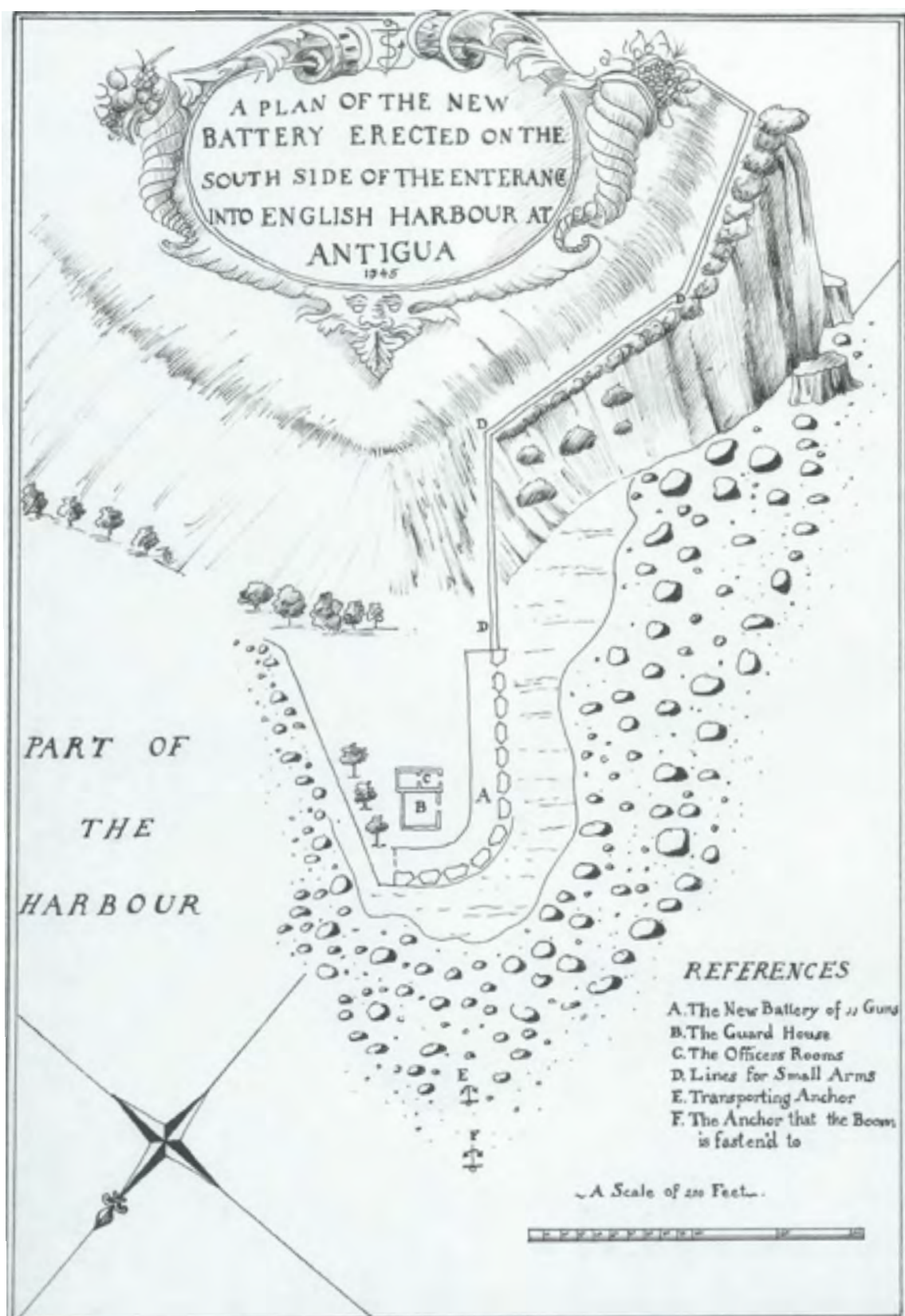


Figure 89. Sketch of Fort Charlotte ca 1745

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In February, 1781, Admiral Rodney,

“...acting on secret instruction, with General Vaughan on board in command of the troops, made himself master of the Dutch island of St. Eustatius where he obtained booty to the value of £3,000,000 and over 150 sail. Much treasonable correspondence which fell into his hands showed that British merchants settled there had been supplying both the French and Americans with war material. St. Eustatius had for some years been a centre for illicit trade and privateering. Sir G. Rodney dispatched the naval stores to H.M.’s dockyard at Antigua” (Blackburne 1951:14).

The following year saw the climax in the Caribbean of the war between Britain and France. In February, 1782, the French captured St. Kitts with the support of a fleet under the Comte de Grasse—in spite of efforts by Admiral Sir Samuel Hood who embarked General Prescott in English Harbour with the 28th Regiment and two companies of the 13th and took them to reinforce the garrison in St. Kitts.

But the French victory was short-lived. On the 12th April 1782, Admiral Rodney won the famous Battle of the Saints off Dominica, capturing the French Admiral (the Comte de Grasse) and sinking many French ships. The sea power of France in the Caribbean was broken, and from that point onwards the main task of the Navy was to eliminate privateers, and to control illicit trade between the United States (now a foreign country) and the British Colonies.

Ashore, the arrival of Governor Colonel Thomas Shirley on Antigua, who saw the increasing likelihood of war with France, marked the beginning of a massive building program to improve the capabilities and security of the naval Dockyard. In November 1781, within three months of his

arrival, Governor Shirley recommended the strengthening of the defences around the harbour. He was much alarmed by the capture of St. Eustatius by the French and the threat of losing the vital Naval Dockyard at English Harbour, so over the next few years launched a massive upgrading of all the defence systems of Antigua. This also led to the construction of the stone and brick barracks and fortifications on the Ridge, from the Blockhouse to the Lookout Point. This area today carries his name, as Cape Shirley or Shirley Heights.

Not surprisingly, the victory at the Battle of the Saints reduced the threat of invasion and made the people of Antigua reluctant to spend more money on fortifications. Their *“last word”* was given on the 11th December 1785, when the Assembly agreed to undertake the building of a cistern at the Ridge, but absolutely *“refused to spend 1 penny more on forts.”* Further work on the fortifications continued until about 1789 when Captain Shipley of the Engineers completed the stone barracks for an additional 300 men, but the cost must have been met by the British Government as the Assembly once again refused to contribute any further towards the building and expansion of the island’s fortifications.

Further improvements and additions were made to the Dockyard itself in the period between 1785 and 1794. The Engineers’ Offices, with pits on the ground floor for pitch, tar and turpentine, were built in 1788 and the Dockyard perimeter wall was extended to enclose the new building. 1789 saw the completion of the Copper and Lumber Store building, and by 1792 the second (west) side of the Canvas and Clothing Store had been completed. The Blacksmith’s Shop dates also from this period.

Section Two - Description of the Property

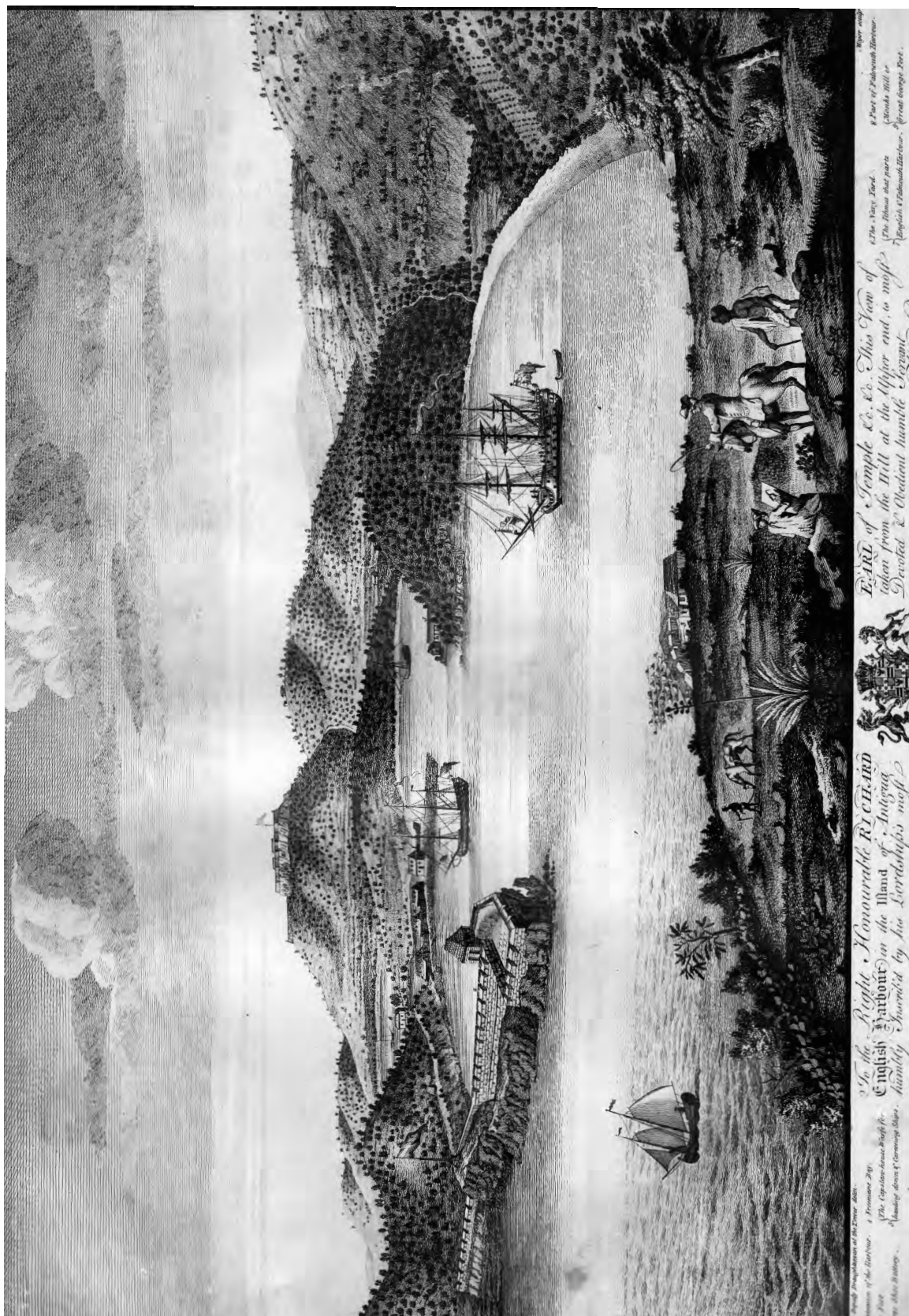


Figure 90. Print view of entry to Naval Dockyard ca. 1754

Section Two - Description of the Property



Figure 91. View of English Harbour by Cptn. Walter, published July 1800



Figure 92. Square Riggers *Inca* and *Aztec* on the wharf Nelson's Dockyard.

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To what extent these developments were due to the recommendations of Captain Horatio Nelson, who was the senior naval officer of the Dockyard between 1784 and 1787, is unknown.

In 1795 the second grandiose plan for further improvement was prepared. There is an Admiralty plan showing a large dry dock cut from one side of the Dockyard to the other, with lock gates at each end, between the Pay Office and the Officers' Quarters. But, like the earlier plan for grand expansion, this project was never carried out. Instead, the enormous Boat House and Sail Loft were built in 1796-1797, only to be levelled to the ground by the earthquake of 1843.

In the meantime, oral history reports that the first phase of Clarence House had been completed in 1787, presumably at the expense of the British Government, as the residence for the Commissioner of the Dockyard. It was allegedly first occupied by HRH Prince William Henry, Duke of Clarence (later King William IV), who as a young man of twenty-two was commanding HMS Pegasus on the Leeward Islands Station. Captain Horatio Nelson, commanding HMS Boreas (a frigate of 28 guns; length 124 feet, beam 33 feet; 617 tons) arrived on the Dockyard in 1784 and took command of the Dockyard, as he was the senior ranked naval officer, still in active service at the Dockyard. Prince William, the Duke of Clarence, arrived on HMS Pegasus shortly after Nelson. These young captains, who are of major historical importance to Great Britain, were stationed in English Harbour at a time when its residences, its forts, its storehouses and its barracks were nearing completion, and the barracks and fortifications on the Ridge were commencing.

In spite of their firm stand in 1785 and 1789, the Legislature of Antigua, now seriously alarmed by the successes of Napoleon in Europe, spent £8,610 in 1790 on fortifying Dow's Hill above Clarence House. By now the buildings of the Dockyard were complete and the development of English Harbour had reached its zenith. In the following year Governor Sir Thomas Shirley resigned, having been responsible for initiating and carrying out nearly all the military construction program around the harbour.

The beginning of the nineteenth century once more brought the threat of attack by the French to Antigua and English Harbour. By now the fortifications were complete and fully manned. At the end of 1803, there were over 1,000 troops employed in the defence of the Dockyard, consisting of Royal Artillery, the 1st Battalion of the Royals, the 64th Regiment, the 70th Regiment and the 4th Battalion of the West India Regiment. The first excitement came in September of that year when the French launched the only direct assault ever to be made on English Harbour. On the 5th of that month the Governor of Guadeloupe dispatched 700 men in thirteen schooners to carry out a surprise attack. They were intercepted by HMS *Emerald*, which captured three of the schooners and drove the remainder away. Her commanding officer, Captain James O'Bryan, was later presented with a sword valued at £200 by the grateful Legislature of Antigua.

A far more serious threat came in 1805 when the French and Spanish fleets, with between 10,000 and 16,000 troops on board, passed close by St. John's. Five days later, Lord Nelson in the *Victory* with twelve line of battle ships anchored off St. John's and disembarked 2,000 additional troops.

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On this occasion Nelson himself did not land in Antigua, writing to Governor Lord Lavington to express his “*determination not to lose one Moment in pushing after the Enemy*” and his “*persuasion that they were gone to Cadiz and Toulon.*” The rest of that story, culminating in the Battle of Trafalgar on the 21st October 1805, and the death of Admiral Lord Horatio Nelson, is history.

During the next 85 years the Dockyard continued to serve as a naval base, although the last military garrison left in 1854. During this period the Dockyard suffered serious damage on two occasions. In 1815 the buildings of the victualing department were set on fire by lightning. The stores contained a quantity of rum with the result that the “*fire burnt with such fury as to battle every effort to extinguish it,*” but the rest of the Dockyard was saved. An even more serious blow by nature occurred in 1843 when the great earthquake of the 19th century did damage estimated at £20,000. The effects are graphically described in *Antigua and the Antiguans*:

“The dock-yard at English Harbour—the pride of the Caribbee Islands—has suffered greatly; the excellent wharfs cracked and rent; in some places they sank down to the level of the sea, in others, they were heaved up and down, like the billows of the great deep; the massy stone and brick buildings erected within the yard were nearly all of them injured; the officers’ quarters severely rent; the cordage stores, etc., cracked from top to bottom; the fine capacious cisterns ruined. The superintendent’s office, etc., was also much impaired and rent; and the stone platform which ran along the commissioners’ room moved out of its place, and the pavement beneath literally wrested up. The guard-house and midshipmen’s

quarters were greatly damaged, and the stone building near presented an awful appearance, one side of it having sunk some depth into the ground, while that part of the wharf contiguous to it was fearfully rent. In the boat-house, the massy stone circular pillars which supported the shed were very much cracked, and one of them was separated from its pedestal and hurled to the ground. The blacksmith’s shop, paint stores, etc., were left but as tottering walls, while the long line of cliffs and stone walls that topped the hills at the back of the yard were shivered in all directions. St. Helena was also much injured, and the embattled walls of Fort Berkley, at the mouth of the harbour, were overthrown. The superintendent of the yard, Jos. Hart, Esq., estimated the damage at about £20,000..

At the Ridge the terrible effects of the earthquake were also felt. The stone stores and barracks were either thrown down, or so severely rent that they were unsafe...The small stone building, situated at the extreme point of Shirley Heights (erected for the accommodation of the signal-man), fell at the commencement of the shock...

The town of Falmouth presented but a mass of ruins—its church was levelled with the ground, and the tombs in the churchyard rent open...The fortifications at Monk’s –hill were cracked and rent in many places...Dow’s Hill, the country residence of the governor, suffered great injury, and his Excellency Sir Charles Augustus Fitzroy lost furniture to the amount of £10,000” (Lanaghan 1944:291).

The importance of the dockyard still being recognized, repairs were quickly made, but in a rapidly industrializing world and changing colonial global interests, the Antigua Naval Dockyard was doomed.

Section Two - Description of the Property

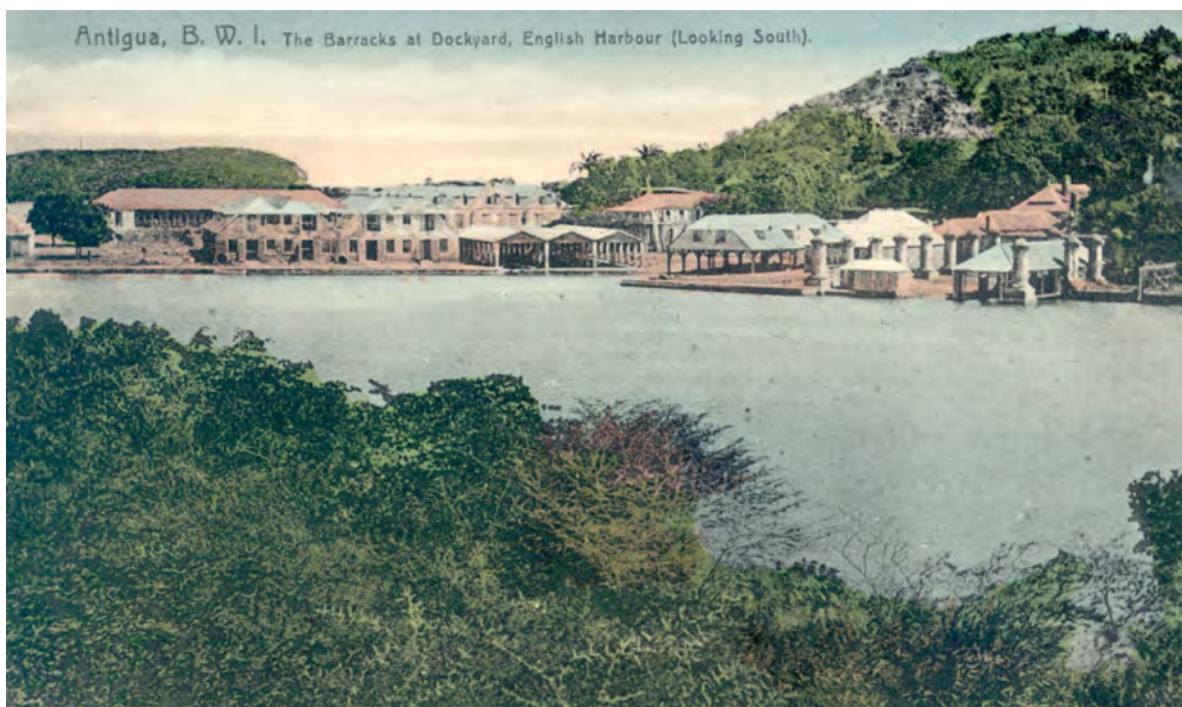


Figure 93. Photo of the Dockyard 15 years after the departure of the British Royal Navy

In 1895 the Dockyard closed as a Royal Naval facility because the ever-increasing size of the steam driven iron ships of war made it difficult for them to negotiate the winding and narrow entrance to English Harbour. The new class of naval ships required large dry-dock facilities, not carenage which was the specialty of the Antigua Naval Dockyard. The Antigua facility slowly became obsolete in the Age of Steam.

The Role of the Enslaved Africans: A Place of Memory

The above account outlining the history and development of the Naval Dockyard is the standard and long-standing Eurocentric version. The building and expansion of the British Empire was hinged on the success, achievements, resilience and sacrifices of the British Navy, which provided protection throughout the expanding Empire. Outposts in the Caribbean, the sources of the wealth that fuelled the Industrial Revolution and trade that converted Britain into a 19th century industrial power-house were established and entirely dependent upon the labour of enslaved Africans.

This also applied to the Navy and Army whose Caribbean campaigns and survival also depended on the enslaved. In fact, African slave labour was the common thread that ran through all facets of life in the Caribbean and elsewhere in the Americas. Enslaved Africans played a pivotal role in the building and maintenance of the Dockyard and surrounding fortifications and facilities. They were the tradesmen, the artificers, and the labourers, skilled and unskilled. They grew the food, hauled and handled the supplies, worked the frigates into and out of the harbour, careened and cleaned the vessels, cut timber, built the wharfs, dredged the harbour, and buried the dead. The British Navy became so reliant on them that after the abolition of the slave trade in 1807, the human cargo of illegal slave ships captured in the Eastern Caribbean by the Navy were sorted and often the best were kept by the Navy to be trained as “King’s Negroes” for service in the Navy and West India Regiments (Nicholson 2002).

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	OCCUPATION	WHITE	BLACK(enslaved)
Dockyard Workers 1780s	Shipwrights	53	19
	Sawyers	5	4
	Block and Pump makers	1	--
	House carpenters	9	3
	Blacksmiths	6	4
	Sail-makers	10	8
	Watchmen	--	4
	Caulkers	--	20
	Labourers	--	38
	Seamen	--	19
	Masons	--	2
	Total Manpower	84	117

Dockyard Workers of 1780s

From the earliest years of the building and expansion of the Dockyard, African slaves were sent from nearby plantations to assist in the construction of the naval facilities and related fortifications. This was an important contribution from the planters who understood the benefits of an established naval facility that would be dedicated towards their protection and that of their trade. To formalize this relationship, an Act was passed in 1744 requiring planters to contribute a number of slaves towards the development and expansion of the dockyard. The removal of the 50ft hill in the center of the yard to establish the careening wharfs

was done in 1749 by enslaved Africans who “cheerful lent for the task” (Nicholson 2002:13).

At the time of the American War of Independence, in the 1780s, 70 percent of the Dockyard employees were enslaved Africans and Creole blacks (Nicholson 2002). The records show the participation of black artisans working alongside their white counterparts. (Table above).

So dependent was the operation of the Dockyard on slave labour that great delays were caused whenever there was a “lack of negroes” as noted when Pilot Domingo was

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authorized to use some of his negroes normally employed in cleaning the harbour for manning the boats. The negative impact when their numbers were low could again be observed in the records of the Dockyard during the War of American Independence that brought enormous hardship to the island. Food and supplies could not be imported from the North American colonies. This coincided with an extreme drought that led to crop failures and starvation. Thousands of slaves died on Antigua alone, and due to a lack of “enslaved” manpower in the Dockyard “the squadron of ships were subject to great delays and inconvenience in coming into and going out of English Harbour” (Nicholson 2002).

Other historical accounts provide useful insights into the daily routine, life, and contribution of enslaved Africans in the Dockyard. The records at the Dockyard Museum note that on 17th October 1823, *the black sail-maker Tom Spanker died after 14 days illness*. Another account found in the diary of seaman Aaron Thomas, who visited the Dockyard in 1798 as a gunner on board the HMS *Lapwing*, describes his attempts to observe the “negroes dance at Freeman’s Bay,” and his discussions with a Negro woman who was born in Makoko near Lake Zambra East Africa. Thomas also writes of the visit of MacCane, a fellow gunner, to see a healer named Grace, a black girl he had employed to heal his leg. Before leaving the island he wrote of a visit to the Swamp Market in English Harbour where he purchased a 42lb pumpkin. Plantation slaves, who at this time were permitted to grow and sell their provisions to better themselves, sold their produce on Sundays at small public markets. Fruit and provisions were also sold/delivered to the ships and

sailors on board by slave women who swam out to the ships with their products secured in baskets that they pushed ahead of them as they swam (Nicholson 2002).

Archaeological research within the Dockyard and at the nearby Naval hospital cemetery and barracks found a significant number of artifacts defined as African material culture. Glass beads and West African-style pottery in particular are among the most common artifacts recovered. Surprisingly, the cemetery was not segregated and all naval personnel, black and white, free and enslaved were interred together, often in the same grave (Varney 2000). All personnel affiliated with the Antigua Naval Dockyard were treated in the naval hospital and buried together in the same cemetery.

Of particular interest in showing the cultural mix was the common distrust of European medical treatments by both the African slaves and the sailors. European medicine and surgical methods were harsh and generally involved amputation, blistering, bleeding, and the consumption of toxic chemicals and metals such as mercury. African healing methods generally utilized comparatively less drastic methods, such as medicinal plants, and were likely a welcome alternative to many who sought the nursing and healing assistance from the young African women in the area community.

Another important historical account specific to construction in the Dockyard is the Journal of Boatswain Francis Fox, written in 1820 during his service at the Dockyard. It contains graphic accounts of the work and hardships endured by his team of 40 enslaved Africans, the “King’s Negroes,” in building the seawall and maintaining the yard. Fox’s work team

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comprised 5 shipwrights, 12 masons, and 23 labourers. Their names include Jackey Bright, Tabit, Job, its and Awonoko. Work included quarrying the large boulders (1 m x 2 m x 2.5 m and larger), transporting them downhill to the waterfront, then preparing the seabed, in places over 16 feet deep, and placing the stones with incredible precision and locking them in place with iron pegs and straps. On two occasions, sections of the seawall collapsed during construction and over 300 tons of cut stone/rocks had to be recovered by diving. Most of this wall still stands to this day--only the eastern portion had to be replaced in 2003 due to hurricane activities and settlement over time.

In sum, enslaved Africans worked and served in all capacities within the British Naval establishment on Antigua and elsewhere in the Caribbean. They also served on the ships of the Navy and saw action, even at Trafalgar, and were pensioners at Greenwich. However, they are invisible in the historical summaries and publications unless one looks below the surface and follows the obscure threads of history. Black/Africans were more accustomed to the tropical climate, the oppressive heat, food, diseases and lifeways than their European/British counterparts. With the rise in hostilities in Napoleonic France, and the military demands of the regular army and naval forces in Europe, enslaved Africans filled the gap and served as the support platform in all capacities, including the 12 West India Regiments and Rangers. The Antigua Naval Dockyard stands in testimony to their contribution, sacrifice, capabilities and capacity to survive and exist within the brutal oppressive system of enslavement.

After emancipation in 1834, the former enslaved continued to work as tradesmen, maintaining and rebuilding the

Dockyard for the Navy. As the Age of Sail changed to the Age of Steam, they continued to build and man the fleets of wooden coastal traders, inter-island schooners, drogues for transporting freight out to the deep draft steam ships anchored off shore, and sail the small fishing boats. With the abandonment of the Dockyard in 1895, they began to use the seawall and careening blocks for their own vessels and for servicing merchant vessels needing repairs. Many went to sea in their own vessels and a thriving trade, and smuggling operation, developed between the islands. Their descendants still reside in the nearby communities and continue to work in the Dockyard following the traditions of seafaring, sea service and use of the facilities as a center for repairs and provisioning of visiting yachts.

For the British Army which garrisoned the forts surrounding the Naval Dockyard, the situation was similar. Initially, the Army depended on African slaves for the bulk of the labour required to build, maintain and service the forts, gun platforms and barracks. Regiments stationed in the Caribbean suffered horrific loss from tropical diseases within a few months of arrival. British soldiers sent to the hot and humid Caribbean wore traditional regimental uniforms designed for colder climates. They also lacked resistance to tropical diseases such as malaria and yellow fever and died in large numbers. By the start of the wars with Napoleonic France, the solution to the problem was found in the drafting of Africans into the Army and 12 West India Regiments were created. They were the first slaves to be freed and given full pay and compensation as regular "Redcoats", and served not only in Antigua but elsewhere in the empire. African soldiers, or the King's Negroes of the West India Regiments,

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at times occupied the barracks that were built by their enslaved countrymen. (Buckley 1998; Dyde 1997, 2000; O'Shaughnessy 1996).

In 1906 the Dockyard and the surrounding lands were taken over by the Government of Antigua. The Dockyard continued to function as a coaling station and, in a military capacity during both World Wars, as a training facility. It was also used by Antiguan seamen and boat builders from the village of English Harbour as a carenage and repair facility for their wooden sloops and schooners that traded and provided inter-island transportation.

Restoration was limited to the structures of particular interest to the various users. In the late 1940s, retired British Naval Commander Vernon Nicholson arrived with his family on their private yacht *Mollihawk* and made their home base in the old Pay Office. They began to offer their yacht for private charter. On an inspection of the hurricane damage to the Dockyard in 1950, Governor Sir Kenneth Blackburne recognized the potential for converting the site for use as a heritage tourism and yachting destination.



Figure 94. The Canvas and Cordage Building ca. 1951

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Figure 95. Entrance into English Harbour with Fort Charlotte in the foreground



Figure 96. Graffiti on shutter from the Pay Office Building now housed in the Dockyard Museum.

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The Restoration of the Antigua Naval Dockyard

In “*Gardens of the Antilles*” by John V. Watkins (in Blackburne 1954)—there appears the following description of the Dockyard:

“English Harbour with its stately buildings and the ruins of what were elaborate ship-fitting facilities in the eighteenth century is unquestionably the outstanding attraction of Antigua.

Though the trip to English Harbour necessitates a long auto ride over over very poor, narrow, pitted roads, all travellers will find it very much worthwhile. Upon arrival one is struck with the appalling desolation. Most of the roofs have collapsed and the structural timbers are in an advanced state of decay. It is inconceivable to me that the Crown can allow these beautiful, historic buildings to disappear. Here was a splendid historical monument that has been abandoned to time, termites, and the elements. Even temporary galvanized iron roofs above the original ones of hand-hewn shingles would have assured preservation, but none were provided and here another of England’s colonial treasures is doomed to extinction. In a few years tourists will view little but piles of rubble”.

That was the problem faced by the Society of the Friends of English Harbour when it was born in May 1951. The organization took its name and its inspiration from the many “Societies of Friends” which had been set up in England to assist in the preservation of cathedrals and other ancient buildings. The English Harbour Society aimed at the restoration and preservation of the Dockyard, both as an historic monument and as a centre for ocean-going yachts.

The first act of the new Society was to obtain registration under the Companies Act in order to ensure the continuity of its work. A long lease of the Dockyard was then secured from the Government of Antigua (the lease ran to 1987). With this solid foundation, a drive was made to raise funds. By the end of 1954, nearly £9,000 had been collected and spent on urgent repairs. This money came from many sources, including her Majesty the Queen and His Royal Highness the Duke of Edinburgh, whose donations in 1954 were a source of great pride to the Society; from annual subscriptions of about 350 Friends; from donations from all over the world, and particularly from the American Mill Reef Club in Antigua; from the sale of guides and postcards; from admission fees paid by nearly 40,000 visitors a year (1961); and from an appeal launched in London in 1953.



Figure 97. The Pub at the Copper and Lumber Store

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In 1955 the pioneer work of the Society at last met its full reward. At the beginning of that year, Lady Churchill, who had for many years taken a keen interest in the Dockyard, sponsored a Special Appeal Committee in England under the chairmanship of Sir Bruce White, K.B.E. The Committee was set the task of raising £40,000, the amount needed for the complete restoration of all the buildings with the exception of the Canvas and Clothing Store. The work of this committee was inspired and helped by Her Royal Highness the Princess Margaret, who first visited the Dockyard in February 1955 and later consented to become Patron-in-Chief of the English Harbour Repair Fund in the United Kingdom. By the end of 1955 the Special Appeal Committee had reached its target and was able to inform the Society that gifts in cash, in materials, and by covenant had been promised in sufficient quantity to meet the probable capital costs of restoration of the Dockyard to its original state.

On Dockyard Day, 14th November 1961, after over 10 years of voluntary effort, careful planning, hard work and generous giving of both time and money, it was possible to “re-open” the Dockyard. His Excellency the then Governor-General and Commander-in-Chief of The West Indies Federation, the Rt. Hon. Lord Hailes, performed the ceremony in the presence of Her Excellency Lady Hailes, Sir Kenneth Blackburne (the founder of the Society of the Friends of English Harbour) and Lady Blackburne, Sir Grantley Adams (then Prime Minister of the West Indies Federation), and Lady Adams, Mr. Angus Acworth, and other visiting dignitaries. On this occasion, the restoration committee changed the name of the Antigua Naval Dockyard to Nelson’s

Dockyard, in honour of Admiral Lord Horatio Nelson who served as senior officer of the facility from 1784 to 1787. This popular name has since become the official name of the site and National Park.

The afternoon ceremony included the presentation of a bust of Nelson by Lt.-Commander Peter Grady of HMCS *La Hulloise* on behalf of the Admiralty. A water-skiing display, a yachting display and a magnificent Beating Retreat ceremony by a guard of the Royal Canadian Navy, the Antigua Defence Force and the West India Regimental Band were part of the program. At sunset there was a historical sketch performed by Antiguans, a display of fireworks at 7 p.m. and at midnight, and a dance in the newly restored Copper and Lumber Store commencing with a period ball demonstration.

To celebrate the completion of the restoration of the Dockyard, a special issue of two postage stamps was released on the 14th November 1961 to coincide with the “re-opening” ceremony. The values were 20¢ and 30¢ and the design common to both featuring the Annigoni portrait of Her Majesty, an adaptation of the portrait of Lord Nelson by L.F. Abbott, and a view of the restored Dockyard.

The English Harbour Restoration Committee in the United Kingdom disbanded in July 1967, having completed the task set by Lady Churchill twelve years earlier. Not only the Friends of English Harbour, but all Antiguans will be eternally grateful to the Committee for their invaluable assistance, without which the restoration of the historic buildings in the Dockyard could not have been accomplished.

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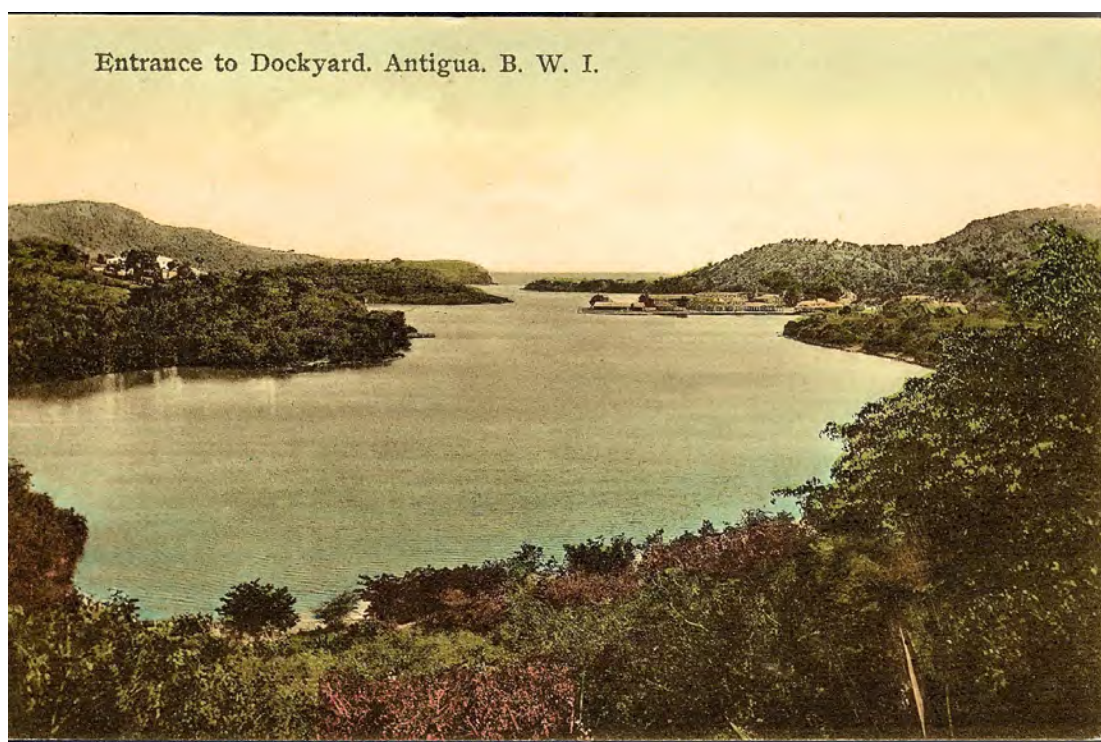


Figure 98. Tank Bay (foreground) ca. 1900

Since the buildings have been restored, tourism has steadily increased and is now Antigua's principal industry. An important part of the tourist industry is the yacht chartering industry, most of which is concentrated in and around the Dockyard. Because of the importance of the tourist industry to Antigua and of the many activities of yachtsmen at English Harbour, all of the restored buildings are now being used in connection with tourism and yachting. This policy was established by the Friends of English Harbour from its inception in the early days of restoration to ensure that no building was used for any purpose that conflicted with the aims of the Society or was not in keeping with the character of the Dockyard. It was adopted by the National Parks Authority and is at the core of all its planning decisions to this day. Hence the sail makers continue to produce and repair sails, the bakery still produces bread, and the former sleeping areas of the sailors and engineers are today used as hotels.

The Antigua Hotel Association, with assistance from the English Harbour yachting community, introduced Sailing Week Regatta in May 1967. Sailing Week quickly grew into a national event and a massive economic boost for the island and all involved. Today a number of other equally important regattas take place throughout the year and remain centred in the Dockyard. Collectively, they have attracted many yachtsmen and their yachts to Antigua and provide employment and the opportunity for Antiguan youth to participate in this exciting sport. The ECLAC 2004 report on the Caribbean Yachting Industry noted that yachting generates three times the financial revenue in comparison to the cruise ship industry in Antigua. The annual yachting events are of great importance not only to yachting affairs at the Dockyard but to the tourist industry in general.

In January 1966, a "Son et Lumière" production began at the Dockyard. It was honoured by the attendance of Her Majesty the Queen and His Royal Highness the Duke

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Figure 99. Royal Navy Work Party 1950

Created by Mr. Christopher Ede, the leading British producer of *Son et Lumière*, it was a production of a very high standard and was very popular during its run. It presented the history of Nelson's time in the Dockyard—his arrival at the harbour in *HMS Boreas*; his enforcement of the Navigation Acts; his “imprisonment” in his own ship and subsequent release; and his meeting with this future wife. This show has since been replaced with a modern Interpretation Centre that presents the story of the Dockyard in four languages off site on Dow's Hill overlooking the Dockyard.

The descendants of the British Navy of the 18th and 19th centuries have also played a notable part in the restoration of the Dockyard.

Throughout the 1960s and 1970s, visiting ships of the Royal Navy and the Royal Canadian Navy regularly sent working parties to paint and work on the buildings and the Museum contains the crests of many of the ships which helped in this way.

To continue the work started by the Friends of English Harbour, the Government of Antigua and Barbuda passed the *1984 National Parks Act*, designating Nelson's Dockyard a national park and creating a National Parks Authority entrusted with the protection of the cultural and natural heritage of the area. Assistance, planning, training, and the funding to establish the park was provided by the Canadian Government International Development Agency (CIDA). An Interpretation Centre was built, staff and faculty trained, restoration efforts boosted with technical advice and training. Lands within the park were zoned following lengthy public consultations and management and development plans written and approved by Parliament. The Nelson's Dockyard National Park today encompasses about 12 percent of the landscape of the island of Antigua. The area has a distinctly rich heritage and includes many natural and marine resources.

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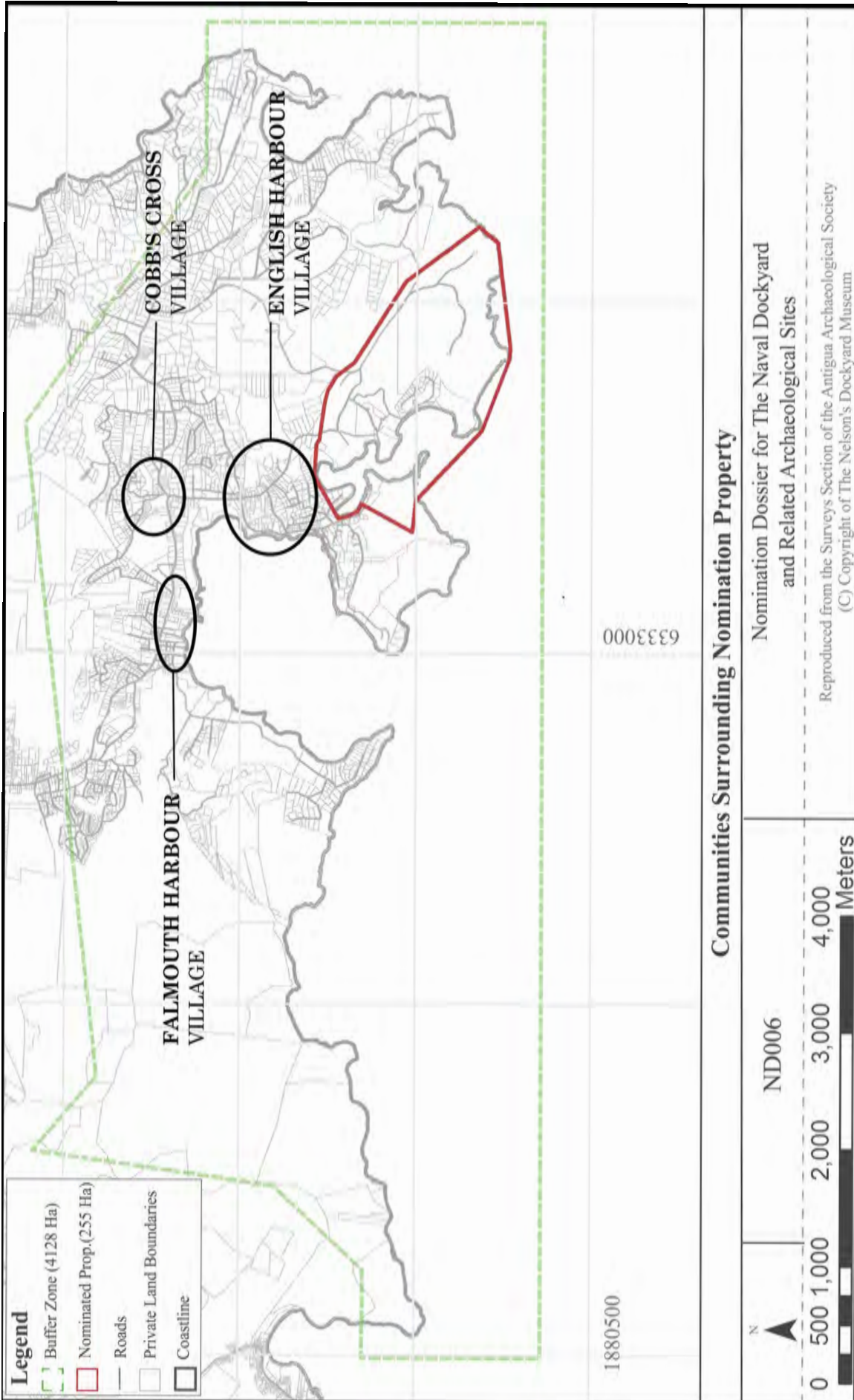
Communities within the Proposed Site and Buffer Zone.

There is only one small residential community within the designated boundary of the site and it is located on the hillside of Galleon Beach resort on Freeman's Bay. It is a small gated community of seasonally occupied vacation homes that are set on the hillside overlooking the beaches of Freeman's Bay. Both hotels on Galleon Beach and Freeman's Bay close or operate at a reduced capacity during the summer hurricane season but are currently planning to expand their operations and capacity by building additional luxury vacation units on their now vacant undeveloped lands. The planning process is guided and managed by the National Parks and stringent "Building and Design Guidelines" are strictly enforced. Environmental and archaeological surveys are conducted prior to any construction within all areas of the National Parks, but particularly so within the core areas of the park residential communities. The closest community to the proposed site within the buffer zone is the village of English Harbour. English Harbour village developed slowly on land outside the naval and military properties. All the surrounding lands were owned and managed by sugar estates. On Antigua, a small island, there was little land available for settlement, and this stifled the development of villages and communities of freemen for a considerable time, even post emancipation. The village of English Harbour started out as small cottages that were built for tradesmen and skilled workers who worked for the Navy, close to the neck of land between Tank Bay and Falmouth Harbour. With the 20th century decline of the sugar industry, land for settlement expansion became available and the community began to expand. Today the village is still closely connected to the Dockyard. Along the main road are restaurants, shops, and businesses that depend on and cater primarily to the yachts and seafarers. The residents from this community trace their lineage to the sailors, tradesmen and enslaved

Africans who lived and worked for the British Navy and Army.

Most of the residents living within the English Harbour community are professionals who work within the marine trades as sailors, shipwrights, engine and electrical repair, delivery and charter crews, cleaners, painters, restaurants, sales, management, hotels and business services directly related to the industry. Rental properties and land to establish businesses are in high demand. As a result, many private homes along the roadside have been converted into places of business, to capitalise on the rental/business opportunities. English Harbour has therefore grown significantly in size over the past 20 years as business opportunities increase. A kilometre north of English Harbour is the village of Cobb's Cross, that is closely connected to the Dockyard, where many of the workers in the businesses and marinas in the English Harbour area reside. Lands on the scenic hillsides of Cobb's Cross are in much demand by many of the business owners and yacht captains who build homes close to their yachts and businesses. located along the main road from English Harbour to Cobb's Cross and beyond to Falmouth, are numerous businesses and workshops that cater to the yachting industry. The small village community of Falmouth, which was the first English Settlement on Antigua in 1632, is located on Falmouth Harbour, northwest of English Harbour and west of Cobb's Cross. The harbour is deep and spacious and functions as an extension of English Harbour. Historically, merchant ships that supplied the Naval Dockyard and nearby sugar plantations, anchored in Falmouth Harbour. There are four marinas, two haul-out slipways, numerous hotels, condominiums, beaches, fortifications and other services and attractions in Falmouth Harbour; all within and regulated by the National Parks Authority.

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Figure 100. 1890's Photo of Ordnance land, Dockyard and Fort Berkerley in background

“This is without exception the prettiest little harbour I have ever saw. The extreme neatnes of the docks, the busy village which has grown up in their vicinity, the range of hills of various shapes and colors which encircle the inland sides, and rocky Ridge which frowns over the mouth, with its union and cannons and ramparts present such a combination of tropical beauty, and English style and spirit as I never saw elsewhere in the West Indies”
(Six months in the West Indies by H N Coleridge 1825).



Figure 101. Ordnance Bay in the foreground ca. 1900



SECTION THREE

Justification For Inscription

3.1.a

Brief synthesis:

The Dockyard rose to prominence as a British Naval facility during the turbulent years of the 18th century--the Age of Sail. Its unique geophysical attributes of deep water and narrow bays surrounded by protective hills and a narrow entrance were ideal for repairing and careening the hulls of sailing vessels and for providing safe shelter during the hurricane season. To facilitate careening and repairs, the natural landscape was altered to allow for the placement of wharf walls and the building of ramps, careening blocks and other structures.

The Dockyard and the supporting army barracks and fortifications that surround it were of major strategic value as a staging area for mobilising and shifting military forces and for protecting British shipping, trade and colonial interests. With the loss of its American colony, defending these islands became crucial as the sugar revenues were vital for the continuing growth of Great Britain's Industrial Revolution. In this light, the naval facility at the Antigua Dockyard contributed to the survival and future expansion of the British Empire at a significant stage in human history.

The Georgian structures within the Dockyard, the surrounding structures on the Ridge, the Commissioner's House, and the barracks were all built in the late 18th century, in anticipation of the beginning of the French Revolution and wars with Napoleonic France. The world order was changing, British interests in the Eastern

Caribbean were seriously endangered and the growing importance of the Naval Dockyard had to be secured at all cost. The structures include warehouses, workshops, barracks and residential quarters, careening pits, a saw pit shed, a bakery, blacksmith shops and many more. These today comprise a unique collection of Georgian period structures in an Eastern Caribbean context set within an enclosed walled compound. While most of the related structures surrounding English Harbour are in ruin, sufficient remain to present a clear picture of the life and times and a rich historical and archaeological legacy.

Much of the repairs to the ships and construction of the facilities was carried out by enslaved Africans or "King's Negroes" whose descendants still reside in the nearby communities. In addition, many of the enslaved also worked as sailors manning supply ships, fishing vessels, and dredgers and as pilots for the Navy, thereby establishing a connection to the sea that continued long after Emancipation in 1834. In sum, the British Navy and its defence was heavily dependent on the labour and input of the enslaved Africans, their skills and creative abilities. With the departure of the Navy in 1895, the Dockyard passed into the hands of the local government who at first had little interest in the site. But the area residents, the descendants of the British sailors and enslaved Africans continued to use the facilities in its original capacity for the repair and building their inter-island sailing vessels and sea craft. By the 1950s and the arrival of the first Nicholson charter

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yachts to English Harbour, restoration efforts began on the old buildings. This in turn led to the birth of the Caribbean yacht charter industry, which has become a major economic contributor to the Antiguan economy. The Dockyard today remains an outstanding example of a still working Georgian period dockyard and a centre of sailing and repair. The area residents continue to work on the boats and marine trades. The army barracks on the surrounding hills have become rich archaeological sites, which have contributed substantially to our knowledge of the life and times of the occupants at this pivotal point in history.

3.1. b

Criteria (IV): “*Be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history*”

The Antigua Naval Dockyard in English Harbour, with its impressive assemblage of Georgian British naval structures enclosed within a walled historic compound, and the associated military complexes that surround it, form a unique cultural landscape. At a time when all the European "super" powers were rapidly expanding their spheres of influence and thus constantly at war, the well protected, natural, enclosed harbour of the Dockyard, usable year round including during the hurricane season, provided Great Britain with a huge strategic military advantage over its European rivals in the Eastern Caribbean at a pivotal time in global history. The Dockyard's structures represent an outstanding example of land-use and sea-use that continues to be utilised today, as a place of repair, provisioning and shelter for modern day vessels. The sharing of knowledge between the enslaved Africans

and the British engineers, artisans and sailors over time resulted in an indispensable workforce of enslaved African tradesmen who were the backbone of the facility and its success. Despite their hardship, they produced extraordinary work of high quality craftsmanship evident at the site today. This knowledge of seamanship, boat building and specialised craftsmanship has been passed down through the generations creating the highly skilled work force of today.

3.1.c

Statement of Integrity

The boundaries of the nominated site are based on the original Naval Dockyard and the surrounding military complexes of Shirley Heights and Middle Ground sitting atop the steep gradient and ridge line, creating both a natural enclosure and a strategically protected harbour. These military complexes were built entirely to protect the crucial naval facility. The boundaries closely follow the “Kings lines” which delineated the original site and are still relevant today in protecting the OUV. All of the structures within the Dockyard are in a good state of repair, having been restored to varying degrees using authentic materials and following the original plans.

Although the military complexes surrounding the Dockyard are in varying degrees of decay, there has been no modern construction within the area, allowing the structures and their physical setting on top of the ridge and steep cliffs to convey their story. In addition, these areas have enormous potential for archaeological research.

The buffer zone, which follows the boundaries of the National Park, has established layers of protection to prevent over-development which could adversely

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affect the core of the park and the OUV of the proposed WHS. Included within the buffer zone are the fortifications of Blake Island, Greater Fort George and Fort Cuyler. Although in close proximity to the Dockyard, these elements were not included in the WHS as their main functions were to protect commerce in neighboring Falmouth Harbour and were not an integral part of Britain's naval strategy in the Eastern Caribbean.

Within the proposed area of the site, the majority of land is owned by the Government. The few privately owned residential plots and commercial areas must follow zoning restrictions in terms of development and physical appearance (Annex7: NPA Act and Development Plan). The boundaries therefore encompass all key historical, natural and aesthetic elements that make up the OUV of this place of memory.

3.1.d Statement of Authenticity

Form and Design

The structures within the proposed site were all built in the 18th and 19th centuries and are of Georgian period British naval architectural style.

Materials and Substance

All of the structures were built of locally available stone and imported bricks and timber. Repair work today utilises stone from the original quarries that are cut and shaped by hand. Bricks and stones are recycled as much as possible, but bricks are at times sourced overseas from recycled buildings from a similar time period. Timber is sourced from South American hardwoods primarily. Originally some pine and oak was used but as it is very susceptible to termite damage it is avoided.

Use and Function

Although the dockyard is no longer used by the British Navy as a safe harbour and place for repairing and provisioning its vessels, it continues to function in its original capacity for modern yachts and seafarers. The Dockyard is still used by local craftsmen to repair boats using traditional methods. This community continues to celebrate its maritime history, as evidenced by the six major sailing regattas per year, which reinforces their connections to the sea. Many traditions, such as sail-making, rigging, caulking and others, survive while some buildings continue to be used in their original capacities: the bakery still makes bread, the seamen's galley still dispenses rum and food, etc.

Much as the military complexes overlooking the Dockyard are in various stages of decay, there are sufficient remains and large intact archaeological deposits to convey their story and therefore does not negatively affect the OUV.

Spirit and Feeling

The Dockyard retains its 18th and 19th centuries form and layout due to the exquisite assemblage of Georgian structures. These structures and docks, that have been a part of the island's long continuing history of maritime craftsmanship and seamanship, contribute immensely to the spirit and feel of this historic dockyard.

From the moment you leave the parking lot and start towards the entrance gate, you are faced with a long brick wall on your left and high rock cliff on your right. You start the walk back in time to a place where English men and enslaved Africans, toiled in the heat, both a long way from home. They took pride in their work of building a naval dockyard, and repairing the ships of war that protected British commerce, and in the

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process created one of the greatest navies and nations the world had seen.

Today that sense is still captured by The Antigua Naval Dockyard through the authenticity of materials and designs of its structures and the continued use by sailing ships of today. The local artisans and sailors pride themselves in repairing boats at the highest of standards, all taking place within the backdrop of newly arriving tourists who can experience history over a pint or two whilst watching the setting sun glint off the ruins of an army barracks atop Shirley Heights.

The buildings that make up the Dockyard and the ruins of the protective positions on the ridges above are more than a mere collection of interesting and architecturally significant structures but a testimony to the strength of the human spirit working in difficult and sometimes perilous conditions to create a unique continuing cultural landscape within the geopolitical Caribbean region. The Dockyard is a monument to the creative abilities of the British Naval engineers, sailors and enslaved African craftsmen who built and maintained the facility and as such, a unique “Place of Memory”.

3.1.e

Protection and Management

The Antigua Naval Dockyard and its associated sites are at the core of a protected area, the Nelson’s Dockyard National Park. The National Park was established in 1984 on the principle of maintaining the authenticity of the Georgian Dockyard and associated features through legislation, zoning, and a strong management plan; and is sufficient to effectively uphold the OUV of the Dockyard and its related archaeological sites that surround it.

Established policies restrict and control development within this core area. All restoration work has been carried out under the supervision of qualified archaeologists, historical architects and utilising original plans, documents and materials. Although the use of most of the structures have changed to fit into the modern world every effort has been made to ensure the integrity of these historical structures.



Figure 102. View of the Dockyard: Ft Berkerly and Freeman's Bay in the foreground.

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Figure 103. Early evening view of the Dockyard with Montserrat clearly visible in the background. Photo taken from Dow's Hill Fort.



Figure 104. Photo taken from the same spot at Dow's Hill but looking further to the East, showing Freeman's Bay in the foreground and Guadeloupe on the horizon.

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3.2 Comparative Analysis

Royal Naval Dockyards were created to build and maintain the ships of the Royal Navy (MacDougall 1982). Several were therefore situated in strategic locations to defend trade routes and for launching expeditions and rapid response in times of war. To achieve these objectives, victualing yards, ordnance yards, hospitals, store rooms and other essential structures were built close to or within the dockyards. The first “permanent dockyards” appeared during the time of the Tudor monarchs in the late fifteenth century. Portsmouth, then Woolwich, Deptford then Chatham are among the earliest. These yards were also home to the fleets for years as war ships rarely went to sea in the winter months. Many often languished in port for years slowly rotting on their moorings, but with the rise of the West Indian and North American colonies in the mid to late 17th century, and the demand for protection of the colonies and the Atlantic trade, an alternative solution was to establish dockyards overseas where ships could be careened, victuals stored and workshops could be on hand to effect repairs.

Due to the early establishment of most British naval dockyards, they suffered from many disadvantages.

“The naval arsenals of Great Britain having been established at a period when her commerce was in its infancy, and the art of navigation but little understood, when her colonies were unimportant and the naval force necessary to protect her dominions we equally inconsiderable with that of the surrounding states, it was natural to choose situations adapted to the security, number, and small dimensions of her ships of war and to lay out their establishment of docks, quays and store houses upon a corresponding scale” (R.J.B. Knight, 1985. 2002:13).

The picture below is taken from Dow's Hill Fort, in the background to the right Montserrat is clearly visible and on the left, under the cloud bank but none the less visible, is Guadeloupe. This serves to emphasise the frontier nature of the Antigua Dockyard, and how close it was to the enemy.



Figure 105. Dow's Hill Fort with Guadeloupe and Montserrat in the background.

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	DOCKYARD	FOUNDED	HISTORY
UK Naval Dockyards	Woolwich	1512	Thames yard, refits, stores, closed 1869
	Deptford	1513	Thames yard, refits, research and development, stores, closed 1869
	Harwich	1652	Important in war with the Netherlands, a small yard, not much used after 1700
	Sheerness	1665	Important in war with the Netherlands, subordinate to Chatham, used for storing and manning outbound ships, site unsuitable for enlargement, closed 1959
	Chatham	1567	Important for war with the Netherlands, building and mooring, silted up late 17th century, closed 1984
	Portsmouth	1492	Important for war with France, trade protection, still active naval base, heritage areas privatized
	Plymouth	1690	Important for Atlantic and Mediterranean, privatized, still an active naval base
	Pembroke	1815	Shipbuilding, closed 1947

UK Naval Dockyards

Deptford and Woolwich:

- Were close to London.
- Were too far up the Thames for rapid deployment.
- Had major issues as the river was silting up.
- Were located in a difficult location against the prevailing winds.

- In the 21st century, Portsmouth is still home to two-thirds of the Royal Navy ships and it remains an active base.
- Plymouth is currently the largest active naval dockyard in Western Europe.
- Both only allow limited public access.
- The historical sections of both were heavily damaged by bombing in the Second World War.

Portsmouth and Plymouth (Devonport):

- Were the two largest and most important naval dockyards in Britain by the end of the eighteenth century.
- As the main home naval bases of the British Empire they are on a scale incomparable with the small frontier colonial dockyards on the frontline of the expanding empire.



Figure 106. Carronade in front of Museum

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Chatham Naval Dockyard

There are other examples of British Naval Dockyards around the world, particularly in Great Britain. Chatham, which is located on the Medway in southeastern England, is an outstanding example of a British Naval Dockyard and historic site. Despite having some difficulties in location, Chatham developed into the third largest naval dockyard in Britain.

“The navigation of the Medway from the Thames or the Nore is intricate, the river being very crooked and the water in the upper part shallow. Large ships had to be taken down to Sea Reach on the Thames to be fitted with their guns” (Lavery 2000:234)

The 400-acre site served as a British Naval facility until 1984. Many of the famous ships that played a pivotal role in naval warfare were built and maintained there, including HMS Victory, Nelson’s flagship in the Battle of Trafalgar. There are Georgian structures at Chatham and works comparable to and surpassing the much smaller dockyard in Antigua, but there are also many differences.

Chatham, though established in the mid-1600s, like most of the other major ship building facilities in Britain saw tremendous development as a direct result of the wealth generated in the sugar producing colonies of the British West Indies, including the Leeward Islands, and the need to supply and protect this economic engine at the foundation of the industrialisation, trade and expansion of Empire.

Unlike Chatham, the Antigua Dockyard was a front-line support facility for the Navy in its bid to protect both British Caribbean overseas territories and shipping against foreign threats and privateers.

The Antigua Naval Dockyard also differed considerably from Chatham as it was built and maintained primarily by enslaved Africans who built many the Georgian structures under the supervision of British engineers. They also worked with naval personnel in a variety of capacities, repairing the frigates that were built at Chatham and other dockyards in Britain. In many ways, both the British sailors and enslaved Africans in Antigua had to be creative, improvising in order to adapt to the chronic shortages, limited supplies, tropical conditions, and hardships in order to complete their tasks and keep the frigates in fit fighting condition for sea-service.

The facilities at Chatham grew steadily as the yard expanded during each new period, from sail to steam and beyond. As an active home dockyard, it was modified and modernised as it continued to be used to build and repair ships late into the 20th century. As Chatham became a modern naval facility, the Georgian sections were to some degree isolated from the Victorian and more modern structures, whereas the feeling within the Antigua Naval Dockyard is one of being “frozen in time,” since very little construction happened after the Napoleonic Wars. The only structure to be built in English Harbour in the post-Napoleonic era was the Clerk’s or Senior Naval Officer’s House (now the Museum) in 1857, during the decline and reduction of the yard. This is a wooden building that can best be described as a transitional Georgian-Creole design set among the brick and stone Georgian buildings. As a continuing cultural landscape, the structure shows the evolution and continuance of the facility into the late 19th century.



Figure 107. HMS *Esk* Careening at St. Helena

Comparisons with Dockyards in Britain's Expanding Empire.

The introduction of sugar into Europe in the mid-1600s, followed by the growing European desire for more of it, led to one of the greatest changes in human history. The race by European nations to protect their Caribbean islands, which were ideal for growing sugarcane, and to conquer the islands of their rivals, led to an almost constant state of war between European nations and thus to the development of "super navies". Whoever controlled the seas controlled the sugar.

The building of dockyards and bases generally followed the expansion of British colonies and interests.

"...Port Royal and Port Antonio in Jamaica, English Harbour in Antigua, and Halifax in Nova Scotia were developed with the assistance of the colonists eager to have the comforting sight of British warships" (Coad: 1983:19.)

Malta and Bermuda followed around 1800, then Esquimaux in British Columbia. A similar situation developed in the Pacific and Indian Oceans as British economic interests and colonies spread around the globe. Dockyards were also established in Simonstown, Aden, Madras and Bombay in India, Trincomalee in Sri Lanka, and Singapore. These dockyards in India were setup and managed by the British East India Company which was dedicated to trade. So in sum, not all dockyards served the same function.

"Although dockyards were originally established to build and maintain the fleet, reasons of location led some to eclipse others in importance. What set these few apart was their use as bases by the fleet. To build and refit warships required just a dockyard; to be home to the fleet required other facilities; safe and sheltered moorings, ordnance yards, gunpowder stores, victualing yards and naval hospitals" (Coad 1983:19.)

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Figure 108. Careening in the 1950's using the tie down blocks.

In this respect, the purpose of the Antigua Dockyard was to provide support for the squadrons of British naval warships that were stationed in the Leeward Islands to protect British interests and its colonies in the Eastern Caribbean. English Harbour also provided a place to moor safely during the summer hurricane months and a hospital for the injured and sick. In addition, Antigua is one of the most northerly Leeward Islands and this was an advantage as the prevailing winds allowed easier attacks on most of the other islands in the Caribbean.

Careening

A crucial component of this comparison is the nature of the services required by the naval ships. Wooden vessels in the tropical waters of the Caribbean were in constant danger from the natural environment. Without extensive and regular maintenance, termites, dry rot, the excessive heat and humidity and wood-boring sea worms quickly reduced the vessels to dangerous conditions. In addition, contact with reefs,

storms and squalls, grounding in unfamiliar waters, and damage inflicted in close action with the enemy necessitated immediate and often extensive repairs. Further to this, the annual hurricane season required ships to be based in a secure harbour that was protected from the open sea and winds.

Careening is the process of cleaning and repairing a ship by turning it onto its side, permitting access to the bottom of the hull. When work on the exposed half was completed, the vessel was turned and the other half serviced. This process required the ship to be brought close to shore and emptied of all of its contents, including guns, ammunition, ballast, sails, spars, rigging and booms. Openings in the hull, including gun-ports and hatches, had to be sealed. The ship was then secured to a stable platform and ropes fastened to the topmasts. A number of capstans were erected ashore and, when turned by teams of sailors, pulled the ship over onto its side, exposing a bottom half. Copper sheeting and rotted timber could then be changed, the hull caulked and sealed in tar, and new

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copper sheets applied. The entire process was then repeated on the other side. On completion of this work, the ship was refitted and made ready for patrol by hauling it to a mooring in Freeman's Bay, in the outer harbour. The best time for this activity was the summer, since it was in any case necessary to be secured in a safe harbour for the hurricane season.

A Comparison Between the West Indian Dockyards and Naval Stations

From a naval historical perspective, there were three British "dockyards" in the Caribbean: Port Antonio, Port Royal, and English Harbour (see Crewe 1993). As previously mentioned, dockyards were purpose built naval repair and careening facilities.

Port Royal: Jamaica

Within the broader Caribbean, British naval facilities, including ones with basic or limited facilities/abilities include Port Royal, Port Antonio, Bridgetown and St. Lucia. Port Royal and Port Antonio were the intended "home" bases for protecting Jamaica in the Western Caribbean. Port Royal rapidly surpassed Port Antonio in importance due to its location on the sheltered Caribbean side of the island. It is situated on a protective "sandbar" at the entrance to the large and windswept Kingston Harbour. It is a remote and dry location that acquired the distinction in the 16th century as "the most wicked" city in the world. For many years, prior to the arrival of the Royal Navy, Port Royal was home base to fleets of pirate ships raiding the Spanish Main and treasure fleets, but in 1694 more than a half of the city sank into the sea and the rest was swept by a tsunami. Its flat topography and scarcity of vegetation provides no shelter from hurricanes.

Serious development at Port Royal began

in 1735 with the building of a careening wharf. Two years later saw the building of a capstan house, storehouses, and accommodation for naval officers. The site was close to Kingston and the capital Spanish Town, the seat of Government where workers and some supplies could be obtained. The harbour suffered a major disadvantage from heavy swells that made work and offloading of ships difficult at times and the isolation of the site often led to delays in work, in contrast to English Harbour where supplies were established close to the dockyard. Fresh water on Port Royal was brought in from 12 miles away, food 5 miles, and stores 7 miles. Regardless, the dockyard flourished and expanded until the 20th century. By 1814, 309 workers were employed at Port Royal.

From a strategic perspective, however, Port Royal was established to protect Jamaica and to maintain the British Naval vessels stationed there. It is located down wind and over 1,000 miles from the Eastern Caribbean. Getting there from the eastern islands was a quick event, but getting back against the currents and prevailing winds was altogether another business and could take several weeks. Jamaica was in effect of no military or naval supportive value to the Eastern Caribbean. The situation was in fact the reverse and on many occasions military support was sent to assist Jamaica from Barbados and the Eastern Caribbean (Parker 2012). As previously mentioned, Port Royal is built on a low lying sand spit no more than a few meters above sea level. It offers little if any protection from hurricanes so the fleet could not remain there during the hurricane months. In contrast, English Harbour is almost completely surrounded by highlands and is therefore well sheltered from hurricanes and easier to defend from a military perspective.

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Today, Port Royal has an interesting assemblage of structures of brick and cast iron. The large hospital is an excellent example of an early iron framed structure from the mid to late 19th century. There are few Georgian structures and none that are clearly dedicated naval buildings. Few of the structures are usable and currently there is no formal or active restoration program. The strength of Port Royal from a historical perspective is as an underwater cultural heritage site and a former base for piracy in the West Indies, and in this capacity it is outstanding in all respects.

Port Antonio, Jamaica

In contrast to Port Royal, Port Antonio was situated on the northern coast of Jamaica. It was built about the same time as the Antigua Naval Dockyard, opening a year later in 1729. It was intended to be a major and active base, but by 1739, ten years later, it was surpassed in importance by Port Royal. Despite the building of careening wharfs, warehouses, hospitals and other essential structures, Port Antonio never materialised as an active or significant naval dockyard. Its failure can be attributed to several reasons. It was essentially built on the sparsely populated north coast close to hostile territories of the maroons; escaped slaves that had proved a difficult and unconquerable people. Due to Jamaica's close proximity to Spanish Cuba, and Mexico the British feared that the Spanish could easily supply the maroons with weapons and encourage an uprising. In response to the fear of a Spanish influenced maroon insurrection, Port Antonio was built as a deterrent or base for naval vessels that could patrol and monitor the north coast of Jamaica and Cuba. Its north coast setting meant that it was in a high rainfall location and this created major issues for effecting

repairs. In 1740, Mr. Kirby, the yard superintendent wrote that he was unable to repair the careening pits as it had rained continuously for nine days. The wet climate led to rapid decay of the facilities and supplies and discouraged settlement in the area by workers. Naval Captains recognised the issues with delays in implementing and completing repairs and took their ships to Port Royal, despite the fact that the Port Royal facilities were grossly under equipped in comparison to Port Antonio. By 1736, there were only 17 yard workers who spent most of their time repairing buildings. Few vessels visited and in 1740 only one ship, HMS Blandford careened at Port Antonio. The dismal situation continued until 1750 when the dockyard was officially abandoned and the few workers relocated to Port Royal (Crewe 1993:213-239).

Bridgetown, Barbados

Barbados is the most windward or easterly of all the Caribbean islands. This was an advantage for the Navy as it was an ideal position for managing military and naval affairs in the Eastern Caribbean. With its large population and garrisons, Barbados was also an ideal administrative centre and was initially the home of the Admiral of the fleet. Situated on the open and expansive Carlisle Bay, the naval station could accommodate many first-rate large ships of the line while Bridgetown was a prosperous city with a large white population where supplies and skilled labourers could be easily procured. However, it could not provide safe anchorage during hurricanes or a convenient place to do extensive repairs. In 1806, English Harbour surpassed Bridgetown as the main naval facility in the Eastern Caribbean (Crewe 1993).

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Pigeon Island, St. Lucia

St. Lucia's strength was its strategic position as a wedge between the French forces on the islands Martinique and Guadeloupe. As a result, it was frequently contested by both the French and British and changed hands fourteen times over the years. The small naval station at Pigeon Island was part of the British Army garrison and not a stand-alone naval facility. It provided limited provisions and could be used for urgent repairs and hospital care but lacked the facilities to be a naval dockyard. It was not a safe hurricane shelter and extensive repairs and refitting were not possible. It was therefore a frontline station used for rapid response and for gathering intelligence or information on the movement of the French ships of war. Few if any structures exist that can be defined as naval facilities.

Bermuda

Bermuda grew in strategic value as a port and base for protecting British ships on the Atlantic passage to Europe and Canada since Bermuda is an isolated island that provided a base of operations close to America and the Atlantic Gulf Stream. It was built in 1809 by convicts brought to the island as a source of labour. By 1814 the yard had a storekeeper, a master attendant, master shipwright, and forty-seven manual workers, so it was much smaller than the Antigua Naval Dockyard which in that same year had 327 manual workers. Bermuda was developed after the loss of the North American colonies and continued conflict with American warships. The War of 1812 saw renewed hostilities between Britain and the newly liberated American colonies and although over time the hostile situation improved, the defences of Bermuda were largely built against possible American

attack. The dockyard and island's defences continued to be developed by the British Navy fifteen years after the end of the Napoleonic Wars. The surviving 19th century cast iron structural frames are exceptional in quality and completion. These iron-framed structures are similar to those of Port Royal, Jamaica. As the value and importance of the sugar islands diminished in the Caribbean, Bermuda continued to develop as an Atlantic station because of its close proximity to the eastern seaboard of the United States and it was a convenient stop on the route back to England. Naval interest continued well into the 20th century, particularly during the two world wars. Compared to Antigua, Bermuda was a latecomer in Caribbean British naval history, starting late but continuing well into modern times, after English Harbour and the islands of the Eastern Caribbean had begun to decline. Its development and history thus differs considerably from that of the Eastern Caribbean and English Harbour.

Asia

Bombay and Madras had facilities that were established by the East India Company, who controlled almost all aspects of East Indian affairs as early as 1626. The boat yard in Bombay was a large, comprehensive facility that rivalled Portsmouth in terms of ability to build and repair ships of the line. A British traveler, Abraham Parsons, wrote in 1775:

“Here is a dockyard, large and well contrived, with all kind of naval stores deposited in proper warehouses, together with large quantities of timber and planks for repairing and building ships, and forges for making anchors...It boasts such a dry dock, so as to be capable of receiving three ships of the line at the same time....” (Parsons 1808:214-215).

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Using the large and cheap but skilled labour force and materials available in India, the East India Company built several ships, including the 74-gun Cornwallis, for the Navy. The management team included a commissioner, a naval storekeeper, a master attendant, and a master shipwright to look after the Navy's interests. Madras was less important but also had its own officials (Lavery 1989:240). Unlike Antigua, the facilities in India were extensive and used primarily for ship building, were not dependent on enslaved labour and were mostly in a stable military area. The Bombay dockyard is now primarily used for repairs and the servicing of the modern Indian Navy and is closed to the public. (except for the 1st Sunday in the month for Indian nationals).

Although Britain had a presence in Ceylon (now Sri Lanka), Trincomalee was originally built by the Dutch and Portuguese and taken over by the British in 1795. It was primarily used as an anchorage and coaling station until its expansion in the early 20th century.

Summary

Although most of the naval dockyards in Britain were built at an earlier time, not necessarily ideal for the massive Navy of the 18th century, many were adapted to the needs of the new Navy and to Britain's rapidly expanding theatre of operations to include typically Georgian-style facilities. These facilities continued to evolve through steam right up to the present-day nuclear ships--unlike the Antigua dockyard, which still primarily services sailing vessels. Shifting strategic and economic interests away from the Caribbean arena doomed the Antigua Naval Dockyard, freezing it in time while its English counterparts continued to evolve as home bases.

Bermuda, although exceptional in quality, came into prominence at a later time frame and was not directly linked to protecting Britain's sugar islands in the Eastern Caribbean.

The Antigua Naval Dockyard, in common with other Caribbean properties, depended extensively on the labour of the enslaved Africans for its construction, day to day running and general labour force.

Jamaica was an important facility designed to take care of Britain's interests in the western Caribbean, but its collection of structures are mixed and for the most part abandoned; it has potential to be developed as a submerged city and archaeological site.

Bridgetown, Barbados, is a listed World Heritage Site for its army garrison and amazing historic city, but did not have a dedicated Georgian naval dockyard.

The Antigua Naval Dockyard has continued to be used by the small nearby community to repair their coastal boats and as a mail and coaling station. In 1950 the facility was reborn as a base for charter yachts and as a heritage tourism site.

In sum, the Antigua Naval Dockyard was a purpose-built Georgian Naval facility built in a naturally occurring, easily protected bay, surrounded by highlands on which defensive positions were built, at a place and time of great conflict and change in the world, by English men and enslaved Africans working side by side, pooling their creativity and knowledge to create a first-rate facility for the maintenance, protection and quick deployment of Britain's naval ships in the Eastern Caribbean. This facility is still in use, repairing, provisioning, and entertaining the sailing ships of today by the descendants of these same men. No other British naval dockyard, be it at home or in Britain's Colonial empire, encompasses all of these expressed qualities in terms of the preservation not just of structures but of the continuing maritime traditions.

3.3 Proposed Statement of Outstanding Universal Value

BRIEF SYNTHESIS

The Antigua Naval Dockyard and Associated Archaeological Sites consists of a purpose built group of Georgian Naval structures, set within a walled enclosure, on a naturally occurring series of bays surrounded by highlands on which defensive fortifications were constructed.

Built at a time when European nations were battling for supremacy of the seas in a bid to control the very lucrative sugar producing Islands of the Eastern Caribbean. Antigua's location as a front line repair, careening and protected year round facility gave Britain's navy a huge strategic advantage over its rivals at a pivotal point in world history. The continued use of the dockyard today by the charter yacht industry as a place of repair, provisioning and protection and of its workforce of highly skilled craftsmen, the descendants of British and enslaved, sailors and artisans make up a continuing cultural landscape.

CRITERIA

CRITERIA (IV)

The Antigua naval dockyard and its related archaeological sites are an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates a significant stage in human history. The impressive assemblage of Georgian Period British naval structures, enclosed within a walled historic compound and the associated military complexes that surround it, were developed at a time when European powers were rapidly expanding their spheres of influence and thus constantly at war.

The natural attributes of the deep waters of English harbour, surrounded by steep protective hills and a narrow entrance facilitated the development of a naval dockyard, which could be utilised year round, including the hurricane season. Collectively the Antigua naval dockyard and its archaeological sites today represent an outstanding example of a Georgian naval facility within a Caribbean context.

STATEMENT OF INTEGRITY

The boundaries of the nominated site are primarily based on those of the original Naval Dockyard and the military complexes of Shirley Heights and Middle Ground strategically located on the hills surrounding the Dockyard. These military complexes were built entirely to protect this crucial naval facility. At Shirley Heights and Middle Ground the boundaries closely follow the "Kings Lines" which delineated the original site; the Dockyard itself is a walled compound; and the rest of the site primarily follows the coastline, diverging slightly to include the Ordnance structures, thus encapsulating all relevant areas for protecting the OUV. All of the structures within the Dockyard are in a good state of repair having been restored to varying degrees using authentic materials and following the original plans. Despite the military complexes surrounding the Dockyard being in various degrees of decay, the fact that there has been no modern construction within the area, allows these structures and their physical setting on top of the ridge and steep cliffs to retain and convey their story and has enormous potential for archaeological research key to our understanding of past lifeways.

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STATEMENT OF AUTHENTICITY

The Dockyard and its associated archaeological sites fulfil all the criteria for authenticity as laid out by UNESCO's Operational Guidelines. This historic Dockyard has a high degree of authenticity as the only surviving example of a Georgian period dockyard established by the British navy within the Eastern Caribbean during the 18th and 19th centuries, where the majority of original structures are still represented. Much as the military complexes overlooking the Dockyard are in various stages of decay, there are sufficient remains and large intact archaeological deposits to convey their story and therefore does not negatively affect the OUV.

PROTECTION AND MANAGEMENT REQUIREMENTS

The National Parks Act, 1984, and its Amendment 2004 protect the Outstanding Universal Value, the authenticity and integrity of the nominated property, and its buffer zone. The Antigua Naval Dockyard and surrounding fortifications are located at the core of Nelson's Dockyard National Park, a declared protected area under the National Park Act 1984, Regulations 2013, Statutory Instrument No. 48. Management and Development Plans, Zoning regulations, building guidelines are in effect. Revisions to the Act and new heritage legislation for compliance with the 2001 Underwater Heritage Convention is now under Cabinet review. The Act provides for the appointment of a Board of Directors and a professional management team to manage the affairs of the site. The Physical Planning Act of 2003 adds additional protection and the Chief Town and Country Planner of the Development Control Authority (DCA) has a permanent seat on the Board.



Figure 109. Anchor's and Capstan, Dockyard



SECTION FOUR

State of Conservation and Factors Affecting Site

4.a.

State of Conservation

The Dockyard implements an aggressive maintenance program. All structures within the historical compound are inspected annually prior to the hurricane season. Minor repairs are done on a daily basis throughout the year, with major repairs scheduled for the quiet summer months unless the situation is critical. The restoration and maintenance staff includes experienced carpenters, stonemasons, electricians, plumbers and landscapers so most projects are managed “in-house”.

If required, expertise is out-sourced to local professional architects, engineers, and quantity surveyors. Research prior to each project is conducted by the Heritage Department, which also monitors the works to ensure authenticity, and documents the works.

The majority of the structures are in a good state of repair and being used in various capacities. Detailed descriptions are presented in the following tables, (6 pages) followed by a summary.



Figure 110. Clarence House prior to the start of restoration

Section Four - State of Conservation & Factors Affecting the Property

BUILDING	RESTORATION (last date of Major Work)	CURRENT CONDITION
Engineers House(used as hotel)	2012	A two-storey structure built of red brick, with wood post and beam interior frame and pine flooring on two floors. Generally in good condition. Recent stabilization work done includes major woodwork for replacing termite-damaged beams, floors and partitions. The building requires additional work to point gaps in brick masonry, replacing cracked stones and minor settlement cracks. Long-term restoration plans are in place to replace the interior and roof with termite resistant tropical hardwood in about five years depending on further deterioration and fund raising efforts. Termite treatment continues and the structure is monitored and inspected regularly.
Guard Station and Engineers workshop. (Used for storage)	2010	This is a brick building with stone floors and a wood shingle roof. It is in good condition and was extensively repaired in 2010. Work included replacement of door and window frames and pointing the weathered brick joints. Additional work is required at the unused southern end to replace damaged wood and to clean and point the loose masonry.
Blacksmith Shop (Little survived of this area structurally)	1984	This area was modified to function as a modern service work area. It is now a laundry, washrooms and shower facility and generator room. It is fenced off and somewhat isolated from the rest of the historical areas.
Sick House	2013	Fully restored building used as rooms for the hotel. Major work was undertaken in 2013.

Structure Condition and Restoration Status

Continues on following page

Section Four - State of Conservation & Factors Affecting the Property

BUILDING	RESTORATION (last date of Major Work)	CURRENT CONDITION
Boathouse and Sail Loft Pillars	1998	Only the large round stone columns survive of this building. Today there has been some renewed weathering but major work will not be required for several years.
Joiner's Loft (hotel annex for the Admiral's Inn)	2008	This is an unusual wooden building, built of large post and beams that is open below on the ground floor. The roof above is enclosed to create a loft setting. It was extensively restored in 2007/8 and is now in excellent condition.
Mast Shed	2012	This is an open space created with stone columns 12ft. in height and topped with a series of hip roofs. It was extensively restored in 2012. Partially used as an open display area for events with space for two gift shops, storage and an enclosure for the electrical transformers and switches for the marina. It is in good condition. New hurricane steel clamps were made to replace the decayed original iron clamps to ensure its strength.
Canvas and Cordage Building	2012	This is a large brick building that is partially in ruins. The 1950 hurricane destroyed the roof and upper floor and the building has not been repaired to its original state. Instead a series of lockers were created for storage, and the offices of Customs and Immigration and other yachting services. There is no immediate plan to restore this large structure at this time for the brick walls of the main floor are in poor condition. It will have to be almost completely rebuilt from the ground up. The Parks management recognizes that this should be done eventually as this structure could make a significant contribution to the heritage landscape and make a major financial contribution to the Dockyard.
Copper and Lumber Store Hotel	Annual Repairs	A large building of brick and stone. Its post and beam interior woodwork requires annual repair work to stabilize the interior. Major funds are being sought to completely restore this building. Despite regular and varied termite treatments, damage continues. Restoration will use tropical hardwood to avoid future issues.

Structure Condition and Restoration Status

Continues on following page

Section Four - State of Conservation & Factors Affecting the Property

BUILDING	RESTORATION (last date of Major Work)	CURRENT CONDITION
Clerks/Senior Officers House (Museum)	1998	A two storey wood building. It was severely damaged in the hurricanes of 1995 and 1998 and had to be extensively repaired on both occasions. Today it is in excellent condition.
Bakery	2001	A stone building that is in good condition. The cisterns were repaired in 2001.
Galley (bar, restaurant and gift shop)	2013	A stone building that is in good condition. External repairs were done in 2013.
Pay Office Building (Offices, liquor store, internet café)	2008	This is a two-storey building of stone and wood, cabin style. It was repaired in 2007 and again in 2008. It is in good condition.
Officers Quarters (offices and restaurant)	2010	This is a large building set atop a very large stone cistern. It is built of composite materials, stone, brick, wood in old English style. Six inch timbers frame the upper structure between which brick is laid. It is in poor condition, work done in 2010 was essentially a stabilization project. It is scheduled for major restoration in 2016 unless funds become available sooner.

Structure Condition and Restoration Status

Continues on following page

Section Four - State of Conservation & Factors Affecting the Property

BUILDING	RESTORATION (last date of Major Work)	CURRENT CONDITION
Capstan House (missing)	none	This building was lost in the 1924 hurricane and never rebuilt. There is no plan to do so in the immediate future, or until all other buildings have been repaired.
Sawpit Shed (Sail Loft)	2009	The roof of this building was replaced and much of the wood on the north side. It was restored using the original plans and is now in excellent condition.
Seawall/Wharf	2003	The ancient stone walls were beginning to collapse in 1990 and a major project to rebuild a large section of the seawall and to stabilize the balance was initiated. Funds were provided through a matching agreement with the European Union and the National Parks. The wall is today in excellent condition and is inspected every year following the hurricane season.

Structure Condition and Restoration Status

Section Four - State of Conservation & Factors Affecting the Property

FORTS AND MAJOR STRUCTURES	CONDITION	REQUIREMENTS
Fort Berkerly	Walls and stone floor mostly intact. Powder Magazine in stable condition. Guard House in poor condition. Stairs to sea weathered severely. Most of this fort is present and provides excellent heritage and scenic values.	Needs masonry work to stabilize walls, to seal missing stones and loose mortar, and filling to plug holes in and below walls. Also needs rendering to keep out moisture and to seal the tops of the walls. Guard House needs new roof, door and windows including frames and hardware.
Fort Charlotte	Has mostly been lost. Only a few stone foundations and parts of the gun platform remain. No major work has ever been done at this site, which is located on private property.	Requires major stone masonry stabilization and clearing of vegetation.
Blockhouse	Excellent condition with rebuilt gun platforms, restored powder magazine, cleared and stabilized courtyard, stabilized perimeter walls, restored cisterns and added facilities (washrooms and vendors shelter)	Work needs to be expanded to include the nearby structures.

Continued on following page

Forts and Major Structures Condition

Section Four - State of Conservation & Factors Affecting the Property

FORTS AND MAJOR STRUCTURES	CONDITION	REQUIREMENTS
Dow's Hill Fort	The site of the new Interpretation Center. The ruins have been stabilized, the walls repaired in places and a viewing platform built. Most of this fort is still in heavy bush cover.	Clearing bush and removal of damaging trees. Continue stabilization efforts to expand the site.
Lookout Platform	Restored	Minor maintenance work on roof shingles, restoration of nearby stone barrack complex.
Canteen Annex	Poor condition, in ruins	Bush needs to be cleared, stone needs to be stabilized, no interpretation.
Artillery Quarters	Partially in ruin. A single building in the courtyard has been restored and plans have been drawn for the restoration of the rest of the compound.	Needs to be cleared of vegetation, and restored. This structure is in an ideal location for modern use and interpretation.
Numerous other ruins on the Ridge at Shirley Heights	There are many additional structures on the Ridge in various states of decay, but little is known as they have not been mapped or measured	Clearing of bush, mapping, stabilization and interpretation

Forts and Major Structures Condition

Section Four - State of Conservation & Factors Affecting the Property

	SUMMARY OF BUILDINGS	CURRENT CONDITION
1	Engineers House	Fully restored, good condition
2	Guard Station and Engineer's Building	Fully restored, good condition
3	Blacksmith's Shop	Partially restored, altered
4	Sick House	Fully restored, hotel rooms
5	Boathouse and sail loft pillars	Restored stone columns only
6	Joiner's Loft	Fully restored, good condition
7	Mast Shed	Fully restored, good condition
8	Canvas and Storage Building	Ruins, partially used
9	Copper and Lumber Storage Building	Fully restored but needs repair
10	Clerks and Senior Officer House	Fully restored, good condition
11	The Bakery	Fully restored, good condition
12	The Pay Office	Fully restored, good condition
13	The Galley	Fully restored, good condition
14	Officers Quarters	Fully restored, needs major repair
15	Capstan House base and capstans	Capstans need minor repairs.
16	Sawpit Shed	Fully restored, good condition

Summary of buildings and current condition in Naval Dockyard

Section Four - State of Conservation & Factors Affecting the Property



Figure 111. The Pay Office having major repairs done to the woodwork.



Figure 112. Clarence House Restoration.

Section Four - State of Conservation & Factors Affecting the Property

	BUILDINGS	CURRENT CONDITION
1	Entry gate and columns	Good condition (repaired 2009)
2	Sun Dial	Good condition
3	Brick and Stone Wall of Compound	Good condition, repairs (2012)
4	Wharf Walls and Heave-Down Blocks)	Fully restored, good condition

Other Structures of Significance and Condition in Naval Dockyard

	SUMMARY OF BUILDINGS	CURRENT CONDITION
1	Fort Charlotte	Ruins (archaeologically intact)
2	Block House	Partially Restored (archaeologically Intact)
3	Artillery Quarters/complex	Partially in ruin (archaeologically intact)
4	Engineers Complex	Ruin (archaeologically intact)
5	Look Out Fort	Fully restored, (active restaurant)
6	Hospital	Ruin (archaeologically intact)
7	Officers Quarters	Ruins (archaeologically intact)
8	The Canteen and Annex	Ruins (archaeologically intact)
9	Cemetery (3)	
10	Married soldiers quarters	Ruins (archaeologically intact)
11	Kitchen and latrine Blockhouse	Ruins (archaeologically intact)
12	Quartermaster House and storage	Ruins (archaeologically intact)
13	Guard house and barracks	Ruins (archaeologically intact)
14	Jones Valley Dam	Ruin (unexplored)
15	Jones Valley	Nature reserve tropical dry forest
16	Dow's Hill Fort	Interpretation center and ruins of fort
17	Fort Berkeley	Partially stabilized.
18	Clarence House	Now under full resoration
19	Middle Ground Barracks	Ruins (archaeologically intact)

Historical Structures surrounding Naval Dockyard

Section Four - State of Conservation & Factors Affecting the Property

In sum, all of the standing buildings and features within the Dockyard are monitored and repaired regularly, and those that still require major work are in stable condition and used in some capacity. Major restoration projects are implemented about every two years and extensive maintenance and stabilization work is conducted every year.

However, on the Ridge and archaeological structures on Shirley Heights, major stabilization has been limited to areas of high traffic flow, visibility and safety. The Blockhouse, for example, was extensively stabilized in 2010 and 2011, and the southern wall of Dow's Hill fort rebuilt.

The archaeology of the Ridge is truly remarkable. Of the more than 50 buildings, only three have been partially excavated. These were small-scale projects of no more than three-square meters per structure but the work showed the enormous potential for future archaeology on the property. Artifacts found were in the thousands and representative of daily life, the buildings, furniture, the regiments, medicine and recreation. Numerous middens or refuse dumps are still in situ, as are the cemeteries and foundations of the buildings.

Most structures have been reduced to small sections of stonewalls and are covered in vegetation. However, the long-term plan for the National Park is to restore several of these majestic structures. Studies were done as early as the mid-1980s and preliminary drawings of floor plans and elevations prepared. In the meantime, archaeological excavations and archival research continues on a small scale to further our understanding of the changing use of the buildings over time and the life ways of the soldiers, their families and the enslaved people who once built and lived in the military compounds.



Figure 113. Excavations on the Ridge

Clarence House on Commissioner's Bay was severely damaged in the hurricanes of 1995 and 1998. It was partially stabilised to save the structure, with limited funds by the Getty Foundation. Full restoration work has now begun after a generous donation to the Clarence House Trust, a registered U.K. charity, by Sir Peter Harrison. The project is a complete restoration of the building and property. It is scheduled for completion in late 2015. The restoration committee includes:

- Project Manager: Dr. Reg. Murphy (trustee)
- Architect: Andrew Goodenough
- Engineer: Oliver (Junie) Davis
- Quantity surveyor: Richard Watson
- Foremen of works: Marius Smith and Michael Flermus

The underwater cultural heritage within the harbour is still largely unknown. Surveys have been done that have located cultural deposits and some recovery has been carried out, but much more work needs to be done to fully assess this area of the park. A recent hydrographic survey that is still in progress has located and confirmed at least one large shipwreck and increased our knowledge of the seabed within the harbour.

Section Four - State of Conservation & Factors Affecting the Property

4.b

Factors Affecting the Property

4.b.i Development Pressure

Development

Most of the land within the proposed site is owned by the government and is therefore fully controlled and managed by the Parks Authority under the National Parks Act. However there are a few privately owned areas. The largest of these is the Galleon Beach Hotel complex in Freeman's Bay, and the Inn. These complex are zoned mixed-use area with hotels, restaurants and exclusive residential housing plots.

Although the resort areas was established before the declaration of the National Park, the existing structures are for the most part in keeping with approved designs. The Galleon Beach project is now entering its second phase of development and extreme vigilance will have to be used to ensure strict adherence to the design and building regulations of the Park.

With the thirtieth anniversary of the establishment of the Nelson's Dockyard National Park, the NPA decided to review the current zoning to determine if it still meets the intended objectives from thirty years ago. This primarily affects the buffer zone. New research is now being conducted into the state of conservation, water quality, the cultural and natural heritage inventories, along with a new hydrographic survey. This is intended to establish new baseline data that will inform the revised management plan. In addition, as new additional parks have been created, the current supporting regulations are being revised and strengthened. The revised zoning of the Park along a more realistic and scientific based criteria while considering private property and the need for economic growth and development provides a renewed platform and base for the proposed site. Some of these activities, such as the scientific studies are well advanced and still in progress.



Figure 114. Remnants of the Canteen Complex

Section Four - State of Conservation & Factors Affecting the Property

In sum, development pressure is managed through zoning, legislation, politics, education/information and political lobbying. It is also essential to have accurate data, a scientific platform that will guide decisions and provide baseline data for monitoring and evaluations. This work is continuous and with the improvements and to our policies guided by World Heritage Management publications and requirements, stronger policies, regulations and practices are now being established.

Agriculture

There is no substantive agriculture within the proposed site, other than small “domestic” backyard gardens.

4.b.ii Environment Pressure.

Environmental pressures on the site can be attributed to human and natural factors, which include climate change, desertification, pollution, earthquakes, fire and hurricanes. The Parks Management in consultation with other governmental agencies, international specialists and organisations has addressed all of these. Most identified threats are managed as much as can be through policy implementation, public outreach, and preventative activities.

Pollution

One potential threat to the site is the possibility of marine pollution from fuel spillages. There is only one fuel distributor within the Dockyard and its supply/storage tanks are above ground. Extreme care is taken with their operations and to date no spills have happened. However, containment barriers and treatment chemicals are available at the fuel service provider and the slipway chandlery. The fuel supplier, the West Indies Oil Company, will provide assistance with cleanup and management of marine-related pollution if necessary. The Coast Guard and the National Office for Disaster Services are willing to provide further assistance. In addition, all of the large mega yachts that visit or moor in English Harbour carry on-board control devices, such as containment booms and dispersive chemicals.

Other potential sources of pollution include maintenance and repair activities for servicing and repairing yachts. This is a core activity that is closely monitored for the materials used in the construction of modern yachts are often hazardous. Workers are knowledgeable and recognize that their livelihoods depend on a clean environments and police their industry quite effectively.



Figure 115. Interior arches Copper and Lumber Store

Section Four - State of Conservation & Factors Affecting the Property

THREAT	ACTIONS	RESULT
Demand for land and to change zoning	Policy enforcement; public information; building guidelines; strengthening of regulations; collaborative actions with Lands and Survey Dept., inform Ministers of Gov.	Controlled approach to development; better policies for land management; educated and informed public, improved knowledge of issues; zone adjustments.
Agriculture (very small scale and not a threat)	None	Not an issue
Political pressure to increase development and permit unsuitable activities and businesses.	Education, lobbying government and agencies that can assist, media exposure.	Greater understanding of the values of heritage and conservation within government.

Development Pressure: Summary Table

Spray painting of yachts can create polluting, leaking fuels and oils from bilges, spillages and accidental loss of varnish, oil and solvents, while the disposal of old items such as batteries, rope, rigging, broken tools etc. has to be carefully monitored. These issues are being addressed by education, strong regulations and enforcement, and community involvement. Most people in the area, including the visiting yachtsmen, use the sea and beaches within the proposed area and buffer zone for recreational purposes, eat seafood caught in the area and make a living that depends greatly on having a clean unpolluted environment. Therefore, pollution activities are rare and minimal. But in a continued effort to improve, facilities and policies have been put in place. These include sewage treatment plants, recycling bins, garbage collection, storage facility and disposal, monitoring by marina and environmental staff, mobile park rangers, and continuous dialogue with stakeholders and community groups.

Climate Change

The Dockyard is situated at sea level (approximately 50 to 75 cm above depending on the tide). Predictions of an increase in sea levels of over 1 meter within the next millennium do not bode well for the Dockyard which is mostly less than 1 meter above sea level. However, it is unclear what preventive actions can be taken to safeguard the historical site against sea level rise. While it is not yet an immediate threat, predictions have been noted and preliminary studies were conducted by graduate student Erin Friedman (CUNY Graduate Centre), using GPS data with GIS predictive modelling programs to assess sea-level rises and storm surges. This has provided useful insights into the threats and potential hazards that will have to be addressed (Friedman 2013). Phase two of her research is now in progress.

Section Four - State of Conservation & Factors Affecting the Property



128 **Figure116.** Fort Berkeley-Hurricane Omar

Over the past twenty years, there has been a clear and noticeable increase in hurricanes and tropical storms in the Eastern Caribbean. With each hurricane season, storm surges batter the coastline, erode the beaches and flood low-lying areas. While the Dockyard and its inner bays are protected from the brunt of the storms, flooding of land behind the sand dunes in Freeman's Bay, and landslides cause damage to the hillside vegetation and structures. Two hotels on Freeman's Bay within the site have been flooded repeatedly over the past ten years and Fort Berkeley on the peninsula that protects the inner bays of English Harbour is also being eroded from the increasingly larger waves. In response, the National Park has had to implement an aggressive maintenance program to keep the walls of Ft. Berkeley intact in order to deflect the storm surges. Similarly, the hotels have had to build larger drainage channels, settlement ponds and retaining walls. Actions taken to manage and reduce the threats include:

I. Annual review of the risk management.

The National Office of Disaster Services of the Government of Antigua Barbuda has a well-established Management Plan. The National Parks Authority works closely with this office, but in addition has developed its own Risk/Disaster Preparedness and Response Manual specifically for the historical naval Dockyard.

II. Identifying the risks and implementing policies and activities in response.

For example, in the village of Cobb's Cross (in the buffer zone), which was severely affected by flash flooding, a drainage canal system was designed and built by the National Parks Authority. No flooding has occurred since its construction. Other actions included the building of settlement ponds, the strengthening the regulations to control land clearing, and establishing new building guidelines.

Section Four - State of Conservation & Factors Affecting the Property

THREAT	ACTIONS	RESULT
Climate Change	Scientific studies; monitoring data and international observations; policy adjustments; strengthen building regulations; strengthen seawalls and coastal sites; improve drainage, education, and increase maintenance programs for the historical structures.	Increased public awareness; reduced soil erosion; stronger structures; increased vegetation; reduced damaged due to preventative action planning.
Pollution	Public information and “buy-in” to program; developed network of response personnel trained for specific activities (oil spill clean up etc.); stronger regulations; recycling policies; improved sewage treatment plant; improved waste collection and management; monitoring through regular inspections and studies.	No major issues to date; improvements in water quality and vegetation cover; increase in species diversity; increase in number of persons utilizing the nature trails and beaches.
Desertification	Public outreach programs; scientific studies; interviews and meetings with stake holders and key persons involved; radio and television documentaries, “jingles” and notices, public lectures.	Reduced number of goats, particularly free ranging goats; better management as more holding pens were built.

Development Pressure: Summary Table

Desertification

Within the delicate military hillside areas of the proposed site and buffer zone, there are a small number of families that own large herds of goats (estimated at over 13,000 in 2005) that roam freely across the landscape. This is a long-standing tradition among generations of these families and there is little political will to change the status quo. In recent times, as the economic situation has improved dramatically for the livestock owners, the goats have become a novelty and are culled only in small numbers and for special festive occasions. As a result, the free ranging herds have become a major issue and are responsible for serious damage to private and public properties and to the environment. Studies funded by the USAID, the National Parks, and the

Environmental Awareness Group (EAG) indicate that the herds have surpassed the carrying capacity of the area and erosion of topsoil and depletion of vegetation are major issues within the National Park. A campaign funded by the USAID was launched to educate the owners and to promote the culling of herds to manageable numbers. The result has been a drastic reduction in the number of goats and the vegetation has made a remarkable recovery. Areas that were bare landscapes, void of all but toxic species of plants, have recovered rapidly and continue to improve. However, this situation must be monitored and managed for the foreseeable future until a cultural change regarding the management tradition of feral goat herding is the accepted norm.

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Earthquakes

Antigua is situated on the eastern edge of the Caribbean crustal plate between the massive Atlantic Plate and the Pacific Plate. Due to this location, the Eastern Caribbean islands, including Antigua, are in an active seismic and volcanic area. There are no active volcanoes on Antigua today, but volcanoes on nearby Montserrat (21 miles or 33.8 km away) and Guadeloupe (45 miles or 72 km away) are active. Mild tremors are frequent on Antigua but more powerful and destructive quakes are rare events. The building code for Antigua establishes and demands high standards and adequate steel structural reinforcing in modern building, but for the older historical unreinforced stone and brick structures, there is a high risk for damage.

This is addressed through regular maintenance, particularly of the wood frames that function to some extent as stabilisers. Cracks and loose stones are repaired as often as possible. But in recognition of the vulnerability of these old structures, they are not used for hurricane shelters.

Flooding

As previously mentioned, flooding in the low coastal areas has been an issue in the past. Hurricanes, tropical storms and depressions deposit large volumes of water that often cannot flow into the sea quickly enough to prevent flooding. In addition, storm surges can compound the situation. This issue has been addressed in the village of Cobb's Cross, where flooding has been a frequent occurrence. In 2012 the National Parks Authority planned and built a drainage canal system that now permits a rapid flow of water from the community to the sea. However, there are hotels and commercial properties, such as restaurants, tennis courts, and cottages, located in flood zones that have to be monitored carefully by their property owners.

To reduce risk, actions by the property owners include diversion canals, settlement ponds, clearing and increasing outflow channels to the sea, and increasing the vegetation cover.

Flooding has not been an issue within the historical Dockyard, but it has in the flood plain and watercourses at Freeman's Bay and Galleon Beach. These properties were developed in unsuitable areas but are scenic landscapes, close to the sandy beach waterfront, and "ideally" located for development with the result that obvious and historic episodes of flooding and storm surges were ignored. This has resulted in major damage to property, although development plans at one of these sites continue to be requested of the NPA.

Fire

Fire is without doubt a major threat to the historical Dockyard and, although to a much lesser degree, to the archaeological sites and stone ruins on the Ridge. Many of the buildings in the Dockyard are built of wood alone and all have major wooden components, such as the roof, floors, windows, etc. To address this threat, a study was conducted by the Heritage Department to recognise and address the issues. As a result, a number of fire hydrants were installed in strategic locations around the Dockyard and extinguishers placed in all buildings. Two-inch diameter fire hoses were placed in a number of locations close to the hydrants and staff trained in their use. These are now checked biannually. Two large mobile extinguishers with 30-meter hoses were placed on the waterfront within easy access to the yachts and waterfront buildings. A third mobile unit is placed at the entrance to the Dockyard near the security station.

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THREAT	ACTIONS	RESULT
Earthquakes	Regular maintenance; preparedness and response manual.	Increased awareness; stronger and more resistant structures.
Flooding	New canal system; large containment pond; clearing of watercourses; improve vegetation on hillsides; improved building and development regulations.	Fewer episodes of flooding in villages; reduced risk to private property; reduced financial losses; improved public safety.
Fires	Increased number of extinguishers within buildings; training on the use of extinguishers; 4 large mobile extinguishers with 2" hoses stationed around the Dockyard; additional fire hydrants placed on property; now attempting to secure a fire truck; training of staff for first response.	Increase in training and knowledge for staff; improved response equipment; a safer environment.
Termites	Increased monitoring; increased treatment frequencies; change to tropical hardwood and treated timber.	Stronger structures; long term financial saving; fewer episodes of infections.
Vegetation	Improved program to remove vegetation from structures.	Still an issue particularly for numerous stone structures in the forest; program needs more funding for additional labour, materials and for stabilization.

Natural Disasters, Risk Reduction and Response Summary

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A number of staff members from various departments have been trained in fire suppression and first response, along with general first aid and CPR.

In addition, a fire station is located about five miles or fifteen minutes away and the National Parks Authority is currently seeking to purchase a fire truck that can be stationed nearby in English Harbour. A unique bonus is that all crew of the many hundreds of yachts moored in the harbour are required to have training in fire suppression and fighting as part of their yachting certification.

The Antigua Barbuda Search and Rescue (ABSAR) and a certified paramedic are based full time in English Harbour. Their services include rapid response and operating an ambulance service within the immediate area. They are often the first response team at fires in the community.

Termites

Termites are rampant in the area and have always been so despite regular treatment programs. The historical records of the Dockyard provide graphic documentation of the “battle” to control these destructive insects. To remedy this, NPA management has increased treatment frequency, removed problematic vegetation close to the structures, and decreed that all wood used must be either be termite-resistant tropical hardwood or chemically pressure-treated against infestation. The tropical hardwood option, albeit more costly, is preferred as our experience is that northern hardwoods, such as oak and maple, have no resistance to termites, wood-worms and ants. The tropical wood selected closely matches the aged northern timbers and is therefore ideally suited. Inspections of structures have been increased from annual to quarterly.

In addition, maintenance programs to remove waste and garbage that might attract other types of vermin are continuous, with

bait stations that are monitored regularly in an effort to prevent insect and rodent .

Vegetation

Another natural threat is vegetation, particularly on the stone structures and archaeological sites on the hills surrounding the Dockyard. In the tropical environment, the natural vegetation has proven a major and costly challenge. The rapid growth of trees, at times directly on top of structures, causes damage and can obscure ruins and buildings, penetrate the walls of cisterns and pry apart the mortared brick and stone structures. In strong winds, the root-weakened walls are more prone to collapsing. This is managed by a regular maintenance schedule that removes problematic vegetation, seals open stonewalls and repairs cracked and damaged structures. However, due to the large area of the park and the number of buildings and structures involved, this is a costly activity that is done on a selective basis whenever funds become available.

4.b.iv Responsible Visitation to the Site

The Dockyard visitor services are well practiced in the management of high numbers of visitors and visiting yachts. Currently the yachting industry is booming, despite the continuing worldwide recession. Over the past two years, there have been record numbers of requests, particularly from the new generation of large yachts that are over 150 feet in length, for dockage and mooring within the safe anchorage of English Harbour. This is good news for the Antiguan economy and the Dockyard as it generates additional revenue that aids in restoration and heritage programs. However, the negative side is that dock space is limited and care must be taken with the new larger powered vessels as they can easily undermine the old historical wharf

Section Four - State of Conservation & Factors Affecting the Property

walls and disturb cultural and archaeological deposits buried within the harbour. This has been primarily mitigated by the construction of a new dock at the south end of the sea wall, which is dedicated to accommodating the larger yachts, thus considerably lessening their impact on the marine environment and the historical wharf walls. In addition, new policies and rules are being developed for the marina that will be communicated to the yacht captains and carefully monitored by the marina staff. New regulations with strong deterrents to ensure that the yachts comply with the seawall protection policies will also be implemented.

In addition, there are about 125,000 cruise ship passengers who visit the Dockyard annually. While we have not yet reached maximum capacity, the tourists visiting the site have to be carefully managed. Large numbers of minivans and taxis filled with tourists arrive within minutes of each other with as many as 3,000 tourists, creating instant traffic flow issues that frustrate the area businesses and the yachts waiting on services and supplies. This is a closely managed and monitored activity by the Parks Visitor's Services Department to ensure safety and to prevent excessive wear and damage to the structures and facility. The key to managing is by working with the Cruise Association, Taxi Association, Marine Trades Association, security and police in an attempt to stagger the arrivals, move the delivery of goods and services to earlier or later hours and to organise more efficient traffic flow. It is a work-in-progress that will continue to be improved. In addition, the tour guides have a variety of routes which can be used to prevent congestion according to visitor numbers, thereby ensuring a constant and smooth flow of visitors, without compromising the quality of the experience.

Visitors to the park vary greatly both spatially and seasonally. The core attraction is the Dockyard and has by far the most "traffic", between visiting yachts, trades persons, school groups, cruise ship tourists and other visitors. Statistics on the numbers of visitors are collected at the points of entry to the historical core, the Dockyard (table 1) and the Interpretation Centre (table 2). Areas such as the Lookout and Blockhouse at Shirley Heights are optional on most tours and thus receive considerably lower levels of visitors. The hiking trails at Jones Valley and Middle Ground, being suitable only for the fairly fit, are primarily used by long-stay visiting yacht people and local residents and are very popular within this group. Forts Berkerley and Charlotte fall into this category.

An interesting and popular event is held every Sunday evening at the Lookout Restaurant on Shirley Heights'. In a restored building and fortification overlooking English Harbour, two live bands play and entertain the audience of locals and tourists for 8 hours, attracting between 1,500 people in the "off season" (summer) and as many as 2,000/3,000 in the winter season. It is also an adaptive reuse of a historical structure that ensures its survival.

In sum, the Dockyard has been managing with ever increasing numbers of visitors since it opened as a heritage site in 1961. Large numbers of visitors are not a daily occurrence, but connected to cruise ship arrivals. It can therefore be planned in advance. Cruise visitors are an essential resource but the flow must be well managed so that they can fully appreciate the historical atmosphere, the beauty of the structures and the scenic landscape. The generally arrive between 10 am and 1 pm. In the hours before and after, the yachtsmen and the stay-over or hotel visitors enjoy the site at its best.

Section Four - State of Conservation & Factors Affecting the Property

As previously mentioned, the NPA Ridge and archaeological sites. Carrying Visitor Services and Events Department capacity is always of concern as to manage all tours and visitors to the Dockyard and other park venues. They collect data on the visitors, including type of visitor (cruise ship passengers, stay over/hotels), country of origin, and other information that is used for planning, marketing and promotion.

The potential increase in visitors from World Heritage Designation will not likely have a major impact on visitors to the Dockyard since it already a well-known destination. Evidence of this can be observed from a Google search of “Georgian Dockyards,” for which 9 out of 10 hits lead to the Antigua Nelson’s Dockyard site.

The possible gains for the Dockyard will be for an increase in stay-over tourists, particularly in the slower months, summer and fall. It is also anticipated that with demand and increase in revenue, restoration could be expanded to other areas on the

maximise the infrastructure will only lead to excessive wear and high repair costs. The sewage treatment plant for example and its collection pumps, whilst of exceptional quality and capable of managing the peak hours, will become a major issue if they are pushed to capacity on a daily basis.

On a cautionary note, tables of visitors can only be used as a guide in terms of visitation as data collected is only on the number of people who pay to enter the park system. Local area residents, crafts men, people visiting the bank, post office and restaurants, visitors and guests to yachts, and after-hours visitation are not reflected in these numbers. The numbers below are only representative of organised groups, tours and paying customers.



Figure 117. Traditional Iron Band entertaining guests at the Dockyard.

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Dockyard Gate October 2011-September 2012													
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Hotels	832	1333	1502	2051	2540	2000	1692	1202	996	1214	1139	609	17110
Organized Tours	1312	6484	7712	10269	11755	10504	6059	1506	531	534	789	614	58069
Independent Tours	483	3896	5536	6740	6558	5262	2516	411	121	141	135	116	31915
Schools	3	56	54	0	32	202	0	29	90	53	0	0	519
Tourism(finance)	7	2	26	5	71	2	0	13	8	11	11	0	156
Locals	1	32	55	37	40	35	104	15	16	95	130	26	586
Misc/other	0	10	11	29	119	26	4	20	32	217	407	21	896
Total	2638	11813	14896	19131	21115	18031	10375	3196	1794	2265	2611	1386	109251

Statistics from the Dockyard entry gate

Section Four - State of Conservation & Factors Affecting the Property

4.b.v Number of inhabitants within property and buffer zone.

The Proposed Site:

The number of person living within the boundaries of the proposed site varies during the year. Information from the Census Office of Statistics stated that there were only 12 people resident full time, and even they were significant travellers. This information was supported by the National Office of Disaster Services. During the winter months the resident population increases to a maximum of about 30 persons who were resident only during that time of year. They were essentially non-citizen or expatriat property owners.



Figure 118. Basket weaver.

Carrying capacity of hotels in the WHS:

The total number of rooms available at all hotels combined is 58 with a maximum total occupancy of 160 persons. However, within the buffer zone nearby are major hotel resorts with significantly greater capacity. Additional rooms are planned.

The Buffer Zone:

Within the buffer zone, according to the Census Office, and the National Office for Disaster Services, the estimated number of residents is 1,800.

Every Sunday evening for the past 20 plus years, locals and visitors alike, have come to enjoy the sunset, the music, the views, the rum punch, the dancing at the Lookout at Shirley Heights overlooking the Dockyard.



Figure 119. Steel Band Pans at Lookout.

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Figure 120. Visitors at Lookout.



SECTION FIVE

Protection and Management

5.a. Site Ownership

The Government of Antigua owns the Antigua Naval Dockyard and most of the land within the boundaries. There are however, a small number of privately owned homes and two hotels within the site. These are all located on the waterfront area zoned for residential and tourism development on Freeman's Bay. Within the buffer zone, lands are mostly private with scattered patches of government-owned lands.

5.b. Protective Designation

The Antigua Naval Dockyard and surrounding fortifications are located at the core of the Nelson's Dockyard National Park, declared a National Park in 1984, under the National Parks Act (Annex 6).

"An Act to provide for the establishment of National Parks and a National Parks Authority; to make provision for the preservation, protection, management and development of the natural physical and ecological resources and the cultural heritage of Antigua and Barbuda; and for matters connected with those purposes". Cap. 290. 11/1984. Pg.3. Nat. Parks Act 1984.

The Outstanding Universal Value, the authenticity, integrity of the nominated property and its buffer zone are already protected by the National Parks Act, 1984, and Amendment 2004.

The National Parks Act 1984 was amended in 2004. The amendments granted the NPA

more responsibilities and significant authority and control of all heritage sites on Antigua and Barbuda. The Act is further supported by Regulations 2013, Statutory Instrument No. 48. Additional Regulations, now under Cabinet review, are expected in the near future. In addition, a new Heritage Act (the UNESCO Model Legislation) for compliance with the 2001 Underwater Cultural Heritage Convention, has been modified to include all heritage, sites and objects, and is also now before Cabinet. This will be of further benefit to the NPA and to the proposed site.

The Physical Planning Act of 2003 adds additional protection. Under this Act, the Chief Town and Country Planner of the Development Control Authority (DCA) can declare sites and structures as protected areas. The Chief has a permanent seat on the Board of Directors of the NPA and ensures that all proposed development plans have been approved by the NPA and are in compliance with their zoning, building guidelines and policies prior to DCA approval. In light of this, the entire built heritage within the site and the buffer zone are also protected by the Development Control Authority.

Another level of protection is the Land Use or Physical Development Plan for Antigua Barbuda. This plan defines and establishes zones for appropriate land use but more importantly recognises and reinforces the boundaries of the Nelson's Dockyard National Park as a protected area. In addition, a new Environmental Management Bill is before Parliament and is

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designed to tighten existing environmental legislation and site management and to fill the gaps where necessary. This legislation will be under the jurisdiction of the Environment Division of the Ministry of Agriculture, Lands and Survey.

This multi-focal approach is essential as the park encompasses 15.94 sq. miles of coastal land and marine protected areas on the southernmost point of Antigua. It is a living park with residential communities, hotels, beaches, forests, mangroves, reefs and the physical remains of numerous fortifications, plantations, and prehistoric sites. The various legislations collectively support the National Parks Act. None have the authority to overrule the National Parks Authority and its decisions.

5.c. Means of Implementing Protective Measures.

The means for implementing and enforcing protective measures is provided in a number of pieces of legislation. The most important of these, designed specifically for the Antigua Naval Dockyard and the Nelson's Dockyard National Park, is the National Parks Act 1984 and the Amendment of 2004 (Annexes 10,11).

To achieve the goals of the Act, the National Parks Authority was created in 1984. The National Parks Authority (NPA) oversees park operations and is a politically appointed statutory body of Government. It is comprised of a Board of Directors under the direction of an appointed Chairperson and is responsible for oversight, fiscal regulations and policy implementation. Daily management and implementation are the responsibility of a professional management team under the leadership of a Parks Commissioner.

The Board of the NPA is comprised of a Chairman, the Chief Town and Country

Planner, the Permanent Secretary for the Ministry Responsible, and five appointed directors. The Minister Responsible, in consultation with Cabinet, chooses the appointed directors. They are generally selected according to their skills and professions. The Board then employs a Commissioner who in turn, and in consultation with the Board, employs a management team to carry out the working and management of the site.

The Amendment to the National Parks Act 2004 states,

“The functions of the Authority are:-

(a) to preserve, protect, manage and develop the natural, physical and ecological resources and the architectural, cultural and historical heritage of Antigua and Barbuda”.

It further states that the NPA has,

“to collaborate with the Town and Country Planner to compile a list of buildings of special architectural or historical interest in any part of Antigua and Barbuda.” N.P. Act, 2004. (4)3a, e.

5.c.i Parks Management

The NPA management team is comprised of experienced experts. The various departments include Yachting Services and Marina, Security, Events and Hotel, Heritage and Environment, Finance, Human Resources, Restoration, Grounds and Maintenance, and Visitor Services. There are monthly management and staff meetings and evaluations. The NPA encourages its staff to continuously upgrade their knowledge and funding is offered to assist in their studies. There are eight senior managers, with assistants who are also qualified and experienced.

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Management qualifications include two MBAs, one MA in heritage tourism, 2 PhDs (archeology, restoration, the environment). Senior staff include additional MA's, BAs and various diplomas. The Commissioner holds an MBA and has over 25 years experience. All senior management have over ten years' experience at the Dockyard.

5.d. Existing plans related to region, area, tourism development, village plan.

The National Parks Authority will soon be celebrating its 30th anniversary. It has been a successful operation and today it is deeply rooted in community, heritage and tourism on Antigua. The NPA is expanding to manage other sites on Antigua and has become the main heritage institution on the island. To this end, it is in the process of reviewing its Strategic Master Plan that will guide it through the next 30 years. Ongoing actions in this respect include:

- A proposed "village plan" for English Harbour.
- A revision and review of the current zoning and land use guided by scientific data and recommendations, and community consultations.
- Review of past research and a series of scientific studies to investigate, document and establish baseline data for future comparative studies, in light of climate change predictions, development proposals and increasing numbers of visitors and expanding yachting industry.
- New building regulations and development guidelines.
- Aggressive fundraising to implement the above.
- A new internal plan for additional restoration and stabilisation work that will add additional structures to the "restored inventory".
- New methods of interpretation with additional documentaries and publications. Some of this work is already in progress but not yet completed.

The restoration plans include major works on the :

- Engineer's House (hotel)
- The Copper and Lumber Store building (hotel, bar, restaurant)
- The Officer's Quarters (administration, offices, restaurant)
- The Artillery Officers' structure (for use as a conservation lab)
- Clarence House (conference centre, State House, museum)
- Interpretation Centre (new interpretation sound and light show)

5.e. Property Management.

The Antigua Naval Dockyard World Heritage site will be managed by the National Parks Authority. It is a proven management system, with strong legislation and experienced, qualified management in place. They will continue to be guided by the National Parks Development and Management Plans (Annex 12). A World Heritage Committee Focal Point has been established and a member included on the Board of the NPA to ensure that the OUV, integrity and authenticity and values of World Heritage are sustained. The Heritage Department, and current focal point for World Heritage, will monitor, document and assist in the management process, an activity which has already been implemented. The Heritage Department currently houses the UNESCO National Commission and is the Office for the Secretary General, which provides additional oversight.

The National Parks Management Plan states the following:

1.0 PURPOSE OF THE PLAN

This Management and conservation plan discusses the significance of the Antigua Naval Dockyard (also known on Antigua as "the Nelson's Dockyard"), its historical structures and related archaeological sites in a national and international context and

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provides guidance and a framework for the on-going preservation and management of the site. In recognition of the site for its vital social, economic, heritage tourism values and its depth of history for Antigua Barbuda, the government, in 1984, declared the former British Naval Dockyard, its associated archaeological sites and fortifications, a National Park under the National Parks Act, 1984. It currently operates with guidance under the policies and mandates of the National Parks Development and Management Plans (1984, 2014, Appended). This plan makes adjustments to the current plan and further ensure that the Outstanding Universal Values and Authenticity of the site is incorporated into the continued management and protection of the site.

2.1 Objectives of the National Parks

The Nelson’s Dockyard National Park was created with a mandate to protect, manage and develop the historical and scenic southern coast of Antigua; an area with an exceptionally large number of historical and scenic landscapes. At its core is the former 18th century British Naval Dockyard, known to Antiguan as the Nelson’s Dockyard. The organization of government that manages the park is the National Parks Authority; a non-profit organization, the National Parks Authority (NPA) that is dedicated to the principles outlined below, with guidance from its policies and objectives set out in its Management and Development Plans.

2.2 PARKS MANAGEMENT PLAN

The National Parks Development and Management Plan was prepared under the provisions of sub-section 10(2) of the Antigua and Barbuda National Parks Act, 1984. Specifically the Act provides that:

“10 (2) A Parks plan shall:

- (a) identify the park and assess the present state of its development;*
- (b) contain a statement of objectives and policies on matters relating to, but not limited to:
 - i. the development and use of all land in the Parks;*
 - ii. maintenance and protection of natural resources and sensitive environmental areas;*
 - iii. protection and conservation of heritage resources and archaeological sites (including buildings, structures and views);*
 - iv. provision of infrastructure and transportation;**
- (c) specify the management and development measures of a Park under section 20;*

and shall be prepared within nine months of the establishment of the Park under section 20”.

In addition, the Objectives of the Initial and still valid Parks Management Plan are,

- To protect the important natural and historic features of the Park and to manage these features so as to encourage enjoyment and appreciation by residents and visitors.*
- To create a unique, world class tourism destination area based on the Park’s natural scenic beauty, heritage resources and healthy yachting industry.*
- To create a sound environment for economic development within the Park.*
- To maintain and improve the quality of existing residential environments within the Park.*

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- *To provide services and facilities to communities and businesses within the Park consistent with the objectives of the plan.*

2.3 *The Parks Development and Management Plan addresses the entire 15.94 sq. mile (41.28 sq. km.) declared area, which includes the historical dockyard and related sites. The NPA will also be responsible for directing the implementation of policy and specifically for directing the development and management of all national parks, established under the National Parks Act, 1984, within the management policies approved by Cabinet. Thus the can develop administrative policies and implement policies and procedures, to carry out the intent of Cabinet policies.*

The NPA will be the administrative body of the Antigua Naval Dockyard World Heritage Site, which is the historical core of the Nelson's Dockyard National Park. Its policies and management will be in accordance with guidelines established by UNESCO World Heritage and the Government of Antigua and Barbuda that will ensure the protection of the Outstanding Universal Values of the site.

(Annex 12 for complete NPA Management Plan.)

5.f. Sources and Levels of Finance.

The National Parks Act 1984, clearly states (4.1 Cap. 290: 8-13),

The funds and resources of the Authority shall consist of-

- (a) such sums as may be provided by Parliament for the purpose;*
- (b) any loan or grant made to the Authority by the Government or, with the approval of the Minister, by any person or body or international organization;*

(c) all monies paid to the Authority by way of subsidies, gifts, fees, subscriptions, rent, interest and royalties as well as any other sum or any property which may in any manner become payable to or vested in the Authority in respect of the performance of its functions; and

(d) any sums or property which may be donated to the Authority.

The Authority may, from time to time, with the approval of the Minister, borrow, secure or raise money by the issue of debentures or debenture stock, or other security, for all or any of the following purposes-

(a) the provision of working capital;

(b) the fulfilling of the functions of the Authority under this Act;

(c) the provision of capital for the expansion of and addition to its fixed assets;

(d) the redemption of any debenture or debenture stock or other security that the

Authority is required or entitled to redeem;

(e) any other expenditure properly chargeable to capital account.

The Authority may, from time to time, borrow by way of overdraft or otherwise for periods not exceeding one year such sums as the Authority may require for meeting its obligations and discharging its functions under this Act.

The Authority may with the approval of the Minister, from time to time, borrow by way of advances from the Government such sums as may be necessary for carrying out its functions under this Act.

In sum the management plan for the National Parks which manages the Antigua Naval Dockyard and related sites, was established with the *National Parks Act, 1984.*

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The Parks Commissioner and Board work closely with the Minister of Finance and its bankers. However, the NPA is a non-profit, self-financing, self-managing government agency that reports to an appointed Minister and the Ministry of Finance. Audited financial statements are submitted annually to the Minister and Cabinet, as are programs and operation budget estimates for each new financial year.

The current internal system requires all department managers in the Antigua Naval Dockyard and National Park to develop and submit annual budgets, programs and project costs for approval and inclusion in the budget. These are discussed and reviewed periodically at management meetings. Capital projects, such as dock expansion and restoration, are developed and implemented separately.

The financial plan of the National Parks is upgraded regularly and there are annual internal and external audits and budget estimates, which are submitted to Cabinet annually. Its financial responsibility, budgets, presentation and successful outcomes are now the benchmark used by the Antigua Barbuda government for its statutory agencies.

The sources of funding to sustain the daily running expenses of the proposed World Heritage Site will be the currently established system and sources now being utilised. These are:

1. Entry/user fees.
2. Property rentals and leases.
3. The marina and revenues from the sale of essential services
4. Businesses owned and managed by the NPA, including the Copper and Lumber Store hotel and restaurant.

5. Events such as weddings, small conferences, marine trade shows.
6. Festive activities including a weekly seafood festival, sailing regattas, fishing tournaments.
7. Publications and gift shop sales.
8. Tours.
9. Management fees, such as environmental levies, building permits.
10. Government subventions for major projects.
11. Donations for specific projects.
12. Bank or private loans.

Implementation of large restoration projects generally requires external funding. These are managed through:

1. Government subventions.
2. Grants from overseas.
3. Funding from overseas as partial loans (e.g., match funding, part local/part donor).
4. Loans from financial institutions.

The largest source of revenue generated in the Dockyard is the Yachting Department. The ancient seawall today operates as a modern marina that caters to yachts of all types and sizes. Services provided to these vessels, including water, electricity, and berthing, food, fuel, maintenance and transportation generate income for the Dockyard and employment for the community. Most of these services are provided directly by the Dockyard, or facilitated through the marina management. (**Annex 8 financial statements and budget "Moving towards a sustainable future"**)

Other sources of funding for the daily operations, programs, restoration and survival of the Park include cruise ship passengers, stay-over hotel guests, and local residents seeking the heritage experience.

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The numbers are further boosted by special events that attract large numbers of visitors, such as sailing regattas, seafood festivals, fishing tournaments, and other events held throughout the year. Some of these events attract on average 3,000-4,000 visitors to the Dockyard for several days in a row, particularly at the beginning and the end of the yachting season--early December and late April. While this is not the norm, these large events have been running for many years (Sailing Week is now 46 years old), proving that the facility and staff are well experienced and capable of coping with large numbers of visitors.

Major events that attract several thousand people for up to a week in the Dockyard include,

1. Antigua Charter Yacht Show.
2. Antigua Sailing Week.
3. Antigua Classic Yacht Regatta.
4. The Royal Ocean Racing Club (RORC) Caribbean 600.
5. Christmas to New Years and the Nelson's Pursuit Race.
6. The Super Yacht Cup.

Short-term events with large numbers include,

1. Fishing tournaments.
2. Special events like receptions, weddings, celebrations, government events, etc.
3. Private functions (Russian Regatta, Oyster Regatta).

5.g. Sources of Expertise and Training.

The management staff of the NPA includes a wide variety of skills and expertise. However, experts are outsourced as and when needed. The NPA has been successful in networking and maximising the skills of overseas experts from North America and Europe and, as previously mentioned, consultants are used frequently according to

includes expertise as listed below:

- **Ann Marie Martin, MBA**, Parks Commissioner, financial planning, parks and projects management, business management, implementation.
- **Reg Murphy, Ph.D.** Archaeologist, construction project management, restoration expertise and experience, currently an affiliated professor at City University New York Graduate Centre, head of field research unit, planning, archaeological survey, museum design and development, heritage-related policies, historical architecture, building construction. In addition, he is the President of the International Association for Caribbean Archaeology and the Secretary General National Commission UNESCO, Antigua Barbuda.
- **Brian Cooper Ph.D.** Manager of the Environmental Unit of the National Parks, agriculture, land use policies, community development projects, president of the Environmental Awareness Group, experienced in environmental survey and impact assessment, and more.
- **Eloise Francis MA**, Manager of Events, Interpretation Officers, visitor Services. Masters degree in Heritage Tourism with 30 years experience in management, training of interpretation officers, hotel staff.
- **Brenda Skepple**: Manager Copper and Lumber Store Hotel, housekeeping.
- **Michael Flermius**: Manager grounds keeping and maintenance, experienced in landscaping, construction.
- **Marius Smith**: Manager restoration projects and marine and yachting services, trains all marina staff.
- **Linroy Adams**: Financial controller, manager of accounts department, supervises and trains all accounts staff.
- **Alicia Daniel, MBA**, Manager of Interpretation Centre and assistant to the Parks Commissioner in budget planning.

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NAME	POSITION	RESPONSIBILITY	CONTACT
Dr. Reg Murphy	Manager Heritage Affairs, World Heritage Committee, UNESCO Sec. Gen.	All matters heritage, research, archaeology.	268 481 5021 /22 268 764 8886
Ann Marie Martin	Parks Commissioner	National Parks management, planning, operations.	268 481 5028 268 481 5030 fax
Dr. Brian Cooper	Manager Environmental Unit	Environment, monitoring, research, policy.	268 481 5034
Eloise Francis	Events and Hotel manager	Events, interpretation, tours and marketing.	268 481 5021 268 764 4961
Alicia Daniel	Manager Interpretation Center, and Visitor Services	Managing the sound and light display and facilities of the National Parks at Dow's Hill. Assisting in budget planning and prep.	268 481 5021
Management team for site			Continued on next page

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NAME	POSITION	RESPONSIBILITY	CONTACT
Brenda Skepple	Hotel Assistant Manager and guest services	Assistant manager of Copper and Lumber Store Hotel, laundry and guest services.	268 481 5035 /33 268 464 8941
Marius Smith	Manager Yachting Services and marina	Manager of marina and all yachting services, and major restoration works.	268 481 5035 /33 268 464 8941
Michael Flirmius	Manager Ground keeping and maintenance	Manager of all maintenance works and stores.	268 481 5021
Mr. Solomon	Chief of Security	Security, disaster prep, site control.	268 481 5041 268 461 4728 268 779 2454

Management team for site

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5.g.ii Support and Information

- **Minister of Foreign Affairs**, Hon. Charles Fernandez, Office of the Prime Minister.
- **Minister of Culture**, Hon. Paul Chet Greene.
- **Director of Tourism**: Mr. Cortwright Marshall.
- **The National Parks Research Unit**: An association of international experts who work collectively on projects in Antigua and the broader Caribbean. This is a group of dedicated university-based professionals that includes bio-archaeologists, materials conservationists, paleo-environmentalists, museum studies consultants, and others who have been working as a group since 1993. Several have assisted in the research and preparation of this dossier.
- **National Office of Disaster Services**: Director Philmore Mullins.
- **Fisheries Division**: Patricia Lovell, Fisheries Officer.
- **Lands and Survey Department**: Mr. Vernon Bird, Chief Lands Surveyor.
- **Development Control Authority**: Chief Planning Officer, Fredrick Southwell.
- **Customs and Immigration**. Chief Immigration Officer, Col. Ivor Walker.
- **Museum of Antigua Barbuda**: Michelle Henry, Director.
- **Historical and Archaeological Society**: Mr. Walter Berridge, Chairman.
- **Environment Division**: Ms. Ruleta Comacho, Ministry of Agriculture.
- **National Archives**: Mr. J. Prosper, Chief Archivist.

5.g.iii Training

Training of junior staff is managed by the various department heads with input from heritage management to ensure that the values and history of the area are well understood.

There is management and staff evaluation and training annually. Outside experts or consultants are sought regularly to assist in training, project development, as well as for independent consultancies. External trainers include experts in hospitality and customer relations, first aid and CPR, scuba certification, fire fighting and evaluations. Other professionals are brought in as required, including architects, engineers, quantity surveyors, and external financial auditors.

Internship: The Heritage Department utilises the services of qualified interns to fill a number of roles in the Dockyard and Park. Most work for a stipend on a one-year contract as museum curators, exhibit designers, collections managers, archaeologists, and environmental technicians. These students are usually between the Master's Degree and Ph.D. degree level and seeking experience prior to or after completing their graduate studies. Other graduate students join the Heritage Department for field research during the summer as volunteers for experience in archaeological excavations, survey, mapping, and GIS or GPS work. They provide quality short-term labour and generally make excellent contributions to the Park. The Heritage Department and Dockyard Museum are heavily dependent on the interns as archaeologists and conservationists are not available on Antigua.

5.h Visitor Facilities and Statistics

There is a wide diversity of services and infrastructure available for visitors. First of all to ensure safety, a CCTV system is in place and fully operational monitored by the Police and other agencies of government.

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In addition, there is a police station at the entrance to the Dockyard, as well as a coast guard station, and nearby within the community are search and rescue services, ambulance and first aid (ABSAR). Further to this, the English Harbour and the Dockyard is an official port of entry to Antigua. Customs, Immigration, and the Port Authority are all stationed within the Dockyard.

Visitor Services coordinate all tours and are at times assisted by the representatives of the various tour agencies, hotels and cruise ships. Professional guides are available to offer tours of various length and topics according to time and visitor interest. On special occasions, these guides/interpretation officers are dressed in period uniforms to enhance the visitor experience. The Dockyard Museum is open everyday, from 9 am to 5 pm, but the research library and facility only open on request.

Within the Dockyard are two boutique hotels, the Copper and Lumber Store and the Admiral's Inn, which has an annex in the Ordnance Bay Powder magazine across the bay. At Freeman's Bay is the five star Inn Hotel, the Galleon Beach Hotel, and its time-share community. Taxis and car rentals are readily available and local buses stop at the Dockyard entry every 20 minutes during the day.



Figure 121. The Powder Magazine at Ordnance Bay, currently hosting an art exhibit.

Facilities available for visitors, both tourists and locals include:

- Information or visitors service desk.
- Guided or self-guided tours.
- Special tours, behind the scenes with museum staff or curator.
- The Interpretation Centre at Dow's Hill; a sound and light show.
- Shopping in the vendors' mall and boutiques.
- Restaurants, bakery.
- Banking.
- Post office.
- Laundry facilities.
- The Dockyard Museum and library.
- Hair salon and physical therapy
- Beaches.
- Hiking the nature trails.
- Sailing and yacht chartering.
- Scuba diving.
- Harbour tours.
- Four hotels.
- Liquor and convenience store.
- Marine electronic sales and servicing.
- Yacht maintenance and servicing.
- Haul out and repair facilities/slipway.
- Marina services.
- Internet café.
- English-style pub.
- Wood carving artists' craft shop.
- Sail repair and sale.
- Marine survey office.
- Pizzerias.
- UNESCO National Commission office.
- National Parks Authority office.

Nearby in the buffer area, the village of English Harbour has over 250 registered businesses. These include services and facilities, including hotels, restaurants, car rentals, a yacht club, sailing school, medical and legal services and numerous artisans and shops.

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Figure 122. Students on the Carpenter's Rock Trail



Figure 123. Carpenter's Rock



Figure 124. The pool at the end of Carpenter's Rock

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For the more adventurous, there are hiking trails, both natural and historical, and a number of forts and coastal batteries. The trails include the Middle Ground, Jones Valley and Carpenter's Rock trails and Forts Berkerley and Charlotte. For the more adventurous, the Pillars of Hercules is an exceptional hike and experience. Within the buffer zone, Fort Cuyler, Greater Fort George and Blake Island's Fort Charles are also great hikes.

Public washroom facilities are available at the Interpretation Centre, the Dockyard, Blockhouse, and Pigeon Point Beach. The beach facility offers showers and changing areas. On popular Pigeon Beach (on the fringe of the buffer zone) are restaurants, gazebos, shady trees and a small facility with swings, slides and climbing bars for children. Camping is permitted in areas of this beach, and CCTV coverage, beach guards and police patrols offer safety. Most of the buildings and facilities, particularly the washrooms, are all wheel chair accessible and have ample parking areas nearby.

Statistics are gathered from various sources. These include tour operators, points of entry, bookings and reservations. The Visitor Services and Events Department manage all tours and visitors to the Park. They collect data on the visitors, including if they are cruise ship passengers or stay-over/hotel guests, country of origin, and other information that is used for marketing and promotion. Generally, Parks staff are willing and capable of working in a variety of positions and come together to run and manage events. Statistics are used primarily by upper management for financial forecasting, planning and budgeting. Additional data is gathered at times through written and discrete interviews to collect more sensitive information from groups not fully represented at the gate, such as the yachts and businesses.

5.i. Policies and programs related to the presentation and promotion of the property.

The National Parks Antigua World Heritage Committee in partnership with the National Parks Antigua began a public awareness campaign and education program that is designed to educate and inform Antiguans and Barbudans about the nominated site, its history and progress towards World Heritage. While this first phase is geared towards sensitising the public, it also provides a deeper sense of history and our obligations towards ensuring its continued authenticity, integrity and OUV. It also presents information on the potential for economic opportunities and new skills and expertise that will be required. The program can be summarised as follows:

- Public information on the Antigua Naval Dockyard relating to its history.
- Public updates regarding the nomination process: newspaper and radio press releases.
- Public information for all within the boundary and nearby communities, stakeholders, area residents, and businesses.
- Develop new social media networks, blogs, web sites etc that will reach a larger audience, particularly the young.
- Developing partnerships with the various medias, particularly the Ministry of Communication and Information.
- Public lectures at the Dockyard and Museum of Antigua.
- Radio interviews and on-air, public call-in programs (monthly).
- School visitations for lectures and education to encourage youth involvement.

The public education program is essentially an adaptation to the longstanding National Parks public outreach program that has been in effect for over ten years. However a new and more focused World Heritage media and

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education campaign was started shortly after the formal acceptance of the Tentative Listing by the World Heritage Committee. Monthly lectures were held on a variety of topics, in the Copper and Lumber Hotel and at the Museum of Antigua by researchers and staff of the Dockyard Environmental and Heritage Units; many of which focused on current research and parks policies and historical events.

The Antigua Naval Dockyard and its importance in world history has also been promoted and presented in numerous books, televised documentaries, journals, and magazines, for many years. Most exposure occurs in association with major international events on Antigua, but the most successful include the recent BBC 4 historical documentary “*Nelson’s Caribbean Hell Hole*” and BBC 2, “*When Britain Shook the World: Why the Industrial Revolution Happened Here*”. Additional promotion is also generated through the annual archaeological field programs that are at times recorded and televised.

Plans are now being developed to create an annual heritage event that will provide a deeper sense of history through re-enactment and theatre. The intent is to work with drama groups and professional re-enactment societies overseas, and regiments that were once stationed on Antigua in historical times, to develop new programs and activities that will improve the quality and standards of our current programs. The Planning Committee recognises the need to expand the education and promotion and is working with the Museum of Antigua, Historical and Archaeological Society, and the Marketing Department of the National Parks, the Ministry of Culture and Education to develop new policies, education programs. This has begun and HAMA Television has now been contracted to produce twelve pilot documentaries on and about the historical Dockyard and its Related Archaeological sites. This is now in progress.



Figure 125. World Water Day activities in the Dockyard.

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Presentation is an important priority and always at the forefront of current Park operations, from events to interpretation and will continue to be so. Interpretation officers undergo a rigorous two months of training prior to employment and at all times they are encouraged to up grade their knowledge, presentations and delivery skills. At times of high visitation, interpretation officers and guides wear traditional and historical costumes of British redcoat soldiers, sailors and civilians of the period along with traditional Antiguan national dress, in an effort to maximise the visitors experience and to enhance the period atmosphere. Periodic uniforms, weapons and artifacts of the period are popular and facilitate discussions and interaction with the public. In addition, youth groups and visitors are at times invited to join in the archaeological projects as “Time Detectives”.

Signage

Signage and interpretation panels are of consistent colour and materials. The current signs that provide information on the buildings within the Dockyard are made of enamelled metal that were designed and manufactured in Canada. The NPA enforces a minimal signage (advertising) policy within the site and buffer area.

Large signs and advertising billboards are regulated to size, height, colour and location.

Media

There are numerous publications, journals, books, academic theses and papers on the history of English Harbour and the Dockyard. Several of these were written by the former museum curator Desmond Nicholson. In addition, numerous articles are written annually for a variety of magazines, including in-flight magazines, travel guides, historical newsletters, and marketing and promotional publications in several languages. Monthly lectures focusing on a variety of topics are popular events. Film crews from different countries have made a number of documentaries within the Dockyard. The most popular, from 2012, were *Nelson's Caribbean Hellhole* and *When Britain Shook the World*, produced by the BBC. These have been well received and British tourists often ask for further information on the history surrounding the documentaries. In addition, yachting magazines, international racing authorities, and television sports channels document most of the major yacht races. All of these shows feature the history and to a large extent the OUV of the site.

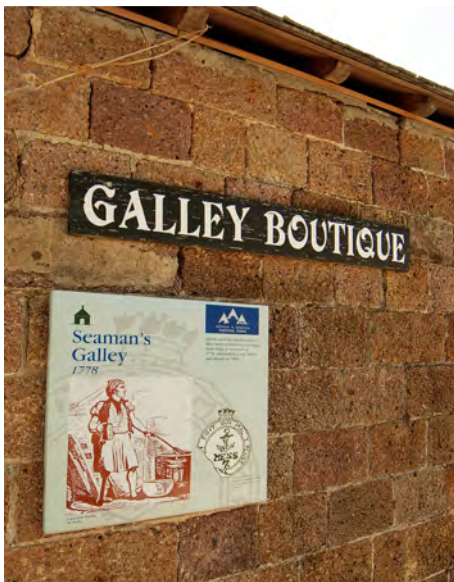


Figure 126. Signage



Figure 127. Dow's Hill Interpretation Center



Figure 128. Interpretation officers with tour group

Interpretation Centre

With the establishment of the National Park, a multimedia centre commonly referred to as the Interpretation Centre was built in the mid 1980s. It has since proven to be a popular attraction with many tour operators. It is a 1980s technology sound-and-light show in an enclosed air-conditioned theatre. It presents the history of the island in 15 minutes, with a choice of five languages. The Park is now reviewing this dated technology with the intention of upgrading it to current technological standards or replacing it with a different medium altogether. It is our goal to offer a creative show with a “wow” factor for the visitor.

UNESCO Conventions and the Site

An important component, to be developed in 2015, is the implementation of the three cultural conventions that were ratified by Antigua Barbuda in 2013: the 2001 Underwater Cultural Heritage Convention, the 2003 Intangible Heritage Convention, and the 2005 Convention for the Promotion

and Protection of the Diversity of Cultural Expressions. These conventions are now being discussed and the Dockyard and its Heritage Department, Museum, archaeology unit and network of experts will play an important role in the process of their development. The Antigua Naval Dockyard, with its rich underwater cultural heritage, is already leading the research and establishment of a national list of wrecks and sites for the 2001 UCH convention. It is also actively involved in public and stakeholder consultations for all the conventions and in this respect is becoming a central place for information, interpretation, media promotions and sources of publications.

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5.j. Staffing Levels (professional, technical, maintenance).

The Park employs on average 100 full-time employees during the winter months and 75 during the slower summer months. The proposed World Heritage Site will be managed by the existing management of the Dockyard, with the addition or appointment of a focal point or World Heritage Desk. This “focal point” is currently the Heritage Department and its capacity will be expanded in light of the pending nomination (see NPA Staff Handbook 2013).

Budgets and management reports are submitted to the Commissioner and reviewed every three months. Management meetings are held monthly. The departments include,

- Heritage Affairs: includes research, archaeology, restoration and planning, monitoring and evaluation.
- Hotel and Visitor Services: includes restaurants, events management, household services (training of staff, tour guiding, visitor services, management of laundry and washroom facilities, etc.).
- Interpretation Centre (includes the gift shops within).
- Grounds and Maintenance.
- Marina and Yachting services.
- Environment.
- Accounts and office management.
- Restoration is separate as it involves all departments depending on the project.

The Heritage Affairs manager, the Yachting Services manager, and the Grounds manager are all experienced builders with an enormous amount of restoration experience. They work closely with the Commissioner to plan, estimate, manage and control all restoration projects as a management team, sharing the work and duties.

The largest department is Visitor Services. It includes hotel workers, laundry workers, interpretation officers, cleaners, restaurant staff, secretarial staff, security guards and others. Next in numbers is grounds keeping and maintenance. Among this group is a full-time plumber, an electrician, carpenters, stone masons, landscapers, drivers, store keepers, painters and labourers. Among the highest paid and valued are the stonemasons, who continue to use traditional methods and techniques in their work. During times of major restoration projects, the Park utilises the services of qualified tradesmen who are well known and respected for their skills. This is not an issue as Antigua is a small island and persons with unique skills are known and can easily be found.

The smallest departments are Heritage and Environment, with a total of four full-time persons. However, due to the unique skills and expertise required in these areas, the department depends on and utilises its internship program, sourcing expertise from overseas. These experts include museum curators, archaeologists, artists, botanists, marine biologists, computer specialists with GIS, GPS and other related skills. This has been successful and the Heritage Department manages several university field schools through its Field Research Centre and has been doing so since 1994. Each year, 25 to 30 students, professors, graduate students and academics from various U.S. and British universities visit Antigua to take part in the annual research programs and for individual projects.

Section Five - Protection and Management of the Property

Their base of operations is in the Dockyard Museum and Field Station and the results are curated, documented, published and displayed at the Museum of Antigua and Barbuda or the Dockyard Museum. Each year, one or two of these graduate students receive an internship to work at the Dockyard Museum, where their skills are transferred to their Antiguan partners. A new artifact conservation lab will be established and managed in this manner to train Antiguan until qualified locals are available.

The partner organisations and academic departments currently active with the field research include,

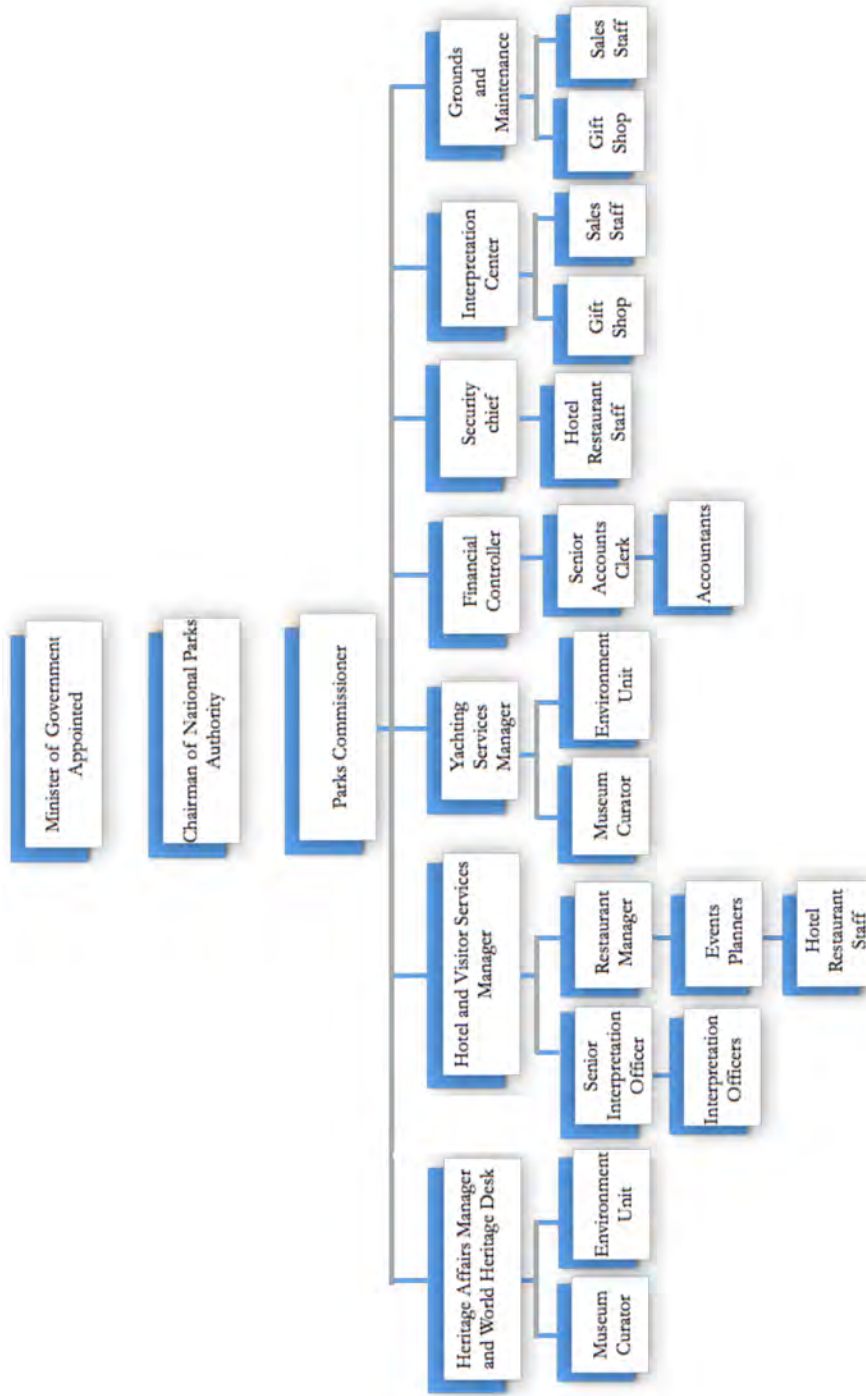
- University of California, Chico Campus, Dept. Archaeology.
- University of Texas, Department Archaeology.
- City University New York, Graduate Centre, and Brooklyn College.
- Lakehead University, Department of Anthropology.

Research focus includes archaeology, forensic archaeology, paleobotanical research, faunal analysis and investigations, soil sciences, geophysics, marine biology, underwater archaeology, museum sciences, conservation and more. Several times each year, researchers assist the Royal Antigua Barbuda Police Force with research, analysis and recovery of human remains and the identification and dating of cultural objects. In sum, the small but active Heritage, Archaeological and Environmental unit and its field research, education programs and projects--some managed and implemented in partnership with universities and academics based in the United States, Canada and Europe--is a core operation for the Park. This unit serves to ensure authenticity, advise on restoration and policy, and to monitor all aspects of Park operations, essentially safeguarding the OUV and values of the site.

Antiguan interns also work in the finance and accounts and interpretation departments and understudy the stonemasons. Additionally, in an effort to continuously upgrade its staff and managers, the NPA will pay the expenses of any employees wishing to upgrade their education, or to study any subject or profession of relevance and need for the Park, with the guarantee that the individual will remain in the Parks employment for a significant time after completion of studies. To this end, many employees have completed advanced degrees, business diplomas, second languages, and improved their skills under this program. The Dockyard Management operates with guidance and policies established in the Management and Development Plan. As previously mentioned, this is being reviewed and a new Strategic Plan has been drafted and awaiting approval from the Board and government. It is currently under review in consultation with the public, stakeholders and government. The Plan has served the Parks well, but in light of its age and the potential of World Heritage designation, and the current review of zoning under a cultural/scientific based criteria the new strategic plan is still a work in progress. The objectives are to strengthen weak areas of the plan, review the criteria under which some areas were protected and zoned, and to provide a renewed focus for the economic realities and conservation needs for the future, whilst safeguarding the OUV.

In sum, the collective objective of our presentation, interpretation and interaction is to evoke the sense of going back in time standing in a dockyard where men worked, lived and died for the power of sugar and empire. The goal is to provide a realistic and accurate historical account that adds to the spirit and feeling or ambiance of the site. New methods of achieving this objective are now being explored and reviewed.

Section Five - Protection and Management of the Property



Organizational chart of the National Parks Authority. World Heritage Affairs and monitoring will be created within the Heritage Department.



SECTION SIX

Monitoring

6.a. Key Indicators for Measuring State of Conservation

Monitoring is the responsibility of the Heritage Department, and includes the documentation, monitoring and study of all heritage structures within the protected areas of the National Park and the Dockyard. Within the core area of the proposed site, the Heritage Department works closely with the maintenance and restoration departments to identify threats and damage, plan restoration and stabilization actions, and develop estimates and the logistics necessary to implement works. The Heritage Department also supervises restoration and conducts research to ensure authenticity is maintained.

On large projects records are kept at the Commissioner's Office and the Heritage Department Office, and at other relevant offices, including the museum, maintenance department or the marina office. These may include impact assessments and historical background information and sources of materials required, or to be used, (e.g., yellow bricks or limestone). Larger projects will include reports and drawings from the project engineer, quantity surveyor, and the current architectural drawings along with the historical drawings and photographs. In all cases all efforts are made to adhere to the historical methods, materials, styles to retain the OUV and authenticity. To further ensure this, the Manager of the Heritage Department will serve in the capacity as Project Manager.

Activities of monitoring include:

1. Annual inspections of all structures within the dockyard to identify threats, repairs required, and follow up.
2. Sourcing of materials for repairs to ensure authenticity (bricks, lime, stone etc)
3. Inspecting sites prior to approval of building permits
4. Approval of building permits for zoning compliance
5. Periodic self evaluations to ensure improvements in systems
6. Maintaining a photographic record of all structures
7. Field research through archaeology to investigate more information about structures and sites, building materials used etc
8. Management of the photographic record, drawings and documents
9. Supervision of restoration projects and planning
10. Annual inspection for fire and safety
11. Constant vigilance to maintain authenticity and historical integrity (seeking alternatives to intrusive modern requirements for buildings, such as air conditioners, wiring and plumbing, satellite dishes, kitchen vents, propane tanks etc). This is the largest challenge and requires the most effort and commitment from all, staff, tenants, management and tradesmen/contractors.
12. All structures within the proposed sight have been photographed and mapped and the data stored in the Dockyard Museum.

Section Six - Monitoring

KEY INDICATOR	INDEX	TARGET	PERIODICITY	LOCATION OF RECORDS
Risk Control and Disaster Preparedness	Control for Fire, Storms, Earthquakes and Pests: inspection of structures, recognition of risks, inspection of drainage canal and watercourses, inspection of fire extinguishers, hoses, and hydrants, staff meetings, training and review of plan.	Public safety, maintaining integrity and structural stability of buildings, walls and sites	1-2 years	Heritage Department, Commissioner's office; maintenance and marina offices.
Legal Protection	Review of regulations and management plans, including zoning and development plans and guidelines.	Maintaining Integrity and authenticity	3-5 years unless required by project needs, new conventions or issues arising.	Offices of the NPA, Heritage and Environment
Training and Promotion	Authenticity in promotion and information; staff and management evaluation, reviews and promotion. Project and events evaluation and review	Capacity building internal and external (assist in training of guides in private sector)	1 year (annual)	Heritage Department, Human Resources (HR) and Visitor Services

Key indicators for measuring state of conservation

Section Six - Monitoring

KEY INDICATOR	INDEX	TARGET	PERIODICITY	LOCATION OF RECORDS
State of Conservation and Maintenance of OUV	Built Heritage: annual inspections of all structures; scheduling and coordinating repairs with maintenance dept; sourcing materials; monitoring repairs; fire safety inspections; archival and architectural research.	Maintaining integrity and authenticity. Planning budget for annual restoration program	1-2 years 1 year	Heritage Dept. National Parks, Parks Commissioner's Office; Maintenance Dept.
"	Approval building permits and zone compliance in the Buffer zone / National Park.	Maintain integrity, zoning regulations, land use plan, managing the protected area.	Weekly	National Parks and Development Control Authority Office
"	Self and external evaluation	"	Weekly	National Parks and Development Control Authority
" along with Research and Monitoring	Archaeological Heritage: survey of sites; photography; updating data base, collections management, interpretation and museum exhibitions; newsletters	Maintaining integrity, safeguarding sites, control of research; reporting and mapping	1 year	Heritage Department and Museum

Key indicators for measuring state of conservation

Section Six - Monitoring

6.b. Name of Agency Responsible for Monitoring.

Heritage Department (Dr. Reg. Murphy)
National Parks
Nelson's Dockyard
English Harbour
St. Paul's
Antigua
1 268 481 5021 or 1 268 764 8886

Management: Ann Marie Martin
Heritage Affairs: Dr. Reg. Murphy
Environmental Affairs: Dr. Brian Cooper

6.c. Current buildings under major repair.

1). Clarence House Restoration Project started on 1st June 2013. It is scheduled for completion in late 2015.

2). The Officer's Quarters are scheduled for major restoration. Much of the core timber frames has been damaged by termites and has to be replaced. Restoration of this structure is now in the planning phase. Fund raising is in progress. This project will hopefully begin on the completion of the Clarence House Project.

3). The Copper and Lumber Store Hotel also has major termite damage. Despite aggressive treatment, it will eventually require major repairs in two or three years. It is currently being monitored and repaired annually.

Recently completed projects include:

- 2009 The Joiner's Loft
- 2009 Blockhouse powder magazine
- 2010 Blockhouse gun platform
- 2010 The Pay Office Building
- 2010 The south wall Dow's Hill fort
- 2011 The Admiral's Inn (interior)
- 2011 The Sail Loft
- 2011 The Engineer's Building
- 2012 The Galley
- 2012 Interpretation Center
- 2013 Mast Shed
- 2013 Naval Ordnance Magazine
- 2014 Access roads and grounds
- 2014 New hydrographic survey of harbour

Section Six - Monitoring

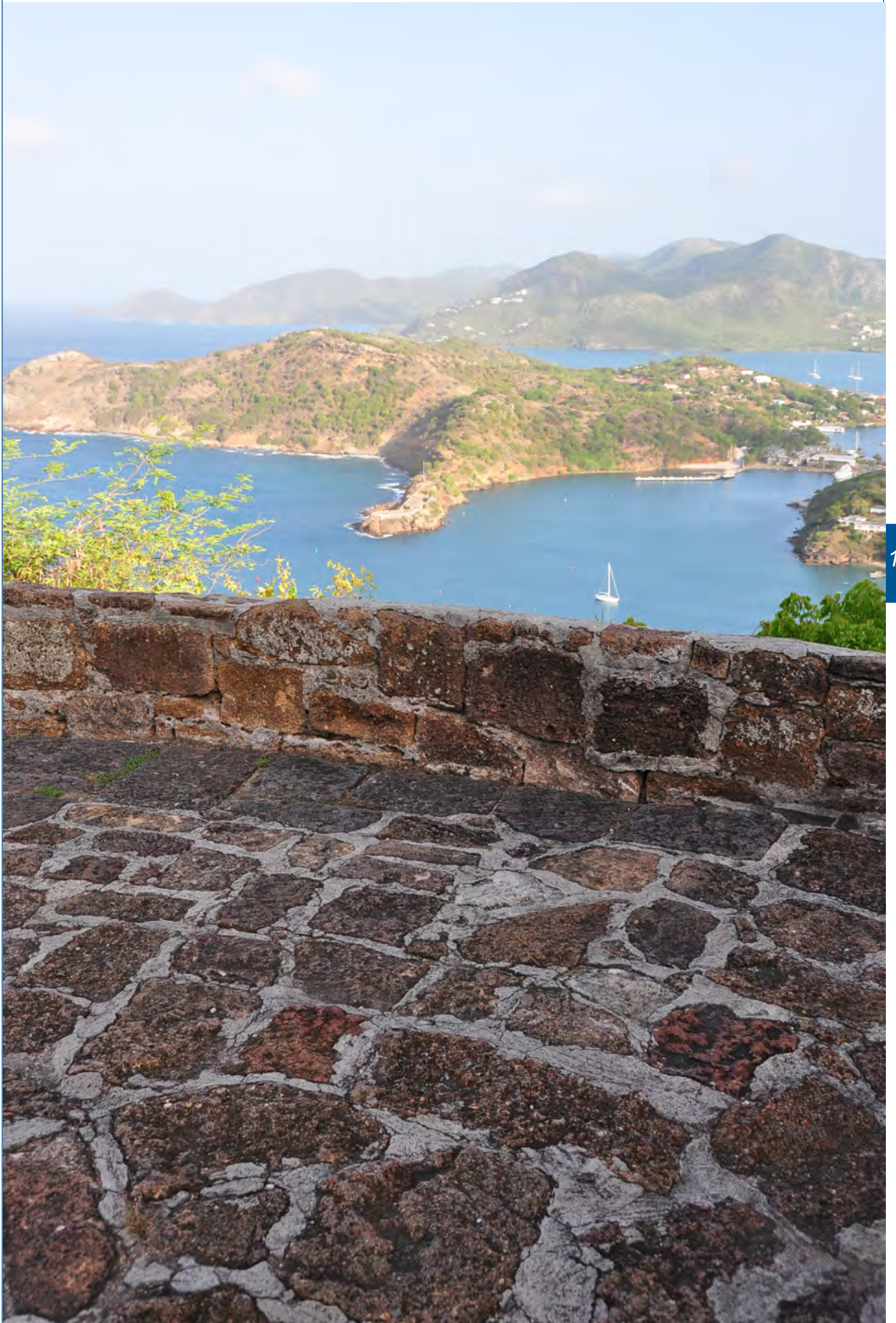


Figure 129. Lookout gun platform with coast view in the back ground.



SECTION SEVEN

Documentation

Documentation

In compliance with the Operational Guidelines, the following documents are hereby appended and attached to this submission. They include,

1. ANNEX 1: Structures within the walled area of the Antigua Naval Dockyard.
2. ANNEX 2: Galleon Beach, Freeman's Bay Cemetery Excavation: Preliminary Report July 2012.
3. ANNEX 3: The Seawall Restoration Project
4. ANNEX 4: Fortifications and Related Military sites: An Archaeological Landscape.
5. ANNEX 5: The Restoration of Clarence House Report
6. ANNEX 6: Letters of Permission for use of Photographs.
7. ANNEX 7: Disaster Preparedness and Response Manual.
8. ANNEX 8: National Parks Financial Statement 2013 / 2014
"Moving towards a sustainable future"
9. ANNEX 9: File of Photographs (Digital).
10. ANNEX 10: The National Parks Act 1984.
11. ANNEX 11: Amendment to the National Parks Act 2004.
12. ANNEX 12: National Parks Management and Development Plan.
13. Powerpoint "Current day uses and activities within the Dockyard"
14. ANNEX 14: A2 & Larger Maps

Section Seven - Documentation

Section 7 a. Inventory of Photographs

Figure No.	Caption	Date of Photo	Photographer	Owner	Non Exclusive Cession of Rights
1	Cover page	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
2	Sunset view of Dockyard	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
3	Main Gateway into Historic Nelsons Dockyard	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
4	View of Dockyard through Clarence House arch	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
5	Ariel View of English Harbour	12/13	Ted Martin	Ted Martin	Yes
6	View of Dockyard from Clarence House	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
7	Sail Loft Columbs Engineers House behind	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
8	Officers Quarters	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
9	Historical map of English Harbour ca 1773		Unknown	Dockyard Museum	Yes
10	Plan of his Magestys Dockyard Antigua ca 1831		Unknown	Dockyard Museum	Yes
11	Entry Gate	07/14	Erin & Cory Look	Erin & Cory Look	Yes
12	Copper and Lumber Store south elevation	08/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
13	Fort Barcerley foreground of Dockyard	08/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
14	Map English Harbour with St Helena in red		Unknown	Dockyard Museum	Yes
15	Guard Strn. & Engineer's storage, workshop	08/14	Erin & Cory Look	Erin & Cory Look	Yes

Section Seven - Documentation

Figure No.	Caption	Date of Photo	Photographer	Owner	Non Exclusive Cession of Rights
16	Engineers House, Admarils Inn	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
17	Engineers house, west elevation	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
18	Gallery in Museum	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
19	Gallery in Museum	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
20	Clerks or Senior Officers House Dockyard Museum	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
21	The Bakery	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
22	Porters Lodge, Sick House, Condemed Articles	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
23	Main Entry Gate into Dockyard next to Porters Lodge	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
24	The Copper and Lumber Store	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
25	The Pay Office	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
26	Main Passage in Officers Quarters	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
27	The Officers Quarters	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
28	Remains of Canvas and Cordage Building	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
29	The Seamen's Galley	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
30	The Mast Shed	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes

Section Seven - Documentation

Figure No.	Caption	Date of Photo	Photographer	Owner	Non Exclusive Cession of Rights
31	Signage	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
32	The Joiners Loft & Boat House	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
33	Sawpit Shed & Master Shipwright's Cabin	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
34	Master Shipwright's Cabin	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
35	John Baxter Plaque	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
36	The Sawpit Shed	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
37	Ramp up to the Saw Pit Shed	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
38	Stone Enclosure Wall, south side	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
39	Sundial	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
40	Brick Wall enclosing Compound	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
41	Sail Loft Columns	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
42	Sail Loft Columns & Canal	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
43	Heave Down Block	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
44	Original Pules sheathed in copper	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
45	Capstan being removed for restoration 1950	1950	Unknown	Dockyard Museum	Yes

Section Seven - Documentation

Figure No.	Caption	Date of Photo	Photographer	Owner	Non Exclusive Cession of Rights
46	Present day Capstans	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
47	Army Ordinance Complex	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
48	Navy Ordinance Powder Magazine	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
49	The Pillars of Herculese	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
50	Map of Freemans bay		Unknown	Dockyard Museum	Yes
51	Arial view of Fort Berkeley & Fort Charlotte Point	2002	Jay Rainey	Jay Rainey	No
52	Fort Charlotte	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
53	Fort Berkeley	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
54	Fort Berkerley viewed from Fort Charlotte	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
55	Fort Charlotte gun platform	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
56	Admiralty long shank anchor at Freeman's bay	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
57	Artifacts from Seawall project	2004	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
58	Glass artifacts found in the Dockyard	2004	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
59	Excavating Workshop area from the 1750's	2001	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
60	Personal items from excavations at Block House	07/06	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes

Section Seven - Documentation

Figure No.	Caption	Date of Photo	Photographer	Owner	Non Exclusive Cession of Rights
61	Ruin of Officers Quarters, Block House complex	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
62	North Bastion wall at Dow's hill Fort	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
63	Arial view of Block House Complex	07/14	Erin & Cory Look	Erin & Cory Look	Yes
64	Guard House at Lookout	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
65	Arial view of Block House Powder Magazine	07/14	Erin & Cory Look	Erin & Cory Look	Yes
66	Store rooms for the Artillery Complex	2008	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
67	Entry gate to Army Ordnance Complex	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
68	Hospital & Canteen Complex Latrines	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
69	The Cemetery at the Lookout	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
70	View from the Lookout Cemetery	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
71	Ruin of the officers Barracks at Blockhouse	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
72	Clarence House Antigua ca 1980	1980		Caribbean Style	No
73	Princess Margaret at Clarence House 1950's	1950's	Unknown	Dockyard museum	Yes
74	Interior of Clarence House ca. 1980	1980		Caribbean Style	No
75	East wall of Clarence House	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes

Section Seven - Documentation

Figure No.	Caption	Date of Photo	Photographer	Owner	Non Exclusive Cession of Rights
76	Beams & Joists main floor Clarence House	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
77	Replica Furniture	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
78	Replica Furniture	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
79	Replica Furniture	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
80	Local carpenter at work	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
81	View from Lookout ca 1900	1900	Jose Anjo	Dockyard Museum	Yes
82	Plan of English Harbour ca. 1748	1748	Unknown	Dockyard Museum	Yes
83	View of Ordinance Bay, Dockyard in background	1756	William Brasier	Dockyard Museum	Yes
84	Plans of structures within the Dockyard		Unknown	Dockyard Museum	Yes
85	Replica frigate, the Mary Rose	2000	Desmond Nicholson	Dockyard Museum	Yes
86	Canon outside the Dockyard Museum	01/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
87	Plans of structures within the Dockyard ca 1790	1790	Unknown	Dockyard Museum	Yes
88	Plans for the Capstan House	1760	Unknown	Dockyard Museum	Yes
89	Sketch of Fort Charlotte	1745	Unknown	Dockyard Museum	Yes
90	View of entry to the Dockyard ca. 1756	1756	Dockyard Museum	Dockyard Museum	Yes

Section Seven - Documentation

Figure No.	Caption	Date of Photo	Photographer	Owner	Non Exclusive Cession of Rights
91	View of English Harbour ca 1800	1800's	Mr Pocock	Dockyard Museum	Yes
92	Square Riggers, Inca & Aztec in the Dockyard	1980's	Desmond Nicholson	Dockyard Museum	Yes
93	The Dockyard 15 years after Royal navy depature	1900's	Unknown	Dockyard Museum	Yes
94	The Canvas and Cordage Building ca. 1950	1950's	Unknown	Dockyard Museum	Yes
95	Entrance to English Harbour with Fort Charlotte		Unknown	Dockyard Museum	Yes
96	Graffiti on shutter from the Pay Office	1980's	Desmond Nicholson	Dockyard Museum	Yes
97	The Pub at the Copper and Lumber Store	12/13	Erin & Cory Look	Erin & Cory Look	Yes
98	Tank Bay (foreground) ca 1900	1900	Unknown	Dockyard Museum	Yes
99	Royal Navy work party ca 1950	1950's	Unknown	Dockyard Museum	Yes
100	Ordinance land, Dockyard & Fort Berkeley ca1890's	1890's	Unknown	Dockyard Museum	Yes
101	Ordinance Bay in the foreground ca 1900	1900	Unknown	Dockyard Museum	Yes
102	View English Harbour, Ft. Berkeley & Freemans Bay	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
103	Evening view of the Dockyard	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
104	Freemans Bay from Dow's Hill	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
105	View of Guadeloupe & Montserrat from Dow's Hill	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes

Section Seven - Documentation

Figure No.	Caption	Date of Photo	Photographer	Owner	Non Exclusive Cession of Rights
106	Carronade Dockyard Museum	01/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
107	HMS Esk Careening at St. Helena		Unknown	Dockyard Museum	Yes
108	Careening in the 1950's using the tie down blocks	1950's	Unknown	Dockyard Museum	Yes
109	Anchors & Capstan, the Dockyard	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
110	Clarence House prior to Restoration	01/13	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
111	Pay Office having major repairs done to the woodwork	2008	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
112	Clarence House Restoration	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
113	Archaeological Research	2001	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
114	Remnants of the Canteen Shirley Heights	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
115	Interior Arches, Copper and Lumber Store	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
116	Fort Berkeley during Hurricane Omar		Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
117	Traditional Band entertaining guests at the Dockyard	03/12	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
118	Basket weaver, the Lookout	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
119	Steel Band Pans, the Lookout	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
120	Music evening at the Lookout	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes

Section Seven - Documentation

Figure No.	Caption	Date of Photo	Photographer	Owner	Non Exclusive Cession of Rights
121	Ordinance Bay Powder Magazine, art exhibit	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
122	Students on Carpenters Rock Trail	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
123	Carpenters Rock	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
124	The pool at the end of Carpenters Rock	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
125	World Water Day activities in the Dockyard	2011	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
126	Signage	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
127	Dow's Hill Interpretation Centre	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
128	Interpretation officers with tour group	2005	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
129	Lookout Gun Platform with coast view in background	02/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
130	Officers Quarters west varena	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
131	Water Colour in front of Pay Office ca			Dockyard museum	No
132	Entry Gate & Gate House	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
133	Ships Modle, Dockyard museum	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
134	Copper & Lumber Store east elevation	07/14	Nicola & Reg Murphy	Nicola & Reg Murphy	Yes
135					

Section Seven - Documentation



Figure 130. The Officers Quarters west varandah.

Section Seven - Documentation

7.b. Text relating to protective designation.

The nominated property lies at the heart or historical core of the Nelson's Dockyard National Park. It is managed by the Parks Authority in compliance and guidance with the National Parks Act, 1984 and its 2004 Amendment. Specific amendments related to World Heritage will be addressed upon a successful nomination. However, as the site will continue to be managed by the Parks Authority and its professional staff, it will do so under the current legal protection/framework. In the meantime, revisions to the current legislation, regulations and new heritage legislation for the island have been drafted and are under review.

The legislation relating to the protection of the nominated property, with relevant development and management plans, include,

- 1). The National Parks Act, 1984
- 2). Amendment to the National Parks Act, 2004.
- 3). Development and Management Plan for the Nelson's Dockyard National Park.
- 4). National Parks Trading Regulations 2014.
- 5). National Parks Regulations 2013.
- 6). Draft model legislation: 2001 UNESCO Convention for the Protection of the Underwater Cultural Heritage.



Figure 131. Water colour in front of Pay Office

Section Seven - Documentation

7.c. Form and Date of most Records and Inventory of Property

The earliest photographic records of the dockyard are kept at the dockyard museum. These are a random assortment of images from the early 1900s. With the arrival of the Nicholson family in 1947, numerous photographs of the dockyard were taken by the Nicholson family and friends. Many have been donated to the museum and are stored in their collections as both film and digital formats. On the establishment of the Dockyard Museum in the early 1960s, an inventory (list) of all of the buildings in the dockyard and on the ridge of Shirley's Heights was compiled by the museum curator. Since that time, each curator periodically revisits the inventory. In 1984, architect historian Charles Jane visited the area and surveyed the buildings along the ridge, while they were still mostly intact. He then produced a set of architectural drawings of the largest structures that are still available in the collections of the museum and heritage department in English Harbour. However, the most significant data gathering was done as a part of the creation of the Nelson's Dockyard National Park. Historian Desmond Nicholson, the new curator of the dockyard museum compiled a new and more extensive list of historical structures within the National Park, the buffer zone of the proposed WHS. The Nicholson inventory was established in digital format in the database of the Museum of Antigua Barbuda and the Nelson's Dockyard Museum. It is still on database in the museum (MS Access format).

2011, former curator Dr. Samantha Rebovich and environmental GIS technician Nigel Bardoe followed up and revisited all of the sites within the proposed site boundaries, collecting GIS references and photographs for comparative purposes, essentially to provide reference images for monitoring the site.

This was revisited in 2012 by curator intern Chris Waters and all sites within the zone were again photographed and geo-referenced, and again in 2013 in support of this nomination by Cory Look, and Erin Friedman from City University New York, Graduate Center.

In sum, a series of digital inventories of the structures and archaeological features including building in the Dockyard are documented and stored in the collections and database of the Dockyard Museum. In addition, restoration projects are photographed prior to, during and after restoration works. These too are kept at the dockyard museum database.

7.d Address of Database and Records:

The Curator
Nelson's Dockyard Museum
English Harbour
St. Paul's,
Antigua
W.I.

Email: regmurphyantigua@gmail.com
Phone: 268-481-5030; 268-764-8886

Section Seven - Documentation

7.e. Bibliography and References Cited

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1954 *The Romance of English Harbour*. A Friends of English Harbour Publication, Antigua.
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1979 *Slaves in Redcoats*. Yale University Press. New Haven, Conn. USA.

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- PRO MP1/293 XC1291 Plan of Careening Capstan House.
- Antigua Yard 1801: Plan of a house proposed for the residence of the Naval Officers.
- Elevation Plans and Sections for a Storekeeper's House and Lodging. Men and provisions whilst ships are careening. Proposed to be built near English Harbour-1729.
- Plan for Sail Loft 1796.
- Plan for Canvas and Cordage Building by Nathaniel Watts 1785.
- Drawing of a building 65'.0 long, 24'.0 wide and 12'.0 in ht. of stone and brick proposed to be erected on the east Careening wharf for the reception of the companies of ships under careens and with a small apartment adjoining for a Porters Lodge.

Section Seven - Documentation

- A Plan and Elevation and Section of the Storehouse marked No. IV on general plan of Antigua Yard with an additional proposed to storehouse.
- A Plan of the new Smith's Shop.
- Plan No. 5 of Report dated 16th March 1853, Sail Loft, Boat Chamber and mast House, also Heave down pits details as proposed using old pattern anchors now on Antigua.
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 - WO 17/2359 " "
 - WO 17/2502 " "
 - WO 34/136 " "



Figure 132. Entry gate and Gate house.

Section Eight - Contact Information of Responsible Authorities



Figure 133. Ships Model, Dockyard Museum



SECTION EIGHT

CONTACT INFORMATION OF RESPONSIBLE AUTHORITIES

Contact Information of Responsible Authorities: FOCAL POINT, WORLD HERITAGE
ANTIGUA BARBUDA

MINISTER OF CULTURE

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Ministry of Culture
Queen Elizabeth Highway
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Antigua
W.I.

Dr. Reg. Murphy
Heritage Department
National Parks
Nelson's Dockyard
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NATIONAL PARKS COMMISSIONER

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**MINISTER OF EDUCATION, SPORTS,
GENDER AND YOUTH AFFAIRS**

Hon. Michael Browne
Chair, UNESCO National Commission
Antigua Barbuda
Queen Elizabeth Drive
St. John's
Antigua
W.I.

**SECRETARY GENERAL NATIONAL
COMMISSION, UNESCO**

Dr. Reg. Murphy
Ministry of Education, Sports, Gender and
Youth Affairs
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**MINISTER OF TOURISM AND CIVIC
AVIATION**

Hon. Asot Michael
Queen Elizabeth Highway
St. John's
Antigua
W.I.

MINISTER FOREIGN AFFAIRS

Hon. Charles Fernandez
Office of the Prime Minister
Queen Elizabeth Highway
St. John's,
Antigua
W.I.

Section Eight - Contact Information of Responsible Authorities

MUSEUM OF ANTIGUA AND
BARBUDA
Michelle Henry, Director
Long Street
St. John's
Antigua
W.I.

DEVELOPMENT CONTROL AUTHORITY
Mr. Fredrick Southwell
Chief Town and Country Planner
Cecil Charles Building
Deanery Road
St. John's
Antigua



Figure 134. Copper & Lumber Store south elevation.



SECTION NINE

Signature on behalf of the State Party

A handwritten signature in blue ink, appearing to read 'G. Browne', written over a horizontal line.

The Honourable Gaston Browne,
Prime Minister Antigua and Barbuda.

This Nomination Dossier is being submitted to the World Heritage Committee ,
UNESCO for possible inscription of the historic Antigua Naval Dockyard and
Related Archaeological Sites, in the list of World Heritage Sites.

ANTIGUA NAVAL DOCKYARD AND RELATED ARCHAEOLOGICAL SITES

THE HISTORICAL LANDSCAPE OF ENGLISH HARBOUR, ANTIGUA.
Structures within the Antigua Naval Dockyard



The Joiners Loft and Boat House

The Engineers House (1785)

This structure is a two storey brick building with a finished attic providing three storey's for its current end-use as an 18 room boutique hotel (Admiral's Inn). The structure was historically used as offices and residences for the Engineers on the upper floors and a storeroom for pitch/tar, lead, paint and turpentine on the main or ground floor. It was built in 1789 directly onto the exterior perimeter wall on the southwestern corner of the compound in classic Georgian style architecture. The structure is primarily of red bricks that were frequently brought to Antigua as ballast in the holds and bilges of merchant ships coming out from England. The interior wood framing support is post and beam style. The high hip-styled roof has dormer windows on all four sides, heavy storm shutters, a low parapet wall, and wood shingles. There is a band or single course of white limestone set horizontally between the first and second floors. In 1907, after the dockyard was handed over to the Colonial Office, the Engineer's Building was used as a Police Station until 1912 when the Colonial Surveyor of Works, Mr. Holmes Court occupied it for use as a Harbour Master's residence. By the 1950s it had fallen into disrepair and crew from the HMS TRIUMPH assisted with its restoration in 1955. The expansion of the yacht charter industry and efforts towards tourism by the Government led to further renovations in 1961 and it's conversion into a hotel; the Admiral's Inn. The exterior brick walls and ground floor remain untouched, but the interior wood was partially replaced at that time. It was again extensively repaired to remove termite-damaged wood in the fall of 2011. The roof is clad in wood-shingles that are changed every 10 years.

North elevation
Engineers House
(Admiral's Inn)





West view of the Engineers Building



South elevation Engineers Building and entry road to the Dockyard

The Guard Station and Engineer's Building

The Guard Station is built directly onto the northern end of the Engineer's Building to create a long, single storey brick building situated on the western perimeter wall of the dockyard compound. It has a stone floor and shingle-clad, steeply pitched hip roof. The Guard's were stationed at the northern end, which is also the location of the main entry gate to the compound. There is a bell mounted above the gate, which was rung to gain entry into the compound. The current bell was donated by HMS TARTAR in 1930's. The engineers working area included a blacksmith shop and forge. The entry doors have stone ramps to permit the rolling of barrels into the structure. There are two chimneys for two separate forges. The Guard House section was first used as a house for the guards and as an on site prison. It was also used to store nails and other small iron objects of value. The Engineer's workshop, which is directly attached to the guard house, developed slowly in its capacity as an engineering workshop and until 1842 functioned as a storage facility. Its conversion was a response to the need for more precise mechanical engineering in the Age of the Industrial Revolution and a lathe and punching tools were installed. The lathe was capable of turning objects from as small as 3" to as large as 28" in diameter. In 1863 the building was used to store and repair steam engines and steam driven machinery. It continued to work as an engineering facility until 1950. Recent repairs in 2011 include the replacement of the termite-damaged roof and re-pointing of brickwork. The structure is currently used for storage by the Dockyard maintenance department. It is 15ft wide by 110ft long or 1550sq. ft.



Entry Gate

The Guard Station





The Entry Gate



Engineers workshop Door



The Engineers workshop

The Porter's Lodge, Sick House and Condemned Articles Store

The Porters Lodge of today was built in 1778. The Marine Guards first used it until 1783, when it became a Victualling Store. In 1785 it was used as a provision storehouse with an area partitioned off for the Porter but by 1797, it was partitioned to include a sick house. It continued in this joint capacity until 1853 when the Sick House became the Condemned Articles Store. The Porters Lodge is situated on the other side of the entry gate on the west wall of the Dockyard. It is similar in construction and style to the Engineer's building on the other side of the gate and indeed like the other structures in the dockyard. It is 231 m. sq. in size (including wooden adjoining rooms) and built mostly of red bricks. It is a single story structure that was converted into additional rooms for the Admirals Inn Hotel as it shares an inner enclosed waterfront courtyard. In summary, its historic use was mostly as an on site accommodation for the Porter and as a treatment area for the sick and hurt. However, serious cases that required extensive treatment and bed care were taken to the nearby naval hospital. A large portion of the building was used to house articles that were removed from the ships that may be salvageable or reused. As this was a naval establishment, all articles were owned by the Crown and could not be casually disposed of without permission. This included rigging, figureheads, clothing, sails, furniture, rope, nails etc. It is in good condition structurally requiring only minor repair work to the bricks in a few areas, particularly near to the entry gate from the dockyard.



The Porter's Lodge, Sick House and Condemned Articles Store



The Blacksmith's Shop

The blacksmith shop and forge was located on the southwestern corner directly on the exterior wall of the compound. The small open fronted space north of it attached to the engineers building is a post-1843 addition. This modern area is an open fronted structure with a low roof and standing chimney. The bellows and anvil were removed and are now kept in the museum. The building can be defined as a “shed” attached to the Engineer’s workshop. The area is 319 m.sq. The original blacksmith’s yard located where the laundry is now situated had a series of six forges. The facility was noted in Papa Sammy’s *“To Shoot Hard Labor”* as the best slave branding facility on the island, having never killed a slave. It was destroyed in the Great Earthquake of 1843 and never rebuilt. Today the area is used for support services for the modern sailors, including a laundry, showers and toilets, and a generator room.



Newer Blacksmiths work area with Chimney



Ramp front of original Blacksmith shop on left



Bellows and Anvil from Blacksmith's Shop

The Clerks or Senior Officer's House

This is a two storey wooden building that is the newest building in the facility. It was built in 1857 to house the senior naval officer or the clerk/ accountant of the dockyard. It is a unique building, architecturally reflecting its Georgian neighbours in proportion with large windows and room height, but elements of Caribbean vernacular can be seen in the finishing details, such as the screen-louvered room dividers. The Clerks House has a large wrap-around verandah on three sides; the direction of the prevailing winds. It is today the Dockyard Museum and gift-shop, and the office of the Environmental Unit of the National Parks. It is a total of 302 m.sq., with two hip roofs covering the enclosed house and a flat shed roof over the verandah. It was extensively rebuilt after the 1995 and 97 hurricanes.



East elevation Clerks House



Clerks House,
Entrance to
Museum and
Interior Main
Floor of Museum

The Bakery (1776)

The Bakery is a small stone and brick structure located south of the Clerk's House and built onto the stone perimeter wall of the yard. It has three ovens of various designs that supplied bread and cooked meals for workers of the yard. It is set back from the waterfront directly close to the location of the blacksmith and engineers work area. Today it continues to make and provide bread and meals for the yard workers and visiting yachtsmen. The structure is 62 m. sq. A small addition to the structure was built in the late 1980's on the exterior of the stone perimeter wall to house additional services and storage. It does not compromise the physical appearance of the building within the dockyard. In front of the bakery are two small barrel vaulted cisterns that are in good condition. The bakery needs no major repairs and is in good order. The fire place hearth is not in use today.



The Bakery with two Cisterns in front

Copper and Lumber Store Building (1789)

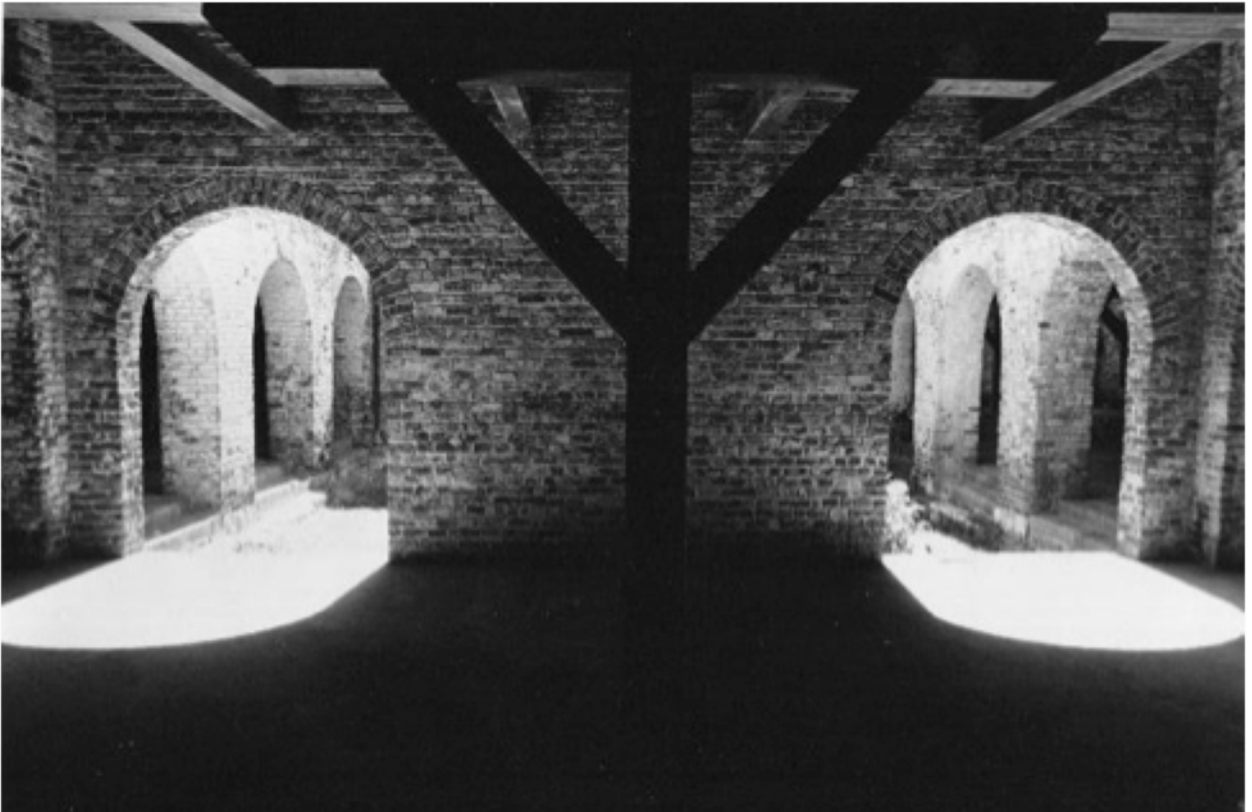
The Copper and Lumber Store building is the centerpiece structure within the historical compound. It is a picturesque two storey yellow brick building with a low parapet wall, and white limestone horizontal line midway between the first and second floor. It was built as a warehouse with walls three feet (1 meter) thick for storing the sheets of copper that were used to cover the ships hulls, and lumber for their repair. The building is 863 m.sq., including an inner courtyard that is open to the elements. Access to the courtyard is via a series of arches. This open space likely provided ventilation to the timbers stored within and light into the interior of the structure. It is typically post and beam architecture, with large 8” sq and 10” sq timbers, knee braced framed to support the upper wooden floor. Historically, the seamen slept in their hammocks upstairs. The building is used today as a hotel with 14 elegantly refurbished suites, and as a venue for events, such as weddings and cocktail receptions. There is also a popular English style pub on the main floor. The roof has numerous dormer windows and is clad with wood shingles. Hurricane shutters protect the wood sash windows. There are four brick cisterns attached to the building on the east and west sides that provided water to the Hotel and Pub. The building conversion to a hotel was done by engineer Jack Paterson in the early 1970s. Many of the wooden posts and beams, floor joists and partitions have been badly effected by termites despite aggressive treatment. The NPA proposes to conduct extensive repairs within the next 5 years. Soft wood, such as pine will be replated with tropical hardwoods that will be more termite resistant.



Interior Main
Floor Copper
and Lumber
Store



Front entrance
Copper and
Lumber Store



Interior of Copper and Lumber Store circa 1960



East elevation of Copper and Lumber Store

The Officers Quarters (1821)

The Officers Quarters was built in 1821 to provide accommodation for officers of ships being careened in the dockyard. It is a two-story structure (666 m.sq.) of wood, stone and brick. The first or ground level floor is a series of 12 large cisterns capable of holding a total of 240,000 gallons or 1,200,000 liters of water that is collected from the roof. The upper story is framed with 8" square posts and beams and the spaces between the frames filled with bricks and lime mortar. There are many structural issues with this building; the result of age and termite damage and it is scheduled for extensive repair and restoration in 2016. It was extensively restored in the early 1960 by builder Tony Johnson. The rooms or apartments that once housed the naval officers are now used as offices and a restaurant. Of major interest is graffiti carved into the walls by Antiguan soldiers training for their overseas posting in WWII. Some did not survive.



East elevation Officers Quarters



West elevation Officers Quarters



North east end of Officers Quarters

The Pay Offices (1760)

The Pay Office was built about 1760 and extensively altered around 1807. It is built of stone, brick and wood (151 m.sq.) close to the waterfront on the northeast area of the dockyard. It is in sum a “wooden cabin” set atop a spacious open stone/brick cellar. In the mid 19th century the structure was extended to provide additional space. It was the office for payment of workers in the naval dockyard, particularly in the post emancipation period. Historically the structure was divided into four small offices. These included the Commissioner’s Office, the Storekeepers Office, the Master Shipwright’s Office and the Master Attendant’s Office. In the late nineteenth century the building was extended with an addition on the waterfront side to provide more usable space. It was the first building to be restored and occupied as a home for the Nicholson family on their arrival in English Harbour in 1947. The wooden upper structure as been repaired on three occasions and today serves as the office of National Commission UNESCO Antigua Barbuda and a marine electronic equipment sales and repair office for yachts. The restored cellar is now used as a waterfront café and convenience food and alcohol store. The building has been extensively repaired in 2005 and 2008. Its main issue is the intrusive elements of modern day, ice storage, communications antenna, and electrical cables.



Pay Office North
West elevation



Pay Office South
West elevation

The Canvas and Cordage Building (1792)

The Canvas and Cordage building was at one time the largest structure in the dockyard. It was built in 1792; a two story brick building (899 m.sq.). The roof was a series of clipped hips that was essentially an attic space that was adapted to provide living space. In design it resembled the Joiners loft set atop a brick single story building. The ground or main floor was a large storeroom for rope, cordage, clothing and canvas. It was built along side the Mast Shed on the northwest side of the yard. The hurricanes of 1950 severely damaged the building and the roof and two supporting walls were removed for public safety. Today a number of shed-style enclosures have been built along the inner walls for use as offices of Customs, Immigration, Port Authority, and storage. Its complete restoration is being considered.



Canvas and Cordage circa 1950



Canvas and Cordage Building today

The Seamen's Galley (1778)

The Galley (159 m. sq.) is a single story stone building that contains ovens and fireplaces where the seamen and yard workers could cook and prepare their meals while their ships were careened. It is located on the northern wharf waterfront between the two careening heave down blocks. It was without doubt a central social place within the dockyard, as workers would have gathered to prepare their mess rations and receive meals. The building is today an active restaurant that continues to provide meals to seafarers. The storage end of the building however, has been converted into a small boutique. The building is in good structural condition with a new roof, veranda, and landscaping.



The Seamen's Galley



The Mast Shed

The Mast Shed (ca.1790)

The Mast Shed (439 m. sq.) is an open structure that provides a covered shaded space for securing and working on masts and spars. Broken masts were brought into the shed by floating them from their ships to the shed. They were then dragged up the ramp into the shed. New timber could be cut at the nearby Sawpit Shed, then shaped and fitted in the Mast Shed before floating them back to their ships moored out in the harbour. All the wood working areas were clustered on the waterfront near the entry of the yard; the Joiners Loft, Saw Pit Shed, Boat-House and Mast Shed. The Mast Shed stone columns and wood roof were completely restored in the summer of 2012.

The Saw Pit Shed (1769)

The Saw Pit Shed (202 m. sq.) is the oldest standing building in the dockyard. It was used to cut timber to the required sizes. It is a single story structure that was built with an open pit below. Timber was cut by two men each pulling the two handled saws in turns, vertically up and down. The building is fronted by an incline plane ramp that provided access for rolling or dragging logs and large timbers into position and out again after cutting. It was restored in the late 1950s and most recently in 2009. The pit floor has been covered with removable plywood and the building now functions as a sail-makers loft.



Sail makers at work



The Saw Pit Shed

The Master Shipwright's Cabin (1769)

In close proximity to the Saw Pit was the Master Shipwrights Cabin (92 m. sq.), a two-story brick structure that was the home of the master shipwright responsible for all repairs to the ships. He reported to the Commissioner or senior naval officer and carried much responsibility in keeping the ships in good condition. The cabin is considered a special place in the intangible cultural heritage of Antigua and indeed the world of Methodism as John Baxter, Master Shipwright brought Methodism to the Caribbean. Baxter, who was sent out from Chatham in 1778, was a “local preacher” and did much to spread the faith and to educate the slaves on Antigua. Today Baxter's Master Shipwright's Cabin is in good condition and serves as a gift shop, office and high security center for the CCTV system of the National Park.



North elevation of Master Shipwright's Cabin

The Joiner's Loft and Boat House (1778)

The Joiner's Loft (307 m. sq.) is a single floored wooden structure built directly on the waterfront. The upper enclosed floor has a hipped roof set on low exterior walls, resembling a finished attic space. It is post and beam construction framed by 12" square timbers that is open on the ground level. At high tide the bases of the first row of posts are underwater, and this facilitated the dragging of small boats and dinghies up under the structure for repair. Upstairs the joiners lived and worked. Much of the fine detailing and joinery was done at this site. The building was extensively restored in 1972 and again in 2009 with tropical hardwood. This building is a fine example of joinery as it is built with mortis and tenon joints, and wooden pegs, dowels and bolts similar in every way to the Saw Pit Shed, the Mast House and the Copper and Lumber Store Buildings.



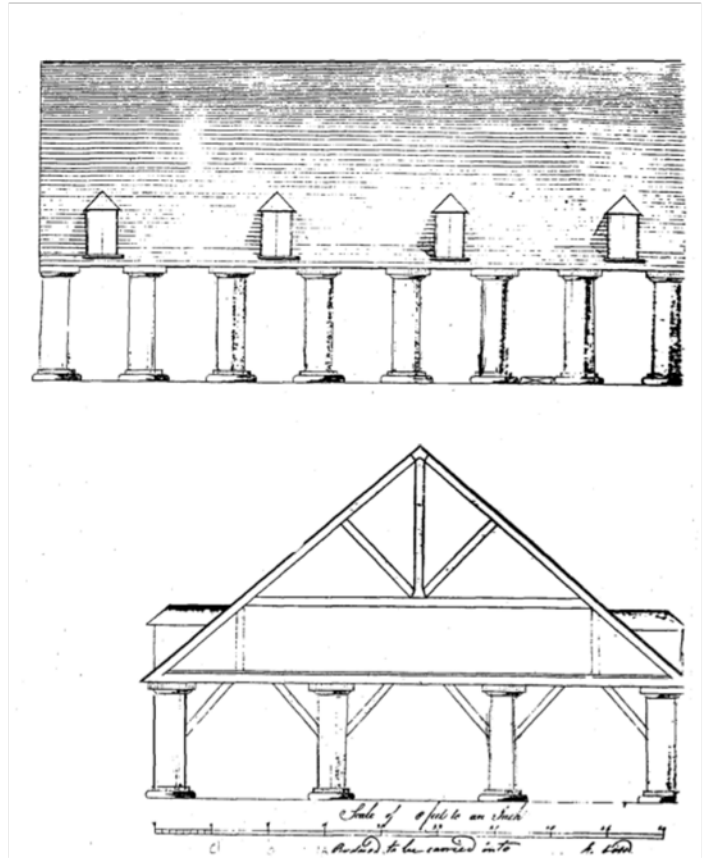
The Joiners Loft and Boat House South West elevation



The East elevation

The Sail Loft Columns (1797)

Within the enclosed yard of the Engineer's and Pitch Store area are 9 round stone column's. These columns once supported the sail loft building. This structure was similar in design to the Saw Pit Shed as large wooden trusses once supported the roof that covered a large open workspace for spreading out and repairing sails. Beneath the loft is a narrow channel or canal that ran under the structure. The ship's tenders entered the canal and the sails were hoisted up into the structure with rope where they could then be repaired. The building was damaged severely in the great earthquake of 1843 that devastated the island, and was finally destroyed in a 1871 by a hurricane. As the Age of Sail was passing, the Sail Loft was not rebuilt so the stone columns were capped to seal and protect them.



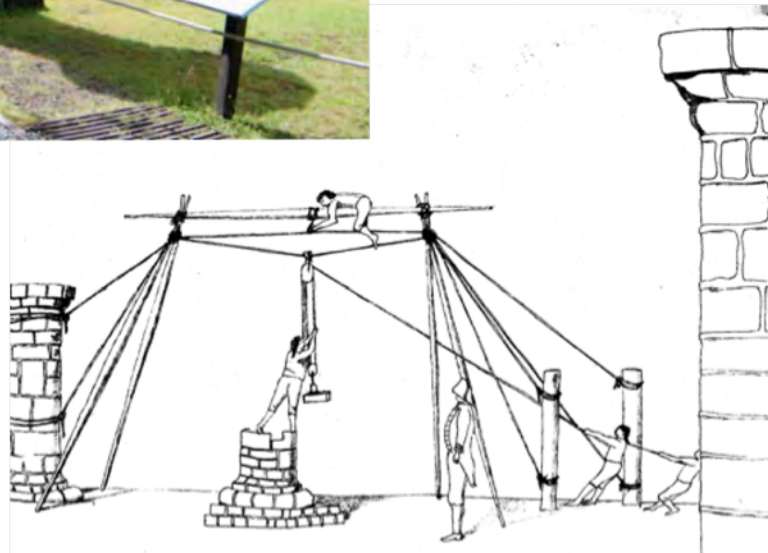
Original Drawings of Sail Loft



The Canal between the Sail Loft's Columns



The Sail Loft columns looking towards the Admiral's Inn



The Sun Dial (1777)

The sundial is one of the oldest structures in the dockyard. It was installed in 1777 fairly close to the Pay Offices. It is located in an area that in the early days of the yard was a hill fifty feet in height. This hill was leveled to expand the yard and the materials used to backfill and create the level space behind the stone wharf of today. This heavy work was carried out by enslaved Africans that were sent from nearby sugar plantations.



The Sun Dial

The Capstan House (ca. 1760s)

A central Capstan House was built around 1760 to heave down ships for careening. In addition, the ships cannons were used as weights for holding the vessel down onto its side. The capstans turned to pull down the ship and when in position, the mast was secured to the stone heave down blocks nearby. The Capstan House was destroyed in 1925 by a hurricane and never rebuilt. Only its low brick foundation and base for mounting the three capstans survive. In 1950, the old wood capstans were removed by HMCS ONTARIO and rebuilt. In 2004, they were again rebuilt by local shipwright Jerry Bardoe. The Capstan House (292 m. sq.) was built wood post and beam style similar in appearance to the Joiners Loft. The ground floor was open to allow working the capstans, but the roof above had a floor creating a loft above where the seamen were quartered during the careening of their ships. There is no immediate plan to rebuild this structure.



Capstan's Today

(A1-46)



Capstan's circa 1960



Visit from the HMS Rose

The Brick and Stonewall of the compound.

The Wall that encloses the dockyard was built to prevent illicit activities within the yard. Desertion, theft of supplies, and the smuggling in of rum were major issues. The wall expanded with the yard over time and was capped with broken glass bottles that were set in the mortar on the top. It is in places 10 feet in height and made of a mixture of yellow bricks and cut stone quarried from the adjacent hillside.



Section of Peremiter Wall



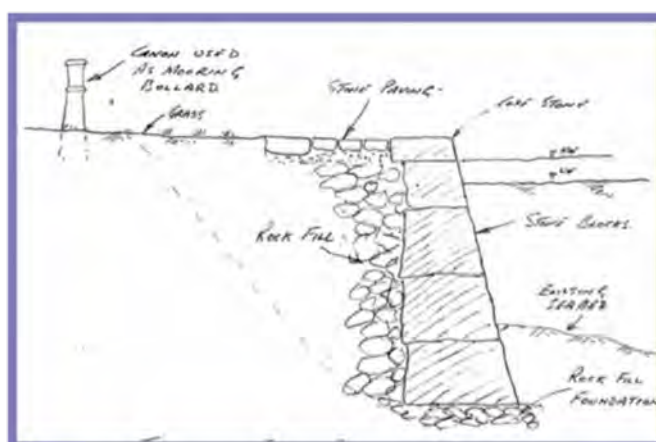
Small Entry Door into Engineers House area

The Stone Wharf and Heave Down Blocks (1820)

The function of the dockyard heavily depended on a stable work platform or wharf. The earliest wharf was made of wooden piles that were wrapped in copper sheeting and coated in tar. They had iron tipped points and were driven deep into the seabed. In January 1820 Boatswain of the yard Francis Fox and a crew of 40, mostly enslaved Africans, began construction on a new stone wharf that expanded the work platform, dock space and in the process the old wooden pile wharf was enclosed within the new stone structure. (See Annex:3 The Sea Wall Project, 2004). The documented names include Jackey, Bright, Tabit, Anthony, Job, Robert Malone, Polydore and Awonoko. Malone is today a common name in English Harbour. At this time, two large stone blocks were built, each containing three large Admiralty Long-Shank anchors. The ring end of the central anchor protruded out of the seaward end of the block onto which a ship's mast was secured when careening. The blocks likely predate the wharf wall in age.



East Warf Wall



Heave Down Block

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**Galleon Beach, Freeman's Bay Cemetery Excavation:
Preliminary Report, July 2012.**



Physical Setting

Geology

Galleon Beach on Freeman's Bay is an ancient eroded volcanic landscape that dates to the Oligocene Period. Rock formations are layered pyroclastic and volcanic ash deposits that rise steeply from the sea to create the steep hills and bays of English Harbour. The beach is a high sand dune behind which is a low lying, grassy area that occasionally floods during hurricanes and large tropical storms. Historically it was a marshy environment that has now been filled with sediments from the steep hills nearby. Sections of this area have been developed as a resort although it continues to flood when the island experiences severe rainfall and storm surges.

Vegetation

The vegetation is an excellent example of the Evergreen Woodlands of Antigua. It is comprised predominately of native species that are capable of withstanding long periods of low rainfall. Along the access road to Fort Charlotte, several alien species are also well established. These too are species capable of surviving the long periods of low rainfall typical of that southern region of Antigua. Numerous cacti and succulent species are well represented thus enhancing the diversity. The forest is however, suffering the effects of overgrazing by feral goats and subsequent soil erosion. Regardless, it represents a secondary forest of mixed native and alien species. Until the 1950's much of the hills surrounding English Harbour and Freeman's Bay were cultivated with cotton. This and other agricultural enterprises were abandoned in the 1960's and tourism development around a rapidly growing yachting industry became the dominant economic focus for the area. The abandoned fields were left fallow and the forest slowly began to regenerate.



English Harbour Antigua.

Historical Context

Freeman's Bay has had a long and complex history. Evidence from archaeological surveys show that the first known occupants were Archaic Age peoples who foraged seasonally along the waterfront, mangroves and swamps of English Harbour. They left little trace of their use of Freeman's Bay and the few artifacts recovered were collected prior to the building of the Galleon Beach Hotel. Their largest settlement in English Harbour was on the southern and western waterfront below Clarence House, and in the Nelson's Dockyard where blades and flakes typical of their lithic reduction methods were recovered during the excavation of an electrical conduit line south of the Copper and Lumber Store Hotel.



By the middle of the first millennium BC, the second period of human settlement on Antigua had begun. These were Arawak speaking, horticultural, seafaring people from South America. The "Arawak", recognized by their unique ceramic styles of White on Red painting and Zoned Incised Crosshatching, have been classified by archaeologists as the Saladoid culture. They established large settlements on Antigua and remained until the arrival of the Spanish explorers in the early years of conquest and exploration. Archaeological research at Freeman's Bay by Dr. Irving Rouse of Yale University, Dr. Fred Olsen and Desmond Nicholson of the Antigua Archaeological Society in the early 1970s, yielded interesting artifacts that were significant of the late pre-contact period or post-Saladoid era (circa 1200 AD – 1400 AD). In recognition of the uniqueness and importance of the Freeman's Bay Arawak pottery, it has been designated the "hallmark" ceramic style for the final pre-contact cultural chronology of the Lesser Antilles. Interestingly, the Freeman's Bay ceramic complex is not Carib which raises many important issues in regards to the long standing historical record and the presence of the fierce cannibalistic Caribs' of the Lesser Antilles. Research at Yale University into the Freeman's Bay ceramics continued until recently under the direction of Dr. Birgit Faber-Morse. Artifacts recovered during the 1970s Yale excavations remain at Yale University and none are available on Antigua for analysis (Murphy 1999).

The Freeman's Bay time period remains the least understood period for the history and archaeology of Antigua for it was the time of European entry into the region. The site was reportedly lost to the development of the tennis court, roads and waterfront units. What little we know is based entirely on the Yale excavations that were conducted at a time when archaeological fieldwork was comparatively primitive to the standards and scientific methods of analysis available today. To this end, any remaining deposits at the Freeman's Bay site should be recovered to compliment the Yale findings. Excavation reports describe the site as small and slightly setback from the beach behind the dune. There were reportedly dense deposits of cultural remains, which include pottery, stone and shell tools and food remains from both vertebrate and invertebrate species (Nicholson personal communication).



Galleon Beach, Freeman's Bay mooring anchor.

Historical Period

The third and perhaps most obvious period of human utilization of Freeman's Bay began shortly after the first English settlers arrived and colonized the island in 1632, displacing the long established pre-Columbian peoples. Within 25 years of settlement, the colonists realized the importance of English Harbour as a place for sheltering their ships from hurricanes and for careening and repair. The deep narrow bays and channels, well protected by steeply rising highlands were indeed ideal and by 1725 the British Navy began to establish the Royal Naval Dockyard in English Harbour.

In the age of sail, most large ships were square rigged and as such could not sail upwind. This created a problem for ships entering and leaving English Harbour. As the outward trip was primarily upwind, ships had to be warped out of the harbour, a timely and difficult process. To avoid this, and to have several war ships ready for action at all times, many were moored in Freeman's Bay stern to the beach (map 2). Large Admiralty long-shank mooring anchors were set on the beach to moor these ships.

To protect the fleet and dockyards, several forts, defense platforms and batteries of cannon were setup around the harbour. One of these, known as the Masked Battery, was established on the beach somewhere between the Galleon Beach Hotel Office and the Inn. It has never been investigated or located archaeologically.

Another defense platform was Fort Charlotte on the southeastern point above the Pillars of Hercules and opposite to Fort Berkeley. Fort Charlotte was established about 1744 and named in honor of Queen Charlotte. It was a small semi-circular defense platform similar in style and layout to Ft. Cuyler on the Middle Ground. Fort Charlotte however, was an establishment of significance. It had two sections, a lower series of embrasures on the seafront point of entry to English Harbour and an upper platform with limited accommodation and small storage facility. The 24 and 32 pounder-cannons of the Charlotte battery had a range of 1.5 miles and together with Ft. Berkeley were a considerable deterrent to enemy entry. Both the Masked Battery and Fort Charlotte would have had a full complement of soldiers, equipment and supplies. While the location of the fort is known the location of the other Support buildings, that were often built of wood, have never been located.



Freeman's Bay historical map showing positions for mooring frigates (Dockyard Museum).



Eighteenth century drawing of English Harbour

The low areas behind the sand dune on Freeman’s Bay were never developed by the military. They were partially swampy and held large pools of water after storms. Despite this, the sand dune was used as a cemetery and historical records show that the enslaved Africans in the area often had dances, drumming and other festivities to the amusement of the Naval personnel in this area (Thomas 1798). While this activity will leave no physical remains or artifacts associated with it, it holds significant socio-cultural implications for the area.



Ft. Berkeley looking east to Freeman’s Bay.

Archaeology

On 29th October 2007, extreme rainfall from a tropical storm flooded much of Antigua. The low lying areas behind the sand dune at Freeman's Bay, popularly known as Galleon Beach, was inundated with over three feet or a meter of water that flooded the restaurant and parking lot behind the dune. To drain the flooded lands, a small channel was cut by backhoe into the dune near to the low concrete wall on the beach. The surge of water rapidly washed out a large channel in the dune about two meters wide and 1 to 2 meters deep (Photos 6).

Examination of the washed out area revealed a large number of human skeletal remains scattered along the beach and others were protruding out of the sand and sides of the pit, indicating numerous burials. Over 265 bones that were collected by concerned area residents and yachtsmen anchored near the beach (Photo 7), were presented to the archaeological team. It was known that the beach had been used as a burial site in the historical past but the extent, age and cultural affiliations of the buried individuals was unknown. The hotel managers, disturbed by these findings notified us that they would be filling the washed out area on the next working day, which presented the opportunity for a "one-day" study of the open site.

On Sunday 30th October 2007, archaeological excavations were conducted by Dr. Reg. Murphy and volunteers from the community. The research focus was:

1. Who were the interred individuals?
2. What time period was the cemetery in use?
3. Were there any objects in association with the remains to shed light on the remains?

Initial Findings

The remains presented to the archaeologists that were recovered on the beach were in an exceptionally good condition due to the burial in soft sand. Examination of the profile of the wash out walls where remains protruded out had no evidence of coffin wood, nails, or soil discoloration. Grave shaft marks were not observable. In addition, there was evidence of multiple burials in two areas of the washout, and these were only 50cm below the surface, while most protruding bones were about 1.5 meters below surface.

The finding of small numbers of shellfish fragments including broken conch shells (*Strombus gigas*) and the known presence of a prehistoric settlement nearby led to early assumptions that the burials were prehistoric. This was reinforced by the scattered haphazard nature or orientation of the remains. However the three skulls found washed out on the beach were of male European or Caucasian ancestry.

Excavations

As excavations began to expose the intact remains, it was immediately evident that the burials were historical period, males who were hurriedly buried on the beach. Four burials were located and work began to expose them by clearing a large workspace around the bones. In doing this, it became clear that **Burial 1**, the shallow burial closest to the road, was actually a large multiple burial pit. The remains lay atop and across each other in various positions. As this large number could not be excavated within the short time available only partial remains from two individuals, including skulls, were sampled from the estimated number of six individuals in the top layer. In light of the shallow depth from the top, we concluded that there were a large number of individuals in this pit and that it may extend down to the typical two meters depth.



Washed out trench, with protruding bones



Bones recovered on the beach

Burial 2 was a partial single individual whose left humerus, vertebra and a number of ribs were protruding out of the sidewall. This individual's skull was likely one of those recovered on the beach the day before. He was a single burial in a straight typically Christian burial position, east to west, facing the east. His hands were placed over his pelvis as he lay in a slightly rounded position we concluded that he was laid to rest wrapped closely in his hammock. No buttons or other objects were found associated with this individual.

Partial remains of a young male. Note hands folded over pelvis.



Burial 3 was another partial burial that lay in a similar folded or wrapped position as number 2, but in a north to south orientation. This was the deepest burial at 1.75 meters below surface.

Burial 4 was also missing his skull and cervical vertebrae. It was in excellent condition and therefore completely removed. On removal, it was noticed that he had been placed immediately on top of another individual. This second individual was left interred and not disturbed.



Conclusions

Analysis of the remains, were conducted the following year, January 2008 by Dr. Tamara Varney Physical Anthropologist and professor from Lakehead University, Ontario, Canada. Conclusions are that the remains were all from young men, ranging in age from teenagers to the mid-thirties.

They were all of Caucasian racial type and likely British sailors in light of the fact that English Harbour was a British Naval facility from 1725 to 1895. Multiple burials are suggestive of epidemic diseases and rapid multiple deaths on board ship. These bodies had to be quickly disposed of in the hot tropical environment and the beach provided a convenient place for this task. No artifacts were found in association with any of the remains. Traditionally, sailors who died at sea were thrown overboard, and those sick in port would have been transferred to the nearest naval hospital which was located close to the dockyard. Those who died at the hospital were interred in its cemetery at hospital hill. Therefore it can be assumed that the burials on the beach were beyond hospital care, died on-board, and required a quick convenient place for internment. In addition, there were hulks moored within English Harbour that were used to confine prisoners of war. These men may have also been interred on the beach.

Archival Research

Research in the archives of the Dockyard Museum indicates that British frigates were moored stern to the beach with their bows anchored facing the channel entrance to the harbour. These were likely ships ready and awaiting active service at the end of the hurricane season or waiting their turn for repairs in the inner harbours of the naval facility. Stricken ships arriving with sick and contagious diseased crew on board were also quarantined in the outer harbour. Occasionally sick men were quarantined at Fort Berkeley nearby. At this time, yellow fever, malaria, typhus, typhoid, smallpox and other diseases often ravaged many crews rendering ships unfit for duty for lack of available men. Of these sicknesses, yellow fever has been identified as the most prevalent. Of particular note the log entries of ships surgeons, one of which noted, "*buried 8 each morning*" (Nicholson 2002).

The exact time or dates for which the beach was used for burials is unknown for English Harbour has been used by the navy for shelter and repairs as early as the late seventeenth century. Records from 1741, the early days of development of the dockyard, the average loss that year was as little as 2% (HMS ANGELSEA) and as high as 37% (HMS LIVELY). In 1747, HMS PORCUPINE lost 32%, HMS RICHMOND 41%, and SUNDERLAND 20.5% (Crewe 1993:90-96).

At that time the number of ships using English Harbour during the hurricane and refit summer months varied, but a conservative number would be about nine. In addition, decommissioned ships that were used as prison "hulks" and to provide accommodation for seamen, were also anchored within the harbour. All of their daily sewage, waste and debris from work were disposed of in the still waters of English Harbour where there are virtually no tides and circulating currents. In addition, the cisterns, open ponds and swamps provided a perfect breeding ground for mosquitoes. As a result the harbour was an unpleasant environment where diseases and infections could spread through the ranks of sailors enclosed below decks in their ships, and in barracks nearby, in the summer heat.

Accounts in the ships logs, journals of seamen and naval doctors present insights into the horror of these epidemics. When HMS EXPERIMENT arrived in English Harbour in May 1793, she was incapable of entering the harbour due to a lack of available men. Most of the crew had been lost to a “malignant fever” called the Boulam Fever; an aggressive form of yellow fever that killed in 12 hours. Crew from the HMS SOLEBAY went to their assistance in bringing the ship into the harbour, and by next day, all who assisted were dead. Within a few days, over 200 men from SOLEBAY were also dead. The fever spread rapidly throughout the island where many civilians met a similar fate (Nicholson 2002:). The only form of treatment for yellow fever was vigorous bleeding, laxatives and mercury. To the infected, the treatment by itself would, in their weakened state, probably have killed them. The SOLEBAY would not be the only ship to suffer this fate and the records show at times, other vessels lost most of their crews while refitting and sheltering in English Harbour, giving rise to the popular name of “The Graveyard of the Englishman”.

This high mortality rate, albeit periodic, would result in multiple burials, erratically positioned on the beach nearby where the soft sand required minimal labour to excavate. Furthermore, no religious personnel were available to provide the normal formal burial services. Burials were rapid non-ceremonial affairs done as quickly as possible in the hot tropical climate. There were no wooden coffins used with these burials probably as there was no time to acquire them. Traditional coffin burials in soil that had a large volume of heavy soil on top of the lid usually resulted in the crushing of the skull and many bones within as the coffin lid decayed and the grave slumped. In this case, the soft sand immediately surrounded the remains protecting them over time and many of the bones were in abnormally good condition. No objects were found in association with any of the remains.

In conclusion, the burials on Galleon Beach are likely young seamen of lower rank who were quickly interred in the convenient sand dune. Higher ranked officers were buried in the churchyard as their position and financial situations were considerably better than the rank and file regulars. In addition, the multiple burials indicate that they likely succumbed to epidemic diseases. None of the bones displayed evidence of violent death or traumas suggesting battle injuries or executions. Isotopic and other analyses are being conducted in Canada on a selection of bones representative of different individuals and will be published elsewhere as separate reports.

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Excavation 2012

The passage of Hurricane Igor in 2009 again flooded the grounds at Freeman's Bay and the Galleon Beach Resort. Massive landslides from the Lookout Point on Shirley Heights carved through the resort covering tennis courts, roads and damaging buildings. Over a meter of water inundated the resort restaurant and parking lot behind the sand dune, and with its return to the sea a large crater and gully was carved into the beach washing away graves and littering the beach with bones. The hotel management quickly filled this gap in the waterfront sand dune with rubble from the landslide creating a hardcore filled sand dune in the middle of the beach.

In the summer of 2012, archaeological excavations were planned and conducted in a small area of the dune that remained intact. It was an effort to investigate the last remaining section of the beach in order to learn more about the eighteenth century life in the navy and the frequent epidemics that took so many to their untimely end. In addition, early success at bone chemistry research on the previously excavated burials, that uncovered evidence of lead poisoning and high levels of mercury in the bones, researchers wanted samples from secure, scientifically recovered, undisturbed archaeological contexts. Further to this, as this was likely a once in a lifetime excavation, it was decided to document it on film. This was done by BBC 4 Cardiff Studio, Wales and made into a documentary by naval historian Samuel Wilson, "Nelson's Caribbean Hell-Hole" (June 2012).

Dr. Reg. Murphy, Director Heritage Resources, archaeology and research for the National Parks, Antigua, led the archaeological team. Team members included,

- Dr. Samantha Rebovitch, Curator Dockyard Museum
- Nigel Bardoe, Research Officer Dockyard Museum
- Dr. Tamara Varney, Professor, Physical Anthropologist Lakehead University, Ontario
- Cory Look, MA PhD candidate CUNY, field technician, GIS, GPS, archaeologist and forensics
- Matthew Brown, PhD candidate and forensic archaeology, paleo-pathologist CUNY
- Paula Varney, Health Care worker, archaeologist
- Wazzim Brathwaite, Museum technician

Excavations

In an effort to maximize the two weeks permitted for field work, two units, two meter square each were excavated. The first twenty centimeters of sand showed built up layers of hurricane deposited sand, below which clean sand with broken shells, particularly queen conch (*Strombus gidas*) and West Indian top shells (*Cittarium pica*) appeared in increasing numbers that was suggestive of a prehistoric component to the sand dune.

Unit 1

One was placed closest to the main road. Dr. Murphy, Matt Brown and Wassim Braithwaite excavated this Unit and the rest of the team worked on Unit 2 that was located closer to the sea. Excavation methods followed standard archaeological practices, using trowels, brushes and dustpans. Artifacts were recovered insitu but all excavated sand was screened through 1/8th inch mesh.

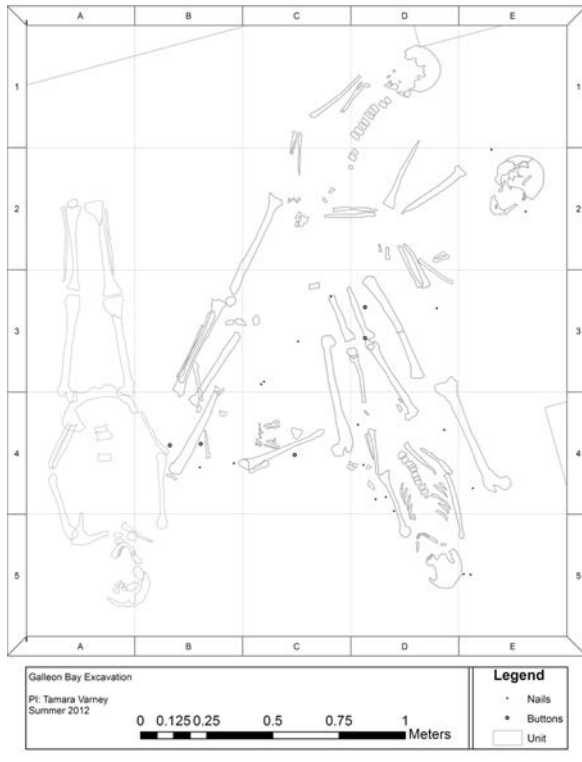
Findings

Unit 1. There was little stratigraphy or color changes to the soil although it was excavated down to sterile gritty subsoil at 1m 8 cm below surface. Evidence of pre-Columbian activities on the beach included shells from a variety of mollusks all with extraction damage were recovered. The dominant species was the *Strombus gigas*. Also recovered deep in the unit was a damaged stone axe of St. Martin greenstone, a burnt post-hole, a worked or retouched lithic tool (scraper), and two pieces of pottery (see list below). Historical period artifacts found includes a small copper thimble and fragments of a broken glass bottle. These were not associated with any human remains. Due to the shallow depth of 35cm below surface, the thimble was likely dropped and lost in the sand. Photographs of the worked shells are included in this report.

This Unit was important as it showed that the lost prehistoric site at Freeman's Bay (reported lost to development of the tennis court and cottages nearby) still has some small intact areas.

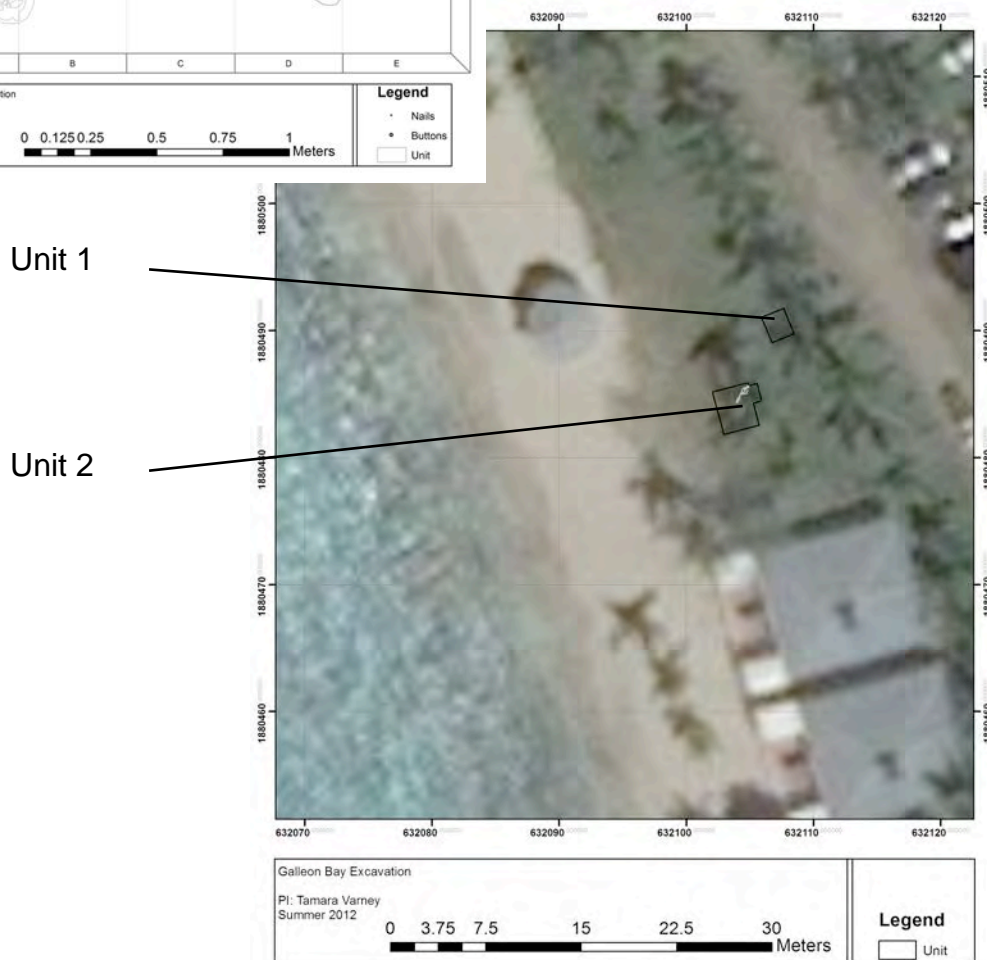
Unit 2. This unit also contained prehistoric Ceramic Age material. A rim shard from an open shallow bowl with a wedge shape or folded rim, common to the post Saladoid period ca. 1100AD, was found (see Murphy 1995). Human remains were encountered at about 45 cm below surface along with coffin nails and wood fragments. It was clear that there were multiple burials in this unit and that some had been disturbed to inter additional individuals. There was no orderly orientation of the remains typical of formal organized cemeteries. Metal buttons, brass with mother of pearl inlays were noted and it became clear that they belonged to one or two of the youths that were interred in the wood coffins. Very young men were often accepted into the navy as apprentices from as young as ten years old. Some also worked as powder monkeys carrying powder to the gunners during battle and others as midshipmen in training. The buttons were believed to be those of young midshipmen.

A total of six individuals were exposed and there was evidence that others were beneath them. This first layer was essentially the top of a mass grave. Only three of the top most individuals were removed for analysis and the others left for future research. The layer was marked with a number of coins dating 2010/11. An intensive report on the analysis of these individuals will be presented in a separate report. Interestingly, a pre-Columbian shell axe was found mixed in the remains indicating that the burial had disturbed prehistoric deposition. (See Map of burials).



Unit 2 Map of burials

Location of units on Dune





Day 1. Removal of sod.



Worked shell (unit 1)



Brass thimble (unit 1)



Shells from pre historic midden (unit 1)



Top of charred post hole (unit 1)



Core of a triton shell: unknown use.



Pre-Historic flint flakes



Unit 2



One of six bodies exposed



Mother of pearl inlaid brass buttons (unit 2)



St. Martin greenstone axe (unit 1)



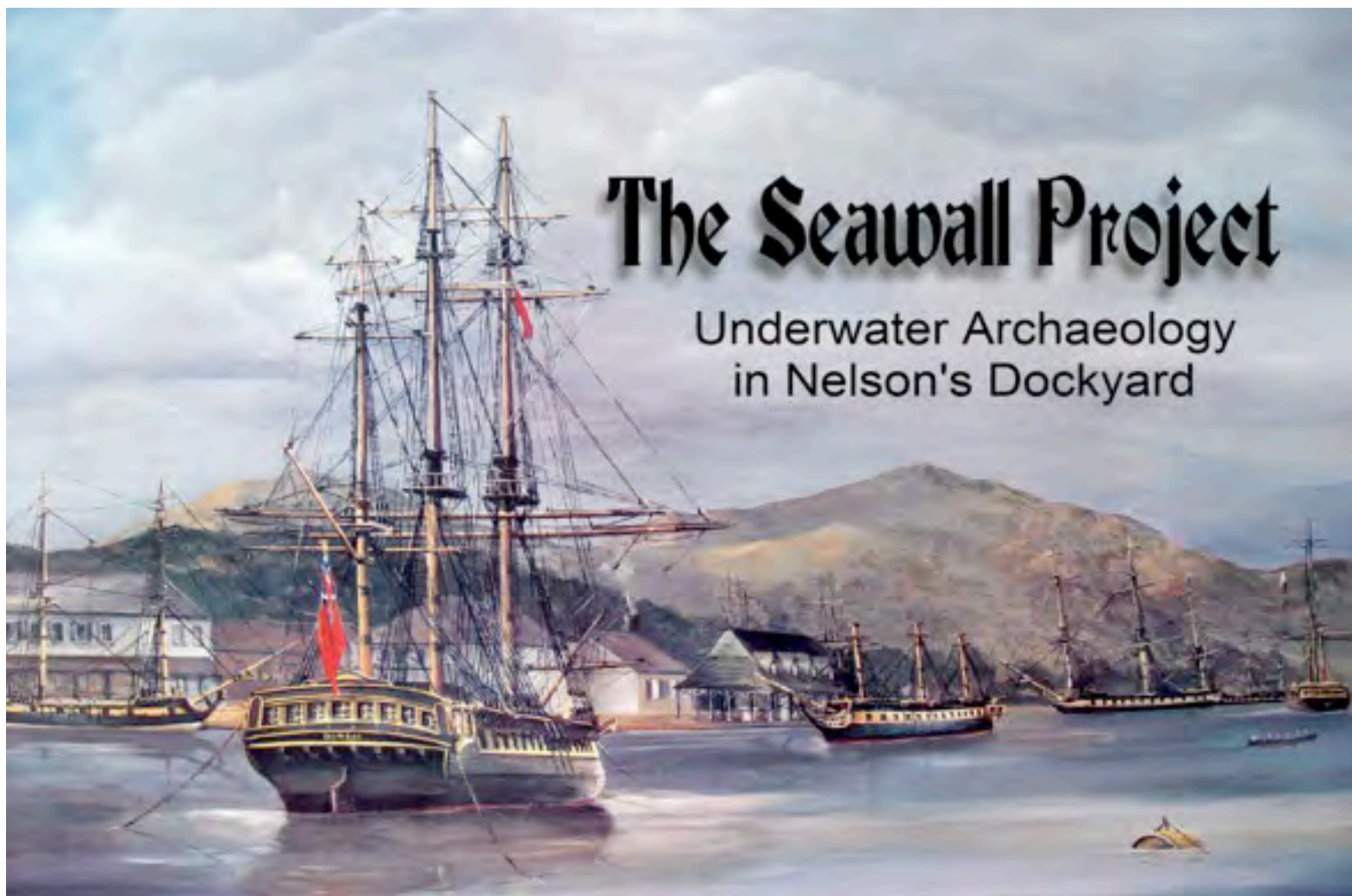
BBC 4 filming "Nelson's Caribbean Hell Hole "



Excavation (unit 2)



In-situ analysis (unit 2)



The Seawall Project

Underwater Archaeology
in Nelson's Dockyard

Annex 3

Preface

The wharf or seawall of the former British Naval Dockyard in English Harbour, Antigua, stood as a protective barrier against the sea since its construction in 1728. It was built to serve as a platform for the repairs and provisioning of ships and continues to do so today. However, recent hurricanes and the ravages of time have taken a severe toll, and the ancient walls began to slump and were on the verge of collapse.

Prior to restoration, underwater archaeological research was conducted to shed light on the original methods and materials of construction, and to investigate the possibilities of underwater cultural deposition. The harbour not only served as a place of anchorage but also a convenient place for dumping refuse and many interesting items have been accidentally lost in the murky depths. Numerous ships have also sunk within the harbour. Underwater archaeological research conducted by the archaeologists of the Nelson's Dockyard Museum and students the University of Calgary, assisted by experienced volunteers in the summers of 2001 and 2002 recovered several hundred artefacts attesting to the rich cultural heritage beneath the sea in English Harbour.

Restoration and reconstruction work began in April 2003, the ancient wall was dismantled, and the crumbling stones below water line replaced with an interlocking concrete system better suited to the stresses of a modern marina. With the commencement of restoration, archaeologists continued to recover artefacts from the dredged mud and debris from the seabed. Our job was to monitor and document the restoration project for the historical record of this remarkable heritage site. This journal summarises the Nelson Dockyard seawall archaeology project and presents photographs and information on the findings to date.



INTRODUCTION

The island of Antigua has many natural harbours that provide safe anchorage, but best of all is English Harbour on the southernmost point of the island in the Parish of St. Paul. Historical references indicate that by 1671, forty-one years after settlement, English and Falmouth Harbours were used by seafarers as a place for shelter during the hurricane season. The virtually land-locked deep water of English Harbour also provided the ability to careen and repair sailing vessels, an important requirement for wooden ships in a tropical environment. The British Navy noted these unique characteristics of English Harbour early in the 18th century, and in 1723, construction began on the numerous wharfs, warehouses, powder magazines, and careening houses, officially establishing the Antigua Dockyard. Numerous fortifications were subsequently built on the surrounding highlands to protect the fleet at anchor and vessels careened within the harbour.

In the Leeward Islands and elsewhere, the early eighteenth century can be described as a period of intense rivalry among European Nations. The wealth producing sugar islands were used as pawns, captured, returned under treaty, only to be captured again in a continuous cycle, as European colonial powers fought and bartered for wealth and power. As the ownership and control of the sugar colonies and trade were dependent on naval supremacy, the establishment of the Antigua naval dockyard was a strategic response that provided the British with a significant military advantage and protection for the financial resources and wealth of the sugar industry.



The development of the naval and military facilities in English Harbour reached its climax by the 1830's. British successes at Trafalgar and Waterloo eliminated the French naval and military threat and Great Britain began to build her Global Empire. Economic and strategic interests quickly shifted away from the Caribbean as the Industrial Revolution gained momentum. The Caribbean sugar islands could not compete with the new regions of the Pacific, sub-Asia, and Africa that were ripe for colonisation and exploitation. The growth of the European sugar beet industry added to the competition. The islands could not compete and soon, they were no longer of value to their European powers, financiers, merchants and investors.

By the mid-19th century, the new generation of large steam powered iron battleships were too long and not able to enter or manoeuvre into the narrow channels of English Harbour and the dockyard at English Harbour was now obsolete. It survived briefly on a reduced scale as a coaling station but in 1895 it was officially closed.

During WWI and WWII, local Defence Forces used the dockyard periodically as a site to practice small arms gunnery and other military exercises, but by then the structures had been abandoned to the elements. In 1947 Commander Vernon Nicholson and his family arrived on board their schooner "MOLLIHAWK". They moved ashore into the old Pay Office and began to charter their yacht to persons wishing to cruise the islands. During a visit to the dockyard, Governor Blackburn saw the opportunity to convert the dockyard into a yachting destination and the "Society of Friends of English Harbour" was formed in 1951. Today, the

restored dockyard carries the name of its most notable resident Admiral Horatio Nelson.



Map of English Harbour by Dockyard Commissioner Captain John Laforey ca. 1780s.



THE SEAWALL

The first dockyard and careenage was built across the harbour at St. Helena, on the site of the Antigua Slipway. In an environment of almost constant warfare, uncharted reefs, hurricanes and tropical marine organisms, the wooden ships of the Royal Navy required regular maintenance and refitting. The warships also needed a sheltered harbour during the hurricane months. By the 1730s, the sheltered bays of English Harbour had proved to be a strategic advantage for the naval squadrons on patrol in the Caribbean, and the facilities were expanded to the western side of the harbour, and the Georgian dockyard seen today was built.

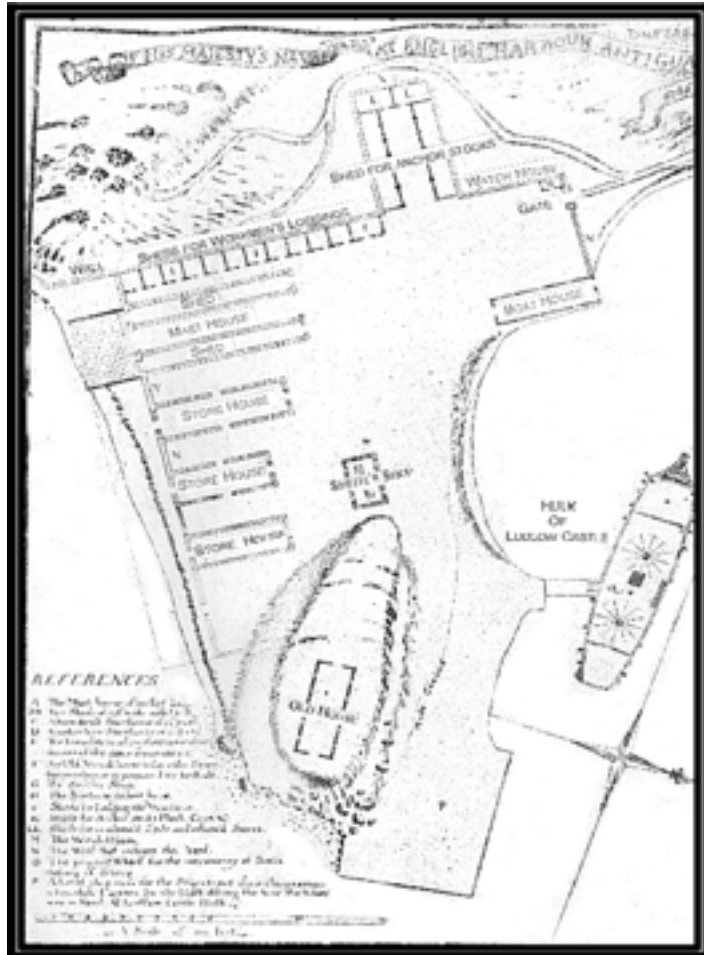
In the area where the sundial is located, a hill about 50 feet high once stood. In an effort to careen the larger vessels, a wooden dock was built to the north and the hulk of the *Ludlow Castle* was permanently moored and fitted with two large capstans for careening. With the loss of the northern colonies in the America War of Independence, the dockyard grew in importance as British ships could no longer refit in North America. Major changes and expansions were immediately implemented and the dockyard was expanded to repair and provision additional ships. In the late 1700s, the facilities and buildings we recognise today were built.

The first wharf or seawall was built of wood and over time, many additions and changes were made to it. It served two purposes. Firstly, it was a work platform against which ships were careened, and secondly, it functioned as a retaining wall that secured the buildings and infrastructure of the dockyard against the encroaching sea. In 1820, the wooden wharf and walls were replaced by a stone seawall; a process

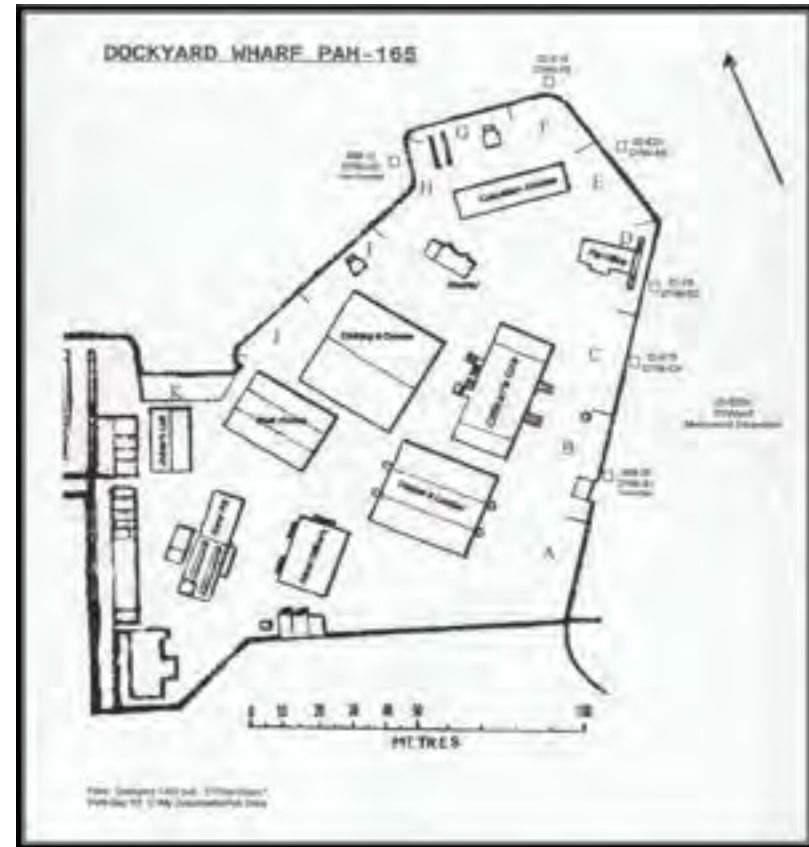
that took three years and employed the services of 11 stonemasons and 23 labourers; enslaved Africans then called the *King's Negroes*. The workforce was supervised by Boatswain Francis Fox who was responsible for construction and supervising the works in and around the dockyard (Nicholson 2002). Large oblong shaped blocks of volcanic stone were quarried just outside the gate and the nearby hillside for constructing the wall. The overall length of the wall is one thousand feet (305 metres), with a depth of water ranging between six feet (1.8 metres) to sixteen (4.8 metres) feet. Numerous supports, such as chain and wooden piles were embedded in sections to provide stability and prevent collapse. Nonetheless, the historical accounts noted that on three occasions, during construction, sections of the wall collapsed, and the stones had to be retrieved by diving. Boatswain Fox is best known today for his journal that survives in the Public Records Office, London. He died on 11th October 1823, aged 49 years and was buried in the Falmouth Churchyard, St. Paul's, Antigua, W.I..

Other important projects around the dockyard required the attention of Fox and his crew so work on the wall was sporadic. Many long hours were spent drilling, cutting and dressing stones in the quarry at the entrance to the dockyard. The cut stone were then taken to the waterfront and laid with amazing precision into position underwater. Behind the cut stone blocks, a thick mass of rubble stones, lime mortar and gritty soils were placed to support the large blocks. Capping stones and a stone walkway was laid on the surface to serve as a level work platform and landing platform. The construction of the stone seawall was a monumental achievement for the period and a tribute to the skills and ingenuity of the enslaved

African tradesmen who built it. The construction and restoration project provided the opportunity to investigate 18th and 19th century construction and engineering methods, to recover numerous artefacts and to learn about the life and times at this naval outpost.



Dockyard prior to 1750.



Plan of the Dockyard today with areas excavated.

Note:

The hill illustrated on the first map was levelled to expand the yard. At that time, the decommissioned vessel HMS Ludlow Castle was stripped of all masts and rigging and used as a careening platform. The hill was in the area of the present day sundial and Officers Quarters.

ARCHAEOLOGY

From the earliest phases of the restoration project, the heritage and archaeological department of the Nelson's Dockyard Nation Park was consulted and given the responsibility for archival research, monitoring and documenting all phases of the project in an effort to ensure a high degree of historical authenticity. During the process of archival review and planning, archaeological investigations were conducted to investigate the depth of cultural deposition, the condition of those deposits, and to learn as much as possible about the construction of the wall.

The area affected by the reconstruction extended outwards 13 ft (4 metres) from the wall. With no budget for either excavation or conservation, the archaeologists could not excavate the entire 1000 ft (305 metres) long seawall, therefore the research strategy was to sample areas along the wall where specific activities took place; for example, the Pay Office, the careening area, the boat ramp and in front of the officers' quarters. Expectations were that the area in front of the wall would have provided a convenient place for:

1. Dumping refuse from anchored vessels.
2. Dumping refuse and old parts from the vessels being repaired.
3. Dumping refuse from the barracks, workshops and businesses in the dockyard.

Further to this, the remains from known shipwrecks in the harbour could also be present. The sea immediately in front of the wall was a "working area" and landing dock so many

items would have dropped overboard accidentally and lost in the soft mud.

PREVIOUS RESEARCH

Over the years, amateur and professional divers have recovered numerous bottles, china and pewter items from the waters of English Harbour. The information provided by some of these experienced divers suggested that there were significant deposits of well-preserved artefacts in the harbour.

In 1988, a team of students (underwater archaeologists) from Cambridge University visited the dockyard and conducted excavations in the outer harbour and the area in front (north) of the Officers Quarters. An interesting assemblage of artefacts were recovered and presented to Desmond Nicholson, former curator and director of the museum. The work of the Cambridge team provided insights into the working conditions, depth of cultural deposition and the realization that a large volume of modern debris also existed and will also have to be removed in the recovery process. Also, the numerous and interesting findings further created an awareness of the potential of a systematic underwater project, the good state of preservation, and the "richness" of the harbour. Some of their findings will be presented in this volume.

Another underwater project of note was an unofficial excavation in 1989 by Deep Quadrant Reef Watch, an environmental monitoring team composed of members of the Queen's Dragoon Guards, the Royal Air Force, and RAF RAME. The team worked in the deeper waters in front of the

wall by the Galley Bar. This project was not focused on archaeological recovery but a training and equipment testing exercise. The artefacts uncovered were incidental to them but interesting from an archaeological perspective. In sum, this was a small project and the findings were documented and catalogued by Desmond Nicholson.

METHODOLOGY

As previously mentioned, there was no financial support for this project. The excavation team was comprised of Dockyard Museum personnel, students from the University of Calgary, and volunteer professional divers. All were certified divers and several had experience in salvage methods, archaeology and the use of underwater metal detectors. The project relied extensively on these volunteers who provided valuable expertise and their time. To excavate, an airlift was constructed using a 4" (10.16 cm) PVC pipe, a garden hose and an air compressor. The more experienced divers worked on the seabed in pairs operating the airlift and metal detector. Dredged materials were deposited into a series of floating screens, 1/4" mesh and examined on land. All "rocks" and coral were scanned with metal detectors in search of small objects embedded inside. Many coins were recovered in this process. All artefacts were then placed in fresh water tubs for cleaning, sorting and treatment. The size of the excavated units was each approximately two-meter square. The fine silt and zero visibility prevented standard methods of mapping and documentation underwater.

Five units were excavated. These were located:

1. In front of the Copper and Lumber Store Building
2. In front of the Officers Quarters
3. To the right of the Pay Office close to the step cut into the stone.
4. To the left of the Pay Office, 20 meters from the building.
5. At the corner of the wall near to the Capstan House.



Screening and scanning the debris with metal detectors.

RESULTS AND FINDINGS

The seabed in front of the seawall has three layers. The top layer was fine silt that clouded the water immediately on contact, reducing visibility to zero. This layer, approximately 75cm thick, was greatly affected by the currents of the harbour and the passing of vessels. It contained primarily artefacts of the past fifty to seventy-five years. Beneath the silt is a black, greasy, compact layer with many shells and gritty sand. Excavation through this material was slow and tedious due to its hardness and the tangle of iron, broken glass and sharp rusty objects. Interestingly, most of Victorian and Napoleonic period objects were recovered in this layer. The third and final layer was gritty, white sand devoid of artefacts.

The most common artefacts recovered from the upper layer were modern bottles. While a wide selection of soft drink bottles of all types were found, beer bottles were most numerically represented. Screwdrivers, pliers, drinking glasses, engine parts, anchor chain, boarding ramps, CD players, and sunglasses are typical of this modern assemblage. Some of these items, particularly the various types of bottles, were kept, and the other less environmentally friendly items, such as batteries, wire cables and electrical components, were removed from the sea and taken to the Government land fill site. Eighteenth and nineteenth century bottles were also represented in the disturbed upper layer.

A diverse selection of ammunition was recovered. These projectiles include: musket balls, grape-shot, a variety of cannon balls, bar and chain shot, Martini-Henry black powder cartridges, early rimmed cartridges, as well as modern bullets. Prior to its closure as a naval dockyard, the site was



Photographing and documenting.



Visibility on a good work day (underwater photos by Martha Gilkes).

used for training local defence forces and this activity accounts for the presence of many of the 20th century bullets. The abandoned facilities continued to be used by visiting warships to training and exercise the ships crew and their portable large calibre field guns. It is clear that much target practice took place for spent bullet casings and live bullets were by far the artefacts most represented. Interestingly, a 6” diameter shell from an early prototype rifled barrel, muzzle loaded cannon was also recovered.

As expected, in the Victorian and Napoleonic layers, significant quantities of artefacts representative of the repair or sailing ships were uncovered. Large sheets of copper once used to cover the bottom of the ships, hundreds of copper and bronze nails, most bearing the military broad-arrow symbol, glass prisms for lighting the lower decks, clamps, iron bars, wooden sheaves, iron rings and straps, were among the sample. Many items, from the glass deck lenses, to scrapers, had the broad arrow, known to the seamen of the day as “the devils claw” clearly marked on the surface. It was a symbol of crown ownership, and these items were not for public use.

Personal items include, buckles, uniform buttons (including 1 US naval), bayonets, a butt plate for a flintlock pistol, a brass mortar for preparing medicine, a lead dice, marked drinking glasses, bowls and plates, and an assortment of earthenware cups and bowls, medicine and perfume bottles, wine and beer bottles were recovered. Marked regimental buttons include the Royal Marines, Royal Artillery, and various West India Regiments, among others.

Over one thousand artefacts from the recovered archaeological sample were kept. Their removal from the sea and low oxygen mud layers demanded immediate

conservation. This was a major problem for we do not have a conservationist on Antigua. Assistance was given in the form of information and advice from numerous individuals and organisations. Of particular mention is, Barbara Hamann, Senior Conservator, Carnegie Museum of Natural History Pittsburgh. With the recovery of many well-preserved artefacts, we have become fully aware of the need to establish a conservation lab prior to the implementation of any further underwater archaeological research projects.

SALVAGE ARCHAEOLOGY

On April 4, 2003, the reconstruction phase of the project officially began. As it was no longer safe or possible to continue with the traditional methods of archaeological recovery, our focus switched to a salvage and documentation operation, photographing and recovering artefacts mechanically recovered from the wall and dredged mud. As expected there were many surprises, such as 12 iron-tipped wooden-piles. These piles were 12 inches by 14 inches in width (31 cm x 36 cm), tarred then wrapped in copper sheets. They were driven deep into the mud and this ensured their preservation. In an area near to the pay office, a complete section of the original wooden seawall, over 12 feet (3.6 meters) in height was exposed, completely intact and in perfect condition. This wooden wall protruded from the seabed, rising to within 2.0’ feet or 60 cm from the surface. It had been buried during the construction of the stone seawall in the early 1820s. This section was documented and photographed prior to being again covered within the modern seawall. An additional two thousand artefacts were collected

and catalogued from the dredged spoils. Tons of dredged material that could not be processed at the time was removed to a storage site near the mangroves of Cobb's Cross. The plan is to eventually screen and process this material; however, with the subsequent drying of the mud, many perishable artefacts will be lost.

On the second day of construction, an Admiralty long-shank anchor of the size carried on a frigate of 40 or more guns was uncovered on land. It had been buried one meter (3 ft) beneath the surface with its head or ring end flush with the outer face of the wall. The protruding ring was likely use as a warping point for maneuvering the ships around the harbour and onto the docks. Conservation of this anchor (16 feet or 5 meters in length) will be problematic. Ultimately 7 more anchors of similar size were recovered; buried about 60 feet apart along the seawall. There were observable differences between the anchors indicating they were from different time periods. One of the capstan blocks had to be dismantled as well in order to facilitate the new PVC service conduits. The stones were numbered the block photographed and measured, dismantled then rebuilt to exact original specifications. This work exposed the two large anchors built within the blocks and provided an additional opportunity to learn more about the function of the blocks and the careening process.



Searching the dredged mud for artefacts.



CONSTRUCTION OF THE SEAWALL: *Georgian Engineering*

An important component of the seawall archaeological project was monitoring and documenting the old wall with specific focus on “how it was built”. It was also the task of the archaeologists to document the new construction. This policy is in keeping with the mandate of the National Parks for the Dockyard is considered a continuing cultural landscape. As it is a major heritage and archaeological site, it is important that all restoration and works be monitored and documented.

With the removal of the stones that comprised the wharf presented the opportunity to gain insights into the engineering methods of the Georgian Period. The size of the stones blocks used varied, but in general, the largest blocks were placed on the seabed. These were as long as 6 feet (2 metres), 5 feet (1.5metres) wide and 3 feet (1 metre) thick. Some bore Roman numerals that likely identified their position for placement on the wall and narrow slots cut into the sides to facilitate lifting with a “Lewis”; a nineteenth century lifting devise. The capping stones at sea level were connected with iron pegs and straps that were secured with molten lead.

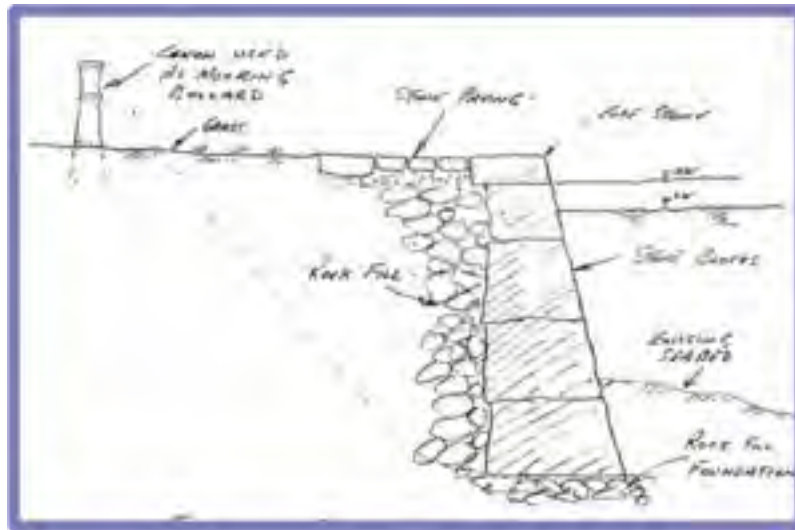
The blocks of stones were placed with staggered or over-lapping joints. The front surface sloped inwards from the bottom to the top. Behind the tightly fitted stone blocks, rubble, gravel and lime mortar was deposited to support the wall. The top capping stones were anchored or pinned to the lower course with square iron pegs, secured with molten lead that was poured into the cut channels in the rock at low tide. The second course was strapped together with broad flat iron

straps; essentially stapled together. The inset ends were also secured with molten lead.

As previously mentioned, the stones were quarried at the entrance to the dockyard, near to the Engineers Building; today the Admiral’s Inn Hotel. The strength of the wall depended on their mass and flat surfaces to remain in position. The front surface was slightly sloped backwards from the bottom to the top.

In contrast, the modern wall, up to the low water line was made of specially designed massive blocks of concrete. They interlock with each other on all contact surfaces, top, bottom and sides.

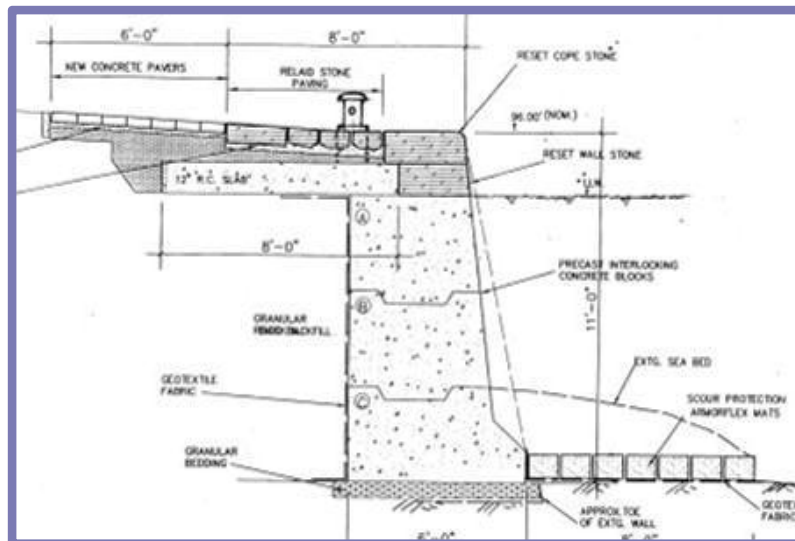
The joints are “seamless”, and as they interlock, fine particles of soil behind the wall will not be washed out by wave or propeller wash. A woven fabric barrier mesh was placed behind the wall to further prevent the loss of soils and support fill behind and under the wall. The seabed in front of the wall was then covered with concrete slabs connected as an interlocking scouring mat. This extends out from the wall about 10 feet (three meters) and is intended to control prop-wash as large modern vessels manoeuvre onto and off of the wall. This is important for it now restricts further archaeological research directly in front of the wall and will act as a time barrier for future archaeological research. From the low water line, the original stones from the old wall were put back in place. Conduits for new services, such as electricity, water, telephone, television were laid behind the wall and new bollards placed. The emblem of George Rex III was placed on the top of these new bollards. They are not original.



Original wall



Section of old seawall



New wall system.



Collapsed section of old wall near Officers Quarters.



Lifting the largest stones was at times challenging.



Concrete blocks for the base of new wall.



This tool known as a Lewis fitted into the dovetail cut in the rock. It could then be lifted.



Iron straps and pins set into the stones with lead.



Removal of the old stone seawall.



Construction process:

All of the capping stones were numbered, lifted and placed in a secure area. The objective was to return them to the exact position from where they were removed. Sheet piling was then placed behind the wall as a temporary support system while the stones were removed and the new wall built. Lifting these large stones was a massive undertaking, and at times the excavators barely managed the weight. Considering that these large blocks were cut, transported to site and placed underwater with remarkable precision and rudimentary tools, by enslaved workers almost 200 years ago is a testament to their skills, ingenuity and abilities as craftsmen. For the underwater work, they had no basic equipment such as diving masks, hooker rigs, diving tanks or protective wet suits



Placing the interlocking blocks.

The new wall emerges.



Uncovering the Original Wooden Walls.

As previously mentioned, there were many surprises, such as 12 iron-tipped wooden-piles. These piles were 12” by 14” in width, tarred then wrapped in copper sheets. They were driven deep into the mud and this ensured their preservation. In an area near to the pay office, a complete section of the original wooden seawall, over twelve feet (3.6 meters) in height was exposed, completely intact and in perfect condition. This wooden wall protruded from the seabed, rising to within 2.0’ feet or 60 cm from the surface. It had been buried during the construction of the stone seawall during the 1820s. It was documented and photographed prior to being reburied within the modern seawall.



A wooden pile emerges, then the copper clad wall.



Copper sheeting on tarred wood piles over 200 years old.



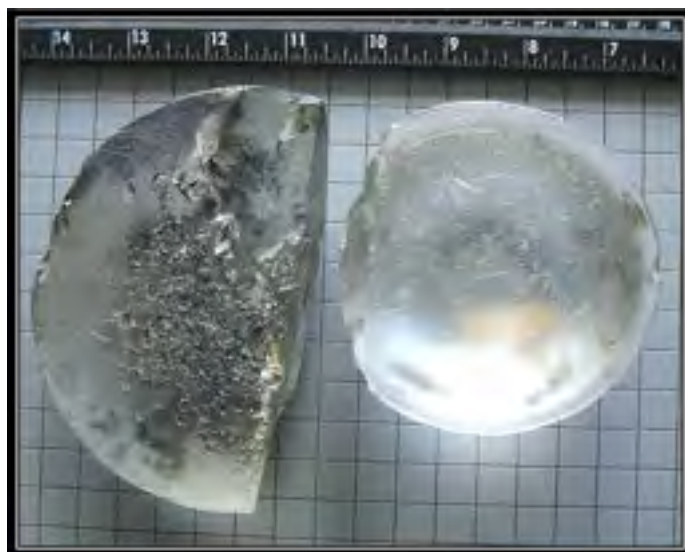
Two Admiralty Long Shank Anchors from seawall.

Clay Tobacco Smoking Pipes.

A number of clay pipes were recovered representing the chronological development of these pipes. Some of the more exotic specimens represented below include:

- *Pipe bowl with image of ship under sail*
- *A pear on a branch with leaf*
- *A woman riding a sea-serpent*





Glass lens that were placed in the deck to permit light into the ships. These “bulls-eyes” have the Broad Arrow mark of the British military.



A more modern version found nearby underwater.

Metal Artefacts: Iron.

The most problematic group of artefacts recovered were iron objects. Iron in particular requires immediate and long-term conservation beyond the scope of this project. Most specimen were unrecognisable pieces of scrap but a few interesting specimen were kept. These were placed in water, photographed and either returned to the sea or kept in an attempt to stabilise them. They include:

- ***Padlocks***
- ***Hammers***
- ***Bayonets***
- ***Iron spikes***
- ***Caulking chisel***
- ***Grape shot***
- ***Cannon balls***



An iron padlock.

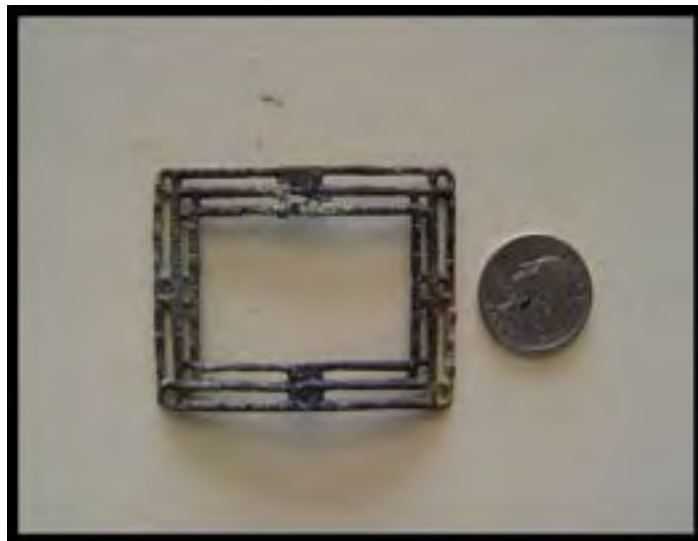


Iron tools and weapons under conservation.

Other metal objects recovered.



Ornate Buckles



Iron hinge pin



Iron handle



Iron ring

Weapons and Armament.

A large number of projectiles and implements of war were recovered. Most represented were brass cartridges from modern bullets (.303cal), particularly blanks that are used during the annual celebrations and events in the dockyard. Today the Police collect the used cartridges for recycling, but this was not always the case and many .303 cal. cartridges were recovered. The bullets recovered represented an interesting assemblage and chronology of the development of the rifle. At the lower levels, muskets balls were recovered, along with cannon balls, bar and grape shot, typical of 18th and early 19th century warfare. By the 1820s, the rifled barrel was no longer an exotic distrusted devise but an accomplished weapon. The early rifled barrels used a large slug that was rammed down the barrel and fired with black powder. It was essentially the same technology as a musket except for the spiral scoring or rifling of the barrel. Rifling improved accuracy and range considerably in comparison the long-standing smooth bore “Brown Bess” musket. Percussion caps replaced flint and muzzle-loaders gave way to breech-loaders. Black powder continued to be used in the first cartridges. Martini Henry rifles used a three-piece brass metal cartridge. The lead slug fitted into a thin, rolled cylinder that fitted into a percussion cap. It was a soft, delicate bullet that was easily damaged. Its unsealed seam expanded and jammed frequently on firing. Smokeless powder cartridges eventually replaced these clumsy versions and the solid brass cartridge, rimmed and eventually without rims soon appeared. All of these cartridges, bullets and two bayonets were recovered from the mud in English Harbour.



Lead musket ball.



Lead slug for early rifle.



Early 3-piece cartridges.

Large Bore Armament and Projectiles

Cannons and cannon balls followed a similar development as muskets, in respects to the rifling of the barrels and the development of the shell casings. The first rifled cannons were also muzzle loaded but the barrels were scored with six deep grooves and the projectile had six nubs protruding outwards along the side in a spiral formation. This caused the projectile or shell to spin and improved distance and accuracy. In contrast, cannon balls did not fit tightly in the barrel and there was little control where it fell. Many field commanders who preferred the unpredictability and random uncertainty of cannon balls initially rejected the accuracy and predictability of rifled cannons. However, with the improvements in breach loaded heavy artillery, the speed of loading and ability to hit targets many miles away, cannon balls quickly became obsolete.

Naval cannon fired a variety of shot that were designed for specific purposes. In combat, the objective was often to capture enemy ships as prizes so chain shot and bar shot were fired at the rigging and masts to disable the opponents. To inflict casualties on the crew and to damage the enemy ships, solid iron balls were fired at the hull. This led to massive showers of wooden splinters, dismantled cannons and made large holes in the vessels. To clear the decks of combatants prior to boarding, the deck mounted carronades fired grape shot, canister shot (bags of musket balls) or stuffed the barrels with nails, bottles, chain and assorted debris. Interestingly, most of the armaments and bullets were recovered near to the Pay Office Building during the archaeology phase of the project.



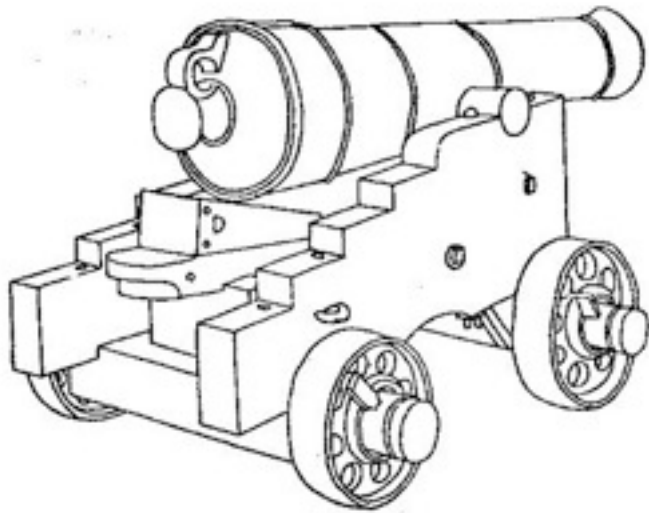
A type of bar shot.



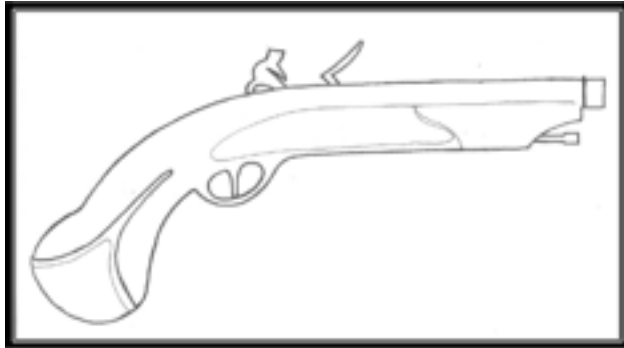
Wide variety of cannon balls and chain shot.



Exhibition day of seawall artifacts.



Early naval shell for rifled barrel cannons.



Butt plate from a pistol.



Trigger guard from a sea service pistol.



An Ornate Hilt or Hand Guard from a Sword.



Example of modern hand guard.

BOTTLES.

Hundreds of fragments of broken bottles, from all time periods were recovered. Many bottles were also recovered by the construction crew and workers but sadly not given to the museum. Thirty complete bottles dating to 18th and 19th centuries were recorded. Due to a lack of adequate conservation many of the oldest have since been lost. Eighteenth century bottles were blown glass and as a result many had air bubbles. These were considerably more fragile than the machine moulded bottles of the 19th and 20th centuries. These earlier varieties were commonly filled with hard sand and concretions that contributed to the breakdown of the glass. Several of these bottles were still corked. The most common of the “older” bottles were the late 19th century three-piece mould.

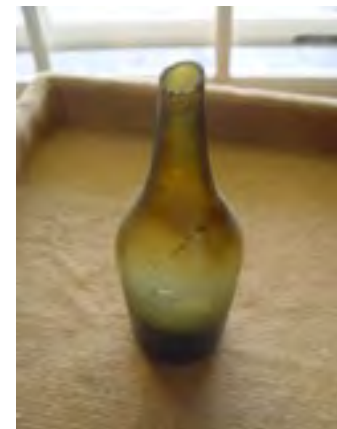
Also recovered were early twentieth century soda water bottles with characteristically pointed and rounded ends and a small number of medicinal vials. Of particular interest were soft drink bottles from the mid 20th century (1960s) including Juc-y, Bryson’s, Coca-Cola short bottles and a rare early 1960s Canada Dry bottle. These recent bottles were of interest to “middle-aged” Antiguans’ who visited the project as many remembered the once popular drinks of their childhood. One early 19th century French wine bottle was recovered.



Soft drink bottles of the 1950s and 60s.



Soda water and rum bottles.



French wine bottle.



A still corked wine bottle encrusted with marine growth.



Soda water bottle.



Bottle seal

"GR" George Rex with broad arrow.



"GR" George Rex

CERAMICS

A large number of shards from a wide variety of ceramics were recovered. Of this sample, tableware including plates and bowls were the most common. The areas of heaviest concentration of shards were in front of the Copper and Lumber Store building, and the Pay Office. Many of the shards in the area of the Pay Office likely originated from the Senior Officers residence that was located near the present day sundial. This structure was demolished prior to the construction of the Officers Quarters.

The ceramics are significant in volume, styles and will be presented in depth in a separate report. However, the most common types included:

- Annularware: Banded, marbled and others
- Transferware
- Blue and White creamware and Chinese porcelains
- Earthenware, brown and yellow glaze
- Delft tin glazed
- Saltglaze stoneware, various patterns
- Shell edge pearlware, blue and green edges
- Flown Blue
- Westerwald stoneware
- Ink jars, boot blacking jars and ointment pots of brown glazed earthen and stoneware

Interesting specimens include a flat perforated platter and a Blue and White transferware jug. Mess numbers and the

motto for the Order of the Garter “*Honi soit qui mal y pense*” (Shame on him who thinks evil of it) were observed on a few. The majority of the ceramics and porcelains recovered are similar to early 19th century British military material culture excavated and reported at barracks and fortifications around English Harbour (Cripps 2003). Several *Banded Annularware* bowls had been incised on the bottom rim with notches that likely marked ownership. These were recovered near to the ramp between the Copper and Lumber Store Building and the Officers Quarters.



Notches incised on the lower rim of bowls: identification marks of personal ownership.



Incising or notching the base rings of bowls: ownership mark.



MESS numbers, manufacturers marks and emblems noted above from ceramics excavated and reported by the Cambridge team. Similar specimens were recovered in the seawall project.



Regimental mess china, were recovered in large numbers at the seawall, near to the Officers Quarters.



Gaming piece made from broken ceramic shard.



Flat platter with numerous holes and nubs underneath.



Ceramic jug: Blue and white transferware.

EARTHENWARE AND STONEWARE VESSELS.



Inkwell.



Assorted earthenware and stoneware pots / containers.



Mustard Pot

Height: 12 cm.

Tin glazed. ca. 1850

Inscribed: "Moutarde Aromatiques Perf^{mée}

Par PIGEAU B. ^{te}

Du ROI, R. St Denis

Cour Batave, Paris"



A small unglazed clay bowl.



GLASS:

Stemmed wine glass and tumblers with initials incised on base



MR, GR, WR incising

Other Glass Items of Interest.



Jar lid.



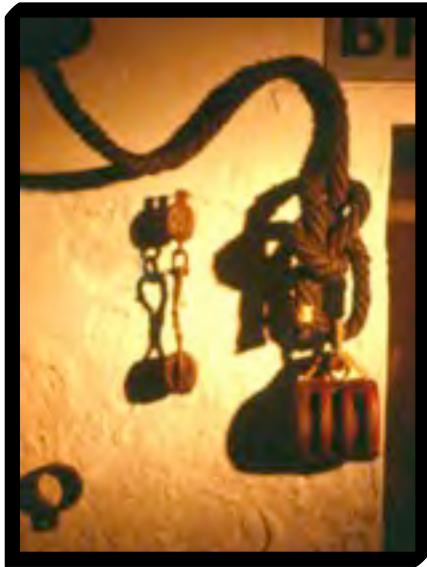
Glass ampules or medicine vials: strange and interesting artifacts

BLOCKS:

Central wheel or sheaves from pulleys from naval vessels. Note the "Broad Arrow", makers initials and date incised on it. On a 74 gun war ship there was about 1,400 blocks/pulleys. These sheaves were made from "Lignum Vitae" wood and survived remarkably well underwater.



Block with pin.



Assorted parts.



Assemblage of sheaves and pins from underwater in English Harbour. The three point versions are older than the four pin variety.

The Seawall Today: an active marina.



Acknowledgements

The Seawall Recovery Project was the largest underwater archaeological project undertaken on Antigua. It relied on a combination of academics and volunteers and advice from experts in a variety of professions. All cannot be listed in this document, but among them are:

Archaeologists, Volunteers and Contributors

- Beau Cripps, University of Calgary
- Daren Thompson, University of Calgary
- David Murphy, Trent University
- Nigel Bardoe, Trent University
- Kyle Bardoe, Conestoga College
- Desmond Nicholson, Dockyard Museum
- Karen McBride, U.S. Peace Corps
- Martha Watkins Gilkes, (underwater photographer)
- Gary Storm, Detector Pro (underwater recovery)
- Dave Chapman, CIDA volunteer diver from Ottawa
- Curtis Fontaine (diver and logistics)
- Emmanuel Peters (Dockyard Museum) logistics
- Jerry Bardoe, Chippy Woodworking- (the airlift)
- Andrew Robinson, Woodstock Boat Builders for providing the compressor
- National Parks Authority

Project divers who recovered many of the best artifacts

- Maurice Belgrave
- Kwamie Hood
- Jamarie Newsome

Photographs

Most of the photographs in this volume are the work of the author. However, many were donated to the Dockyard Museum during the course of the project, some of which are included in this volume. These photographers include David Milner, Karen McBride, Martha Watkins Gilkes, Desmond Nicholson and David Murphy.

Illustrations

The line drawings and silhouettes throughout are the work of Desmond V. Nicholson. Although he was quite ill at the time of the seawall field archaeology, Desmond contributed significantly to the archaeology by assisting with the research, mapping and cataloguing. It was his last contribution to archaeology on Antigua. The design of this book and the use of his drawings is a reflection of his first book on the Nelson's Dockyard, and a tribute to him.

Builders of the 2003 Seawall

George Looby, Engineer
Jack Johnson, Contractor
David Milner, Engineer
Serge Cheremeteff, Underwater engineering
Divers: Maurice Belgrave and Lindsey Hendrix
Earl Gardner: Electric engineering
Ira Berriero: “
Marius Smith: National Parks construction manager
Ann Marie Martin: Parks Commissioner

Special thanks to the archaeology and museum crew.



Karen McBride and David Murphy



Archaeology and Heritage Manager

The construction crew



ANNEX 4

THE FORTIFICATIONS AND RELATED MILITARY SITES: AN ARCHAEOLOGICAL LANDSCAPE



The Fortifications and Related Military Sites: An Archaeological Landscape

With the end of hostilities after the American War of Independence and the loss of the North American colony, Britain was in a precarious and difficult position. She had stood alone in a bitter war against her European rivals and now her former colony of America was a new and hostile country with significant military and financial potential. The British colonies in the West Indies depended heavily on trade with North America and the disruption of trade for them was a major financial disaster. American privateers quickly added to the threat against British merchant ships. At the same time, the numbers of French warships and privateers in the Eastern Caribbean quickly increased, emboldened since the recapture of Guadeloupe and Martinique. The British Navy was obligated to not only protect British territory, but also trade, by enforcing the Navigation Act that restricted trade and shipping solely to British ships. Non-British ships were officially barred from trading with the British colonies of the Eastern Caribbean.

This placed enormous pressure on the British Navy and financial constraints on the British and colonial governments. The top naval priority in the Eastern Caribbean following the American Revolution was to protect its two remaining colonies, Antigua and Barbados. At this moment in time, the Naval Dockyard at Antigua became the most important overseas dockyard for Great Britain, as it was the only facility in the Eastern Caribbean where ships could be careened, sheltered and refitted. The dockyard at Bermuda would now slowly rise to the occasion in the early 19th century as a naval station close to the American mainland, but in the late 18th century, the Antigua Dockyard was the only option.

Ironically, the financial burden created by France's financial and military support of the American Revolution soon led to unbearable taxation and subsequently revolution, the disposal of the monarchy, and the rise of the Napoleonic Period. Britain quickly realized that war with France was eminent and began to support efforts by the Antigua based military governors to reinforce and improve the garrisons and naval facilities on Antigua. The Antigua Naval dockyard was now of enormous strategic value that had to be protected at all costs.

Today the hillsides surrounding the dockyard and far beyond are littered with the ruins of the barracks, cisterns, gun platforms and middens or garbage dumps filled with the refuse of daily life of the time. With a few exceptions, they are now archaeological sites as the tropical vegetation, hurricanes and earthquakes have reduced the once elegant Georgian stone structures to rubble.

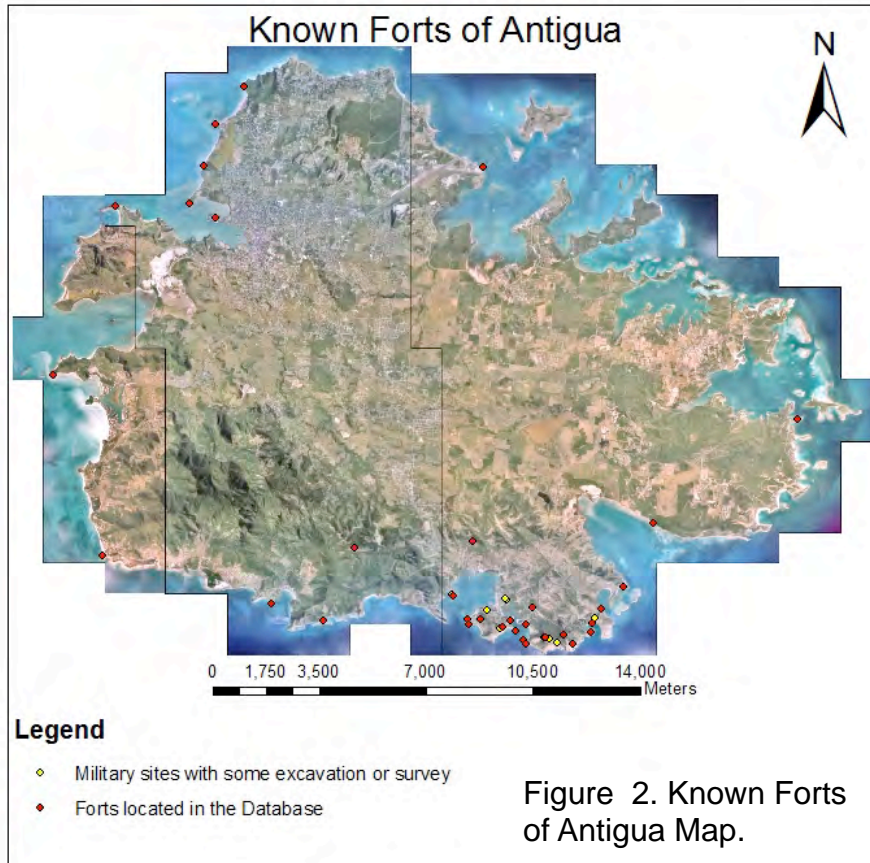


Figure 3. The officers Quarters at Blockhouse ca. 1961.

Fortifications and Supporting Structures

An important function of Shirley Height's Antigua was as a platform for launching offensive operations to neighbouring islands. To this end, large barracks were built to accommodate Army Regiments awaiting deployment. Many of these were built of stone as were nearby houses and cabins for married soldiers, officers and managing personnel, such as the quartermasters and doctors, but many were built of wood set onto stone foundations. All had spacious covered verandahs and supporting structures nearby, such as latrines, cook houses, and storerooms.

These structures, now mostly in ruin were organized into regimental clusters that depended on the specific functions of the "special" regiments, for example, the engineers, and the artillery. On the eastern ridge, these include,

- The Blockhouse defence platform and support facilities
- The Lookout defence Platform and facilities
- The Artillery Officers Quarters and support facilities
- The Engineers Quarters
- The Canteen
- The Hospital
- Structures on the north side of the Ridge
- Dow's Hill Fort
- The Guard Station and other Structures on south side of the Ridge
- The Quartermaster's house
- The Dam in Jones Valley
- The Cemeteries
- The Ordnance buildings and magazines on Ordnance Bay

On the western ridge or Middle Ground was,

- Middle Ground Barracks
- Keene's or One-Gun Battery

At the harbour entrance was Ft. Berkeley to the west and Ft. Charlotte to the east. Figure 1 is a sketch showing the location of most of the structures that were constructed on the Ridge at Shirley heights.

Current Condition and Restoration

Blockhouse

On the Blockhouse hill was a small, fortified enclosure set on the edge of the southeastern cliffs. Within the stonewall that outlines the compound is a square powder magazine from which the site gets its name. There is also a sizeable cistern and catchment slope, and gun platforms. Beneath the surface of this confined area, stone lined channels were placed to carry surface rainwater to the cistern. Restoration work to stabilize stonewalls and the water catchment was carried out at the Blockhouse in the early 1980s on the establishment of the National Park. More work was done in 2010 to restore and stabilize the Blockhouse powder magazine and gun platforms. Worn stones were replaced and a new lime wash was placed on the interior wall of the magazine. This compound overlooks the Atlantic Ocean and was an important post for observing approaching ships and threats (mostly privateers) to the dockyard from the French island Guadeloupe 40 miles to the southeast. In addition to the large caliber 32 pounder cannons, Blockhouse like all military stations on Antigua were signalling stations and messages could be relayed quickly along the chain of forts around and across the island. The site is an enclosed platform about 446 feet in elevation with its guns situated facing the sea and Atlantic to the east.



Figure 4. Ariel View of the Powder Magazine at Block House

The most prominent building within the compound walls is the stone bombproof powder-barrel magazine that was capable of holding 500 barrels of gunpowder. It was built in 1789, with walls over three feet in thickness. The powder magazine is a low building that was intentionally set below the skyline. On its west side, there is a small, attached shifting-room where the barrels were opened to the sunlight to evaporate moisture. The main room is vented through a number of zigzag slits in the wall. This building is in excellent condition as it has been recently restored and has been well maintained.



Figure 5. Interior of Powder Magazine



Figure 6. Water collection Blockhouse.



Figure 7. Powder Magazine and Shifting room at Blockhouse

Blockhouse Barracks and Domestic Structures

Outside of the enclosure, nearby to the west are the associated barracks, kitchens, canteens, latrines and guardhouses. All have deteriorated significantly and today present piles of rubble and stone foundations. The Blockhouse barracks were large and spacious with stone colonnade verandahs and high ceilings. Archaeological research led by Dr. Murphy of the Dockyard Museum and graduate students from the University of Calgary were conducted to map the structures at Blockhouse in the summer's of 2007 and 2008. This research also focused on the substantial and artifact-rich middens or refuse dumps located on the north and south sides of the ridge and structures.



Figure 8. Artifacts from the Block House Midden.



Figure 9. Block House Officers Quarters



Figure 10. Graffiti: "1st W I R" (West India Regiments) on Corner Block

Lookout Point



Figure 11. View from the Lookout

The second important compound that has been extensively restored is the Lookout Point gun platform and guardhouse. The cisterns, water catchment platform, gun platforms and Guardhouse were restored in the early 1980s. The current use of the building as a restaurant and social centre for heritage tourism events has been very successful. It is today a popular venue and attraction for tourists and nationals as it commands a magnificent view of the southern coastline of Antigua, the National Park and the historical Naval Dockyards. The view of the ancient eroded landscape, coastal hills and bays set on the junction where the Caribbean sea and Atlantic Ocean merges is without doubt one of the most scenic vistas in the Caribbean and elsewhere and is an iconic image of Antigua.



Figure 12. The Dockyard.



Figure 13. The Lookout Guard House.



Figure 14. Sunday evening music and party night at the Lookout.

As previously mentioned, the historical function of the Lookout was as a point for observing ships approaching from the south and west and for alerting the Dockyard and other fortifications on the island in the event of a threat. It overlooks the entrance of English Harbour and Forts Berkeley and Charlotte. Funding for the initial restoration was provided by a grant from CIDA (Canadian International Development Agency) in 1983 and it continues to be maintained by the Parks Authority and the current restaurateurs. Behind the gun platforms and to the east of the cistern and catchment platform at Lookout is the highest point on the ridge at 487 ft in elevation. This was the main signal station that relayed signals of approaching ships to the rest of the island. Governor Shirley wrote,

“Their signals for communicating notice of an enemy are so judiciously arranged that the whole island is sufficiently alarmed in less than a quarter of an hour, and assistance may be sent to the part of it which may be attacked in a very short time.” (Gov. Shirley, August 27th, 1781)

Even the eminent arrival of mail ships was signaled to the island as it approached from across the Atlantic Ocean”.



Figure 15. Gun Platform at the Lookout

The Lookout Complex

Working our way east from the Lookout, are two distinct historical areas. On the north side of the road, are the remains of the soldiers barracks, a cistern, and the Jones Valley cemetery. These have been surveyed and archaeological research carried out to gain insights into the use of the building and the lifeways of the soldiers, their material culture and subsistence in the tropical environment (Cripps 2003). Hurricane Georges severely damaged the barracks in 1998 and its stone colonnade was destroyed, but even in this damaged condition, it remains the most complete of the ruined barrack structures on the ridge today.



Figure 16. Water Catchment at Lookout Complex.



Figure 17. Soldiers barracks at the Lookout.

The second area of occupation, on the south side of the road is the enclosed Cemetery and the structural remains of the Officers quarters and associated out buildings. These are mainly footprints with a few walls still visible. Very little is know of this area as it is in dense bush and no archaeology or systematic survey has been done to date.



Figure 18. Footprint for octagonal water tank.



Figure 19. Remnant of Officers Quarters



Figure 20. Gable end wall possibly of Kitchen.

Artillery Officers Compound

The Artillery Barracks, set on the north side of the road, is the first complex encountered when arriving on the Ridge. Along with the barracks, are outer buildings that served as the storage rooms, the commanding officers quarters, hospital, kitchen and cistern. The most prominent of these is the stone barrack that collapsed in Hurricane Hugo in 1989. Unlike the other buildings on the ridge and Naval Dockyard nearby, the barrack was built entirely of cut limestone and brick and was large enough to house 60 men. The spacious verandah colonnade was enclosed with 9 arches. The bricks were imported from England and the stones quarried on the island, but unlike any other building on the ridge, the stones used are not from the immediate vicinity. The Artillery storage building nearby was fully restored, initially as a military museum, but today it is now used as the Dockyard Museum Annex. It is a structure with two rooms, each 20 feet square that are today used for storage and by archaeology students as a base for field research. A UNESCO Participation Program Grant provided the seed funding to establish this building as a research station in 2001 and the archaeological department of the National Parks continues to manage it. The cistern is also in a fairly good state of repair, but the remaining structures are all in ruins.



Figure 21. Research Station at the Artillery Complex



Figure 22. Original stone arch with added on stone wall.

The large artillery officers barracks was used as an insane asylum in the 1920s. At this time, minor modifications were made to the building, including the placement of bars to some of the windows, and additional walls to secure the area. Differences in the quality and style of the stone masonry can be observed, marking the different periods and use of the building. The National Parks Heritage Department proposes to rebuild this structure in the near future, starting with the restoration of the western courtyard to create an additional storeroom and a conservation lab / museum annex. It is hoped that this work will be completed in the summer of 2016.



Figure 23. Stone wall detail, Artillery Complex.



Figure 24. Artillery Officers barracks.

The Engineer's Compound

The Engineer's Compound at one time had a number of structures including barracks, guard station, office and support buildings such as a kitchen, workshops and storerooms. It was situated opposite the Artillery Commanding Officers residence on the south side of the road along the Ridge. Little is left of this facility except for a few small stone walls deep into the forest on the southern cliff overlooking Jones Valley, and the remains of a catchment pond next to the main road.



Figure 25. Catchment pond with brick in flow channel.

The Hospital and Canteen

Both of these buildings are completely in ruin today. The hospital (1793) was placed on the south point and was the southernmost building on Antigua. It was built on a cliff with quarters nearby for the medical staff, services and storage. It is conveniently in close proximity to the cemetery that is located on the western slope of the same hill.

The nearby canteen and its annex buildings were support structures of the hospital complex. They are situated close to each other and the cemeteries. The canteen was a single story stone cabin with red pottery floor tile. Outside of the east window of the canteen is a substantial midden.

The hospital was in its time a two story stone building, closest to the cliff. Its latrine empties over the cliffs edge. Archaeological research at this site (including the canteen) in 1997 uncovered hundreds of broken clay pipe bowls and stem fragments, glass shards from drinking tumblers, wine and rum bottles, and also large quantities of fragments of teacups and saucers. But interestingly, little evidence of hospital related objects were recovered. The material culture signifies an area of rest, relaxation and social activities where smoking and drinking of tea were major pastimes.



Figure 26. The Privy.



Figure 27. The Canteen.

Dow's Hill Fort and Interpretation Center

Originally built in 1790 with 5 cannons, it has extensive bastion walls on the north side which are in excellent condition. It encompasses a large area, most of which is now covered in thick bush and is unused. By the early 19th century, a spacious residence had been built in the fort as the country home of the Governor. The building was destroyed in the great earthquake of 1843. Today the stabilized ruins, are used as a scenic viewing platform. It is adjacent to the Park's multi-media Interpretation Centre which was built in the late 1980's. This facility also houses a gift shop, washrooms and an events venue. The uncleared area of this fort has tremendous potential for future development.



Figure 28. Interoperation Center



Figure 29. Stabilized ruins of the Governors house.



Figure 30. Stabilized ruins of Dow's Hill Governor's Residence.



Figure 31. Detail, west wall Dow's Hill Bastion, in good repair.



Figure 32. North wall Dow's Hill Bastion also in good repair.

Structures on the North side of the Ridge

There are a series of structures in various states of decay, on the north side of the main road along the Ridge further to the east of the Artillery Complex. No serious mapping or archaeological investigation has been done on these areas, but a variety of structures have been observed on historical maps of 19th century. Structures are listed as follows from east to west: 1). Field Officers Quarters; 2). Assistant Quartermaster's Quarters; 3). Senior Field Officers Quarters; 4). Quartermasters General Store. This area offers huge potential for future archaeological investigations.



Figure 33. Ruins on north side of the Ridge.



Figure 35. More Ruins!



Figure 34. Ruins on north side of Ridge.



Figure 36. Enclosing wall, possibly of General Stores area.



Figure 37. Exterior wall of ruined structure on north side of the Ridge.

The Guard Station and Other Structures

The Guard Station was located roughly half way between the Artillery complex and the Block House complex on the south side of the main Ridge road, where three, and perhaps a fourth "structure" have been identified. Very little remains of any of these structures other than footprints of the foundations, some steps and the base and bottom of a cast iron water tank. This area has had no archaeological investigations or mapping done at this point in time; another area for future research!



Figure 38. Remnants of Guard Station.



Figure 39. Base and bottom of cast iron water tank.

The Jones Valley Dam

The large stone end wall that once created an extensive dam remains in place and is still in fairly good condition. However, the western wall that would have taken the most pressure has collapsed. The Jones Valley dam now forms part of a popular historical / nature trail.



Figure 40. End wall of dam at Jones Valley.



Figure 41.



Figure 42. On the Jones Valley Trail.



Figure 43. Catchment and Cistern at the Lookout.



Figure 44. Cistern at the Artillery Complex.



Figure 45. Cistern at Soldiers Barracks at the Lookout.

Water Management: The Cisterns and Catchment

Antigua is a notoriously dry island. There are no rivers or streams therefore all water for human and animal use must be collected from rainfall in ponds and cisterns. Along the ridge of Shirley Height's are a variety of cisterns, catchments and ponds. All surface water was channeled to stone cisterns built within the various compounds. Rainwater from the barracks and large buildings were carried through copper lined wood ducts to the cisterns for human consumption. Along the waterway, sediment pits were placed to filter out grit and dirt. Ponds and catchments were built in strategic areas to collect water along the ridge, but the largest by far was the dam at Jones Valley. Jones Valley is a narrow valley between two semi-circular, steep hills that make up the Ridge; it is a substantial catchment area that narrows at the lower elevation which is ideal for creating a dam. At the narrowest point in this steep valley the stone dam wall was built; the first of its kind known on Antigua. It is still unclear what the water capacity for this large containment area would have been, but it would have been significant.

Ironically, the life saving fresh water cisterns were the breeding ground for the mosquitoes that carried malaria, yellow fever and dengue that decimated the soldiers, sending nearly half of every regiment to an early grave.



Figure 46. Ornate cistern front next to the Officers Quarters at Blockhouse



Figure 47. Monument to the 54th Regiment at the Lookout Cemetery.

The Cemeteries

There are two cemeteries on the Ridge at Shirley Height's. The best known is on the western slope near to the Lookout Barracks. A number of tombs and gravestones remain to the memory of the tragic events that occurred, and the significant loss of life in service of King and Country during the eighteenth and 19th centuries. Thousands of soldiers, sailors, administrators, officers and enslaved Africans were brought to Antigua and other islands in the Caribbean and placed in a theatre of endless epidemics, warfare and other hardships. A large obelisk stands in memory of the 54th West Norfolk Regiment that was virtually wiped out during their ill-fated tour of duty from 1848-51 in the Eastern Caribbean. Another significant tomb is dedicated to Harriet the wife of Sgt. Major John Hipkin who died from the withering effects of the climate and dysentery in 1851.

Another lesser known cemetery is located on the north facing slope of the hillside above Jones Valley. This cemetery is situated closer to the hospital and has more graves and tombstones. It is an area of substantial size that has not yet been mapped or fully documented. It is known to archaeologists and the hikers that venture on the nature trails in the forests of Jones Valley between the Ridge and Shirley Height's. None of these cemeteries have been excavated archaeologically for they are not threatened or likely to be lost to development.



Figure 48. Lookout Cemetery.



Figure 49. Jones Valley Cemetery.



Figure 50. Middle Ground cisterns.



Figure 51. Footprint of Middle Ground Barracks.

Middle Ground

The area of hills directly to the southwest of the naval dockyard is known as the Middle Ground. These hills provide a natural barrier against hurricanes but had to be fortified to prevent enemy forces from landing on the beaches below and attacking the dockyard from the strategic highland. Along the Middle Ground ridge two gun platforms were built. The first, One-Gun or Keene's Battery, and the second, Ft. Cuyler. The residential complex for the regiments stationed along the Middle Ground ridge was positioned between both gun platforms. Of these, only Keene's Battery lies within the boundary of the site, while Ft. Cuyler, which was located to protect Falmouth Harbour, is located nearby within the buffer zone.



The Middle Ground complex comprised three barracks that were built of wood, a small kitchen, store room, and latrine. Water from the roofs of the barracks drained through the courtyard into cisterns located near the low northern perimeter wall.

Figure 53. Keene's Battery gun platform.

Only the stone verandah and foundations of the wooden barracks and storeroom remain today. The site, although disturbed in the past by looters, has rich archaeological potential.



Figure 52. Grinding holes at Middle Ground.

An interesting feature nearby are the polished oval holes in the bedrock. They match another similar feature at the Blockhouse Barracks and are believed to have been used by the enslaved Africans in service of the military as grinding holes for the processing of grains using traditional West African methods. This is a feature common to the Sukur region of northern Nigeria.



Figure 54. Fort Berkerley.

Fort Berkeley

Fort Berkeley was built on the peninsula that forms the west side of the entrance to English Harbour. It is a natural protective barrier, and as such was heavily fortified from as early as 1704, twenty one years before the building of the dockyard. In these early years, English Harbour had already become a popular place for naval captains to careen and shelter their ships; an activity that began in the 1670s. The fort was built in phases that reflect the growth of the dockyard but is essentially a frontal defence line of cannon and musketry. The powder magazine is situated low on the landscape and was described as “a bomb proof building dating to 1811, that held 300 barrels of powder”. A cooperage and a powder shifting room are attached to the magazine and a small room for the guards on duty. In the 1780s there were 25 cannons in good order at the fort. A single 24 pdr. cannon that dates to 1805, is the only one left in position. Over the edge of the wall at the entrance to the harbour, an upturned cannon can be seen deeply embedded into the rock. This was used to fasten the end of the chain that extended across the harbour entrance to prevent entry to the harbor at night. Ft. Berkeley was also used as a quarantine station for ships arriving with fever on board.



Figure 55. Gun platform at Fort Berkeley.

Fort Charlotte

Fort Charlotte is located on the eastern side of the entrance to English Harbour, opposite to Ft. Berkeley. It was established around 1745 as a battery with 11 guns to guard the entry to English Harbour. It was at first called the South East Point Battery, but by 1755, after additional improvements, it was renamed the Horseshoe Battery. In the 1780s expansion of Governor Shirley's defence system, a larger gun platform was built further up the hill so that it could also function as a signal or communication station for harbour entry along with its defence roll. The now significantly larger fort was renamed Fort Charlotte in honour of Queen Charlotte, the King's consort. Very little remains of the lower fort, and the only substantial remains of the upper fort are the walls of the gun platform. Fort Charlotte is used extensively today for the starting and finishing point of the many sailing regattas that take place annually within the area.



Figure 56. Gun platform at Fort Charlotte.

Powder Magazine Ordnance Land

There are two powder magazines on Ordnance bay. The Navy ordnance complex, of which only the Powder Magazine remains, was built in 1807. It held 750 barrels of gunpowder, making it the largest in the harbour. It is in remarkably good condition. An addition to the structure was built on to the east side of the building facing the dockyard by the Nicholson family in the early 1960s, that was used as their home and the office of the first charter yacht business in the Eastern Caribbean. Today this structure has been converted into luxury apartments and is a part of the Admiral's Inn Hotel.



Figure 57. Navy Ordnance Powder Magazine



Figure 58. Adimarals Inn from the Navy Ordnance



Figure 59. Navy Ordnance Powder Magazine

The Army Ordnance complex and powder magazine was built on the opposite side of Ordnance bay, to the east of the naval ordnance. Today the powder magazine, which still has the original pitch floor, is in excellent condition. The cistern is also intact, but the large area to the south which was a store house for the artillery, has been reduced to a stone floor and the bases of some large stone columns.



Figure 60. Powder Magazine, now a private residence.



Figure 62. Pitch floor in Powder Magazine



Figure 61. North end Powder Magazine.



Figure 63. Stone floor and Column bases, remains of storage area.

Archaeology and the Regiments

Archaeological research has identified the various regiments that were stationed on the ridge. Numerous military buttons, regimental insignia, crests and other diagnostic artifacts have been found. These findings were confirmed with regimental records in Great Britain. Documentation of the tombstones also provides confirmation and dates for regimental tours of duty. In addition, documentation of graffiti, and names scratched into personal objects have also been recovered.

Several other personal items that provide useful insights into the daily life and social activities of the soldiers, include gaming pieces such as dice and dominos that were made from lead and bone. The archaeological assemblage of cultural materials include, personal items, metallic parts of military equipment and uniforms, glass, china or porcelain, bottles and tobacco smoking pipes, gun flints and animal bone.

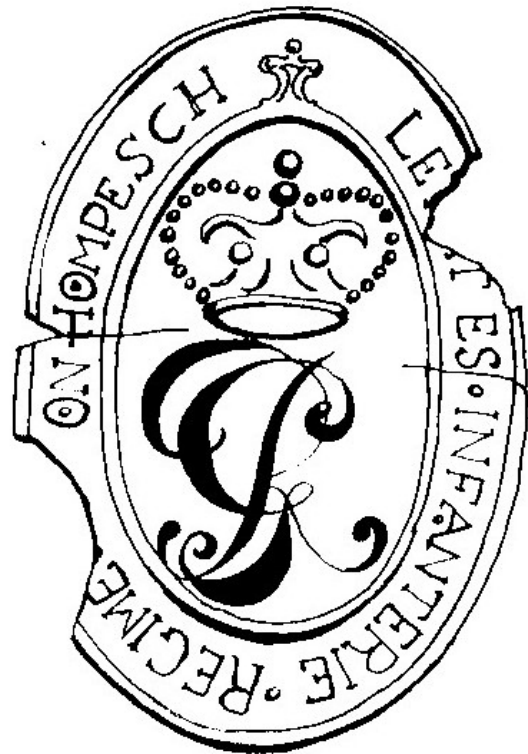


Figure 64. Badge from Shako hat worn by German Hessian mercenary soldiers.



Figure 65.



Figure 68.

Figures 65 - 70 Artifacts excavated at Blockhouse.



Figure 66.



Figure 69.



Figure 67.



Figure 70.

Figure No.	Caption	Date of photo	Photographer /Owner
Cover	Blockhouse Barracks	07-2014	Nicola & Reg Murphy
1	Sketch of the Ridge	1980's	Dockyard Museum Collection
2	Forts of Antigua Map	2012	Dockyard Museum Collection
3	Blockhouse Officers Quarters	ca.1961	Gil Holmes/ Nicola Murphy
4	Arial view Blockhouse	07-2014	Cory & Erin Look
5	Interior Powder Magazine	07-2014	Nicola & Reg Murphy
6	Water collection Blockhouse	01-2014	Nicola & Reg Murphy
7	Blockhouse Powder Magazine	01-2014	Nicola & Reg Murphy
8	Artifacts Blockhouse	06-2008	Nicola & Reg Murphy
9	Blockhouse Officers Quarters	07-2014	Nicola & Reg Murphy
10	Grafiti Officers Quarters	07-2014	Nicola & Reg Murphy
11	View from Lookout	07-2014	Nicola & Reg Murphy
12	Dockyard view Lookout	07-2014	Nicola & Reg Murphy
13	Guard House at Lookout	07-2014	Nicola & Reg Murphy
14	Music/party at Lookout	01-2014	Nicola & Reg Murphy
15	Gun platform Lookout	07-2014	Nicola & Reg Murphy
16	Water Catchment Lookout	07-2014	Nicola & Reg Murphy
17	Lookout Barracks	07-2014	Nicola & Reg Murphy
18	Officers complex Lookout Ruins	07-2014	Nicola & Reg Murphy
19	Officers complex Lookout Ruins	07-2014	Nicola & Reg Murphy
20	Officers complex Lookout Ruins	07-2014	Nicola & Reg Murphy
21	Research cent. Artillery complex	07-2014	Nicola & Reg Murphy
22	Artillery Officers Barracks	07-2014	Nicola & Reg Murphy
23	Artillery Complex Stone wall detail	07-2014	Nicola & Reg Murphy
24	Artillery officers Barracks	07-2014	Nicola & Reg Murphy

Figure No.	Caption	Date of Photo	Photographer / Owner
25	Engineers Complex Pond	07-2014	Nicola & Reg Murphy
26	Privy at Hosp./Canteen Complex	07-2014	Nicola & Reg Murphy
27	Canteen	07-2014	Nicola & Reg Murphy
28	Dow's Hill Interpretation Center	07-2014	Nicola & Reg Murphy
29	Stabilized ruins Dow's Hill Fort	07-2014	Nicola & Reg Murphy
30	" "	07-2014	Nicola & Reg Murphy
31	Dow's Hill Fort North Wall	07-2014	Chris Waters
32	" " West Wall	07-2014	Chris Watters
33	Ruins North side of the Ridge	07-2014	Nicola & Reg Murphy
34	" "	07-2014	Nicola & Reg Murphy
35	" "	07-2014	Nicola & Reg Murphy
36	" "	07-2014	Nicola & Reg Murphy
37	" "	07-2014	Nicola & Reg Murphy
38	Guard Station south of Ridge	07-2014	Nicola & Reg Murphy
39	Tank Base " "	07-2014	Nicola & Reg Murphy
40	End wall of Jones Valley Dam	07-2014	Nicola & Reg Murphy
41	Jones Valley Trail sign	07-2014	Nicola & Reg Murphy
42	On the Jones Valley Trail	07-2014	Nicola & Reg Murphy
43	Water Catchment at Lookout	07-2014	Nicola & Reg Murphy
44	Cistern at the Artillery Complex	07-2014	Nicola & Reg Murphy
45	Cistern at Soldiers barracks	07-2014	Nicola & Reg Murphy
46	Cistern at Blockhouse	07-2014	Nicola & Reg Murphy
47	Monument at Lookout Cemetery	07-2014	Nicola & Reg Murphy
48	Lookout Cemetery	07-2014	Nicola & Reg Murphy
49	Jones Valley Cemetery	07-2014	Nicola & Reg Murphy

Figure No.	Caption	Date of Photo	Photographer / Owner
50	Cistern at Middle Ground	07-2014	Nicola & Reg Murphy
51	Footprint Offic. Quart. Middle Grnd.	07-2014	Nicola & Reg Murphy
52	Grinding Holes Middle Ground	07-2014	Nicola & Reg Murphy
53	Keene's Battery gun platform	07-201	Nicola & Reg Murphy
54	Fort Berkeley	07-2014	Nicola & Reg Murphy
55	Gun Platform at Fort Berkeley	07-2014	Nicola & Reg Murphy
56	Gun Platform at Fort Charlotte	07-2014	Nicola & Reg Murphy
57	Navy Ordnance Powder Magazine	07-2014	Nicola & Reg Murphy
58	Admarils Inn from Navy Ordnance	07-2014	Nicola & Reg Murphy
59	Navy Ordnance Powder Magazine	07-2014	Nicola & Reg Murphy
60	Army Ordnance powder Magazine	07-2014	Nicola & Reg Murphy
61	" " " "	07-2014	Nicola & Reg Murphy
62	" " " " Pitch Floor	07-2014	Nicola & Reg Murphy
63	" " " Complex Stone floor	07-2014	Nicola & Reg Murphy
64	Artifacts excavated at Blockhouse	07-2008	Reg Murphy
65	" "	07-2008	Reg Murphy
66	" "	07-2008	Reg Murphy
67	" "	07-2008	Reg Murphy
68	" "	07-2008	Reg Murphy
69	" "	07-2008	Reg Murphy
70	" "	07-2008	Reg Murphy

Clarence House Restoration Project

English Harbour, Antigua



BACKGROUND

Clarence House Antigua is without a doubt, the finest example of a Georgian Period formal, country residence in the Lesser Antilles. Popular legend holds that stonemasons sent out from England, built Clarence House around 1786 as the intended residence for Prince William Henry the Duke of Clarence who was on active service in the Royal Navy, in Antigua in 1787, on H.M.S. PEGASUS. This early structure was built over to create the house we know today. Clarence House (of today) was built by the Navy Board between 1804 and 1806, as the home of the Commissioner of the Antigua Dockyard and was used in that capacity until the end of the Napoleonic Wars in 1815. In 1816, the naval dockyard no longer had a resident commissioner, and the house became the residence of the senior dockyard supervisors until 1856, when it was leased to the Governor of Antigua, Kerr Baillie Hamilton. Clarence House continued to serve as the country residence and state house of the Governor-Generals of Antigua and Barbuda until its demise in the 1990s hurricanes. Many dignitaries have been entertained at Clarence House, but to Antiguans, the most memorable historical event was that Princess Margaret chose to and spent her honeymoon at Clarence House.

The original structure was built by John Foster; the “Foreman of House Carpenters” at the Dockyard. In 1871, it was severely damaged in a hurricane and was subsequently rebuilt. Major repairs and alterations were again conducted in 1951, by Governor Sir Kenneth

Blackburn in wake of the two hurricanes in 1950. In the 1990s, hurricanes, Luis, Marilyn and Georges devastated the residence and its outer buildings, and today the once elegant architectural masterpiece in a ruinous state. Efforts to stabilize the structure, eradicate termite infestation and dry rot further reduced its condition.

In 1996 Governor-General Sir James Carlisle initiated a major conservation project for restoration of the house. A study was commissioned and a master plan produced by Commonwealth Historic Resources Management Ltd to assist in the fundraising efforts and to serve as a guiding document for the restoration. Commonwealth’s extensive study and master plan is of exceptional quality and detail and most of it will be retained as the master plan for the continued restoration efforts.

Clarence House represents one of the finest Georgian Period Caribbean houses. It is an outstanding example of European “Palladian” architecture within the Caribbean environment. Further to this, its historical context and setting deems it a primary cultural heritage site of significance. It is of major importance to the cultural, historical and architectural heritage of Antigua and Barbuda. In light of this, The Clarence House Trust was formed by “Friends of Clarence House” with the specific object of completing the restoration of the house and to establish a formal garden that will be dedicated to Princess Margaret.



Photo: King William IV of Great Britain.



Photo: Clarence House in the 1980s (*Caribbean Style*)



Photo: Interior of Clarence House (*Caribbean Style*)

Restoration and Re-Use

Rational for Restoration

Clarence House was one of the finest Georgian Period Caribbean houses in the Lesser Antilles and without doubt the premiere Great House on Antigua. It has been described as an outstanding example of European “Palladian” architecture within the Caribbean environment. Further to this, its historical context, historical association with the British Monarchy and setting in the scenic landscape of English Harbour deems it a primary cultural heritage site of Antigua. As a key component of the Nelson’s Dockyard, it is a key part of the historical fabric of world history: specifically the development of the British Navy and Empire. It was built by enslaved African craftsmen in the service of the Navy and it that capacity is our patrimony and legacy from them.

Clarence House rivals other Caribbean masterpieces, such as Devon House Jamaica. It can also be compared with Rose Hall, Jamaica, Villa Nova and St. Nicholas Abbey on Barbados. As an historical Great House it can make an enormous contribution to the heritage tourism development of Antigua and Barbuda. There are no Great Houses, historical homes, or structures open to the public on Antigua, and as such it is an enormous asset. It was at one time one of the premiere tourist attractions on Antigua and it is certain that it will receive larger number of visitors after restoration.

Formal Gardens

Another undeveloped component to the project is the development of a formal garden. Princess Margret had expressed the desire to develop such a garden in her name for her times at Clarence House were “the happiest days of her life”. The head of the Princess Margret Trust is Lord Sainsbury of Long Island, Antigua. The development of a “sensational” garden at the site can be achieved and is in the objectives and plans for the newly formed Clarence House Trust. The combination of the restored Great House and Formal Gardens may in fact rival the Dockyard as a separate attraction on Antigua.

Adaptive Re-Use

The new “Vision” for Clarence House may be compared to that of Devon House in Jamaica. It will be open to the public, yet used to host selected “hi-end” events. Interpretation officers will offer guided tours of the house and gardens.

The restored Great House and gardens should function primarily as:

1. a living museum and heritage attraction for Antigua
2. a place to host official State functions; high level meetings, cocktails and receptions for visiting dignitaries etc...
3. a venue for tourists and locals to enjoy .

Clarence House will be returned to its early 20th century plan with minor changes in layout to the original as proposed by the Commonwealth restoration team. Their master plan design for an earlier 18th century structure will not be used. In addition, will the plan for converting it into a modern dwelling as proposed by Governor Carlisle will not be done. On completion most of the house will not be suitable as a modern place of residence. To do so will drastically alter the authenticity of the structure, limit its self sustainability and restrict access. The courtyard and ground floor will be used for events and conferences.

Main Floor

The main floor will be restored with its raised panel walls and tray ceiling and ornate arched fan room dividers. However, electrical outlets, switches, and security system will have to be installed. There will be no air conditioning on this level. It has also been proposed that one of the north bedrooms be converted into a modern washroom facility for use during during special functions. This floor will be furnished with antiques or replica furniture dating from the 18th to late 19th century. It initially had raised panel wood covering the living and dining walls and tray ceilings, and a simpler style tray ceiling in the two middle bedrooms. The walls in these rooms were not raised paneled but painted mortar and wood. All bedroom windows had inset interior hidden wood shutters and were double hung. The wall creating the hall or passage from the living dining area through to the bedrooms and north entry were made of wood, vertical 1"x12" pitch pine rising to a ceiling of about 8 feet. Above that was open lattice work between the wall

and the tray ceilings in the passageway to permit air flow. As much of the furniture has been lost, replicas and other period antiques will be sought.

Kitchen and Food Service

Cooking was traditionally done in a separate building in the courtyard. The 1950s kitchen is a modern intrusion and will be demolished. A new larger facility is planned for elsewhere on site. The interior of this kitchen will be modern. This facility will be responsible for catering events and for preparing meals for large functions. The new kitchen will be moved altogether to the lower courtyard service area, close to the house. The space it now occupies will be landscaped and returned to its original appearance. A small pantry or prep room will setup in the ground floor/cellar where meals can be plated for serving.

Ground Floor or Cellar

The lower or ground floor will be used for services, staff needs and for small conferences and workshops. It is recommended that the southern room be rebuilt without the need for vertical columns to create an open space suitable for small conferences and workshops. Lighting will have to be installed in the ceiling for this purpose. The other large space in the middle can be used to create two separate rooms with large doors and a central passageway. The rear smaller room of the structure will be used for support services so two small washrooms and office space will be required (male and female). The front and central rooms should be air conditioned as they will serve a modern function periodically. Their walls should be pointed with lime and

damaged stones replaced to strengthen the structure. Despite its “modern” function and use, the decor, style and finish should be mid to late Georgian. The arched entrances to this lower level will have to be fitted with doors and screens accordingly. They should also be kept as open as fire escapes and for ventilation.

Veranda

The veranda around the main floor was enclosed in the 1950s with wood jalousie louvered “windows” that provided a cool, private enclosure. They will be replaced as they are important for protecting the limestone masonry and for cooling the house. Enclosed verandas were furnished living spaces and an important part of “Caribbean” life; particularly so in Antigua as can be seen in our historical urban and rural residential architectural designs and styles. The veranda floor was originally finished with rendered lime. To many, this is unacceptable and not durable; however, as this is a restoration and not a modern rebuild, it is strongly suggested that the polished lime mortar floor be relaid.

Veranda Ceiling

The ceiling of the veranda was recently installed lower than it was originally thereby compromising the decorative elements over and around the doors and windows of the structure. As this was incorrect, of the wrong construction materials, and already affected by termites, it is proposed that it be removed, the rafters, beams and fascia inspected and then replaced correctly with 12” planking replacing the current 6” grooved modern style.

The **veranda posts** are also incorrect in style, size and placement. They should be replaced with 6” by 6” hardwood posts that are to be anchored to the veranda floor and secured with steel ties and concrete hidden below the stones and floor of the veranda floor.

Courtyard

The outer buildings in the courtyard will be all restored for use as support facilities for large functions such as weddings and events. The current washrooms and servants quarters with its collapsed roof will have to be rebuilt as a modern washroom facility internally, but retain an historical Georgian or Caribbean vernacular externally. Its septic tank and soak away system will have to be rebuilt with a larger capacity further away from the building. This courtyard is ideal for use as outdoor café, giftshops, interpretation, sales and staff needs. It is also ideal for hosting large social events such as weddings, tea/garden parties, and exhibitions and this is the main recommendation for its new role. The courtyard floor is currently rocky and uneven and will have to be inspected, leveled and made suitable for use. It is recommended that the Parks not provide rental space but manage the area for weddings and conferences and special events.

Caretakers House

The caretakers house will not be rebuilt. Instead, the modern building located in the forest will be renovated and used as a security post and operations center for tour guides, visitor entry, ticketing, and information. Other existing ruins in the grounds will be decided at a later date.

Concrete Platforms

The Son et Luminiere platforms were inspected and will have to be repaired. They have been damaged by vegetation growth but are generally in good order. They are ideal and could be used as a platform for a outdoor theatre and events. While there are no current plans for the re-introduction of this show, there have been discussion on the potential of developing a modern version of the show where the story of English Harbour could be told with the dockyard as a background.

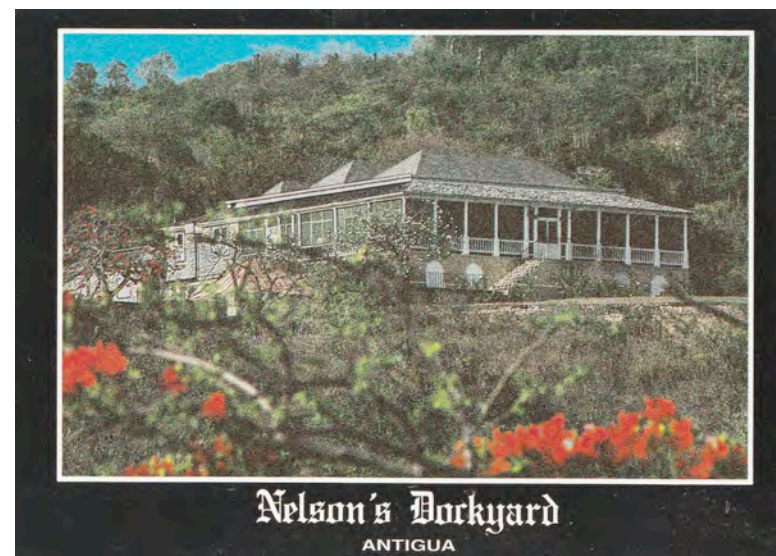
Site Management

Management and ownership of the site should remain under the National Parks Authority as an extension to the Nelson's Dockyard. The Parks has the staff and qualified technicians to manage and develop all aspects of the project and site.

The Clarence House Trust

The Clarence House Restoration Trust was established with the sole objective of procuring revenue for the restoration efforts and to establish the formal gardens. Donors in the United Kingdom can now be encouraged to make sizable donations to the Trust Account and can claim the donation on their taxes. The current Trustees are, Dr. Reg. Murphy, Sir Peter Harrison, and Geoffery Tack. The Trust has no intentions of managing or controlling the site but will be active in the restoration process. It has no claim of

ownership of the site and seeks to work with the National Parks Authority and Government of Antigua towards the restoration efforts. It will however ensure that its funds are spent in an appropriate manner and that the site is managed in a professional manner. Funding for the restoration have been provided by the Sir Peter Harrison Heritage Foundation, UK.



**Registered Charity UK Charity Commission # 1122572
Clarence House Trust**

The Vision: Photos of the courtyard of Devon House, Jamaica.



Interior of Devon House Jamaica.



Bakery in Devon House courtyard



Current Courtyard Clarence House



Clarence House kitchen (demolish and rebuild elsewhere).



Test hole dug in verandah floor near main front entrance.

Proposed Specifications for Completion of Clarence House

Policy statement for guiding the project:

The Clarence House Project is an important restoration project for both Antiguan and English heritage. Under UNESCO World Heritage Criteria, it is a Continuing Cultural Landscape, and therefore not a static archaeological site or monument. Modern materials and construction methods can be therefore utilized as long as the appearance and visible architectural elements represents the historical period being presented as closely as possible. Above all, safety is a major consideration. Therefore,

- *In consideration of the fact that the structure is weak and likely incapable of surviving a major earthquake, and*
- *Considering the large investment in funds and labour, and*
- *Being mindful of the historical context, authenticity and outstanding values of the site, all efforts must be made to find a realistic balance that ensures the continued survival of the structure whilst reflecting its historical past.*

Modern materials and construction methods such as reinforced masonry supporting beams and columns hidden within the structure will be acceptable and recommended provided they are not visible or alter the historical appearance. This is in keeping with the UNESCO World Heritage Tentative Listing of the Antigua Naval Dockyard and National Parks policy. The outer buildings of the courtyard and kitchen must also reflect the period historical appearance of the site.

The following is a presentation of the suggested restoration and treatment specifications for the project that is to be confirmed by committee.

Section 1.

Masonry:

1. **Stairs to main floor:** Remove weathered stones and replace with similar type if the stone is weak or too worn for reuse. Resurface and reset with lime mortar (mixture to be confirmed).
2. **Walls:** Remove bowed limestone face stone at southwest end and rebuild. The inside or interior side of exterior stone walls of the Living and Dining area, as well as the cellar wall can be built of modern material such as cast concrete as long as it will not be visible or exposed. Should reinforcing this support wall may be essential it can be done and the stone replaced to present the

original appearance (engineering and masons to decide but this will likely be an on site call during work).

3. **Structural support for building:** There is major concern over the structural integrity of the south wall and the arches and lintels between the main and ground floor. (engineering decision to be made after the stone mason restoration has begun but it expected that all wood lintels will have to be replaced with tropical hardwood)
4. **Interior brick partition wall.** Complete brickwork at arched passageway wall to bedroom. Set up furring strips for raised panel finish and to conceal electrical and service wiring and conduits. (decision on services: security, lighting, fire suppression etc)
5. **Veranda Floor.** This is essentially earth and rubble fill that has been plastered over. Recommendations are to remove 4 to 5" of old mortar and replace with new water resistant lime mortar, then finish to previous height (with adequate off slope). This floor can be rendered and polished to a high gloss to reflect its original finish. Where the new columns supporting the roof are to be placed, pockets of cast concrete will be necessary to support hold and tie-down steel anchor plates for hurricane resistance. (Engineering required)
6. **Ground Floor or Cellar.** Clean stone. Replace broken or damaged stones where necessary but

retain the original stone floor. The inner room will require wood partitions and double doors to facilitate conference sessions and small meetings.

7. **Arches.** Replace damaged stones and plaster with lime wash.
8. **Cisterns:** Clean then inspect damage and decide on repair methods.
9. **Exterior wall around building:** Remove roots and vegetation. Repair cracks, missing stones and rebuild if structurally compromised.
10. **Treatment:** The masonry walls must be treated for termites prior to construction of wooden frames, window boxes, lintels etc.

Section 2.

Woodwork: Roof, Partitions, Ceiling, Doors and Windows.

1. **Veranda ceiling:** The current ceiling is not true to the original design, so, as it is already damaged by new infestation of termites, it should be removed and raised to its correct height. It is recommended that greenheart wood frames with white pine planking be used for the new ceiling.
2. **Posts and Beams:** The current large posts are incorrect in size, placement and style. They must be replaced with six-inch square greenheart and anchored with stainless steel anchor mounts to

hidden concrete blocks. That support area must be thickened (engineering) within the stone veranda. It is uncertain how they are currently attached and supported.

3. **Roof:** To be retained if not damaged.
4. **Door and window frames:** All timber to be used must be either pressure treated pine or greenheart. The finishing material for the wood shutters boxes must be termite resistant while the hinged boxed shutters of a lighter material such as white pine. All doors are to be of solid wood and glass of original style.
5. **Windows:** Windows must be of original style but not necessarily of original design with lead weights. Modern plastic windows are easily available and more affordable. However, all efforts must be made to select the most realistic in appearance, strength and durability. Wood double hung with lead balance should be the first choice.
6. **Floor:** The timber floor should be polished greenheart on greenheart joists. This will be more durable than the original pitch pine wood. The veranda floor can be polished limestone mortar colored to match the original.
7. **Cast Iron Railing:** The flat iron railing should be kept and repaired where necessary. It should not be replaced with a modern material, and where resetting or changing of stone supports is

required, it should be reset with lead or a bonding epoxy as before.

8. **Courtyard floor:** This area must be cleaned and leveled. As it will be a space for public gathering, possibly with a café, gift-shop and washrooms. Regardless it must have a safe walking platform. The large outcrops of rocks now present will have to be leveled and a stone or cobble yard floor laid to facilitate dancing, tables and free movement during events. This can be completed as a second phase of the project.
9. **Outer buildings of the courtyard and grounds:** The original outer buildings are to be modified. The options for modification and end use are open. The former garage for example could be converted into rental space, as could the enlarged maids room and former generator room. Alternatively, the courtyard could be utilized as a single space for special functions like weddings. The proposed kitchen higher up on the cisterns could then be moved down to this more appropriate level and rebuilt in the maids washroom area, and new washrooms built elsewhere nearby. Further discussion will be held prior to finalizing the end use of these structures. The guard-house and the ground keepers house are proposed optional new buildings and will follow the new drawings as presented by the architects. These are of new materials but must reflect the historical theme of the site. These are not included in this discussion

and can be built at the second phase of the project.

10. Front pavement of structure: The southern area in front of the building between the flagpole and the house is used as a turning and parking area. It is a valuable space that can be landscaped with a tropical floral garden, an ornamental round-about and fountain. The asphalt should be replaced with cobblestone for a more appropriate appearance. The Coast Guard operation that uses this road will have to find a new access route outside the property boundary.

11. Furniture: Replication of the furniture has begun as it is anticipated that it will require a considerable time to select and make. Craftsmen from the nearby community have already made several classic pieces.

Clarence House Update 2013

In July 2013, restoration work begun on Clarence House. This was made possible by a donation of US\$3,000,000 to the Clarence House Trust, by the Sir Peter Harrison Heritage Foundation, London, England. The restoration project is managed by the National Parks Restoration Committee and Project Manager, Trustee to the Clarence House Trust, UK, Dr. Reg. Murphy.

The project team includes, Andrew Goodenough, architect, “Junie” Davis engineer, Richard Watson quantity surveyor, Marius Smith and Michael Flirmus foremen of works. The first phase was to remove all intrusive elements, vegetation, loose stones and debris, and to clean up the site. The project has since advanced to improving the structural integrity by replacing old lintels, cracked stones, crumbling walls and mortar. This is well under way and in the meantime, a second team of stonemasons has begun to cut and prepare the large quantity of limestone that will be needed for the building. Three sides of the upper floor, outside wall has now been completed and work is underway inside the building preparing it for placement of windows and the paneled wood interior finish. The timber for the floor, jambs, and roof have been ordered. The expected completion date is November 2015.

At the same time, sourcing and an inspection of the antique furniture have begun. The project is on time, on budget and on schedule.







New stonework façade on upper floor exterior.



Period furniture being replicated.

Disaster Preparedness Plan

The Antigua Naval Dockyard National Park

Introduction

The Antigua Naval Dockyard (Nelson's Dockyard) is without doubt the premiere heritage tourism and yachting centres of the Caribbean. It is crucial to the economic activities and viability of Antigua. While the dockyard and historical core of the park has the finest assemblage of Georgian Period buildings, the greater park has many pristine beaches, mangroves and marine resources that are also crucial to the social well-being and economy of Antiguan and visitors. The management has been entrusted to the National Parks Authority.

In recent times, the media has been inundated with information and predictions regarding major climatic changes that will lead to a significant increase in the number and strength of hurricanes, and rising sea levels for the Caribbean region. In light of the hurricane experiences of the 90s, and these current predictions the management of the National Parks are quite concerned. Further to this, the growing success of the Dockyard as a marina within the yachting industry and a destination for the cruise industry, it is essential that a plan be devised to manage and mitigate threats and disasters. This plan is a first step in the development of a comprehensive plan. It will

1. Identify the crucial heritage and natural resources of the National Parks.
2. Identify the potential threats.
3. Identify vulnerable zones.
4. Identify a line of command.
5. Recommend preparative actions and policies
6. Identify persons and organizations for response and action before and after a disaster.
7. Identify and recommend locations of necessary resources.
8. Conduct a risk assessment survey and make recommendations for improvements and policies.

Heritage Sites

Heritage sites are often seen as low priority in the event of a pending hurricane where the protection of lives and private property generally takes president over "public" resources. Homes, shelters and safety normally take priority despite the recognized importance of the heritage resources. The Dockyard and its buildings depend completely on its management and staff. This is due to the fact that it is a living community whereas the historical stone structures on the ridge at Shirley Height's are not. These have been left to the elements and are now reduced to rubble. Clearly there must be an order of priority

and a ranking of these resources but some measures can nevertheless be taken that will reduce loss and aid restoration.

The built heritage resources within the Nelson's Dockyard National Park are first priority for action and risk management. They comprise an assemblage of mostly Georgian Period structures that have been well maintained. Many have been restored within the past decade. However they are historical building that were built with materials and methods from the past, primarily lime mortar, stone and brick. They do not fit the general building code of today, lack steel reinforcement, concrete, ring beams and are at risk. The following is a list of the primary structures in the Nelson Dockyard National Park:

1. The stone perimeter walls
2. Clarence House
3. The Field Research Centre at the Artillery Officers Complex.
4. The Artillery Officers Complex
5. The Blockhouse complex (Powder magazine, vendors shelter, cisterns, barracks, stone perimeter walls)
6. Fort Berkeley
7. Fort Charlotte
8. Fort Charles
9. Fort Cuyler
10. Dow's Hill Fort
11. The Lookout (restaurant, barracks)
12. Officers Quarters near Lookout
13. The Canteen and Annex
14. The Hospital
15. The Married Officers residences and associated buildings
16. The Powder Magazine at Naval Ordnance
17. Powder Magazine and complex at Artillery Ordnance Stores
18. Middle Ground cisterns
19. Fort Charles on Blake Island

Within the Dockyard, the built heritage and other modern works include:

1. The Guardhouse and Engineers workshops
2. The Engineers House (Admiral's Inn Hotel)
3. The Sail Loft pillars and boat access pit
4. The Hospital and Condemned Articles store
5. The Joiners Loft
6. The Shipwrights Cabin
7. The Saw Pit Shed (A&F Sail)
8. The Museum
9. The Copper and Lumber Store
10. The Officers Quarters
11. The Mast Shed

12. The Canvas and Cordage complex (Immigration, Customs etc)
13. The Galley
14. The Pay Office
15. The Sick House
16. The Capstans
17. The Bakery
18. The Seawall

Modern Infrastructure includes:

19. The Interpretation Centre on Dow's Hill.
20. The Laundry
21. The Sewage Treatment Plant
22. The waterfront seawall and wooden piers
23. Mobile resources and supplies of the Park (vehicles, cement, lime, equipment)
24. Channel markers, mooring bouys' and navigation lights
25. Signage and interpretation panels
26. Electrical generators, switch control room, marina infrastructure on waterfront.
27. Vehicles
28. Supplies for the Grounds and Maintenance Departments
29. Supplies for the Hotel
30. Wood umbrellas/gazebos on Pigeon Point Beach
31. Public washroom on Shirley Heights
32. Port Office in Falmouth
33. The dingy dock in Falmouth
34. The mega-yacht dock
35. The dingy dock in Nelson's Dockyard
36. Vendors Mall in Nelson's Dockyard
37. Vendors Mall at Horsford Hill
38. Vendors Mall at Blockhouse
39. Playground and washroom facilities at Pigeon Point Beach
40. Security cameras and system

Risks and Threats to the National Parks

The risks and threats to the Nelson Dockyard National Parks are numerous. Not all will be address in depth in this report. The primary threats that present danger to life and property within the Park include,

- Flooding and storm surges in low coastal areas
- Flooding in areas of poor drainage
- Hurricanes
- Earthquakes
- Landslides
- Fire

- Oil or fuel spills
- Terrorism
- Tsunamis

Risk Reduction Plan for the Dockyard

It is clear that one cannot be fully prepared for unplanned events such as an earthquake. But one can plan for the eventuality and be prepared in an effort to reduce risk. To prevent damage and to reduce risk in all events it is essential to conduct routine annual checks, follow a strict maintenance program, and have a clear concise action plan. There should also be a response plan for after the event. Fortunately there are numerous models from a variety of agencies that can be adapted and modified. Among the more recent are,

1. Disaster Planning Guide. NODS
2. Mitigating Disasters. UNESCO
3. Protecting the Past from Natural Disasters. Carl Nelson, National Trust for Historic Preservation.
4. Hurricane Procedures Manual. The Caribbean Hotel Association.

Within the context of disaster preparation and planning, we are not alone. Organizations that will assist in planning, preparation and response include,

- The Red Cross (training and relief)
- The Royal Police Force (security) 462-0125
- The Defence Force 462-9570; 484-2102
- National Office for Disaster Services (NODS) 462-4206; 562-1551-4
- Antigua Public Utilities Authority (APUA) (hoist for tree pruning, checking electrical lines etc) 480-7256/462-4232
- Antigua Barbuda Search and Rescue (ABSAR) (first response, search and rescue) VHF radio ch. 16 & 68
- Coast Guard (search and rescue) 462-3206/0671
- West Indies Oil Company (WIOC) (fuel and related spills) 462-0140, 462-0144
- Dockyard Police 460-1002
- Humane Society 461-4957
- Fire Department 462-0044/999/911
- ABS Radio 462-2998
- ABS TV 562-1204
- Observer Radio 481 9100
- Central Board of Health (CBH) 462-2936
- Emergency Medical Services (EMS) 562-2432/464-6003
- Solid Waste 562-1349/2019
- Hospital 462-0251

However the Dockyard staff and management are its best resource. Past experiences have provided experience far beyond any recommended text. Regardless, the Park relies

on a few core managers and line-staff to implement its preparation plans prior to an expected event. Should these key persons not be available, it will be essential to have a formal plan that others not as familiar with the resources and facilities, may implement. The managers of the Park and their responsibilities include,

The Role of Management

The Parks Commissioner, Mrs. Ann Marie Martin

1. In the event of a disaster, the management structure should remain. The Commissioner should be the central coordinating authority. **All information and activities should be channelled through her. The Commissioners Office will act as the central office for coordinating activities, expenditures, information and the disaster management unless otherwise stated.** Should the Commissioner not be able to fulfil this role then another manager must be appointed. Regardless, all managers are aware and experienced sufficiently to operate independently should that situation arise.
2. Public relations will be critical before, during and after an event. There will be pressure for information. To avoid misinformation, the Commissioner or an appointed representative working closely with her should be the sole individual providing information to the media and public.
3. The Commissioner or her appointed representative must have a copy of this plan at hand, for access to the information within, particularly the names and telephone numbers of response agencies.
4. The Commission should ensure that funds are accessible for emergency supplies and equipment following an event.
5. The Commissioner should ensure that the **accountant** secures the financial records and funds on site.

Building Maintenance and Grounds Manager, Michael Flirmus

(Assistant Manager Mr. Ira Berriero, electrical engineer)

1. This individual will be responsible for bi-annual inspections of all buildings in the dockyard and an annual inspection of the historical structures within the Park.
2. This individual will be responsible for maintaining a stock of essential tools for use after the event. (see list).
3. The Maintenance Manager will present the results to the Commissioner and other appointed or necessary individuals for action.
4. The Maintenance Manager will be responsible for ensuring that any repairs or modifications are done satisfactorily.
5. The Maintenance Manager and his staff will be responsible for closing up external shutters, boarding up windows and doors, securing loose construction materials around the site.

6. Liaise with the electrician to check generator and secure its spare fuel prior to event.
7. Secure all building supplies.
8. Secure the garbage facility to ensure no loose bags and objects remain on ground and close up bins.
9. Fill all water tanks.
10. Check all drains and gutters are clear; particularly the storm drains at the main gate.
11. Shut off generator prior to storm or arrange with security to do so.
12. Ensure that the generator room is secure, doors tightly closed and that water will not enter system.
13. Shut off all cooking gas tanks for restaurants.
14. Check to ensure all transformers are off the ground and secure. They are to be checked again after the storm has passed.
15. Make sure all tools are secured.
16. Secure office: all files, office supplies, computer and equipment, fax machines etc.
17. Check solar panels and washroom at Blockhouse.
18. Check sand bags are filled and placed at Copper and Lumber Store Hotel.

Grounds and Landscaping (Above managers)

1. This individual will be responsible for coordinating all yard works prior to and after an event.
2. All trees will have to be pruned to prevent breakage.
3. All picnic tables, benches, flowerpots and unsecured items will have to be removed and placed in storage.
4. The grounds will also be responsible for the post disaster cleanup, cutting of fallen trees and debris.
5. The grounds will also be responsible for the removal of coconuts or other potential objects in the garden and grounds.
6. The grounds department has the largest number of employees and will therefore have to work closely with the other departments, such as the hotels to assist in securing the property.
7. The Grounds manager will have to keep and secure for access, a stock of tools for use after the event in order to clean up the site.
8. Check playground at Pigeon Beach and English Harbour
9. Remove all garbage and secure containers around complex.
10. Fill all water tanks at Interpretation Centre.
11. Check that oil storage tank is empty or secured from leakage, flooding, or damage by falling debris.
12. Check the sewage treatment plant is secured.

Marina and Yachting Services and Restoration (Marius Smith)

1. This department will be responsible for ensuring that all yachts in English Harbour are adequately moored and do not pose a threat to life and property.
2. In the event of a minor storm and yachts are on the dock, he is to ensure that they are adequately secured and not a threat to others or the marina.
3. This department must work closely with community groups and organizations from the area, such as the TOT Club, Coast Guard and Police.
4. Marine services will monitor VHF radio transmissions for emergency during and after the event.
5. Marina office staff will ensure all electrical equipment is secured, files and records placed in secure containers, and that all windows and doors are closed and barred, and that no files, electrical equipment.

Copper and Lumber Store (Brenda Skepple and Eloise Francis)

1. The manager will assist in securing alternate accommodations for guests when the threat of a storm is announced, for the building is not an adequate hurricane shelter. Its structural integrity has been compromised by extensive termite damage.
2. If the building cannot be evacuated and patrons cannot be placed in safer accommodation elsewhere, the manager will ensure that the facility is adequately provisioned with emergency rations, flashlights, water and first-aid-kits.
3. In the event of a late season hurricane when hotel is open, the manager or an appointed person will be responsible for all guests in the hotel.
4. A list of all guests and staff in the hotel is to be made prior to the hurricane.
5. Backup all computers and secure electrical equipment prior to the hurricane.
6. Check all items on the floor in case of flooding.
7. Remove paintings from the walls in the open areas that have no doors.
8. Check VHF and other radio systems.
9. The manager must be familiar with and refer to the "Hurricane Procedures Manual for Hotels".
10. Again...the policy and first option will be to close the hotel and remove all guests.
11. The manager will have to ensure that there is a person in the facility suitably qualified in first aid.
12. The manager will have to check frozen food stocks and kitchen supplies are managed accordingly (not wasted or left to spoil and not consumed if it has).
13. Sand bag critical areas along waterfront doors to prevent flooding.
14. Close and bar all windows, storm shutters and doors.
15. Plastic wrap and cover all furniture, and remove from areas without doors.
16. Make sure gas is shut off to kitchen and kitchen utensils/equipment is secure and placed in cupboards.
17. Make an inventory of stores in hotel, including food, beverages, glass, televisions, cutlery, sheets, linens, etc
18. Place all towels, sheets and bedding in plastic bags.

19. If guests are in the building due to the timing of the storm, serve only light food such as coffee, soup, and beverages. These must be prepared in advance of the storm and disposable plates, cups and cutlery used.
20. Close the bar and no alcohol is to be served.
21. Meals to be served only in secure area. There is to be no room service.

The Museum, Field Research Centre and UNESCO Office (Dr. Reg. Murphy), & Wassim Braithwaite

Environmental Department: Dr. Brian Cooper, Wassim Braithwaite and Jazeel Murphy

1. The manager will have to secure the library and collections in the event of damage to the building.
2. The manager will have to secure all computers, records, and office equipment in the facility prior to an event. All boxes and documents are to be placed in plastic bags and sealed.
3. All artifacts are to be secured in bins, bagged and an inventory made of their location and contents of bags.
4. The manager will ensure that the buildings are in good order, shutters placed and electricity.
5. After the event, the manager will ensure that immediate conservation efforts are implemented, valuables secured and repaired conducted immediately, because of the delicate, fragile and valuable nature of the museum collections.
6. Backup computers and store data off site.
7. Close all windows and storm shutters.
8. Staff should be aware of possible damage from the large palms and trees around the hotel and storage areas must be placed to avoid this eventuality.
9. Take photos of each building from all sides and file for insurance purposes if needed.
10. At the start of the hurricane season, the curators must ensure that a supply of empty storage bins, plastic sheeting, large garbage bags, masking tape on hand to contain the documents, artifacts and essential books.

Security Chief Clement Solomon 774-0176

Available resources in English Harbour: Police Officers, Coast Guard and Private Security in the yard.

1. The chief of security will ensure that the property is secure during and after any event.
2. He will monitor all persons entering and leaving the facility.
3. He will ensure that guards are assigned to protect property immediately.
4. He will coordinate additional security measures with the commissioner and external agencies as required (Police or Coast Guard)

5. Security will monitor the VHF radio transmissions during the event and immediately after.
6. Security should also check well in advance of a storm, the VHF and other emergency radio frequencies to be used in event telephones no longer work.
7. The security will close the gate and secure the compound immediately prior to the storm and not reopen the main gate until the “all clear” is given by management following the post-storm safety checks.
8. Check to ensure all storm shutters are closed.
9. Close up and lock Joiners Loft building unless it has been leased to another party or business.
10. Security will ensure that only authorized individuals are permitted entry to the dockyard after the event.
11. The dockyard vehicles/truck should be placed in the middle of the taxi area and not inside the yard. Please avoid parking under trees or in an area where there are threats by falling electrical poles, wires

Giftshop (Abigail Smith)

1. The manager of the gift shop will secure the stock on display and in storage.
2. The manager will ensure that goods are off the floor, fragile and perishable items removed from display and stored.
3. The manager will ensure that the store is secure and electrical equipment is unplugged, covered with plastic sheeting or placed in sealed garbage bags.
4. The computer must be backed up and secured in plastic sheeting or bags.

Interpretation Centre Manager (Alicia Daniel)

1. The manager will ensure that the building is secure, locked, and shuttered.
2. The manager will ensure that the gift shop is secured and items stored safely.
3. On departure from the building, electrical systems are to be turned off
4. The generator should be fuelled for after the event.
5. The manager will ensure that all water tanks are filled and the electrical power is turned off prior to the storm.

Threat and Response

Each type of threat will require a different type of response and actions. However all present hazard to life and property and preparation is essential.

Essential Supplies

During beginning of the hurricane season, these supplies must be checked as rechecked as soon as a hurricane poises a threat to the island. They should be kept in an easily accessible place that is known to all management, line staff and security.

Essential supplies include:

- ❖ First aid kits (3)
- ❖ Flashlights (3 or more)
- ❖ Spare batteries for all battery powered devices
- ❖ Hammer (2)
- ❖ Crow bar (2)
- ❖ Saw (wood and hacksaw with spare blades)
- ❖ Large axe or chain saw (1)
- ❖ Spare gasoline in approved container
- ❖ Plan with all shut off electrical panels and switches
- ❖ Shovels and pick axe
- ❖ Hand held VHF radio
- ❖ Portable communication radios
- ❖ Batteries for all devices using batteries
- ❖ Water in 5 gallon containers
- ❖ Buckets
- ❖ Rope
- ❖ Lifting device or come along
- ❖ Dingy with engine and oars
- ❖ Plastic garbage bags
- ❖ Plastic sheets and rolls of plastic
- ❖ Tarps for covering open roofs

Equipment for Security Staff on Duty

In a hurricane situation, all security officers on duty should have essential safety supplies. These include:

- Flashlights
- Rubber boots
- Rain coats or foul weather gear
- Radios and communication devices
- Access to first aid equipment
- Access to transportation
- A safe base for operation
- Food and water stored
- List of contact numbers for emergency and NPA management

Actions List for Managers in Event of Hurricane

All managers will ensure that their offices are supplied with their special needs and are secure and covered.

- All computers must be backed up and copies of files stored off site in secure locations.

Managers are to ensure that their workspace secure, electrical wires and sensitive materials lifted off the floor and documents secured in plastic sheeting.

Managers are to ensure that hurricane shutters are firmly closed and braced, and exposed glass covered and taped.

The **Grounds Manager** is to ensure that all trees are trimmed and loose items, furniture and equipment is secured.

The **Museum Manager** or Curator is to ensure that cabinets are covered, the library shelving covered with plastic sheeting and artifacts and displays are secured.

The **Marina Manager** is to ensure that yachts moored to the seawall are secured and pose no threat to the marina infrastructure with their dock-lines.

He is to ensure that no vessels anchor in the channels or in areas that will block marine traffic should they sink or ground during the storm.

Maintenance Manager is to ensure that the sewage plant is secure and will not poise a thread of leakage, overflow, or pollution.

The **Accounts Manager** will ensure that all files, records and accounting documents are secured, waterproofed and the computer data backup is secure off site or in the safe.

A notice must be sent out to all yachts that pets will not be permitted to roam free in the dockyard and will not be taken into government shelters. Arrangements must be made by yacht owners to have their pets taken to Humane Society well in advance.

Notice of regulations to be posted in advance.

English Harbour Radio should be given notices for yachting community well in advance.

As the dockyard is a collection of 18th century buildings, they are not safe for use as shelters. Walls are not reinforced nor are roofs anchored by today's standards. The practice of using the Copper and Lumber Store as a shelter must be discontinued immediately.

Security will lock down to public access...residents, staff and yachts only...before and after storm until safety inspection is completed and site cleared.

Twenty-four hours before a storm, tenants are responsible to ensure their goods and personal effects are secure. This will provide time for yard personnel to secure buildings.

Tenants not permitted to use any generator or alternative energy sources during or after a storm without permission from NPA.

All clean up efforts in dockyard will be managed by NPA except for the internal

NPA cannot predict the potential damage of a storm. Tenants are therefore solely responsible for their property and goods.

Grounds Manager will install hurricane shutters on Interpretation Centre and sandbag back door.

Maintenance Manager is to clear roof drains especially on parapet walls (Interpretation Centre and Copper and Lumber Hotel)

- He is also to check solar panel and washroom at Block House

The Commissioner will coordinate all activities, liaise with the Coast Guard and authorities, manage all news and communications, and ensure that her office and documents are secured.

Assembly Points (In the event of a fire)

- Assembly points are to be established and made clear to all staff and employees and hotel guests.
- In the event of a fire all persons are to immediately vacate the buildings and calling on others as they do so.
- If a small starting fire cannot be suppressed by (trained) staff, all persons must leave the building and assemble at a predetermined site safely away from the structure.
- An immediate count must be made to ensure that all persons known to have been in the building are present.
- Trained staff will assist in handling the evacuation and with fire fighting process until professional firemen arrive at the scene.
- Remember that yachtsmen are also trained in fire-fighting methods and larger yachts will have pumps, hoses, extinguishers etc.

Fire Prevention Policies

- All structures must have adequate fire extinguishers.
- All staff must know the location and type of fire extinguishers closest to their work stations.

- All staff must be trained in the use of extinguishers and the types needed for the various types of fires.
- An annual evaluation and maintenance must be done to ensure that all fire-fighting equipment is in good order.
- An annual review must be done of the first response team, replacing missing or retired persons, and testing and reviewing all supplies and equipment are accessible and in good order.
- The first response team must be trained in the basics of fire fighting and first aid.
- There are three access routes into the dockyard,
 - The new road outside the wall at the super-yacht dock
 - The main road through the inner gate
 - The main entrance to the Admiral's Inn Hotel
 - These must be kept free of objects such as derelict vehicles, building materials, and parked vehicles.
- The fire hydrants must be tested regularly and their hoses inspected.
- The two large mobile extinguishers must also be inspected annually.

Fire and Yachts

Fire on-board a yacht will require special management. Whilst the crews are specially trained, fires are unpredictable.

- Yachts carry large volumes of fuel and are made of materials that once alight, will burn intensely and be difficult to extinguish.
- The smoke produced can be toxic and special equipment including breathing respirators and oxygen/air tanks are essential.
- It is important that early preventative actions be taken to control the spread of fire to other yachts, particularly so if they are on the dock or marina seawall.
- All efforts must be made to tow the vessel off the dock if the fire cannot be contained.
- The stricken yacht must be kept out of the main channel and not be allowed to drift onto other vessels.
- The closest mobile sea-craft with fire fighting pumps is ABSAR.
- A mobile water pump with hose must be kept by the NPA in a secure, easily accessible location, that will be dedicated strictly and exclusively for fire fighting. This will pump salt water from the sea and must therefore be mobile.

Earthquakes

As previously mentioned, earthquakes are unpredictable. They are also frequent in the Eastern Caribbean. Policies for earthquakes are well know for Antigua Barbuda and presented on the radio on a regular basis. Policies for the Dockyard are,

- Depending on ones location, crouching down alongside a large sturdy piece of furniture (desk) is necessary.

- It is important to get clear of buildings, walls, the wharf wall, poles and other objects that might fall or collapse.
- As reclaimed land is subject to settlement and liquefaction, it is important to seek solid ground away from the waterfront.
- The area around the sundial is solid land, whereas the Galley Bar and Mast-shed areas are not.
- If an earthquake is substantial, there will be a danger of a tsunami so it is important to seek high ground immediately after.
- The highest points are the hill immediately above the Police Station, Middle Ground, Hospital Hill and Shirley's Heights.
- It is important to leave the area and to not clutter the roads and become a hindrance to emergency crew and vehicles.
- Avoid all fallen electrical poles, wires and structures.
- Establish an assembly point and conduct an inventory of staff and known persons and their last locations.
- Be prepared to assist emergency workers in the rescue operations, as you will be aware of the plan, interior layout, and workspace within the buildings.

Post Disaster Documentation and Reporting

Immediately after a major disaster event, the Dockyard will be inspected and all damages documented. The management team that will manage this process will include,

- Heritage Department
- Buildings and Grounds
- Restoration/construction

Depending on their initial evaluation, experts will be sought to provide independent evaluations, estimates and advice, and underwater surveys if required. A written report will be submitted to the Commissioner who will inform the Chairman of the Board and Minister Responsible. UNESCO World Heritage will also be notified by the focal point contact person as soon as it is possible and the facts gathered as UNESCO will be an important partner in the planning and restoration process.

Contacts List of Key Personnel National Parks

Commissioner Martin (all area codes 268) 764-0386; 560-4803
 Marius Smith (Marina and Maintenance) 464-6941; 463-1657
 Brenda Skepple (Manager Copper and Lumber) 723-4614; 460-1783
 Eloise Francis (Marketing) 460-3432; 764-4961
 Molvia (Gift Shop) 784-2816; 561-2755; 460-1465
 Alicia Daniel (Interpretation Center) 784-2748
 Dr. Murphy (Heritage and Museum) 460-1712; 764-8886
 Jazzeal Murphy 481-5034 (cell)
 Wazzy (Museum) 722-7736
 Maurice the Diver (773-7242)
 Dr. Brian Cooper: Environmental Unit 481-5034.

Preparation Plans for the Dockyard Museum

Current staff available:

- Dr. Brian Cooper (environment)
- Wazim Braithwaite (museum)
- Dr. Reg Murphy
- Jazeel Murphy

The dockyard museum has been lost twice in recent hurricanes (Louis and Georges). To avoid a future loss of artifacts, and in light of the fragile nature of the structure, and in consideration of the likelihood that the museum will be again lost, the contents must be secured. In the event of a hurricane, 24 hours before the expected arrival of the storm the following actions must be taken.

1. Back up computer, unplug system, place in a plastic bag and put in a secure area.
2. Place maps and other exposed documents in plastic bags and seal.
3. Place these in an area where they will not blow away.
4. Close all cupboard doors and tie shut...items inside should be bagged.
5. Books in the library should be placed in bags and sealed.
6. Desks should be covered in plastic sheeting and tied with tape or rope.
7. Any valuable artifacts on exhibit that may be damaged should be removed and placed in secure container.
8. Secure shutters and doors.
9. Photograph and document all exhibits prior to event in case of damage.
10. Backup data to be stored off site.
11. Ensure main breaker is turned off when the preparation is completed.
12. Ensure supplies for replacing exhibits are placed in storage for a quick recovery.

After the event, the staff must return to the museum to ensure its safety and to implement immediate first aid for any damaged artifacts and exhibits.

1. Staff must get the official all clear on electricity before turning on lights etc...
2. Wet paper and photographs can be frozen prior to conservation to prevent them drying out.
3. Check all artifacts are secure in an emergency...store in safe area as recovered should the building be lost....
4. Notify security/police if guards are necessary during recovery time.

Any staff on holiday during a storm must return to the MUSEUM as soon as it is safe to do so to secure any damaged, wet or exposed collections, documents and bags/containers.

Hurricane Season Policies: Nelson's Dockyard National Parks Marina

The following regulations and suggestions were prepared by the National Parks Authority for yachts intending to use English Harbour for storm or hurricane anchorage in the hurricane season. Whereas the regulations must be adhered to, the suggestions are strongly recommended but are not obligatory.

Policies

1. Persons who intend to leave their vessels unattended and afloat in English Harbour during the hurricane season **MUST** make arrangements with competent caretakers such as recognized yacht captains or a caretaker who satisfies the NPA representatives of competence.
2. Before a vessel of any size or type is left in English Harbour, her owners or their representatives must contact the NPA marina management and sign the pertinent form agreeing to the regulations.
3. Owners or their managers on "Live-aboard" vessels intending to shelter in English Harbour for the hurricane season or take temporary shelter for a named storm or hurricane must also agree to the regulations before a named storm is expected.
4. Vessels intending to swing on anchors must clear their intended position with the National Parks Marina representatives prior to impending storms or hurricanes. No vessels will be allowed to stay on anchor in English Harbour unless prior approval is granted.
5. No roller-furled jibs, sail covers, or bimini tops are to be left on during a storm and booms should be tied securely at deck level.
6. Vessel which leave their hurricane positions after named storms or hurricanes and in doing so dislodge other vessels, anchors or lines **MUST** report this occurrence to the National Parks Marina or their representatives or to the master or caretakers of the vessel in question.
7. When moored together, yachts must make every effort not to have mast in lines so that they can become entangled.

I _____ of yacht _____ hereby agree to the above regulations.

Advisory to yacht owners and live-aboard occupants.

1. Adequate stores, fuel and water should be kept on board as supplies may not be available after the storm.
2. Failure to comply with these regulations may result in legal action against the offending yachts/vessels.
3. You will be responsible for your vessel before, during and after a storm event; including clean up costs and salvage.
4. Please place your valuables and boat papers in a waterproof container, particularly registration and insurance documents.

Advisory to Tenants

Following the recent meeting of the Hurricane Preparedness and Response Committee of the National Parks, the following actions are to be taken by all owners of businesses in the Dockyard and yachts moored within English Harbour.

In the event of an approaching storm or hurricane, business owners are advised to:

1. Unplug all electrical devices, and transformers.
2. Do not store supplies on the floor in the event of flooding.
3. Tenants must remove any valuable items from the building and secure their property 24 hrs prior to a storm.
4. Be advised that electricity and water will be shut off prior to the arrival of the storm.
5. No pets should be kept in any building and will likely not be allowed entry into hurricane shelters. Therefore make arrangements to have your pets taken to an adequate place where they can be cared for.
6. The historical Georgian structures are not safe for use as a shelter. Be advised that all buildings in the dockyard will be closed and locked prior to the storm.
7. Entry into the dockyard will be restricted prior to and immediately after the storm. No entry will be permitted until it is safe to do so.
8. All tenants must give a telephone contact (name and number) to the dockyard security.



“MOVING TOWARDS A SUSTAINABLE FUTURE”

*National Parks Authority Work Programme and Budget
Report 2013-2014.*

*Submitted by : Ann Marie Martin
Parks Commissioner*

ACKNOWLEDGEMENT

<i>Ms. Eloise Francis</i>	<i>Copper and Lumber Store Hotel and Restaurant, Events and Marketing Department.</i>
<i>Mr. Linroy Adams</i>	<i>Accounts and Security</i>
<i>Dr. Reginald Murphy</i>	<i>Heritage and Museum</i>
<i>Dr. Brian Cooper</i>	<i>Environment Unit</i>
<i>Mr. Marius Smith</i>	<i>Yacht Services and Restoration</i>
<i>Mr. Michael Flermius</i>	<i>Maintenance and Grounds</i>
<i>Mrs. Alicia Daniel</i>	<i>Visitor Services and Gift Shops</i>
<i>Mr. Seth Burton</i>	<i>Human Resources/Public Relations</i>

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The Year in Review

Protection of the Parks rich heritage continues to be paramount on the National Parks Authority's agenda. As the Authority continues to move towards the path of sustainability, it plans to invest heavily in its environmental protection programme and alternative energy programmes.

The Nelson's Dockyard National Park remains resilient in the mist of the ongoing economic downturn. The Authority's unwavering approach to prudent management in the development of the Park's resources has spared the Authority from the onslaught of failing businesses and organization that is evident in Antigua and the worldwide economy.

The National Parks Authority remains the main catalyst driving the Yachting Sector in Antigua and Barbuda. Through its partnership initiative with the Antigua Charter Yacht and other stakeholders, the yachting sector continues to produce major benefit to Antigua's economy. Indicators for the 2014 Yachting season are registering an increase in the number of yacht arrivals to our destination.

A review of 2012-2013 performance shows that the Parks revenue has fallen by 1.5% totaling EC \$ 11,593,626.61. Despite the reduction in revenue, the majority of Park's programmes and activities were successfully implemented. The detailed and accurate budget process was a key instrument in assisting Management to meet its obligations to a number of community partnership initiatives.

The Authority's foremost attention will remain on the protection of its natural resources and to foster the growth of the yachting sector which is the main economic engine to the Parks' revenue plant. National Parks Authority will prioritize its efforts to enhance its legislative and institutional agenda maintaining its keen focus on the Environmental Protection and Sustainability.

In keeping with this agenda the Authority through its Environment Unit was successful in meeting several of its objectives as outlined in its budget report of 2012-2013.

The Environment Unit:

The Environment Unit completed its second year of operation in July 2013. The absence of the Unit Coordinator due to surgery resulted in some setback in several areas of work and affected the completion of work programme goals for 2012-2013. In spite of the setback the Environment Unit achieved successes in several areas of its programme. These include:

- ✓ In July 2012 a new staff member – Mr. Ruleo Camacho joined the team. Camacho was the replacement for Nigel Bardoe whose resignation would take effect in September 2012. Mr. Camacho was expected to spend one year in the park before pursuing further studies.

During Camacho's short stint he spearheaded the Parks first Under Water Trail at Windward Bay and the Waste recycling Programme. Mr. Camacho was also able to benefit from the handing over of information and skills from Mr. Bardoe before his departure. Some of the training was in the use of GIS software.

- ✓ **Development Plans for New Parks – Devils Bridge:** After Devils Bridge was declared a park in 2008, some preliminary work have been undertaken.
 - ◆ Maps of the boundary and its super-position on the images of the 2010 aerial survey have been created and some proposed locations for parking, visitor facilities, vendors and routes of proposed trails have been prepared and submitted to the Board.
 - ◆ Consultations on a one-on-one basis have begun on the proposed draft plan for the area.
- ✓ A quick survey of the newly declared Fort Barrington Park was carried out in February 2013. Unit Coordinator Brian Cooper, Chris Waters and Ruleo Camacho was involved in this exercise. Photographs were taken and several issues were identified for further considerations.
 - ◆ Aerial photos from the 2010 aerial survey were obtained from the Surveys Department and the boundary lines were superimposed.
- ✓ **Photo and GIS Map Database:** Maps from the original development plan have been digitised and geo-referenced so that they can be overlaid onto topographic maps or digital aerial photo survey images. The gazetted boundaries were also digitised so they are available for use on all maps of the NDNP. They have replaced the original tentative boundaries that were used for the original Development Plan maps. Property boundaries were also obtained from the Environmental Information Management System (EIMAS) provided by the Environment Division. However, it has not been possible, despite considerable effort, to obtain a clear picture of those plots which are privately owned and those which are still Crown Lands.

- ♦ Photographs of many features of the NDNP have been taken and it is intended to archive them in a searchable database (Access) for ease of use and research. Some consultancy assistance is being sought to set up the appropriate database and train NPEU staff in how to enter data and to maintain the database.

- ✓ **Vegetation Survey of NDNP:** A comprehensive vegetation survey started in March 2013 with a survey of the core area surrounding English and Falmouth harbours. This was conducted by biodiversity specialist Kevel Lindsay of Island Resources Foundation. Subsequent to the survey Mr. Lindsay will present his findings in the form of a Survey Report, a Conservation Report and a Management Report.
 - ♦ The Survey report will focus on the survey itself, parameters, methodology and species observed. The report included a species list for the whole core area and sub-lists for distinct ecosystems within the core area.
 - ♦ The Conservation Report will focus on species of special conservation concern, including any red-listed species, as well as plants found that were not able to be identified as they needed to be re-sampled when producing reproductive structures such as flowers or fruit. Due to the dry conditions preceding the survey, many species had lost leaves and were not in flower or fruit, making identification much more difficult. The presences of invasive plants were also recorded along with their location.
 - ♦ The Management Report will address management options that should be considered in providing effective conservation of the species of concern. Other deliverables were collections of pictures of plants, especially those of conservation concern.

- ✓ A partial review has been carried out using the cadastral data and the original zoning proposals, particularly in relation to the Rendezvous Bay development.

- ✓ A New Year star watch was held early January at Blockhouse and attended by about 50 persons. The several well-known constellations were identified and observed with naked eye, binoculars and telescope. Jupiter and its four larger moons were of considerable interest especially amongst the children present.

- ✓ The NPEU participated in World Wetlands Day (February 2nd) activities at Fanny's Cove near Devils Bridge, where there is a long stretch of fringing red mangroves. This was done in collaboration with National Solid Waste Management Authority and the Grand Pineapple Beach Resort. Several tons of waste were removed from the access road which was being used as a dump for household refuse and builders waste. Several derelict vehicles were also removed. Discussions have been held with the management of Grand Pineapple Beach Resort regarding anti-littering signs following the clean-up.

- ✓ **Meteorological Station Project:** The NPEU is involved in environmental monitoring and rehabilitation and it is therefore very important that accurate data on the weather conditions at or as close as possible to the restoration sites is available. This is especially important for rainfall data. Not only rainfall distribution but also the intensity of rainfall is important in understanding soil erosion and drought effects on vegetation. A good knowledge of the local weather conditions is also quite important in predicting the level of fire hazard during dry periods.

This project calls for the purchase and setting up of a automated meteorological station close to the Dockyard, where rainfall amount, and intensity, humidity, maximum and minimum air temperature, wind speed and direction can be measured on a daily basis. Measurement of solar radiation is also important in determining rates of water evaporation from the soil. The data will be downloaded to a computer on a daily basis and the NPEU will be able to report the data to the NPA, and possibly to the Met Office for their records.

- Consultations were held with the Meteorological Services staff regarding choice of equipment and with regard to setting up the station. It was hoped that support from the Finnish Embassy in Caracas for purchase of the meteorological equipment could have secured and application was made for that purpose. It now appears that the particular project has finished and support will be sought elsewhere.
- ✓ **Water Quality Monitoring Programme:** A monitoring programme was started in November 2012 with the assistance of Dr. Linroy Christian, Chief Chemist at the fisheries laboratory. Sampling was done on an approximately monthly basis at agreed on points in both Falmouth and English harbours, as well as at Windward Bay situated between the two harbour mouths. Sites were selected so as to get a picture of general water quality levels in each harbour. Some spot sampling was also done at several points where run-off drains into

each harbour. A full report on the sampling programme and its results was completed by Ruleo Camacho before he left the unit.

- ✓ **Windward Underwater Trail Project:** An underwater trail was developed just off-shore in Windward Bay to provide residents and other visitors to the Park a chance to see and identify the variety of coral species to be found in that environment. This idea was birthed by Ruleo Camacho who developed the photo interpretation and produced the leaflet that describes the trail in detail. A full report on the trail is available at the unit.

- ✓ **Waste Recycling Programme:** The Environment Unit was able to partner with Antigua and Barbuda Waste Recycling Company (ABWREC) and National Solid Waste Management Authority (NSWMA) to launch a waste recycling programme targeting the yachts.
 - ◆ The NDNP is visited by a large number of yachts during the course of the year. During peak times, scores of yachts fill the Dockyard and the marinas in Falmouth Harbour. Besides the yachts, the crews swell the population of English Harbour and surrounding areas considerably. All this creates additional waste, much of which can be recycled, through the facility at the Antigua and Barbuda Waste Recycling Company (ABWREC).

 - As there have been difficulties in a previous attempt to recycle through misuse of waste receptacles intended for recycling, when the programme was re-started in 2012, focus was concentrated on the yachting community in English Harbour, which is generally more accustomed to recycling programmes in their home bases. Once separation and collection of recyclables from the yachts was organised, attention was turned to Dockyard sources of recyclables. Collection bins were kept inside the Dockyard where they are less subject to misuse. Boat captains were encouraged to place all recyclables in clear plastic bags so they can be distinguished from normal garbage. A leaflet on the recycling programme was produced and distributed to various offices likely to be visited by boat captains as well as NPA staff offices.

 - ABWREC has been very supportive, providing two medium-sized, plastic wheeled skips with lids to be used for storage between collection days. Collection has been facilitated through the National Solid Waste Management Authority (NSWMA).

- ♦ Waste oil collection has also been stepped up with collections from the storage tank being made by Mr Fletcher of Harney Motors Biodiesel Unit. This year some provisions to make the waste oil tank more easily accessible by providing a platform, so that the opening is at a better height. This will minimise risk of oil splashes or spillage during transfer to the tank. Also a bleed valve is needed at the base of the tank to allow removal of rainwater that falls into the tank as this can affect the subsequent processing of the oil off-site. Nearly 1000 gallons of oil has been recycled in 2012.

- ✓ **Environmental Mapping and Digitization Programme:** Initially, the NPA/NPEU did not have any GIS software capable of providing the mapping needs of the NPEU. Since both staff members have some GIS experience and were capable of using GIS software it was important to obtain it on the unit computer. It was also needed by the Heritage Department. Application to the leading GIS software supplier in the region was made to be provided a grant to obtain the newer version of ArcGIS (ArcGIS10) at the heavily discounted price of approximately US\$ 100 (= EC\$ 270) for an individual computer. Licences were obtained in late 2012 and, while it took some while to get the software installed and in use, the installation is now completed.

By using alternative software and an earlier version of ArcGIS, before ArcGIS 10 was obtained, the various maps of the Park Development Plan Part I were scanned and digitised so that zone boundaries could be overlaid on aerial photographs and scanned topographic maps. Boundary maps of the other newer parks were also created. Maps of proposed development plans at Devil's Bridge were also created. The presence of the ArcGIS also helped develop maps to assist the application for Global Heritage status was also substantiated.

Budget 2013/2014 is strategically aligned to last's years' action agenda scheduled for completion in September 2014. Schedules have been updated and new budgetary allocations have been assigned to enhance the department's work programmes and the overall efficiency of the Authority.

Budget 2013 -2014 will place strong emphasis on the Marketing Department and the Public Relations Machinery of the Park. The external threats of increased competition from other Marinas, the decrease in overall cruise ship arrivals to Antigua and the heightened taxis fees from the hotels have all threaten the revenue base of the Park. Added efforts are required to focus on our key markets within the yachting sector and to grow our events base. The Authority has made additional provision for sales clerk to be added to our marketing team. Plans are also in place to enhance our product offer through new and innovative services and products.

 **Marketing:**

During the reporting period the marketing department was able to increase awareness of the Park as a leading travel destination through branded messaging and targeted advertising placements and online co-ops. Niche publications targeted such sectors as Hotels, Yachting, Leisure, and the historical travel market and the cruise sector. The overall effect was the establishment of a consistent market presence.

✓ **Advertising:** Through the utilization of determined media and specific promotional materials such as television, flyers, visitor and guide maps, and the internet, considerable interest in the Park was realised. Examples of promotional and/or visibility efforts undertaken include:

- Life in Antigua, The Antiguan, The Treasure Island, soft cover publications highlighted the scenic and heritage features of the area, and a ‘call to action’ to ‘Explore and Discover’ the Park.
- Tourist maps and over seven major hotel in-house directories featured many of the cultural, natural and recreational scenic assets such as the museum and Dow’s Hill Historical Site and Sound and Light Show.
- The yachting marina and services were presented in popular publications such as Yachting Essentials, Classic and Sailing Week Magazines, Mega Yacht Publications, Antigua Marine Guide and Super Yacht Publication. Nelson’s Dockyard Marina has a presence on the websites of these publications.
- On-going meeting with Sales Representatives from leisure and yachting magazines to discuss new leads, operational upgraded and several of the Park’s ads, to include branding, positioning and key points of differentiation.
- Continued to promote the Park activities via the internet by placing banner ads on Antiguanice.com to include the Nelson’s Dockyard Marina, the Copper and Lumber Store Hotel, and Parks’ general events during the fiscal year.
- Developed relationships with large church communities in Antigua. For example, during the year, the Marketing team placed appropriate Park’s ads in anniversary magazines for two Moravian churches and the historical St. John’s Cathedral Anglican Church.

- ✓ **Trade Shows** - Attended tradeshows in key markets where the cruise and yachting sectors are prominent. This provided considerable networking opportunities and enabled our representatives to sell the Parks' services to key overseas partners.

- ✓ **Website & internet** –
 - Upgraded the NPA's Website and added new flexible features to adapt to new technologies.

 - Continued engaging fans via Social media outlet, particularly through the Seafood Friday group, which is now one of the largest active groups on Facebook.

 - As a result there is an increase in the fan base through the various offerings on social media, bringing new attention to the National Parks Authority by over 50% and growing. The NPA's website receive approximately 3,000 hits monthly.

- ✓ **Public Relations/Media Coverage:**
 - Garnered and increased publicity for the Park through a variety of media opportunities: press releases, Radio and Television interviews and strategic branding opportunities through various events hosted by the Park.

 - Press releases were issued to all media to raise awareness on a host of activities related to the park.

 - Both local and overseas market benefited from this awareness during the hosting of the yachting events, including Classic, the Russian sailing Regatta, Sailing Week, because of the cross promotion benefits.

 - Live Radio and Television coverage of various events brought increased attention to the facilities of the park, while a real and meaningful partnership with ABS television was cemented as the park was readily accommodated in getting information out no matter the form or shape.

 - The hosting of an appreciation dinner for St. John's Taxi Association was another excellent relationship builder that is expected to return tangible results during the upcoming season.

✓ Sponsorship

- Sponsorship requests were favourably considered for a number of schools, service organizations, Government Ministries, not-for-profit organizations such as churches. In the past year, the Authority financially aided individuals seeking healthcare in Antigua and overseas. These sponsorship endeavours increased positive image and community cohesiveness for the Authority.

✓ Partnerships & Group Sales

- Continued strong alliances and working relationships with industry partners.
- Information about the Park was disseminated to visitors that passed through the Copper and Lumber Store Hotel and at Heritage Quay.
- The team also marketed the Park's unique offerings to the targeted areas, built and maintained relationships as well with hotels, taxi associations, island tour operators, student youth groups, event organizers and church groups. In addition, assisted and organised familiarization tours, attended events aimed at representatives that may influence increased visitation to the Park and Antigua in general.
- Distributed marketing flyers to key places: hotels, airport visitor information desks and Tourism Overseas Offices. These were places likely to be visited by the target audience.

✓ Creative

- Designed and produced creative pieces in house and organized, on a needs-basis, from outsourced companies. The team also coordinated the photo library and usage of images including requests for logos, and contributed to the overall branding for the Park.

Budget 2013 – 2014 aims to strengthen our revenue base and cushion the impact of the forecasted downturn in the cruise tourism sector. Investments will be made in the Event's Sector and the Yacht Services department that will create a sustainable revenue stream for the Authority. Plans to outfit the Super Yacht Dock with the electrical and fuel services are in its advance stages and a new access road to facilitate the increases in traffic to this facility is currently being built.

The Yacht Services:

The National Parks Authority (NPA) plays a leading role in promoting Antigua as the leading yachting destination in the Caribbean. The NPA, through the Yacht Services Department strive to maintain and create numerous sailing and yachting events throughout its calendar year by attracting vessels to stay and take part. The main goal of the Yacht Services Department is to offer excellent customer and marine related services in a safe and friendly environment and exposing our marina guests to an exciting experience in Antigua.

The dynamic role of the Yacht Services Department is to foster a customer base relationship with visiting yachts. Hence, the Department manages two (2) offices namely the Port Authority Office and the Nelsons Dockyard Marina to meet the end needs of the customers. The Port Authority Office processes the entry and exit forms and collects applicable fees relating to anchorage within the environs of English and Falmouth Harbour. Additionally, this office works in conjunction with the Customs and Immigration Departments to process inbound and outbound vessels. On the other hand, the Nelsons Dockyard Marina office manages the berthing collection of fees, provides information and other pertinent services to its clients.

- ✓ **Promotion and Marketing:** The National Park seeks to encourage and continue to develop its infrastructure and all related services that support the Yachting Sector. Marketing is significant and a quite an amount of effort and resources are being put into attracting yachts to our country as their main winter base. The Authority seeks to provide an opportunity to engage in yachting events, sightseeing and recreational activities in a safe and relaxing atmosphere.

Additionally, visitors can take advantage of professional services such as painting, mechanical repairs, refits and crew recruitment. It is therefore of paramount importance that the National Parks Authority targets yachting enthusiasts to include owners, captains, crews and broker houses in its marketing initiatives.

- The Authority maintains its presence at the several Yacht charter shows annually. MYBA show in Genoa in May and the Monaco Yacht Charter Show in September are targeted mainly for the large amount of charters. The records have shown that most of our clientele originate from Europe. These shows exhibit approximately 120 to 150 Super Yachts in total; ranging in size from 120ft to 350ft with attendances by agents, brokers, editors, press representatives and other technical services and supports.

The MYBA Show is a great opportunity to meet and network with all the key stakeholders in the industry and to promote Antigua and Barbuda as the destination of choice within the Caribbean. The 2013 show was held 29th April – 03rd May 2013. Delegates who attended the show capitalized on the opportunity to participate in meaningful discussions, distributed flyers and brochures as well as showcasing Antigua during the daily cocktails. The Antiguan representatives treasured the ‘Boat Hop’ experience and were able to extend personal invitations for the captains to visit our island. They reported that the captains were very hospitable.



Booth display and entertaining rum punch at the Exhibition stand at the 2013 MYBA Show.

- The Genoa Charter Show for 2013 ended with great optimism for Antigua winter season. Many captains have shown willingness of entering the Antigua Charter Yacht Show in December 2013 and subsequently using Antigua as the home base for pick up charters, maintenance work and provisioning. It is therefore anticipated to be an interesting 2013-2014 season.

Due to the continued promotion in Genoa, we are pleased to announce that Oyster Yachts have confirmed four (4) vessels for berthing in the upcoming boat show scheduled for 4th – 12th December, 2013. To date, a total of fifteen (15) vessels have indicated interest in which three (3) are confirmed.

- Publications - The Nelsons Dockyard Marina reaches a very wide audience of owners and captains by advertising in the following publications. All At Sea (Caribbean News Letter), Yachting Pages, Mega Yachts Edition (Captain Guide), Yacht Essentials, Super Yacht Publication and Yachting Insider are some of the publications in which the NPA is advertised. The Nelson's Dockyard Marina can also be viewed on the National Parks web site. Additionally, other featured sites are Antigua Nice.com and Amazon.com.

✓ **Statistics:** Several yachting events impacts the operations of the Nelson's Dockyard Marina annually and adds tremendous value to the economy of Antigua.

- Antigua Charter Yacht Show - The Antigua Charter Yacht Meeting (Boat Show) recorded a steady increase from 2009 to 2011. In 2011 the marina recorded thirty-seven (37) vessels for the event which was the most for the four year period. It was in this year that the annual Antigua Charter Yacht Show celebrated its 50th Anniversary and this may have contributed to this increase. The Nelsons Dockyard Marina was full to its capacity and had the greatest display of super yachts for this event.

However for the reporting period 2012-2013 the Marina hosted twenty-three (23) of the ninety-eight 120 (98) registered vessels for the Annual Charter Yacht Show.

- The Super Yacht Cup Challenge is held in January annually. The 2012 Challenge was one of the better years in terms of number of yachts registered for the Nelson's Dockyard Marina. A total of nine (9) yachts were registered compared with eight (8) yachts in 2013.
- The Russian Sailing Regatta - For the past three years this Regatta have used the Nelson's Dockyard Marina to host its prize giving ceremony and after party.
- The Antigua Classic Yacht Regatta has evolved into a traditional sailing event with classic vessels crafted into Schooners, Ketches, Ywal and Sloops. The Nelsons Dockyard Marina saw some of the finest artistries such as Kairos, Adventuress, Sumurun and Bounty, among others, berthed on its dock during this year's event. Also featured in this Regatta are Caribbean-built vessels like Summer Wind and Summer Cloud. This year's event which was the 26th Annual Event 50 plus boats saw thirteen (13) vessels registered when compared to four (4) vessels in the previous year.
- Antigua Sailing Week Regatta - The Nelsons Dockyard Marina has been the home of choice for many vessels participating in the annual event. This year was the 46th annual Antigua Sailing Week Regatta and the marina was at its maximum capacity
- The Antigua and Barbuda Fishing Tournament - Over the past few years the Antigua and Barbuda Fishing Tournament have grown in popularity

within the Nelsons Dockyard Marina. The event is heavily patronized by residents enjoy the festive atmosphere. They can be seen tasting a variety of dishes, purchasing fresh catch from the fishing vessels or even just simply have a good time.

The number of fishing vessels participating in the fishing tournament each year has been fairly consistent. This year a total of thirty-one (31) vessels took part in the two-day event. The tournament is subsidized by the National Parks Authority. Complimentary dockage and water is provided to registered vessels all in an effort to support the event annually.

- ✓ **Environmental Responsiveness** – The Yacht Services Department has embarked on an environmental program in conjunction with the Environmental Unit (EU) of the Nelsons Dockyard National Parks. This program commenced in November, 2012 the objective is to sensitize the Yachting personnel population of the recycling practices being introduced in the marina. A pamphlet was created by the EU which detailed the products to be recycled and its procedures. The Yacht Services Department assisted in the distribution of the brochure and supplied transparent bags for disposal.

The response received from the yachting community was very encouraging. Most captains and crew members were enthusiastic to take part in the program. The Marina worked in conjunction with the Grounds Department to ensure that the guidelines were followed and that the materials were appropriately separated.

- ✓ **Super Yacht Dock Facility** – The first phase of the Super Yacht Dock Facility was completed in December 2012. This new facility at the Nelson’s Dockyard Marina provides twenty-four feet (24ft) draft at the dock and has the capacity to berth twelve (12) super yachts; increasing the marina’s capacity to forty-two (42) vessels.

Phase two of this project which is currently ongoing will outfit the dock with essential marina services to include water, shore power and fuel. Plans are on scheduled to have these installed for the start of the new yachting season.

This upgrade comes at a critical juncture when the Authority must find creative ways of strengthening its revenue base. The additional capacity which will facilitate larger vessels (up to 300 feet) is expected to generate additional revenues for the Authority.

Service Road - A new road is being constructed to service the new super dock facility. Construction started on the 15th July, 2013 and work is still in progress. All service lines to include electrical cables and conduits, sewage, water and fuel lines to the facility will be channeled along this route.

The protection of the Parks' rich cultural and historic heritage remains our top priority. The ageing infrastructure brings its own challenges. The Authority remains resolute in its restoration and rebuilding programme which is a major part of the Authority's mandate to preserve our historical assets.

The Authority's rebuilding programme lies primarily with the maintenance department. For the reporting period the department was engaged in various projects and activities

Maintenance and Grounds:

During the reporting period, the Grounds and Maintenance Departments were engaged in several projects and activities geared towards extending the useful life of all buildings and to preserve the aesthetics of the environs through managed upkeep.

The projects undertaken by the maintenance department include but not limited to Horseford Hill, Blockhouse, Pigeon Point, Dow's Hill and Nelson's dockyard just to name a few.

- ✓ **Horsefordhill Project:** Horse ford Hill boasts a beautiful lookout point where visitors can experience a breath-taking view of the South-Western side of the island. This lookout point houses a mini vendor's mall where visitors can purchase souvenirs and other gift items. 80% of work was previously carried out on this site. It was the objective of the Maintenance Department to finish the remaining 20% in order to bring the project to completion. However, to date, only approximately 15% of this has been completed due to financial constraints.
 - The Horseford Hill project began on 8th October 2012 and lasted approximately two weeks. The National Parks Authority received complaints from vendors about a constant leaking in the wall during rain which disrupted their operation. In order to address this problem, a retaining wall measuring 126'x8"x24" was erected. This was done in order to slow the flow of water running off the hill. In addition, a drain 126'x5"x6' was also cast in order to steer the water away from the building, thus rectifying the problem and preventing any foreseeable

leakage. Preparation for the casting of the drain and retaining wall was done manually since there was no access for heavy duty equipment at the site. Some of the work for this aspect of the project included form work, steel work, laying of BRC and use of a pump truck to pump 21 yards of 3000psi concrete.

- A concrete step allowing visitors access to a higher lookout point was also constructed. The already existing columns were plastered with thinset in preparation for trowel text application which was later done. Painting of the roof began. However, directives were given from the Park's Commissioner to put a hold on the painting aspect so that the Vendors can be given an opportunity to operate their business smoothly without interruptions. Later, in January 2013, the go-ahead was given to continue work on the site. Spouting and downpipes were installed which took approximately four days to complete. Painting of the roof was then completed.
 - The work at the Horsford Hill Look off is about 95 percent completed.
- ✓ **Pay Master's Office/ Signal Locker:** Built around 1806, this building was used as a Pay Master's Office and later the Harbour Master's Office. Today, it houses several important businesses; *Signal Locker* - a Marine Repair Electronic Shop, *Crab Hole Liquor* – a small grocery and liquor store and *Hot Hot Spot* – a coffee and pastry shop, all of which are integral to the development of our viable yachting sector. During our general building inspection, several observations were made:
- **Signal Locker** - There was extensive leakage to the roof of Signal Locker due to the fact that 75% of the roof comprised of old and rotting shingles. In addition, sudden drop in areas of the floor and constant squeaking suggested structural compromise. This was due to numerous batteries and other heavy items being stored on the floor. Evidence of old and rotten boards were also present.
 - **Action:** The old shingles on Signal Locker were removed and replaced with new ones.
 - **Crab Hole Liquors** - The overhead ceiling showed evidence of serious structural compromise. Several 3x6 timber joists were split and cracked down the center lending to little or no support to the upper floor. Entrance doors were in disrepair resulting in difficulty closing, which presented some security concerns. Proper ventilation to the building was

also another area of concern. A plan of action was put in place to remedy and address the problem.

- **Action:** The 3x6 floor joist in the ceiling of Crab Hole Liquor was removed and replaced with four large 6x6 timber beams to restore structural integrity. The floor boards were replaced, puttied, sealed and painted.
- **Hot Hot Spot** - There were windows and hinges which needed to be replaced for maximum security.
 - **Action:** Windows and hinges at Hot Hot Spot were replaced.
- ✓ **Galley Bar:** This building, past known as the Sea Man's Gallery, was built in 1779. It was used to feed many sailors while their ship was being careened in the Harbour. Today it houses two businesses, one of which is Galley Bar and Restaurant. This business serves a similar function to that of its origin where yachters gather for a hot meal and a few drinks after a hard day's work. Due to the age of the building and its location on the water front area, the salty environment poses many challenges for the structure. The owners of the business brought several concerns to the attention of the National Parks are requested that they be addressed.
 - **Observations/concern(s):**The salty air caused the steel in the columns to corrode and expand which resulted in cracks to various areas of the column and ultimately caused them to fall apart. This was evident to different degrees throughout. Any attempt to restore the columns would only be a temporary fix since the steels were already corroded. Rails and ballisters were in extremely bad condition, many of which were rotten. Approximately 40% of the stone floor in the dining area was uneven and eroded. The flower planter which was made of loose stones was in disrepair.
 - **Action:** A team comprising of Maintenance and Grounds workers and a few professional contract workers were assembled; 1 carpenter, 1 stone mason and 1 varnish specialist.
 - All twelve concrete columns were demolished and replaced with 8x8 green heart columns which were sized to 6x6 to accommodate the roof. These columns were then supported with ½ inch aluminum plates that were cast into the flooring.
 - The rails were also replaced with 3x4 green heart timbers.

- The rotten areas in the balusters were cut off in order to reuse them.
 - However, the flooring was raised approximately 4 inches to accommodate the now short portion.
 - The uneven and eroded stone floor was completely removed and replaced.
 - A completely new and larger flower planter was erected around the entire perimeter of the building.
 - In addition to the work carried out on the Galley Bar and Restaurant itself, repairs were also done to the adjoining store room. The shingles on the entire roof were replaced.
 - An access for physically challenged persons (a ramp) was also built, since there was none previously.
 - The entire building was stained, varnished and painted. Some electrical work was carried out on the building as well.
- ✓ **Pigeon Point Bathroom:** Pigeon point beach is one of the most widely used beaches on the island - by locals and tourists alike. Its location provides a fun and safe haven for families around the island. Many activities, including camps, parties, church functions and even sailing week activities etc. are held here on a regular basis. Cruise ship passengers also frequent the beach while their liner is anchored in the harbour. Because of the constant use of the beach, the National Parks Authority is constantly seeking ways in which to upgrade the beach. IP cameras were previously installed for an added measure of security and to act as a deterrent for any illegal activities. A playground for recreational activities for children was also erected. Because of the constant use of the beach, it therefore became necessary for a bathroom facility to be erected which was done.
- **Action:** The recently constructed bathroom facility requires high maintenance and it is the objective of the Grounds & Maintenance Departments is to see that this is done.
 - The entrance gate which was made of plywood and acted as a temporary fix was replaced with a permanent and more durable metal gate. In keeping with the need for high maintenance of the beach,

periodic checks are carried out on a regular basis to determine areas of concerns.

- The cleaning of the beach is done on a contractual basis: three times weekly in peak season and twice weekly off-season.
 - Workers from the Grounds team carry out landscaping work around the bathroom facility on a fortnightly basis.
 - One worker is responsible for the removal of garbage from the beach. This is done every morning. The Maintenance team addresses any necessary maintenance work that needs to be done.
 - In addition to the regular maintenance and grounds work carried out at this facility, in the month of November minor repairs had to be done on the fence which was damaged from a motor vehicle accident. The fencing wire and pipes were replaced and the damaged wall repaired.
- ✓ **Fort Berkeley Trail:** This trail is located around the super dock area; it is a 15 minutes hike to Fort Berkley. Directly opposite fort Berkley is Fort charlotte back in the 18th centenary these two forts guarded the only entrance to English harbor. Presently a Powder Magazine house and cannon still stands at Fort Berkley. The path to Fort Berkley is used mostly in the tourism season and is cleaned seasonally (every 6months).

This project commenced on the 26th of November and was completed by the 21st of December 2012.

- **Action:** Work done on the Fort Berkeley Trail includes:
 - Cutting over hanging branches of tree which included 43 Manchineel trees.
 - Raking up loose stones and using them to fill a back area which was eroded during heavy rain.
 - Cutting the lawn at Fort Berkley.
 - Cleaning out the powder magazine.
 - Using blower to blow out excessive leaves from trail.

- Using the loose stones as stone work along the path on both sides enhancing the look of the area.
- The wooden steps leading to the trail were in a bad condition. Repairs were done on the steps and the wooden bridge was replaced.
- ✓ **Working Mast Shed:** This building was originally built in 1778 and destroyed by an earthquake in 1843. It was then restored in 1956 as a Cordage, Canvas and Clothing Store. Located directly opposite the Copper and Lumber Store Hotel the building now houses two gift and souvenir stores. This building was in bad repair as a result of termite infestation and was restored for the 2012 – 2013 season.

In addition to the roof that was completely redone, the two shops housed in the space (Photo Phantasy Antigua and Dockyard Pottery) rebuilt and the sizes of the spaces were increased.

- ✓ **Copper & Lumber Hotel:** One of the most focal and admired point in the Nelson’s Dockyards is the Copper and Lumber Store and Hotel. Known for its 14 luxurious suits and fascinating history the hotel is popular among the natives of Antigua as well as the yachters who visit the island. Copper and Lumber Store and Hotel is also known for Wedding, Banquets and by popular demand Sea Food Fridays. Considering the age of the building regular maintenance is required for its proper up keep.
 - **Action:** An extensive amount of work was undertaken in the Copper and Lumber Store Hotel. All formica countertops were replaced with mosque tiles. The work completed includes:
 - Identified areas in the bathrooms were sanded and varnished
 - The floors were sanded; the seams were potted and stained.
 - Work done in the hallways included scraping out and filling back leaking seams. They were also sanded, stained and varnished with one coat.
 - The gallery rails were coated with varnish.
 - All windows, shutters and doors- were checked and all fasteners were secured.
 - Upper Lobby - The rotted floorboard and replaced.

- Freelance - The formica in the kitchen was replaced with Mosque tiles. All light switches and bulbs were checked and all vents in bathroom were cleaned. The fan in bathroom and the cone shade bulb located between clothes closet were changed.
- Badger - The buldge in the floor was repaired as well as other minor repairs in the room. The exhaust hood in the kitchen was removed.
- Collingwood - Rotted floor boards in the central area of the room were replaced. The countertop in the kitchen and the wall paper was repaired. Proper lighting was needed on the stairway so the lightning fixture was inverted to create more light. This was done in a few of the rooms.
- Dreadnought - Minor repairs were done.
- Agamemnon - A new closet light fixture was installed.
- Boreas - The wall paper in the bathroom was repasted to the wall. A wiring short in the bathroom vent was repaired.
- Victory - Minor repairs were done to include repairs to the window frames, removal of damaged wall paper and painting the area and installation of moldings. A new light fixture was installed in the safety deposit box area, the candle light holder was changed and exposed electrical wires were encased in chunking for a neater finish.
- Britannia - Termite infested window frame was repaired. Chipped counter top tiles were replaced.
- Amazon - The weakened floor boards on the upper landing were replaced, the vanity was changed from formica to wood and other minor repairs. The faucet in the kitchen was replaced and a new toilet was installed in the bathroom.
- Achilles - Minor repairs were done. Bathroom cupboard was rebuilt and a vanity counter top on the upper floor was changed to mosque tiles. A switch for the ceiling fan was installed, the light shade over the vanity was replaced and the bathroom vent was cleaned.
- Royal Sovereign - The AC drain pipe was encased and the tiles on the counter top were dressed.

- Hardy - Minor electrical work was carried out and the bathroom vent was cleaned.
- Ajax - Minor electrical work was done and a lighting fixture was replaced.
- Africa – Chunking was used to cover exposed electrical wires and a lighting switch was replaced.
- Reception/Lobby Area – The female bathroom in the lobby was outfitted with a new face basin and toilet unit. Maintenance work was also carried out in the male bathroom.

✓ **Hurricane Preparedness:**

- Pre hurricane disaster preparation included pruning of coconut trees, Palm trees and over hanging branches.
- The palm trees had to be secured with tie wire for safety during the passing of tropical storm “Isaac “.
- Copper and Lumber - The windows and doors facing the water front and Mango tree deck were seal off with strips of board to prevent any damages that could occur during high wind and rain. One of the maintenance workers slept at the hotel overnight in case he was needed to assist with anything during the storm.
- Dows Hill Interpretation Centre - The shutters at the centre were closed in and all door and window were safely secured for the storm.
- Drainage - The drain which is located behind the laundry/opposite the Garbage facility was cleared by a backhoe and the garbage facility was neatly cleaned.
- Photo Fantasy and Dockyard Pottery - The Working Mast Shed was under repairs and as a result the western side of Photo Fantasy and Dockyard Pottery were exposed to the weather of tropical storm Isaac. That portion of the building was reinforced with plywood to secure the building.

- ✓ **Car Park Wall:** The Car Park retaining wall was built in the early ninety's during the CIDA project. The wall was in a deteriorated condition and posed a threat the motoring and visiting public. The wall had to be demolished and rebuilt and the project was sub-contracted. The project started on the 7th of September 2012 and was completed on the 19th September 2012.

The previous wall was badly constructed. This was not easily detected at first. However, during the re-construction process, it became quite obvious and would not have reflected well on the aesthetics of the entrance. Therefore it became necessary to correct and rectify this problem. In order to do so, some steel work, form work, material and labour were required, all of which were not estimated for in the original invoice. On the 18th September the wall was completed and painted

✓ **Termite Treatments**

- At the commencement of restoration work on the Working Mast Shed it was noted that termite treatment was necessary. The initial treatment was carried out on August 20, 2012 and a subsequent treatment on 13th September 2013.
 - Saw Pit Shed Building that house A&F sails and Things Local received an overall treatment of windows, floor doors and around the building this treatment is to get rid of existing termites and to prevent as much as possible future termite infestation.
 - Cordage and Canvas Store – the portion that houses the Customs and Immigration Office – the roof were treated for termites after the technicians pointed out that termites were mainly in the roof and lighting fixtures. The entire building was inspected and treated for termites.
 - Blockhouse Bathroom – The presence of termites was evident in the entire building including the roof. The entire building was treated.
- ✓ **Sewage Plant:** Over the past year the sewage plant had many hiccups. A meeting was held on January 16th 2013 with representatives of with Engineering Management and Associated Services (EMAS) in an effort of the plant assessed.

Subsequent to the assessment, the National Parks Authority engaged the services of EMAS to carry out the necessary repairs and entered in a service contract for the maintenance and upkeep of the plant. After several visits from

the technicians at EMAS the sewage plant was operational in automatic mode by the 30th January 2013.

The contractual arrangement between the National parks and EMAS proposes to monitor the sewage plant with the submission of monthly reports to the park. The proposal outlines 2-5 visits per month and spend 12-16 man hours towards the sewage plant at a cost of EC\$ 1,500.00 a month. This contract went on until the month of May, we received a call stating that the technician was offered another Job and would not be able to go through with the contract. Presently the sewage plant is being monitored by the park's electrician who was initially responsible for monitoring the plant's activity.

- ✓ **Garbage Collection:** During the peak of the tourist season garbage is collected three times around the dock in the Nelson's Dockyard and at Falmouth Harbour. This is done internally by the Grounds Department.
- ✓ **Garbage Skiffs:** Three of the Garbage skiffs were in deplorable conditions and needed to be repaired. The repair work included:
 - The fabrication of small windows to allow proper ventilation in the bin.
 - Cutting away rotten areas from the bottom and the sides
 - Cleaning and chipping off rusted areas
 - Finally painting the skiff inside and out
- ✓ **Water treatment:** The National Parks is continuing its water treatment exercise in an effort to ensure that the water within the establishment is potable. Chlorine tablets, chlorine powder and caustic soda are used to treat the water in and around the dockyard. The test points established are the Copper and Lumber Store Kitchen, Bar and Rooms, Hot Hot Hot Spot, Laundry, Dock Side Hook up, Market Place, Dow's Hill Interpretation, Blockhouse, Galley Bar, Bathroom at Officers Quarters, Bakery, Pigeon Point Bathroom.

The National Parks remains committed to its mandate to restore and conserve our historical assets. Within the reporting period the Authority was successful in securing the funds to restore one of Antigua's foremost heritage sites – Clarence House. This dream was birthed into reality with the ground breaking ceremony on 17th December 2012. An amount of EC \$8,000 was raised through the Peter Harrison Heritage Foundation and work commenced in July 2013. There are 16 full-time employees presently working on the project. Project is scheduled to be completed in 2014.

Security:

The National Parks sits within three (3) thriving communities and as part of its community partnership initiatives the Park continues to play a dynamic role in supporting community programmes. The NPA Budget for 2013- 2014, plans to assist with raising funds through donor assisted programmes for the support of the Cobbs Cross Clinic and the Dockyard Police Station.

During the last year, criminal activities have been minimal within the Park. This is largely due to the enhanced CCTV initiatives and the ongoing efforts of the Antigua and Barbuda Royal Police Force to control criminal activities within our nation state. The Authority continues to invest heavily in its security programme. Budget 2013-2014 will facilitate routine repairs and upgrade to the current network of cameras. Additional cameras will also be installed. The Authority will seek to partner with other corporate businesses to ensure that the National Park remains a safe place to live and conduct business. This year as in the past years the Antigua Charter Yacht Meeting has assisted with the street lighting project in preparation for the Annual Yacht Charter Show.

NPA Operations: Security has been and continues to be a priority in the National Parks management plan. Due to the diverse operations of activities within the park, providing a safe and secure environment for business is not an option. The negative impact of any criminal activity in the area would have adverse repercussions for Tourism and Yachting related businesses in Antigua and Barbuda.

The National Parks Authority provides its own security with a compliment of four (4) NPA guards and two (2) Special Security Guards. These six guards work twelve hour shifts and provide twenty-four hour security to the Nelson’s Dockyard.

For the summer period, and to cover the shifts while employees take their annual vacation, Daric Johnson (Tour Guide) has been assisting in the Security department. The Authority compliments to Mr. Johnson for his flexibility and dedication.

The parks network of cameras has proven beneficial in the fight against crime. There have been situations when the cameras recording have been used to view various activities that had taken place with much success. However, there is still room for improvement. Plans are ongoing to improve the night vision capability and to install more cameras at strategic locations.

The Authority have been partnering with the Dockyard Police Station over the years in providing security service at the Dow’s Hill Gate which is in a somewhat remote location. The Dow’s Hill Gate is one of the Authority’s cash points and a decision had been taken not to operate the gate without Police presence. Unfortunately, there have

been times when the police have not been very reliable. This puts the Authority in a challenging position, having to operate using one of the NPA Guards who is not armed. This is generally not in the best interest of the park or its employees.

The Authority is currently exploring two options to rectify this situation.

1. The Authority has written to the Police Commissioner requesting permission for one of its officers to carry a firm arm.
2. To determine the cost of having an armed guard at the location.

Human Resources:

The Authority's policy towards training and development for its employees continues to reap tremendous benefits. This has resulted in high productivity and upward mobility for a number of junior staff who are now placed in management position. This year's budget makes provision for the ongoing training and development of the Authority's human resource.

- ✓ For the reporting period the National Parks Authority (NPA) maintained a steady level of employment, with 83 employees, including full time, part time and contracted staff on payroll. These include some employees whose contracts had ended but were recalled on a temporary basis at the Copper and Lumber Store Hotel & Restaurant at the close of the perennial "end-of-season" to provide for the on-going operations of that Business Unit.
- ✓ The turnover of employment remains virtually nil, during the year 2012/13 as at June 30, 2013. The NPA though remains a sought after institution for which employment is being sought with over 350 applications coming to the HR Department and reviewed during a period in which we posted no advertised vacancy.
- ✓ Our internal staff and former contracted employees' data base and maintenance of previously contracted and internal discretionary recruitment, has been a plus in our reducing inefficiencies in time spent recruiting employees.
- ✓ During the year, interest in Educational Advancement has been on the increase, with at least four (4) employees expressing interest in exploring scholarships and study leave options. Hence, the budget proposes draft budget proposes an increase in educational development for staff.

- ✓ **Movement of Employees:** During 2013, two professional employees Mr Chris Waters and Ruloe Comacho will leave from the Museum and Environmental Department respectively, both for further studies.

Another employee Mr James Gerald was sent on retirement in June, 2012 after 20 years with the NPA. He has received his thrift fund and the NPA has agreed to the pay his gratuity in instalments.

The HR department in in process of seeking replacements and have held further discussion seeking longer term and viable options since professionals in these units have been the main area of term over. The Heritage Affairs Manager and the Coordinator of the Environment Unit have been aware of the vision for greater indigenous input and other capacity building request.

- ✓ **Discipline:** During the reporting period no employees were dismissed or suspended.
- ✓ **Recruitment:** We have successfully recruited our first non-English speaking tour guide and have provided exposure to both Tour Centre's.
- ✓ **Employees Handbook:** The employees' handbook has been completed, signed off and distributed to all members of staff and Board Members.
- ✓ **Uniform Policy:** A policy has been developed to address uniform ordering and administration of the process. The approval of this will address changes for future development of a more effective, efficient and a standardize system that is central.
- ✓ **Photo IDs:** The NPA fully implemented its Photo Identification system the Time and Attendant Alpha Tract Software and hardware system is in the processed of being introduced.
- ✓ **Staff Meeting:** The target of one meeting per month for employees was not met and generally employees were not met, yet updates on the issues in the Park and matters concerns were addressed amicably.
- ✓ **Training:** Mr. Wendell Bachelor has started his Supervisory training at the UWI open campus.

Visitor Services:

The National Parks is indeed a National treasure and has gained the interest of the millions of visitors that come to our shores annually. While the European guest has always had a keen interest in our history, the US market remains one of our major source markets contributing approximately 12 percent of total visitor arrival.

The Visitor Services Department was recently realigned and now comprises of the Dockyard Visitor Service, the Interpretation Centre and the Gift Shops. To this end the newly appointed manager has not had the opportunity to make a thorough assessment of the department. In light of this several meetings were held with the different units in an effort to ascertain the immediate challenges and remedies that would be required to improve the level of service offered.

Visitor services employees; both at the Dockyard and Interpretation Centre are in constant and direct contact with the guest and are generally the first to interact with our visitors upon arrival to the park. The gift shops attendants, though they interact directly with the visitor they are not usually the first contact. The department has a total staff complement of 20 employees fulfilling varying roles. There are ten tour guides, two gate attendants/cashiers, two gift shop attendants, two cleaners, a gardener and three unit supervisors.

Employees are continuously encouraged to function efficiently in a professional manner. The matter of quality customer service and its importance to the organization cannot be over emphasized. Emphasis has and will continue to be placed on the diversification and improvement of the visitor experience. Continued focus will involve maintaining quality content of interpretative material, engagement with customers, and quick response to tour operators' requests and concerns.

Recruitment - Over the past years, management has undertaken a new strategy in its employee recruitment process. The National Parks have sought to hire tour guides on a six-month contract as opposed to full-time employees to furnish the Visitor Services Department. This decision was influenced by the economic downturn and its perceived impact on our visitor arrivals. This option has proven to be beneficial and was once again employed for this financial year as the park continues to monitor the impact of the economic decline.

The employees in the Visitor Services department are to be commended for their hard work and commitment in conducting the guided tours and other duties daily. However, there is always room for improvement and as such this year emphasis will be placed on building highly effective teams. The Authority is committed to further training and development but the transfer of knowledge is a critical factor if the department is to achieve its goals and objectives.

Visitor Arrivals to Antigua and Barbuda:

Antigua and Barbuda continues to be a destination of choice to many travelers worldwide. While the industry is influenced by seasonal trends, it remains evident that the winter months attract the largest quantity of visitors annually.

Caribbean Tourism Organization Statistics Report for 2011 -2012 is summarized below for visitor arrivals into Antigua and Barbuda. In 2012, tourist arrivals by air increased by 2.3 percent when compared to 2011 when a total of 5,595 additional visitors by air arrived. Unfortunately though for the same period Cruise Ship arrivals recorded a 9 percent decline. In 2011 cruise passengers totaled 606,485 compared to 551,161 in 2012.

Table 1: Total Visitor Arrival - Antigua & Barbuda 2010-2012

Total Visitor Arrivals to Antigua and Barbuda			
	2012	2011	2010
Air Arrivals(Jan - Dec)	246,926	241,331	229,943
Cruise Ship Arrivals (Jan - Dec)	551,161	606,485	557,635
Total	798,087	847,816	787,578

For the current year 2013 data for visitor arrivals are not provided for the entire year. Based on what is presented comparisons made on the to-date totals are shown below. It is noted that an overall decline of 5 percent in visitor arrivals are recorded for the reported period.

Table 2: Total Visitor Arrival Comparisons - Antigua & Barbuda 2013/2012

	2013	2012	% change
Air Arrivals (Jan - Jul)	149,464	157,977	-5.4
Cruise Ship Arrivals (Jan - Apr)	339,106	356,562	-4.9
Total	488,570	514,139	-5

The United States and Europe continues to dominate Antigua's source markets. In 2011, we recorded 92,097 European tourist and in 2012, American tourist totaled 93,214. As the figures below show as of July 2013 the United States has contributed a higher number of visitors to the island's total arrival.

Table 3: Visitor Arrivals by Markets - Antigua and Barbuda

Tourist arrival by Markets			
Market	2013 (Jan -Jul)	2012	2011
United States	57,013	93,214	84,832
Canada	20,718	24,185	22,403
Europe	51,743	89,909	92,097
Other	19,990	39,616	41,999

Visitor Arrivals to the National Parks Authority.

The Nelsons Dockyard National Parks is one of the must see sights in Antigua and Barbuda for all the visitors to the island's shores.

The National Parks welcomed in excess of 100,000 visitors annually. These visitors arrive to the island seeking a vacation experience that will be etched in their memories for a lifetime. The sites within the park have captured the interests of our visitors over the years but things are definitely changing as new players have entered the market jockeying for a share of the market pie. While the players have increased and continues to do so, unfortunately the number of visitors to our twin island state continues to dwindle. As this market pie dwindles it creates pressure on the players to be more creative in their service delivery if they are to remain competitive. The Authority is therefore challenged to create and maintain a sustainable environment that balances the need for development and ensure the historical and natural assets are preserved for posterity and the enjoyment of our visitors.

Due to its self-financing status, the National Parks must generate the required financial resources to make the operations sustainable. Hence the park is highly dependent on visitor arrivals as one off its main revenue streams. Therefore one of our major challenges is the seasonality of the tourism industry that provides significant activity only six months of the year. Although tourism related activities span a six month period the parks operations spans the entire year.

The Authority's recorded decline in visitor arrivals is in keeping with the trends dictated by the impact of the economic crisis. The slow rebound that has been indicated by the Eastern Caribbean Central Bank is being realized at even slower rates. In relation to the visitor arrivals by sea, it is noted that in some instances the number of calls to the island have increased but regrettably the number of visitors are declining.

Table 4 below summarizes the monthly visitor arrivals to the park; both the Nelson's Dockyard and the Interpretation Centre for three years. For the current period 2012-2013 season data is presented as at July 2013 for the Nelson's Dockyard and August 2013 for the Interpretation Centre.

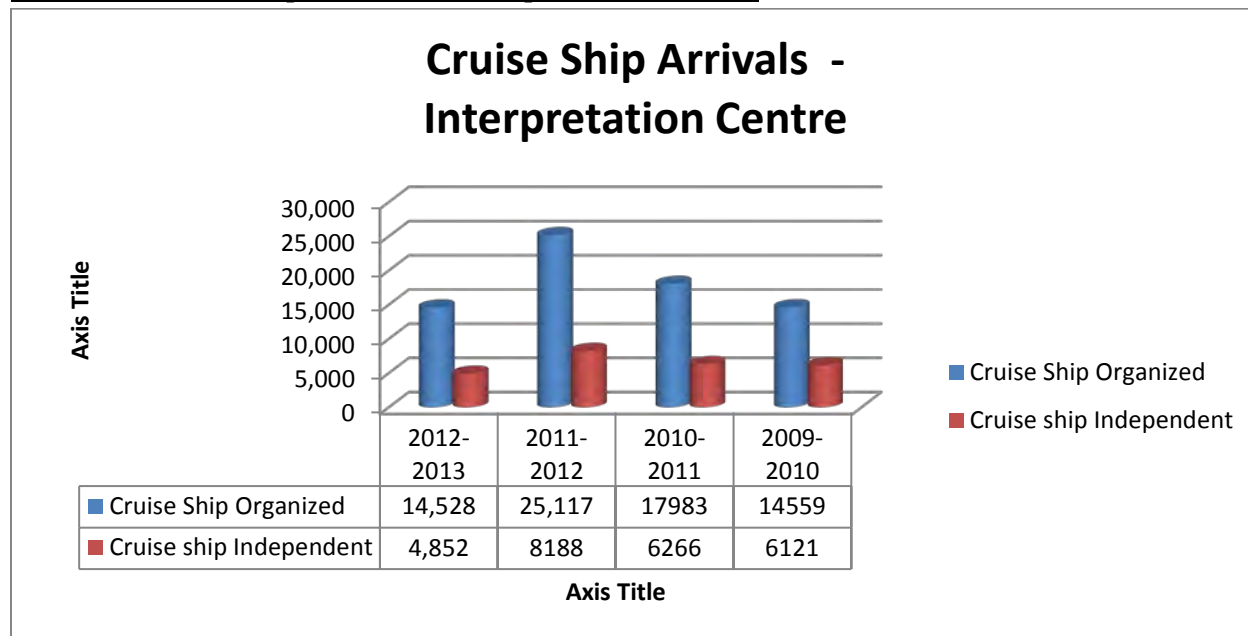
Table 4: Visitor Arrivals to NPA

Month	Nelson's Dockyard			Interpretation Centre		
	2012-2013	2011-2012	2010-2011	2012-2013	2011-2012	2010-2011
October	4242	2638	2957	180	1182	1851
November	10493	11813	13373	4290	4495	4073
December	10893	14896	14488	4194	8589	4949
January	19486	19131	15178	7386	6701	6108
February	12619	21115	18750	6485	7694	6265
March	14014	18031	20901	2938	6418	7320
April	8438	10375	12613	3118	4011	5056
May	2817	3196	3317	1322	1199	1583
June	2476	1794	2184	887	919	985
July	2891	2265	2593	1603	1236	1644
August		2611	2899	1131	1396	1327
September		1386	1378			
	88369	109251	110631	33526	43840	41161

From the table above for the current period we see that the Nelson's Dockyard welcomed 88,369 visitors as at July 2013. The year to date total for 2011-2012 as at July 2012 was 105,254 visitors. From these figures we see a 16 percent decline in visitor arrivals for (October – July) 2012-2013 when compared to the same period 2011-2012.

On the other hand the Interpretation Centre welcomed 43,840 visitors in 2011-2012 tourist season. The figures for 2012-2013 (33,526 visitors) show a significant decline of 24% when compared to last year. Further examination of the visitor arrivals for the Interpretation Centre show that there was a significant increases and decreases in the figures coming from the cruise ship for the past four years. These are shown in the table below.

Table 5: Cruise Ship Arrivals - Interpretation Centre



The significant decline in cruise ship arrivals to the Interpretation Centre has also impacted revenues. The reasons for this decline can be attributed to the change of ground tour operators that took place at the start of the tourist season. As a result of the change the tour itinerary was reduced from four stops to three stops. This impacted the Interpretation Centre which would generally be a part of the four stop itinerary.

Rendezvous Tours for instance started handling some ships that were previously handled by Tropical Adventures and Alexander Parish. Rendezvous Tours which also manages Antigua rain Forest canopy tours promotes more of an adventure experience focusing on zip lines and beach tours. Further, for the reporting period, Aida (cruise ship) made fewer calls when compared to last year.

The challenge of the declining visitor arrivals to the National Parks is a serious one. For the 2013-2014 tourist seasons it has already been indicated that the cruise ship arrivals will continue to decline. Major cruise lines are rerouting their ships to other destinations.

In light of this the Authority must create new avenues for revenue generation. The marketing department must increase the NPA's presence through advertising and promotions. The public relations machinery must be set in motion, creating new awareness and interest in the park. The Authority should further seek to intensify its efforts in the hotels to increase our share of that sector.

Gift Shops

The National Parks operates two gift shops, one on the ground floor of the Nelson's Dockyard Museum and the other at the Interpretation Centre. For the past seasons the Dow's Hill shop did not have a set attendant. This role was fulfilled by the tour guides who operate at the centre. For the reporting period employees were rotated between shops in an effort to have both shops adequately covered especially on busy cruise ship days. Recruiting a suitable gift shop attendant for the Dow's Hill shop has been an ongoing challenge.

Efforts were made to train one of the tour guides for the gift shop thus creating an additional attendant. The training started but was not completed. This effort would be continued in preparation for the start of the new season.

The Retail Edge software that carries the point of sale in the shops is no longer operational. The computer technician had to create an alternative avenue to have some functionality to manage the Gift Shops operations. The new software for the Gift Shops that is compatible with Quick Books will go online for the start of the new season. At the end of the financial year when the inventory would have been checked and verified by the Auditor, the year-end data would be imported into the new operation system. The new operation system is intended to be online for the start of the new financial year as all equipment have been sourced.

One of the plans for the reporting period was to explore the opportunity of rebranding the shops. The plan was to source some unique items with the Dockyard brand. Although this has been a passion of the Marketing Director for some time now, it was not accomplished. However, it will remain a priority for the months to come.

 Heritage and Museum:

The Heritage Department will continue to pursue the Authority's long term goal of obtaining World Heritage Status. The department plans to continue to upgrade its exhibits and the digitization of its collections. For the upcoming year the department will undertake an inventory of all the Heritage sites in Antigua and Barbuda.

Over the past year the Heritage Department has been involved in a wide variety of activities and completed a number of projects. Intern Chris Waters worked for that period as the Curator and proved to be an important and valuable addition to the staff. He has proven to be a good mentor for junior staff member Wassim Braithwaite who now assumes responsibility for managing the collections, catalogues artifacts and library books, and builds exhibits for the museum.

✓ Storage and Collections Management

- The Museum conducted an inventory of its collections and re-catalogued all of its collections. Aging plastic storage boxes were changed as 25 new plywood boxes were built and put into immediate use. The work program also involved cleaning out the locker storage area and the Dow's Hill Center. Many exhibits required maintenance and this was done. In addition, a review was done of the main exhibits and it was decided to completely change them all to a traditional objects based display museum. This work is now in progress and will continue into 2014.

The Museum staff also catalogued all of the books in the library, and digitized all photographs. This will serve as a backup to its collections as research can now be done using the renewable digital database and not the delicate originals.

Several joint museum projects were implemented as both museums maximized resources to improve collections, data management, storage, and to establish common policies and control methods. This was extended to the digitization program and we have now acquired a complete set of digitized air photos of Antigua from 1924 and 1942.

✓ Education:

- Over the past year the museum hosted a number of field researchers and students, assisting with their research and as a result acquired new information, maps and artifacts for our collections. One of the more important studies was the Erin Friedman map of the dockyard and projections for sea level rise using predictive models.
- The museum's education program remains in effect and 8 field trips and lectures were done at schools on Antigua, including the Antigua Girls' High School and the All Saint's Secondary. The museum also carried out a one-year evening lecture series that was quite successful. This was done in partnership with the Environmental Unit. It also assisted the Environmental Unit with its "yearlong" water quality assessment of English and Falmouth Harbours.
- A new website was created, tweets and blogs posted and social media was used extensively by staff of the museum throughout the year.

- Archaeological excavations were also done at Indian Creek this summer. This is the start of a 5 year project in partnership with the University of Texas and California State University.

✓ **Documentaries**

- This was an active research season and we were successful in attracting 2 BBC documentaries and exposing our research and the dockyard to the world. This activity will continue into the 2013 season but we must capitalize on the publicity and **launch a new series of books, both historical and photo-journals of artifacts, the dockyard and the scenic landscapes of the National Parks as recommended by the BBC.**

The new series of books will be a priority for the heritage department in 2014. Work on the final drafts is progressing and should be completed early in 2014.

(To view documentaries, Google: **Nelson’s Caribbean Hell Hole, and When Britain Shook the World.**)

✓ **Clarence House**

Clarence House continues to be a major priority for management of the Heritage Department. Over the years, we have updated our estimates and quantities, documented the history of the structure and assisted all in providing information regarding the restoration, end-use, and structural details about the site. Management will continue to monitor and document the restoration work as it progresses.

✓ **Museum Internship Program:**

The department was strengthened by the acquisition of an intern – Mr. Chris Waters - with considerable experience in field archaeology, research and collections management. Mr. Waters was charged with the responsibility for organizing and implementing an inventory of artifacts collection in the Dockyard Museum. This project was completed and we now have a new computer database and system that is an improvement on the old Nicholson system. There are about 12,500 artifacts catalogue, not including collections in storage at the research lab that are still being analyzed.

Mr. Waters tenure will come to an end in early August, and going on to complete his PhD at Syracuse University. The department will be recruiting a replacement for Mr. Waters in the upcoming year.

The new focus for the museum will be to change its current main floor exhibits to a modern, interactive exhibition hall. Therefore, we are planning to acquire an intern with museum exhibit building and design skills and experience.

✓ **Museum Design of New Exhibits**

Design work and text preparation for the new exhibition is now in progress and we will be working with Sign Pro to cost and build the new generation of signs and backlit panels. Some of this was approved in the last year's budget but could not be implemented as the inventory and cataloguing of our collections took considerably longer than planned.

The museum was fortunate to receive a donation of high quality glass cabinet display cases for the exhibition of artifacts. This donation was made by our partner institution the Museum of Antigua. They cannot be used for any other purpose or by any other organization under contract with the donor.

✓ **Museum Education Program:**

- ◆ Last season the Museum ran a monthly lecture series in partnership with the Environmental Unit. It was a successful event and requests are being made to run the lectures in the season instead of off-season; essentially from November to June 2013-14 in order to reach a larger audience.
- ◆ We have also provided training for the Museum of Antigua staff in collections management and upgraded their databases.
- ◆ The department offered assistance to Betty's Hope with the design work of their new exhibits.
- ◆ The Museum staff led several field trips to Arawak sites, Betty's Hope, Indian Creek, Bats Cave, and a number of forts. These trips were by request from a number of schools, the Ministry of Tourism, Ministry of Education, Pathfinders, Sandals Resort, U.S. Air Station and other organizations. In addition we guided a number of independent researchers and academics on field research to various sites and shared in their research and data.

✓ Storage Boxes and Needs:

The storage capability of the museum is inadequate. The immediate need is for additional space and boxes for the collections. The museum inventory of artifacts has outgrown the Rubber-Maid plastic storage bins that were donated ten years ago through a grant from UNESCO. These bins are now dry rot and the plastics very brittle, breaking under the weight of the collections inside.

We began to replace the damaged bins last summer by having 20 plywood bins made by a carpenter. This year we hope to continue this project and to have an additional 25 bins made to replace the crumbling plastic bins. The cost for this project is presented in the financials below.

✓ Field Work

Field research continues. Projects in progress include GIS mapping of the heritage sites on the island, particularly those within the National Parks. Mapping of coastal sites are also being done and a GIS simulation with sea-level rises as predicted is also in progress. The results are startling as it indicates that many of our coastal resources are in danger. The Nelson's Dockyard will be severely impacted by flooding, and, as the models indicate, much of it will be underwater with the 1 meter rise.

Student Erin Friedman of Brooklyn College has written a Master Thesis on this topic and it is to be defended this fall. This work will provide an understanding of the predicted rise in sea levels, an event that is already affecting the coastline of Antigua and the various National Parks.

✓ Archaeology

Research has now begun at Indian Creek. This is a joint project between the University of Texas and the Heritage Department - NPA to excavate and compare the historical chronology that was established at the site by Rouse and Nicholson in the 1970s.

The current research will use modern methods to investigate the relationship between cultural change and the environment. The site dates between 200 BC and 1300 AD. In addition, we will be working with the Betty's Hope team from California State University, coordinating and guiding their research program and gathering the information and processing artifacts for our collections.

✓ Assistance to Government and Private Sector

The NPA's Heritage Department continues to work with other departments of government. The NPA is the only department of government with key knowledge of our heritage and culture, and as such we provide information to various Ministries and Agencies. For example, the department partnered with the Ministry of Tourism to develop funding proposals for Betty's Hope. Other assistance include:

- ♦ The Authority sits on various committees and assists DCA in assessing applications that have the potential to impact historical sites
- ♦ Training sessions were held with the professional Tour Guides at the recent GARD project.
- ♦ The department assisted the Royal Antigua Barbuda Police Force with two of their forensic recovery cases, both murder investigations.

✓ World Heritage Application

World Heritage continues to be the main objective and focus of the Heritage Department for this year. The deadline for application is February 2014 but we have fast tracked this and are on schedule. The application process involves the compilation of an exhaustive dossier on the outstanding universal values, the authenticity, values, comparative analysis and justification of the proposed property.

The process involves the preparation of a detailed historical description of the site, its structure, physical coordinates and management plan. The boundaries of the site have been established and the mapping completed. The outstanding issues remaining are editing and scanning the accompanying documents, writing supporting annexes, and including the legislative support. With the recent completion of the National Parks Regulations, this only now requires an amendment to the National Parks Act and this issue and process is currently being addressed by the Legal Department.

The National Parks hosted the delegates of a UNESCO World Heritage Workshop on building dossiers. One session and the evening reception were held in the Dockyard. Several members of World Heritage Center Paris were in attendance. Since this event, several neighboring islands have contacted us for advice and assistance in their research, interpretation and methods. These include Trinidad, Anguilla and Jamaica.

✓ National Parks: Education Outreach

The National Parks Heritage Department maintains its education outreach programmes with the schools and various groups and organizations. These include lectures, and advice on heritage and archaeology on a monthly basis.

We also use visiting scholars for capacity building within Government sectors on Antigua Barbuda. For example, GIS Software is essential for planning, survey, data gathering and much more. It is used in all government technical institutions, from APUA, Survey Dept., DCA to Agriculture. It is expensive and costs government thousands of dollars every year to renew licenses and purchase programs. The Heritage Department managed to acquire the services of a visiting scholar, Dr. Becky Boger from Brooklyn College to offer a five-day workshop on the use of an open-source free program for selected government departments. The project was managed by the Environment Division and was very successful. Other similar sessions will be organized during the new financial year.

✓ Ground Penetration Radar:

Last summer, the Heritage Department worked with Professors from the University of Texas on field-testing a new Ground-Penetrating-Radar System. This process utilized a hand held device that provides images of objects and features beneath the surface of the ground. Field-testing done on Antigua will inform the further development and refinement of this futuristic archaeological devise.

✓ X-Ray Dispersive Emission Devise:

This year we will work with California State University to field-test a hand held x-ray tool that will be used by archaeologists in locating the sources of ceramic and glass objects. Three students and two professors will be visiting Antigua to field test these units with the Heritage Department and archaeologists.

✓ Cultural Policy:

The Heritage Department is leading the recent drive to develop a Cultural Policy for Antigua Barbuda. At a request from the Prime Minister, he department have informed and guided legal draftsmen on International Policy/Convention ratification that are linked to funding sources, such as the Commonwealth and the European Union Funds (EDF).

Some level of success has been recorded in this process and will lead to the establishing the cultural policy document that will then inform the development of Heritage Legislation. This was made possible through the partnership and linkage with UNESCO in the Dockyard.

Antigua Barbuda is now signatory to the UNESCO Underwater Cultural Heritage Convention, the Convention for Intangible Cultural Heritage and the Convention for Promoting the Diversity of Cultural Expressions, due to the direct actions of the Heritage Department and UNESCO Dockyard World Heritage Office.

✓ **OAS Heritage Assistance:**

There was some assistance given to the OAS in the survey or assessment of Cultural Heritage needs in the region. The Director was selected to be a part of a small team to advise the OAS on policies following a SWOT Analysis. This project continues.

The National Parks is seen as a good role model for the economic potential of cultural heritage and our links to Academia and UNESCO and now the OAS is having an impact on Heritage in the region. This is giving the NPA good international visibility as a best practices case study.

✓ **Guest Lecture – St. Maarten:**

In December, Director Murphy was invited by the Governor of St. Maarten, an emerging Caribbean State to present a lecture at the Governor's Symposium on Building an Economy: the Role of Cultural Heritage for Economic Survival in Emerging States. Dr. Murphy was one of three speakers and the lecture was well received.

Similarly, a presentation was also made on World Heritage and Underwater Cultural Heritage in Santiago Chile, Monte Video Uruguay, Port Royal and Kingston Jamaica, in 2012.

✓ **Film Documentary:**

The Heritage Department was directly involved with the making of four film documentaries that have been aired to wide audiences in North America and Europe. The most popular of these was on BBC4 *Nelson's Caribbean Hell Hole*. When it aired, it was for the first 15 minutes the most watched and popular show in the U.K. It is popular on the Internet and as it featured the Dockyard, it has provided good publicity, marketing and heritage tourism for the Parks.

Copper and Lumber Store Hotel:

✓ **Special Events:**

- Our success in hosting events of various sizes and types of events, throughout the year, has increased the Park's enviable reputation as an events popular venue. Emphasis has been put into proactively seeking to attract and support appropriate events.
- During the fiscal 2012-2013, the weddings market received the highest inquiries. As a result, it is imperative that we continue to focus on the weddings market. Currently, there exists much competition for this market segment with other venue providers. We face competition especially from large hotel venues. At times, our competitors, due to their economies of scale were able to quote more attractive prices.
- Events carried out for the period under review are summarized below and included: weddings, awards and social dinners, reunions, school events and yachting oriented events.
- In December, the annual New Year's Eve Party took place with planned activities such as the issuing of paraphernalia, set up of bar booths and a compelling New Year's ambience that created the right party atmosphere. The event started approximately 10:00 p.m. The crowd built up to over 500 yachtsmen and nationals. For the first-time, the event utilized only renowned D.Js. At midnight, the traditional fireworks display welcomed in the New Year. The party really kicked in as hundreds danced until 2 am. This event was resoundingly a success. Seemingly, the usual big live band was not missed. In an effort to build up activity in the Dockyard for the evening, a special dinner and dance was organised by the Copper and Lumber Store. The overall feedback was favourably impressive. To increase better performance on dinner attendance, early planning and competitive price packaging will be incorporated into this year's event.
- The increasingly popular Seafood Fridays' continues to be a key attraction with average weekly attendance of 150 – 200 individuals.
- Over 20 dinners and Bar-B-Qs were carried out for yachting, church, schools and service organisations. Such dinners in particular the Tot Group, Antigua Sailing Academy, UNESCO Caribbean Seminar, Kiwanis and the Russian Bar-B-Qs were well attended and high accolades registered.

- Ten (10) wedding receptions were hosted for the period under review.
- Hosted and supported The Antigua Film Motion Festival. The organizers were quick to praise the successful execution of the latter and expressed their intent to use the Copper and Lumber Store for its 2013 Prize-giving event. Similarly, the Antigua Film Motion Festival was given favourable rating for its first annual Gala event.
- Participated and supported the Department of Tourism marketing and advertising efforts as well as attended training workshops, FAM tours, Website, Complimentary Lunches etc. The Park's image has increased from planned media FAM tours and the building of the www.visitantigua&barbuda.com website. Marketing is preparing and providing content on behalf of the Park.
- Created Ads for Radio and T.V to promote the Park as an ideal location for summer activities, for example, family reunions, recreational and other educational visitor experiences.
- Carryout over 20 on- site visits, telephone and on-site meetings of Dow's Hill and at Copper and Lumber Store Hotel for potential events. Prepared event quotes and event contracts for clients and organizations.
- Hosted and supported cultural and yachting events to include: Oyster Regatta, 2012 - 2013, Myst Carnival Launch & Heelz event, Antigua Sports and Fishing Tournament and Carnival Media launch.
- Facilitated venue and equipment rental for Church, Community Service Groups, for example, Community Day-cares, Schools in St. Paul's, Sports and Optimist Clubs, Police Officers for their planned visits, for picnics, hikes and fishing events in the Park.
- Partnered and expedited Annual Tea Party Dinner with Kiwanis Club
- Coordinated the "Turning of the Sod" Ceremony of Clarence House on December 12th, 2012 and Sir Peter Harrison's investiture luncheon in March, 2013.
- Hosted the Antigua Sailing Week End of race events during Sailing Week held from April 27th to May 2nd, 2013. The scheduled activities mirrored those of 2012. The late planning of this prestigious annual event, the

calibre of boats' participation, substantial sponsorship and the choices made relative to the night entertainment continue to be a challenge to the growth of this event.

- The Antigua Classic Regatta Prize-giving Ceremony was held on April 22, 2013, at the Copper and Lumber Store. The Authority offered two-day “free” berthing for the boats. The Marketing team supported and catered for the event. Meetings were convened with the Committee to discuss the concept of the event and the Committee was pleased with the success of the evening activities. It was noted that the revenues can be made if the event was moved an hour earlier. In doing so, the yachtsmen would come to the event much earlier and ideally patronize the food and bar stations.
- Hosted a musical concert on April 9th for a Windjammer cruise line in Falmouth Harbour. The guests noted that it was a great evening of jazz and contemporary performances executed in a special setting – an 18th century courtyard.
- On June 18th, 2013 supported the Island Academy Fun Day. The Committee announced the great financial success of the event. As such, the organisers announced that the venue will remain unchanged for next year.
- Executed Children Adventure Day in the Park July 18th. This event is in its 3rd year; the attendance climbed to over 500. It will be necessary to revisit the activities and ensure that the product meets the demand to maintain the growth of this event.

NPA Network Report - Current and Future Network Development

• Administration Offices

The National Parks Authority network is currently being managed to by Mr. Glenn Merchant.

To date, the Network has been expanded (from the initial 6 clients and 1 server) to 26 clients (23 windows desktop computers and 3 laptop computers) and 2 servers, which are on the NPA local domain network. The management and upkeep of the clients are done mostly via central services that have been installed on the main server, the most recent being a WSUS (Windows Software Update Services) server. This serves as a central repository for all locally approved updates issued by Microsoft for the products that we utilize on the network and decreases the need for the clients to go on the internet to get updates, but to our local server which has policies already setup to schedule updates at the most appropriate times. Further, it will also help to keep them running smoothly and up to date with the latest software patches and security updates as well as decrease the amount of bandwidth each client uses to get updates.

- ✓ **Quick Books Point of Sale** - Installation of the Quick Books Point of Sale Server and clients has been completed but only the Dockyard Gift Shop is connected to the server as the Dows Hill Site is still operating independently. Work has begun to install the PTP (Point to Point) link between the two locations to create a single network.
- ✓ **Dedicated Internet Access Link** – The Authority have secured a Dedicated Internet Access (DIA) link from LIME which is now the primary source of internet access to the NPA offices within the Dockyard and also serves the hotel guests of the Copper and Lumber Hotel. The Dows Hill location still uses a separate internet connection which will be disconnected and the location will share the DIA once the installation of the PTP link is completed.

In preparation for the PTP link and better networking and security, we have installed firewalls, one each at the Main NPA office and Dows Hill location. These play a very important role in network security and will be used to connect the two locations securely in the near future.

The three internet domains owned by the NPA (nationalparksantigua.com, nelsonsdockyardmarina.com and copperandlumberhotel.com) are now fully under our control to allow better management and customization. In following with this move and with the introduction of the DIA, the email services have been moved and are now hosted on the premises giving us full control and versatility. We can now

create and assign any email on these domains, thus increasing our professionalism and public appeal.

The acquisition of the copperandlumberhotel.com domain was completed in the last few weeks and Mr. Merchant is currently in the process of creating customized emails for the Reception, Brenda Skepple and Eloise Francis; emails can also be created for restaurant under this domain if the need arises. The move to host our email locally is one that not only gives us the benefits previously stated but eliminates the need to pay external hosting fees every year for email services with limited resources. Another benefit is the ability to access the email from any internet enabled device using a web browser, anywhere in the world, as well as receiving emails on mobile phones, tablets and laptop computers.

The installation of the electronic Time Clock system has been completed, and ID badges have been created which also double as the employee time card. Ms. Denisia Malone has been using the system without much problems with her payroll software, eliminating the need to manually calculate employee hours for payroll purposes. There have been some instances where the software slows down but these have been so minute that it does not show negatively on the successful implementation of the system. Several employee ID cards have had to be reprinted due to being lost. The HR Department usually handles this matter and relay the information to Mr. Merchant.

Wireless access points have been installed in the NPA main office, the HR Office/Board Room, the Museum Workshop and the Copper and Lumber Front Office to support some desktop clients using wireless access to connect to the npa.local domain and also for guest purposes. These access points broadcast two Wireless Networks (SSID)

1. National Parks Authority: used for connection to the server and network access and
2. National Parks Authority Guests: used for guests and persons BYOD (Bring Your Own Device) access that has NO access the npa.local domain and its resources.

Security is enforced by the newly installed firewall at the npa.local main office. Plans will be submitted to install wireless access points in others offices in the near future.

The Authority continue to suffer power issues during the summer/low season times that causes many issues; mainly damage to equipment caused by High voltage spikes. Talks with Ira Gonsalves-Barriero has shown there is little that can be done and so efforts have been taken to minimize these damages by making sure each system is protected by UPS systems. One of the hard drives on the main Dell PowerEdge server (NPA-SRV2) failed in the last year causing an interruption in operations. A new hard drive was purchased and installed, the server was rebuilt from the back of the previous day and operations resumed smoothly afterwards. Backups continue to run daily but a hard drive failure of the backup device was discovered and the drive

replaced within the last week, with the integrity of the data being unaffected from the failure.

Although it has been running well, due to the increased load from additional services, the secondary server Dell PowerEdge Server (NPA-SRV1) is in need of some upgrades and ultimately a new replacement server needs to be purchased; the upgrade will consist mostly memory and additional hard drive space. This server currently hosts the QuickBooks Point of Sale database, the eZee Frontdesk database, file server for the Copper and Lumber hotel, Yacht Services Department, Maintenance Department, Museum Department, backup Domain Controller, backup DNS Server, backup DHC Server.

- **Copper and Lumber Store Hotel**

The guest wireless network of the Copper and Lumber Store Hotel has been difficult to maintain due to the high costs of equipment which would have been initially recommended to ensure proper functioning. Over the past year, Mr. Merchant have been replacing only the necessary pieces of equipment in order to provide a functioning network.

- ♦ To date, all the network switches with 3 Managed PoE switches that will strengthen the backbone of the wireless network have been replaced. These switches will not only perform network switching, but they will also provide power to access points that will be installed to replace the current old ones, thus increasing efficiency and reducing electricity consumption of the wireless network. This is basically done because the power is being provided by the switches instead of each access point having the need to be powered separately by their own electrical power supply.
- ♦ In an effort to save on the NPA overall budget by not buying a new firewall server, an old computer from the Main Office have been upgraded and converted into a server that now manages all network traffic on the wireless network. This server was put into operation on the 20 September 2013 and Mr. Merchant reported that 137 days later to date (4 February 2014) it has been functioning perfectly ever since, never been shut down, restarted or malfunctioned. This server performs three major functions, it' a VMWare Virtual Host Machine which contains other virtual machines performing their own unique function.
 - Windows XP Monitoring Virtual Machine – provides monitoring of the wireless network
 - Linux firewall server and guest voucher management – provides internet access, security, vouchers, client IP addresses for all wireless clients.

- Capacity exists for the future addition of other virtual machines if needed.
- ◆ The installation of UPS systems will be carried out at each switch location and this coupled with their PoE status will provide redundancy in the event of a power failure and the time it takes for the generator to switch on.

Plans are being finalized to replace the access points in the rooms to the more efficient PoE models mentioned previously and also to expand the wireless to serve the outside areas with the main purpose of serving Seafood Fridays, the restaurant and the dining areas to the back of the courtyard advised by Eloise Francis.

Approximately 99% of the desktop computers have been replaced with newer models, the 1% being the computer used in the museum workshop. The yacht services department has requested a new computer system over at the customs office, which already has network infrastructure installed to accommodate the same.

VISION STATEMENT

“The National Parks Authority will be recognized for its leadership, excellence and stewardship. Through its environment, heritage-base and visitor services programmes, the NPA will place high priority on the development and maintenance of attractive parks, sustaining the environment and building a healthy yachting sector.”

MISSION STATEMENT

“The NPA will pursue the Interpretation and preservation of major historic sites, assume the protection of its natural resources and develop its contemporary yachting vocation. Those efforts will be aimed at setting up a world class tourist destination for the pleasure and education of Antiguan and visitors alike, while respecting the way of life of the present residents of the Park. In pursuing its aim, the National Parks Authority will seek the support of the Private Sector, to achieve financial self-sufficiency and assume leadership in developing the Tourist Industry on the Island for the socio-economic benefits for all Antiguan.”

OBJECTIVES

The major short to medium term objective for the Park is to grow its market share both within its two major growing markets the cruise and yacht sectors. The growth in these market segments is critical to sustain the financial sustainability of the Park that will provide the conduit for its environmental, historical and social programmes.

➤ **Stimulate economic activities:**

- First class marina (continually expand and upgrade of services)
- Create a duty-free shopping centre (increase consumer spending especially the yachting sector)
- Stimulate growth in the hotel sector
- Grow the cruise ship sector – create more innovative tours

➤ **Building Community Partnership:**

- Engage in a number of community oriented projects through a number of sponsored initiatives.

- Form a strategic partnership with the Cobbs Cross Government School through a number of key initiatives.
 - Enhance the Pigeon Point Beach user facility to include additional camping ground and the installation of a volley-ball court.
 - The National Parks Authority will be represented in the Business League Softball Competition. The team is comprised of NPA employees, NPA partners and members of the community.
 - The Authority will partner with community stakeholders to construct a community clinic at Cobbs Cross.
- **Enhancement Regulatory Framework**
- Enhancement of NPA legislative framework
 - The Authority will select a cadre of Park Wardens to support the park's legislations and regulations.
 - Build institution capacity through the strengthening of the established Environment and Heritage Departments
 - Review and adopt NPA Master Plan
 - Review and Adopt the NPA Building Guidelines
 - Finalize the Trading Regulation, General Regulation, the Environment Regulation and the Garbage Regulation.
 - Finalize the Master Plan.
- **Medium to Long Term Objectives:**
- Re-store the Clarence House as a Great House that will be used as a Museum and to cater for State Events.
 - The Government of Antigua and Barbuda has included three additional parks under the Management of the National Parks Authority. These include Fort Barrington (Goat Hill), Green Castle Hill and Devil's Bridge.
 - Draft the Management and Development plans for these new parks. They all have unique, natural and heritage resources that can be developed into visitor attractions. In the immediacy it is recommended that the relevant signs be put in place to identify the areas as National Parks.
 - Embark on an alternative energy initiative.
 - Execute plan for the development of the English Harbour Village Centre.

The Long Term Objective:

The Long term objective is for the National Parks Authority to become a World Heritage Site. This can be achieved through the Authority’s programme to sustain the natural environment and to control the development in such a way it does not compromise the integrity of the area.

- National Parks long term plan to develop and manage new parks in a sustainable manner. It will also focus on creating a sound environment for economic development within the Parks and to provide services and facilities to benefit Antiguan.
- Launch the islands’ first Alternative Energy Project.
- Embark on a number of key restoration programmes in the Shirley’s Heights

❖ SWOT ANALYSIS

Strengths:

- Nelson’s Dockyard National Parks greatest strength lies in its human resource. The strong knowledge base and pure competences of its staff complements continues to position the National Parks as one of Antigua’s key institutions that cater to the Antigua’s main tourism Industry.
- The National Parks strength also lies in the unique characteristics of its natural resources. It is the only working Georgian working dockyard in the Caribbean. It has a well-protected harbor, historic buildings, scenic hillsides, beauty beaches, these attributes have resulted in the National Parks being the island foremost historic site and yachting centre of the Caribbean.
- Recognition as one of the leading National Parks within the region for its ability to manage a National Parks and made it a sound financial institution.

Weaknesses:

- Lack of legislation to protect the natural resources of the park
Inadequacy in controlling the development activities within the park as it relates to the management and development of lands.
- Lack of a strategic Public Relations Plan to engage the local communities to buy into the Parks’ Programmes and Initiatives.
- The sheer magnitude of restoring a number of historic buildings is huge. The Authority lacks the financial resources to embark on major capital projects simultaneously.
- The seasonality of the industry creates a six (6) month period to generate its revenues.

Opportunities:

- To become a UNESCO World-Heritage Site. This will provide funding for key restoration programmes, preserve the natural resources of the Park and to generate an increase in tourism arrivals.
- To create a viable apprenticeship program in the area of stonemasonry.
- To garner Private Sector support for the Yacht Training Institute.

Threats:

- The lack of or slow growth within our main markets of the USA and Europe continues to impact visitor spending.
- The decline in cruise arrivals to Antigua indirectly affects gift shop sales and the number of guided tours and cruise ship lunches offered at the park.
- Increased pressure from developers to develop sensitive conservation lands and the endorsement from Government to support such investments projects.
- Rising electricity costs.
- Increase competition from tour operators.
- Global recession and reduction in consumer spending.

❖ **CRITICAL SUCCESS FACTORS**

The sustainable use of the Natural Environment is critical to the long-term objective of the Park. The Authority must therefore put more emphasis on the protection of the Natural Environment.



- Tighter control measures must be put in place emphasizing the need for the immediate strengthening of the Parks Regulatory Framework. The Authority should stop the hemorrhage and the disposal of Government lands within the Park. These lands are needed to sustain and foster the growth of the Parks overall Development Plan.
- Execution of the Master Lease between the park and the Government of Antigua and Barbuda.
- The National Parks Authority must continue to foster employment opportunities in the area of businesses and provide job opportunities. In order to do so, the Authority must focus on the further development of its product that would appeal to all sectors of the Tourism Industry.
- Management will endeavor to keep the industry average of 35% of its income in relation to its payroll expenses. Employment levels will be managed with considerations to the seasonality of the industry and its ability to sustain its current payroll.
- Special attention will be paid to the yachting sector; an area that has high potential to stimulate economic growth. The performance of the other sectors should however not be ignored. A diversified portfolio is critical to the Parks ongoing success.
- It is critical that NPA with its limited resources continues to forge strong strategic partnership with other key stakeholders such as the Environment Unit, the Yachting Association, the main arms of Government and the local community.
- As the Government's agent, The Authority should be the catalyst for stimulating economic growth.
- Finalize the Master Plan and execute a development strategy for the overall development of the English Harbour Area.

❖ **CARIBBEAN TOURISM OUTLOOK¹**

The Caribbean Tourism Organization (CTO) statistics indicate that cruise arrivals to Antigua and Barbuda for the period January – July have decreased by 1 percent when compared to the same period 2012.

CTO also indicates that tourist arrivals from our main markets USA (-10%) and Europe (-6%) also show some decline while there has been some increases from the Canadian market (28%).

Hon. Beverly Nicholson-Doty in the State of the Industry Report of February 2013 noted that there is reason for optimism which is based on increasing numbers out of the US to some regions. He also notes that in some territories hotel revenues are accelerating albeit at a moderate rate. Amidst the positive signs Riley noted that the stark reality is that some member countries are still hard pressed to recover particularly those that rely heavily on the British Market.

Chairman Nicholson-Doty further noted that cruise tourism has been flat region-wide for each of the last three years. He also said that intra-regional shifting of the cruise schedules resulted in fairly significant increases in the northern Caribbean activity offset by reductions in that of the south.

❖ **FINANCIAL SUSTAINABILITY**

¹ State of the Industry Report –Caribbean Tourism Organization by Hon. Beverly Nicholson-Doty. 14th February , 2013 -

The Year in Review: The National Parks Authority is established as a self-sustaining, not-for profit entity. The Authority receives no Government subvention and must therefore create its own machinery for generating a sustainable revenue source. With the current economic turmoil, this role is becoming more and more challenging. There is increased level of competition and internal threat from other arms of Government after its revenue source. To this end, Management was forced to become more creative with its product offering and to increase its level of productivity.

For the financial year 2012-2013 there was a general decline in business activities. Despite the economic challenges Management, was successful in fulfilling most of its goals and objectives as outlined in Budget 2012-2013. For the financial period ending September 2013 there was a 1.6% decline in revenue and a 2% decline in expenditure.

The Authority will continue to monitor the impact of the economic recession on the economy. According to IMF projects global growth at 2.9% for 2013 and rising to 3.6% in 2014. Amidst this economic back drop the Authority will proceed strategically to fulfill its plans as outlined in budget 2013-2014.

For the period ending September 30th, 2013 the National Parks total income was **EC\$11,593,626.61** and total expenditure was **EC\$ 9,433,800.28**. Net income for the end of the financial year was **EC\$1,032,023**. Actual income and expenditure for the reporting period are summarized in the **Table: 1** and the major growth areas are shown in the graphs presented.

Due to the uncertainties in the global economy management has used a very conservative approach in our budget estimates for this report.

	2013-2014 Estimates	2012-2013	2011-2012	Variance 2012-13/ 2011-12	% Change
INCOME:					
Entrance Fees	2,652,264	2,358,524	2,917,922	(559,398)	(19)
Berthing and Anchorage	1,751,266	1,757,705	1,906,408	(148,703)	(8)
Electricity/Water (dock)	1,638,433	782,211	556,853	225,358	40
Environment and Garbage Fees	572,019	558,292	695,072	(136,781)	(20)
Port Dues	306,132	286,095	328,616	(42,521)	(13)
Laundry and Shower	68,658	72,943	72,721	222	0
Lease Rents	1,418,043	1,218,106	1,144,778	73,328	6
Government Subvention				-	
Enterprises (Gift Shops)	475,420	462,591	494,451	(31,860)	(6)
Copper and Lumber:					
Rooms	567,187	530,014	625,064	(95,050)	(15)
Food and Beverage	414,518	407,400	426,036	(18,636)	(4)
Special Events	596,589	642,179	464,443	177,736	38
Special Events - Seafood	681,515	698,840	890,107	(191,267)	(21)
Drinks - Cruise Ship	166,090	167,689	164,740	2,949	2
Lunch - Cruise Ship	81,104	76,732	124,568	(47,836)	(38)
				-	
EXPENDITURE:				-	
Salaries/Wages/Benefits	3,935,257	3,712,097	3,620,183	91,914	3
Electricity	1,657,204	1,183,241	1,348,186	(164,945)	(12)
Water	85,936	104,894	185,124	(80,230)	(43)
Insurance	402,107	387,385	332,545	54,840	16
Severance	39,992	98,020	61,484	36,536	59
Maintenance	419,456	464,174	643,332	(179,158)	(28)
Restoration Works	96,600		14,846	(14,846)	(100)
Printing and Stationary	51,718	72,469	103,957	(31,488)	(30)
Special Events	373,578	453,654	301,577	152,077	50
Special Events - Seafood	429,614	531,393	643,332	(111,939)	(17)
Discount allowed	190,147	192,848	197,219	(4,371)	(2)
Security Contract	118,380	113,912	98,847	15,065	15

Table 6: Income and Expenditure Summary (2011/2012 - 2012/2013)

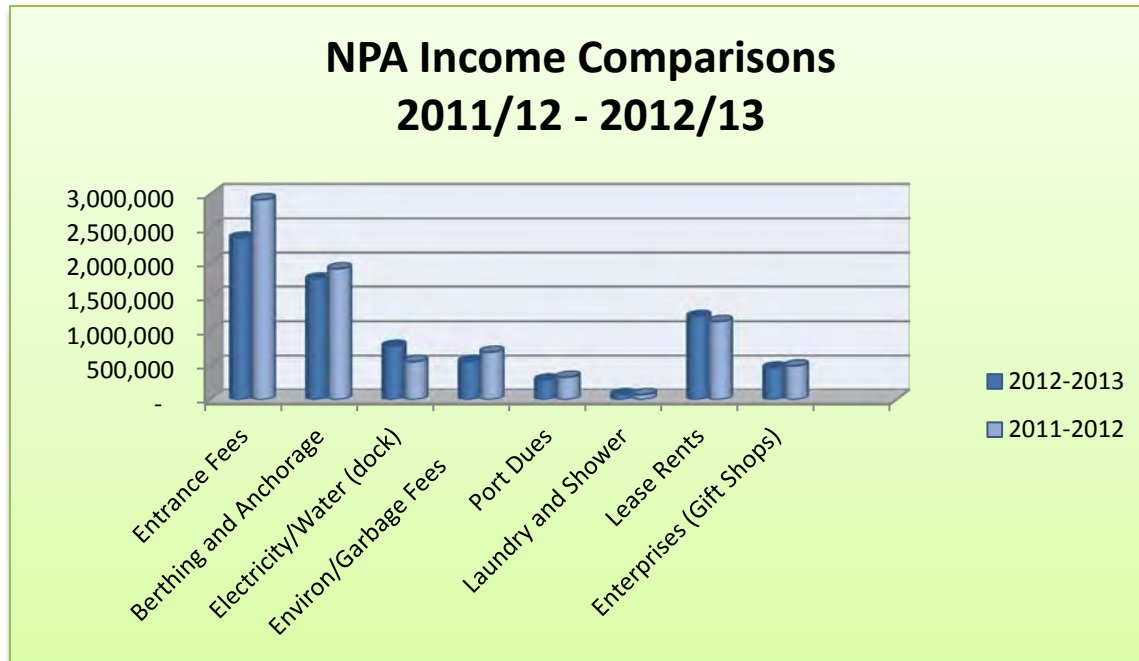


Figure 1: NPA Income Comparisons

Income:

A review of the NPA financials shows a minimal decrease of 2 percent in total revenue for the period under review when compared to the same period for 2011 -2012. The areas worthy of note area:

- Entrance fees went down by \$ 559,398 or 19 percent.
- Lease Rents reflected a 6 percent increase or \$73, 328 when compared to the previous year.
- Revenues generated by Berthing and Anchorage decreased by 1,318,703 or by 69 percent.
- Revenue generated by electricity sales increased by 40 percent compared to last year.
- Special Events at the Copper and Lumber shows an increase of 38 percent compared to the same period of the previous year.
- Seafood Friday's revenue shows a 21 percent decline for 2012-2013 compared to last year.

- Food and Beverage sales decreased by 4 percent.
- Cruise ship lunches at the Copper and Lumber Store hotel shows a decrease of 38 percent for the period under review compared to last year 2011-2012.
- Hotel Room sales decreased by 15 percent.
- Gift shop sales also show a decline of 6 percent.
- No Government subvention was received this year.

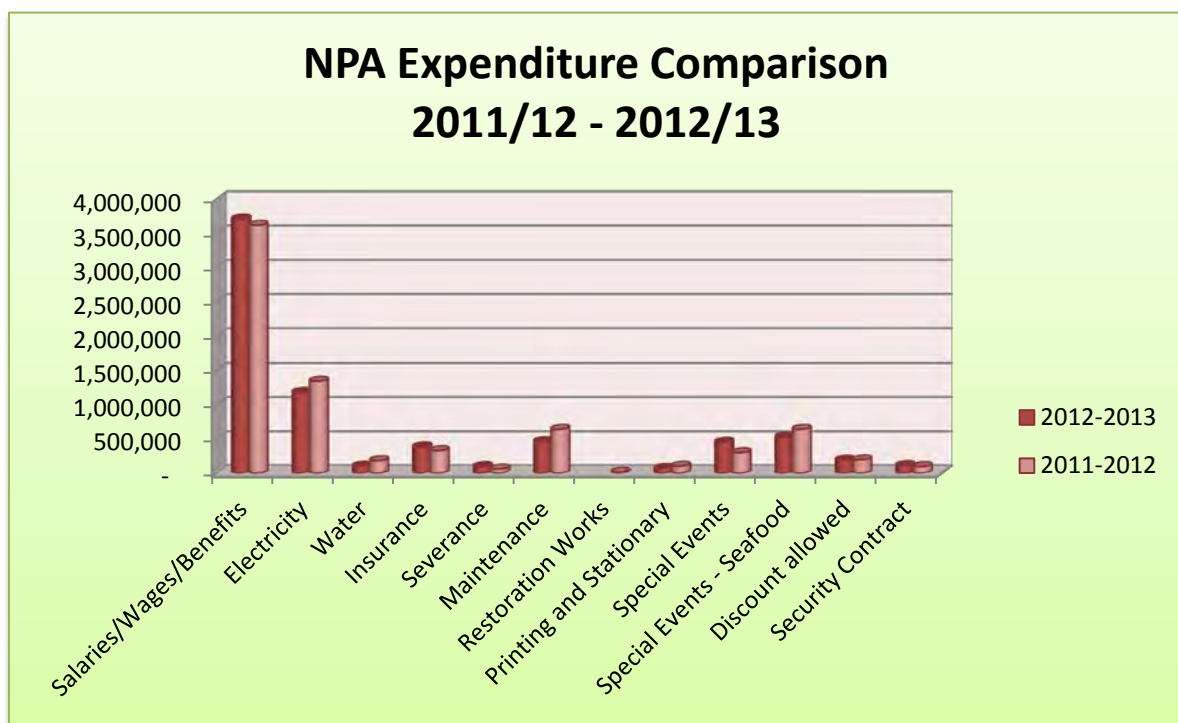


Figure 2: NPA Expenditure Comparisons

Expenditure:

- The single largest expenditure is salary wages and benefits which shows a 3 % increase over 2011- 2012 financial period. This is relative to the increase activities and special events at the Copper and Lumber Store Hotel.
- Electricity payments to APUA decreased by 12% i.e. \$ 164,945. This is congruent to the increase in Super Yacht calls to the Marina.

- Insurance cost for the reporting period shows an increase of 16 percent. This increase is relative to the construction of the new Super Yacht Dock.
- The National Parks continues to offer the special discount to tour operators and a special rent reduction during the summer months. Total discount offered for the reporting period totals 192,847.79.
- During the reporting period (2012-2013) the Authority has paid out EC\$98,019.65 in severance package.
- **Copper and Lumber Store Hotel:** The following graph shows the comparisons in revenue for the Copper and Lumber Store Hotel 2011-2012 and 2012 – 2013.



Figure 3: Copper and Lumber Store Hotel Income Comparisons

Generally, increase in expenditure is relative to the increased in revenue. In keeping with its mandate, all revenues go directly into the restoration and preservation of the park's resources. As revenue increases there is a direct correlation with the added number of projects and programmes the NPA will undertake.

Financial Goals and Actions:

The National Parks continues to function as a self-financing institution, supported mainly through user fees, lease rents and retail profits. In recent years, the parks financial position have been improving but the present global recession poses a serious challenge, prompting a need to explore other potential avenues of revenue source. The heighten increase in electricity costs is a major concern for the Authority. Conversely there is also a need for cost efficiencies.

To fulfill its financial goals management will seek to grow its revenue base and secontinue to develop the park's product to meet the growing demands of its customers. Management will identify innovative revenue generating initiatives, such as new events and programmes.

The National Parks has recently completed the construction of its new Super Yacht Facility, which has increased its berthing capacity. This venture is expected to increase the revenue generating capabilities of the park.

Financial Projection 2013-2014:

As in previous years, Management has once again adopted a conservative approach in the preparation of its Budget Report 2013-2014. This decision is based solely on the current economic outlook which shows no significant signs of improvement in the short term. The forecast for the summer months shows decrease in cruise ship arrivals which is our main revenue source during the summer months. To date no hard data has been derived as to the performance of the hotel sector for the upcoming winter season. Nevertheless there are some real strong indicators for the first half of the year that if realized can cushion the impact during the summer months. These trends are used to guide this year's projection.

Based on consumer spending patterns, we expect little growth in the retail sector; this is relative to the low spending power of the cruise passengers. In light of this, it is it is expected that a decrease in cruise customers will negatively impact gate receipts.

The indicators for the Yachting Markets point to a busy season. Reports emanating from the Yacht Charter Shows have confirmed that the Charter Season in the Caribbean will be very busy. Antigua being the hub, will gain its market share of the business. We also anticipate that the increase number of scheduled yachting events will yield high returns for the Marina and the hotel during peak times. These events include the Oyster Round the World Rally and the Oyster Regatta which will take place April 2014.

Budget 2013-2014 estimates total revenue at **\$11,625,067** and total expenditure at **\$10,780,236**. **Excess of income/ expenditure is expected to be \$229, 231.**

- The Authority will continue to develop Events at the Copper and Lumber Store Hotel realizing its potential for growth. For the financial period ending 30th September 2013, events yielded EC\$642,178.58. This reflects a 38 percent increase when compared to financial period ending 30th September 2012 and 6 percent of total revenue for the reporting period. In light of the current economic climate Budget 2013-2014 conservatively estimates that events will yield EC\$596,589 projecting a 9% decline in revenue compared to 2012--2013.
- Entrance Fees from gate receipts and organized tours is forecasted to decrease by 12%. Management has again decided to hold off on the scheduled increase in entrance fees. However at the time of this report, Management was unable to get any clear indicator from the Hotel Sector. Therefore a conservative approach was used in making the projection.
- Enterprise is expected to show a 4% decline in revenue over last year.
- Lease rent is expected to show an increase of 15% when compared to last year. NPA will receive an additional \$16,000.00 per month in rent for the Powder House and Carib Marine respectively.
- Berthing and Anchorage recorded an 8% decline in revenues for the period 2012-2013 when compared to the 2011-2012. Budget 2013-2014 is predicting a further 0.4% decrease in revenue from berthing and anchorage.
- Room revenue at the Copper and Lumber Store Hotel decreased by 15% in 2012-2013 when compared to 2011-2012. However a 7% increase is forecasted for the budgeted period 2013-2014.

It should be noted that the Authority's performance for 2012-2013 when compared to 2011-2012 is commendable in spite of the current economic backdrop. An overall 1 percent decline in revenue was recorded.

Major Expenditure

The Main expenditure items continue to be Salaries/Wages and Benefits, Utilities and General Maintenance. These figures remain consistent with previous years. It is important to note that Salaries and other expenditures are relative to the level of

undertakings. An upward shift in revenues would show a correlation with increase expenditure.

The Capital Budget for 2013-2014 is estimated at **\$ 1,218,065.00**. The Departmental allocations are outlined in the attached schedule.

Funding Capital Expenses:

Capital Projects outlined in Budget 2013-2014 will be funded through special grant funding. The balance of the capital expenses is forecast to come from revenue generated through NPA general operating account. These funds will be used to fuel other revenue--generating machinery of the park. The return over the medium to long-term has the potential to create greater wealth for the Authority. Further enhancements of the NPA plant will provide for greater efficiency and increase revenue potentials. This will be realized as:

- The potential to accommodate large yachts on the Marina which will yield increase revenues.
- The upgraded kitchen can facilitate larger events.
- Enhancement of the Interpretation Centre to cater for events.
- Enabling the NPA to carry out its mandate by ongoing restoration projects.
- Utilizing the restored buildings and historic structures to create sustainable wealth for the park.
- Improving our brand through the enhancement of our product offerings.
- The beautiful gardens enhanced landscaped, new and improved public facilities.
- Grasping the once in a life time opportunity to gain World Heritage Status.
- Branding the NPA as an Environmental friendly institution while at the same time preserving our natural environment.

Loans:

- The National Parks is presently servicing three (3) loans.
 - Cash secured loan EC \$160,000 granted in September 2010 at interest rate 10% per annum. Monthly payment \$3,400.00 Loan expires September 2015.
 - Loans - from Mr. Peter Harrison and the Peter Harrison Heritage Foundation for the construction of the Super Yacht Dock. The Authority makes blended quarterly payments of USD\$ 50,000.00. The loan expires in April 2023.

Budget 2014 proposes to increase revenue by:

- Targeting the local market by hosting local events.
- Increase NPA berthing capacity to facilitate larger yachts and to meet the demand during peak season – an additional 6 mega yachts per day
- Increase lease rent on existing leases that have not been adjusted to EC\$5.00 per sq. ft.
- Lobby Central Government for a greater level of financial support.
- Grant Aid. – The Authority is pursuing the option of securing additional financial resources to undertake several of its projects and plans for the new financial year. Confirmation on this is expected in the new year.
- Through careful planning and administration, Management will achieve the maximum benefit from its available resources. Regularize unauthorized sub-lease arrangements, tour and dive operations within the water of the Park and examine all fee structures.
- Evaluate and make appropriate fee structure changes consistent with Board policy directives.
- Create a dedicated fund for marketing and security through the proposed license fees from the Trading Regulations.
- Identify and develop innovative revenue-generating initiatives, such as new events and programs

Improve Operational Efficiencies:

- Introduce a systematic control inventory system.
- Its financial goals will also include several cost-cutting measures:
- Ongoing assessment of current operations and identify efficiencies which could be achieved through changes in energy consumption, procurement and other operational functions.

Budget 2013-2014 makes provision for an energy audit exercise and a shift to more energy efficient equipment. This further highlights the need for central stores and a systematic inventory control system.

- Management will continue to cut cost through cross-functioning and outsourcing of its planned activities and programmes.
- Introduce new cost cutting measures through improved development and planning initiatives.

Other plans will include:

- Develop and maintain a sustainable plan to protect both the natural and historic resources of the Park.
- Forge and maintain a better working relationship with the local and wider community
- Upgrade and maintain the general aesthetic of the area. (The introduction of a National Parks Garden competition with emphasis on diversity).

Master Lease: *The National Parks Act 1984 - Part IV* – Subsection 21- deals with the Lease of Crown Land to Authority – “the Authority may from time to time, after consultation with the Minister, request in writing that any portion of Crown land within a Park be leased to the Authority for such term not exceeding fifteen years as the Authority may specify”..... There are parcels of lands specifically within the Dockyard and its surrounds which were vested in the Friends by Government of Antigua and Barbuda. These lands were vested in the National Parks’; however the lease term has expired.

This matter has been outstanding for some time and needs the Board’s urgent attention. Until such time, the National Parks cannot enter into any lease arrangement as it pertains to Crown Lands. It is recommended that when this matter

is addressed that the Authority explores the possibility of adding other parcels of land that are necessary for the Park to carry out its mandate.

Budget 2013-2014 will continue to pursue the finalization of the Master Lease and provision will be made to continue the necessary survey work to be carried out to facilitate this process.

Lease Agreements:

- ✓ During the past year, the lease agreement between Claude King and the Government of Antigua and Barbuda was executed. The National Parks Authority is the Government's agent on all matters pertaining to the lease.
- ✓ A new rent has been finalized for Ordinance Company Ltd.
- ✓ Over the last year a number of draft leases have been executed. A revised rent schedule is included and when concluded would add a 5% increase in overall lease rents. Approximately 13 tenant agreements reflects an increase in rent.
- ✓ The issue of land ownership needs to be regularized. As it relates to Crown lands outside of the perimeter of Nelson's Dockyard, but remains under the development control of the National Parks. Individual squatting on government lands especially for commercial purposes needs to be regularized. It is recommended that a joint meeting between CHAPA, Ministry of Agriculture and the National Parks be held with an aim to regularize all outstanding land issues.

Developments:

- i. **Development Applications** - for the period 2012-2013 the National Parks received a total of thirty (30) building applications. At the time of reporting, approval have been granted for eleven (11) Residential and thirteen (13) Commercial developments. The approved applications have been submitted to the Development Control Authority (DCA) for further processing.
- ii. **Hydrographic Survey** - In keeping with its vision to become a world class yachting destination, the National Parks Authority commissioned a hydrographic survey of English and Falmouth Harbours.

As it is today, the surveys and charting of the identified area are no longer adequate to meet the requirements for the modern use of these

harbours and their approaches by the ever increasing number and size of vessels.

The survey will be conducted from the 9th to 20th September 2013 by Kongsberg Maritime Ltd. Antigua stands to benefit from new charting to encourage greater and safer use of English and Falmouth Harbours. The aim of the exercise is to resurvey Falmouth and English Harbours and their approaches to international standards and develop modern paper and electronic charting thereby increasing the safe use of these harbours and making entry and exit easier.

- iii. **Swamp Land Development** - The National Parks Authority intends to use a portion of the Swamp Lands in English Harbour as a public park with accommodation for a limited number of commercial spaces. The public park and adjacent mangroves have been proposed as a public park/bird sanctuary. Mr. Ivor Jackson was recruited to serve as advisor on proposals submitted for use of the said lands. The first draft of the report has been prepared and awaits review by the Board and Minister responsible for Parks. A draft survey plan has also been prepared.

Ordinance Co. Ltd - Ordinance Co. Ltd had breached several covenants under their lease agreements and as a result, the Crown brought proceedings against them in the High Court to forfeit the said lease. The High Court in Claim ANUHCV 2007/0648 Attorney General v Ordinance Land Co. Ltd granted possession to the Crown in a Judgment dated 25th May 2010. The effect of the judgment terminated all subleases with Ordinance Land Company as at the date of the judgment. The occupancies of the land were required to visit the office of the Attorney General so that a new lease agreement with the Crown could be negotiated. To date one (1) lease has been signed, Mr. Paul Deeth for a boutique hotel of 12 rooms, spa and pool.

The lease for Carib Mall is still pending. Presently there is a vagrant on the land which hinders the Crown from moving forward. Negotiations are in place for the residential leases.

South Point Development: - South Point Development is situated in Falmouth Harbour adjacent to the Antigua Yacht Club. The development comprises of twenty-six (26) high-end rooms, gym, lounge, restaurant and fitness centre. The project is geared for completion in mid-December 2013. The total investment is approximately EC \$40 million.

During the period of construction of the South Point Project, the developers had to reclaim a portion of land using boulders and soil to permit the creation for the equipment and machinery needed for the construction to access the site. Permission was granted by the National Parks Authority to the developers to reclaim and purchase a sliver of land to facilitate the work to be undertaken.

South Point also plans to build a small dock to provide berthing space. This application is still pending since there is a perceived conflict between the developers and the owner of the Antigua Yacht Club Marina.

Golden Point Development – The National Parks granted permission in 2005 for a sub-division and boutique hotel. Due to a long delay of litigation between the developers and the owner the project was delayed for some time. Work started in the latter part of 2013 after a revised Master Plan was submitted in May 2013. Approval has been granted for a water-front restaurant, guest houses, cottages, pool and ancillary services.

During the development phase the National Parks raised several issues relating to –

- i. The unauthorized drainage of the lagoon in the development behind Windward Bay
- ii. The drainage of the wetlands to the west lagoon
- iii. The setback from watermark and the public access to Windward Beach.

The Authority has since received a written commitment from the developers that the National Parks guidelines would be met. The project is being monitored by the representative of the Environment Department.

Galleon Beach Development – Galleon Beach have recently appointed New Directors to the Galleon Beach Development Company and as a result new talks have been held with the National Parks Authority and the newly appointed representatives. At the most recent meeting, permission had been sought to erect a road on lands owned by the company. National Parks Authority has registered several concerns as it pertains to the public access road and the historic site of Pillars of Hercules. The Authority is awaiting a revised copy of the Master Plan to show the discussed access roads. The NPA has also agreed to submit building guidelines to the developers.

Rendezvous Bay Development - Following a series of consultations, National Parks Authority has submitted a resolution to the office of the Attorney General to amend the National Parks zoning plans from conservation Zone to Special Building Area. Meetings are presently being held with the developers on the overall Master Plan. The primary concern of the developers is that strict building guidelines be enforced on all developments in the area. To this end, they have drafted the “Rendezvous Bay Design Control Rules”. The objective of these rules is to ensure that all designs are compatible with the site, the environment and the design objectives of the project.

Proposed Development Slipway Cottages – The National Parks Authority received proposed development plans for Slipway Cottages. These plans were submitted by Mr. Salvatore Perna, Architect for the Inn. The said drawings lack specific information relevant for the review of the application. The required information was deemed

critical since the proposed development sits within the conservation zone and in the core of the Dockyard which has recently been identified to be conserved for World Heritage Status. The Authority has requested a written description of the proposed development from the developers.

ABSAR's Office – Falmouth Harbour - Antigua and Barbuda Search and Rescue has plans to build its own headquarters in Falmouth Harbour. Both the National Parks Authority and the Antigua Investment Group have decided to support the venture by giving permission for ABSAR to use an area of land at the Sales and Service Area to accommodate the shore-based facilities and dock. A draft plan which includes a launch area for an emergency boat has been submitted. Mr. Ivor Jackson, Consultant to the National Parks Board is presently reviewing the plans.

Antigua Sailing Academy - The Antigua Sailing Academy teaches young Antiguan to sail and become qualified to work as Sailors in the Mega Yacht Industry. It also has a swimming component to its programme. Plans are afoot to become RYA certified and to introduce “Sports Tourism” - a similar programme offered by Sunsail's prior to its closure.

In preparation for this venture, the Antigua Sailing Academy has moved to its new location at the Hails Inn in English Harbour. The Academy plans to improve its programme to include a qualification for Dinghy Instructors and a Day Skippers course. To accommodate the extended programme an area to launch the boats is required for the start of the school year. There are also plans to build floating docks catering to approximately 12 yachts of about 6 ft draft. With this facility in place, visiting crew on yachts would be offered racing opportunities such as a Challenge Races in deep waters around Falmouth.

Tony Maidment – An application was submitted to the Authority to build a restaurant over the sea in Falmouth Harbour to include a Jetty. The application is pending a review by Ivor Jackson – Consultant to the Authority.

Antigua Company Sea Steel Ltd – Operation “D” Boat - The applicant is seeking to operate a 130 ft decommissioned oil tanker converted into a stationary floating entertainment attraction in Falmouth Harbour. A committee comprising of Dr. Reginald Murphy, Marinus Smith and the Parks Commissioner met with the applicants. Concerns were raised as to the seaworthiness of the vessel especially in light of the fact that the vessel is no longer self-propelled and would have to be towed to its location. To date no survey work has been conducted. Concerns were also raised as to the identified location which is adjacent to the area reserved for berthing

of Mega Yachts and Windjammer Cruise. The Authority is presently assessing the feasibility of the proposed venture.

Antigua Company Sea Steel Ltd have submitted plans to the National Parks and a committee comprising of Ivor Jackson (Consultant and Advisor to the Board), Environ Zechariah (Marine Engineer) and Frederick Southwell (Town and Country Planner) have been set up to review the proposal.

❖ PHYSICAL PLANNING AND DEVELOPMENT

Environmental sustainability implies courses of action that do not jeopardize the long-term stability of ecological systems or the survival of key features of the cultural heritage. It therefore involves managing our resources, “in such a way that we can fulfill economic, social and aesthetic needs while maintain cultural integrity.”

National Parks in spite of its critical role of protecting and managing the key natural and historic sites of Antigua, lacks the explicit and comprehensive environmental policies or coordinated environmental programs to do so.

Inadequate staff and budgetary resources have limited the NPA’s ability to effectively carry out its role. Currently, the most pressing area in which the strengthening is required is the provision of trained personnel to plan, develop and implement sound environmental management programs. An important component of this is the need for reliable research and monitoring to generate quality data for informed decision-making.

It is of utmost importance to ensure that monitoring systems be put in place, as the potential impacts from pollution are dependent on the effectiveness of controlled and established measures. In sum, risk management and preparedness policies are essential. Monitoring should also include water quality and site inspection. To this end, NPA plans to train and develop special park wardens to assist with the protection of the marine and natural environment.

Objective:

The NPA must develop a Policy for the management of its environmental resources and to monitor and minimize developmental impacts on the environment.

Plan of Action for the management of the Natural Resources of the National Park:

- ✓ Identify the institutional arrangements required to manage all natural resources.
- ✓ Review best management practices from other regional countries that could be used to guide natural resource management in the park.
- ✓ Determine the relevant programmatic areas to be pursued in an action-based approach to implementing a practical natural resource management program for the Park.

- ✓ Recruit and train Park Wardens.

Building Regulatory Framework:

For the National Parks to be effective in carrying out its mandate, it must strengthen its Regulatory Framework. The Authority has been successful in drafting and finalizing its general regulations. These regulations have been approved by the Minister and Gazetted.

The Authority has also commenced work on the Trading Regulations. Within the first quarter of the new financial year these regulations will be finalized for approval by the Minister.

Presently there are no regulations to deal with the issues of illegal clearing of lands and littering within the Park. Also there are no guidelines or building standards in place. The Authority is in the process of establishing clear building guidelines and standards to govern any development within the park.

The National Parks Act -Part VI- Subsection 26 – Regulations makes provision for NPA to make regulations for the carrying out of the purposes of the Act and for the preservation, management and development of Parks. To this end, there are number of regulations that have been drafted. These include but are not limited to the following:

- ✓ Processing Fees
- ✓ Environmental Levy
- ✓ Garbage Disposal Regulation

Land Use proposals for the Middle Ground Area:

The Middle Ground area was zoned for Conservation under the Nelson’s Dockyard National Park Development Program. A draft land use plan has been completed by Ivor Jackson and Associates and awaits the Board’s review.

❖ **OPERATIONAL PROGRAMMES 2013-2014 and Budget Estimates**

The National Parks Authority facilitates varying roles and functions in fulfilling its mandate as outlined in the National Parks Act 1984. The Authority is governed by a Board of Directors which is appointed by the Cabinet. The Board is responsible for formulating policies and regulations to govern the Authority's operation.

The Parks Commissioner is responsible for the daily operations of the Authority and carrying out the policies laid out by the Board of Directors. Under its mandate the Authority seeks to preserve, protect, manage and develop the natural physical and ecological resources and the historical and cultural heritage of Antigua and Barbuda.

This mandate which is the purpose for which we exists is fulfilled through the various departments and their outlined work programmes for the financial year.

❖ ACCOUNTING and INTERNAL CONTROLS

The Accounting process provides companies with various pieces of information regarding business operations.

At the National Parks Authority the Accounting processes is done internally and reviewed by an Auditor who submits audited financial statements annually to the Board of Directors. The financial year runs from October to September and the operations are highly seasonal driven by the peaks and lows of the Tourism and Yachting Industries.

The financial information administered by the accounting department indicates how well the Authority is performing. In simple terms the information tells a story as to whether the organization is making monies or not and is used to determine business decisions. Decisions may include expanding current operations, using different economic resources, purchasing new equipment or facilities, embarking on new project ideas or reviewing new business opportunities.

Knowing the financial position of the organization is critical information as it indicates whether the Authority has the ability to cover its expenses, undertake certain projects or expand its reach. Financial information also indicates whether a particular business operation is profitable or not.

MISSION STATEMENT

The Accounting Department of the National Parks Authority provides accurate and timely financial data to assist with the management of the Authority's resources, and to ensure that financial records are maintained in accordance with Generally Accepted Accounting Principles and guidelines.

Operational Review:

The Accounts Department plays a pivotal role in the recording and management of the parks resources. The department has a staff complement of four persons including the department supervisor. Emphasis is placed on accuracy and confidentiality in documenting and reporting the Authority's financial resources. The responsibilities of the department include business such as payroll, accounts receivables, inventory control and management and security.

The employees are encouraged to do their very best at all times. Special commendations are given for punctuality and low levels of absenteeism within the department.

In spite of the current economic landscape, when businesses are challenged to maintain revenue flows, the Authority must steer the financial ship down a path that is sustainable. Although the challenge may be great, the Authority must manage carefully the resources that are within its control while reducing expenditure and eliminating waste. In light of this the department's role is even more critical as relevant information is required for decision making.

Department Strengths:

- The employees are to be commended for their hard work and dedication. The ability of the department to accomplish their varied roles and responsibilities is testament to their level of commitment and dedication.
- The team is quite youthful with high potentials for further training and development and resulting growth..

Department Weaknesses:

- The department is now using technology to advance its operations. The process lacks a computerized network that would allow for departmental information to be fed electronically into the accounts database. The situation as it is currently has daily cash summarizations being done manually and then brought to the office to be entered physically into the accounts data base. Valuable time is lost as the time spent re-entering this information could be spent performing other tasks.
- The office layout is another matter of concern. As it is currently its open form lacks the required privacy for the nature of work. This layout allows for distractions of employees which could lead to incorrect postings. There are times when there is significant amount of traffic frequenting the office.

Opportunity:

- The integration of new software into the operating systems will facilitate greater efficiency in the department.

- The integration of the operating systems is deemed to be a strategic move in improving the general operations and efficiency of the department.

- ✓ **Physical Inventory Control:** The National Parks Authority continues to improve its inventory control system. The central storeroom is functional. All purchases are done through the storeroom. Inventory are checked by the Accounts Department and entered into a manual system. This system lacks a comprehensive control mechanism for receiving, stocking and tracking the movement of the inventories.

The proposed inventory control system to be implemented will include all the parks retail operations. The operations at the Copper and Lumber Store Hotel, the central storeroom and both gift shops will be linked into the general accounting software. Further investigations are being conducted on the most suitable approach for the management of gate operations.

During the new financial year the Authority will purchase and install a Point-of-Sale system for the Copper and Lumber Store Restaurant. Consultations are on going.

- ✓ **Revenue Collection and Control:** For the 2012-2013 financial year the Authority made a decision to use cashiers on the cash collection points at its two gates. Prior to this decision selected tour guides performed dual roles rotating as gate attendants and tour guides. This decision was seen to be more in keeping with generally accepted accounting principles.

Efforts are being made to increase the security levels at our cash points. During the new financial year the Authority will continue to strengthen its network of cameras and extend the reach to cover all cash points and other relevant areas. The use of the CCTV cameras within the park has been very effective, as it is believed to have impacted the amount of crime in the area.

- ✓ **Operational Efficiency:** The department is striving to reorganize its daily operations in an effort to optimally meet its objectives and provide the relevant information in a timely manner. Subsequent to the Financial Audit of 2012 several deficiencies were identified by the Auditor and several new operational procedures had to be implemented in order to meet generally accepted accounting principles as highlighted by the Auditor.

In order to better provide information upon request it was noted that the departments filing system needs to be upgraded. To facilitate this, the need for additional filing cabinets was identified. To facilitate the improvements to our accounting procedures and control measures, an allocation of **EC\$12,027.00** have been made in the Capital Expense Budget (*see 2013-2014 budget schedule attached*).

❖ ENVIRONMENT UNIT

Mission: *The Environment Unit exists to protect the natural and scenic environment of the park.*



Figure 4: The natural beauty of Devil's Bridge

Activity 1: Management of NPA and external development projects within NPA lands

In respect of managing development of the land within the NDNP and the other newer Parks, it is clear that the NPA needs to be able to provide better guidance to potential developers, with regard to making sure that all development plans take into account the needs of the Park and are sensitive to the historic and natural features of the particular location. This service to the NPA will therefore need to include several activities, which are outlined below.

Activity 1.1: Developing approved Park Building Standards and Practices

This activity will build on the draft guidelines drawn up by Ivor Jackson (Land Development and Building Guidelines: Nelson's Dockyard National Park, Ivor Jackson and Associates, 2010). These need to be worked on in-house before being circulated for comment amongst relevant stakeholders.

These guidelines will take the form of a set of draft standards and practices with respect to the application process, design of buildings, use of materials, methods of construction and conduct at the building site. It will also include a set of appropriate forms to be completed by prospective developers that will provide opportunity for developers to think through their development plans and will also provide sufficient information to track understanding and compliance.

Key assistance will be sought from the DCA, local architects and contractors, with respect to what is needed and what is practical. This will require individual meetings with these stakeholders as well as presentation of draft proposals at various stages of development. Eventually it is intended that this set of guidelines can be approved by the NPA Board for the guidance of developers and their architects and contractors, so that the historical, environmental and aesthetic qualities of the site can be properly recognised and protected to the greatest extent possible.

There will be costs with respect to time of certain professionals involved and for any stakeholder meetings, as well as eventual publishing of the guidelines.

Activity 1.2: Park Patrols and Monitoring

It is intended to hire in the first instance two Park Rangers who will be primarily responsible for the protection of park “assets” outside of the responsibility of the Security Department. It will be their duty to make regular patrols particularly in critical areas to be on the lookout for any behaviour of the general public that threatens the values of the park itself. This is a very broad responsibility and involves knowledge of many kinds of “asset”. For instance it relates to theft of stones or other materials from historic buildings, the unauthorized setting of fires and possibly the control of such fires, theft of plants or destruction of vegetation especially the removal of trees or plant of conservation concern, the unauthorized clearing of any land within the park or mining of sand or other materials. It should also include the adherence by developers to the published guidelines for development both in terms of land clearing, road building etc. as well as the use of proper materials and sticking to approved designs.

The budget provides for two rangers and allocates 50% of their salary to this particular activity. The other 50% is spread amongst other activities where they will be provided on-the-job training in conservation, ecology, development practices and interaction with the public. In order to be effective, these rangers must be mobile and 50% of the cost of a pick-up vehicle is also allocated to this activity.

Activity 2: Crisis Response

This activity is intended to cover time and resources needed to respond to urgent issues arising during the plan period that were not anticipated or do not really fit into other parts of the planned activities. These may be issues relating to environmental threats from natural or man-made disasters (storms, floods, chemical spills, etc.). They may also be issues arising from urgent Government requests or private sector activities within the National Parks.

The resources needed would be primarily staff time and in most cases transportation. Other resources may include the acquisition of reference materials, sampling programmes, chemical tests and identification of pests or predators, depending on the needs which arise. Government assistance from the appropriate agency will also be requested where found necessary. This activity will be ongoing, responding as needed.

Activity 3: Development Plans for New Parks

In 2008 three new national parks were declared. These were much smaller parks located at Devil's Bridge, Fort Barrington and Greencastle Hill providing protected area status for these three areas which are important to the nation for several reasons - archaeological, historical, geological and scenic importance as well as for cultural, recreational and heritage reasons. A fourth area at Half moon Bay was described and a declaration with boundaries prepared, but unfortunately, so far this area has not been declared.

However, to date little has been done to bring these areas under any sort of management programme and few persons know that these places are, in fact, National Parks. All three areas need to be surveyed, so that the boundaries and all the most important resources within the area declared, can be located, identified and mapped. Careful research into the historical, natural and cultural assets of each area will be needed to evaluate these findings and perhaps uncover additional assets. When these things have been completed, work on determining a management plan for each area can be undertaken.

The three areas are described below along with what has been accomplished and what remains to be done.

Activity 3.1: Devil's Bridge National Park

Devils Bridge is an outstanding piece of natural coastline on the Eastern coast of Antigua situated about 2.5 miles ENE of the village of Willikies and lying between Mercer's Creek Bay to the north and Nonsuch Bay to the south. The Bridge itself is a narrow arch of limestone rock that has been carved by wave action over thousands of years. At this point there is no protecting reef, so the Atlantic swells crash onto these rocks providing spectacular sights when nearby storms send large swells comes our way. This means that the seas in the narrow bay under Devils Bridge are almost always turbulent. Folklore suggests that Devil's Bridge was a



favourite spot for escaped African slaves to jump to their death rather than risk recapture. As it happens, this spot is also the most easterly point of land on Antigua that is easily accessible and is therefore the closest point to West Coast of Africa which lies approximately 2000 miles away on the far side of the Atlantic Ocean.

The limestone rocks here are part of the Antigua formation that was laid down under shallow seas, some 23 to 30 M years ago. There are also Amerindian artifacts found in the area which have not yet been properly studied. The proposed development plan will include the following:

Activity 3.1.1: Rapid Reconnaissance Survey and Mapping

The Unit is proposing a detailed vegetation survey of the Devils Bridge Park in 2013-2014.

Activity 3.1.2: Rough marking of boundaries and signage development.

No progress has been made on boundary marking or signage for the entrance to the Park. It is clear however, that signs are urgently needed where littering has traditionally taken place on the road to Fanny's Cove and at other spots off the main road to main site.

Activity 3.1.3: Research re existing reports and documents on the area – history, archaeology, cultural use, flora and fauna, folklore etc.

Some extensive research was done on the African slave routes and location of the main slave ports and their direction from Devil's Bridge. However, Antigua is somewhat further north than any of these ports and is opposite a rather barren part of the coastline of Mauritania.

Activity 3.1.4: Produce draft development plan, with maps and work schedule, for presentation to Board for approval.

The plan takes into consideration some of the major problems which are apparent with the current lack of any supervision of activities at Devil's Bridge. These were considered to be 1) lack of any control of vehicular access, which is leading to degradation of the site and erosion of the beautiful grass sward. Cars are driving right to the headland overlooking Dian Point. 2) Heavy pedestrian traffic is eroding the

limestone pockets and also crushing the plant life surviving in the pockets of shelter and moisture. 3) There is no provision for garbage and at present the Vendors are doing what little garbage management there is. 4) The lack of signage means that many visit the site without any assistance in interpreting the features to be found there or their significance to Antigua and Antiguan.

The plan seeks to address these problems by restricting vehicular access (except for emergency vehicles and those for disabled and providing a parking area on the western side of the approach to the Devil’s Bridge site. Vending and park facilities will be kept on this side of the narrow approach to the headland. This will allow the bridge itself and its immediate surroundings to remain in as natural a state as possible. The only structures contemplated would be a wooden board walk and platform, which would allow viewing of the bridge and the swirling waters from a safe distance for all persons and especially those with limited mobility who find walking on the very uneven surface difficult and even dangerous. Persons would be encouraged to use the boardwalk thus reducing the traffic on the limestone and the consequent wear and tear on the surface and its vegetation. Signs describing the bridge and its geological story as well as other signs relating to Devil’s Bridge geographic link to West Africa. Other signs would describe the plants and other biodiversity that persists in this exceedingly harsh environment and their adaptations to life that make them able to survive in the environment.

Major issues to be solved during the planning period relate to the best kind of management structure for the Park.

Activity 3.2: Ft Barrington National Park



Activity 3.2.1: Rough marking of boundaries on the ground

No boundary marking has been done. Discussions with the Ministry of Tourism are planned shortly.

Activity 3.2.2: Research re existing reports documents on the area – history, archaeology, cultural use, flora and fauna, etc.

Historical research will be left to the Heritage Department to conduct. The NPEU is planning to do a quick vegetation survey while the consultant is here before the end of

2013. At this time a preliminary look at the possibility of creating a gentle ascent to the Fort along the southern flank of the hill will be made.

Activity 3.2.3: Produce draft development plan, with maps and work schedule, for presentation to Board for approval

A plan of the site with park boundaries provided is already available from the NPEU. The background is the 2010 aerial survey photos. After the reconnaissance it may be possible to provide more details of possible access routes.

Activity 3.3: Greencastle Hill NP



Development of this park remains very much in third place and it is likely that very little work on this park can be completed in the coming year. No work has been done in any of the proposed activities so far.

Activity 3.4: Half Moon Bay NP

No activities have been carried out on this proposed park and it is unlikely that with the staff shortage and work load relating to the development Plan review that this situation will change in 2013/2014.



Activity 4: Revision of NDNP Development Plan

The year 2014 will mark 30 years of operation of the National Park. During this period, the Park Development Plan has not been revised. Since 1984, there have been many changes to the park, most notably in the subdivision of lands for development within the Park, sale of Crown Lands for private development, tremendous growth of the yachting industry and of cruise tourism in the Tourism Sector. In addition, three new parks have been declared at Devil's Bridge, Fort Barrington and Green Castle Hill. Externally there has been significant growth in environmental consciousness and in the need for sustainable development. Antigua has signed on to several important multilateral environmental agreements, committing itself to certain actions with respect to biodiversity monitoring and protection, protected area development, actions to combat desertification and most recently, to adaption to climate change. All of

these developments have implications for the importance of the National Parks System and its need to adapt to the changing circumstances.

Within the Park, several proposed developments have challenged the original zoning plan and necessitated adjustments to these zones. This has been a piecemeal approach to adjusting the plan to suit imposed circumstances rather than addressing the situation in a holistic manner. A draft revised zoning plan for the NDNP, prepared by Ivor Jackson and Associates, raised numerous questions regarding the way forward for the Park and indicated the need for a thorough examination of the park's resources so that planning of land use can be based on solid data.

In order to be able to obtain as much of this data as possible the following activities were instituted in the 2012-2013 work programme.

Activity 4.1: Photo-database and GIS map creation to facilitate review of current NDNP zoning plan and effects of proposals for re-zoning

The Environment unit will continue to upgrade its database that was initiated in the 2012-2013 period.

The vegetation survey has been started (2013-March) with a survey of the core area of the NDNP will continue in this period to include the eastern and western areas of the Park. (See Section 7.6) Information is also being collected on other biodiversity within the park as time and expertise allows.

Activity 4.2: Detailed examination of re-zoning proposals and consultations with park stakeholders and community representatives.

This will also be part of the consultancy and activities surrounding it as proposed in Section 4.3

Activity 4.3: Draft Development Plan 2014-2019

This will probably constitute the most important and time consuming activity for the plan year 2013/2014. It will also be a major cost centre of the budget. It has been provisionally agreed that this requires considerable input from a consultant with considerable experience in managing and developing a National Park as well as with the management of the biodiversity and natural features which caused

it to be set aside as a protected area in the first place. A Terms of Reference for the consultant will have to be drawn up outlining the deliverables required. However, the overall outcome desired is a draft Revised Development Plan for the NDNP ready for submission to the NPA Board.

It is intended that the Revised Development Plan (RDP) will provide new guidance on all important aspects of Park development policy, procedures and monitoring. The role of private lands within the park should also come under some scrutiny as part of determining zoning and other land use issues. Other aspects of management, especially those regarding technical support for the conservation responsibilities of the Park and possibly recommendations for revised legislation where it is badly out of sync with current thinking and practice.

The detailed nature of the consultant's activities have yet to be worked out, but they will involve much discussion with current NPA staff as well as officials from the public service and private sector stakeholders. These will require one-on-one meetings as well as plenary sessions with groups of stakeholders. The main consultant will probably have to make at least three visits – initial familiarisation; in-depth fact gathering and discussions with stakeholders; presentation of draft plan to stakeholders. A second consultant to address any issues regarding revision and modernisation of the National Parks act may also be required.

Activity 5: Environmental Monitoring and Assessment Programme

Nelson's Dockyard comprises approximately 2250 ha (~5500 acres) of land and 1810 ha (~4470 acres) of marine area. At present there is very little documented information concerning the flora and fauna, ecosystems and important species to be found in the park, or on the threats which they face. Likewise, there are still many historic and ancient sites to be properly mapped, described and studied. The same is even more true regarding the lack of documented knowledge of the marine areas.

For this reason, it is very important that the Environment Unit, in close collaboration with the Heritage Unit, should begin the process of documenting the state of the environment within the NDNP. Such a study might be termed a baseline study – though this should have been executed soon after the declaration of the Park in 1984. This may require the assistance of some specialist help in identifying the less common plants, birds and other species to be found in the NDNP.

A thorough "base-line" study would take considerable resources – time, specialist personnel and finance. This may require activities to be prioritized, where the most obvious and "popular" biodiversity is surveyed first. This would include woody plants and herbaceous species that are more easily recognized or of interest to persons for

visual, or cultural reasons. However, any endangered or threatened species need to be flagged promptly, so that their existence can be recognized in any discussion of rezoning or development plans that may impact on their survival. This would include native plants, birds (including migrants), bats, reptiles (especially nesting turtles), butterflies and large moths, crustaceans, and marine organisms such as sea grass spp., all corals, marine crustacean, fish and marine mammals.

Discussions with persons knowledgeable of the natural history of the NDNP will be consulted to provide suggestions regarding problem areas, location of rare species etc. Attention will be focused on those areas identified in the development plan as wilderness, conservation, habitat or heritage areas, but will include other areas, such as recreation or agriculture, if important or interesting items are discovered.

Since the original work plan was developed the ability to carry out a comprehensive vegetation survey has somewhat limited this need for this activity group as many of these hot spots are being identified by the vegetation survey. However, with the expected availability of park rangers and a vehicle to transport them, it will be much more possible to carry out the kind of monitoring proposed for Activity 5.1. However, there has been developing various community groups who have an interest in their natural environment and are willing to take private action as a group to monitor and if necessary rehabilitate it where possible. Activities proposed are described below.

Activity 5.1 Hot Spot Identification and Monitoring:

In the initial stage, the terrestrial survey will concentrate on various hotspots, where there is a significant threat being posed by un-managed or unintended activity – such as unregulated grazing or land clearing by mechanical means, or through pest and disease outbreaks that are not under control. Spread of invasive species such as Coralita or Neem could also come into this category. Another hot spot indicator would be the presence of rare or endangered species or areas of high bio-diversity. New information is available on this already, so these areas can be identified quickly while others are being identified.

NPEU staff will train the park Rangers to identify many of these hot spots and how to monitor them, so that they can monitor the park as they carry out their other duties.

Activity 5.2: Problem areas identification:

This activity will identify areas where ecosystems are already degraded due to various factors and where some rehabilitation is required, such as the degraded lands on Middle Ground. Other areas may be identified by community groups or individuals who are willing to use their own resources (human and otherwise) to assist in either monitoring them or undertaking some restorative action. The NPEU will provide

limited financial assistance in kind as well as technical advice for effective management of the affected wildlife. Where necessary, areas will be categorised, described and mapped and recommendations will be provided for their rehabilitation.

Activity 6: Environmental Education and Public Awareness Programme

These activities are intended to raise public awareness about the National Parks and in particular about the important and significant role they are playing in the conservation and enhancement of the nation's natural resources. Since children are always very important components in any public awareness or attitude change programme, they should be the top priority in terms of attention with respect to locals and residents.

Nevertheless, our visiting yachtsmen and their crews as well as the thousands of overseas visitors who either stay in the Park or visit it, are important as well, due to the fact that they have many opportunities to promote the NDNP and Antigua, where commercial advertising may not reach. Moreover, a greater understanding and knowledge of the scenic beauty and natural history of the NDNP will help greatly to improve the enjoyment of their visit.

Activity 6.1: Schools Awareness Programme.

This programme is intended to be conducted in close collaboration with the Heritage Unit, which already has a programme of planned visits to schools. During 2011/2012, local schools within the catchment of the Dockyard were targeted first, with the intention of expanding the outreach as time and resources permit. During 2011/2012 work plan presentations were made to the Cobbs Cross primary school and a visit to the Dockyard and hike to Fort Berkeley were conducted a few weeks later. The children were encouraged to collect natural objects such as leaves from different plants.

For 2012/2013 it was intended to change the format somewhat as the school visits were time consuming to organise and did not provide for adequate interaction with the students. It was intended to focus on several of the Global environment recognition days such as World Water Day, World Environment Day and to organise activities at the dockyard to help students understand the messages of these days. However, due to the Coordinator's absence on sick leave in the middle of the Spring term when many of these Days occur, it proved impossible to get activities organised.

For the planned 2013/2014 work programme it is intended to make a fresh start at observing at least three environment days with programmes geared to providing

interesting activities for primary school students to carry out outside of the classroom. These three days will be chosen later but would certainly include World Wetlands Day (February) and World Environment Day (April).

The number of activities will depend on the level of staffing available in the Unit.

Activity 6.2: Seminars Programme

This programme is intended to focus primarily on adult audiences but will have much the same objectives as the Schools programme.

The Seminars programme in 2012/2013 was badly disrupted by the departure of Nigel Bardoe (Environment Officer) and Samantha Rebovich (Heritage Department) as well as the coordinator's absence due to surgery. It had been intended to have a series of seminars on Protected Areas, but there were a large number of other meetings organised by the Environment Division on similar issues that made the kind of participation intended difficult to achieve.

This year – 2013/2014 the department plans to hold several public meetings in an effort to conclude the discussion phase on the revision of the Development Plan. The planned seminar series will address issues raised by the revision process.

Activity 6.3 Field Events Programme: Consist of advertised guided field trips and events (such as star watches, clean ups, etc.)

The unit's field events - the Star Watch event and the participation in the World Wetlands Day clean-up was a success.

Similar opportunities will be taken in 2013/2014 to hold similar activities. Also trail guides are being produced for each of the NDNP trail and a programme of guided walks involving the Rangers and NPEU staff will be undertaken.

Activity 6.4: Artistic Events Programme:

This activity was originally intended to feature Park centred events, displays, exhibitions featuring local artists and photographers, showcasing the beauty, biodiversity and natural resources of the Parks System. This would provide an opportunity for a number of artists and photographers who have demonstrated a great interest in Antiguan wildlife, to exhibiting their work within the Park to raise awareness about the Park environment.

In 2013/2014, emphasis will be placed on creating an exhibit on the environment in the old children's room in the Museum which has kindly been made available to the NPEU by the Heritage Department. This will feature the range of plants and animals to be seen in the various ecosystems of NPA's parks. It is hoped that this can be set up before the end of the tourist season.

Activity 6.5 Park Promotion:

This activity is intended to increase Park System visibility at major national public events and public interaction on Park environmental / heritage programmes.

NPEU participation in local and national events was planned, where persons with an interest in the outdoors, national culture, agriculture or the environment would gather. Such events could include the Charter Yacht Show, World Environment Day, Earth Day, Mango Fest etc. A table would be manned by NPEU and possibly Heritage Department representatives, and would display literature, booklets and even samples of artefacts or other items of interest from the archives which would generate considerable interest in the Park, its history and its environment.

Unfortunately, it was not possible to attend any of the proposed events in 2012/2013. If staffing allows a more dedicated effort will be made in 2013/2014. Attempts are also being made to produce a range of leaflets and photographs, which would be used at such events. It will also include the production of a promotional video on the historical and natural features of the NDNP for public broadcast, talks and such events as mentioned above. It can possibly also be made available on the website.

Activity 6.6: Plant Signage in Dockyard

The unit will engage in an exercise to name the trees and shrubs and other plants in the NDNP area. Most plants in the dockyard are un-named. Those who do not know what they are will go away without knowing what they saw. Some of the plants have an interesting story to tell – this could be briefly told by use of signs appropriately placed. The Lignum Vitae tree is a good example, but there are many others.

Unfortunately, efforts were directed to getting the Marine Trail at Windward Bay set up, so it was not possible to complete the sign design and production on plant naming activity. A leaflet on the plants of the Dockyard is being commissioned to supplement the signs.

Activity 6.7 Heritage Plants Exhibit:

The objective of this activity is to provide more information on the plants and crops that have been important in Antigua's history. It is believed that this would be of considerable interest to both residents and visitors.

The Dockyard grounds are nicely landscaped, but many of the plants are introduced and there is a dearth of plants that connect to the history of Antigua. To fill this gap, some plants important to the early colonial period will be planted in the old herb garden, where they can be seen by visitors and their story told. Tobacco, indigo, and sugar cane are prime examples. For more recent times, Antigua Black pineapple and sea island cotton have interesting stories to tell as well. There are many more – Aloe vera for one.

It will be necessary to engage a local botanist and landscaper to collect the necessary seeds and slips for the propagation of the plants/crops selected to highlight. This person can also raise the seedlings. The herb garden site has already been partially prepared for this development, but more trees will have to be removed to provide sufficient light and space.

Activity 6.8 Visitor survey:

This activity is intended to obtain better knowledge of visitor interests in conservation and environmental matters.

The activity would likely be better as part of more general visitor survey, but in planning the activities above, it was evident that there was little knowledge of what the Park's visitors (both local and from overseas) are really interested in concerning the Park's environment and what they therefore would be likely to appreciate finding or doing in the NDNP. A questionnaire was prepared in 2012/2013, but it was not possible to use it before the high season ended. It is intended that this questionnaire will be administered, starting in December 2013. It is hoped that the Rangers will be on site by this time, so they can assist in administering it.

Activity 7. Research and Restoration Programme - Environmental monitoring

The Research and Restoration Programme is intended to provide some of the basic scientific knowledge and data needed to support the environmental programmes and their management decisions. In addition, the Restoration component is where environmental management technology is put into action to restore damaged ecosystems and to thereby reduce the negative effects of this damage on other downstream systems, as in the case of denuded hillsides which are resulting in

siltation of coastal areas into which these hillsides drain.

Activity 7.1 Meteorological Station project:

The NDNP is a considerable distance from the weather station at VC Bird International Airport which is the nearest official weather station. Weather conditions at English Harbour are frequently quite different from those at the airport.

Activity 7.2 Water Quality Monitoring Programme

Water quality is a major issue in the National Parks, especially in the NDNP. Many of the issues to do with the marina and with the permanent small boat residents are current issues that have water quality as a central issue. There are also issues relating to the contribution of run-off entering either harbour from land based sources of pollution

Water quality is an ever changing factor and should have a consistent monitoring plan in order to provide relevant data to help with marine decision making in the Parks. A consistent monitoring plan will also be able to show trends over time, from quality changes between high season and the off season as well as a greater picture over longer time periods.

As a follow up to what was achieved during the reporting period, discussions with Dr Christian are to be held shortly, to agree on a revised programme of testing in 2013/2014 incorporating what was learnt from the previous year's programme. It is anticipated that expenditure should be similar to that of last year.

Activity 7.3 Windward Underwater Trail Project

It was found that the materials used for the underwater illustrations provided too favourable a substrate for algal growth and the pictures, despite regular cleaning became damaged. The picture plaques were all removed for this hurricane season and it will be necessary to re-print the pictures to protect them in an alternative manner that leads itself to more effective cleaning and visibility. A marine biologist with good knowledge of the coral species will be needed to replace the skills of Mr Camacho – at least on a part time basis.

This year will therefore focus on improving the picture plaques so that they will last longer than a season. Costs are therefore an estimate as the best solution is not

known at the moment.

Activity 7.4 Coral Reef Monitoring Programme

Until the situation with respect to the hiring of someone with marine biology skills is satisfactorily dealt with, this activity will have to be put on hold. A minimal amount has therefore been left in the budget to provide minima continuity.

Activity 7.5 Waste Recycling programme

The waste recycling initiated with the yachtsmen during the reporting period achieved some measure of success through the partnership with Antigua and Barbuda Waste Recycling Company (ABWREC) and the National Solid Waste Management Authority (NSWMA).

The main emphasis in 2013/2014 will be to increase awareness among NPA staff about the need for the programme and to improve the regularity and efficiency of collections in the Dockyard. This will need a series of meeting with the staff of the various Departments. Bins for recyclables to be used by the public in the Dockyard are also planned.

Activity 7.6 Environmental Mapping and Digitisation Programme

The unit stands to benefit from the GIS software that was installed during the reporting period. An environmental programme is very dependent on maps to plan development of areas and to document the spatial distribution of the natural resources in the National Parks.

This software increases the unit's capabilities as it is an important tool in modern environmental mapping is the Geographical Information Systems (GIS) software. The programme allows for the creation of digitised maps made up of multiple layers on different kinds of information about the spatial area. This makes it easy to show all the areas of conservation importance in relation to parcel boundaries or any of the zones provided by the Park Development Plan.

Activity 7.6.1: Vegetation Survey of NDNP

As outlined previously, Mr. Kevel Lindsay completed the vegetation survey concentrating on the national parks core. Another phase of the survey will be

undertaken focussing on the eastern and western areas of the park in the upcoming year.

As indicated above the March 2013 survey covered only the core area of the NDNP, leaving the eastern and western extremities for Phase II. This will be carried out early in the new work programme year, so as to complete this during the wet season when leaves and reproductive structures should be more easily available. Phase II will include plant surveys in all the areas outside the Core Area. These include Parts of Piccadilly, Mamora Bay and Redhill within the park boundary, as well as Monks hill Sugar Loaf, Cherry Hill, Doigs watershed, Mt Carmel, Fisher Hill, Old Road Bluff and Signal Hill.

The same format of reporting will be used so that both surveys can be combined into one comprehensive document and database for the NDNP. Additional days will be spent on a similar but much simpler exercise for Devil’s Bridge and Ft Barrington National Parks. The consultant is requesting the assistance of several persons on an as –needed basis to assist with certain aspects of the survey. These will be identified in the consultant’s report.

Activity 7.6.2: Vegetation mapping of NDNP

This activity is separated from the actual survey work, which is primarily carried out in the field. The vegetation eco-zone mapping, while based on the observations in the field, is primarily a desk-top exercise using a combination of the field data and mapping information provided by aerial surveys and other types of maps such topographic, soils and rainfall maps, all of which have been digitised and geo-registered so they can all be overlaid in a Geographical Information Systems programme such as ArcGIS 10 which is now available to the NPEU and Heritage Units. (See Sec 7.6)

The field work will be used to identify signature features of the various plant associations so that they can be recognised on the aerial maps. These are then plotted so that all parts of the Park have been assigned a vegetation class. The consultant will work with the NPEU Coordinator in producing a vegetation map for the NDNP, which in turn can then easily be used to assist in assigning land use zones as the Park Development Plan is revised. It should not be necessary for the Consultant to make any special travel for the mapping activity, having already completed the plant survey.

Activity 7.7 Reference Library and Database

This activity is to flag the importance of developing a suitable reference library for the Environment Unit. There is a well-stocked library of reference materials for the

Heritage Department which has been developed over the years, but materials for identification of plants, birds, fungi insects and other arthropods are not available. All aspects of marine life are also very poorly treated. Although the internet is an important source of information at this time, it is still necessary to have copies of key reference books and also maps and charts. A list of publications is being drawn up for acquisition.

Activity 8.0: Professional Support and Training

Professional staffs need always to be developing their knowledge and skills. Meetings with fellow professionals are important to make new contacts, share information and keep abreast of developments outside one's own sphere of operation. Professionals also need to be able to present research that they have carried out to their peers for critical evaluation and recognition. This way good performance can be maintained and also a high level of interest and self-motivation.

Training is more specialised and may be required to provide special skills or knowledge needed for a particular activity or piece of research or use of specialised software.

8.1: Attendance at professional meetings and conferences

This activity is to facilitate attendance at important conferences and meetings which are not sponsored and where financial resources are necessary for conference fees, travel and accommodation etc. In 2012, the coordinator attended the Caribbean Urban Forestry Annual Meeting held in St Thomas, USVI. This proved a very useful opportunity to meet others involved in management and in scientific study of various protected areas and community re-forestation projects. The opportunity of being in the Virgin Islands was taken to also visit the St John's National Park on the island of St John's. The park environment is similar in many respects to the NDNP – both marine and relatively dry hilly forest. so the visit proved also very useful in sharing information and ideas.

8.2: Training courses

To date no training requiring formal attendance at a course has been required. However, in situ training was carried out in GIS software use for Ruleo Camacho when he joined the staff, by outgoing staff member Nigel Bardoe. This proved very useful and Ruleo was able to put his new knowledge to good use in a short time.

It is quite possible the Ruleo's replacement when selected, may need training, but this can only be determined when the person has been selected and is on board.



Budget 2013-2014 allocates **EC\$ 333,369.00** to facilitate the programs and activities for the operations of the Environment Unit for the new financial year. An additional EC\$70,000.00 is allocated as capitalized expenditure for the purchase of a vehicle (***see 2013-2014 budget schedule attached***).

❖ MARKETING



INTRODUCTION:

The purpose of the marketing plan is to serve as a road map for the various initiatives that will be undertaken for the upcoming year. The strategy focuses on the current needs and desires of identified clientele and customers of the Park. Recognizing the need to remain flexible in an ever-changing marketing landscape, the plan and action items provide a solid platform for the process in a precise and comprehensive document.

The Park has a plethora of outdoor recreation choices, historical and cultural features, museums, yachting facilities and services, hospitable people and numerous outdoor opportunities to provide to the discriminating needs of a changing market. Our marketing efforts will focus on engaging our customers while keeping the Park's offerings at the forefront of the minds of our potential customers.

Our primary marketing objectives are to increase visitation and communicate a cohesive and effective marketing identity. In the upcoming fiscal year, marketing efforts will be geared more towards online marketing, with a heavy focus on the social media platform. We will give potential visitors using our website more tools for researching and planning their trips. In addition, we will continue to take advantage of partnerships with yachting, cruise and other tourism entities, creating the necessary synergies for promoting a prime tourist attraction, quality yachting facilities and services.

The relevant marketing strategies are based on the overall proposed marketing goals of the Park. The priority tactics include advertising, promotions, public relations, building industry relations and events. An Action Plan, listing specific marketing initiatives, is included. The Implementation process is scheduled for October 2013 to September, 2014. Further, the Marketing Strategy will be reviewed and monitored on an on-going basis to ensure its success.

Economic and Industry Overview:

The global tourism marketplace has been in a state of change for the past decade, and the recent economic downturn is not the only factor. Several factors are impacting the travel and tourism market. These include the internet, emerging markets and destinations, socio-demographics, traveler interests and expectations, concern about the environment, personal safety and even energy and political issues.

The emergence of the internet is the most profound travel trend that has affected consumer behavior. The digital landscape has resulted in media content that is personal, portable, searchable, social and interactive. It is less about mass media interactive and consumers have become more sophisticated in the way they communicate and connect to digital media—anytime from anywhere.

As a result the new dynamics have brought increased competition to countries such as Antigua and Barbuda. The task at hand is to continuously work at making our products and experiences stand out amid aggressive competitors and seemingly unlimited consumer choices.

Market Outlook:

The leisure market in Antigua showed a positive development, in line with international arrivals. According to the Antigua Tourism Authority, “West Jet commences new direct service from Toronto to Antigua twice weekly on Wednesdays and Sundays. This will support strong growth potential in the Canadian Market. This new flight represents a 15% increase in airlift, a net gain of 7,000 seats from the previous year. In addition, American Airlines saw an increase of 15% airlift into Antigua in 2012 from direct JFK service. This 4 times per week service has helped to fuel a growth in arrivals from the US market of 12% year to date at end of September. AA also still continues to serve the destination with daily service from Miami now all year round due to its heavy load factors on this route. This is still supplemented by additional daily American Eagle service via San Juan. “

Despite the foregoing analysis, global market conditions continue to dampen Antigua and Barbuda’s tourism industry. Further, the UK APC tax and a revised tax structure

at the Antigua & Barbuda Airport and the continued limited airlines availability are expected to have a negative impact on visitor arrivals.

The global trends and challenges will continue to impact tourism businesses worldwide. The United States, despite recent signs of recovery, several parts of Canada and Europe are still mired in recession. Rising gasoline prices, which lead to increase airfare costs is a major factor.

So far as marketing is concerned, social media is now being adopted by older generations at a greater rate. This will be an area on which we will keep a careful eye and one worthy of specific strategies to take advantage of this on-going trend.

In addition, smartphones and tablets have also emerged as powerful tools for travel research and purchase. Access to the Internet via a smartphone has increased by nine percentage points over the last year to nearly one-third of American visitors. (Internet, 2012).

While there are plenty challenges, there are also opportunities. In the long run, we will achieve success by focusing on elements within our control.

The Park's unique combination of experiences will ensure competitiveness in an uncertain market. Our stunning scenic beauty, rich history, pristine natural environment and authentic maritime culture and marina facilities, premiere multi-media show, upgraded museum, well-located historic Copper and Lumber Store Hotel, and customer focus staff will remain our main strengths.

There is a need for more authentic, holiday experiences. We will continue to differentiate the market with quality experiences and value to satisfy today's choosy leisure travellers and other niche groups. In the short term, we will work collectively to create compelling experiences and to facilitate the development and promotion of value-added packages and find additional ways to pull in customers online. The next phase of developing the websites include future landing pages for special events, more e-blasts and e-newsletters, and continued use of social media.

Public Relation is an important area of marketing that has been used to some extent already, but has much room for expansion. It requires the least expenditure of financial resources and very effectively gets the message to the Park's target audience.

Keeping a positive, consistent relationship with the press and media, by feeding them quality, newsworthy information is key to the success of public relations. When good press coverage is given to the Park about its special events, promotions, programs and Park oriented activities, it's worth its weight in gold!

Opportunities & Issues:

In order to build a competitive advantage, it is important to view challenges that can impact future success and opportunities to build on the company's weaknesses.

Opportunities:

- ♦ Benefits from growing markets that are showing resurgence e.g. Canada, USA and Germany
- ♦ The opportunity to use the Park's natural and historic/cultural attractions as venues for special cruise-ship incentive groups, conferences, regattas, weddings, conferences, dinners, and cocktails events. Specifically, festival and events are important drivers to stimulate identified target audience to the Park e.g. food and wine festival, hiking, sailing, camping, film and music festival as well as yachting regattas. In addition, there will be many opportunities to host/create international events to enhance the Park's calendar, to attract the desired target market, bring valuable economic benefits and to promote the Park and its brand values
- ♦ Develop partnerships with historical and yachting organizations.
- ♦ The Park with its numerous cultural and natural resources makes it a popular setting for travel documentaries and film production.
- ♦ Potential for cooperation among tourism/yachting partners could result in greater success in reaching target audiences, instead of piecemeal efforts by individual association.
- ♦ Opportunity exists to cross-market throughout Park's departments to increase awareness and repeat visitor visitation or to build "value"

Challenges:

- ♦ Fierce competition from similar trade businesses that offer aggressive incentives.
- ♦ Visitation patterns to the Park are highly seasonal with the majority of visitation occurring during the high demand months of December to April. This seasonality impacts the operating effectiveness of businesses in the Park and environs
- ♦ Limited marketing dollars
- ♦ Internet use and use of social-media networks
- ♦ Slow world recovering economy and the uncertainty affects intent and ability to travel.
- ♦ Weather uncertainty affects travel patterns and willingness to travel.

- ♦ There is insufficient IT marketing and sales staff.
- ♦ There is a need for specialized staff to assist in designing and packaging the Park's core experiences to better position against its competition and to promote its points of differentiation.
- ♦ There is also insufficient visitor statistics on Park visitor demographics to facilitate planning.
- ♦

Mission:

To establish the Nelson's Dockyard National Park as a premier, world class tourism destination, increase visits and longer stay, provide visitors with a diversity of experiences and strives to deliver best practice in customer service and presentation of the product.

Marketing Goals

- ✓ The Park is committed to remaining the main land and water based tourist attraction of Antigua and to attract visitors to the Park to make it their main stay for all activities and events. The goals of the Park's marketing strategy are:
- ✓ To continue to increase visits, length of stay, and the number of repeats visitors and yield by 10%.
- ✓ To continually improve the quality of the visitor experience so that it exceeds the expectations of visitors.
- ✓ Expand internet marketing opportunities.
- ✓ Promote the Park as an excellent events venue and to generate a positive Park's image.
- ✓ Continue marketing efforts that highlight the Park's amenities, cultural, historical, natural aspects, yachting services and a welcoming atmosphere.
- ✓ Use technology and social media to promote the Park's intrinsic feature categories: archaeological, cultural, recreational, natural, scenic and historic, yachting, touring, and event attendance, and to make it easier and more convenient for potential visitors to source/find and "buy" the Park's products and services.

Target Markets/ Groups

The key market segments for the Park may be broadly categorized as the following:

- ♦ Cruise ship passengers (heritage/cultural travellers – independent and packaged tours).
- ♦ Hotel based tourists (sightseers, family with kids, heritage lovers, business, etc.)
- ♦ Yachting visitors - adventure and outdoor recreation travellers (boating, hiking, sailing, etc.)
- ♦ Niche Markets (small, educational tour groups with specific interest in heritage and archaeology, sailing, nature enthusiasts,)
- ♦ Special event market: free independent travellers, hotel-based visitors, nationals (school groups, visiting friends and relatives, Church groups, service organizations, Government Ministries, private business entrepreneurs, etc.)

These broad market segments cut across key geographic markets: the USA, UK, *Germany and Italy* and are primary source of customers for the Park. In addition, residents, along with visiting friends and relatives, are key targets for repeat visitation.

Marketing Strategy – Purpose: The purpose of the marketing strategy is to provide the marketing Department with a plan that can be implemented to strengthen the market position and promotion of the Park’s services and facilities. The marketing strategies outlined below represent the most balanced marketing approach possible considering the budget limitation. The promotional strategy will be promoted through a combination of print advertising, public relations initiatives, events, digital online strategies and promotional materials to engage and serve the visitor effectively.

Advertising:

The overall goal for advertising is to attract a diverse mix of visitors to the Park. To reach this goal, we incorporate a call-to-action in all advertising. Marketing Staff will seek out advertising opportunities with targeted publications which will help us reach out to our niche groups. These opportunities may include consumers, historical and nature enthusiasts, outdoor recreationalists, yachting and shopping visitors.

Advertising will direct these target markets to landing pages on our Website, where customers can find the information of specific interest to them. We will thrive to

generate sufficient interest through mediums such as local Radio and T.V, and the internet.

Strategy: Drive traffic to Park's www.nationalparksantigua.com. Generate marketing leads and requests for trip-planning information. Promote distinct segments of the Park offerings: yachting, tours and sightseeing (heritage tourism); museum educational programs and multi-purpose show (cultural tourism)

Tactics:

- Place infomercial for General Park events and programmes. Seek government sponsorship on ABS T.V.

- Attend yachting Trade shows to conduct face-to-face contacts and to gain exposure in this key market.

- Place Park ads in a number of magazines specifically those with website linkages. These include: Super Yacht Services, A & B Marine Guide, Mega Yacht Magazine and Antigua Sailing Week. Hotel & Leisure Market: Life in Antigua; The Antiguan; Elite Hotel; Luxury Hotel; Virgin Holidays; The Treasure Islands etc.

- Place 30-second television ads on national television to promote various events in the Park, including Christmas, New Year's celebration: Sailing Week and Children Summer Programs, etc.

- Utilize visitor testimonials on website to entertain and educate the public about the diverse things to do and see in the Park.

- Streamline and maximize other social media offerings by the Park. For example there are separate Facebook pages for the Park and for the Museum.

Collateral

To attract visitors, we will create and distribute a range of print (flyers, incentive coupons, and other materials) which demonstrate to visitors the range of things to do in the Park. The collateral will demonstrate also the range of activities, accommodations, history and heritage that have led to our positioning. Some print collateral will be completed in-house by services staff particularly flyers and coupons which promote all events and events incentives.

Strategy: *Increase awareness and knowledge of the Park. Provide visitors with adequate and accurate information to spur them to become potential visitors.*

Tactics:

- *Produce and print flyers: Tours – Dow’s Hill Cultural Expo- Children Summer activities; Sailing Week Activities; New Year’s Eve Flyers.*
- *Conclude 3-5 minute infomercial ad. of general Park activities to be used in hotels and other tourism entities;*
- *Develop general graphics for annual events and print ads.*
- *Build Photo Library.*
- *Produce and install one branded sign on entrance to the centre; and one sign at the English Harbour cemetery to show way to Nelson’s Dockyard*
- *Distribute marketing tools to key industry locations on a needs-basis.*
- *Purchase DVD Player & Lap-top.*
- *Produce (4) costumes periodic displays*

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- *Develop general graphics for annual events and print ads.*
- *Build Photo Library.*
- *Produce and install one branded sign on entrance to the centre; and one sign at the English Harbour cemetery to show way to Nelson’s Dockyard*
- *Distribute marketing tools to key industry locations on a needs-basis.*
- *Purchase DVD Player & Lap-top.*
- *Produce (4) costumes periodic displays.*

Website & Internet Development:

In the coming year, there will be a conscious shift to focus more on becoming more digital marketing savvy and build relationships with new audiences through social media platforms like Facebook, Twitter and YouTube.

The new website, www.nationalparksantigua.com will provide opportunities for online and flexibilities for tablets and mobile technologies. Online tools such as *Facebook*, *Twitter* and *YouTube*, for example, will continue to be used to complement the marketing efforts with more targeted messages. Use of these platforms will also be used for promotions, contests and offers, and will provide a more one-on-one experience with visitors.

Strategy: Continue to upgrade website content, features and functionality. Increase use of online technology. Utilize social media to generate interest to utilize the Park's services and facilities.

Tactics:

- Create new website for NPA with the necessary linkages to various social media platforms, including Facebook, Twitter and YouTube.
- Conduct thorough analysis of NPA website, by updating content on regular basis to make it all embracing of every facet of life in the National Park. Link it with the other websites and the other social media offerings being utilised by the Marketing Department.
- Continue online marketing & optimization initiative. Enhance Search Engine Optimization, hosting, Web domain & Yachting Banner.
- Add content and specific photos to enhance the site, visitor experience and to increase interest in visiting the Park.
- Install Email portal/promotional landing pages for information and promotion - strategize specific email lists throughout year targeting specific areas and times.
- Seek new linkages and maintain previous linkages on key websites.
- Distribute tour guide brochure online
- Conduct thorough analysis of NPA website, by updating content on regular basis to make it all embracing of every facet of life in the National Park. Link it with the other websites and the other social media offerings being utilized by the Marketing Department.

Public Relations:

Public Relations will continue to be a key component of the marketing program, with a focus on crafting a positive, visitor-friendly image of the Park through feature articles and television programs. The marketing staff will respond to inquiries to garner positive editorial coverage. Build and leverage relationships with the media. We will maintain a photo library with nature, people, events and activities photos.

Strategy: Cement relationships with media entities. Generate image awareness in order to increase interest in the Park as a year-round tourist and yachting attraction. Expand target audience interest in the Park.

Tactics:

- Produce standard press kit for media inquiries and place on website. (Online & print version)
- Develop internal data base of tenants to be placed on distribution list for newsletter.
- Continue to write and distribute pertinent news releases and storylines to national media regarding new developments, niches, special events, specials, packages, etc.
- Continue to take photos and develop partnerships with local photographers in order to have a wide variety of photos available for media requests, ads and our website.
- Engage in on-going, proactive outreach with Editors/ writers to generate placement of Park stories in magazines.
- Host luncheon for media partners, (managers and writers) and magazine writers and publishers.

Hotel Marketing:

In an effort to capture this market, various media are available to be utilized, such as print, online advertising, public relations. Various events can also form part of the strategy. Visitors will tap into www.nationalparksantigua.com which will be used to engage them in the marketing messages, images and videos, and a call-to-action on all pages will encourage them in their trip planning decisions. In a number of key hotels around the island, leisure magazines with the Park's editorials and ads are placed in the hotel rooms and at the Tour Desks. The sales team works with Tour Desks' Representatives and taxi-drivers to help grow the hotel market.

The Nelson's Dockyard National Park marketing is built around its core product/services within which are a variety of niche experiences. The coastal areas, beaches, (nature) the trails, Forts, sailing, charter tours, historic tours, shopping, hotel, restaurants, (cuisine), marina with unique yachts for photography and (heritage) museum, archaeology and old artifacts all have critical mass of experiences which gain visitor response, and that motivate them to want to come to the Park.

In addition, the NPA's website will increase the Park's visibility; provide ready access to information to aid travel planning and share the positive online reviews we have

already been receiving. Hence, the foregoing sale tactics concentrate on providing a means to increase the number of visitors to the park, create awareness and increase interest in the Park's attractions and services.

To aggressively market to this segment, it is recommended to hire a Sales Officer to increase the hotel visitor numbers to the Park.

Long-term challenges and opportunities that align with the hotel segment are outlined as follows:

Challenges:

- Fares from hotels are expensive. Over the years, this has been a major impediment.
- Hotel organized day tours are priced between US\$80 to US\$95. The transportation cost is US\$80 for one to four passengers. Observations indicate that the Jeep Tours are the main operators which move the majority of visitors from the hotels. The Park customary receives consistent numbers from these Operators. However, the visitors are encouraged to patronize Restaurants, which provide inexpensive lunches. It follows that the restaurant businesses in the Dockyard do not get their share of this market.
- Several unauthorized taxi drivers consistently inform the visitors that the Park's entrance fee is too expensive. Visitors are taken on nearby hills outside of the Park.
- Visitors have insufficient funds to spend due to the downturn in the economy.
- The national Parks Authority is not allowed to develop tours with the use of cheaper transport service.
- The Park has no modern boats, well- equipped to design small harbour tours.
- Insufficient time allowed to visitors on an island tour.
- Sound and light Show in need of upgrade.
- Lack of weekly Park's Hotel Sales Representative.
- Lack of family recreational fun activities.
- Island tours by sea conducted by the following boats: Wadadli Cats, Treasure Island Cruises, Mystic and The Excellence. It is interesting to note that the Park's entrance fee is not included in these packages.

Opportunities:

- Establish and enhance Park experiences. Many of the Park's products are participatory in nature, and historical. The Park is well-positioned to capitalize on the shift in demand for more authentic niche experiences, e.g. learning (historical, environment and archaeological tours), hiking, cuisine, beach and camping experiences.
- Capture a larger share of the national, regional and international market
- Build working relationship with nearby hotels such as: St. James's Club & Verandah, The Inn & Pineapple Hotel

Strategy: *Generate awareness and to increase market share*

Tactics:

- *Distribute NPA's flyers in hotels.*
- *Install electronic picture frames in hotels, showcasing activities within the Park*
- *Coordinate Fam tours; maintain working relationship with Tour Desk Operators and Hotel taxi-drivers.*
- *Hire a Sales Representative*

Cruise Market:

Internationally, the European market for cruises remained a growth market. According to a study by the European Cruise Council (ECC: Statistics and Markets 2012), the number of European passengers on ocean cruises grew by 9% year-on-year to 6.1m in 2012.

Nationally, Antigua's cruise-ship market peaked in 2009-10 season when Antigua welcomed more than 700,000 passengers. In 2012-13, the forecast figure for ship arrival was 312 which translate to over 600,000 passengers estimated to visit Antigua.

In the summer of 2013, the Royal Caribbean will be returning to Antigua. In this period, Jewel of the Seas will make one visit every week as opposed to every two weeks last year. Carnival will maintain its visit of two calls every two weeks.

The Park has seen a falloff in its overall cruise-ship market for the period 2012-13. In an effort to increase its share of the independent market, Ms. Denise Phillip, Marketing Sales Officer, was assigned to carryout sales marketing at Heritage Quay. This marketing initiative from the onset proved successful and it has enabled the Park to increase its revenues and awareness of the Park as ‘a must see’ tourist attraction. Building on this success, the Park plans to increase the sales efforts on heavy cruise-ship days. In addition, it will continue to seek permission to install digitized marketing tools to increase its visibility in the Quay.

The challenges and opportunities align with the Cruise sector are outlined as follows:

Challenges:

- Repeat visitors are seeking new and interesting activities.
- Differentiating the product is an important marketing strategy to focus our brand on reflecting the diversity of the Park. Some of the Park’s attraction can offer specific customized visitor experiences. In terms of the latter, limited marketing resources, including funding and staff resources, pose a significant challenge to increasing awareness of strong niche experiences.
- Lack of Park’s visuals and digital marketing tools are installed at Heritage Quay.

- Perception of lack of variety of boutique shopping experiences.

Opportunities:

- Develop exhibitions and historical representations e.g. Re-enactments and upgrade Sound and Light Show at Dow’s Hill Historical Centre.
- Increase customer satisfaction in service and giving good value for promised services.
- Create exciting activities to interest and to engage the visitor.
- Cooperative marketing with other stakeholders e.g. the Cruise Association.

Strategy: *Increase cruise ship market share. Support industry partner on-going initiatives*

Tactics:

- *Produce Taxi tour cards and host a Cocktail/ Dinner Meeting.*
- *Produce short feature on local craft vendors for marketing and educational purposes.*
- *Attend schedule tradeshow.*
- *Hire a steel band on heavy cruise-ship days and place at the Dockyard & Dow's Hill Centre.*
- *Develop re-enactment acts, Uniforms and props display.*
- *Continue strong alliances with established tour Operator/Representatives and Events Managers.*
- *Maintain a supply of flyers at various hotels.*
- *Produce Taxi-driver tour posters.*
- *Provide NPA photo images to enhance booth for promotional purposes.*
- *PRODUCT DEVELOPMENT & Special Projects.*
- *Existing products/services will continuously be renewed in response to visitors' expectations. New products and experiences will be developed where research indicates promise. Specifically, improve visitor satisfaction is critical to provide visitors with a superior experience to encourage return customers.*

Strategies:

- *Assist in the coordination of culturally themed tours.*
- *Create a Day Pass that packages together several cultural attractions.*
- *Train marketing staff in Social media skills*
- *Collaborate with Human Resource Department to expedite one customer service seminar to improve Customer Service skills*
- *Continue to encourage improved quality to Park's services and facilities.*
- *Collaborate with the Heritage Department to develop activities which focus on history/heritage.*
- *Give sponsorship both financial and gifts-in-kind to: schools, community groups, church, sports, NGO's and Govt. social groups.*
- *Pigeon Point Picnic Facility: Install platform, stage & benches in assigned area for cruise ship tour operators' special shore excursion clients.*
- *Setup exhibitions, culinary activities, Carnival costumes on display, stalls (everything Antiguan – rum, hot sauce, local drinks,*
- *Events*
- *E-marketing continues to spur repeat visitation and generate increased exposure for the Park.*

Strategy: *Improve planning and implementation of events. Increase Park's image.*

Tactics:

- *Host and support traditional yachting events.*
- *Produce Flyer for September for Monaco show and New Year's Eve Extravaganza.*
- *Seek sponsorship in respect to annual events.*
- *Confirm entertainment.*
- *Confirm fireworks production promptly.*
- *Order party items.*
- *Print notice board.*
- *Advertise in other media*
- *Plan and execute "Children Adventure Day" with kid's meal, competition, games, etc.*
- *Advertise in February in the Schools.*
- *Meet with Committee to initiate plans for activities & entertainment for Sailing Week and Dockyard Day.*

Other Marketing Initiatives:

- Give sponsorship to financial and gifts-in-kind groups: schools, community groups, 'special cases' health care individuals, church, sports, NGO's and Government services that serve the community, for example, Police and Fire Departments.
- Purchase outside tables, tents & chairs, and umbrellas for Dow's Hill Historical Centre.

- Install T.V. at Visitor Centre (Dockyard and Dow’s Hill)

The Marketing Department is the engine of growth propelling the Authority’s growth. In order to maintain this growth pattern and extend its reach to our local and visiting public, Budget 2013-2014 allocates EC\$ 524,184.00. Additionally other major expenses for the new financial year have been capitalized totalling **EC\$12,000.00 (see 2013-2014 budget schedule attached).**

❖ YACHT SERVICES DEPARTMENT

The Yacht Services Department comprises of five (5) employees. The employees work on a shift rotation system to accommodate the office hours. The Yachting season and most of the yachting activities are scheduled during the winter months starting from November and ending in May. After the peak season has concluded workers take their vacation during the summer months that runs from June to October.

There has been a general improvement in work performance of the staff. Most workers exhibit the knowledge, skills and abilities (KSAs) to perform their task well. Dealing with complex matters is noteworthy. However, there is room for improvement. Workers must display passion and possess a positive attitude that will enrich customer service and ultimately productivity. In addition, attendance needs to be improved upon. Sickness and calling in sick has been a matter of concern.

It is vital that the Yacht Services Department maintain its high standard of service excellence.

Challenges

There are challenges that the Yacht Services Department continues to experience. These include:

- The inability to frequently patrol Falmouth Harbour and English Harbour.
- Inadequate patrol security in the Nelsons Dockyard Marina at all times. (could be Police within the dockyard vicinity)
- Major Renovation to the marina office (Facelift)
- Computer extremely slow and frequent network breakdown
- Training
- Proper access to navigator range lights for servicing. (Two(2) are located on fenced private lands)
- Congestion on cruise ship days at the dinghy dock in Falmouth Harbour.
- Abuse of the dinghy dock in Falmouth Harbour by local fishing vessels.
- Lack of designated area for incoming vessels seeking clearance.

Recommendations:

✓ **Patrol Boat**

The dockyard marina received its patrol boat from the coast guard. This would significantly assist the department in functioning effectively. Marina personnel would be able to conduct regular patrols within the National Parks waters and be in better position for taking inventory. The patrol boat would also assist in locating vessels on anchorage and help in the case of emergency situation in a timely manner.

✓ **Security**

Adequate security patrol is needed on a 24-hr basis to profile persons who may display suspicious behaviour. Also, two (2) or three (3) more CCTV cameras and

adequate lighting needs to be installed on the Super Yacht Dock so that the facility and marina guests can be closely monitored. This is highly recommended due to two (2) break-in incidences that occurred on the said dock during the season.

✓ **Port Authority and Marina Offices**

The Yacht services offices have been air-marked for improvement:

- Complete renovation of the marina office.
- Installation of two (2) new computers. (1 in the Supervisor’s Office and 1 in the Port Office)
- (2) Air conditioning unit (Port Authority and supervisor office respectively)
- Rolling Shutter for Port Authority Office
- New office Furniture

To facilitate the renovations to the office operations will be temporarily relocated to the Port Office.

✓ **Computer System**

It is imperative that regular maintenance be done in order for the computer system to work effectively. In addition to the new computer system, the department is preparing to launch “Marina Works” operating system. In order to obtain maximum functionality it is important that the server(s) manager and users liaise and precautionary measures are followed.

✓ **Training**

It is recommended that the departments’ employees be trained in these pertinent areas:

- ♦ Customer Services
- ♦ Computer training
- ♦ VHF radio communication

✓ **Entrance Fees**

The entrance fee for passengers entering by sea should be increase from USD \$5.00 to 7.00 per adult and from USD \$2.50 to USD\$4.00 per child under twelve (12) years of age. This would facilitate the on-going restoration projects within the National Parks.

✓ **Environmental Re-enforcement**

- ♦ The Marina will procure a holding tank and mandate all vessels within the marina to utilize it.
- ♦ The issue of over spraying, antifouling and frequent diesel and oil spillage needs to be addressed in the harbour.
- ♦ Frequent patrol of the Falmouth and English Harbour area.
- ♦ Continuation of recycling program leaflets should be handed out.

✓ **Diving**

English Harbour- Bow moorings are placed around the dock to stabilize most vessels in position especially when there are high winds and their anchors are not set properly. However, some of these moorings are being lost on an annual basis when anchors are being caught and jerk the screws out from their position due to the motion from the powerful windless on the yachts.

Therefore, it is necessary that yearly checks are done on the moorings for chains, screws and anchor damage. General maintenance is also done and chains and ropes are stretched back to the dock.

Falmouth Harbour - Annual maintenance on all navigation buoys in Falmouth Harbour is done during late Oct/Nov. this includes:

- Checking screw anchors
- Checking chains and swivel
- Checking pontoons for damage
- Putting in place two (2) concrete blocks

✓ **Dinghy Docks Repair and Extension**

- *Restoration of Dinghy Dock at Falmouth Harbor:* The dinghy dock is in disrepair. This requires immediate extensive restoration. In addition, an extension of the dinghy dock at the Falmouth Harbor is needed to facilitate cruise ship tender.
- A floating dock is needed to facilitate catamarans and or special events in the low draft area at the Nelsons Dockyard Marina.

- ✓ **New Dock** – The construction of new dock between Sun Sail and Admirals Inn 70ft x 12ft.is required.

- ✓ **Pedestals** –The pedestals needs to be refurbished and the timber top to be installed.
- ✓ **Navigation** - Four (4) solar panels to be installed on range lights: Two (2) green in Falmouth and two (2) red in English Harbour. A Solar Panel needs to be affixed on Navigation Leading Light Tower

- ✓ **Cleats**

Metal Cleats - Twelve (12) dock cleats are needed to be installed from the back of the Pay office to Galley Bar the outfit of the dock.

Wooden Cleats - Wooden Cleat to be installed on new Wooden Deck

- ✓ **Bollards – Forty** (40) bollards to be painted around the dock. Cast Iron Bollards to be maintained on the dock.
- ✓ **Patrol Boat** – To be outfitted with VHF antenna and radio, navigation leading light battery and body repairs.

The Yacht Services Department continues to strive for development by maintaining and creating yachting events. The ideal situation is to have events throughout the year where the marina can be fully utilized so that economic benefits can be maximized.

In conclusion, the Yacht Services Department is optimistic that season 2013-2014 promises an increase in new and long-term clients to simulate continued growth and sustainability as the National Parks is greatly dependent on the yachting industry.

To facilitate the projected growth in the yachting Sector, Budget 2013-2014 allocates **EC\$ 2,151,819.00** for the departmental operation and **EC\$268,312.00** in Capital Expense Budget to the Yacht Services Department (*see 2013-2014 budget schedule attached*).

❖ **GROUNDS and MAINTENANCE DEPARTMENT**

These two departments have been twined together and share a Manager and Office Assistant.

♦ **Grounds**

In the Grounds department there are six (6) full time employees and one (1) part-time worker. The main objective for the Grounds department is to beautify, clean and maintain the park which includes Nelson’s Dockyard, Dow’s Hill interpretation centre, Blockhouse, Horse Ford Hill, Pigeon Point Beach.

The duties of the department entails; cutting of the lawns, pruning of trees, weeding the gardens, fertilizing and nurturing the plants. In addition, garbage and oil collection is conducted and disposed at the parks garbage facility. The projects identified for the new financial year for the Grounds department are summarized below.

PROJECT	TIME PREDICTED	FRAME
❖ Tools to be purchased	January	
♦ Improve landscaping for the entrance at Dow’s Hill interpretation centre	October	
♦ Fountain to be installed		
♦ Garden at gate entrance	November	
♦ Fountain to be repaired		
♦ Garden in the car park area	December	
♦ Plants to be added around the Dockyard	January	
♦ Fort Berkley trail	November	
♦ Hauling of Garbage	November 2013 Until October 2014.	
❖ Roadside projects Shirley Heights & Blockhouse, Pigeon Point, Horseford Hill.	November 2013 Until October 2014.	

Tools - A work man with proper tools is as important as a business with a great leader. With this in mind it is mandatory for tools to be purchase for the upcoming season. This will assist with the work task for the Grounds department.

Dow’s Hill Interpretation Centre:

Garden Entrance - The Interpretation Centre needs a face lift for the eastern side of the entrance. The main idea is to set up a nice garden entrance which will revamp the whole setting of the area. To get a new and improved look the area would need a small excavator to remove the trees that are present.

Fountain - A fountain at the Centre would enhance the scenery of the area.

Nelson’s Dockyard:

Gate Entrance - The main entrance of Nelson’s Dockyard is the welcoming point for our visitors. The National Parks grounds department sees the necessity to provide the much needed services that help to make our visitors feel relaxed, at peace and right at home. The idea is for all existing palm tree to remain, but the dew drop, yellow bells, silver button, bouganvillea and spider grass these will be removed. After removing the plants they will be replaced with Three Fingers, and other flowering plants like the Crotons Petrel and would run along the fence. Varied Crown of Thorns and some groups of Trialis will be placed between the Palm trees to give for a more organized look.

Fountain - Presently there is a non-operational fountain at the gate of Nelson’s Dockyard. Repair work is needed to get it up and working again. This will be repaired in the New Year.

Car Park Garden – Plans are made to create a garden inside the round-a-bout located at the Nelson’s Dockyard car park area. The main idea is to erect the concrete frame to the height of 1 foot tall and order different plants to imbed.

Plants/Cactus for the Dockyard- A few plants and cacti will be purchased to be implanted around the dockyard to add to the beautification of the area. In addition to the plants some boulders will also be required.

Fort Berkley Trail - This trail is one of the most famous in the park area. Realizing that nature has taken its course and factoring in the hurricane season, arrangements will be made for a general clean-up of this trail. This year the cutting down of overhanging machineel trees and the raking and compiling of loose stone will be done by two contract workers. The reason for this is because of the danger of working on and around poisonous trees.

The main objective is to get Fort Berkley trail accessible without causing any danger to persons who may decide to take the hike. This project is aimed to be completed in two (2) weeks' time period at an estimated cost of EC\$ 5,000.00

Hauling Garbage - Although the Grounds Department is responsible for garbage collection around the National Parks Authority premises after taking it to the garbage facility the garbage needs to be sent to the Crooks landfill. For the upcoming year the Authority will continue to use the contractor to perform this service.

Roadside Projects - The road side project includes taking care of Horseford Hill; Pigeon Point Beach, Shirley's Heights and Blockhouse sites. This work entails cutting the grass and over hanging branches and any other general clean-up required. Block house and Shirley's heights roadside project includes edging and cutting alongside the pathway leading up to Shirley's heights. This service will be continued into the new financial year.

The Grounds Department has been and will continue to display a high level of professionalism as we continue to strive for excellence. It is our motto to beautifully maintain and enhance the aesthetic of the park daily. We are aware that it is our responsibly to sell the beauty of the country and maintain the standard of National Parks Authority.

♦ **Maintenance:**

The Maintenance department consists of six (6) full time workers. The department consists of one (1) electrician, one (1) plumber, one (1) carpenter, one (1) stone mason, one (1) stone mason assistant and one (1) maintenance assistant. The key objective is to assist in any way possible to preserve and restore the historical heritage of the area which includes building and other physical structures.

The projects identified for Budget 2013/2014 are summarized in the table below.

Building/Projects	Time Predicted
Tools	November
Marina department	October
Horseford Hill	October
Galley boutique	October
Bathroom Cubicles	October
Roofing membrane	November
Toilets & valves	November
Dow's Hill Interpretation Centre	December
Blockhouse	February
Sewage plant	November
Block house Bathroom project	April
Pigeon point gates	January
Camera for project pictures	October
Recondition vehicle /Double cam	December

Tools - Tools are needed for the productivity of the maintenance department. A significant amount of repairs are conducted around the park on a daily basis. In some instances tools are being rented and this sometimes slows down productivity as they might not be readily available.

Yacht Services Department - The Yacht Services main office is scheduled for a facelift. The plan is to have this done for the start of the yachting season. Renovations will include, repairs to the building, installing a new door and additional lighting and repainting the space.

Horseford Hill - A new deck will be built at the Horsford Hill Look Off for our visitors. The old deck will have to be demolished. Also a retaining wall is required on the western side to facilitate proper drainage.

Galley Boutique- Additional stone work at Galley boutique is to be conducted.
Officers' Quarters Bathroom:

- The cubicles in the bathrooms at officer's Quarters are unstable and are in need of repairs. These cubicles will be rebuilt by the maintenance department.
- Commercial Sensor Toilets will be purchased to replace the manual ones that are currently in use. Additionally, two physically challenged units will also be installed.

Roof Repairs – the roofs of several buildings have been identified for repairs. These include, Officers' Quarters Building which houses the NPA main office. This work will be undertaken in the new financial year.

Dow's Hill Interpretation Centre:

- Recommendations were made to construct some picnic tables to be used at the Interpretation Centre for visitors and taxi drivers.
- Motorized roll shutters - The motorized roll shutters will be manufactured and installed at the Interpretation Centre. These shutters will secure the building and also serve as a hurricane barrier. The shutters will cover the opening outside the restaurant and the doors will be reinforced with mill finished sheet aluminium.

The dimensions of the 4 shutters are 2-120'width x 124" tall and 2-134" width x 84" tall

Blockhouse - The doors and windows at the Blockhouse vendors stall needs to be repaired and replaced with Green Heart Wood. Plans are to carry out these repairs in the upcoming season.

Sewage Plant - Presently the Sewage plant is up and running at a 70% performance. Additional work is required to have the plant running at full capacity. Preparations are being made to have the plant at 100 percent.

Pigeon Point Gates – Two gates are to be installed at pigeon point beach bathroom facility.

- Gate 1 would entail fabricating welding painting and installing of a gate measuring 48x96' from galvanizes steel tubing. The frame of the gate will be 1 ½ x 1 ½ steel tubing and the pickets 1x 1" steel tubing.
- Gate 2 would entail fabricating; welding and painting of a sliding gate measuring 155 x 96 from galvanize steel tubing. The frame of the gate will be 1 ½ x 2 steel tubing and the pickets 1 x 1' steel tubing.

The employees in this department are very flexible and knowledgeable and the aim is to sustain the preservation and development of this historical area. The importance of our heritage is well known and appreciated and the team will continue to provide the

level and quality of work that will keep our historic buildings in good repair for a long time to come.

To continue the maintenance and upkeep of the historic buildings and to maintain the beautifully kept gardens and grounds the Grounds and Maintenance Department have been allocated a total of **EC\$ 1,189,273.00** in Budget 2013-2014 to facilitate the programs and activities for the new financial year.

This is disbursed in the following way. **EC\$ 487,992.00** for Grounds beautification projects and **EC\$ 701,281.00** for Maintenance and upkeep. An additional **EC\$36,000.00** has been allocated as capitalized expenditure (*see 2013-2014 budget schedules attached*).

❖ RESTORATION

Overview

Historically, restoration works commenced in 1929 by the Governor General of the Leeward Islands-Sir Reginald St. Johnston after the dockyard fell in disrepair in 1889 by the British Navy and was further deteriorated by a hurricane in 1928. However, in 1950 the Society of Friends of English Harbor was formed to ensure that numerous sites were restored within the park. The National Parks Authority was established in 1984, and its main objective is to restore, preserve and conserve historical buildings and sites for citizens and visitors alike.²

As the National Parks Authority (NPA) continues to accomplish its mandate, the sustainability of each building requires distinctive materials, features and construction techniques that must be pertinent to its historical architecture. While restoration remains a challenge the National Parks Authority is committed to the continued refurbishment and preservation of historical sites and buildings for the enjoyment and education for all.

Considerable restoration was done on Working Mast House and Admirals Inn in the summer months June and July of 2012. In addition, Clarence House, Block House and Shirley's Heights were cleared of shrubs of its immediate surroundings. As a result, the buildings and its environs were greatly improved.

The department has identified several buildings that would require some level of restoration work in the medium and long term. These include –

- ◆ Admirals Inn Complex
- ◆ Dockyard bakery
- ◆ Guard House
- ◆ Saw Pit Shed
- ◆ Joiners Loft
- ◆ Working Mast Shed (Roof to shingle and columns to repaint)
- ◆ Copper and Lumber Store Hotel
- ◆ Capstans
- ◆ Dinghy Dock wall.

However, what is required at this time is a list according to priority as to what areas are most critical.

Budget 2013-2014 allocates **EC\$ 96,000.00** to the Restoration (*see 2013-2014 budget schedules attached*).

² English Harbour: The First 2000 Years: pg.43,& 64

❖ SECURITY



Management will continue to pursue alternative approaches to combat the issue of crime within the park.

Nelson’s Dockyard Main Gate: The Security Officer on guard at the main gate has very little or no control over persons entering the dockyard. This is due mainly to the post office and bank that are located within the yard. While this may be considered normal/acceptable during the day, the night poses other challenges.

During the night, there needs to be tighter control measures in preventing persons from freely accessing the yard. It might be useful to create a way in order to close off the visitor services entrance during the night in order to have a better control over persons entering the dockyard.

Also, there is the existing challenge with vagrants roaming the Dockyard compound. The NPA needs the necessary legislation in order to prevent the vagrants or others with undesirable behavior from frequenting the yard. The National Parks continues to experience little or no police patrolling the Park area. Despite the appeals to the relevant authority, strong police presence continues to be an issue especially during major events.

Dow’s Hill Gate: This entrance gate which is also a revenue collection point is located in a remote area and is controlled by a female attendant accompanied by a police officer for most times.

- There is some level of difficulty for the attendant to control vehicular traffic while at the same time collecting cash. It would be useful to consider erecting a barrier either a chain or a boom at that location.
- Security at the Dow’s Hill location is also a challenge in terms of personnel. The current arrangement with the police is not very reliable. Most times the police officers are either late or not available for duty. It is recommended that the option of replacing the police with an armed guard be further explored.
- The option of an armed guard at the Dow’s Hill Interpretation Centre would definitely increase the cost of providing the service. Currently, the Police officers are paid EC\$80.00 per day and the cost for the quotation received for an armed guard from Special Security Services is EC\$18.00 per hour or EC\$144.00 per day at basic rate. A further analysis of the situation is required.

Blockhouse and Shirley’s Heights: Although Shirley’s Heights and the Blockhouse falls within the park no security coverage is provided at these locations. The park is legally responsible for providing a safe environment for its patrons and as such needs to take a proactive approach towards security at all its locations. It might be useful to consider the option of providing security services at these locations.

The Blockhouse and Shirley’s Heights locations are widely used by visitors and residents alike. Because of their elevation and location and primarily the unevenness of the surface and cliffed edges, strict attention should be paid to erecting barriers and signage at the relevant areas. These security measures are necessary and legally required in order to protect the interest of the Authority. The importance of signage cannot be overly emphasized.

Recommendations:

- ♦ Install a security barrier and warning at the Blockhouse site
- ♦ Erect a boom at the Dow’s Hill Gate

The Authority must therefore take a proactive approach in its security measures. Budget 2013-2014 allocates **EC\$ 377,205.00** to the Security Department (*see 2013-2014 budget schedule attached*).

❖ HUMAN RESOURCES

The NPA core strengths are well established as we remain one of the foremost statutory bodies in Antigua and Barbuda. However in increasing challenging times it becomes critical that we intensify efforts to: maximize our strengths and alleviate its weaknesses and grasp the opportunities.

STRENGTHS

- Strong Leadership Command remains the key that holds the organization together.
- An excellent working environment.
- An experienced and well qualified management team.
- A task-oriented workforce that is capable and committed to multitasking.
- An excellent physical environment that aids healthy and relaxed working conditions.
- A youthful support staff that lends for easy succession and willing to be developed.
- Strong commitment to maintain staff levels while attaining high levels of productivity and maintaining efficiency and effectiveness across the board.

However in a changing environment there are still identifiable weaknesses that we will work to strengthen.

WEAKNESSES

- A cultural mind-set amongst some workers that borders on casualness in dealing with the external customer;
- A sense of entitlement and resistance to change in some areas of operations; Lack of financial resources that would facilitate staff increases to the desired level;

These weaknesses however create opportunities for our continual growth, development and adjustment as we seek to move to higher level

Opportunities

- Continued Professional Development Training and Educational Development for staff
- Concluding our Collective Agreement with the Union to Clarify our financial.
- Provision to foster and develop coaching sessions and park-wide customer care responsiveness and collective responsibility to visitor comfort

Threats:

The NPA is mindful that the current global and national economic challenges can further affect revenue targets in a declining tourism sector. However with signs of improvement in tourism, we must position our employees to be aware of the following threats and impacts of not creating a Consistent Customer Friendly environment for visitors and guests to the park.

Human Resource Objectives: The following remain the objectives most critical to the HR Department:

- Established a vigorous, standardized and on-going Professional Development Training for all staff during summer months.
- Encourage the establishment and development of a social/sport club
- Negotiate inter-departmental retreats, seminars, workshops on an on-going basis.
- Implementing a full staff Orientation for all Copper and Lumber Store Hotel and Restaurant employee at start of season.
- Increasing staff appreciation activities and ensure that monthly and quarterly events and activities are held and catalogued on calendar.
- Utilize casual staff functions as means to share and improve professionalism.

- Encouraging Educational Development among staff and targeting specific staff.
- Implement Operations Manual for Copper and Lumber Hotel Restaurant, to guide staff in providing better product and overall branding.
- Ensure that all Performance Evaluation are done on a quarterly basis including peer evaluation and period customer evaluation for key department;
- Maintain a push for practices in all NPA HR matters.
- Training will be focused on specific areas and the need to address cultural mind sets that affects our serving others.

Institutional Strengthening: The need for the capacity building in the Heritage Unit, the Environmental Unit, strengthening of the cashiering unit and system and a review of the operation of the Copper & Lumber are key areas to be addressed for the 2014 fiscal year.

Human Resource Department: An Administrative Assistant to the Human Resources (HR) Department shall be accessed by September 2013.

Security: The reduction of night security officers present at the Interpretation Centre at Dow’s Hill remained as the covering of the glass will be done at the start of the 2013/14 season.

Strategically, we have covered Interpretation Centre very well as a key improvement in security. However the hiring of one other security officer – armed for the Dows Hill Gate remains a matter of priority due to the unreliability of the Police.

Housekeeping/Cleaning: It has become critical to have one of the three persons in Housekeeping on full time staff. This will be crucial to smoother flow operation for 2014.

Cashiers: On November 15, 2012, the NPA moved to the hiring of two cashiers on one year contract, to facilitate the visitor services department cash control will be undertaken to be separate functionaries than tour guides. This needs further strengthening and the application for shifts will mean a more integrated approach to cashiering park wide.

Tour Enhancement: Our best tour guides Nathania Jonas and Jhamaine Edwards will be used to enhance our customer relations product and administrative improvement within that Visitor Services Department and this shall be completed for 2013/14 season.

Showers and Laundry: A full review of the Laundry operation has been commissioned and will be carried out by that department.

Training: We will aspire to continue to facilitate and secure professional development training opportunities for staff and management.

- ♦ Customer Care and Communications is slated for September, October and November for all staff.
- ♦ Radio Communications training for Security and Yacht Services Staff slated for September.
- ♦ Supervisory Training for all appointed Supervisors scheduled for August/September.
- ♦ Human Resources propose a Leadership and Strategic Planning workshop for management in September in the form of a Retreat.
- ♦ Basic First Aid.

Education and Technical Development

- During 2010/11, seven employees were identified for special training and educational development that will enhance their competencies and the NPA investment into succession planning.

In 2012/13, three of these will complete their training. They are Ms Denisia Malone who is due to complete her Certified Accounting Technician Training (CAT) Course; Mrs. Jolene Bachelor her Associates Degree in Business at ABIIT; and Ms Nathania Jonas her Associates Degree at ABIIT as well.

- We are expecting Ms. Tamica Wilson, Ms. Aldine John, Ms. Jhamine Edwards and Mr. Oniel Whyte will be undertaking certificate work specific and academic studies.

Compensation

- The effective running of the Park will mean maintaining the current compensation levels as determined by the Collective Agreement.
- A meeting for August 2013 with the Union and the Employers Federation will determine the outcome.

Health and Safety

- For the new financial period twelve (12) more persons will undertake First Aid and CPR certification.
- Safety Standards - These will be followed accordingly for all workers and a Health and Safety workshop will be all in the mix.

Awards and Appreciation:

- Two employees to date have taken their gift allocations for the Employees Awards and appreciation. They are Mrs. Brenda Skepple - Platinum awardee - over 30 years and over; and Ms. Cheryl Lovell -.Silver awardee serving for 20 to 24 years.

The other employees will receive their prize awards in phases – in which we will target 75% of the remaining gifts for 2013/2014 fiscal year and the remaining 25 % for the year 2014/2015 for disbursement. However after that period prizes would not be redeemable.

These prizes will be redeemed in this budget cycle since the top awardees will access them at three designated times: May 2013, June 2013 and September 2013; while the hotel awardees will access theirs in the summer off season, which relates to our standard vacation period.

Year End Staff Event:

- In December, 2013, a staff event is proposed where the main focus will be to honor staff based on performance evaluation for
- Staff Awards Banquet - The employee of the year, emerging from each monthly employee of the month presented. Spirit of the Parks Award and Top department employees will be honored.

Other Staff Events

- Our monthly staff meetings will have a social tone following updates on critical staff matters.
- The Employee of the Month will be recognized each time as chosen per department. Then the Employee of the year will be selected by a panel.
- Birthday celebrants for each month will be formally recognized at the monthly meeting.
- An NPA Sports Club is for January 2013 will be subject to approval.

Performance Evaluation: The quarterly evaluations - Quarterly review for the months ending March and June are due by September. An annual appraisal will be done in December 2013 for all employee and department head have been given the details and the process for such.

The proposed activities for the Human Resource Department for the 2013-2014 financial year includes

- ♦ Professional Development and Training /Retreat
- ♦ Educational Development
- ♦ Management Technical Training
- ♦ Monthly Employee Appreciation
- ♦ Proposed NPA Sports Club Staff Support
- ♦ Staff award Event – December 2013

The HR Department will ensure that all avenues are exhausted in boosting morale of staff and challenging the NPA to implement measures that enhance its viability and take a strategic human resource management approach that leads to the path of becoming a model statutory body and national model of best practice.

The Human Resource Department have been allocated **EC\$ 298,158.00** in Budget 2013-2014 to facilitate the programs and activities. An additional **EC\$ 5,500.00** have been allocated under the Capitalized Budget (*see 2013-2014 budget schedule attached*).

❖ VISITOR SERVICES DEPARTMENT

For the budgeted period efforts in the Visitor Services Department will be focused on creating highly effective team of employees and emphasize the importance of data collection. It is important, especially at this time to be able to make a determination as to where our visitors are coming from.

Continuous training and development of our human resource will remain a priority. To this end, Customer Service Seminars are scheduled for the upcoming financial period. These will be facilitated by Ms. Shirlene Nibbs at a time to be arranged.

In light of the fact that our cruise arrivals are declining, the potential exist to grow our market share in the hotel sector. It is recommended that a stronger presence in the hotels be pursued.

The economic movements in the operating environment and its implications for the park dictates that efforts are made to put things into perspective and work cohesively to rebrand the National Parks in the market. There are several improvements that have been identified for the department and are listed below; but critical to the department's success will be the delivery of a quality service.

Visitor Services Improvements:

Nelson's Dockyard

- Additional wooden chairs for lobby – This will continue the improvements that were started last year to create a lobby space where of visitors especially the elderly can sit and rest awhile.
- Acquiring video feeds for the television. A television has already been installed. Video feeds and pictures of the park will be uploaded to be run throughout the day. In addition to this, the walls will also be decorated with photographs of the park. All in an effort to introduce the other sites and to create a greater awareness and appreciation of the entire park.
- Potted plants for the lobby (allocations made in the Grounds Budget) - will be a part of the enhancement of the space.
- Umbrellas and raincoats for the employees to be used during tours in rainy conditions.
- Lockers – These will be installed in the lunch room space to secure the employees personal effects. Each employee will have his/her individual lockers.

- Lunch Room – Given the nature of the operations and the scheduling of the tours, it was deemed necessary to outfit the lunch room so that employees of the department are able to eat and resume duties especially on busy tour days. A refrigerator, microwave, a table and chairs will be provided.
- Appropriate seating for the employees will be installed.

Dows Hill Interpretation Centre Improvements:

- Service and maintenance for the sound and light show. In addition to the monthly servicing, at the start of the new season, a general overhaul and cleaning of all lights will be undertaken. Also provision will be made in the capital budget to purchase some additional parts for the show as a back-up. This will significantly reduce any down time or interruptions in our service in the event of a breakdown.
- Additional plants for the front of the building. (allocations in the grounds budget) will be put in to continue the beautification project started last year.
- Chairs for Reception – Appropriate seating for the reception areas will be provided.
- Welcome sign to the Centre. The Centre lacks adequate signage that will allow visitors to know where they are. An “Welcome Sign” will be mounted on the wall next to the entrance gate. Also a directional sign will be erected at the Dow’s Hill gate junction to show the way to the Interpretation Centre.
- Wooden benches (allocations in Maintenance budget) will be placed on the grounds for visitors to sit and enjoy the park. Provision will also be made for the taxi drivers to be accommodated.
- Repairing of windows (allocations in maintenance budget). The maintenance department will continue its maintenance of the building. Reconstruction work will continue to repair the windows especially in the reception area. These will be made a priority for the New Year.

- Aluminum Shutters – In an effort to reduce security costs at the Centre, Management decided to install aluminum shutters on the building. Thus, the building will be locked down during the evenings eliminating the need for security. Upon installation the shutters will also be a hurricane barrier.
- Umbrellas/Rain Coats to be used during rainy conditions.
- A television will also be installed at the Centre to stream photographs of the park.

Gift Shops:

The new operating software will be installed and launched by the first quarter in the New Year. This new software will facilitate a more efficient operation and will enable the Accounts department to process data more speedily.

The shop attendants have gone through some training with Mr. Jackson – Auditor and more recently, a refresher course will be held.

The Visitor Services Department have been allocated a total of **EC\$ 1,025,002. 00** in Budget 2013-2014 to facilitate the programs and activities. This will be dispersed in the following way Nelson’s Dockyard - **EC\$ 495,890.00**, Dockyard Gift Shop - **EC\$ 100,973.00**, Dows Hill Gift Shop - **EC\$ 16,974.00** and the Interpretation Centre - **EC\$ 411,165.00**. An additional **EC\$ 90,126.00** have been allocated under the Capital Expense Budget (*see 2013-2014 budget schedule attached*).

❖ HERITAGE and MUSEUM DEPARTMENT**Figure 5: The Museum Building**

Mission Statement: *“The Heritage Department preserves unimpaired the cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations. The Heritage Department cooperates with partners to extend the benefits of cultural resource conservation throughout this country and the world”.*

Several activities and projects have been identified to be undertaken during the upcoming year. It is believed that these will improve and create a greater awareness and improve the attractiveness of the Museum to the residents and the visiting patrons.

✓ Exhibit Upgrade:

The Heritage Department proposes to continue working on Museum exhibit upgrades. New interactive digital exhibits and backlit dioramas will be installed along with more artifacts and more concise text panels. The overall objective of the upgrade which will include improved visual displays with artifacts and interactive panels is to create a new generation of exhibits. The Authority is in consultation with Sign Pro to facilitate the proposed plans.

For the upgrade the focus will be done on the ground floor. Also some new exhibits will be built. To achieve this, the assistance of an exhibit builder will be required, preferably from on island.

Further, the new exhibits cases will be outfitted with lighting and the exhibits on display will be secured to the cases to prevent theft.

✓ **World Heritage Status:**

The National Parks, in its quest to achieve World Heritage Status will be required to print and digitize the sizable dossier, plans, maps and documents, for submission to the World Heritage Center. An application for financial assistance has been recently sent to UNESCO World Heritage. The proposed site is expected to be showcased to the world on its approval. Deadline for the submission of the dossier is 15th January 2014. Further, the selection and inspection of the site is expected by the first half of 2014. Once all the requirements are met and no further revisions are required celebrations can begin early 2015.

One of the challenges being faced is the lack of commitment on the part of the Government who has failed to meet the financial requirement (dues) under the World Heritage Convention. These requirements will have to be met in order for the application to be made. This debt is currently about 7,000 Euros. Other costs associated with the preparation and submission of the dossier by January 2014 is approximately EC\$13,200. All costs is expected to be allocated from the special grant funding.

✓ **Conservation and Storage**

The establishment of a Conservation Lab for the National Park will be a milestone for the Eastern Caribbean. This unit will be established with guidance from UNESCO, the Port Royal Lab in Jamaica, and California State University, who will also offer training. The unit also has the potential to generate revenue and will be dependent on donor funding.

Over the years the department has been using plastic bins to store its artifacts. Last year the process of converting the plastic storage bins to wooden bins commenced because the plastic bins were severely damaged. However at this stage additional bins and shelving will be required for the newly restored areas. This project will be continued in the New Year.

The Heritage Department will build twenty-five (25) additional wooden storage boxes for the storage of the museum's collections. This project will be outsourced and the Authority will provide the materials.

The department also proposes to repair the storeroom locker in the Canvas and Cordage building. Currently, the area is unsightly, and the old plastic bins are on the floor. The plan is to build some shelving for the wooden storage boxes and space to

hold museum supplies and equipment. Improving this storage area will create additional space to relocate artifacts that are currently stored in the Museum.

✓ **Office Improvements:**

The Administrative Office requires additional furniture to include chairs. This will be addressed in the new financial year.

✓ **Conferences:**

- ♦ The Heritage Department will attend the annual Museums Association of the Caribbean Meeting in Belize (October 2013),
- ♦ The meeting of the International Association of Caribbean Archaeology in San Juan, July 2013.
- ♦ Dr. Murphy is the President of the IACA and the Museum holds an Institutional Seat on the Board of Directors of MAC.
- ♦ The Heritage Department was a founding member of both organizations and continues to guide and shape heritage and museum development in the Caribbean. Our attendance is crucial for both organizations.

✓ **Side Scan Sonar survey of English Harbour:**

- ♦ The Heritage Department will work with volunteers to implement a sonar based survey of the bottom of English Harbour to locate underwater wrecks and potential hazards. Funding for this will be minimal, mainly gas and stipends for the boat and crew, and dive tank filling and rental.

✓ **Cultural Policy and Heritage Legislation:**

In order to effect optimal functionality of the department, the enabling legislation is critical. The department quite cognizant of this fact will be pursuing this course of crafting the required legislation in the upcoming year. Donor funding will be sought for this project.

The following table gives a timeline of the projects and activities to be undertaken throughout the new financial year.

	Projects	Implementation and Completion
1.	Complete main floor exhibits	December to July 2014 (8 months)
2.	New audio visual setup	January to March 2014
3.	Additional Storage boxes	Sept. 2013 to March 2014
4.	Improve shelving and doors locker space	April/May 2014
5.	Additional signage for parks	February-March 2014
6.	Publication on the structures of the dockyard	December 2013
7.	MAC conference 2014	October 2014
8.	Events: World Heritage and others that are placed on us by government	January to July 2014
9.	Hosting of World Heritage inspectors	February to August...unknown date for final inspection
10.	Printing and editing of World Heritage dossier	In the event that grant does not get funded. (December 2012)
11.	A complete survey of the heritage resources of Antigua, a GIS based inventory and SWOT analysis.	January to December 2014
12.	A clean up and minor improvement to three heritage sites.	November to June 2012-13
13.	Preparing a new Management plan for heritage development National Parks	February 2014
14.	Submission of World Heritage final dossier to WH Center, Paris.	January 2014

Proposed Projects (Special Grant Funding):

Conservation Lab: Approval has been given for the setting up of a Conservation Lab. The Artillery Quarters at Dow's Hill have been identified for the setting up of the lab. At that location, there are two buildings that have most of their walls in good order but needs to be roofed, new floors, doors and windows. The site has been cleared of the large trees and is ready for restoration work to begin.

The space would not only be used for the Lab and storage, but would also serve as additional workspace for the Heritage Department. The department has also looked at the possibility of introducing a new attraction for locals and visitors to observe the process of artifacts being transformed to a "new" condition. This project is estimated to cost approximately EC\$ 127,000.00 and will be funded by special grant funding.

The Heritage Department have been allocated **EC\$ 274,915.00** to facilitate the programs and activities for the operations of the Museum and Heritage Department for the new financial year. An additional **EC\$ 127,000.00** has been reserved for funding through the special grant funding.

❖ COPPER and LUMBER STORE HOTEL and RESTAURANT

The Copper and Lumber Store Hotel and Restaurant is without a doubt one of the finest Georgian structures in the Caribbean. Built in 1789, its walls are three (3) feet thick and bricks were imported as ship ballasts from Britain. The structure was built to store the lumber and copper sheets required for repairing ships. Sailors from ships were roomed upstairs while their ships were being refurbished on the dock. Today, the edifice is now fully restored and converted into a small hotel, bar and restaurant.

The Copper and Lumber Store Hotel and Restaurant is situated within the walls of historic Nelson's Dockyard. Its central location, unique charming architectural character and courtyard setting makes it a popular Centre for visitors from the cruise ships, hotels and the home for many yachtsmen and their guests. The hotel not only caters for accommodation but also offers a fully catered facility for social events such as parties and for those who desire to host memorable events (weddings), in a special ambience in its 18th century setting.

✓ Mainbrace Pub Restaurant Operation

Mission: To offer customers quality food and beverage service in a comfortable ambience.

Tactical goals:

- ♦ Keep food costs below 35% of revenue.
- ♦ Keep employee labor costs between 16-18% of revenue.
- ♦ Maintain tight controls on cost and operations through partnership management.
- ♦ Create customer loyalty incentives.
- ♦ Implement customer feedback system.
- ♦ Implement staff incentive system

Overview:

The operation continues to face challenges as a result of the prolonged economic downturn. The tourism industry has been hit hard by the current global situation. In

the cruise sector, arrivals have decreased. As a consequence, the Restaurant realized a decline in organized tour drinks and lobster lunches. Notwithstanding, relative progress was recorded in organized events, in particular our mainstay Seafood Friday's.

The essence of any great restaurant starts with its menu. At the Mainbrace Pub Restaurant, efforts have been made to improve our food and beverage offerings to enhance our reputation and to broaden our appeal with customers. However, the positions of chef and supervisor of the kitchen remained unfilled for the past season. With this, the line staff was asked to fill the breach. While they performed creditably under the circumstances, there is still room for improvement. Further training is required by the staff as we continue to expand.

The Storage facility was added to the kitchen operation, it brought considerable benefits to the overall effectiveness of the facility. Further, new food procurement processes and procedures for accountability purposes were adopted during the season. In the upcoming season a number of equipment and furniture will be needed to allow for safety and health purposes.

During the past year we have experienced many challenges throughout the operation. These areas were: Human Resource, Health & Safety, Restaurant Service and malfunctioned equipment. These areas are highlighted below.

Human Resource & Kitchen Operations: The continued growth of the operation has placed great demands on the existing staff. The staff deserve the highest praise for their performance during the course of the year. From daily breakfast, lunch to events and specifically the weekly Seafood Friday preparations. The staff prevailed through difficult conditions such as: a humid kitchen, and leaking pipes which caused water remains on the kitchen and bar floors. During the next season, efforts should be made to improve a number of these problems.

Last season, we made a decision to adjust the staff levels in the kitchen; this adjustment did not leave any room for flexibility in the staff composition. As a result it affected the effectiveness of the operation. Going forward, additional staff will be needed to cope with the daily demands. It will be necessary to fill these positions: a dishwasher, a prep cook, a storeroom assistant and a server.

All staff in Food & Beverage will be given specific duties which will help to reduce some of our service issues. A Shift leader system will also be introduced in the kitchen; staff will be delegated also to supervise daily kitchen activities.

Restaurant Service: It is viewed that the restaurant needs a supervisor to manage the floor operation. At present there is no leadership on the floor which leaves everyone on the same level. The supervisor will be responsible to ensure, among other duties, that service is executed in a timely manner, to carry out “meet and greet” exercise to customers and to solicit their feedback. In this case, it is recommended that Mr. Neal Charles be given the official responsibility to supervise the restaurant.

Health & Safety: Our operation has not been meeting standards recommended by The Federation of Tour Operator (FTO) and Hazard Analysis Critical Control Point (HACCP). Our Kitchen is still lacking the standards recommended by the HACCP Manual. For example, we should have proper kitchen doors and keep them close during operation. This will prevent flies from invading the kitchen. In addition, the kitchen is still humid since some adjustments are needed to the extractor fans. It appears one of the fans have a stronger pull than the other; as a result hot air permeates the kitchen and prevents the cooler air to enter. It is recommended therefore to switch both fans to increase the cooling of the kitchen. Hence, it is paramount to install prep holding room, 3 compartment sinks, as well as shelves. Revenues can be substantially affected by adverse publicity resulting from food quality, illnesses, or health concerns.

Procurement & Administration: The procurement section is significant to the restaurant operation. This area not only handles procurement of food but manages data collection, to include daily stock movement, processing invoices and monthly inventories. It is important for the department to keep on top of data for the different areas of operation to prevent high stock variances. By virtue of this exercise, we are able to give a breakdown in our Food & Beverage allocation costs. In addition, there will be the requirement for a POS (point-of-sale) system; the computer software has the ability to create reports with various analyses to include total sales report on food, beverage, number of covers, credit card sales and much more.

Products & Related Services: The Mainbrace Pub Restaurant will offer a menu of food and beverages. There will be the usual two- fold ways to purchase these products; table service and take-out from the restaurant. The menu is moderately priced offering Caribbean and International items with a common theme. Popular burgers and pizzas and other healthy, flavourful and satisfying food made with lots of natural ingredients are on offer.

Daily Breakfast & Lunches: A number of initiatives aimed at improving the service in the restaurant will be undertaken next season. We will change the lunch menu on a regular basis to allow for more creativity by kitchen staff and choices for the customer.

A Sunday relaxing lunch will also be introduced which will feature: salads, wraps and wines in the initial stages and expansion of other items at a later date. Lunch will run from 12noon to 4pm on Sunday's. We want to create a great atmosphere on the water front. Our target group will be those families who are looking for a place to enjoy a quality lunch on a Sunday. These ideas are geared to increasing our daily operation revenue.

In recent months, we have enjoyed the benefit of serving our guests on the water front deck. The Deck has become the restaurant's bread and butter. Many guests like sitting outside to enjoy the breeze and the majestic scenery of the harbor. The deck, in its present condition, among other things, damages our furniture. We are asking for this to be placed on maintenance priority list for conclusion before the restaurant reopens.

Furniture, Fixtures and Equipment: As mentioned there is a need for new installation of furniture and equipment in the kitchen and bar areas. Purchases of the expensive items could be done in phases during a 2 year timeframe. A detailed list of the related items is attached. **See Appendix III**

✓ **Hotel Rooms Operation:**

The hotel provides its customers with a beautiful, relaxing, and country-style setting. It seeks to fulfill the following benefits that are important to our customers: **Selection:** The hotel has several different rooms, some with unique, breathtaking view of the famous English Harbour; **Accessibility:** located within 45 minutes from St. John's; **Customer Service:** guests will be impressed with the level of attention that they will receive; and, **Competitive Pricing:** All rooms will be competitively priced.

Overview:

Over the past 15 years, the Copper and Lumber Store Hotel, as it is fondly called, has earned the reputation for quality hospitality in accommodation and catering services.

It has been home to many and varied guests including national and international to include corporate, leisure and event customers and plays host to a variety of activities throughout the year.

The hotel's four (4) categories of accommodation are Georgian Suites, Georgian Studio, Contemporary Suites and Contemporary Studio. The rooms' income for the year was lower than that of the previous year by approximately 12%. More than 75% of the

hotel rooms remained unoccupied during the months of October, November and July. The hotel was closed for August and September. The growth on the previous year is attributed to conferences, the Museum Association Caribbean meeting (MAC) in November and other family reunions as well as events.

We continue to maintain a strong market share in the European market, and a slight increase in guest's arrivals from countries such as America, Canada & Caribbean. A moderate increase came from four (4) online booking engines: Hotel Plus, Hotel beds, Booking.com, Secure Hotel Reservations. These links have great potentials and all opportunities should be explored for greater achievement.

It is however challenging to secure new markets and maintain repeats market share. When we look at how people research and book their travel and accommodation over the course of the last three or so years, two things are clear - traditional models are decreasing in relevance and the rules of the game have fundamentally changed. Travelers across the world use the internet for their travel information and rely on recommendations from various websites. Their popularity is such that the online travel agencies are becoming the shop front window for much of the travel and tourism industry

Situation Analysis:

One of the hotel's market segments is Special Events which continue to register steady growth. We will continue to penetrate this market by adding quality and value. Indeed, special events can be an effective tool for increasing economic activity, enhancing quality of life and promoting a community's image nationally and internationally.

There are many competitive pursuits on the hosting and management of events from other emerging hotels and event planners. A key opportunity is for the hotel to focus on expanding its event services and special points of differentiation to better position against its competitors.

Hotel SWOT Analysis: Research amongst customers, previous reports, and staff highlight the key SWOT situation:

➤ **Strengths:**

- ♦ 18th Century Georgian, unique boutique (Country) Inn.
- ♦ Accommodation with waterfront views
- ♦ Provides a unique photography experience

- ◆ Located to a diversity of natural attractions, topography, flora, fauna, and historical landmarks.
- ◆ Provides an intimate, relaxing homely warm feeling
- ◆ Location- centrally located to shopping areas, restaurants and beaches
- ◆ Affordable- competitive room rates make it an excellent ‘price point destination’ as compared to other hotels in the area. Branded rooms with full amenities
- ◆ Friendly and hardworking employees

➤ **Weaknesses**

- ◆ Limited knowledge of the brand in most international markets
- ◆ The hotel is not represented by overseas Travel Agents
- ◆ There is lack of employee reward system
- ◆ Limited marketing resources to comeback competition
- ◆ Limited amount of rooms sometimes outstrip demand
- ◆ The utility costs to operate the hotel is high
- ◆ There is a lack of food quality consistency
- ◆ Lack of Customer relationship program/Customer service
- ◆ There is no process driven approach in serving guests
- ◆ Lack of restaurant atmosphere in the nights
- ◆ The hotel’s waterfront lacks visual appeal
- ◆ Frequent wear and tear of the property due to proximity to open seas

➤ **Opportunities**

- ◆ Venue for special events and small conferences
- ◆ Located minutes away from a variety of historic, recreational and other possible experiences
- ◆ Theme tours and dinners
- ◆ Exposure via yachting regattas
- ◆ Membership opportunities with marketing associations
- ◆ Web linkage strategy with industry partners driving traffic to each other’s sites
- ◆ Growing numbers of Baby-Boomers retiring and wanting to travel
- ◆ Internet and mobile usage
- ◆ Joint marketing opportunities

➤ **Threats**

- ◆ Affected by seasonality- the Dockyard businesses close down in the slow period while the yachts move north or further south to avoid the hurricane impacts.
- ◆ Termites’ infestation in the wooden beams and flooring
- ◆ Increased competition from other hotels and service providers
- ◆ Economic downturn

- ♦ There is insufficient airline flights into Antigua

Competition: Nationally, the competition comes from a number of emerging and established service enterprises. Competition varies according to the type of activity, service as well as the preferred settings the customer is seeking. In cases of event and hotel markets, for example, hotels can compete by their visibility such as: exceptional physical features, tropical gardens, waterside views, number of rooms, and location to the historical Nelson’s Dockyard. The large hotels are known to compete better in prizes because of their economies of scale. On the other hand, CLS can use some of its competitive advantage to differentiate its key niche markets.

Marketing Strategy: The core strategy is to effectively position the historical Boutique brand, focusing on its points of differentiation, including value offerings and personalized service. The hotel will also be positioned as a charming, relaxing and affordable facility. The latter coupled with recreational activities such as arts, special events, natural and cultural activities represent key elements that today’s guests are seeking during their stay.

Goals/ Aims: The goals of the Copper & Lumber Store Hotel are summarized as:

- ♦ To position the Copper & Lumber Store as premier venue for upscale yachting events.
- ♦ To continue to preserve and protect this priceless historic treasure
- ♦ To create and support the best experiences for guests.
- ♦ To target niche groups such as weddings, honeymooning couples, corporate, yachting and historic and educational & religious groups.

Financial Objectives:

- ♦ Realize 10% increase in occupancy each subsequent year
- ♦ Experience a growth in new customers who will be turned into long-term customers

Target Market Strategy: Our primary targets continue to be visitors in the below categories:

- Visitors travelling to the area
- Yachtsmen
- Groups - Corporate & leisure
- Special events: Weddings, Award dinners, ceremonies, etc.
- Couples

- Weekend Getaways

Marketing Mix: The marketing objective of the hotel is –

- To drive awareness; increase branding of the hotel;
- To focus on increasing occupancy and length of stay;
- To targeting niche groups,
- To maximize partnerships and cooperative marketing, e-marketing, flexible pricing policy and event marketing.

The business is driven by the website, referrals and repeat guests so it is imperative to be able to attract new guests. The marketing mix is comprised of the following - approach to pricing, distribution, advertising, promotion, and personal selling. It is also proposed to use a combination of traditional, non-traditional and online advertising, website, publications, public relations, social media, and new technologies to implement our 2013-2014 Marketing Plans.

Key Product & Service Strategy: Our marketing strategy's objective is to communicate the unique set of services that we offer to our hotel guests. We will attempt to direct the focus of our guests to the issues of quality and value for their money as opposed to simply the bottom line costs associated with their stay. The most important service that will be offered is the provision of a safe, comfortable facility, room and restaurant upgrading, a friendly approach and a relaxing environment that can give a stress free stay.

Value Proposition: Room 'upsell' whenever possible and in those that are upgraded. The hotel will continue to offer free business essentials:

- WIFI and Computer access in the rooms and in the lobby areas.
- Additional options to create customer value and visitor experience in the hotel will include: Visitor concierge services and a welcome drink (rum or Fruit punch) on arrival to the hotel.
- Airport transfer on request.
- Enhance gourmet continental breakfast with freshly baked items such as croissants, muffins and small pineapples strudels, and cheap fruits in season such as: melons, Cantaloupes, apples and bananas and oranges.
- Play light music in the lobby especially in the evening;

- Place portion milk in guests' rooms. At the moment guest only receive tea, coffee and sugar; Afternoon tea will be arranged in the courtyard as per guest requests.
- Enhance the lobby area for reading and relaxing by installing CTV, bookshelf, potted plants and reading lights.
- Encourage guests to spend a day at Pigeon Point Beach. The beach has a lovely setting with available toilet facilities for guests. Free transportation and a lunch basket will be provided. In the event, spa service is required, it will be outsourced.
- Park Historical tours and hikes

Future Products and Services: Our services will evolve over time to reflect industry trends and changing client needs. To help us improve our services, we will seek regular feedback from our clients regarding how satisfied they were with our services and what could be done to improve their stay with us.

Distribution (Place) Strategy: Distribution of services will be provided at the hotel. This will also be done through our website, travel agents, OTAs, Trip Advisor and sales staff at the front desk, as well as in the Yacht services department. Distribution of services will also include communicating with guests (i.e., phone systems, Taxi ordering, organizing special day tours, reservation dinner bookings).

We will ask visitors to state which staff member gave exceptional service and incentives will be given. On the other, if the feedback was negative, it will be discuss with the relevant staff member.

Pricing Strategy: Room rates will range from US \$145 - US \$250 per night in peak season. In the off season prices will range from US \$135 to US \$195 per night.

Prices will be discounted not only for accommodation but also for larger groups that intend to patronize the restaurant for long term periods. Prices for wedding and large events will be set according for the services requested.

Promotion: Primary focus will remain on print ads and on the Internet. In cases of low occupancy, we will run promotions to help drive inquiry, on the hotel's website and partners websites, such as "A Free Night, - "Stay 4 pay for 3"Any Night", Mother and Daughter Weekends, Yachtsmen Special, and other combinations.

Advertising:

- Continue targeting consumers in the UK, USA, and Europe & Canada. Methods include advertising in leisure, Travel and niche publications.
- Capitalize on established relationships with key media contacts to secure additional national broadcast coverage for the hotel.
- Promote accommodation & events packages to religious and social groups, couples, Yachting Regatta organizations as well as yachting corporate groups since these have been lucrative markets over the years.

Website Marketing Strategy: Our main website marketing strategy hinges upon making sure all major travel sites such as Expedia.com, Orbitz.com, and Hotels.com list our hotel when customers search for hotels in our area. Linkages will be formed with key websites such as: Hotel.com, Caribbean Vacation Places to Stay and Best Romantic Inn etc.

Website and Social Media:

- ◆ SEO & Website Content – Update content on new site continuously
- ◆ SEO optimization and monitoring to ensure searches reach relevant web pages, Optimize website to promote the hotel and special packages
- ◆ Keyword list development
- ◆ Social media & Blogs - Create a social media plan for Facebook, Twitter, Pinterest, and other sites, and support/resources to keep it active year-round, including blogging and the input of photos, press releases and current events.
- ◆ Paid search - Google Adwords set up –
- ◆ Maintain Trip Advisor business listing and portal.
- ◆ Solicit guest’s assistance to submit Trip advisor reviews of their stay/experience. Marketing Team will produce a simple card stating, “We hope you have enjoyed your time here. Talk about us on line at Facebook, Twitter, Trip advisor, and YouTube.”
- ◆ Monitor activity and effectiveness of online booking engine namely Booking.com, Expedia etc., and develop strategies to increase bookings through this service.

- ♦ Develop email database.

Joint Marketing/Partnership Initiatives:

- ♦ VIP marketing - marketing tools, advertising, tradeshow, website management and social media
- ♦ Membership – Antigua Hotel Association
- ♦ Caribbean Hotel Association
- ♦ Distribute the hotel brochure to Overseas Tourism Offices.
- ♦ Caribbean Places to Stay

Production:

- ♦ Develop photo product offerings that can be used for all marketing to support media relations, promotion and web site contents.
- ♦ Develop Hotel Brochure & rate sheet, room Information folder, food and drink coupons

Staff Specialized Skills Training:

- ♦ Assist in the coordinate Staff Training in Customer Service
- ♦ Expedite training workshop to develop social media.

See Appendix II

✓ **Special Events:**

Currently, one of the CLS Hotel best tools for stimulating key target markets is the use of special events. Plans are to continue to support and host prospective events and seek out possibilities for new events. Although the main aim is to increase revenues, special emphasis will be placed on the events which have the potential to actualize: image compatibility, potential media coverage, measurability, continuity, quality visitor experiences.

Strategy:

- ♦ Continue to create awareness of the hotel as a wedding venue by advertising in print, publications, Radio, T.V. website.

- ♦ Word out of mouth remains the most effective means of advertising so it is crucial that relationship building and networking with key partners, while reaching out to potential guests will be a strategy unto itself
- ♦ Expand events market share by 5%.

Tactics:

- ♦ Support existing events: Antigua Yacht Charter Meeting, Antigua Classic Regatta; Antigua Sailing Week; Sports & Fishing Tournament;
- ♦ Continue to promote Restaurant’s special events: dinners, reunions, wedding staging, chef contests, etc.
- ♦ Set Seafood Friday operation under a 30 x 40 tent; create an additional station with atmosphere using: tables, table cloth, uniformed kitchen staff cooking on a table top stove and positioned a cake display refrigerator including smoothie and ice cream. Our Product is fast becoming a world class event which means we must keep improving. This area would be the assigned service, which should be packaged with food and expensive wines. Advance reservation will be required.
- ♦ Continue producing and installing video clips of pasta cooking for the website plus promotional strategies and contests; Merchandising of branded items to include: tea shirts, mugs, caps & pens.
- ♦ Purchase event items for event expansion and enhancement.

Monitoring and Review:

Monitoring and review of the implementation of the marketing plan will be on-going. Various forms of monitoring will include:

- ♦ Assessing any increase in visitors
- ♦ Website hits
- ♦ Assessing revenue: monthly and annual
- ♦ Assessing expenses: monthly and annual
- ♦ Repeat business

- ♦ Search engine referrals
- ♦ Mystery shoppers
- ♦ Level of satisfaction with visitor services as measured by audience survey and feedback
- ♦ Review of the Marketing Plan will be undertaken on an annual basis in view of the monitoring activities recommended above.

✓ **Guest Services Operation:**

Mission: To provide thorough and efficient customer service to clients in order to facilitate guest exceptional experience and encourage return visits. Other duties may include processing forms of payment and responding to guest inquiries and concierge services.

Overview:

The Front Desk Officers have been greatly involved in increasing guest satisfaction and to help lower their complaints. It requires of them to maintain warm, hospitable behaviour during their interactions. Guest Service Officers are also responsible for the guest registration process and communication of hotel services and promotions. These highly visible roles give opportunities for casual conversations and has a direct impact on creating the overall guest experience. Other duties may include processing forms of payment and responding to guests' inquiries.

Striving to make a good and lasting impression on our guests is one of the Hotel's goals. Despite daily complaints whether due to a malfunctioned air-conditioner or other operational in-house problems, most of the complaints are dealt with immediately. As a result, many guests at the end of their stay do not leave without expressing their appreciation for the excellent service they would have received.

The Housekeeping maids, in the meantime, have the responsibility to clean the downstairs of the hotel, manage the laundry and keep the rooms and lobby upstairs pristine. The workers contribute substantially to the guest experience. Hence, many repeaters have remarked on their hard working attitude and quality service delivery.

We record our appreciation to the staff, a complement of six (6) that includes three (3) housekeepers and three (3) receptionists/reservations. Their overall performances were again noted: helpful, friendly and courteous.

Renovation/Refurbishing of Rooms:

During the financial year 2013-2014 scheduled maintenance will be an on-going process and most of the heavy maintenance work is planned to be completed before October, 2013. For example, the windows and doors repair project is considered urgent for this budget year. Several of the doors are reflecting a shabby appearance while others are unable to be properly secured.

At the same time, refurbishing of rooms has started. Rooms to include Dreadnought, Boreas, Badger, Royal Sovereign, Africa, and Amazon have received upgrades of soft furnishings. Moreover, a detailed list of amenities and apparatus for use in the rooms, varnishing and painting activities have also been proposed. Improving the physical product is integral to attracting guests to the hotel, particularly those who are repeaters.

Termite Treatment and Control:

The Terminix Company applied the annual termite treatment to the entire building at the beginning of the work year and usually at the end of the season. The spray method was used in this activity treatment.

It is recognized that although it might appear that the termites have slowed down, they are making their way in the windows, doors and furniture. There are minimal damages to floor boards but the main beam on the upper and lower lobby has become much hollowed. The cosmetic casings that were applied, some years ago, are still unharmed; similar treatment is recommended in the short-term.

Air-Conditioning:

All 14 air-conditioning units had the general maintenance at the beginning of the season. However, these units are exposed to the elements particularly the salty air and have been experiencing corrosion, hence the break-down of the units. There were three units that had to be replaced with compressor and condenser parts. The problem did not disrupt the flow of operation for any long time. The refrigeration technician was Sylvester Nichols.

WI FI Facility:

The Wi-Fi service in the hotel has been operating inconsistently. Throughout the past year, lack of this internet coverage cause many guests to complain painfully and regularly. An upgrade of this facility is recommended to improve front desk efficiency and guests' satisfaction.

Issues for consideration: Stated below are issues for consideration. Number one (1) This will fall under long-term and is underpin by the hotel design; while number two (2) and three (3) are worthwhile to note for further review and action.

- ♦ The lighting is poor in some rooms in the hotel.
- ♦ Purchases should be made of additional 18th century reproduction furniture e.g, and authentic leather chair sets to show up the hotel brand.
- ♦ There is a lack of activities from 4:00 and it is affecting room sales during the high season e.g. closure of bars in the evening.
- ♦ There is a need to upgrade the hotel's standards, for example, fire, health and hurricane.
- ♦ Conversely, most vacationers are looking for the ideal holiday and once our guests make reservation they will be expecting the best.
- ♦ For 2013-2014 a 10% growth is forecast. There will be much focus on ways to introduce new services while improving on the existing ones. These upgrades will lead our hotel to offer the guests a truly memorable experience.
- ♦ In terms of the hotel rooms, the high-end rooms deserve a makeover to include tubs/whirlpool baths. These rooms have already acquired many accolades and excellent reviews and the upgrade will certainly offer more luxury to the product.
- ♦ In the best interest of our guests it is important to extend the hours of operation in the restaurant and bar. This will help to lessen the ineffectiveness of our service whenever the guests call for a meal or drink and cannot be served.
- ♦ It is highly recommended that the general staff obtains a customer service training course before the new season begins. We need to continue to improve and maintain the highest quality in our service.

Finally, the influence of online distribution channel is significant in order to be seen and heard in the online marketplace as effectively as possible. New skills are needed. E-Commerce and Revenue Management have become two issues that are foremost in hoteliers' minds. These areas together with increased resources to enhance our online footprint on a global basis are what we must do well. Success in this constantly changing environment is therefore dependent on being able to use the tools effectively as well as being flexible enough to meet the demands and needs of our customers. But dealing with these global issues is but one challenge for us.

The Copper and Lumber Store Hotel have been allocated **EC\$ 701,108.00** and an additional **EC\$130,000.00** as capitalized spending in Budget 2013-2014. The Restaurant have been allocated **EC\$ 1,290,976.00** and an additional **EC\$ 191,337.00** as capitalized spending in Budget 2013-2014. *(see 2013-2014 budget schedule attached).*

❖ CLEANING DEPARTMENT

Overview:

The Cleaning Department plays a critical role in ensuring the visitor experience is exceptional. Staff that diligently performs their task in this crucial area will help in a huge way to ensure the Park's thrust in realizing continued and increasing Customer Satisfaction at the highest standard is maintained.

There are five persons in this department who are assigned routinely to the following areas: Visitor Services, bathrooms and vendor areas in the market, the laundry, bathrooms and showers, Immigration, Customs, Bathrooms in the Officer's Quarters building, NPA office, Maintenance and the marina offices. Daily work duties consist of some or all of the following services: sweeping, dusting, trash removal, bathroom cleaning, spot removal/cleaning, floor mopping, window cleaning, exterior/sidewalk cleaning. In general, their duties include daily maintenance cleaning, followed by a more "in depth" cleaning on a two week basis.

During the past year, cleaning and monitoring assigned work areas periodically have been inconsistent. It follows that special meetings held with the staff to explain the importance of carrying out this exercise has resulted in much improvement. To this end, complaints have been minimal and often words of satisfaction are announced by members of the public and tenants alike.

Mission: The aim of the Cleaning Department is to ensure the cleanliness of the Park's facilities.

General maintenance and infrastructural projects: These initiatives summarized below are paramount to ensure that the Park visible and tangible product features display high standards:

Several areas have been identified for general maintenance and improvements in the upcoming financial year. The focus will be primarily in the bathrooms. Some of the improvements include:

- ♦ Installation of baby change tables.
- ♦ Challenge Bathrooms & ramps – One of the largest problems disabled travelers face is locating accessible toilets. In the Park exists only one fully disability friendly bathroom and it is located at Pigeon Point.

- ♦ Sanitary napkin dispenser-these will be “coin” operated and will therefore pay for themselves while providing a necessary service.
- ♦ Stainless Steel sanitary napkin dispenser.

- ♦ Hot water for the Shower and Toilets

- ♦ Automatic faucets- this will minimize tampering and save on water

Recommendations:

- ♦ Cleaning services in office settings should be carried out in the evening (4:00 to 6:00 p.m. starting December, 2013).

- ♦ Installation of Vendor’s Disposable Machines in key toilets.

Conclusion:

The Park is noted for its beauty. For many the physical environments play a vital role in attracting visitors to the Park and more so, many value clean facilities. It is therefore necessary that the staff of the Cleaning Department continue to maximize its resources and exert efforts to achieve and maintain clean facilities. In doing such, the Authority will have yet another draw to encourage its visitors to choose the Park as their yachting or holiday destination.

In budget 2013-2014, a total of **EC\$ 204,557.00** have been allocated to the Cleaning Department for the operation of the department in the upcoming financial year. The budget has also allocated **EC\$ 15,000.00** in capital expenses to facilitate the improvement identified for the upcoming financial period. **(see 2013-2014 budget schedule attached).**

❖ LAUNDRY DEPARTMENT

Among the many services provided by the Nelson's Dockyard Marina, one of them is the laundry service for the yachtsmen. It is an amenity which is essential also to the Copper and Lumber Store Hotel and the public. The Laundry service is ideally located in the Dockyard. It is not a full-fledge laundry, however, it provides washing and drying services.

All our customers benefit from the following services:

- **Same day or next day service.** For individuals who drop their laundry at our location, we provide same-day service which means that you can bring your clothes in by 9 A.M. and collect them by 4 P.M.
- **Extensive laundry service.** Our staff sort, wash, dry and fold all of your personal clothing and linens, except for hand-washables and garments that cannot be hot dried. We provide all soap, bleach, and fabric softener and apply a different treatment to delicate clothing.

Objectives of the Laundry Department:

- To offer good customer service
- To offer fast quality service to the yachting community and the public.
- To help to increase the yachting value offerings.

Competition - The Laundry faces competition from local Laundry persons from the nearby communities. Several of these persons have had a good working relationship many years before the introduction of the Nelson's Dockyard Laundry. In addition, most of the larger Motor Yachts have laundry facilities on board.

Equipment: Currently the laundry has: 1 washing machine; and 1 dryer. To operate more efficiently another washing machine and a dryer should be purchased.

Water shortage: During the year under review, one persistent problem is the erratic supply of water to the laundry. Running water is supplied from the tanks situated in the garden. Seemingly, the pressure is reduced since the shower and toilet uses the same source. Additionally, this problem is fueled on numerous occasions by a lack of

water from the Government's main supply. As a result, the laundry workers are forced to turn away business and these unforeseen water shortages help to create unsatisfied customers.

Operational Hours: During the season, there is a demand for the Laundry and Showers to be opened for longer hours. It is often noted that several working yachtsmen, having worked late on board a yacht apparently require showers; however, on reaching the laundry it is closed. In addition, persons on yachts that have cleared after 6:00 p.m. have complained that the service offered is insufficient and at least the hours of operation should be extended. Against this background, it will be necessary to review the laundry operational hours and how best we could improve the entrance system in a cost effective manner.

Marketing: Information on the Laundry service will be facilitated via flyers, inclusion in yachtsmen hand-out, internet, word-of-mouth and signs.

Recommendation:

- ♦ It is recommended that the hotel and NPA laundry merge operations so as to facilitate all necessary washing and drying functions.
- ♦ It is also recommended that a meeting be convened in October, to include the Management Team to give their input in regards to the modernization of the Shower and Toilet Section, and in particular the Laundry Facility. Subjects to be discussed include and limited to the following:
 - Water supply
 - Design of the Laundry and shower and Toilet Section in general
 - Financial controls to include: financial facility/system to be used to gain access to the laundry, for normal and extended hours, collection and storage for laundry entrance
 - Purchase of an additional washers and dryers to increase output.
 - Linking both laundries to improve efficiency and a balanced work load. This would necessitate the purchase of a trolley and steam press.
 - Equipment maintenance management.

Conclusion

In the long-term, the laundry will focus on raising its bar in terms of services offered to its customers and strive to gain a competitive advantage in this market.

Budget 2013-2014 allocates **EC\$ 71,941.00** to the Laundry Department for its operations throughout the upcoming financial year. Also, an additional **EC\$ 24,000.00** has been allotted in capitalized spending. **(see 2013-2014 budget schedule attached).**

✚ CLARENCE HOUSE RESTORATION PROJECT



Clarence House Restoration Project is funded by the Peter Harrison Trust UK Ltd. The project is managed by the National Parks Authority. Direct supervision of the projects falls in the hands of Marius smith and Michael Flermius.

After the “Sod Turning Ceremony” in December 2012, work officially commenced on 28th June, 2013. A demolition team consisting of 7 (seven) workers demolished the concrete columns and beams. Five (5) of these workers started on the 28th June, 2013 while the remaining two (2) began on the 8th July, 2013. A total of seven (7) days was taken to complete the first phase of the assignment followed by cleaning and clearing of the grounds. A designated area was also identified for building materials to be placed.

Inside the building two (2) of the inner arches were broken to floor level. Additionally, the old kitchen was also demolished which took approximately three (3) weeks including the removal of the bricks walkway. Moreover, several underground drains were found, a larger cistern than expected and a huge sewage tank which was then decided to be condemned. The demolition team is awaiting next assignment.



Restorative Work at Clarence House

However, masonry work began on the 8th July, 2013. The stone cutters which comprises of six (6) masons started cutting and shaping stone to be refitted within the structure.

On the 23rd July, 2013 the sign at Clarence House was erected at the entrance. The Governor General also paid a visit to the site and was impressed with the amount of work that they have accomplished. In attendance were the Parks Commissioner Mrs. Ann Marie Martin, Trust Chairman - Dr. Reg Murphy, Project Foremen Mr. Marius Smith and Mr. Michael Flemius and Quantity Surveyor Mr. Richard Watson and I (Marius Smith).

The 5th and 6th August 2013 were public holidays. Nevertheless, workers were asked to stay home for the balance of the week and report to work on the 12th August, 2013.



Governor General and the Restoration Team

✚ Capital Budget – Special Grant Funding

There are several historic buildings within the Nelson’s Dockyard that are in need of major restoration. These include the Copper and Lumber Store building which is estimated at EC\$ **1.98 Million**, the Officer Quarters Building **EC\$ 1.5 Million** and the Interpretation Centre roof **EC\$750,000.00**. Other Capital intensive project includes the rebuilding of the Market area approximately **EC \$ 2.5 Million**

In an effort to carry out these projects it is highly recommended that the National Parks Authority approached the Caribbean Development Bank through Central Government for a loan, with a low interest rate in the range of 2.5 percent. It would be most appropriate to have these projects documented detailing the scope of work, cost estimates and time schedules to be developed that will be used to approach Central Bank. The Authority will also be required to developed strategic plans that will enable it to ascertain the financial sustainability of the project.

➤ Alternative Energy Research Programme

The National Parks Authority has an obligation to promote and practice good energy practices. As the largest organization that manages protected areas on Antigua, we are poised to be the leaders of this energy initiative.

Objective: Making the National Parks independent of fossil fuel through a joint venture project with the APUA thereby making a contribution to the energy shortage on Antigua. To generate an alternative revenue source that would foster NPA restoration program.

National Parks spends approximately EC \$650,000 per year in electricity. The spike in fuel cost and uncertainty of fuel prices has propelled the Authority to find an alternative source of its energy needs. Previous research has shown that two of three areas in the National Park, Devil’s Bridge and the Shirley Heights area have a reliable and constant wind flow. NPA will be the manager of this resource.

Financial Estimates	Nelson’s Dockyard	Devil’s Bridge
No. Turbines	3	10
Rated Power	275 KW	275 KWH
Cost	2 120 438 Euro	6768.125 Euro

Funding Source: Donor Agency

➤ **Copper and Lumber Store Hotel**

The Copper and Lumber Store Hotel has been under the direct management of the National Parks for the past thirteen (13) years. Over the past years extensive work has been carried out the refurbishment of the main structure to include the roof. The restoration work is somewhat challenge, due to the nature and age of the building. There are several on known factors such as termite infestation and the ingress of water from leaking roofs. The termite attacks were severe in many instances. A structural report by Junie Davis in 2010 recommended repairs can be effected for an estimated total sum of approximately EC\$2,000,000.

Management has also engaged the minds of other professionals. Emanating from those discussions is the alternative to completely rebuild the Copper and Lumber roof. Figures branded around are in the region of EC \$20 million. Of course, if this is an option a detailed comprehensive planned will be required.

➤ **Market Building**

This Market Building was constructed in the early 80's primarily to house/shelter the vendors. Although this building sits at the entrance of the Dockyard, it does not compliment the overall ambience of the Nelson's Dockyard. The Market Building is in dire need of repair and cannot cater to the high level of traffic. While there are increases in the number of activities relating to cruise ships, yachting and banking; the infrastructure lags behind. The entire roof leaks, the shingles and supporting rafters are completely eroded, and a large galvanize spouting had to be replaced on the front of the building to divert the flow of water off the roof. This is unsightly and ineffective in diverting the flow of water during heavy down pour.

After several site meetings, architect Eric Smith was invited to give an overview and to make recommendations as to the type of structure. Mr. Andrew Goodenough has also been working on the project as to the type of structure that would best suit the entrance.

The initial plans included the expansion of the Bank of Antigua Dockyard Branch. This plan has since being shelved and so is the Bank of Antigua's offer for a soft loan. To date talks have been held with the Caribbean Development Bank. A draft business plan will be prepared. It is noteworthy that the time factor involved is longer than the commercial banks. NPA is proposing a loan amount of EC \$3 million. The Loan Facility will to be negotiated at 2.5%. This loan request would be challenged through the Government of Antigua and Barbuda.

➤ **Horsford Hill Lookoff**

Phase 11 of the Horsford Hill LookOff project includes covering the roofs with galvanized sheerings. Dress all columns by plastering and trowel text to give an enhanced finished. Work also includes staining the rooms and paint facial boards. A façade will also be added.

Estimated Cost: EC\$ 37,915.00

Project Funding Operational Budget Surplus

➤ **Building Materials**

Plans are in place to purchase a container load of brick, container of shingles and 500 bags of white lime. These are needed for the general maintenance/restoration programmes

Overall Cost: EC\$ 95,802.00

Source of Funding: Operation Budget

The National Parks has established a strong platform capable of creating sustainable growth and development to the overall development of Antigua and Barbuda. To successfully protect the natural resources and conserve our key heritage sites, the Authority has added two critical components to its establishment - the Environment and Heritage Departments. The ability to ensure that adequate resources are provided to carry out their mandate is also critical to the survival of the park.

This is however congruent to its ability to maintain a strong financial position despite the external variables that continually threatens its revenue base. Management is confident that if the proposed programmes and initiatives are administered in a timely and proficient manner, they will enable the Authority to remain strong.

The prolonged economic challenges should not be ignored but should be used to drive the need for greater efficiency and higher productivity emanating from its human capital. Management is confident that both the need for greater efficiency and the ability to create new and improved ways of wealth for the Park must go hand in hand if the National Parks is to foster growth and sustain a healthy environment.

THE WAY FORWARD

Looking ahead, it is evident that the Yachting Sector offers the greatest opportunity for growth. The cruise ship sector although forecast 20% growth for 2012, is challenged by the current economic crisis in Europe. If the trend continues, a serious fall off is expected in 2013. The hotel sector remains a bit sluggish and there are no strong indicators for any serious growth.

Having examined our main market source, the growth of the Yachting Sector in Antigua has the potential to yield the greatest benefit not only for the National Parks but the country on a whole. Despite the present economic crisis, the yachting market remains buoyant. Management firmly believes that every opportunity should be grasped on maximizing the full potential of this market.

On chartering the way forward, there is need for additional rooms especially for major yachting events. The cottage type industry which is largely controlled by the expatriate community lends itself greater opportunity for nationals alike.

The Opportunity also exists for the creation of a Conference Centre and additional retail outlets which will assist the National Parks in strengthening its resource base. Management is in the process of finalizing plans which will be presented to the Board for its consideration.

As previously discussed the potential exist for additional berthing facilities during the peak size. There is also the opportunity to cater to the mega yachts by creating additional docking spaces. Management is also in the process of drafting plans for these initiatives.

The National Parks Authority natural resources are its greatest asset. If preserve as other world heritage sites, it has the ability to gain Antigua and Barbuda National Park World Heritage recognition. The benefits from acquiring such prestigious status are unlimited.

There are significant benefits to the National Parks from world heritage status.

- ✓ World heritage status is an established force in world tourism markets, and Antigua and Barbuda more specifically the National Parks Authority can expect to reap benefits from world heritage tourism once given the status.
- ✓ World heritage listing will also increase public interest and awareness in protecting the values of the site. The National Parks Authority once inscribed on the World Heritage List will benefit from the elaboration and implementation of a comprehensive management plan that sets out adequate preservation

measures and monitoring mechanisms, in addition to increasing the tourist activities at the site.

This Heritage Department has been championing the cause and this year following several meeting, final paper works are being prepared. All properties eligible to be on the World Heritage List must have adequate long-term legislative, regulatory, institutional and/or traditional protection and management to ensure their safeguarding which the National Parks Authority has already established.

In closing, Management is most confident that its 2012 Agenda will bring about the outlined objects that will enable the National Parks to continue its mandate to restore and preserve our nation's greatest asset. As we celebrate the 50th anniversary of the Nelson's Dockyard a key milestone, the establishment created laid by our forerunners will be sustained for future generation while at the same time being used to create economic benefits for all Antiguan's and Barbudan's and tourist alike.

 **CONCLUSION**

The National Parks has established a strong platform capable of creating sustainable growth and development to the overall development of Antigua and Barbuda.

However, the National Parks Authority is facing considerable challenges to maintain its destination competitiveness, protect the heritage, cultural and natural resources within the mandate for future generations, and to continue to make and increase its contribution to the country's economy.

Given the resources and opportunity, it is necessary that the Authority focuses its attention on creating a sustainable path the NPA must established a comprehensive sustainability policy embracing both marina sustainability and an alternative energy programme for the entire Dockyard and pursuing the destination as a World Class Heritage Site under UNESCO, a long overdue initiative given the Dockyard's unique position as the world's only Georgian Dockyard.

In closing management is most confident that its 2013 agenda will meet the short term objectives and lay the platform for a more sustainable path. The present economic climate calls for the Authority to become more focused on a long term sustainable path for the Park.

APPROVAL:

The 2013-2014 Budget Report for the National Parks Authority was approved on the

_____ day of _____, _____.

Claude Anthony
Chairman
NPA



NO SHOES BEYOND THIS POINT







DOCKYARD
MUSEUM





DOCKYAR
MUSEUM





GALLEY BOUTIQUE

GALLEY
BOUTIQUE

AM







REMEMBERING THE PAST
EMBRACING THE FUTURE

BATMAN















1973

INDIES

CEMEX Systems
Cement
Pulver
Fertilizer

Billy's Home
Archaeology
School 2014
August 2014



Sunsail

Sunsail



Guard House
The Lookout
1791

ROY















PILLARS
RESTAURANT and BAR

Admirals Inn

Closed







Copper & Dumber
Store Hotel
RESTAURANT & BAR







CHAPTER 290

THE NATIONAL PARKS ACT

Arrangement of Sections

Section

Part I

Preliminary

1. Short title.
2. Interpretation.

Part II

The National Parks Authority

3. Establishment and Constitution of the Authority.
4. Functions of the Authority.
5. Delegation by Authority.
6. Directions as to Policy.
7. Appointment and functions of the Parks Commissioner.
8. Employment of staff etc.
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10. Parks management and development plan.

Part III

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12. Power to borrow or raise capital.
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15. Accounting of the Authority.
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17. Rules.
18. Annual Report and Estimates.
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National Parks

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23. Acquisition of private land.

Part V

Nelson's Dockyard National Park

24. Nelson's Dockyard National Park.

Part VI

Miscellaneous

25. Pension plans.
26. Regulations.
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Transitional

28. Dissolution of the Friends of English Harbour and transfer of its assets, liabilities etc. to the Authority.
- FIRST SCHEDULE.
SECOND SCHEDULE.
-

NATIONAL PARKS

An Act to provide for the establishment of National Parks and a National Parks Authority; to make provision for the preservation, protection, management and development of the natural physical and ecological resources and the historical and cultural heritage of Antigua and Barbuda; and for matters connected with those purposes.

(13th December, 1984.)

11/1984.
3/1986.

Part I

Preliminary

1. This Act may be cited as the National Parks Act. **Short title.**

2. In this Act— **Interpretation.**

"Authority" means the National Parks Authority established under and by virtue of section 3.

"Central Housing and Planning Authority" means the Central Housing and Planning Authority constituted by the Slum Clearance and Housing Act; **Cap. 404.**

"Development Control Authority" means the Development Control Authority established by the Land Development and Control Act; **Cap. 235.**

"financial year" means such period of twelve months as the Authority with the approval of the Minister may determine to be its financial year except that the first financial year of the Authority shall be the period commencing upon the date when this Act comes into operation and ending upon such date as may be fixed by the Authority with the approval of the Minister;

"Friends of English Harbour" means the Friends of English Harbour being a company with limited liability registered under the Companies Act;

"Minister" means the Minister to whom responsibility for Economic Development and Tourism has been assigned;

"Park" means a National Park established under and by virtue of section 20 and the Nelson's Dockyard National Park established under and virtue of section 24;

"Parks plan" means a plan for the management and development of a Park prepared under section 10;

Cap. 333. "Port Authority" means the Port Authority established by the Port Authority Act.

Part II

The National Parks Authority

Establishment and Constitution of the Authority.

3. (1) There is established a body corporate to be called the National Parks Authority.

Cap. 224.

(2) Subject to this Act, section 22 of the Interpretation Act applies to the Authority.

First Schedule.

(3) The provisions of the First Schedule have effect with respect to the constitution, members and proceedings of the Authority and otherwise in relation thereto.

Functions of the Authority.

4. (1) The functions of the Authority are—

(a) to preserve, protect, manage and develop the natural, physical and ecological resources and the historical and cultural heritage of Antigua and Barbuda;

(b) to encourage the provision and improvement of facilities for persons visiting Parks for the enjoyment thereof;

(c) to perform its functions pursuant to this Act as a non-profit making organisation using any surplus funds it acquires for the enhancement of the natural, historical and cultural resources of Antigua and Barbuda in general and, in particular, of Parks;

(*d*) in so far as it may appear desirable to the Authority so to do, to carry out or permit to be carried out—

- (i) the repair, restoration and maintenance of any historic building in Parks, and
- (ii) such works as may be necessary to facilitate the use of the sea adjoining Parks for sailing, boating, diving, bathing or fishing;

(*e*) in so far as the Authority deems desirable to provide or cause to be provided within Parks—

- (i) accommodation, meals and refreshments;
- (ii) huts and camping sites;
- (iii) roads, parking places, paths, soil and conservation works, buildings and fences; and
- (iv) such other things as may be prescribed by regulations made under this Act;

(*f*) to the greatest possible extent consistent with the performance of its functions under this Act, to consult and co-operate with departments, divisions and agencies of the Government and with other bodies having functions, aims or objects related to those of the Authority;

(*g*) to exercise such other functions and powers and to perform such other duties as may be conferred upon the Authority by this Act or any regulations made under this Act; and

(*h*) for the purpose of carrying out its functions under this Act, to do all such acts as may appear to it to be requisite, advantageous or convenient for or in connection with the carrying out of those functions or to be incidental to their proper discharge and to carry on any activities in that behalf either alone or in association with any other person or body.

(2) Paragraph (h) of subsection (1) relates only to the capacity of the Authority as a body corporate and does not authorise the disregard by the Authority of any law or rule of law.

Delegation by
Authority.

5. Subject to the provisions of this Act, the Authority may delegate to any member or committee of the Authority the power and authority to carry out on its behalf such functions as the Authority may determine.

Directions as to
Policy.

6. The Minister may after consultation with the Chairman of the Authority, give to the Authority such directions as to policy to be followed by the Authority in the performance of its functions as appear to the Minister to be necessary in the interest of Antigua and Barbuda, and the Authority shall give effect to such directions.

Appointment and
functions of the
Parks
Commissioner.

7. (1) The Authority shall with the approval of the Minister appoint a Parks Commissioner to manage the affairs and undertakings of the Authority.

(2) The Parks Commissioner shall be responsible for the implementation of all policies and programmes approved by the Authority.

(3) The Parks Commissioner shall exercise all the functions entrusted to him by this Act and any regulations made under this Act.

(4) The Parks Commissioner shall be present at all meetings of the Authority unless he is instructed by the Chairman to withdraw from any meeting or he has obtained leave of absence from the Chairman or is incapacitated by illness or other cause from attending any meeting.

Employment of
staff etc.

8. The Authority may employ agents and staff, retain solicitors, accountants and other professional services on such terms and conditions and for such remuneration as it determines after consultation with the Minister.

Restrictions on
powers of the
Authority.

9. Notwithstanding section 4, the Authority shall not without the prior approval of the Minister—

(a) assign any salary, in excess of such sum as the Minister may determine and notify in writing to the Authority, to any post on the staff of the Authority;

(b) appoint any person to any post on the staff of the Authority to which a salary determined by the Minister under paragraph (a) is assigned;

(g) make any provision for the payment of pensions, gratuities or other like benefits to any officer or servant of the Authority or to others with reference to their service to the Authority;

(d) lease or otherwise dispose of or charge any property held by the Authority for the purposes of its functions under this Act.

10. (1) The Parks Commissioner shall prepare and keep under review plans for the management and development of Parks. **Parks management and development plan.**

(2) A Parks plan shall—

(a) identify the Park and assess the present state of its development;

(b) contain a statement of objectives and policies on matters relating to, but not limited to—

(i) the development and use of all land in the Park;

(ii) maintenance and protection of natural resources and sensitive environmental areas;

(iii) protection and conservation of heritage resources and archeological sites (including buildings, structures and views);

(iv) provision of infrastructure and transportation;

(g) specify the management and development measures to be taken in respect of the Park;

and shall be prepared within nine months of the establishment of a Park under section 20.

(3) In the preparation, review or amendment of a Park plan the Parks Commissioner shall consult with members of the local community, local authorities and other persons affected by the Park plan.

(4) After preparation or amendment of a Park plan, the Parks Commissioner shall submit it to the Authority for its consideration; and the Authority shall, subject to subsections (6) and (7), hold one or more public meetings for

the purpose of presenting the Park plan or amendment thereto and receiving submissions thereon.

(5) The Authority shall submit each Park plan or amendment thereto along with any submission thereon and a record of the public meetings, if any, to the Minister, who shall submit them to Cabinet for approval of the Park plan or amendment.

(6) Where the Authority deems it necessary to amend a Park plan, notice of the intended amendment shall be published in the *Gazette*, and in one or more newspapers in circulation in Antigua and Barbuda.

(7) If twenty or more persons requisition a public meeting in respect of an amendment under subsection (6), the Authority shall hold one or more meetings on such amendment.

Part III

Financial Provisions

Funds and resources of the Authority.

11. The funds and resources of the Authority shall consist of—

(a) such sums as may be provided by Parliament for the purpose;

(b) any loan or grant made to the Authority by the Government or, with the approval of the Minister, by any person or body or international organization;

(c) all monies paid to the Authority by way of subsidies, gifts, fees, subscriptions, rent, interest and royalties as well as any other sum or any property which may in any manner become payable to or vested in the Authority in respect of the performance of its functions; and

(d) any sums or property which may be donated to the Authority.

Power to borrow or raise capital.

12. (1) The Authority may, from time to time, with the approval of the Minister, borrow, secure or raise money

by the issue of debentures or debenture stock, or other security, for all or any of the following purposes—

- (a) the provision of working capital;
- (b) the fulfilling of the functions of the Authority under this Act;
- (c) the provision of capital for the expansion of and addition to its fixed assets;
- (d) the redemption of any debenture or debenture stock or other security that the Authority is required or entitled to redeem;
- (e) any other expenditure properly chargeable to capital account.

(2) The Authority may, from time to time, borrow by way of overdraft or otherwise for periods not exceeding one year such sums as the Authority may require for meeting its obligations and discharging its functions under this Act.

13. (1) The Authority may with the approval of the Minister, from time to time, borrow by way of advances from the Government such sums as may be necessary for carrying out its functions under this Act.

Power to borrow from Government.

(2) For the purpose of making approved advances to the Authority under this section, the Minister responsible for Finance may authorise advances out of the revenues or surplus balances of Antigua and Barbuda.

(3) Pending the raising of any such loan, the Minister responsible for Finance by warrant under his hand may authorise the Accountant-General to make advances out of the revenues of Antigua and Barbuda to the Authority in such sums and on such terms and conditions as the Minister responsible for Finance may think fit for the purposes authorised by this Act.

(4) The repayment of any such advances and the payment of interest thereon shall be made by the Authority in like manner and on like conditions as borrowings by the Authority subject to any special terms and conditions which

may be stipulated with respect to any such advance by the Minister responsible for Finance upon the making thereof.

Application of
funds of the
Authority.

14. (1) The funds of the Authority shall be applied towards—

(a) meeting the obligations and discharging any of the functions of the Authority under this Act and any matter incidental thereto;

(b) the creation of a reserve fund of such amount as the Authority deems expedient.

(2) Any sums outstanding to the credit of the reserve fund provided for under subsection (1) that is not immediately required to be expended in the meeting of any obligation or the discharge of any functions of the Authority may, from time to time, be invested in securities approved either generally or specifically by the Minister; and the Authority may, from time to time, with the like approval sell all or any of such securities.

Accounting of the
Authority.

15. (1) All decisions, orders, rules and regulations relating to the financial operations of the Authority and authorised by this Act shall be made by resolution of the Authority at a meeting thereof and shall be recorded in the minutes of the Authority.

(2) The Authority shall keep proper books of account showing, under appropriate heads—

(a) the market value of the lands, premises, facilities and properties under the management and control of the Authority on behalf of the Crown or as acquired or constructed as a result of any grants or donations from persons, governments or international agencies;

(b) the outstanding accounts of any loans received by the Authority for the acquisition of or the construction of any premises, facilities or properties by the Authority;

(c) all monies received by way of earnings of the Authority and such appropriations by Parliament, donations, gifts or other monies as have been received by

the Authority without being designated for any capital acquisition or construction;

(d) all monies expended by the Authority in carrying out its activities; and

(e) any monies received in trust by the Authority for any purpose.

(3) The accounts of the Authority shall be audited by the auditors to be appointed annually by the Authority.

(4) The Authority shall, before the commencement of each financial year, submit to the Minister for the information of Parliament a copy of its income and expenditure budget in relation to such year, and the Minister shall cause such copies of such budget to be laid before the Legislature.

(5) After the end of each financial year, the Authority shall, as soon as the accounts of the Authority have been audited, cause a copy of the statement of accounts to be transmitted to the Minister together with a copy of any report made by the auditors on that statement or on the accounts of the Authority.

The Minister shall cause a copy of every statement and report to be laid before the Legislature.

(6) Notwithstanding any power of the Authority conferred by this Act, where the Authority intends to embark upon any programme for expanding its facilities that will involve borrowing monies upon the credit of Antigua and Barbuda or that will require a longer period than one year to complete, the Authority shall obtain the approval of the Minister responsible for Finance thereto before incurring any liability in respect thereof.

16. (1) All monies of the Authority accruing from its operations under this Act shall be paid into a bank or banks appointed by resolution of the Authority, and such monies shall, as far as practicable, be paid into the Bank from day to day, except such sums as the accountant may be authorised by rules made under section 17 to retain in his hands to meet petty disbursements.

Cash deposits
and payments.

(2) All payments out of the Funds of the Authority except petty disbursements not exceeding a sum to be fixed by rules made under section 17 shall be made by the accountant or on his behalf by any other officer appointed by the Authority, in accordance with any such rules.

(3) Cheques against any banking account required to be kept or withdrawals from any savings bank account shall be signed by the accountant and countersigned by the Chairman of the Authority or any member of the Authority or any officer of the Authority appointed by resolution of the Authority for the purpose, and any such resolution shall be certified by the Chairman and forwarded to the bank or banks concerned.

Rules.

17. The Authority shall by resolution make rules in respect of the following matters—

(a) the manner in which and the officers by whom payments are to be approved;

(b) the bank or banks into which the monies of the Authority are to be paid, the title of any account with any such banks, and the transfer of a fund from one account to another;

(c) the appointment of a member of the Authority or an officer of the Authority to countersign cheques on behalf of the Chairman in his absence;

(d) the sum to be retained by the accountant to meet petty disbursements and immediate payments and the maximum sum that may be so disbursed for any one payment;

(e) the method to be adopted in making payments out of the funds of the Authority; and

(f) generally as to all matters necessary for the proper keeping and control of the accounts and books and the control of the finances of the Authority.

Annual Report and Estimates.

18. (1) The Authority shall prepare and present to the Minister three months after the expiration of each financial year of the Authority a report—

(a) dealing generally with the activities of the Authority during its last preceding financial year;

(b) containing such information relating to the proceedings and policy of the Authority as in its opinion can be made public without detriment to the interest of the Authority; and

(c) containing a statement of its accounts audited in accordance with the provisions of section 15.

(2) The Minister shall cause a copy of the report together with the annual statement of accounts and the auditor's report thereon to be laid before the Legislature.

(3) Copies of the Authority's report together with annual statement of accounts and the auditor's report on that statement or on the accounts of the Authority shall be published in such manner as the Minister may direct.

(4) The Authority shall not less than three months (or such shorter period as the Minister may in any particular case allow) before the expiration of each financial year submit to the Minister for approval estimates of revenue and expenditure of the Authority in respect of its next succeeding financial year.

19. Notwithstanding anything in any other law contained, all plant, machinery, appliance, apparatus, equipment and other materials imported by the Authority for the purpose of carrying out its functions under this Act shall be free of all customs duty and consumption tax; and the income of the Authority shall be wholly exempt from the payment of income tax.

Exemption from
Customs Duty,
Consumption tax
and income tax.

Part IV

National Parks

20. (1) The Minister may, on the request of the Authority, by Order published in the *Gazette* declare any area of land or water or both land and water described in the Order to be a National Park; and such Order is subject to affirmative resolution of the Legislature.

Establishment of
National Parks.

(2) Where a National Park has been declared under subsection (1) the Minister shall cause a map of the area to be prepared and shall cause notice of the preparation thereof, and of the places where copies thereof may be inspected at all reasonable hours, to be prescribed in the *Gazette*.

Lease of Crown
Land to
Authority.

21. The Authority may from time to time, after consultation with the Minister, request in writing that any portion of Crown land within a Park be leased to the Authority for such term not exceeding fifteen years as the Authority may specify.

Permission
subject to
approval of the
Authority.

22. (1) From and after the date when this Act comes into operation, no permission, approval, authority, subdivision, lease or permission relating to any land or property whether Crown land or otherwise within a Park shall be granted or made by the Central Housing and Planning Authority, the Development Control Authority or the Port Authority, or by anybody purporting to act with delegated authority from any such body unless the prior written approval of the Authority is obtained for that purpose; and if such approval is not obtained, any such action by any such body shall be null and *void ab initio*.

(2) Any person aggrieved by the refusal of the Authority to grant the approval referred to in subsection (1) may within twenty-one days of the date of the refusal appeal against it to the Minister, setting out the grounds upon which the appeal is made.

Cap. 235.

(3) Every appeal to the Minister under subsection (2) shall be referred by him to the Appeals Tribunal established under section 14 of the Land Development and Control Act for the purpose of hearing and determining the appeal.

(4) The Authority may not refuse to grant the approval referred to in subsection (1) except where it is satisfied that it is necessary to do so for the better carrying out of its functions under this Act or in order to give effect to a Parks plan or any part thereof.

Acquisition of
private land.

23. Where the Authority has determined that it is necessary or desirable for the better carrying out of its functions under this Act that any private land within a Park should be acquired by the Crown, the Authority shall issue a written determination to such effect and the Crown may thereupon acquire such land under the Land Acquisition Act.

Cap. 233.

Part V

Nelson's Dockyard National Park

24. (1) Notwithstanding section 20, the lands together with all buildings and other structures thereon described in the Second Schedule are declared a National Park to be called the Nelson's Dockyard National Park. **Nelson's Dockyard National Park. Second Schedule.**

(2) Subject to the provisions of section 21, all lands, buildings, structures, rights or easements which at the date when this Act comes into operation are situate within or, as the case may be, appertain to the Nelson's Dockyard National Park and which at that date are vested in the Crown shall remain so vested and shall not, without consultation with the Authority, be assigned, sublet, leased, mortgaged or dealt with in any other manner either by the Crown or by any person deriving title from the Crown.

Part VI

Miscellaneous

25. The Authority may, with the approval of and subject to such terms and conditions as may be imposed by the Minister of Finance, provide for the establishment and maintenance of pension plans and like plans for the benefit of its employees; and in every such plan, different provisions may be made for different classes of employees. **Pension plans.**

26. The Minister may make regulations generally for the carrying out of the purposes of this Act and for the preservation, management and development of Parks, and without derogating from the generality of the foregoing provision such regulations may — **Regulations.**

(a) prohibit or restrict entry into or movement within any Crown Land in a Park by any person, vehicle or animal;

(b) prohibit or restrict camping, squatting or residing in any Crown land in a Park;

(c) provide for the levying of fees and charges for entry into any Crown land in a Park or any buildings therein or for any services or amenities provided by the Authority;

(d) provide for the payment of compensation by any person doing damage in a Park or for the removal

from a Park of any person committing an offence against any regulation;

(e) provide for the control and regulation of the conduct of any trade or business carried on within a Park;

(f) provide for the prevention within a Park of damage to any land, building, person, animal or thing and for the preservation of public order;

and any regulation so made may prescribe a penalty on summary conviction for breach of such regulation not exceeding five thousand dollars and imprisonment for one year.

Act binds the Crown.

27. This Act binds the Crown.

Part VII

Transitional

Dissolution of the Friends of English Harbour and transfer of its assets, liabilities etc. to the Authority.

28. (1) The Friends of English Harbour is hereby dissolved.

(2) All real and personal property, whether in Antigua and Barbuda or elsewhere, which immediately before this Act came into operation was vested in or belonged to the Friends of English Harbour is hereby vested in the Authority without conveyance, transfer, or assignment.

(3) The person charged with the keeping of any register, on the written request of the Authority and on payment of the appropriate fee, shall make such entries in his register and on any outstanding documents of title and generally do all such things as may be necessary to give effect to the provisions of this section.

(4) Subject to the provisions of this Act, all assets, rights, obligations and liabilities which immediately before the date upon which this Act comes into operation were vested in, imposed upon or incurred by the Friends of English Harbour are deemed to be the assets, rights, obligations and liabilities of the Authority.

(5) All references to the Friends of English Harbour in any law or in any agreement, deed, instrument, application, notice, or other document whatsoever shall, unless the context otherwise requires, be read as references to the Authority.

(6) Without limiting the generality of the foregoing, upon the date when this Act comes into operation the Friends of English Harbour shall deliver to the Authority, or as the Authority may order, all moveable property vested in the Friends of English Harbour immediately prior thereto, and all books, papers, documents, minutes, receipts and ledgers appertaining to the Friends of English Harbour and to its operations.

(7) Without limiting the generality of the foregoing and subject to the provisions of subsection (8) every agreement, whether in writing or not, to which the Friends of English Harbour was a party immediately prior to the date upon which this Act comes into operation, and whether or not of such nature that the rights and liabilities thereunder could be assigned, has effect as from the date upon which this Act comes into operation as if—

(a) the Authority had been a party to such agreement; and

(b) for any reference (however worded and whether express or implied) to the Friends of English Harbour there were substituted in respect of anything to be done on or after the date upon which this Act comes into operation a reference to the Authority.

(8) The appointment of any officer or servant of the Friends of English Harbour subsisting immediately before the date when this Act comes into operation is, if such officer or servant so agrees, deemed to be made by the Authority under the provisions of this Act, and for the purpose of determining the rights of pension or gratuity of such officer or servant, shall be regarded as continuous from the time he was appointed by the Friends of English Harbour.

(9) Any proceedings pending at the date when this Act comes into operation to which the Friends of English Harbour

was a party shall be continued as if the Authority were a party thereto in lieu of the Friends of English Harbour.

(10) Where anything has been commenced by or under the authority of the Friends of English Harbour prior to the date upon which this Act comes into operation and such thing is within the powers of the Authority or was done in relation to any of the matters transferred by this section to the Authority, such thing may be carried on and completed by, or under the authority of, the Authority.

(11) The Minister may by Order published in the *Gazette* provide for any matters which it appears to him necessary or expedient to provide for the better carrying out of the provisions of this section, and without prejudice to the generality of the foregoing, may appoint any person to do any act or sign any document for and on behalf of the Friends of English Harbour whereby the assets of the Friends of English Harbour may be transferred to the Authority.

FIRST SCHEDULE

(Section 3)

**Constitution of
the Authority.**

- 1.** (1) The Authority consists of the following members—
- (a) a Chairman to be appointed by the Minister;
 - (b) the Permanent Secretary of the Ministry responsible for the subject matter of this Act;
 - (c) the Town and Country Planner; and
 - (d) four other members appointed by the Minister.

(2) Every member of the Authority appointed by the Minister shall, subject to the provisions of this Schedule, hold office for such period not exceeding three years as the Minister may direct and is eligible for re-appointment.

(3) Every member of the Authority appointed by the Minister shall be appointed by instrument in writing.

Leave of absence.

- 2.** The Minister may grant to any member of the Authority leave of absence in respect of his duties as a member of the Authority.

3. If any member of the Authority is by reason of illness **Acting members.** or any other cause temporarily unable to perform his functions as a member of the Authority, the Minister may appoint any person to act in his stead during the period of such illness or inability.

4. (1) Any member of the Authority other than the Chairman, may at any time resign his office by instrument in writing addressed to the Minister and transmitted through the Chairman; and from the date of receipt by the Minister of such instrument such member shall cease to be a member of the Authority. **Resignations.**

(2) The Chairman may at any time resign his office by instrument in writing addressed to the Minister and such resignations shall take effect as from the date of the receipt by the Minister of such instrument.

5. Notwithstanding paragraph 1 (2), the Minister may at any time revoke the appointment of any member of the Authority if he thinks it expedient so to do. **Revocation of appointments.**

6. (1) The names of all members of the Authority as first constituted and the appointment of any person as a member of the Authority shall be published in the *Gazette*. **Gazetting of appointments and termination of appointments.**

(2) The termination of office of any member of the Authority whether by death, resignation, revocation, effluxion of time or otherwise, shall be published in the *Gazette*.

7. (1) The seal of the Authority shall be kept in the custody of the Chairman and may be affixed to instruments pursuant to a resolution of the Authority and in the presence of the Chairman and the Secretary of the Authority. **Custody, affixing and authentication of Seal and signature of documents.**

(2) The seal of the Authority shall be authenticated by the signature of the Chairman and the Secretary of the Authority.

(3) All documents other than those required by law to be under seal that are made by the Authority and all decisions of the Authority may be signified under the hand of the Chairman, or of any other member of the Authority authorised to act in that behalf, and of the Secretary of the Authority.

8. (1) The Authority shall meet at such times as may be necessary or expedient for the transaction of its business, and such meetings shall be held at such places and times and on such days as the Authority may determine. **Procedure and meetings.**

(2) The Chairman may at any time call a special meeting of the Authority and shall, within seven days of the receipt of a requisition in writing addressed to him by four or more members of the Authority summon a special meeting of the Authority to consider the matters contained in such requisition.

(3) The Chairman shall preside at a meeting of the Authority; and in the absence of the Chairman at a meeting, the members present and constituting a quorum shall elect a chairman from among their number to preside at that meeting.

(4) The Chairman, or where the Chairman is absent, the person elected to preside over the meeting in pursuance of subparagraph (3), and three members of the Authority shall form a quorum.

(5) The decisions of the Authority shall be by a majority of votes; and in addition to an original vote, the Chairman or other person elected to preside over the meeting, as the case may require, shall have a casting vote.

(6) Minutes in proper form shall be kept by the Secretary of the Authority and shall be confirmed by the Chairman or other person appointed by the Minister to preside over the meeting, as the case may require, as soon as practicable thereafter at a subsequent meeting; and certified copies of such minutes when so confirmed shall be forwarded to the Minister within such period as may be prescribed by the Minister.

(7) The Authority may co-opt any one or more persons to attend any meeting of the Authority for the purpose of assisting or advising the Authority, but no such co-opted person shall have any right to vote.

(8) Subject to the foregoing provisions of this Schedule, the Authority may regulate its own proceedings.

(9) The validity of the proceedings of the Authority shall not be affected by any vacancy amongst the members thereof or by any defect in the appointment of a member thereof.

**Sub-Committees
of the Authority.**

9. (1) The Authority may appoint a sub-committee of the Authority to examine and report to it on any matter whatsoever arising out of or connected with any of its functions under this Act.

(2) Any such sub-committee shall consist of at least one member of the Authority together with such other persons, whether

members of the Authority or not whose assistance and advice the Authority may desire.

(3) Where persons not being members of the Authority are members of a sub-committee appointed under this paragraph, or where any person is co-opted under sub-paragraph (7) of paragraph 8, the Authority may with the approval of the Minister by resolution declare the remuneration and allowance of such persons, and such sum shall properly be payable out of the funds and resources of the Authority.

(4) The Authority may by resolution reject the report of any such sub-committee or adopt it either wholly or with such modifications as the Authority may think fit.

10. A member of the Authority who is directly or indirectly interested in a contract made or proposed to be made by the Authority—

Disclosure of Interest.

(a) shall disclose the nature of his interest at a meeting of the Authority; and

(b) shall absent himself from that part of the meeting of the Authority with respect to that contract.

11. (1) No member of the Authority shall be personally liable for any act or default of the Authority done or omitted to be done in good faith in the course of the operation of the Authority.

Protection of members.

(2) Where any member of the Authority is exempt from liability by reason only of the provisions of this paragraph, the Authority is liable to the extent that it would be if the member was a servant or agent of the Authority.

12. There shall be paid from the funds of the Authority to the Chairman and other members of the Committee, such remuneration whether by way of honorarium, salary or fees, and such allowances as the Minister may determine.

Remuneration of members.

13. (1) The Authority shall have its principal or head office at such a place as the Minister may by Order published in the *Gazette* declare.

Principal office.

(2) The Authority may establish branch offices in any part of Antigua and Barbuda.

SECOND SCHEDULE

(Section 24)

1. The Nelson's Dockyard National Park consists of all that land to be specified, delineated and particularly described by Order made by the Minister after consultation with the Authority and published in the *Gazette* situate at and known as Nelson's Dockyard, Shirley Heights, Dows Hill, and all lands adjacent to such lands or in the vicinity thereof (save and except therefrom Clarence House and the appurtenances and land therewith usually occupied) as well as all land adjacent to English Harbour and Falmouth Harbour or in the vicinity thereof,

2. The Minister shall cause a map of the land referred to in paragraph 1 to be prepared and shall cause notice of the preparation thereof and of the places where copies thereof may be inspected at all reasonable hours, to be published in the *Gazette*.

3. Any Order made by the Minister under this Schedule is subject to affirmative resolution of the Legislature.



[L.S.]

I Assent,

**James B. Carlisle,
Governor-General.**

17th September, 2004.

ANTIGUA AND BARBUDA

No. 11 of 2004

AN ACT to amend The National Parks Act, Cap. 290.

*[Published in the Official Gazette Vol. XXIV
No. 72 dated 14th October, 2004.]*

ENACTED by the Parliament of Antigua and Barbuda as follows —

1. This Act may be cited as the National Parks (Amendment) Act, 2004. Short title.

2. Section 2 of the National Parks Act, in this Act referred to as the principal Act is amended as follows — Amendment of
section 2.

(a) by the repeal of the definition of "Minister" and the substitution of the following —

“ "Minister" means the Minister to whom the responsibility of National Parks has been assigned."

(b) by inserting in its appropriate alphabetical order the following —

"Town and Country Planner" means the person appointed under section 6 of the Physical Planning Act, 2003. No. 6 of 2003.

ANTIGUA 2
AND
BARBUDA

The National Parks (Amendment)
Act, 2004.

No. 11 of 2004.

**Amendment of
section 4.**

3. Section 4 of the principal Act is amended as follows —

- (a) by the repeal of paragraph (a) of subsection (1) and the substitution of the following —

"(a) to preserve, protect, manage and develop the **natural**, physical and ecological resources and the architectural, cultural and historical heritage of Antigua and Barbuda;"

- (b) by repealing subsection (1)(d)(i) and substituting the following —

"(i) the repair, restoration and maintenance of any building of special architectural or historical interest;"

- (c) by the renumbering of paragraph (d) as (e) and inserting the following as paragraph (e) —

"(e) to collaborate with the Town and Country Planner to compile a list of the buildings of special architectural or historical interest in any part of Antigua and Barbuda."

**Amendment of
section 10.**

4. Section 10 of the principal Act is amended by the repeal of subsection (3) and the **substitution** of the following —

—

"(3) In the preparation, review or amendment of a Park's plan, the Parks Commissioner shall consult with the Town and Country Planner, the members of the local community, local authorities and other persons affected by the Park's plan."

**Amendment of
Second Schedule
of Cap. 290.**

5. The Second Schedule to the principal Act is amended as follows —

- (a) by repealing paragraph 1 and substituting the following —

"1. The Nelson's Dockyard National Park consists of all that land situate at and known as Nelson's Dockyard, Clarence House, Shirley Heights, Dows Hill, and all lands adjacent to such lands or in the vicinity thereof as well as all land adjacent to **En-**

NELSON'S DOCKYARD
NATIONAL PARK

VOLUME 1
PARK DEVELOPMENT PLAN

Prepared by:
The National Parks Authority
of
Antigua and Barbuda

With the
Assistance of:

The Canadian International
Development Agency

and technical assistance by:

The DPA Group Inc.
October, 1985

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PART 1
PREAMBLE

1. Authority

This plan is prepared under the provisions of sub-section 10 (2) of the Antigua and Barbuda National Park Act, 1984. Specifically the Act provides that:

“10 (2) A Parks plan shall –

- (a) identify the Park and assess the present state of its development;
- (b) contain a statement of objectives and policies on matters relating to, but not limited to:
 - (i) the development and use of all land in the park;
 - (ii) maintenance and protection of natural resources and sensitive environmental areas;
 - (iii) protection and conservation of heritage resources and archeological sites (including buildings, structures and views);
 - (iv) provision of infrastructure and transportation;
- (c) Specify the management and development measures of a Park under section 20;

And it shall be prepared within nine months of the establishment of a Park under section 20.”

PART I

PREAMBLE

2. Park Plan Structure

This Park Plan is presented in two volumes:

Volume I – Nelson’s Dockyard National Park Development Plan

Volume II – Nelson’s Dockyard National Park Management Plan

Volume II, the Park Management Plan is incorporated by reference in this volume. The Park Plan is presented in two volumes to ensure a clear distinction between Plan policies which will guide the NPA in decision-making on development applications and its own development within the park, and management plan policies related to Park operations. Notwithstanding the distinction for presentation and organizational purposes, the two volumes together constitute the Nelson’s Dockyard National Park Plan.

3. Development Plan Structure

The Development Plan is organized in three parts, each of which is described below.

Part I – Preamble describes the authority under which the plan has been prepared, the structure of the plan, responsible agencies, and approval and amendment processes.

Part II – The Nelson’s Dockyard National Park Development Plan contains a statement of objectives and policies on the development and use of all land in the park, the provision of infrastructure, community facilities and transportation services, and the management of the development plan. It is this section which is subject to Cabinet approval under the provisions of Sub-section 10 (5) of the Antigua and Barbuda National Park Act, 1984.

Part III – Programs to Implant the Plan describes policies and programs of the National Parks Authority for implementing the plan as described in Part II of this document. As such they would be approved policies of the National Park Authority. These programs and policies will be used to guide the actions of the National Parks Authority and the Parks Commissioner above and beyond the legal requirements of the National Parks Act. As the National Parks Authority and/or Parks Commissioner are likely to have to make adjustments over time (for example, the investment program) and these are programs and policies to implement the plan, they should not be incorporated into the legally adopted plan.

4. Responsibilities

The roles and responsibilities of the Government of Antigua and Barbuda under the provisions of the National Parks Act are summarized below. For complete descriptions reference to the National Parks Act, 1984 should be made.

GOAB Cabinet is responsible for approval of the park plan and any amendments thereto on the recommendation of the Minister of Economic Development and Tourism (Sub-section 10 (5)) Approval under the provisions of the Act applies only to Part II of this document.

The Minister of Economic Development and Tourism is responsible for submitting the recommended park plan or any recommended amendments thereto by the National Park Authority to Cabinet. (Sub-section 10 (5)).

The National Parks Authority is responsible for approving and implementing the recommended park plan on the advice of the Parks Commissioner. The NPA must submit each park plan or amendment thereto, including submissions and record of public meetings, to the minister of Economic Development and Tourism (Sub-sections 10 (4)). The NPA is also responsible for programs and policies to implement the plan as set out in Part III of this document.

The Parks Commissioner is responsible for preparation of the plan and for management and development of the park under the direction of the National Parks Authority. The Parks Commissioner, upon consultation with the community and other persons affected by the Park plan or any proposed amendment thereto, must submit the plan or amendment to the NPA for its consideration. (Sub-section 10 (2), (3), and (4)).

The Development Control Authority is responsible for review and approval of development applications under the provisions of the Land Development Act and for referral of all approved applications to the NPA for review and decision based on the park plan.

5. Planning Process

Management of development applications and proposed amendments to this plan are specified in the National Parks Act. The procedures are summarized below and illustrated in Exhibits 1 and 2 for development applications and plan amendments respectively.

a. Development Applications

- The applicant submits an application to the Development Control Authority for review against the provisions of the Antigua Land Development Act.
- The DCA reviews the application for conformity to the provisions of the Land Development Act and Planning Regulations (building lot sizes, site access, infrastructure, etc.).

Exhibit 2: Development Control Process - Applications

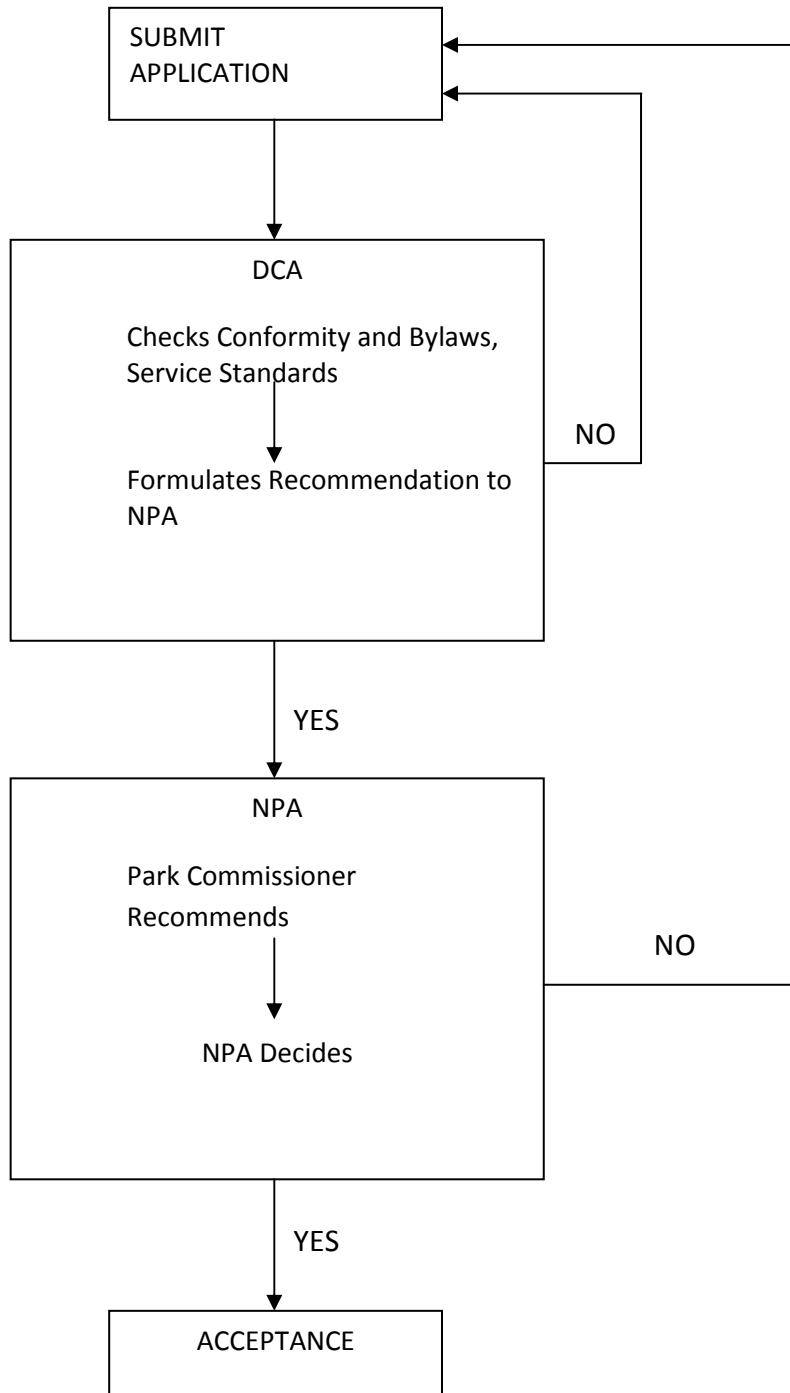


EXHIBIT 1: PLAN AMENDMENT PROCESS

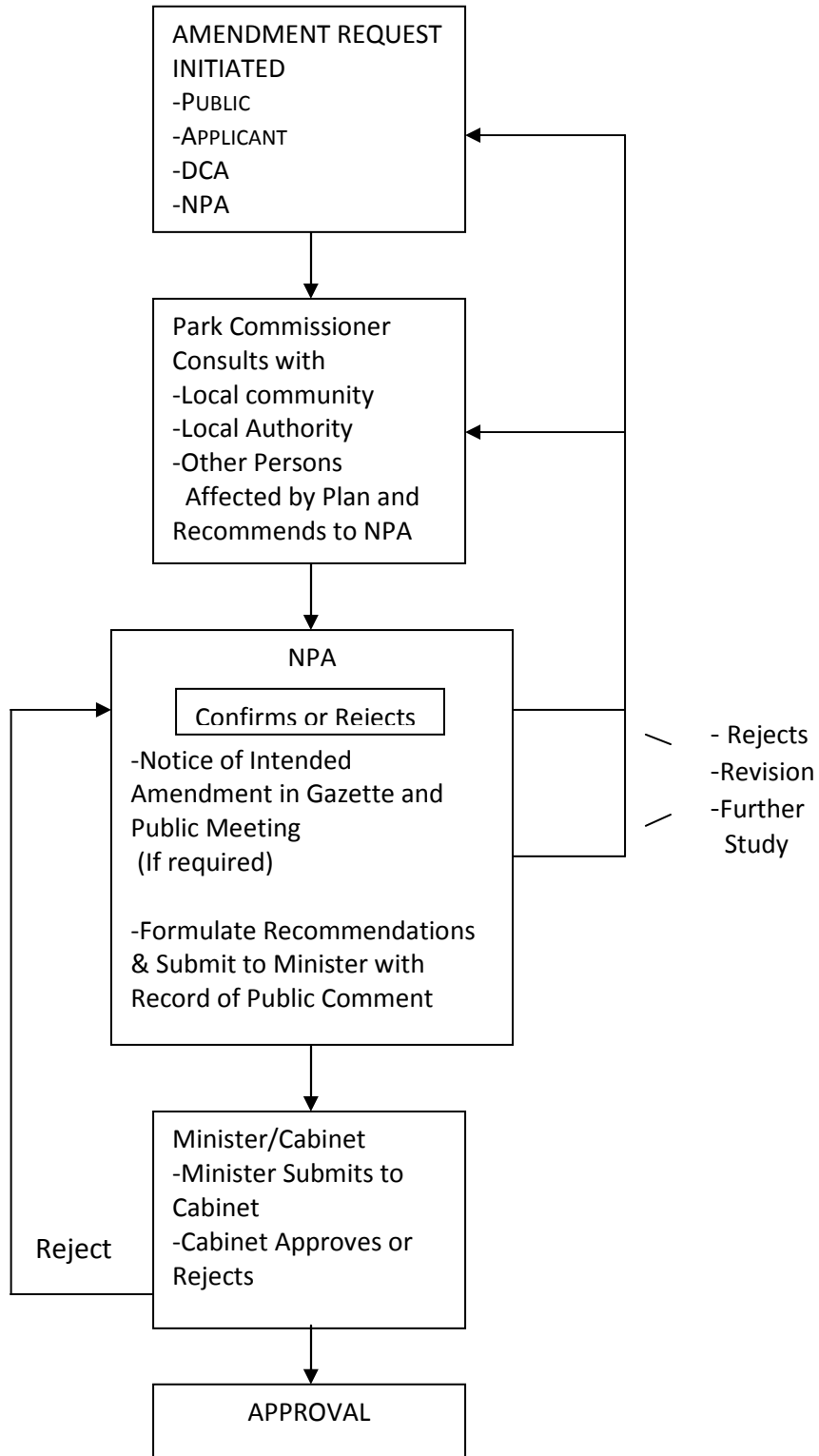
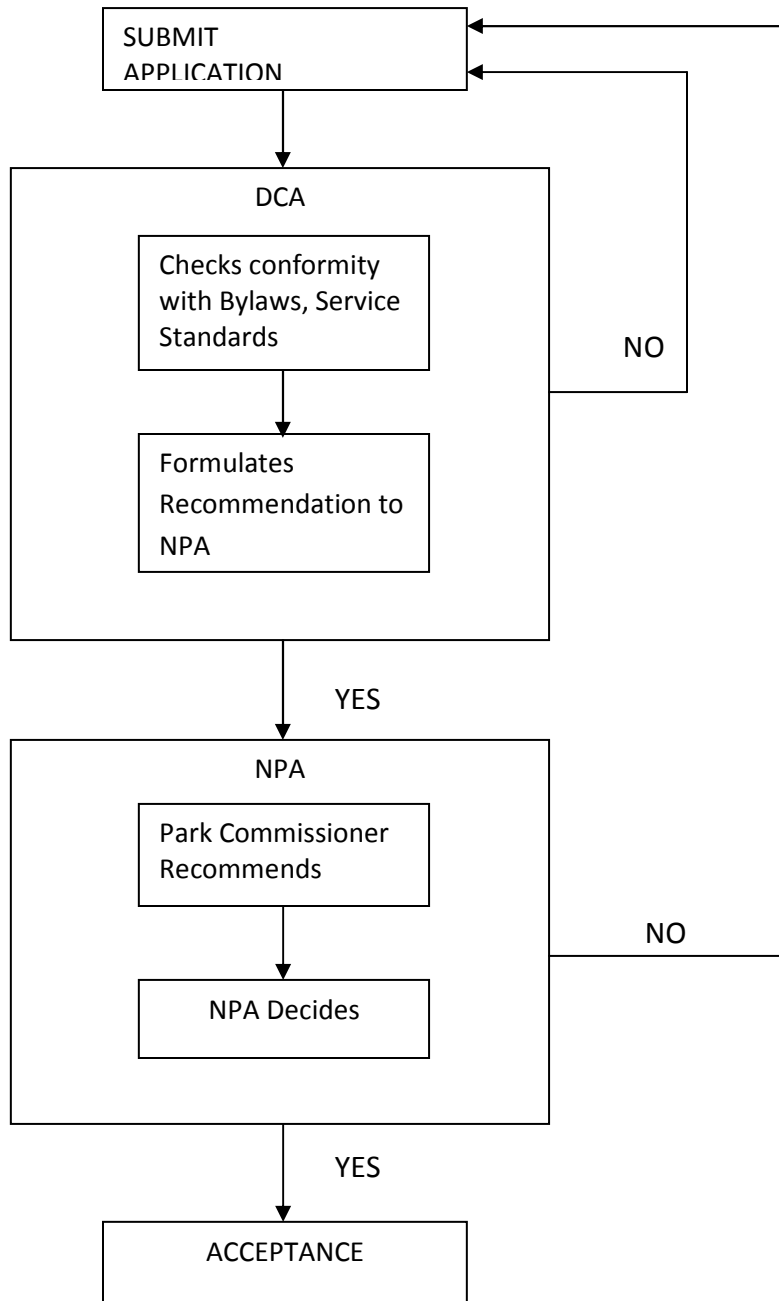


EXHIBIT 2: DEVELOPMENT CONTROL PROCESS – APPLICATIONS



- The DCA forms a recommendation on the development application and submits the recommendation to the NPA.
- The NPA considers the recommendation of the DCA and the Parks Commissioner on whether the application conforms to the intent of the Park plan.
- The NPA approves or rejects the application.

b. Plan Amendments

- A proposed plan amendment may be initiated by the GOAB, the NPA, the Parks Commissioner, and any business and/or citizen affected by the Park plan.
- The Parks Commissioner consults affected groups and citizens.
- The Parks Commissioner formulates a recommendation to the NPA.
- The NPA considers the recommendation of the Parks Commissioner and, if the NPA forms intent to recommend the proposed amendment, the NPA advertises the proposed amendment.
- The NPA holds a public meeting if a petition requesting a public meeting is submitted by more than 20 citizens. The NPA makes a recommendation to the Minister of Economic Development and Tourism along with a record of public meeting, comments and any written submission on the proposed amendment. The Minister submits the report of the NPA to Cabinet.
- Cabinet approves or rejects the proposed amendment.

PART II – NELSON’S DOCKYARD NATIONAL PARK DEVELOPMENT PLAN

This development plan describes the way in which the Nelson’s Dockyard National Park is to be developed and managed consistent with the intent of the National Parks Act. It is organized into seven sections: Objectives for the Park, The Park Boundary, Economic Development and Tourism, The future Land Use Framework, The Park Interpretation Plan, Plan Management and Investment Program.

The core of this plan is the future land use framework which describes the intent of the National Park Authority for the ongoing use and development of lands within the National Park. The land framework is described in map and text from sets out policies to guide the National Park Authority in making decisions on applications for development.

The Park interpretation plan forms and integral part of the overall National Park Plan and describes how the land uses and features of the park are intended to be linked through a circulation system of roads, trails and waterways. The facilities described in the Park interpretation plan are intended to be the responsibility of the National Park Authority for construction and management.

This plan is an approved statement of objectives and policies for future development of the National Park. It will guide the National Park Authority in carrying out its mandate to develop and manage the national Park. The last section of this part contains policies concerning the management of the plan which the National Park Authority will use in it day-to-day decision-making. The intent of these policies is not only to ensure a fair and equitable Park development process but also to ensure that the plan is maintained as vital management tool for guiding Park development.

References

“This plan” – refers to Volume I – Park Development Plan. Any reference to the Park Management Plan is made as “Volume II – Park Management Plan”.

“Part III” – refers to Part III of Volume I - Park Development Plan.

1.0 OBJECTIVES

The objectives of the NPA for future development within the Park are:

- 1.1 To protect the important natural and historical features of the Park and to manage these features so as to encourage enjoyment and appreciation by residents and park visitors.
- 1.2 To create a unique, world-class tourism destination area based on the Park's natural scenic beauty, heritage resources and a healthy yachting industry.
- 1.3 To create a sound environment for economic development within the Park.
- 1.4 To maintain and improve the quality of existing residential environments within the Park.
- 1.5 To provide services and facilities to communities and business within the Park consistent with the objectives of this plan.

2.0 THE PARK BOUNDARY

- 2.1 For the purposes of this plan, the boundary of the Nelson's Dockyard National Park shall be as shown on Map 2.1, described generally as that area of land along the coast line from Carlisle Bay to Mamora Bay which includes the watershed and visual areas along that coast line, significant historic and natural sites in the vicinity of Nelson's Dockyard, and a wilderness area east of Falmouth Harbour.
- 2.2 Upon approval of this plan under the provisions on subsection 10 (5) of the Act, the NPA shall cause a plan of survey of the Park boundary to be prepared and incorporated as an amendment to this plan within three years of the date of approval.
- 2.3 In considering any requests for amendment to the Park boundary, the NPA shall regard to the following:
 - a. The opportunities presented by the proposed amendment for enhancing the capacity of the NPA to achieve the Park objectives;

- b. The significance of the natural or historic features of the area to Antigua and the potential for, and feasibility of, development of the area such that an improved economic contribution to Antigua's economy can be realized;
- c. The practicality of linking the area to be incorporated (if it is a proposed addition to the National Park area) to services and facilities with the present boundary;
- d. The long term management and development costs associated with the proposed boundary amendment; and
- e. The alternatives available to the National Park Authority and/or to other agencies of the Government of Antigua and Barbuda for managing and developing the area within the proposed boundary amendment.

2.4 In considering any proposed boundary amendment, the NPA shall hold a public waiting to hear submissions and shall incorporate these submissions and a written record of the public meeting comments in their report to the Minister of Economic Development and Tourism.

3.0 ECONOMIC DEVELOPMENT AND TOURISM

3.1 The NPA shall encourage development in the Park consistent with this plan, that:

- a. Complements and enhances the English Harbour reputation as a centre for yachting in the Caribbean;
- b. Protects and develops the area's rich heritage resources for the enjoyment of Antiguans and visitors;
- c. Is sensitive to and complements the natural resources of the Park.

3.2 The NPA shall foster and maintain a fair and consistent business climate to encourage future investment, both local and foreign.

3.3 The NPA shall provide opportunities for local Antiguan as at all level to participate in development and business opportunities within the Park. This means to achieve this shall be as set out in Volume II – Park Management Plan.

3.4 The GOA shall seek ways to strengthen and develop new linkages between the area's tourism activities and other sectors of Antigua's economy.

3.4.1 In carrying out the intent of Policy 3.4.1, particular emphasis shall be placed on:

- a. Agriculture – to produce and market local Antiguan food products;
- b. Transportation/tourism services – to afford maximum enjoyment and understanding of the area's history.
- c. Construction – to offer modern, efficient construction services;
- d. Handcrafts – to promote the culture and heritage of Antigua.

3.5 The GOA shall continue to encourage and provide opportunities for the development of a healthy, viable yacht service industry in English and Falmouth Harbours.

3.5.1 The GOA shall adopt management policies, fee and permit structures, and provide Dockyard and related yachting services such that:

- a. English Harbour is fully competitive with other yachting centres in the Caribbean;
- b. English Harbour is perceived as welcoming, vibrant, interesting and safe port of call providing first class services to the yachting community.

3.6 The GOA shall promote the Park's heritage, scenic and yachting attractions in encouraging land based tourists to visit English Harbour.

3.6.1 Emphasis will be placed on developments and services which offer opportunities for, and assist tourists in, exploring and appreciating the Parks heritage sites, scenic beauty and yachting environment in comfortable and interesting ways.

3.6.2 The NPA shall create and maintain additional opportunities for specific tourists market segments during all seasons and, in doing so, shall have regard for the following:

- a. Historic tours;
- b. Archeological tours and digs;
- c. Field research programs on the Parks history, archeology and environment/ecology;
- d. Special events, visiting theatre companies, etc.

3.7 The NPA shall develop programs to encourage Antigua and Barbuda residents of all ages to use and enjoy the Park's resources. Particular emphasis will be placed on educational field trips for school children and the means to achieve this shall be developed through consultation with the Minister of Education.

4.0 FUTURE LAND AND FRAMEWORK

4.1 The NPA shall encourage a land use pattern, consistent with the objectives of this plan that maximizes the quality of life for residents and business within the National Park and maximizes the attraction of the Park to world tourism markets.

4.1.1 The NPA shall be guided by the land use policies of this plan in making decisions on applications for development and redevelopment, designing and implementing Park development programs, and improving infrastructure and community services in the Park.

4.2 PARK THEME AREAS

- 4.2.1 For the purposes of this plan, the Park shall be considered as comprising 4 theme areas, shown on Map 4.1.
- 4.2.2 The principle of consistency with the theme areas concept shall be used in detailing the land use framework for the Park, design of the Park interpretation plan, and in considering any proposed amendments to or development applications under, this plan.
- 4.2.3 Further to 4.2.2 above, the characteristics of each theme area and their respective land use principles are shown in Schedule 4.1.

4.3 FUTURE LAND USE PLAN

- 4.3.1 Map 4.2 shall be considered as the expression of intent of the NPA for a future land use pattern based on the policies outlined in this plan.
 - 4.3.1.1 Uses permitted within each land use designated shall be as shown on Schedule 4.2

Schedule 4.1: Park Theme Areas – Characteristics and Land use Principles				
Item	<u>Dockyard/English Harbour</u>	<u>Falmouth/Cobb's Cross</u>	<u>Dow Hill</u>	<u>Wilderness Area</u>
Area Theme	<ul style="list-style-type: none"> National Park focus point Mixed heritage and tourism/commercial precinct World-class yachting harbour Primary water access to park 	<ul style="list-style-type: none"> Primary land entrance to National Park Mixed residential and commercial development 	<ul style="list-style-type: none"> Park entrance Selected ecological and historic/archeological sites Opportunities for agriculture and long-term residential development 	<ul style="list-style-type: none"> Area of spectacular natural scenic beauty Preservation, nature interpretation and wilderness recreation activities
Land Use Principles	<ul style="list-style-type: none"> Heritage precinct with strong commercial reuse emphasis Emphasis Dockyard commercial uses compatible with heritage/yachting theme Provide for concentrated tourist commercial areas west of Tank Bay Day and evening activities Designated yacht working areas complementing heritage theme Preserve hillside view Architectural design & siting guidelines for new structures Improve aesthetic appearance of park access route 	<ul style="list-style-type: none"> Protect hillside views, heritage sites and environmentally sensitive areas Maintain public access to waterfront Protect agricultural lands Improve aesthetic appearance of park access route consolidate residential areas Improve community services and facilities Encourage selective tourism development and yacht service facilities Fishery linkage potential 	<ul style="list-style-type: none"> Conserve hillside vistas from and to Blockhouse Hill Protect Indian Creek ecological/heritage features Define areas for residential and agricultural preserve Designate areas for interim agricultural use Provide public access to Mamora Bay and Reef beaches Encourage recreation use in vicinity of Mamora Bay Improve Park access 	<ul style="list-style-type: none"> Preserve and protect important ecological zones (e.g., wildlife habitat, breeding and migrating resting areas) Protect and enhance existing agriculture Provide for a variety of outdoor recreation experiences and interpretative programs including <ul style="list-style-type: none"> Hiking and underwater trails Boat tours Beach use Scenic look offs Picnic sites Limit vehicular access route throughout area

PART II
NELSON'S DOCKYARD
NATIONAL PARK
DEVELOPMENT PLAN

SCHEDULE 4.2 LAND USE DESIGNATIONS, INTENT, AND PERMITTED USES

<u>LAND USE DESIGNATION</u>	<u>INTENT</u>	<u>PERMITTED USES</u>
<p>1. <u>Natural/ Historic Resources</u></p> <p>Agriculture</p> <p>Conservation</p> <p>Wilderness Conservation</p> <p>Habitat</p> <p>Heritage</p> <p>Recreation</p>	<p>Protect lands suitable for agricultural use and encourage agriculture</p> <p>Conserve scenic hillside and associated natural vegetation; Protect nature views; Conserve mangroves</p> <p>Provides undeveloped natural wilderness area for nature interpretation hiking activities</p> <p>Protect natural habitat areas for birds, mammals and fish</p> <p>Maintain, reconstruct, document historic resources for public enjoyment</p> <p>Provide opportunities for public recreation within park, conserve beaches</p>	<p>Include livestock grazing, vegetable gardens, fruit groves, and other agricultural uses</p> <p>Limited public infrastructure (trails, roads), other uses as may be permitted by special area policy 4.3.3</p> <p>Limited public infrastructure (trails, scenic look offs, agricultural uses) where such uses do not diminish the intent of the wilderness conservation areas</p> <p>Limited public natural interpretation activities, habitat documentation</p> <p>Public infrastructure interpretation activities, commercial concessions and uses compatible with the historic theme and enhancing park objectives for tourism attraction</p> <p>Recreation uses</p>

SCHEDULE 4.2 CONT'D

<u>2. LAND USE DESIGNATION</u>	<u>INTENT</u>	<u>PERMITTED USES</u>
2. <u>Economic Development</u>		
Commercial	Provide opportunities for commercial development to serve Antiguans, Park residents and visitors; encourage resource related commercial uses (fishing)	Retail, food related, restaurant, entertainment, hotel accommodation, fishing industry, farmers market, yacht services, personal and business services, handcrafts, institutional
Community	Encourage, maintain community environment with full range of community services	Residential, local convenience stores, home occupations, schools, churches, recreational facilities
Residential	Encourage the development of residential areas, provide housing opportunities	Residential, local convenience stores, home occupations, schools, churches, recreational facilities
Rural Residential	Encourage residential with home related agricultural uses	Residential buildings or lots not less than 20, 000 sq .ft., ancillary agricultural access
Tourism	Encourage tourism related development	Hotels, restaurants, entertainment, ancillary commercial uses including water sports, bars, etc.
Tourism/ Residential	Encourage cottage accommodation compatible with residential development	Residential, hotel cottage accommodation recreational facilities
Yacht Working Areas	Designate areas specifically for yacht related services and facilities	Yacht related services and facilities, ancillary commercial uses
Dockyard Heritage/ Commercial	Encourage development of world class, high quality heritage precinct	See policy set 4.6

4.3.2 It shall be the policy of the NPA to encourage development consistent with this future land use pattern.

4.3.2.1.1 No applications for development in the Park shall be approved by the NPA for uses inconsistent with the future land use pattern shown in Map 4.2 except as provided for in the policies of this plan.

4.3.2.1.2 In considering all applications for development and its own development projects, the NPA shall be guided by the Park Theme Area policies and other policies of this plan as appropriate.

4.3.2.1.3 The NPA may set such terms and conditions for any development approval under this plan as are necessary to carry out the intent of this plan.

4.3.3 Notwithstanding policy 4.3.2.1, the NPA may consider applications for development not permitted by the provisions of Schedule 4.2 for areas designated “conservation” in accordance with Policy set 4.3.3.

4.3.3.1 In considering such applications the NPA shall have regard for the following:

- a. Whether the proposed use will diminish or enhance overall Park objectives, and is consistent with the theme area characteristics and the theme area land use principles; and
- b. The environment and aesthetic impact of the proposed use of land.

4.3.3.2 Any approval by the NPA under the provisions of Policy 4.3.3.1 shall specify the conditions for development necessary to carry out the intent of this plan.

4.3.4 For an application for development which is located adjacent to or on the boundary of, one or more land use designations as shown 4.2, the NPA may consider the proposed development under either land use designation provided that:

- a. The proposed development is consistent with the intent of the Park objectives, and the theme area characteristics and land use principles; and
- b. The proposed development will not diminish the intent of the plan to protect the area's natural/or historic features;
- c. Conditions are placed on the proposed development sufficient to ensure that the intent of the objectives and policies of this plan are met.

4.3.5 In renewing applications for development in the Park, the NPA shall determine if Park Interpretation facility or right of way as set out in Map 5.1 of this plan is proposed for the applicant's property. Where such is the case, the NPA shall enter negotiations with the applicant to secure an agreement to provide public access as appropriate.

4.3.6 For any development approved under the provisions of this Plan on Crown land, the NPA shall, as part of the approval, require a lease agreement which specifies:

1. The terms and conditions necessary to carry out the intent of this plan.

2. Terms and conditions necessary for consistency with the Park Management policies of Volume II – Park Management Plan.

4.3.7 The NPA shall, in consultation with the DCA, CHAPA and other Government of Antigua agencies, encourage the provision of residential development opportunities for local residents of the Park area. In so doing the NPA shall emphasize areas designated Community, Residential, or Rural Residential in the Falmouth/Cobbs Cross area.

4.3.7.1 Pursuant to Policy 4.3.7, the NPA shall encourage the provision of CHAPA subdivisions on Crown Lands in Patterson’s, Falmouth, Cobbs Cross and English Harbour.

The NPA shall seek to identify 80 to 100 acres for such subdivisions.

4.4 NATURAL AND HISTORIC FEATURES

4.4.1 The NPA shall protect the natural and historic features of the Park from adverse effects through the policies of this plan and through conditional development approvals as required.

4.4.1.1 The conditions for development that the NPA may consider include, but are not limited to, drainage and run-offs, natural vegetation removal, access, parking, building height and site plan layout.

4.4.2 The NPA shall develop a comprehensive catalogue of the historic and archeological features of the park. The catalogue should describe the feature, its historical importance, location and a priority rating of its relative importance to Antigua and the National Park.

- 4.4.2.1 NPA shall undertake a review and updating of the historic features catalogue on an annual basis as described in Part III of this plan.
- 4.4.3 For development applications on or adjacent to natural and historic features designated on Map 4.2 of this plan, or as may be described in the historic features catalogue as priority 1, the NPA shall required, as part of the application for development, the delineation of the feature, a description of the effect of the proposed development, and the mitigation strategy to minimize negation impacts.
- 4.4.4 For features which are rated as priorities 2 or below in the historic catalogue, the NPA may consider as a condition of development an adequate time period for documentation, not to exceed 90 days, except as may be otherwise agreed to by the NPA and the applicant.
- 4.4.5 The NPA may consider applications for development on the Shirley Heights and Monk's Hill heritage sites and in so doing shall have regard for the following:
- a. Shirley Heights – provision for a hotel use provided that the use is located within a historic structure restored to standards acceptable to the NPA and provided that all outdoor hotel amenities are not visible from public circulation areas and do not detract from the historic nature of the site.

- b. Blockhouse Hill – provision for a restaurant concession not to exceed 1000 square feet in gross size and located in a historic structure restored to standards acceptable to the NPA.
- c. Monk’s Hill – provision for a restaurant and related gift store/handcraft concession provided that the use is located in a historic structure restored to standards acceptable to the NPA.

4.5 DEVELOPMENT DESIGN GUIDELINES

- 4.5.1 The NPA shall not permit structures exceeding two stories anywhere in the Park except where such buildings do not diminish the intent of the Park objectives.
- 4.5.2 In considering applications for development in the Dockyard/English Harbour theme area, the NPA use as a guideline for reviewing building plans, the following:
 - a. Roof design compatible with traditional historic building design of the area;
 - b. Materials which evoke historic theme of the area.
- 4.5.3 The NPA shall develop detailed design guidelines for development, including its own, throughout the Park as part of restoration standards study and park interpretation program called for in the Park Investment Program in Part II of this plan.

4.6 NELSON'S DOCKYARD HERITAGE PRECINCT

4.6.1 The NPA shall consider Map 4.3 as the expression of intent for future land use in Nelson's Dockyard Heritage Precinct.

4.6.2 In Nelson's Dockyard Heritage Precinct the NPA shall enter into leases, manage its own development, and consider development applications in a manner consistent with Policy Set 4.6 of this plan.

4.6.3 The NPA shall encourage and maintain a mix of uses in the Dockyard proper, from the Dockyard market building south to, and including, Fort Berkeley that includes:

- Hotel uses
- Restaurants and bars
- High quality retail outlets, with an emphasis on retail uses consistent with the Dockyard's heritage character
- Private yacht related services restricted to retail and service outlets occupying less than 500 gross square foot
- Community craft facilities
- Provision for park interpretation activities
- Harbour management uses

SCHEDULE 4.3: NELSON'S DOCKYARD AREA USE GUIDELINES			
Building	Current Uses	Proposed Uses	Alternative Spaces for Uses Proposed to be Reallocated
Naval Officer's	Museum Residence/Office	Park Offices Harbourmaster reception	Museum – Proposed museum/Interpretation Centre Residence – Other Accommodation
Bakery	Bakery	Bakery	-
Shipwright House & Support Shed	Harbour & Dockyard Administration	Retail Restoration	Navel Officers (Park Offices)
Guard House	Residence	Retail Park Interpretation Operations & Maintenance	Residence – Other Accommodation
Mast house/Joiner's Loft (adjacent to Admirals Inn)	Storage Residence	Retail	Residence (upon lease expiry or negotiation) – other accommodation
Engineer's Office	Admiral's Inn	No Change	-
Mast house/Joiner's Loft (adjacent to Canvas & Cordage)	Storage Vendors	Retail/Vendors Restaurant/Bar Yacht Business	-
Copper & Lumber	Hotel/Restaurant Sail Loft Museum Storage	Hotel/Restaurant Retail Convention Facilities	Sail Loft – Production Facilities to Alternative Location; Retail Outlet to alternative location Museum – to Museum/Interpretation Facility
Canvas & Cordage Store	Yacht Lockers Chandlery	Hotel/Park/Interpretation/ Community Space/Retail	Tank Bay and/or Falmouth Waterfront yacht services area
Naval Officer's Quarters	Restaurant Retail Library Crafts Yachts Businesses	Restaurant/Bar Retail Crafts (retail) Yacht Business	Production facilities for crafts to local enterprises facility
Galley	Restaurant Retail	No Change	-
Pay Office	Yacht Business Retail	No Change	-
Capstan House	Undeveloped	No Change (review in three years)	-

*Retail uses to emphasize uses appropriate to Dockyard heritage character including craft demonstration that have retail potential. Large scale production activities (e.g. Woodworking) should be moved to alternative locations.

4.6.3.1 The NPA shall use as a guideline in the approving the use of space, including its own, the mix of uses set out in Schedule 4.3.

4.6.3.2 In the following Schedule 4.3, the NPA shall have regard for existing leases, its own schedule for development of a museum/interpretation centre, a local enterprise facility, and yacht service facilities as set out in policies 4.6.4 to 4.6.6 inclusive, and the provisions of Volume II – Park Management Plan.

4.6.4 The NPA shall seek funds for the construction of a local enterprise facility to accommodate local enterprise production and business start-up activities. In so doing the NPA shall follow the provisions of Volume II – the Park Management Plan.

4.6.4.1 The NPA shall consider the area between English Harbour Town and Cobb's Cross for location of the local enterprise facility.

4.6.5 The NPA shall consider two alternative sites for the location of a museum/interpretation centre for the park as follows:

a. A site adjacent or integrated with the Market building on the current parking lot;
and

b. A site adjacent to Falmouth waterfront on the west side of the access road.

4.6.5.1 The NPA shall make final site selection based on a detailed design study reviewing the advantages and disadvantages of each site taking into consideration access, parking, and circulation capacities and layout, and location relative to the Park transportation system.

4.6.6 The NPA shall, at an appropriate time and based on a market feasibility study, seek to develop the Falmouth waterfront including:

- a. Development for marine infrastructure including hard edging, mooring facilities and shore power and water on the Falmouth waterfront; and
- b. Establishing development conditions and requesting development proposals for the provision of integrated yacht business services.

4.6.6.1 The request for development proposal shall take into account the size and nature of the market for yacht services.

4.6.7 The NPA shall encourage the development of yacht service facilities in the Tank Bay area. In reviewing applications for development in this area the NPOA shall have regard for:

- a. Provision for integrated site development;
- b. Provision for day worker space and yachting lockers;
- c. Building(s) design compatible with the historic character of the area;
- d. Limited public access along the waterfront to facilitate viewing of yacht working activity;
- e. Conservation of the mangroves on Tank Bay; and
- f. Reconstruction of Stanley's Tavern

4.6.7.1 In the areas designated yacht services on Map 4.3, the NPA may consider restaurant/bar uses provided such uses are accessory to the primary use.

4.6.8 The NPA, in setting the development conditions and/or renegotiating leases related to the yacht working areas, shall ensure that the objectives of Antiquization are advanced.

4.6.9 The NPA shall develop circulation pattern for the Nelson's Dockyard Heritage Precinct based on the following:

- a. Restriction of vehicular access to the Dockyard to service vehicles during specified hours;
- b. A pedestrian circulation system that minimizes waterfront access;
- c. Access to the water-based park transportation system;
- d. A parking area sufficient to accommodate tour-bus turning movements and with easy pedestrian access to the museum/interpretation centre.

4.6.9.1 The NPA shall consult with affected business prior to adopting a circulation pattern for Nelson's Dockyard Heritage Precinct.

4.7 LAND OWNERSHIP

4.7.1 Where the provisions of this plan unduly restrict to use of private property, as determined by the NPA, the NPA shall enter into negotiations with the property owner

to secure a mechanism for development control which is acceptable to both the NPA and the property owner. In so doing, the NPA may consider the following techniques:

- a. The swapping of Crown land elsewhere in the Park or, subject to the approval of the Government of Antigua, in Barbuda, elsewhere in Antigua for the land in question;
- b. The determination of a reasonable use of the property which does not diminish the intent of the Park objectives; and
- c. Acquisition of the property.

4.7.1.1 Undue restriction is defined for the purpose of this plan as areas designated Habitat, Conservation or Recreation where slopes are less than 20% and where agricultural uses are not feasible by reason of soil capability.

5.0 PARK INTERPRETATION PLAN

5.1 In reviewing applications for development and in designing its own program for Park development, the NPA shall use as a guideline the Park interpretation plan shown in Map 5.1.

5.2 To implement the Park interpretation plan the NPA shall, as appropriate:

- a. Incorporate provision for implementation through its annual capital and operating budgets;
- b. Seek outside investment where possible to fund the construction of the Park interpretation facilities;

- c. Negotiate with development applicants as appropriate to secure access where necessary in accordance with policy 4.3.5 of this plan.

5.3 It shall be the policy of the NPA not to permit the construction of any roadways other than for park maintenance and security purposes in the wilderness area as illustrated on Map 5.1

5.4 The NPA shall use the Park interpretation plan as the basis for designing a circulation pattern including roads, bus systems, walking trails, and boat tours throughout the Park.

5.5 Pursuant to 5.3 above, the NPA shall design and implement a park signage program within the Park and along major access routes to the park from St. John's and the Antigua Airport.

5.6 For areas designated Habitat on the Future Land Use Map of this plan, and for other significant natural features as may identified from time to time, the NPA shall seek assistance to research and document the nature and significance of these features. This means to do this shall be as set out in Part III of this plan.

5.7 The NPA shall develop and implement an events component as part of its Park Interpretation plan. This program should involve both day-time and evening activities and include but not to be limited to:

- A Dockyard theatrical program for Antigua theatre groups and visiting overseas theatre companies;
- Music programs
- Historical revues/plays;
- Heritage "days" to mark particular historical events in the Dockyard and Antigua's history;
- Yachting "days" to welcome new yachts to English/Falmouth Harbours;
- An annual National Park festival.

5.7.1 For heritage and yachting “days” and an annual festival event, the NPA shall seek the co-operation and participation of the business community in advertising, use of period costumes for staff, and provision of entertainment.

6.0 PLAN MANAGEMENT

6.1 Any application for development for uses other than Residential or Agricultural within the Park should be accompanied by a statement of how the development will contribute to achieving the Park’s objectives and how it is consistent with the theme area characteristics and land use principles.

6.1.1 Where an application is of a minor nature and/or where the application is consistent with the land use designated as shown in Map 4.2 of this plan, the Parks Commissioner in consultation with the DCA may waive this requirement.

6.2 The NPA shall require the Parks Commissioner to review and report annually on the provisions of this plan. Such reports shall include recommendations, if any, for possible amendments to this plan.

6.3 The NPA shall maintain an official record of amendments to this plan and shall from time to time publish up-to-date editions of this plan which incorporate these amendments and which include the date of approval by Cabinet.

6.4 To assist in exercising its functions under the provisions of the National Parks Act, and to ensure on-going plan management, the NPA shall design a consultation program above and beyond that required by the National Parks Act. This consultation program shall not form part of the officially approved plan but shall be maintained in Part III of this plan document. The consultation program shall include provisions for:

- a. A citizens advisory committee;
- b. Consideration of plan amendments;
- c. Consideration of major development applications;
- d. Liaison with the yachting industry;
- e. Liaison with the business community;
- f. Community consultation; and
- g. Consultation with national associations (for example, the Antigua Hotel Association) and national agencies as from time to time may be required for ongoing Park management.

6.4.1 Pursuant to Policy 6.4, the NPA shall initiate discussions with the community to establish a citizen's advisory committee. The mandate for such a committee should be to provide advice to the NPA on matters affecting the ongoing development and management of the Park including:

- Major development applications within the Park
- Project planning for park implementation projects, particularly for projects in the community.

The NPA should establish an orderly communications and meeting schedule with the citizen's advisory committee, implemented through the office of the Park's commissioner. The meeting schedule should be designed to minimize time delays in considering development applications.

7.0 INVESTMENT PROGRAM

7.1 The NPA shall implement its development program in accordance with the investment program as set out in Part II of this plan.

7.2 The investment program shall be updated annually and may be modified from time to time based on amendments to this plan, financial conditions and/or resource constraints.

PART III – PROGRAMS TO IMPLEMENT THE PLAN

INTRODUCTION

This Part III describes programs necessary for plan implementation which are intended to be discretionary programs of the National Park Authority. They may be amended from time to time by the NPA as plan implementation and further study dictates. As such, they are intended to guide the activities of the NPA and are not included in Part II of this development plan, which requires cabinet approval for amendment. Amendment of the programs in this Part III would require explicit approval by the NPA based on a recommendation by the Parks Commissioner.

Four program areas are described in this part:

- Investment program;
- Historic resources
- Park interpretation; and
- Consultation programs.

It is anticipated that these programs will be amended and or modified from time to time and new programs will be added as park development proceeds.

1.0 INVESTMENT PROGRAM

The National Park Plan described in Part II above will require a substantial investment program by the public sector to implement the concepts and facilities and services proposed. This is over and above anticipated private sector development in various areas on the National Park.

A preliminary, comprehensive investment program is described below. Upon final approval of Part II of this plan by GOA Cabinet, and subject to negotiations with potential financial participants, this investment program will be modified in detail as required. It will serve as a guide for the NPA in managing its own activities and in coordinating park development.

The investment program presented herein covers the first five years of park operation. Once this preliminary program is finalized, the NPA will prepare an annual five year capital budget as part of the financial information to be submitted to the Minister under the provisions of the National Parks Act.

PROJECT PURPOSE

The basic purpose of establishing and developing a Nelson's Dockyard National Park is to increase the economic contribution of English Harbour to the economy of Antigua. Through the creation of a National Park consistent with the objectives as set out in Part II of this plan, it is anticipated that there will be substantial economic and social benefits to Antiguan.

INVESTMENT PROGRAM

To meet the project purpose and to implement the Nelson's Dockyard National Park plan, a preliminary investment program has been prepared based on three project elements;

1. Increased tourism expenditures and value added to Antigua;
2. Development and operation of a National Park; and

3. Increased local enterprise and employment.

Exhibit 1.1 shows the activities consistent with each project element that are judged to be necessary to achieve the project purpose.

A summary of the estimated financial requirements during the first five years of operation by activity is shown in Exhibit 1.2. The program includes a combination of technical assistance for the parks management and operations, historic restoration, development of land and sea related facilities, park planning and operations, and project activities to encourage local enterprise development and increased local employment. The total five year investment package is estimated at \$10 million Canadian.

Based on the Park Management Plan (Volume II), and specifically policies related to the sources and applications of funds, it is expected that the financial participants in the investment program would include:

1. Aid agencies – For technical assistance and training, non-revenue generating public infrastructure;
2. Financial institutions (e.g. Development banks) – For financing of revenue generating public infrastructure;
3. Private donors – For specific projects related to historic restoration and natural environment documentation.
4. The NPA – For park operations and management, minor capital works, and cost-sharing on park interpretation and related facilities

Upon approval of the parks plan the investment program will be detailed and negotiations with financial participants would be finalized.

PART III
PROGRAMS TO IMPLEMENT
THE PLAN

EXHIBIT 1.1 PROJECT ACTIVITIES		
Elements	Activity	Tasks
INCREASE TOURISM EXPENDITURE AND VALUE ADDED	Marketing Program	Marketing Plan Visiting Survey Advertising
	Interpretation Program	Program Design Overseas Training Signage Construction Ecology Study
DEVELOPMENT AND OPERATE NATIONAL PARK	Restoration	Restoration Design Guidelines Overseas Training Historic Facility Restoration Sugar Mill Restoration
	Facilities Development – Land	Dockyard Roof Repair Dock Electrical Upgrade Dock Lighting Dock Sewer Upgrade Dock Landscaping/Parking Museum/Interpretation Centre Hiking Trails Jetties Look offs New Roads Road Improvements Park Electrical Upgrade Parking Areas Garbage Collection Recreation Area Meeting/Elderly Care Day Care Centre
	Facilities Development – Sea-Related	Dockyard Wharf Repair Shore Power/Water Shore Hard Edging Fire Protection System Yacht Moorings Stern-to Mooring Telephone/Telex Public Facilities/Showers Fal. Float. Dock/Finger Pier Coastal Reef Markers Harbour Competitiveness Study
	Park Planning and Operations	Technical Assistance (Plan Adoption, Management, Transitions) Investor Program Design Equipment (NPA/DCA) NPA Parks Tour Boundary Survey Counterpart Parks Commissioner Taxi-Industry Study
INCREASE LOCAL ENTERPRISES AND EMPLOYMENT	Local Enterprises Facility	Facility Construction
	Agriculture/Fishing Linkages	Linkage Feasibility/Design Fishing Wharf
	Business Concession Opportunities	Shuttle Bus Harbour Ferries Technical Assistance

EXHIBIT 1.2: PRELIMINARY INVESTMENT PROGRAM BY PARTICIPANT (CDN \$000,00)												
CIDA – ANTIGUA HARBOUR DEVELOPMENT COSTS BY EXPENSE TYPE AND FINANCING AGENCY – FINANCIAL BORDER PRICES										The DPA Group		
			DISTRIBUTED BY EXPENSE TYPE (EXCL. PRIVATE FINANCING)					-----FINANCED BY -----				
			TOTAL	EQUIPMENT	SERVICES	TRAINING	MANAGE	CONSTRCTN	EXT DON	EXT LEND	PR. DON.	NPA/OTHER
1 1	1	Marketing Program	.314	.	.266	.048	.	.	.048	.	.	.266
1 1	2	Interpretation Programme	.278	.	.	.258	.	.020	.178	.	.100	.
1 1		INCREASE TOURISM EXPENDITURE AND VALUE ADDED	.592	.	.266	.306	.	.020	.266	.	.100	.266
1 2	1	Restoration	.938	.	.	.138	.	.800	.438	.060	.380	.060
1 2	2	Facilities Development-Land	5.463	.	.	.	.150	5.313	3.133	.815	.294	1.221
1 2	3	Facilities Development-Sea Related	3.149	.120	.	.025	.	3.004	.188	2.865	.	.096
1 2	4	Park planning and Operations	2.145	.045	1.470	.310	.320	.	.655	.	.	1.490
1 2		DEVELOP AND OPERATED NATIONAL PARK	11.694	.165	1.470	.473	.470	9.116	4.414	3.740	.674	2.867
1 3	1	Local Enterprise Facility	.969	.	.	.169	.200	.600	.469	.500	.	.
1 3	2	Agricultural and Fishery Linkages	.070	.	.	.040	.	.030	.040	.030	.	.
1 3	3	Business Concession Opportunities	.122	.090	.	.032	.	.	.032	.090	.	.
1 3		INCREASE LOCAL ENTERPRISE AND EMPLOYMENT	1.161	.090	.	.241	.200	.630	.541	.620	.	.
1		INCREASE ECONOMIC CONTRIBUTION OF ENGLISH HARBOUR TO ANTIGUA	13.447	.255	1.736	1.020	.670	9.766	5.181	4.360	.774	3.133
		CONTINGENCY	.	.	.	.	.	.	.	.	.	.
		INFLATION	13.447	.	.	.	.	.	5.181	4.360	.744	3.133
		TOTAL PROJECT										
		TOTAL PROGRAMME EXCL. CONTING. & INFLATION	13.447	.255	1.736	1.020	.670	9.766	5.181	4.360	.744	3.133
		TOTAL CONTINGENCY	.	.	.	.	.	.	.	.	.	.
		TOTAL INFLATION	.	.	.	.	.	.	.	.	.	.
		TOTAL PROGRAMME INCL. CONTING. & INFLATION	13.447	.	.	.	.	.	5.181	4.360	.744	3.133

2.0 HISTORIC RESOURCES PROGRAM

The Nelson's Dockyard National Park is rich in historic and archeological features. In Part II of this plan, policies are set out to protect the most important features and to research and to document these resources call for the preparation of the catalogue of the historic and archeological features of the park (policy 4.4.2). The catalogue would provide the basis for guiding the NPA's own activities in park restoration, development and interpretation program planning as well as reference for checking against development applications which may affect these resources.

Historic and Archeological Features Catalogue

Mr. Desmond Nicholson, in association with the Antigua Historic Sites Commission, has prepared an inventory of historic and archeological sites in the park. This inventory should be used by the NPA as the starting point for preparation of a comprehensive catalogue. The NPA should have a map prepared to locate each of the features, reference to a catalogue numbering system.

In preparing the catalogue, the NPA should consult with Mr. Nicholson and Historic Sites Commission and should review the priority rating assigned to each feature.

Prior to finalizing the catalogue, the NPA should use the inventory presented herein as the basis for reviewing applications against the provisions of Part II, Policy Set 4.4, of this plan.

3.0 PARK INTERPRETATION PROGRAM

The policies of Part II of this plan, together with the preliminary investment program, define a comprehensive approach to designating a park interpretation program and implementing interpretation facilities and services.

While there is sufficient information to get the interpretation program underway and fully operational, the natural features of the Park are not nearly as well documented as the historic and archeological features. Therefore the NPA should seek to research and document these features as soon as possible and incorporate the results into the park interpretation program as they become available.

A partial list of the natural features to be researched and documented includes:

1. Indian Creek
2. Mangrove Vegetation throughout the National Park
3. The sea turtle breeding grounds at Rendezvous Bay
4. The reef areas along the national park coast line
5. Flora and fauna of the National Park
6. Bat Cave

To meet the requirements of this program, the NPA should seek the assistance of research institutions, universities, conservation associations and concerned individuals. A strategy to implement this program should be developed and reviewed with knowledgeable and interested citizens within the National Park area and Antigua.

4.0 CONSULTATION PROGRAM

The National Parks Act includes mandatory provisions for public consultation related to plan adoption and plan amendments. These are summarized in Part I of this plan. It is important for the successful operation of the Park that the NPA programs and activities receive the widest possible public support and that the NPA, in considering programs, plan amendments, and other initiatives, seek the ideas and comments of businesses and residence with the National Park and effected government agencies and associations outside the National Park. To achieve this number of consultation program principles which the NPA will follow are outlined below in addition to establishing a citizen's advisory committee as set out in Part II, Policy 6.4.1.

1. Consideration of Plan Amendments and Major Development Applications.

There will always be circumstances where amendments to the plan are necessary to further the objectives the objectives of the National Park. These may be both administrative and policy in nature. Although administrative plan amendment proposals are not likely to directly impact park residents and businesses, the NPA should consider holding public meetings to receive responses on all proposed plan amendments where the NPA judges that it is in the best interest of ongoing park development and management. In particular, where plan amendments are proposed of a policy nature (for example, amendments to the future land use map, park interpretation plan, Dockyard historic precinct plan, etc.) the NPA should consider as a matter of course the holding of public meeting prior to submitting its recommendations on the proposed amendment to the Minister.

In the case of major development applications which could potentially affect adjacent property owners or park objectives in general, the NPA should consider holding a public meeting to invite comments on the application.

MANAGEMENT PLAN

The Antigua Naval Dockyard and its Buffer Zone; the Nelson's Dockyard National Park.

1.0 PURPOSE OF THE PLAN

This Management and conservation plan discusses the significance of the Antigua Naval Dockyard (also known on Antigua as “the Nelson’s Dockyard”), its historical structures and related archaeological sites in a national and international context and provides guidance and a framework for the on-going preservation and management of the site. In recognition of the site for its vital social, economic, heritage tourism values and its depth of history for Antigua Barbuda, the government, in 1984, declared the former British Naval Dockyard, its associated archaeological sites and fortifications, a National Park under the National Parks Act, 1984. It currently operates with guidance under the policies and mandates of the National Parks Development and Management Plans (1984, 2014, Appended). This plan makes adjustments to the current plan and further ensure that the Outstanding Universal Values and Authenticity of the site is incorporated into the continued management and protection of the site.

1.2 STATEMENT OF SIGNIFICANCE

The Antigua Naval Dockyard and Associated Archaeological Sites consists of a purpose built group of Georgian Naval structures, set within a walled enclosure, on a naturally occurring series of bays surrounded by highlands on which defensive fortifications were constructed. Built at a time when European nations were battling for supremacy of the seas in a bid to control the very lucrative sugar producing Islands of the Eastern Caribbean. Antigua’s location as a front line repair, careening and protected year round facility gave Britain’s navy a huge strategic advantage over its rivals at a pivotal point in world history. The continued use of the dockyard today by the charter yacht industry as a place of repair, provisioning and protection and of its workforce of highly skilled craftsmen, the descendants of British and enslaved, sailors and artisans make up a continuing cultural landscape.

1.3 STATEMENT OF INTEGRITY

The boundaries of the nominated site are primarily based on those of the original Naval Dockyard and the military complexes of Shirley Heights and Middle Ground strategically located on the hills surrounding the Dockyard. These military complexes were built entirely to protect this crucial naval facility. At Shirley Heights and Middle Ground the boundaries closely follow the “Kings Lines” which delineated the original site; the Dockyard itself is a walled compound; and the rest of the site primarily follows the coastline, diverging slightly to include the Ordnance structures, thus encapsulating all relevant areas for protecting our Outstanding Universal Value (OUV). All of the structures within the dockyard are in a good state of repair having been restored to varying degrees using authentic materials and following the original plans. Despite the

military complexes surrounding the dockyard being in various degrees of decay, the fact that there has been no modern construction within the area, allows these structures and their physical setting on top of the ridge and steep cliffs to retain and convey their story and has enormous potential for archaeological research; key to our understanding of past life-ways.

1.4 STATEMENT OF AUTHENTICITY

The Dockyard and its associated archaeological sites fulfill all the criteria for authenticity as laid out by UNESCO's Operational Guidelines. This historic dockyard and its buildings have a high degree of authenticity. They represent a surviving example of a Georgian period dockyard established by the British navy within the Eastern Caribbean during the 18th and 19th centuries, where the majority of original structures are still represented and are still in use. Much as the military complexes overlooking the dockyard are in various stages of decay, there are sufficient remains and large intact archaeological deposits to convey their story and therefore does not negatively affect the OUV.

1.5 WORLD HERITAGE

In 1982, Antigua and Barbuda ratified the UNESCO World Heritage Convention. This Convention recognizes sites of "Outstanding Universal Value" (OUV) to all humanity. The Antigua Naval Dockyard and its Associated Archaeological Sites set in an area of exceptional beauty qualified for listing on this prestigious international list. The Antigua Naval Dockyard, also known as the Nelson's Dockyard was listed on the UNESCO list of "Tentative" World Heritage Sites in 2012, under Criteria IV.

1.6 CRITERIA (IV): The Antigua naval dockyard and its related archaeological sites are an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates a significant stage in human history. The impressive assemblage of Georgian Period British naval structures, enclosed within a walled historic compound and the associated military complexes that surround it, were developed at a time when European powers were rapidly expanding their spheres of influence and thus constantly at war. The natural attributes of the deep waters of English harbour, surrounded by steep protective hills and a narrow entrance facilitated the development of a naval dockyard, which could be utilised year round, including the hurricane season. Collectively the Antigua Naval Dockyard and its Related Archaeological Sites today represent an outstanding example of a Georgian naval facility within a Caribbean context.

2.0 THE NATIONAL PARKS

2.1 Objectives of the National Parks

The Nelson's Dockyard National Park was created with a mandate to protect, manage and develop the historical and scenic southern coast of Antigua; an area with an exceptionally large number of historical and scenic landscapes. At its core is the former 18th century British Naval Dockyard, known to Antiguanas as the Nelson's Dockyard. The organization of government that manages the park is the National Parks Authority; a non-profit organization, the National Parks Authority (NPA) that is dedicated to the principles outlined below, with guidance from its policies and objectives set out in its Management and Development Plans.

2.2 PARKS MANAGEMENT PLAN

The National Parks Development and Management Plan was prepared under the provisions of sub-section 10(2) of the Antigua and Barbuda National Parks Act, 1984. Specifically the Act provides that:

“10 (2) A Parks plan shall:

- (a) identify the park and assess the present state of its development;
- (b) contain a statement of objectives and policies on matters relating to, but not limited to:
 - i. the development and use of all land in the Parks;
 - ii. maintenance and protection of natural resources and sensitive environmental areas;
 - iii. protection and conservation of heritage resources and archaeological sites (including buildings, structures and views);
 - iv. provision of infrastructure and transportation;
- (c) specify the management and development measures of a Park under section 20;

and shall be prepared within nine months of the establishment of the Park under section 20”.

In addition, the Objectives of the Initial and still valid Parks Management Plan are,

- To protect the important natural and historic features of the Park and to manage these features so as to encourage enjoyment and appreciation by residents and visitors.
- To create a unique, world class tourism destination area based on the Park's natural scenic beauty, heritage resources and healthy yachting industry.
- To create a sound environment for economic development within the Park.
- To maintain and improve the quality of existing residential environments within the Park.

- To provide services and facilities to communities and businesses within the Park consistent with the objectives of the plan.

2.3 The Parks Development and Management Plan addresses the entire 15.94 sq. mile (41.28 sq. km.) declared area, which includes the historical dockyard and related sites. The NPA will also be responsible for directing the implementation of policy and specifically for directing the development and management of all national parks, established under the National Parks Act, 1984, within the management policies approved by Cabinet. Thus the can develop administrative policies and implement policies and procedures, to carry out the intent of Cabinet policies.

The NPA will be the administrative body of the Antigua Naval Dockyard World Heritage Site, which is the historical core of the Nelson’s Dockyard National Park. Its policies and management will be in accordance to guidelines established by UNESCO World Heritage and the Government of Antigua and Barbuda that will ensure the protection of the Outstanding Universal Values of the site.

2.4 INVENTORY OF SITES

The Parks Heritage Department shall keep an inventory of all historical sites and structures. The list of known sites and structures within the WH boundaries are presented in Table 1. All historical sites and structures known within the boundaries of the National Park are presented in Table 2, appended.

3.0 MANAGEMENT

3.1 Management Structure

To achieve the objectives and goals, The National Parks Act, 1984 outlines the management structure required by government for the Parks. The Government/Cabinet will appoint a Minister with specific Responsibility for the Park and a Board of Directors or “Authority”. The Authority, or Cabinet appointed Board of Directors will provide guidance, policy and established regulations. The only permanent position on the Board is the Chief Town and Country Planner from the Development Control Authority (DCA). An appointed Chairman will lead the Board. The daily operations will be managed by a Commissioner assisted by a management team of specialists (see chart). The Commissioner will sit on the Board of the NPA.

NPA Act 1984, pg. 6, states,

- a. A Parks Commissioner.
 - 2) *The Parks Commissioner shall be responsible for the implementation of all policies and programmes approved by the Authority.*
 - (3) *The Parks Commissioner shall exercise all the functions entrusted to him by this Act and any regulations made under this Act.*

- (4) *The Parks Commissioner shall be present at all meetings of the Authority unless he is instructed by the Chairman to withdraw from any meeting or he has obtained leave of absence from the Chairman or is incapacitated by illness or other cause from attending any meeting.*

b. A World Heritage Focal Point and Heritage Resources Manager.

- Will be responsible for matters related to heritage, including research, archaeology and restoration.
- He is to ensure Authenticity and OUV are maintained.
- He will be responsible for policies and programs related to education and interpretation.

c. A Director of Parks Environment Management.

- Will be responsible for all environmental matters, policies, and programs.

3.2 The management team will be selected in accordance to the specific expertise required to fulfill the mandate of the NPA. For the Antigua Naval Dockyard and Related Archaeological Sites, as well as the greater Nelson's Dockyard National Park, its buffer zone, expertise required will include,

- **Financial manager:** to manage all finances of the Park. Will be responsible for daily accounting, book-keeping, monitoring expenditures, annual audits and financial reports.
- **Events organizer/manager:** to be responsible for organizing and planning all events within the Park. Will also be responsible for promotion of events and activities.
- **Restoration specialist/Manager:** will be responsible for planning, research and preparing budgets of restoration projects, and to manage and supervise all projects to ensure authenticity. Will be responsible for monitoring and documentation of all restoration project and activities. The Park has an aggressive restoration program and restored buildings are utilized for a variety of new functions, such as hotels, restaurants, and museums.
- **Grounds and landscape managers** will be responsible for the maintenance of the grounds and landscape activities.
- **Visitor services manager** will be responsible for the interpretation officers, their training and management of visitors to the site. They will coordinate visits with cruise ships, taxis and hotels, and ensure a high degree of accuracy and quality of the information provided by officers.
- **Environmental manager** will monitor and manage environmental issues, research and document the environment in the park.
- **Marina and yacht services manager** will manage all marine traffic; yachts arrival and departure, their berthing, mooring and activities. He will work closely with the environmental management to ensure that the marine environment is not abused.
- **Maintenance manager** will be responsible for daily maintenance on all structures.

- **Human resources manager** will be responsible for all employees, their rights and obligations of employment, interviewing and advising the commissioner on employment needs.
- **Interpretation Centre manager** will be responsible for the daily management of the Interpretation Center and its audio visual show as well as the gift shops.
- **Architectural historian** will research and advise on the built heritage within the site.
- **Archaeologists** will work throughout the site conducting research and education activities. He will be work with the museum curator and be responsible for making presentations and advising all other departments on authenticity, building materials and the documentation and management of all archaeological sites.
- **Marine biologists** will be responsible for research underwater and on the shoreline and mangroves, related research, develop underwater trails and dive sites, and monitor water quality in the marine environment.
- **Security manager** will be responsible for all security.
- **Museum curator** will be responsible for the museum, its collections, exhibits and artifacts in storage. He will publish and catalogue all findings and research notes.
- **Quality control** officer will monitor the physical appearance of the site, workers activities, quality of service and activities.
- **Hotel manager** will be responsible for all aspects of the hotel, including the restaurants, bars, laundry and staff.
- **Marketing Manager**

A single, multi-skilled individual can fill several positions, but they must be provided sufficient staff and equipment to carry out their mandate.

3.3 The National Parks employs over 75 persons directly, but indirectly, several thousand persons work within the businesses/industries created by the Park. These include the yachting sector, hotels, restaurants, taxi and transportation services, retail and professional services, and many others. Various assessments have been made of the economy of the yachting industry and the role of the National Park in managing that important economic and heritage tourism sector of Antigua and Barbuda, for example,

- Ann Marie Martin, 2004. *Master Plan, Nelson's Dockyard National Park Strategic Plan 2004.*
- Economic Commission for Latin America and the Caribbean (ECLAC). *Survey of the Yachting Sector, Antigua and Barbuda*
- Ivor Jackson 2007. *Master Plan, Village Center for Historic English Harbour.*

3.4 There are currently eight departments/teams in the management structure. These are,

1. Heritage includes the Museum, Restoration, the Environment Department,

- archaeology, research and architectural history/planning and permit inspections.
- 2. Yachting services manages the marina and also assists with restoration efforts.
- 3. Financial control
- 4. Security
- 5. Interpretation Center
- 6. Visitor Services, Marketing, Hotel management
- 7. Human resources
- 8. Maintenance and grounds management

Managers submit quarterly reports and annual budget estimates. Management meetings are routinely held quarterly, and prior to, and after every major event.

3.5 Management issues and management solutions can be generalized as the following:

- 1. Development pressure and control
- 2. Over grazing by feral livestock (goats and sheep) leading to erosion and deforestation
- 3. Looting and destruction of sites and structures
- 4. Environmental management and control
- 5. Visitor and events
- 6. Seasonality of site
- 7. Natural hazards

3.5.1 Land and Development: The Act gives the NPA the mandate for the management of all crown lands within the Park (buffer zone) and rights of approval of all private development projects within its boundaries. The Development Control Authority must also grant approval, after the NPA permit is issued. To manage and control this process, all lands within the Park (buffer zone) were zoned in public consultation and varying restrictions placed according to the zone. An inventory of natural and cultural heritage sites guided this process. Specific areas, such as the archaeological ruins along the Ridge was designated a cultural landscape, while beach/water front areas zoned for tourism development. Environmentally sensitive areas were zoned as conservation areas; which affords restricted development and promotes research, and sustainable tourism. In sum, all lands within the proposed buffer zone of the World Heritage site is fully protected and managed.

The initial zones established in 1984 were amended by public consultation in 2011 and a new zoning map was prepared by consultant Ivor Jackson and Associates. In 2014 and 15, a further and more intensive revision of the zones is currently being implemented. Scientific studies of the vegetation, archaeological sites, conservation areas, communities and their needs, the marine environment, and tourism/development needs are being conducted and it is anticipated that by late 2015 a revised zoning map will be finalized for the Buffer Zone or Nelson's Dockyard National Park. This will have no impact on designated area of the World Heritage Site. (See zoning maps appended).

3.5.2 Land within the World Heritage Site: Most of the lands within the demarcated boundaries of the proposed World Heritage site is owned by the government and is

therefore fully controlled and managed by the Parks Authority under the National Parks Act. However there are a few privately owned areas. The largest of these is the Galleon Beach Hotel complex in Freeman's Bay, and the Inn. These lands are zoned as mixed-use area with hotels, restaurants and exclusive residential housing plots. Although the resort areas were established before the declaration of the National Park, the existing structures are in keeping with approved designs. The NPA policies and building guidelines and covenants, along with regular monitor of all construction and development projects within the boundaries is conducted on a regular basis. However, the land developers, home owners and business self regulate and in most instances demanded stricter guidelines and covenants, boosting the quality of projects in and around the site.

A World Heritage Department is now established to review, monitor and evaluate all proposals, building projects and plans done in and near to the proposed World Heritage Site and its Buffer Zone.

3.5.3 Monitoring and Control. The World Heritage Focal point is establishing policies and changing management practices in an effort to fully oversee and monitor all works, including daily maintenance, and services that impact the site.

3.6 Development Pressure: There is significant pressure to acquire crown land within the proposed site and buffer zone for development. At times the proposed use conflicts with the zone regulations. The solution for this issue is education and by establishing clear policies and strict enforcement. The building permits, site inspections, building guidelines and regulations also assist with the management process.

- **Building Guidelines** (as previously mentioned) for developing and building in the National Parks are in effect and planning design advice is freely available prior to development. The guidelines establish minimum standards, adherence to the historical theme, and ensures that the OUV is protected. They include recommended boundary setbacks, colours of materials, types of materials to be used, size of lots, height and type of roof design, encourages vegetation and bans clear cut of forests for developments.

3.7 Overgrazing: There is a long-standing tradition and culture of free ranging goats and sheep on the open hills and forests of the site. This well-entrenched cultural practice has caused destruction throughout the Park. As the herds are not culled on a regular basis the numbers have at times increased beyond the carrying capacity of the land.

A solution to this issue has been sought through dialogue and consultations with the livestock owners, education and incentives for managing the number and quality of the animals. The NPA will develop a policy in consultation with the Ministry of Agriculture and the Environment for the land used by free grazing livestock within the boundaries of the site and buffer zone.

3.8 Carrying Capacity: The Dockyard receives over 150,000 walk-in visitors annually. This excludes the business patrons, yachtsmen and persons attending the

numerous events. Cruise ship passengers comprise a significant number of the visitors and create the “highest traffic” issues. They arrive en-mass and depart as suddenly as they appear. The period of highest cruise visitors is between 10 am and 1 pm. However, as the visitors service department is aware of the schedule and approximate numbers, a sufficient quantity of interpretation officers are brought in to ensure a smooth flow of tours. Automotive traffic is restricted at these peak hours of visitation, and business and yachts are asked to schedule their deliveries during the periods of day and if possible, use the road outside the south wall that has been reserved for their exclusive use.

3.9 Looting and the Destruction of Sites: Another cultural tradition was the dismantling of the collapsed stone structures for reuse and sale of cut stones and bricks. This activity has been stopped through enforcement, frequent monitoring, and education. However, there are rare incidents that are being addressed through policing, public education and by establishing visual deterrents such as CCTV cameras. Similarly, the rich archaeological deposits have been attractive to many of the persons with social issues (drug users) who are encouraged to dig and collect artifacts of value by knowledgeable persons, who are mostly from North America and Europe. This is still a minor issue and enforcement has increased accordingly. The Parks has installed a CCTV system and mobile units of Park Rangers and Police have increased surveillance in all areas. However, the remote location of many sites increased the difficulty of monitoring. The management plan for these remote archaeological sites includes an increase in,

- Education and public interaction.
- Increased monitoring, policing and surveillance.
- Increase in penalties and a zero tolerance policy.
- Improve the social systems that pressure these individuals to commit this crime.

3.10 Seasonality of the Site: The economy of the Caribbean is almost entirely dependent on tourism, particularly so for Antigua. Tourism is a seasonal industry with most visitors arriving in the winter months. For the Dockyard and the National Parks, the primary income is generated from the yachting sector. During the “season”, November to April, about 4,000 yachts visit English and nearby Falmouth Harbours. These yachts spend significant funds on mooring, anchorage, goods and services that trickle through the economy and contribute more than cruise ship visitation (ECLAC Report 2004). In sum, visitors to the Dockyard and Park. In the summer months, the numbers of visitors and yachts decline dramatically. However, it is not necessarily a negative situation for although the income declines the quiet times or “slow season” is used by the NPA to implement projects, restoration works, site improvements, staff training, and field research. Other activities, such as fishing tournaments and weddings are held during these summer months.

3.11 Natural Hazards, Hurricanes: Antigua is located in the Eastern Caribbean archipelago of islands in the heart of the Atlantic hurricane belt. It receives Tropical Storms and hurricanes on an annual basis, yet damage is generally minimal. This is due to the high standards of the building codes and good planning and preparation policies, and public education. The sheltered position of the dockyard generally ensures only

minimal damage, however, there have been exceptions as the storms are unpredictable in strength and frequency. Regardless, the site has never been impacted beyond the means of the staff and insurance coverage to manage repair within a short period of time.

3.11.1 Earthquakes are a major concern. The Eastern Caribbean Islands form the eastern edge of the Caribbean plate that over rides the Atlantic seabed subduction zone. Earthquakes and tremors are infrequent and cause minor damage; however, there have been major catastrophic events that occur approximately once every 150 years.

3.11.2 Other hazards (fire, pollution). These types of events are rare but do occur (see annex 7).

3.12 Solutions The solution to disaster management is in preventative planning, policies, best practices and response. ***The NPA has a Disaster Preparedness and Response Manual that is reviewed and upgraded annually.*** All management and most staff are experienced with the disasters listed above and are competent to manage the situations as they arise. (see Annex 7: *Disaster Preparedness and Response Manual for the National Parks, Antigua*)

Regardless, the policy of annual reviews, inspection of structures and equipment, planning of response, ensuring that necessary equipment is easily available, that staff are trained for their duties, have served well. There is ample assistance from government and private organizations nearby, including rapid response paramedics, firefighters, police and coast guard, medical services. These services, the policies and contact information of key individuals are outlined in the Parks Disaster Prep and Response Manual.

4.0 FINANCE

4.1 The National Parks Act 1984, clearly states (Cap. 290: 8-13),

The funds and resources of the Authority shall consist of-

- (a) such sums as may be provided by Parliament for the purpose;*
- (b) any loan or grant made to the Authority by the Government or, with the approval of the Minister, by any person or body or international organization;*
- (c) all monies paid to the Authority by way of subsidies, gifts, fees, subscriptions, rent, interest and royalties as well as any other sum or any property which may in any manner become payable to or vested in the Authority in respect of the performance of its functions; and*
- (d) any sums or property which may be donated to the Authority.*

The Authority may, from time to time, with the approval of the Minister, borrow, secure or raise money by the issue of debentures or debenture stock, or other security, for all or any of the following purposes-

- (a) the provision of working capital;*
- (b) the fulfilling of the functions of the Authority under this Act;*
- (c) the provision of capital for the expansion of and addition to its fixed assets;*
- (d) the redemption of any debenture or debenture stock or other security that the Authority is required or entitled to redeem;*
- (e) any other expenditure properly chargeable to capital account.*

The Authority may, from time to time, borrow by way of overdraft or otherwise for periods not exceeding one year such sums as the Authority may require for meeting its obligations and discharging its functions under this Act.

The Authority may with the approval of the Minister, from time to time, borrow by way of advances from the Government such sums as may be necessary for carrying out its functions under this Act.

For the purpose of making approved advances to the Authority under this section, the Minister responsible for Finance may authorise advances out of the revenues or surplus balances of Antigua and Barbuda.

Pending the raising of any such loan, the Minister responsible for Finance by warrant under his hand may authorise the Accountant-General to make advances out of the revenues of Antigua and Barbuda to the Authority in such sums and on such terms and conditions as the Minister responsible for Finance may think fit for the purposes authorised by this Act.

The repayment of any such advances and the payment of interest thereon shall be made by the Authority in like manner and on like conditions as borrowings by the Authority subject to any special terms and conditions which may be stipulated with respect to any such advance by the Minister responsible for Finance upon making thereof.

The funds of the Authority shall be applied towards,

- 1. Meeting the obligations and discharging any of the functions of the Authority under this Act and any matter incidental thereto;*
- 2. The creation of a reserve fund of such amount as the Authority deems expedient.*

Any sums outstanding to the credit of the reserve fund provided for under subsection that is not immediately required to be expended in the meeting of any obligation or the discharge of any functions of the Authority may, from time to time, be invested in securities approved either generally or specifically by the Minister; and the Authority may, from time to time, with the like approval sell all or any of such securities". (Laws of Antigua and Barbuda, Cap 290. 8-11).

4.2 Park Finances

4.2.1 Sources of funds: The NPA is a self-financing, non-profit statutory body of

government. It generates revenue through,

- Leasing of land and buildings
- Managing its resources, for example, the Copper and Lumber Hotel and restaurant
- Hosting and managing events
- Service charges/entry fees/environmental fees/marina dockage fees
- Private donations
- Donor Aid provided for specific projects
- Bank loans for specific projects

4.3 The largest sources of funds generated for the operation of the Park is the Yachting Sector. Revenue generated from yachting is significantly higher than the revenues from the walk-in and cruise ship tours. The Park has an annual income of about ten million dollars, which closely matches its expenditures depending on the restoration and development projects implemented each year.

5.0 MONITORING AND DOCUMENTATION

5.1 The Heritage Department is responsible for monitoring, documentation and research. It collects and stores information, drawings, photographs and records of activities, work, use and repairs/restoration of all buildings in the Antigua Naval Dockyard and Related Archaeological sites, as well as those in the outer buffer zone areas of the National Park.

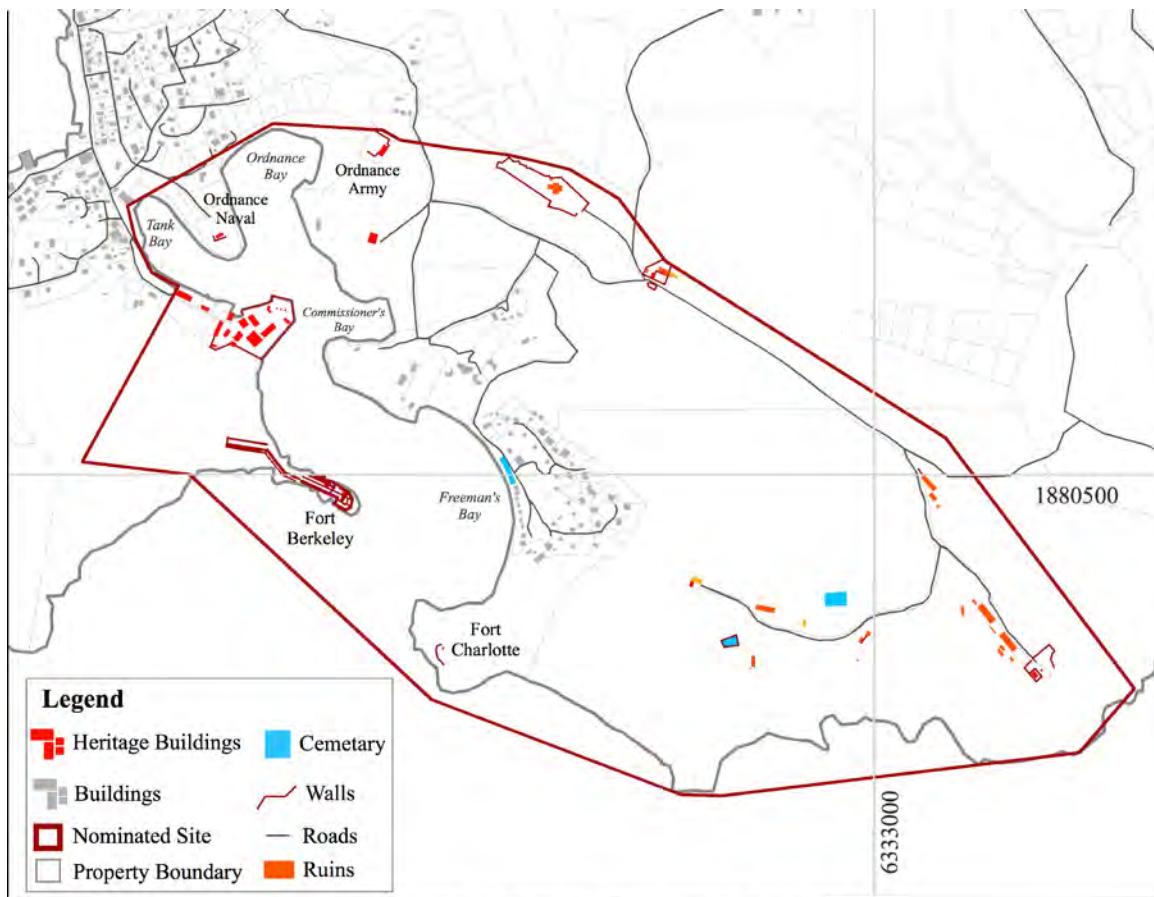
5.2 These records are kept in the office of the Heritage Department with some duplicates housed in the Museum. Photographs and smaller documents are photographed, scanned and backup copies kept off site.

5.3 The Heritage Department is mandated to conduct archival research to continuously up grade its records, locate new documents, and to implement field research archaeological excavations and survey. Numerous records, maps and plans of the structures, naval facility, inventories and surveys done by the British Navy are housed at the National Archives of Great Britain, Kew Gardens, London, England. Copies of these records are to be kept by the heritage department to assist in the interpretation, restoration and general knowledge of the site.

5.1 The sites and structures fall within two categories; physical structures or archaeological sites. Physical structures are either,

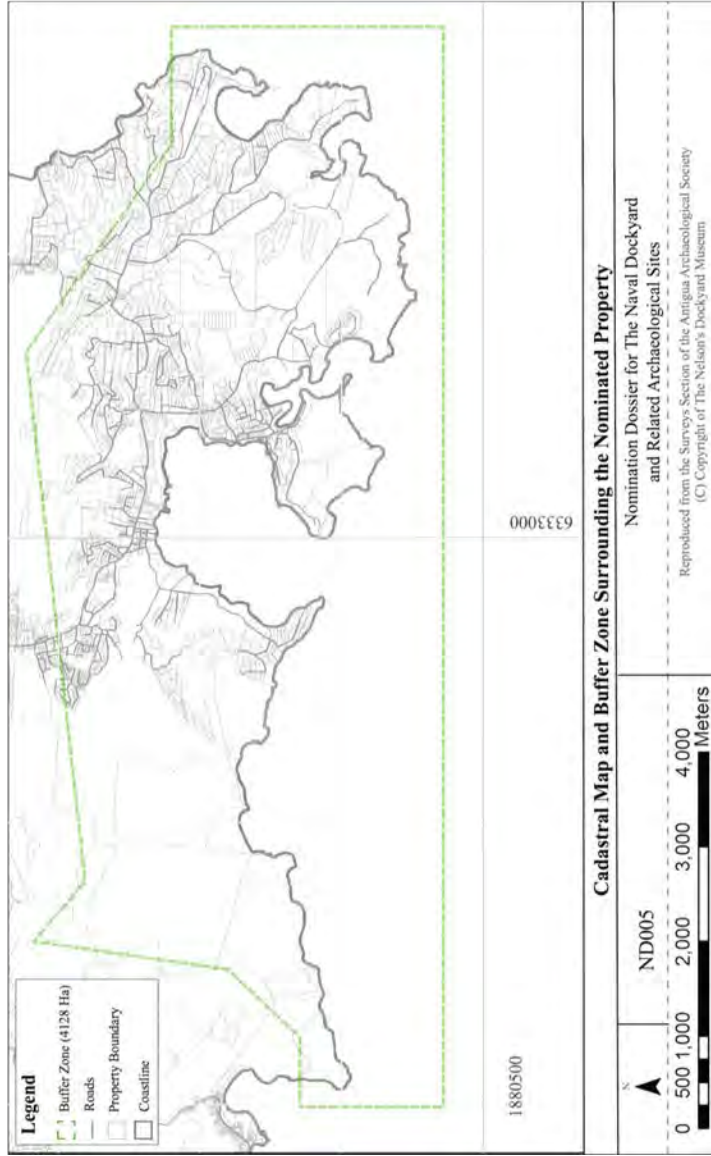
1. Complete (with walls, roof, floor complete and requiring minimal restoration)
2. Ruins (are structures that are not useable and require much effort and cost for restoration)
3. Archaeological sites and structures are areas where little to no physical structure remains that are visible on the surface. It includes advanced ruins, garbage dumps, cemeteries and all areas where activities took place.

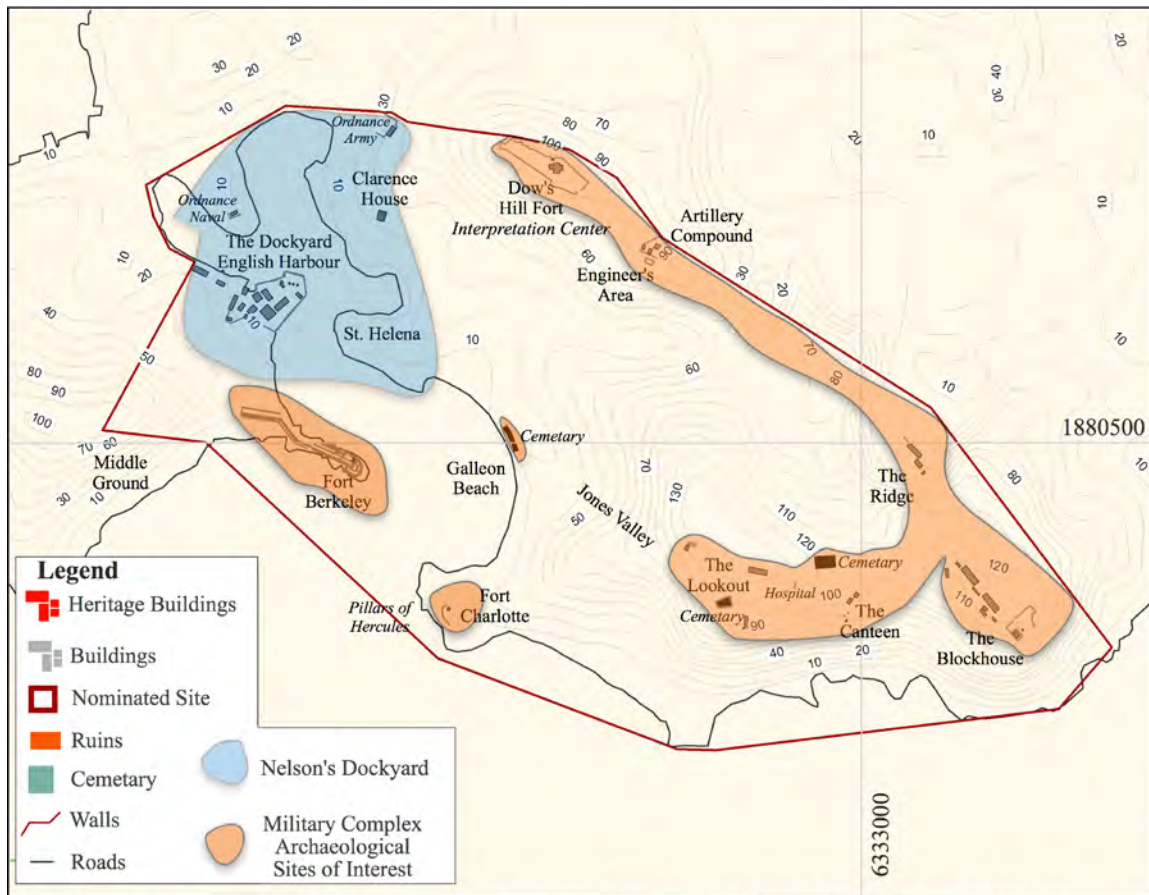
An inventory of these are presented below.



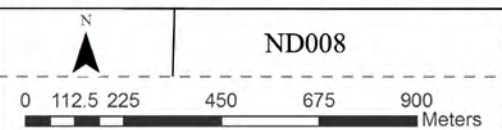
Cadastral Map and Nominated Property

	<p>ND007</p>	<p>Nomination Dossier for The Naval Dockyard and Related Archaeological Sites</p>
<p>0 112.5 225 450 675 900 Meters</p>		<p>Reproduced from the Surveys Section of the Antigua Archaeological Society (C) Copyright of The Nelson's Dockyard Museum</p>



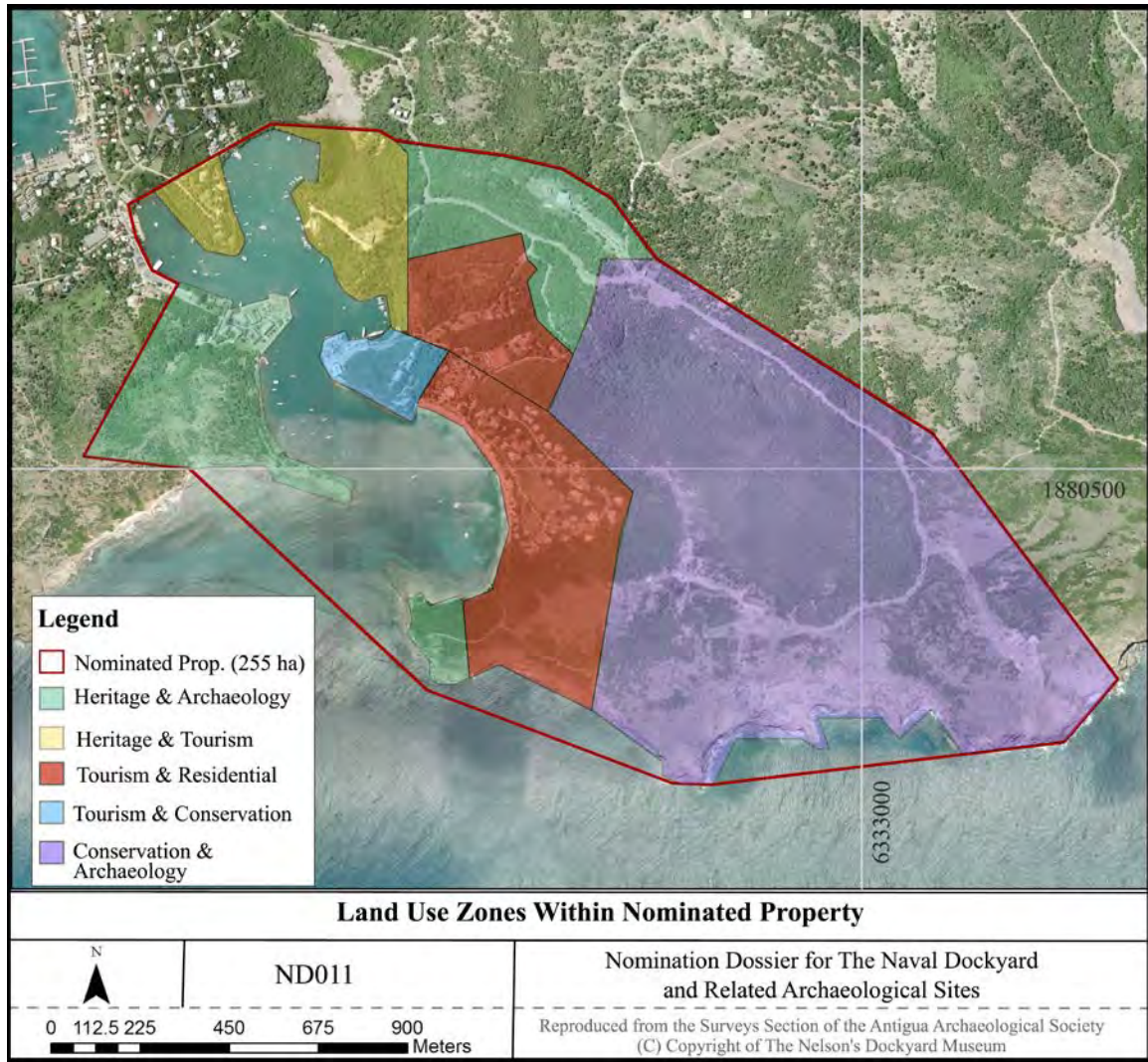


Heritage Features and Surrounding Archaeological Military Complex and Nominated Property



Nomination Dossier for The Naval Dockyard and Related Archaeological Sites

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Map of zones within the WH Boundaries.

Above: Historical structures and sites within the World Heritage Site.

Below: Original land use zones and recently updated version. A newer version is in study and consideration.

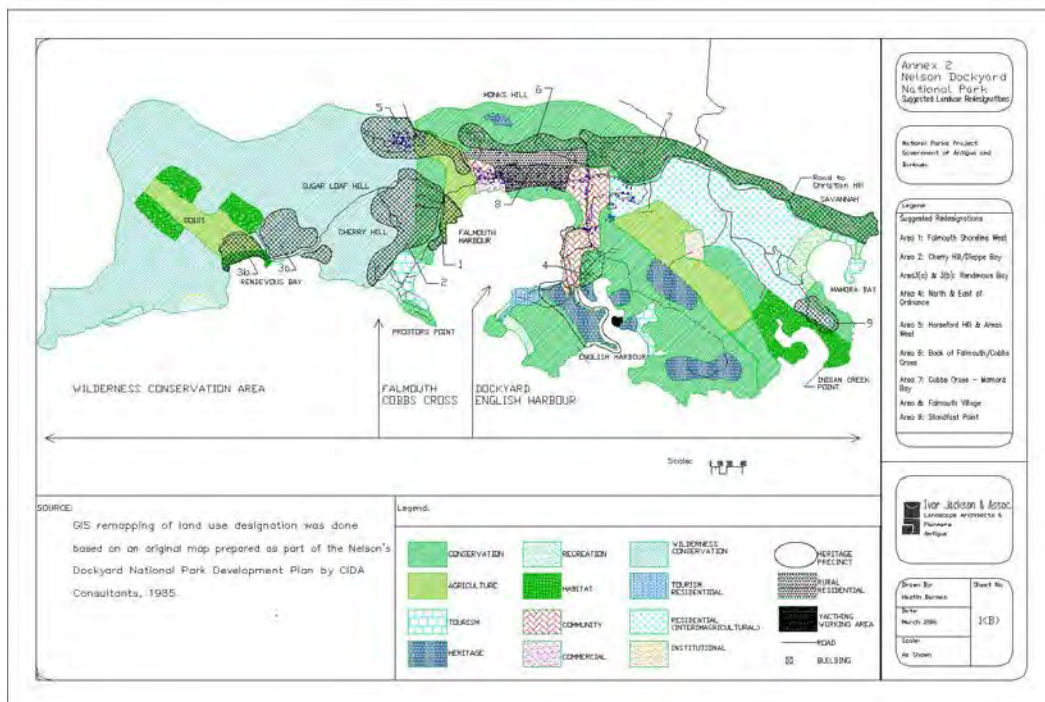
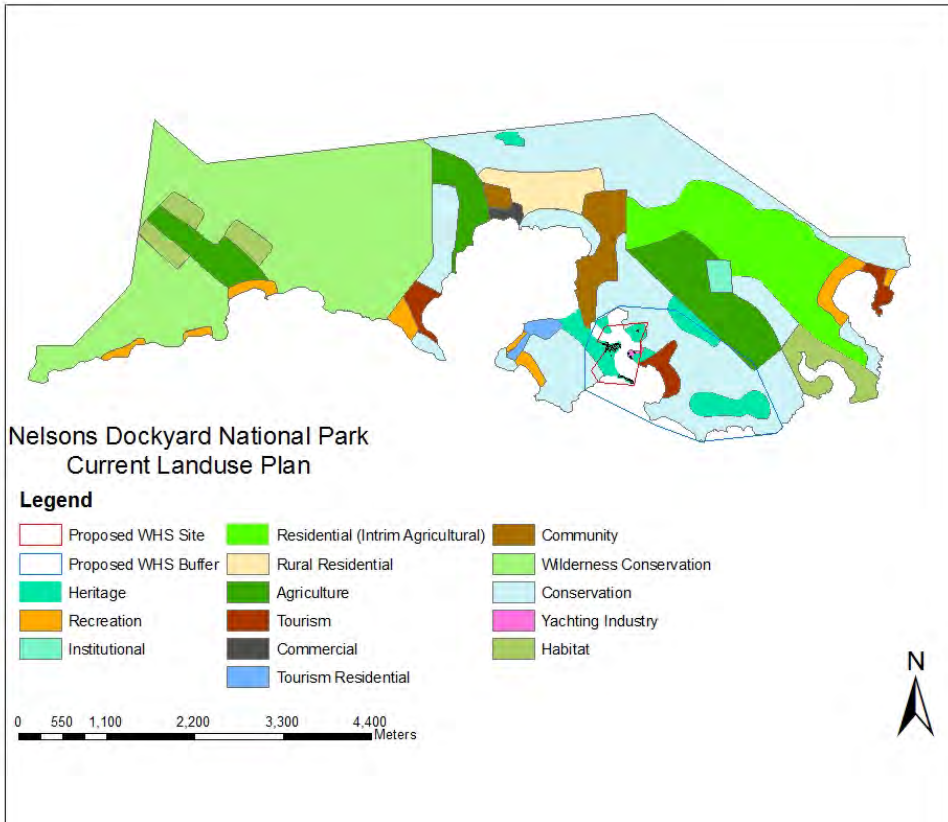


Table 1. List of Historical and Natural Sites within the National Parks.

SITENO	SITE	TYPE	EASTING	NORTHING	PERIOD	CODE
AN-002	RENDEZVOUS NATURAL AREA	Natural area	2010	8020		RVV
AN-014	FALMOUTH SUGARLOAF	Natural area	2190	8210		FSL
AN-019	MAMORA REEF	Natural marine area	2915	8095		
AN-020	SNAPPER POINT	Natural area				
AN-021		Natural area	2697	8091	1800-1900	BC
MAH-009	SIGNAL HILL	Military signal station	2016	8251	1790-1850	SIG
PA-001	FREEMAN'S BAY	Ceramic Amerindian	2590	7974	1100-1400	FB
PA-002	MAMORA BAY	Ceramic Amerindian	2865	8105	900-1100	MAR
PA-003	INDIAN CREEK HARBOUR	Aceramic Amerindian	2774	7977	?	ICK
PA-004	INDIAN CREEK	Ceramic Amerindian	2725	8105	35 -1100	I/C
PA-005	FALMOUTH CHURCH AMERIND	Ceramic Amerindian	2384	8205	100- ?	FCH
PA-006	GUINEA BUSH	Ceramic Amerindian	2447	8284	1000 AD	GBM
PA-007	COBB'S CROSS MANGROVE	Aceramic Amerindian	2495	8165	500 B.C.	CCR
PA-008	FORT CHRISTIAN SADDLE	Aceramic Amerindian	2804	8042	?	FCS
PA-009	BLAKE ISLAND	Ceramic Amerindian	2331	8096	1000 A.D.	BKI
PA-010	PETER POINT,NR.CLARENCE W	Aceramic Amerindian	2537	8052	500 B.C.?	PPT

PA-011	SNAPPER HOLE	Aceramic Amerindian	2468	7966	C.500BC	
PA-012	BAT'S CAVE CAVERN	Aceramic Amerindian	2679	8091	Contact	BCH
PA-013	COPPER AND LUMBER STORE	Ceramic Amerindian	2523	8015	600 c.	CU
PA-014	TUCK'S AMERINDIAN	Aceramic Amerindian	2032	8058	-500	
PA-015	DOEG'S AMERINDIAN	Ceramic Amerindian	2032	8135	250	DA
PA-016	COBB'S CROSS EGRET COLONY	Natural area	2472	8171		CCG
PA-017	KEANE'S BATTERY SADDLE	Aceramic Amerindian	2508	7995		KBS
PAH-001	WARNER GRAVES	Plantation building	2696	8171	1650-1730	WH
PAH-002	SAVANNAH OLD MILL	Plantation building/mill	2628	8195	1670-1740	SOM
PAH-003	FORT ISAAC	Military defense	2891	8122	1700-1735	FI
PAH-004	BLOCKHOUSE OFF. QUARTERS	Military building	2709	7937	1790-1854	BH
PAH-005	DOCKYARD SOUTH	Naval residence	2524	8009	1795-1840	DYS
PAH-006	HERRING HILL	Military residence	2457	8043	1750-1850	DVN
PAH-007	FORT CHRISTIAN	Military defense	2819	8050	1740-1795	FC
PAH-008	BLACK'S POINT BATTERY	Military defense	2382	8016	1700-1830	BPB
PAH-009	FORT GEORGE, MONK'S HILL.	Military defense	2400	8270	1689-1923	MH
PAH-010	DOCKYARD BLACKSMITHY	Naval building	2514	8017	1750-1850	DYL
PAH-	DOEG'S ESTATE	Plantation	2035	8115	1730-	DO

010		building/mill			1850	
PAH-011	DOCKYARD VALLEY	Naval residence	2510	8015	1780-8015	DYV
PAH-012	FORT CHARLES, BLAKE Is.	Military defense	2336	8092	1672-1780	BI
PAH-013	HORSESHOE BATTERY	Military defense	2566	7950	1700-1830	HS
PAH-014	FORT CHARLOTTE	Military defense	2573	7937	1700-1830	HSL
PAH-015	MAN O' WAR HILL	Naval residence	2559	8007	1730-1830	MOW
PAH-016	GATEWARD POINT	Residence	2298	8092	1650-1700	GW
PAH-017	GUINEA BUSH MILL	Plantation building/mill	2446	8284	1750-1830	GUI
PAH-018	CHERRY HILL	Plantation building	2308	8120	1800-1975	CH
PAH-020	SANDERSON'S POINT	Residence	2477	8101	1780	Z
PAH-021	MAIN TOP	Naval residence	2500	8016	1720-1830	MT
PAH-022	DOW'S HILL VALLEY	Plantation building	2595	8091	1770-1830	DHV
PAH-023	DOCKYARD TOP	Naval residence	2514	8006	1740-1785	DT
PAH-024	ISAAC HILL	Residence	2840	8140	1720-1740	IH
PAH-025	JESSAMINE HILL	Residence	2554	8119	1750-1850	JH
PAH-026	WINDSOR	Naval residence	2457	8021	1745-1785	WI
PAH-027	INDIAN RIDGE	Residence	2710	8084	1700-1750	IR
PAH-028	POWDER MAGAZINE, OLD	Military building	2541	8079	1765-1785	OPM

PAH-029	CLARENCE HOUSE VALLEY	Naval residence	2599	8039	1750-1800	CHV
PAH-030	JONES' VALLEY	Military burials	2660	7980	1690-1770	JV
PAH-031	MAIN TOP UPPER	Naval residence	2484	8008	1790-1850	UMT
PAH-032	ARTILLERY QUARTERS HOUSE	Military residence	2629	8025	1800-1860	AQH
PAH-033	SAVANNAH DAM SOUTH	Plantation building	2606	3225	1670-1720	SDS
PAH-034	SAVANNAH DAM WEST	Plantation building	2540	8240	1760-1805	SDW
PAH-035	DOCKYARD VALLEY UPPER	Naval residence	2507	8014	1770-1830	UDV
PAH-036	MAIN TOP LOWER	Naval residence	2500	8010	1725-1760	LMT
PAH-037	WINDSOR, LOWER	Naval residence	2467	8017	1725-1775	LW
PAH-038	SPRING HILL	Plantation building	2279	8198	1800-1870	SH
PAH-039	INDIAN CREEK PENINSULA	Residence	2761	7972	1750-1800	ICP
PAH-040	MIDDLE GROUND	Military building	2487	7987	1790-1850	MG
PAH-041	BARTER'S MILL	Plantation building/mill	2076	8176	1700-1925	BE
PAH-042	FORT CUYLER	Military defence	2426	8018	1790-1850	FCY
PAH-043	THE INN, UPPER	Naval residence	2582	8028	1770-1840	TIU
PAH-043	THE INN, LOWER	Naval residence	2578	8032	1770-1840	TIL
PAH-044	JESSAMINE HILL LOWER	Residence	2551	8101	1830-1880	LJH
PAH-	INDIAN CREEK RIDGE	Residence	2738	8016	1720-	ICR

045					1760	
PAH-046	INDIAN CREEK ESTATE	Residence	2746	8002	1800-1880	IC
PAH-047	WINDWARD BAY	Residence	2444	7973	1730-1760	WB
PAH-048	LOWER INDIAN CREEK HILL	Residence	2771	8058	1725-1755	LICH
PAH-049	INDIAN CREEK HILL	Residence	2762	8044	1720-1775	ICH
PAH-050	HUNGRY HILL	Residence	2238	8242	1734-1780	HUH
PAH-051	MASTER SHIP\WRT'S KITCHEN	Naval residence	2518	8018	1750-1770	MSK
PAH-052	RENDEZVOUS GUARD HOUSE	Military building	2174	8068	1735-1760	RVG
PAH-053	DIMSDALE MILL	Plantation building/mill	2159	8258	1665-1921	DD
PAH-054	ARTILLERY NCO's	Military residence	2612	8039	1770-1800	ANCO
PAH-055	FOREMAN OF S\WRIGHT'S UPR	Naval residence	2466	8043	1770-1825	FS u
PAH-055	FOREMAN OF S\WRIGHT'S LWR	Naval residence	2472	8043	1779-1825	FS I
PAH-056	BLOCKHOUSE MARRIED QRS	Military residence	2700	7942	1790-1850	BHW
PAH-057	BARLETT HOUSE	Residence	2660	8025	1775-1880	BAR
PAH-058	PIKE HOUSE	Residence	2681	8012	1775-1880	PIKE
PAH-061	ST ANNE'S HOUSE	Military building	2430	8052	1780-1850	STA
PAH-062	MAST POND VALLEY	Naval residence	2480	8028	1770-1850	MPV
PAH-063	TARZAN TENNIS	Naval residence	2480	8057	1800-1890	TT

PAH-064	CHAMBERLAIN CISTERN	Residence	2440	8050	1750-1800	CC
PAH-065	COMMISSIONER'S BAY	Naval refuse	2561	8025	1680-1740	CBB
PAH-066	LAND ARSENAL HILL	Residence	2561	8075	1750	LAH
PAH-067	HOSPITAL & CAPTAIN'S HO	Naval building	2490	8060	1770-1830	HCH
PAH-068	DOW'S HILL FORT	Military defense	2595	8055	1790-1843	DHW
PAH-069	HERRING HILL, GREATER	Residence	2452	8048	1770-1820	GHH
PAH-070	HERRING HILL SOUTH	Residence	2457	8041	1770-1825	HHS
PAH-071	ARMY ORDNANCE STORES	Military building	2447	8045	1790-1820	DNC
PAH-072	STANLEY'S TAV. & MAST HO	Naval building	2491	8054	1750-1850	STH
PAH-073	ARTIFICER'S CABIN (North)	Naval residence	2486	8051	1780-1970	ACN
PAH-074	ARTIFICER'S CABIN (Disp)	Naval residence	2492	8036	1780-1960	ACD
PAH-075	CLERK'S HOUSE	Naval residence	2496	8031	1800-1880	CK
PAH-076	TANK BAY UNDERWATER	Underwater	2505	8035	1690-1980	TB
PAH-076	ANCHOR WHARF	Naval refuse	2509	8029	1780-1830	AW
PAH-076	TANK BAY (SW)	Naval building	2498	8034	1863	TBS
PAH-077	KEANE'S BATTERY	Military defense	2498	7991	1760-1850	KB
PAH-078	COBB'S CROSS	Residence	2502	8184	1720-	CBC
PAH-	CHAPEL	Residence	2479	8104	1800-	CPG

079	POINT/GORDONS				1900	
PAH-080	CHAPEL HILL	Residence	2497	8119	1750-1850	CHH
PAH-081	HOSPITAL HILL LOWER NORTH	Residence	2501	8103	19th cent	LHN
PAH-082	HOSPITAL HILL North	Residence	2501	8093	1780-1820	HHN
PAH-083	NAVAL HOSPITAL	Naval building	2510	8082	1760-1820	NH
PAH-084	NAVAL ORDNANCE GATE	Naval ordnance	2506	8058	1790-1850	NOG
PAH-085	GUN CARRIAGE STORE	Naval ordnance	2508	8057	1790-1850	GCS
PAH-086	ORDNANCE SMITH'S FORGE	Naval ordnance	2508	8054	1790-1850	OSF
PAH-087	ORDNANCE SEASERVICE STORE	Naval ordnance	2511	8054	1790-1850	OSS
PAH-088	ARMOURER'S SHOP	Naval ordnance	2513	8052	1790-1850	ARS
PAH-089	ORDNANCE COOPER	Naval ordnance	2510	8051	1790-1850	OC
PAH-090	SALTASH POINT & MAGAZINE	Naval ordnance	2515	8045	1810-1850	SPM
PAH-091	ORDNANCE STORES	Naval building	2514	8058	1760-1850	OS
PAH-092	WATCH HOUSE	Naval building	2536	8082	1770-1830	WS
PAH-093	PETER POINT WHARF	Military building	2537	8054	1760-1785	PPW
PAH-095	CLARENCE W. SLOOP MOORING	Underwater	2531	8040	1725-1820	CSM
PAH-096	ST HELENA DOCKYARD	Naval building	2545	8015	2545-8015	SHD
PAH-097	MAN O'WAR FRIGATE MOORING	Underwater	2541	8001	1725-1820	MFM

PAH-098	FREEMAN'S FRIGATE MOORING	Underwater	2573	7974	1670-1900	FFM
PAH-099	ETNA SHIPWRECK	Shipwreck	2517	8060	1925?	EW
PAH-100	SALTASH POINT SHIPWRECK	Shipwreck	2516	8036	1780	SPW
PAH-101	KINSALE SHIPWRECK	Shipwreck	2525	8030	1762,sank	KW
PAH-102	MELAMPUS SHIPWRECK	Shipwreck	2553	8021	1763,sank	MU
PAH-103	GOREE SHIPWRECK	Shipwreck	2556	8021	1767 sank	GWK
PAH-104	FORT BERKELEY	Military defense	2540	7978	1700-1820	FBE
PAH-105	LAND SERVICE ARSENAL	Military building	2555	8065	1788-1850	LSA
PAH-107	CLARENCE HOUSE	Naval residence	2551	8045	1787-1985	CLH
PAH-108	RED HOUSE	Residence	2551	8034	1760-1850	RH
PAH-109	PITCH KETTLE POINT	Naval building	2551	8029	1750-1820	PKP
PAH-110	IRWIN'S HOUSE	Residence	2575	8021	1770-1820	IWH
PAH-111	MASKED BATTERY	Military defense	2576	8000	1745-1800	MSB
PAH-112	CHARLOTTE PENINSULAR	Residence	2590	7945	1790-1850	CHP
PAH-113	FREEMAN'S VALLEY	Residence			?	FV
PAH-114	GEN. OFFICER COMMANDING	Military residence	2599	8057	1790-1843	GOC
PAH-115	ROYAL ARTILLERY QUARTERS	Military building	2626	8036	1790-1850	RAQ
PAH-	OFFICER COMM.	Military building	2629	8033	1790-	OCA

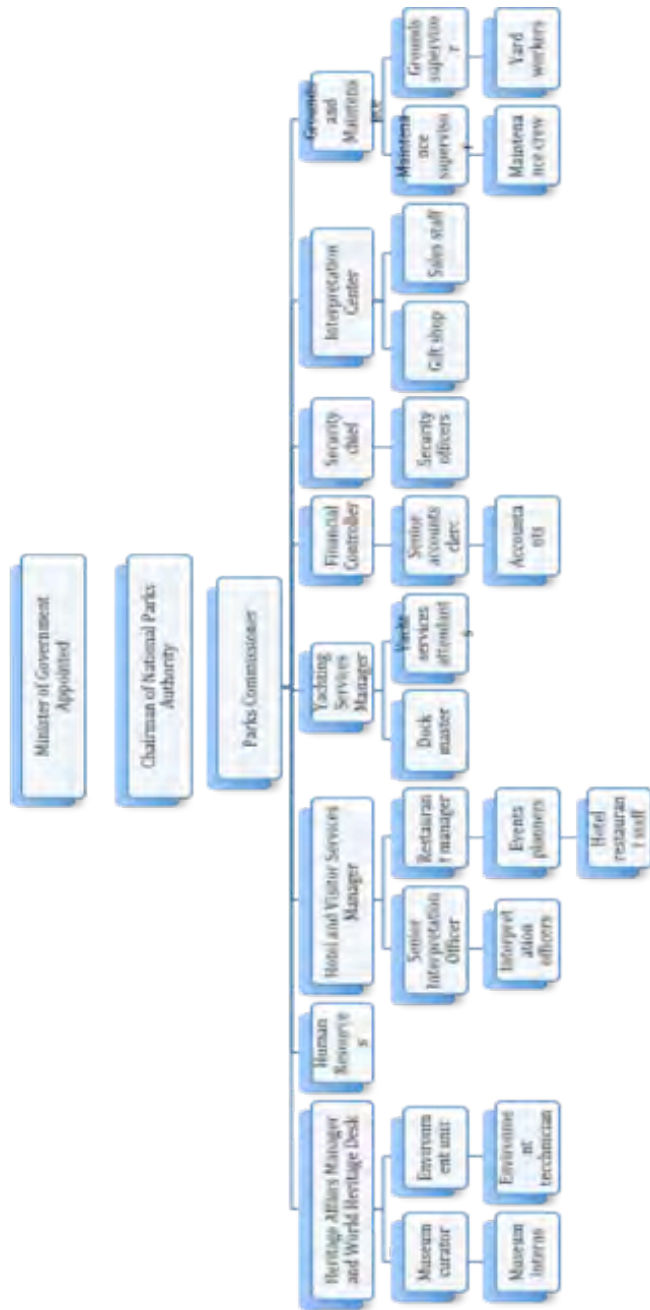
116	ARTILLERY				1850	
PAH-118	MAIN GUARD HOUSE	Military building	2666	8002	1814-1850	MGH
PAH-119	QUARTER MASTER SGT'S QRS	Military building	2690	7987	1800-1850	QMQ
PAH-120	SENIOR OFFICER'S QUARTERS	Military building	2694	7078	1800-1850	SOQ
PAH-121	ROUND BATTERY	Military defence	2695	7968	1770-1800	RB
PAH-122	SOLDIER'S BARRACKS (B/Ho)	Military building	2702	7952	1789-1850	SBB
PAH-123	BLOCKHOUSE GUN PLATFORMS	Military defence	2725	7935	1780-1850	BP
PAH-124	STAFF SERGEANT'S QUARTERS	Military building	2699	7951	1800-1850	SSQ
PAH-125	CANTEEN	Military building	2674	7940	1793-1850	CAN
PAH-126	SOLDIER'S BARRACKS S/HTS	Military building	2661	7948	1793-1850	SBS
PAH-127	OFFICER'S QUARTERS S/HTS	Military building	2652	7952	1793-1850	OQS
PAH-128	ARMY HOSPITAL	Military building	2645	7935	1793-1850	AH
PAH-129	LOOKOUT KITCHEN	Military building	2633	7957	1800-1850	LK
PAH-130	SHIRLEY HEIGHTS LOOKOUT	Military defence	2627	7960	1780-1850	LP
PAH-131	LOOKOUT SIGNAL STATION	Military signal station	2638	7960	1780-1850	LS
PAH-132	SHIRLEY HEIGHTS CEMETERY	Military burials	2640	7942	1790-1850	SHC
PAH-133	BAKERY AND STORE	Military building	2670	7997	1823-1850	BS
PAH-134	ROYAL ARTILLERY HOSPITAL	Military building	2618	8054	1800-1850	RAH

PAH-135	ROYAL ARTILLERY WEST	Military building	2605	8025	1800-1850	RAW
PAH-136	DOW'S HILL GATE HOUSES	Military residence	2606	8046	1790-1860	DHG
PAH-137	DIEPPE VIEW RUIN	Plantation building	2275	8077	1780-1850	DVR
PAH-138	GAULDING FLAT	Residence	2272	8055	19th cent	GF
PAH-139	EDWARDS POINT	Residence	2323	8119	1800-1850	EP
PAH-140	PATTERSON'S ESTATE	Plantation building/mill	2332	8166	1770-1900	PE
PAH-142	GLEBE HOUSE	Ecclesiastical	2452	8209	1700-1978	GL
PAH-143	BLACK'S POINT HILL	Military defense	2389	8001	18th cent	BPH
PAH-144	BLACK'S POINT HOUSE	Residence	2396	8019	1780-1850	BHO
PAH-145	HERRING HILL EAST	Residence	2469	8039	1780-1850	HHE
PAH-146	GORDON'S MILL	Plantation building/mill	2373	8362	1740-1900	GE
PAH-147	DOW'S HILL COACH HOUSE	Military building	2604	8049	1790-1850	DHC
PAH-148	NCO'S OF ARTILLERY	Military building	2615	8049	1790-1850	NCO
PAH-149	JONES VALLEY LOWER	Residence	2590	8002	1750-1800	LJV
PAH-150	SENIOR FIELD OFFICER	Military residence	2674	7999	1800-1850	SFO
PAH-152	CANTEEN ANNEX	Military building	2677	7946	1795-1850	CA
PAH-153	CANTEEN PRIVY	Military building	2674	7938	1800-1850	PRI
PAH-	BARTER'S LOWER	Plantation	2135	8105	1730-	BA

154		building			1925	
PAH-155	INDIAN CREEK GUN PLATFORM	Military defense	2788	7976	1780-1850	IGP
PAH-156	PATTERSON'S LIME FACTORY	Industrial	2336	8178	1900+	PLF
PAH-157	INDIAN CREEK BATTERY	Military defense	2790	8005	1740-1820	ICB
PAH-159	ST ANNE'S PT.SHIPWRECK	Shipwreck	2405	8058		
PAH-160	NELSON'S DOCKYARD	Naval building	2800	8020	1825-1889	DY
PAH-161	SNAPPER HOLE LOOKOUT	Residence	2465	7966	c.1850	
PAH-162	SNAPPER HOLE SHIPWRECK	Shipwreck	2498	7969		
PAH-163	ST PAUL'S CHURCH	Ecclesiastical			1640-1988	
PAH-164	RIDGE RESIDENCES	Military residence	2638	8025	1800-1850	RR
PAH-165	DOCKYARD WHARF	Underwater	2529	8016	1860	DYW
PAH-166	WEST CAREENING WHARF	Underwater	2528	8028	c.1850	WCW
PAH-167	CARPENTER ROCK WEST	Residence	2603	7937	1747	CR
PAH-168	CARPENTER ROCK EAST	Residence	2639	7908	1755	CRE
PAH-173	CAPSTAN HOUSE BATTERY	Military defense			1727-1770	CHB
PAH-174	EYLIS BATTERY	Military defense			1725	EY
PAH-176	HORSFORD'S MILL	Plantation building/mill	2285	8234	1750	HOR
PAH-178	NAVAL HOSPITAL CEMETERY	Burials	2507	8085	1780-1820	

Table 2. Buildings within the World Heritage Site (UTM)

<u>Building</u>	<u>Easting (m)</u>	<u>Northing (m)</u>	<u>Area (m²)</u>
Fort Berkeley	631861	1880570	2656
Slipway Restaurant	631909	1880846	543
Fort Berkeley Barracks (?)	631667	1880870	66
Slipway Shed	631880	1880889	84
Slipway Annex	631950	1880908	208
Bakery Annex	631641	1880917	66
Dockyard Bakery	631645	1880922	62
Engineers Annex	631593	1880918	110
Blacksmiths	631598	1880935	88
Copper and Lumber Store	631696	1880930	863
Sawpit Shed	631626	1880945	202
Carpenters Office	631623	1880954	67
Officers Quarters	631729	1880952	666
Guard House/Engineers House	631609	1880958	231
Pay Office	631775	1880976	151
Mast Shed	631669	1880972	439
Master Shipwrights House	631622	1880988	92
Joiners Loft	631636	1880985	307
Canvas and Cordage	631696	1880979	899
Capstan Building	631761	1881007	292
Engineers House	631572	1881005	194
The Galley	631730	1881005	159
Sail Loft	631605	1881011	873
Clarence House	631991	1881178	425
Senior Officer/Clerks	631426	1880839	302



Antigua Naval Dockyard and Related Archaeological Sites



**CURRENT DAY ACTIVITIES WITHIN THE PROPOSED
SITE**



START OF THE RACE FROM FORT CHARLOTTE

RORC 600 RACE





THE ROYAL OCEAN RACING CLUB,
WHICH WAS FORMED IN 1925 TO
FOSTER OCEAN RACING,
INAUGURATED THE RORC 600
CARIBBEAN SERIES IN 2008.
ANTIGUA, WITH ITS CONTINUING
TRADITION OF SEAFARING AND IDEAL
SAILING CONDITIONS, WAS CHOSEN.
THE STARTING AND FINISHING
POINTS OF THIS 600 MILE,
CONTINUOUS RACE TAKES PLACE OFF
FORT CHARLOTTE.





ANTIGUA CLASSIC REGATTA















THE ANTIGUA CLASSIC REGATTA, NOW IN
IT'S 38TH YEAR, BRINGS TOGETHER
CLASSIC
YACHTS AND NEW BOATS BUILT IN THE
SPIRIT OF TRADITION, TO NOT ONLY
COMPETE IN THREE DAYS OF RACING BUT
TO KEEP THE SKILLS ALIVE IN
MAINTAINING, REPAIRING AND SAILING
THESE GRACEFUL OLD LADIES.





TRADITIONAL CARIBBEAN WORK BOATS GATHERING FOR THE CLASSIC REGATTA



THE SUPER YACHT RACE



A BIG BOAT SERIES, OVER 100 FEET, TRADITIONAL DESIGNS AND THEIR MODERN COUNTERPARTS, RACING OVER THREE DAYS ENJOYING THE STEADY TRADE WINDS. STARTING POINT IS AT THE ENTRANCE TO NELSONS DOCKYARD JUST OFF FORT CHARLOTTE



HEADING FOR THE FINISH LINE OFF
FORT CHARLOTTE



ANTIGUA SAILING WEEK





ANTIGUA SAILING WEEK
PRIZE GIVING
CEREMONY AT THE
DOCKYARD

ANTIGUA SAILING WEEK,
WHICH IS NOW IN IT'S
47TH YEAR, ATTRACTS
WELL OVER 100 BOATS IN
VARIOUS RACING
CLASSES.

THE RACES TAKE PLACE
OFF THE SOUTH COAST
OF ANTIGUA, WITH THE
FOCAL POINT FOR
PARTIES, THE
COMMITTEE DESK AND
THE FINAL PRIZE GIVING
TAKING PLACE IN THE
DOCKYARD.

“HUGH BEE” SAILED BY WELL
KNOWN LOCAL SAILOR SIR
HUGH BAILEY



THE AMERICA'S CUP VISITS ANTIGUA



THE OLDEST
SPORTING
TROPHY IN THE
WORLD, WHICH
TRAVELS FIRST
CLASS WITH IT'S
TWO GUARDS,
ARRIVED IN
ANTIGUA FOR A
BRIEF VISIT TO
HELP CELEBRATE
SAILING WEEK
2014

THE AMERICAS CUP AT THE COPPER AND LUMBER STORE



THE NELSON'S PURSUIT RACE

INAUGURATED IN 2005 TO COMMEMORATE THE BICENTENARY OF NELSON'S PURSUIT OF THE FRENCH FLEET IN THE CARIBBEAN. THIS RACE TAKES PLACE ON NEW YEAR'S EVE, WITH THE START AND FINISH LINE JUST OFF FORT CHARLOTTE.

THE PRIZE GIVING AND DISPENSING OF RUM PUNCH TAKES PLACE ON THE EAST SIDE OF THE OFFICERS QUARTERS WITH ALL MONIES RAISED FROM THE EVENT GOING TO THE ST. JOHN'S HOSPICE.





THE TRANS ATLANTIC ROWING RACE





22

Asia Pacific
GARMIN
TFM 14

Blue sailboat

Person on pier



THE TRANS-ATLANTIC ROWING RACE HAS BECOME A YEARLY TRADITION, FROM EUROPE TO ENGLISH HARBOUR ANTIGUA.

THESE BRAVE SOULS ROW ACROSS THE ATLANTIC SINGLE HANDEDLY OR IN PAIRS, YOUNG AND OLD, ABLE BODIED, OR IN MANY CASES OTHERWISE. THEY ARRIVE EXHAUSTED BUT JUBILANT.





THE FIRST OF THESE ROW BOATS TO MAKE IT ACROSS WAS THE "WOMBLE" ROWED BY "TINY". IT NOW HAS A PERMANENT HOME IN NELSONS DOCKYARD.



KARIESO, A CARIB CANOE







KARIESO WAS BUILT ON THE SOUTH AMERICAN COAST, HEWEN FROM A SINGLE TREE, USING TRADITIONAL AMERINDIAN METHODS.

SHE WAS DEVELOPED TO KEEP THE TRADITIONS OF THE ORIGINAL INHABITANTS OF OUR ISLANDS ALIVE AND TO PROMOTE STRONGER BONDS BETWEEN THE LESSER ANTILLES.



ANTIGUA'S FORMER MINISTER OF CULTURE IN THE MIDDLE

CARIB SAILING CANOE "GLIGLI"





THE "GLIGLI" SAILED AND ROWED HER WAY FROM DOMINICA IN THE SOUTH TO ST. THOMAS IN THE NORTH, WITH STOPS ALONG THE WAY INCLUDING THE DOCKYARD IN ANTIGUA.

SHE WAS THE FIRST SUCH VOYAGE IN SEVERAL HUNDRED YEARS, REMINDING US OF WHAT THE ORIGINAL INHABITANTS OF THESE ISLANDS WERE CAPABLE OF, AND SHARING A BIT OF "CARIB" CULTURE ALONG THE WAY.



OTHER EVENTS THAT HAVE TAKEN PLACE IN THE DOCKYARD



THE ANNUAL CHRISTMAS
MORNING FUND RAISER FOR THE
HOUR GLASS FOUNDATION



THE BEATING OF THE RETREAT ON DOCKYARD DAY



AID FOR HAITI MUSIC CONCERT

TRADITIONAL STRING BAND
PLAYING FOR A UNESCO EVENT
IN THE DOCKYARD



THE INTERNATIONAL
CONGRESS FOR CARIBBEAN
ARCHAEOLOGY WAS
PARTIALLY HOSTED BY THE
NATIONAL PARKS IN 2009





THE MUSEUMS ASSOCIATION OF THE CARIBBEAN (MAC) MEETING HOSTED BY THE COPPER AND LUMBER STORE

THE ANTIGUA CHARTER YACHT MEETING, WHICH IS IN IT'S 53RD YEAR IS HOSTED BY THE DOCKYARD AND SURROUNDING MARINAS





SCHOOL CHILDREN VISITING ONE OF THE CHARTER YACHTS DURING THE BOAT SHOW

HRH PRINCE EDWARD'S VISIT TO COMMEMORATE THE QUEENS DIAMOND JUBILEE





THE PRINCE VISITS
THE MUSEUM, PLANTS
A TREE AND ENJOYS
THE VIEW OF THE
DOCKYARD FROM
DOW'S HILL FORT AND
INTERPRETATION
CENTRE



ANUAL SUMMER CAMP IN THE DOCKYARD AND AT DOW'S HILL INTERPRETATION CENTRE





SUMMER CAMP

THREE ANNUAL FISHING TOURNAMENTS ARE HOSTED BY THE DOCKYARD





ARCHAEOLOGY WITHIN THE PARK



TIME DETECTIVES YOUTH ARCHAEOLOGY PROGRAM



UNDERWATER ARCHAEOLOGY EXHIBIT
DAY



EXCAVATING ON THE RIDGE AT SHIRLEY HEIGHTS



THE ELDER HOSTELS WORKING AS VOLUNTEER
ARCHAEOLOGISTS



**SURVEYING HISTORICAL
STRUCTURES WITHIN THE
PROPOSED WORLD HERITAGE
SITE**



CRAFTS MEN AT WORK











STONE MASONS AT WORK ON THE CLARENCE HOUSE RESTORATION PROJECT



THE DOCKYARD AND
SURROUNDING
AREAS HAVE
BECOME POPULAR
WEDDING VENUES



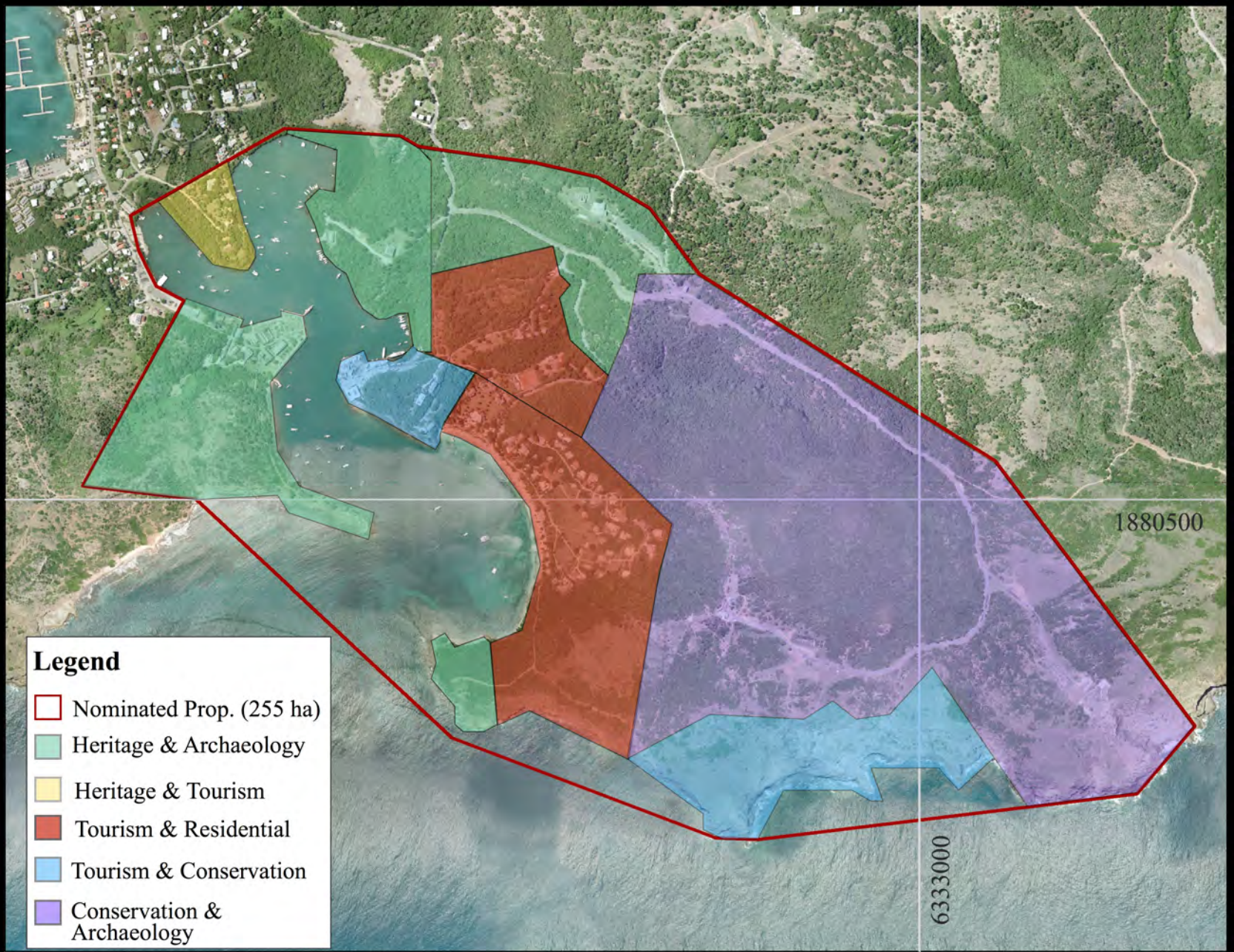




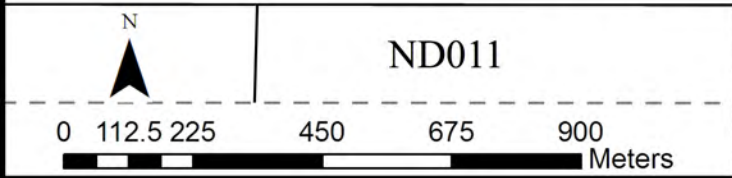
RE OPENING OF THE DOCKYARD 1961

THE END

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Land Use Zones Within Nominated Property



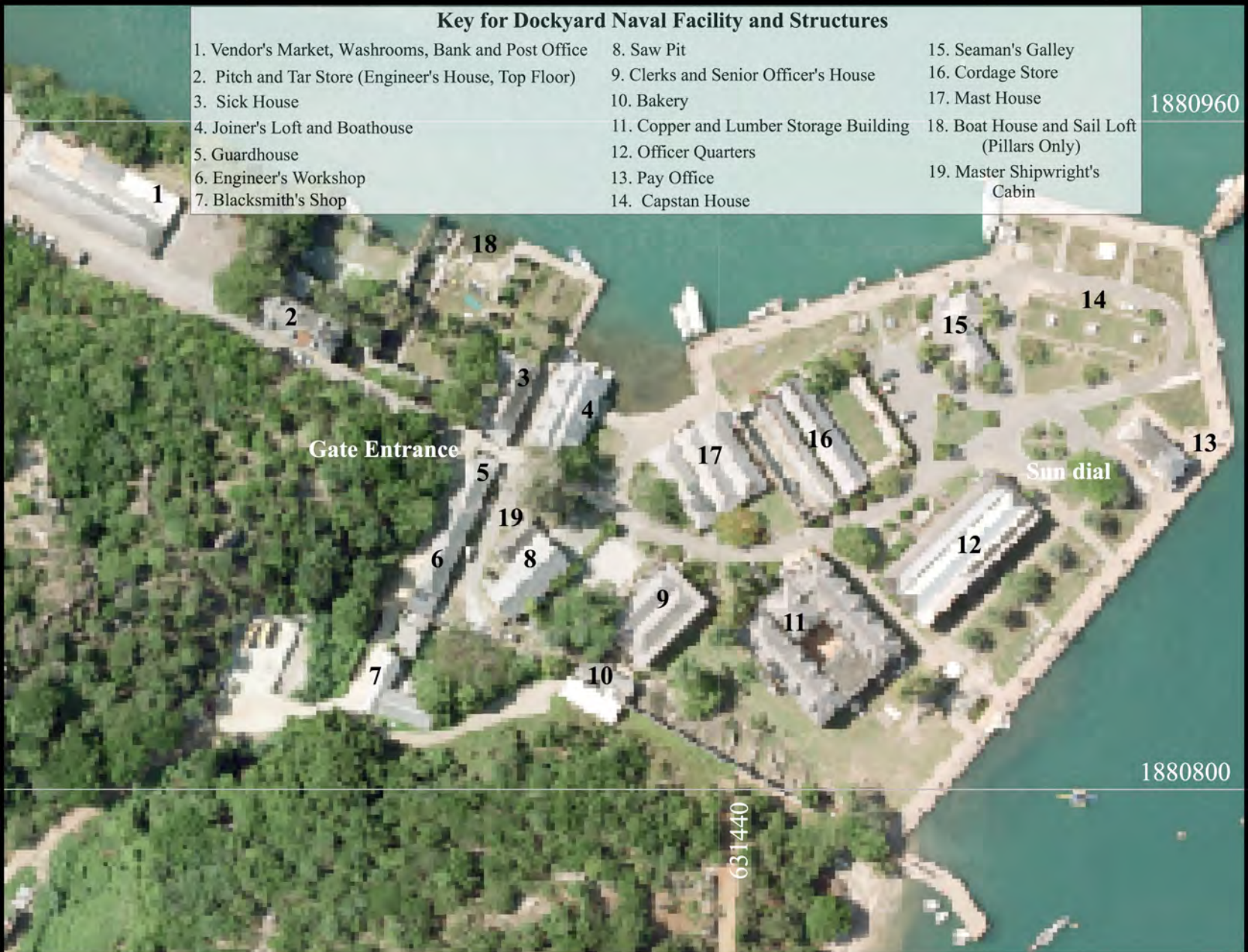
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Key for Dockyard Naval Facility and Structures

- | | | |
|--|--|---|
| 1. Vendor's Market, Washrooms, Bank and Post Office | 8. Saw Pit | 15. Seaman's Galley |
| 2. Pitch and Tar Store (Engineer's House, Top Floor) | 9. Clerks and Senior Officer's House | 16. Cordage Store |
| 3. Sick House | 10. Bakery | 17. Mast House |
| 4. Joiner's Loft and Boathouse | 11. Copper and Lumber Storage Building | 18. Boat House and Sail Loft (Pillars Only) |
| 5. Guardhouse | 12. Officer Quarters | 19. Master Shipwright's Cabin |
| 6. Engineer's Workshop | 13. Pay Office | |
| 7. Blacksmith's Shop | 14. Capstan House | |

1880960



1880800

Aerial of The Dockyard Naval Facility and Structures



ND014

0 12.5 25 50 75 100 Meters

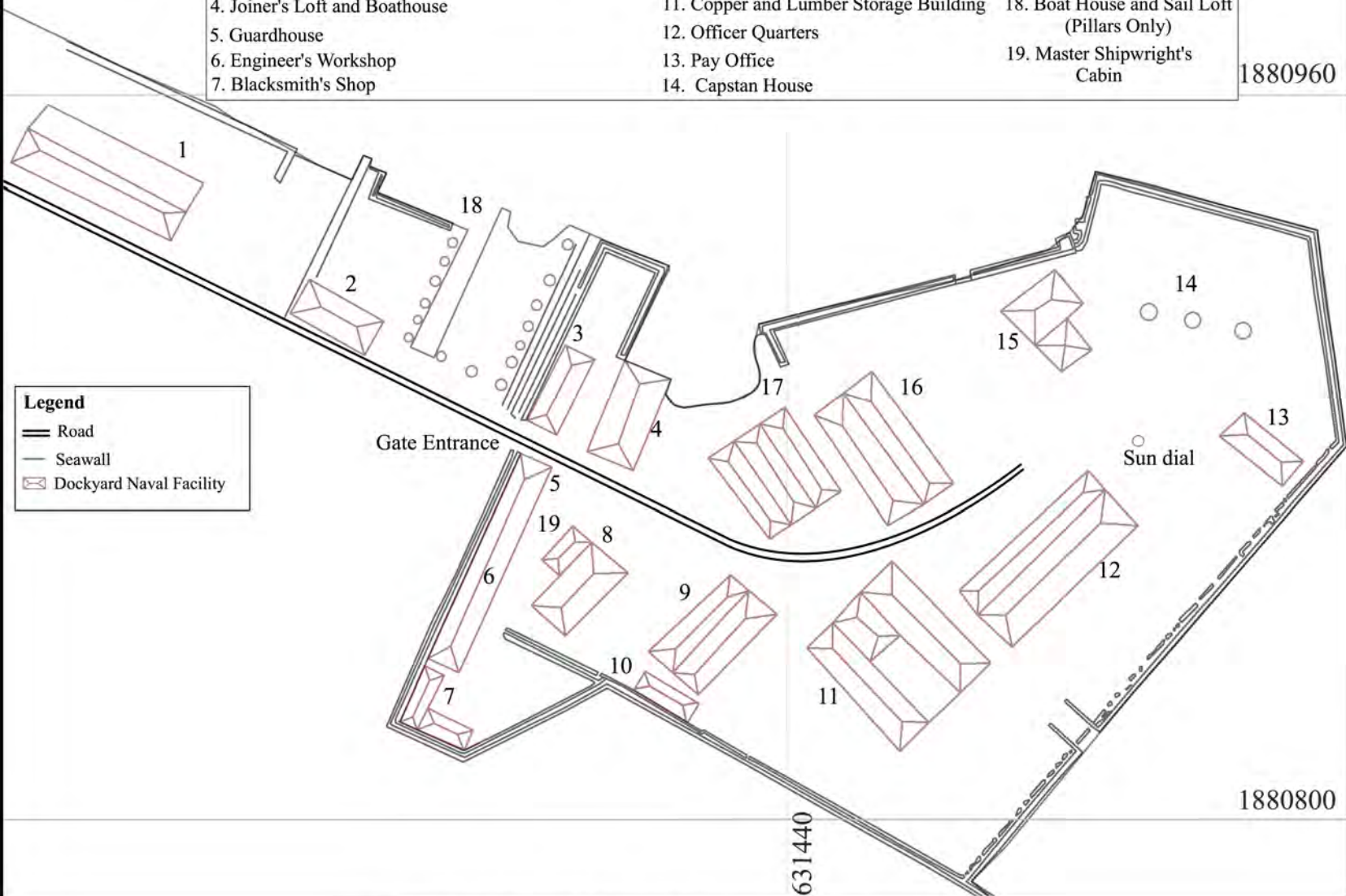
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| 5. Guardhouse | 12. Officer Quarters | 19. Master Shipwright's Cabin |
| 6. Engineer's Workshop | 13. Pay Office | |
| 7. Blacksmith's Shop | 14. Capstan House | |

1880960



Legend

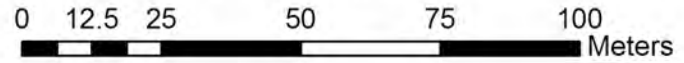
- Road
- Seawall
- Dockyard Naval Facility

The Dockyard Naval Facility and Structures

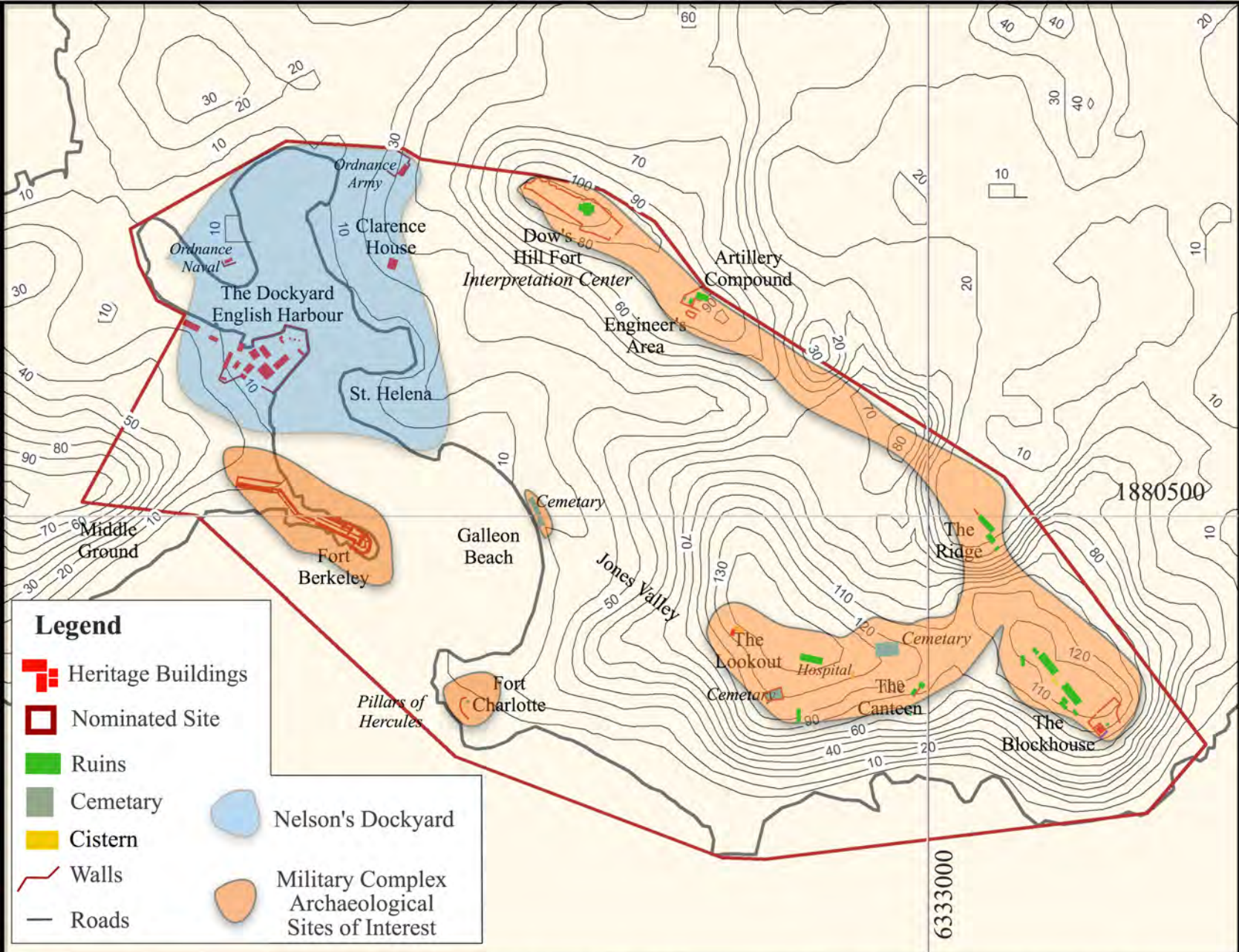


ND013

Nomination Dossier for The Naval Dockyard and Related Archaeological Sites



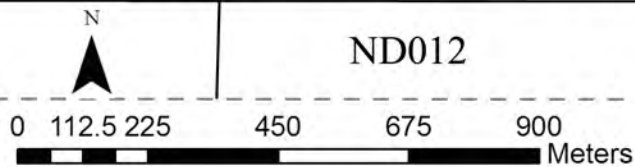
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Heritage Features and Surrounding Archaeological Military Complex and Nominated Property

ND012


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Legend

 Nominated Prop. (255 ha)

Aerial Map and Nominated Property

N

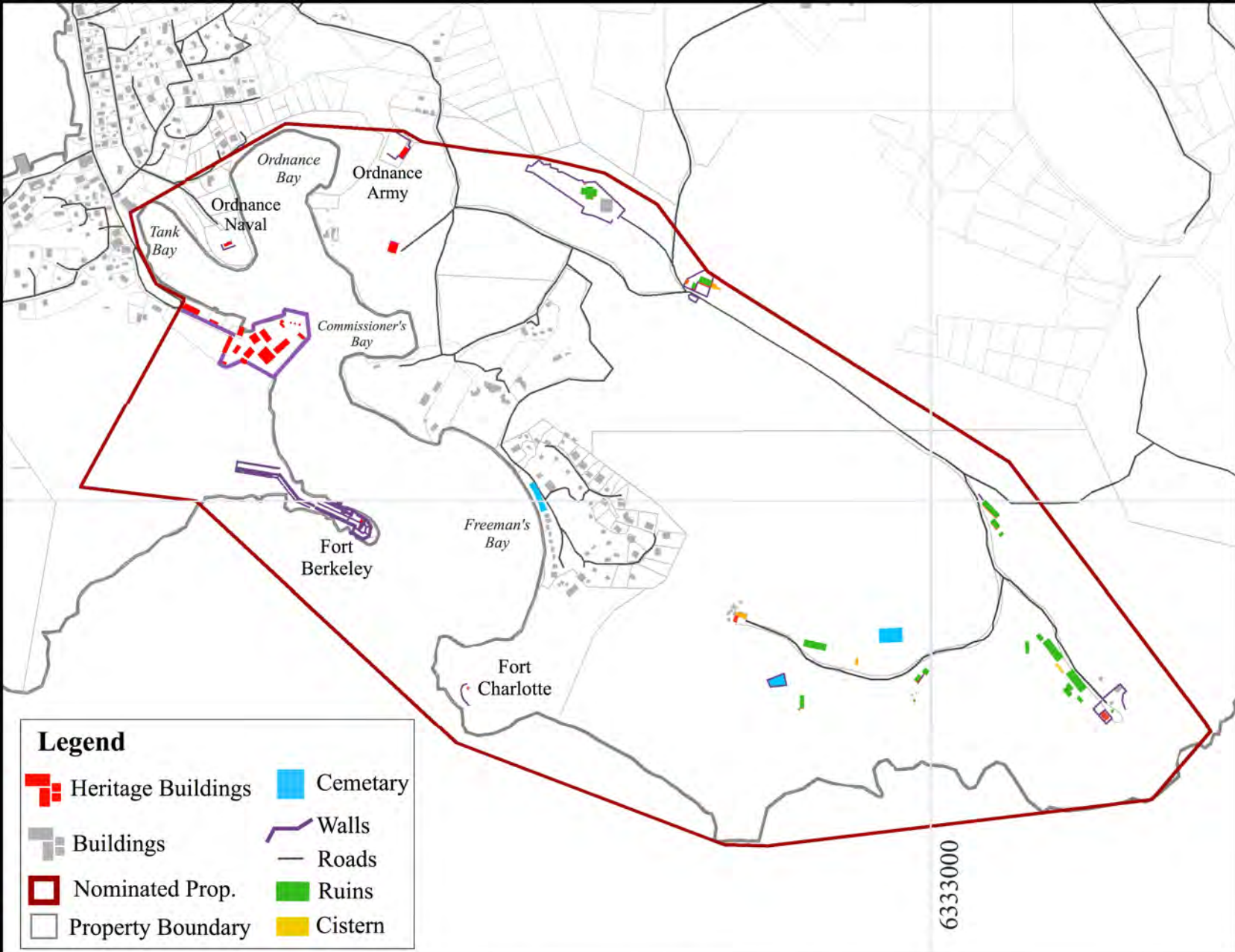
ND010

0 112.5 225 450 675 900




Meters

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Legend

- | | |
|--|--|
|  Heritage Buildings |  Cemetary |
|  Buildings |  Walls |
|  Nominated Prop. |  Ruins |
|  Property Boundary |  Cistern |
| |  Roads |

Cadastral Map and Nominated Property

N

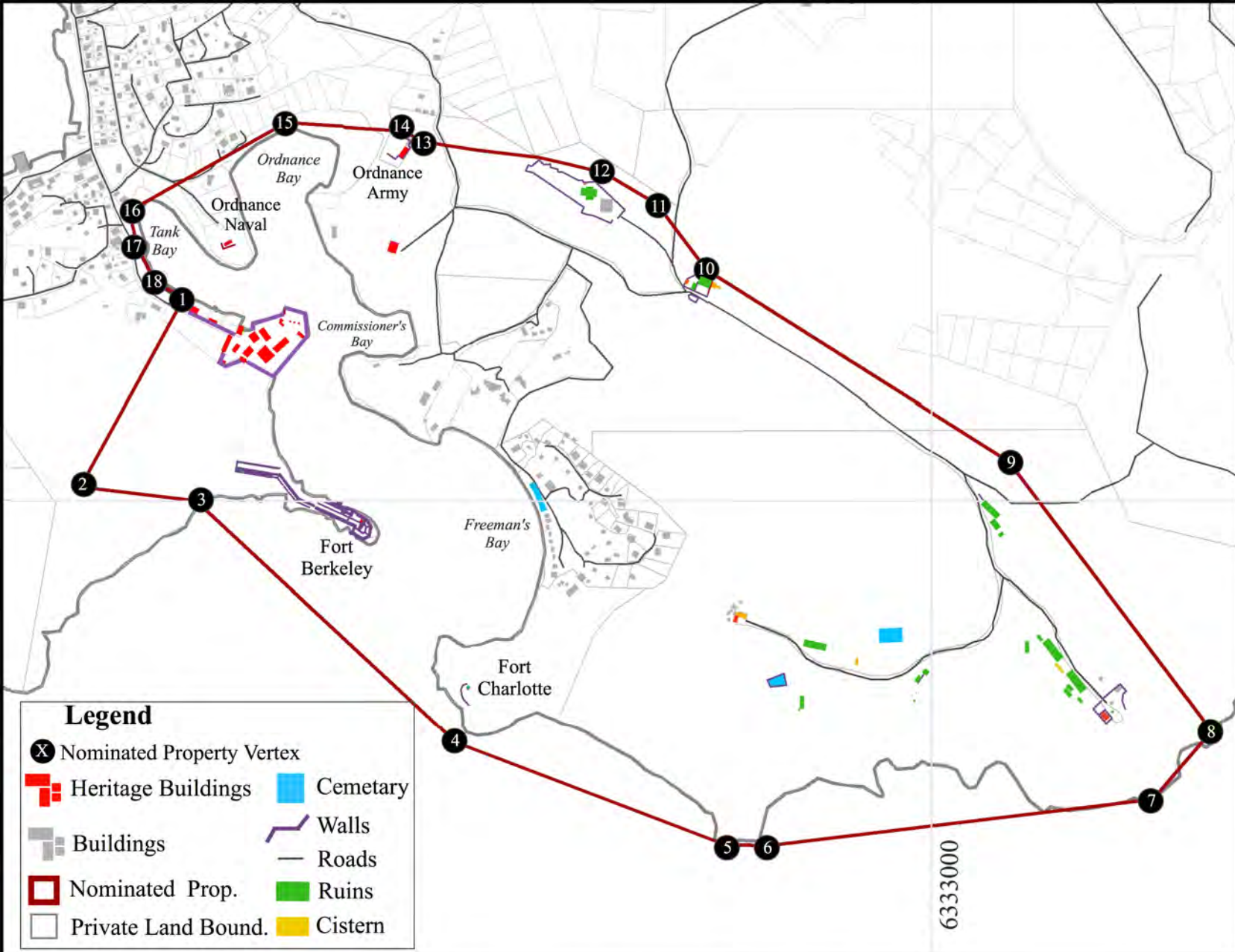


ND009

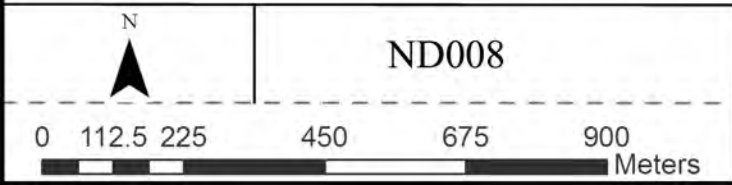
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Meters

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Cadastral Map and Nominated Property Vertices



Nomination Dossier for The Naval Dockyard and Related Archaeological Sites

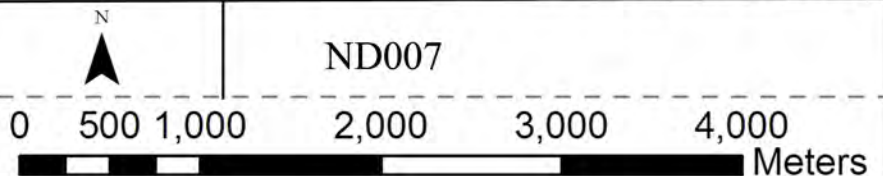
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Legend

- Buffer Zone (4128 Ha)
- Roads
- Property Boundary
- Coastline
- Buffer Zone Vertex

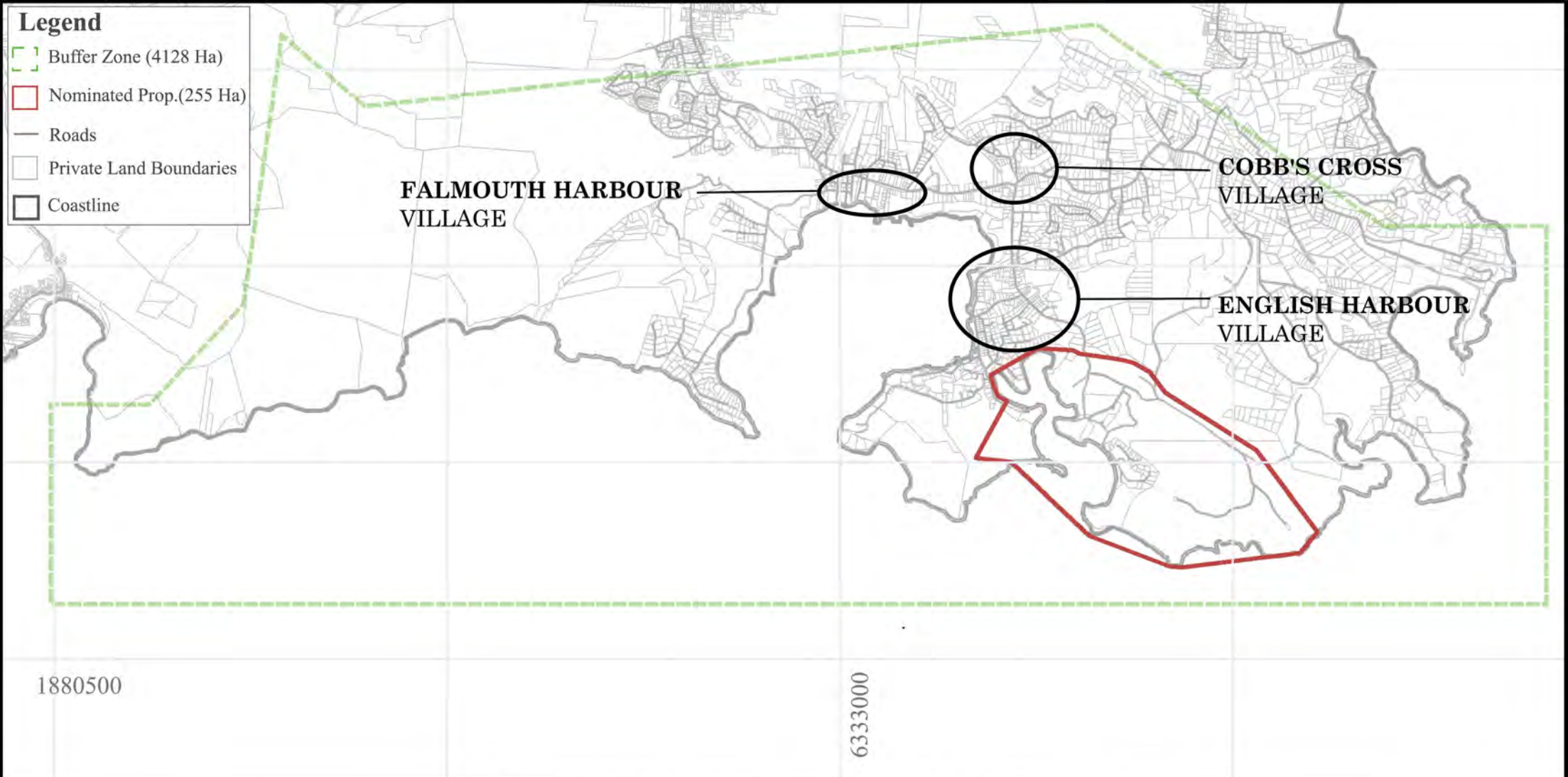


Cadastral Map and Buffer Zone Surrounding the Nominated Property Vertices

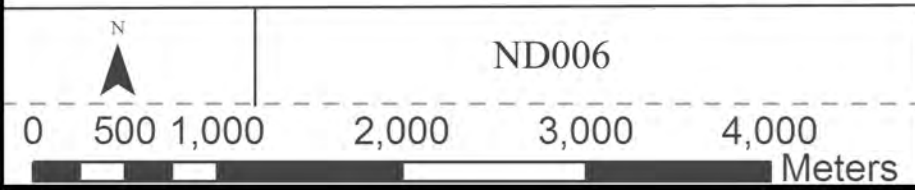


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Communities Surrounding Nomination Property



ND006

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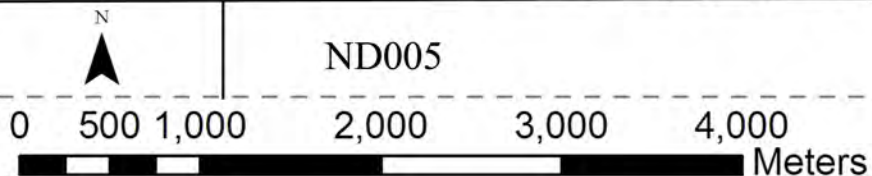
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Legend

- Buffer Zone (4128 Ha)
- Roads
- Property Boundary
- Coastline

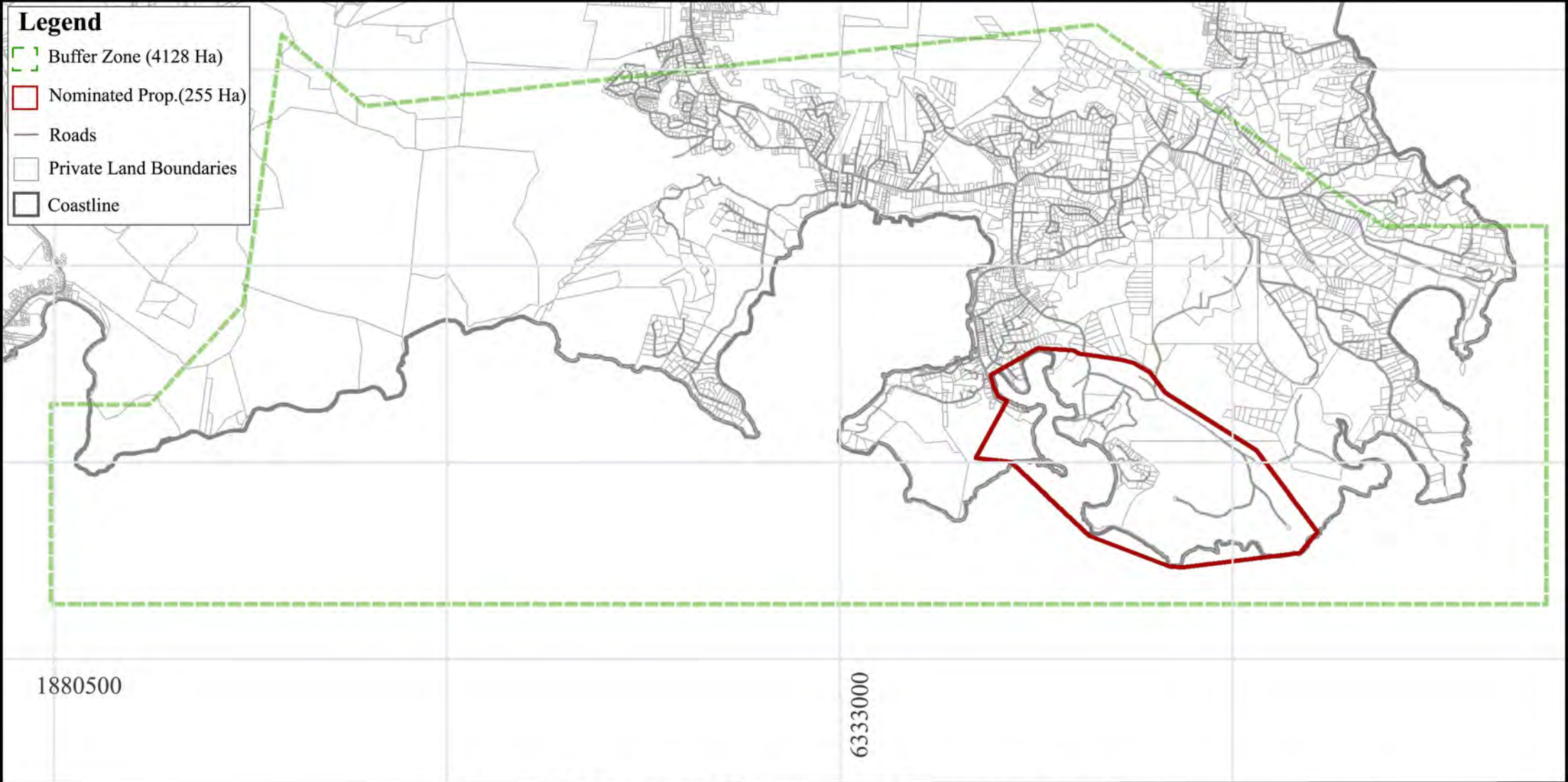


Cadastral Map and Buffer Zone Surrounding the Nominated Property

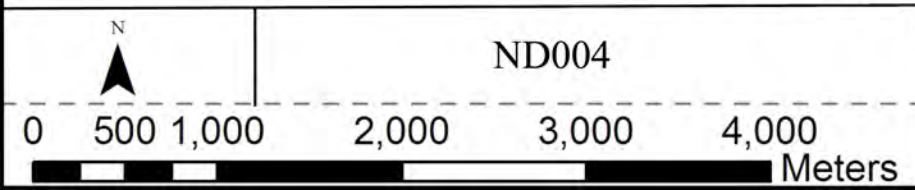


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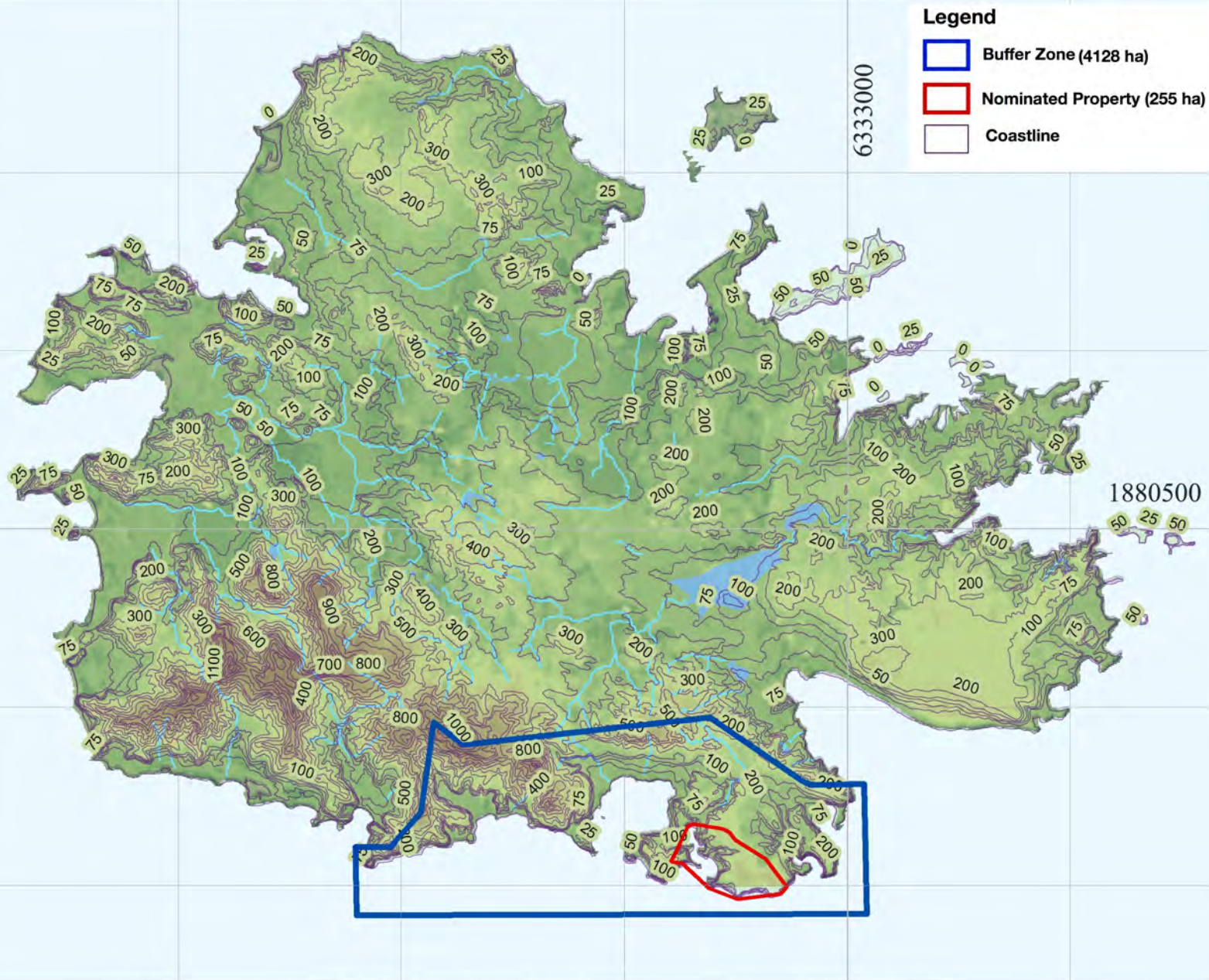


Cadastral Map within the Buffer and Nominated Property



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Topographic Map with the Buffer Zone and Nominated Property

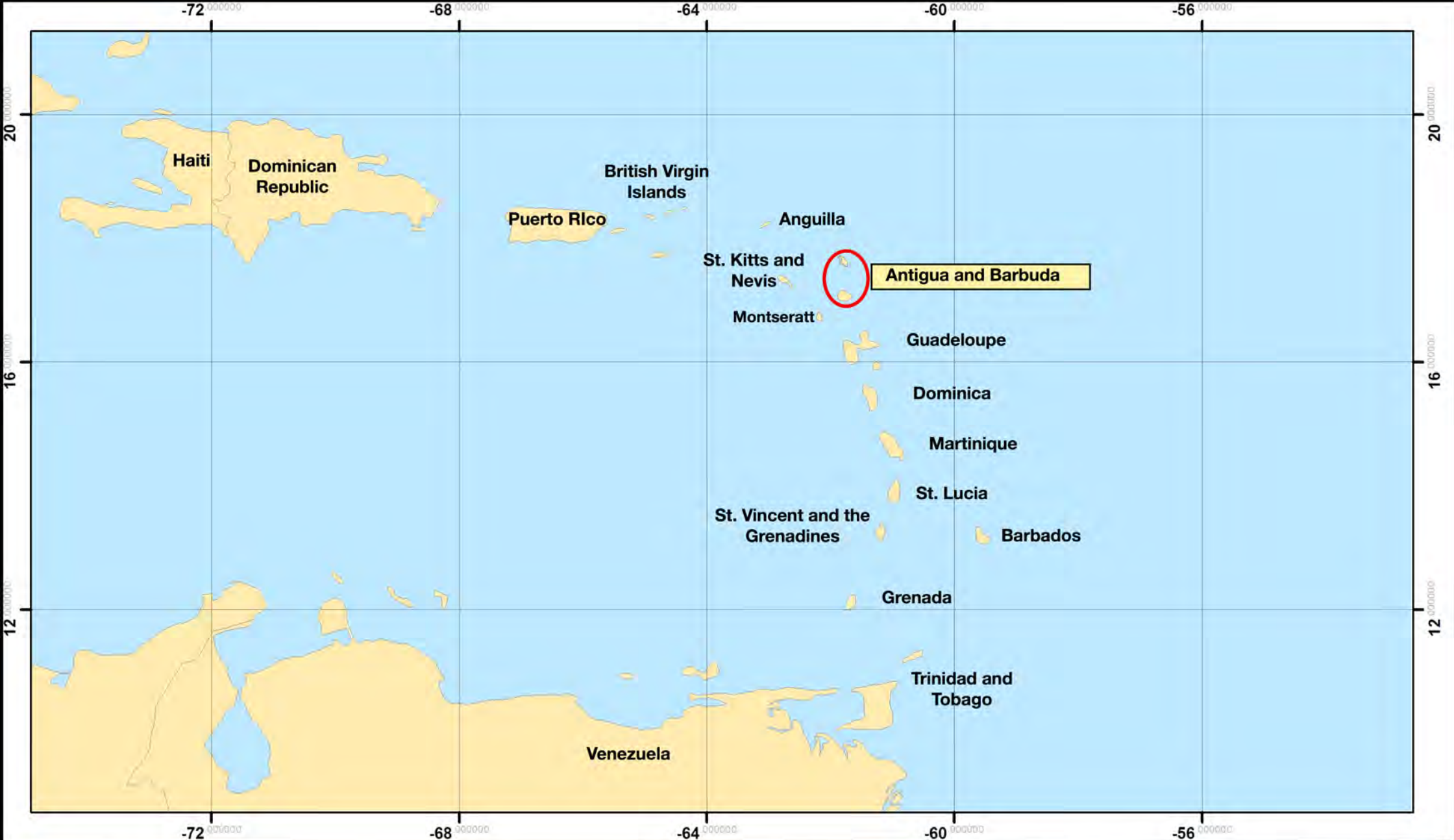


ND003

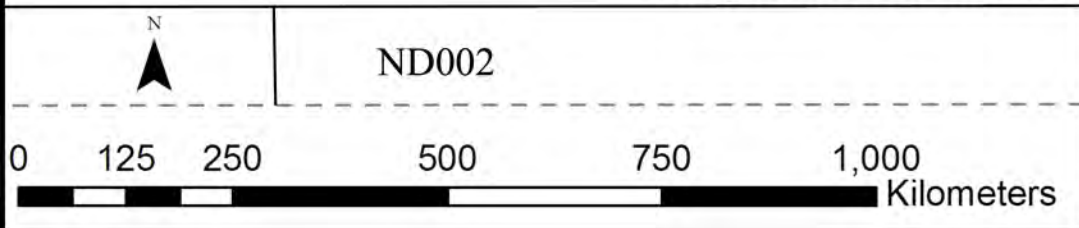
0 1,000 2,000 4,000 6,000 Meters

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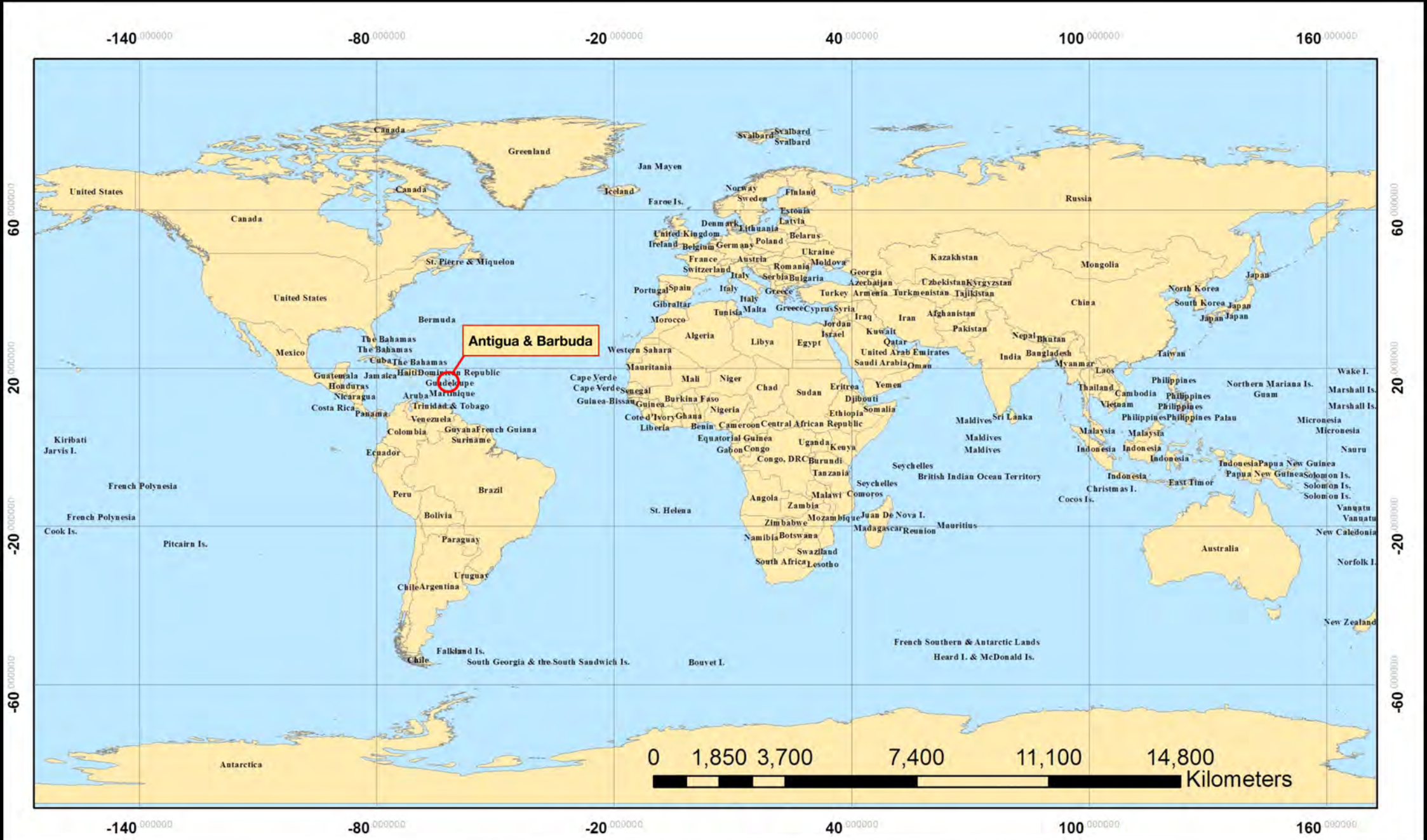


Antigua and Barbuda in Relation to The Lesser Antilles



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Location of Antigua and Barbuda in Relation to the World



ND001

Nomination Dossier for The Naval Dockyard
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Gwenaelle Bourdin
2016
Director
ICOMOS Evaluation Unit
11, rue du Seminaire de Conflans
94220 Charenton le Pont
Paris
France

20th February

Ref: GB/AS 1499

Dear Madam Bourdin,

Re: The Antigua Naval Dockyard and Related Archaeological Sites; Request for Additional Information.

I write to update you on our progress to date in our efforts to meet the end of month deadline. We have made considerable progress and I have attached information to this document. Others will follow as separate attachments. Some are works in progress and will be completed over the next few months. We have also acquired the services of Mrs. Isabel Rigol to assist us in preparing a Conservation Plan. Already a draft document; a five-year plan has been produced and nearly completed. This has to be part of a larger Management Plan of the site which will address capacity building and growth within the organization, particularly so for the Heritage Department. We have also been in communication with several other professionals and academic institutions, discussing long term programs and opportunities including museum development, staff training in stabilization, research, conservation and much more.

To conclude, I have attached additional information and documents and some may be sent separately due to their large file size. I have scanned the pages of the dossier related to the inclusion of Criterion ii. Please advise if a completely new dossier is to be printed and sent to Paris. I can have this done and sent by FedEx immediately if needed.

Thank you for your assistance, and I will be pleased to send additional information immediately if requested.

Sincerely yours

Dr. Reg. Murphy
Chairman World Heritage Committee Antigua Barbuda
Revisions Requested: The Antigua Naval Dockyard and Related Archaeological Sites

Criterion ii

We have considered the addition of Criterion (ii) and have adjusted the document to include it. This is quite simple for, as you noted, it is already reflected directly throughout the document.

Additional Protective Legislation

The Environmental Protection Legislation was passed by Parliament on the 24th September 2015 and is now in effect. In regards to the Heritage Legislation, (modeled from the UNESCO Model) the committee has met on several occasions since our Paris meeting and we have managed to conclude the final review. The legislation is now with the Head of the Senate, the Honourable Alincia Grant and the legal draftsman at the Attorney General's Office for formatting. The government is in full support and the Hon. Attorney General is pressuring the committee for its completion. Our plan is to have it concluded and presented to the AG and Cabinet by the end of February for inclusion on the agenda for the March sitting of Parliament, and it is anticipated that it will have a speedy passage through the House. Already several of the Ministers on both sides have endorsed the efforts and have seen and approved the draft.

Proposed Development/Hotel Renovations within the Boundaries

In regards to the proposed development at Freeman's Bay. The Galleon Beach Hotel project has been a very long standing proposal/project. The site is currently a mixture of high-end residences for seasonal vacationing home owners, and lower end, run-down (1960/70s cottages. The hotel is in poor condition and mostly unused. As an old facility that predates the establishment of the National Parks, it is not in keeping with the current design guidelines, quality and covenants for this area. It has to be renovated to be in keeping with the area, its heritage, architecture and our OUV. The hotel has suffered chronic financial issues and has changed ownership three times in the past 20 years. It is now at the beginning of a lengthy litigation process and there are no current plans for its renovation or expansion. Furthermore, as all previous development approvals are now expired, the planning, design and approval processes for any new projects on that site will have to be resubmitted and evaluated under the stronger and more restrictive covenants, building guidelines and policies now in force.

Cultural Impact Assessments Galleon Beach Area

In regards to the proposed renovation of Galleon Beach Resort and its properties, an archaeological/cultural survey was conducted of the site and its surrounding lands and waterfront in 2009 and again in 2013. Archaeological research and excavations were carried out by Yale University and the Antigua Archaeological Society in 1973 and 1974 on the prehistoric component of the site. The 2009 survey conducted by the Heritage Department of the National Parks Authority covered the entire area. This was done to guide their decisions on the proposed rebuilding and expansion of the hotel. On the basis of the Parks survey, excavations were done on the most sensitive and threatened area of the beach (2013 and 2015) that were being eroded by hurricanes and increasing storm surges. This research will continue in the summer of 2016.

In light of the realization of the eventual improvement of the "resort" this area is one of the most intensively excavated and researched sites in the Parks and all historical features and

sites have been documented. The process of archaeological monitoring and mitigation will continue for the foreseeable future. In sum, there are no physical structures or visible features of significance on the landscape, except for the gun platforms, stone foundations and cistern at Fort Charlotte, where no development will ever be permitted.

The second development project located in English Harbour is the Inn Hotel. It is a well established (1961) high end hotel with a very low foot print. It was recently upgraded and conforms in every respect to the building guidelines of the National Parks. It has had building approval for six additional cottage style units that will match the current historic architecture within its forested landscape. It is anticipated that this project will be done during the next year. The areas proposed for these additional units are within the area zoned for conservation which permits highly restricted tourism development in accordance with the Parks Building Guidelines.

It must be noted that as previously mentioned, there are a few private properties (residential building lots) in the proposed site within the Galleon Beach and Inn Resort compounds. Of these, only a few have not been developed. They are all subject to the increasingly stricter building guidelines, covenants and must conform to the regulations of the Parks. These private properties were sold as development lots long before the establishment of the National Parks and the recent World Heritage initiative.

Discrepancies in the Zoning Map

In regards to the Zoning Maps and possible differences, the National Parks Authority embarked on a review of its zoning classifications after thirty years of being established and managed. We reviewed the rationale for the established zones and the criteria for classification, and implemented field studies and public consultations to guide the evaluation. It was noted that land use had changed, communities were growing and there were changes in vegetation and species diversity among other things. It was decided to simplify and adjust the zones and to create a more user friendly map. The differences that were observed by the review committee may have been the original land use map and a Draft Proposal done but not ratified. Regardless, the program is now complete and a new map is now being finalized and the most recent draft copy will be attached to this document. Final consultation is now taking place with all the relevant authorities and should be implemented by mid-March if not sooner.

Conservation Plan and Policy Document

Conservation architect Isabel Rigol has just concluded her visit to Antigua. She did a thorough review of our documents, policies, visited the buildings and sites, and is now working with us to prepare a formal Conservation Plan. This plan has to be an expanding document that will be developed over the immediate few months and years due to the very large area of the site and the buffer zone. Regardless the process has begun and the objectives, conservation measures, priorities and other key factors of the plan has been established and a work program outlined.

Carrying Capacity Study

To establish policies and guidelines for a carrying capacity document, essential data must be collected over a span of time, particularly during the peak periods of site use and occupancy. This is now being collected and will be discussed further below.

Road Map for the Future/Completion of the Documents

Our road map can be summarised as follows:

- A **revised management plan** which is focused on our OUV is in progress. This will be completed by the end of April of this year.
- **Conservation Plan:** A conservation plan is now being prepared. We have enlisted architect Isabel Rigol to assist in the process of finalizing and writing a Conservation Plan for the site. Isabela arrived in Antigua on February 8th 2016. A draft document has already been produced and it is anticipated that a basic plan will be completed by the end of April. It must be noted that currently there are no conservation architects resident on Antigua. Capacity building is a priority but will require time to implement and this will be addressed in our master plan.
- **Revised Land Use Plan:** See attached draft copy of Land Use Plan, awaiting final review and ratification.
- **Tourism Visitor Carrying Capacity Study:** We have begun the process of gathering data which, once analysed, will allow us to make informed decisions in the following areas. The study includes motorized traffic flow, total numbers of visitors, parking space availability, cruise ship tour buses and commercial traffic, as well as marine traffic into English Harbour. The NPA recognises the need to decrease and possibly restrict motorized traffic within the historical dockyard and to introduce an environmentally friendly shuttle service, but additional parking spaces will be required as well as traffic wardens and enforcement. A traffic flow study was done by consultants Ivor Jackson and Associates as part of a proposed Village Plan to improve the infrastructure in English Harbour. This portion of the plan will be revisited to determine its viability prior to acquiring the services of another consultant. Regardless, academics from the University of Valencia, Spain have expressed interest in assisting with our proposed Carrying Capacity Study and will be engaged to complete the study. This study must be carried out over a number of months to obtain an accurate data set and therefore will not be completed till the end of August, 2016 (data gathering). Preliminary information will likely be available sooner. It will be necessary to have the final document (data summary) by September for its implementation and inclusion in the 2017 budget of the NPA.
- However, it must be considered that there is already an efficient system in place. In times of major events, when thousands of visitors are expected to the dockyard, we work closely with the police to create additional parking areas outside of the historic core and buses and golf carts used as shuttles to take visitors into and out of the site. The road system converts into a one-way system and kept clear of parked vehicles to permit rapid response vehicles unrestricted entry and exit into the dockyard and events. This system has been in place for many years and is tried and tested. However, a new review and survey will potentially improve the situation and

formalize the practices and policies. As there are many parties involved, such as the Police and Fire departments, Transport Board, Disaster Services, Emergency Medical Services, National Parks, the Development Control Authority, business and community representatives, and others, it will require time to gather and review all the new data and contributions from stakeholders. A final policy document related to Carrying Capacity, traffic flow and visitor management should be completed by the end of the year 2016.

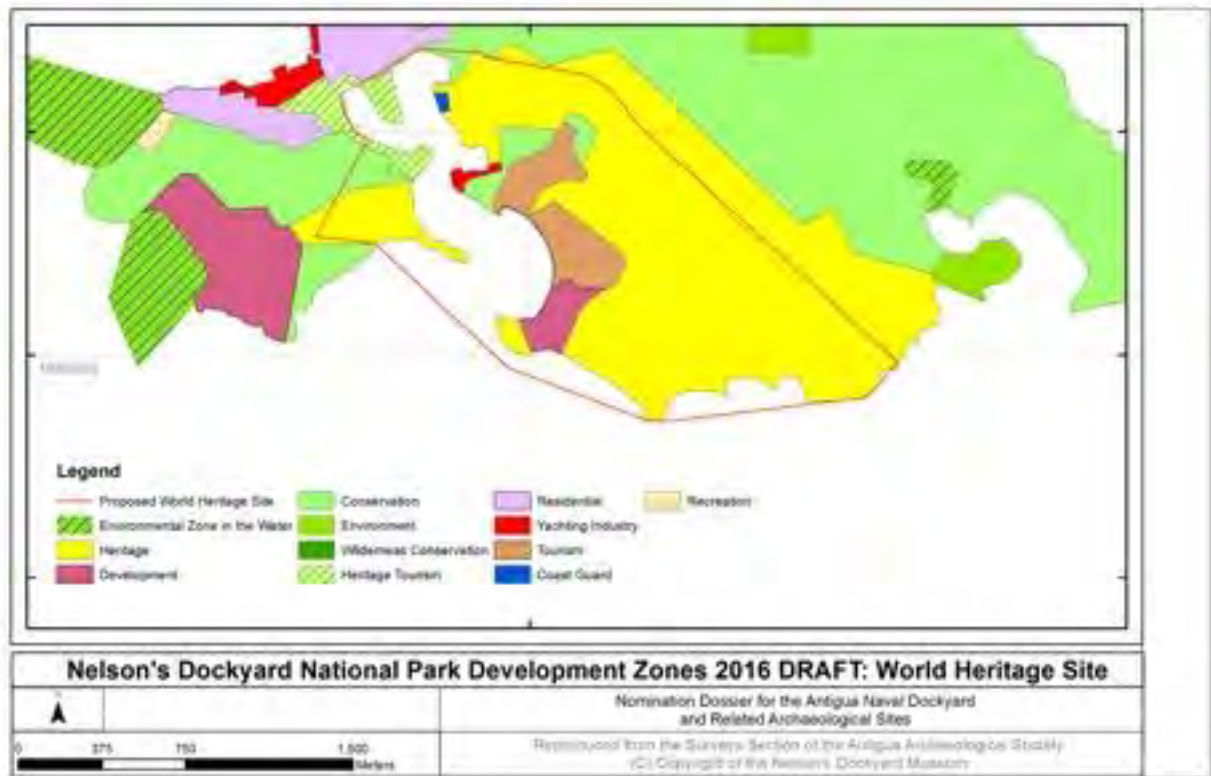
- The goal and mandate of the National Parks is and has always been to protect, conserve and manage the heritage resources of the Park. With this in mind, a policy document for the maintenance, preservation, and stabilization of the built heritage needs to be written. This document should detail materials and methods to be utilized to protect the OUV of our built heritage. We have begun this process with the assistance of Isabel Rigol and are in negotiations with historical architects and conservationists from the University of Valencia. This process will need to include capacity building within the maintenance and restoration staff of the National Parks.
- With regards to the archaeological sites: We currently have an active archaeological program which includes field surveys, excavations, site monitoring and mapping. This is done on an annual basis with research associates from overseas universities, graduate students and museums that assist in the processes of research and analysis. Numerous papers and publications are presented at major conferences and in journals annually. All field work is managed and coordinated by the Heritage Management Department which has established protocols for research projects in place. For the protection of the OUV of our archaeological landscape, stabilization projects are essential and will be detailed in our conservation plan.



Nelson's Dockyard National Park Development Zones 2016 DRAFT

	Nomination Dossier for the Antigua Naval Dockyard and Related Archaeological Sites	
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Zones Within the Nelson's Dockyard National Park Buffer Zone for the Proposed World Heritage Site

Heritage

The Heritage Zones encompasses highly sensitive and important historical and archaeological sites. **No building or development is permitted.** Restoration and stabilization is allowed but only following intensive studies, archaeological research and environmental and cultural impact studies. Stabilization is the preferred option for interventions and research and monitoring is essential.

Development

These areas are considered as special cases within the Conservation Zone. They comprise, the Galleon Beach Properties, the Windward Bay Development and the Rendezvous Bay Development. They are all privately owned properties that have been permitted to develop low density residential and boutique hotel projects. They must conform to the building guidelines and mitigation processes outlined in the Conservation Zone below.

Conservation

Conservation Zones in the National Park are subject to specific policies and guidelines. This zone has within it special areas where higher levels of control

and management applies. In addition, there are areas of special interest, old private properties, and lands within the boundaries of existing businesses and properties. Development within these areas is permitted but subject to stringent control, building covenants', policies and guidelines. All proposed development projects will require a cultural impact assessment and archaeological mitigation if necessary. Archaeological research must be included in all impact assessments. The developer will be responsible for all survey and excavation costs and artifacts and materials uncovered will be the property of the Museum of Antigua, or the Dockyard Museum. Portions of this zone must remain in its current natural state with interpretation signage where possible. The size of the building, the colors permitted and the architectural design are strongly controlled. Building permission cannot be granted without prior permission from the National Parks Authority. The DCA cannot grant development/building permits in NPA Conservation Zones before an NPA review, nor can Crown lands be leased or sold without permission from the NPA (NPA Act 1984). Conservation lands cannot be altered or re-zoned without public consultation. The guidelines and policies are outlined in the NPA policy documents.



Environment

Environmental Zones are established because of unique environmental attributes and values within the immediate area. These may include flora, fauna, geological features, marine resources, scenic landscapes and more. Most of these sites are coastal under water parks. No buildings or development is permitted in these areas.



Wilderness Conservation

Wilderness Conservation areas are undeveloped, remote and rich in unique species and scenic values. No building is permitted without major impact assessments. Activities, such as hiking are permitted but should be restricted to established trails and pathways. Off-road vehicles should be limited to established pathways and highly controlled.



Heritage Tourism

Heritage Tourism areas are established areas with historical structures or features. Buildings may be stabilized and research is encouraged. Activities such as guided tours and low impact commercial activities are encouraged but structures may not be altered from their historical condition to suit the commercial activity. Interventions must follow the general principles of conservation.



Residential

Residential areas are areas where communities and community related activities are established. It includes schools, churches, restaurants and areas of social activities, shops, light industry, primarily yacht support and dwelling houses. They are however, subject to the general rules of the Conservation Areas and structures must comply with the design guidelines.



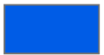
Yachting Industry

The waterfront areas designated for yachting activities and the development of the industry permits activities related to the industry. Marinas and slipways are required to comply with regulations and environmental policies to ensure sustainable development and control pollution.



Tourism

Tourism areas are designated for hotel development and related activities. Hotels must conform to the general building guidelines and additional covenants and restrictions will be applied according to the proposed project. Environmental and Cultural Impact Assessments must be conducted prior to planning and development. Activities must conform to the General Regulations of the National Parks that restricts the use of jet skis, horses, and loud musical events. Large high density hotel developments are to be prohibited.



Coast Guard

The Coast Guard is an essential service. However, the area designated to them is an important archaeological and within a heritage tourism venue. As a military related service, their operations must be respectful of public safety and their heritage environment. Expansion of their facility is restricted and any proposed additional structures or infrastructure on site subject to the general regulations of the National Parks.



Recreation

Recreation areas are primarily public beaches within the National Parks. They are open to public access but no development is permitted. They are also environmentally sensitive areas with breeding ground for turtles and near shore fringing reefs. Activities must comply with the General Regulations of the National Parks Authority.



Environmental Zone in the Water

Environmental zones located in the sea are specially designated areas within the protected boundaries of the National Parks. These areas include old stands of mangroves, reefs, underwater trails and activities within these areas are highly restricted to research.

Section Three - Justification for Inscription

yachts to English Harbour, restoration efforts began on the old buildings. This in turn led to the birth of the Caribbean yacht charter industry, which has become a major economic contributor to the Antiguan economy. The Dockyard today remains an outstanding example of a still working Georgian period dockyard and a centre of sailing and repair. The area residents continue to work on the boats and marine trades. The army barracks on the surrounding hills have become rich archaeological sites, which have contributed substantially to our knowledge of the life and times of the occupants at this pivotal point in history.

3.1. b CRITERIA (II):

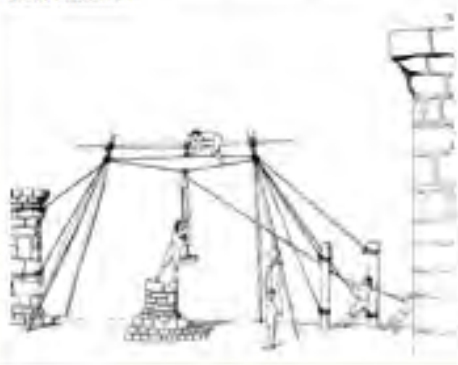
The Antigua Naval Dockyard and its Related Archaeological Sites exhibits an important interchange of human values, over a span of time within a cultural area of the world on developments in architecture and technology and landscape design. The enslaved Africans toiling in the service of the British Navy and Army built and worked the facilities that were critical to the development of the British Empire, trade and industrialization. The Georgian Period buildings and archaeological landscape stand in testimony to their efforts and continues to influence the architectural, social and economic development of their descendants.

Criteria (IV): "Be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history"

The Antigua Naval Dockyard in English Harbour, with its impressive assemblage of Georgian British naval structures enclosed within a walled historic compound, and the associated military complexes that surround it, form a unique cultural landscape. At a time when all the European "super" powers were rapidly expanding their spheres of influence and thus constantly at war, the well protected, natural, enclosed harbour of the Dockyard, usable year round including during the hurricane season, provided Great Britain with a huge strategic military advantage over its European rivals in the Eastern Caribbean at a pivotal time in global history. The Dockyard's structures represent an outstanding example of land-use and sea-use that continues to be utilised today, as a place of repair, provisioning and shelter for modern day vessels. The sharing of knowledge between the enslaved Africans and the British engineers, artisans and sailors over time resulted in an indispensable workforce of enslaved African tradesmen who were the backbone of the facility and its success. Despite their hardship, they produced extraordinary work of high quality craftsmanship evident at the site today. This knowledge of seamanship, boat building and specialised craftsmanship has been passed down through the generations creating the highly skilled work force of today.

3.1. c Statement of Integrity

The boundaries of the nominated site are based on the original Naval Dockyard and the surrounding military complexes of Shirley Heights and Middle Ground sitting atop the steep gradient and ridge line, creating both a natural enclosure and a strategically protected harbour.



CONSERVATION PLAN FOR ANTIGUA NAVAL DOCKYARD AND ITS RELATED ARCHAEOLOGICAL SITES. NATIONAL PARKS AUTHORITY

1. INTRODUCTION

In recognition of the site for its invaluable significance within the History of Antigua and Barbuda as well as its vital social and economic achievements, based on heritage tourism, in 1984 the government, declared the former British Naval Dockyard, its associated archaeological sites and fortifications, a National Park under the National Parks Act from 1984. It currently operates with guidance under the policies and mandates of the National Parks Development and Management Plans from 1984 and 2014 respectively.

The Nelson's Dockyard National Park was created with a mandate to protect, manage and develop the southern coast of Antigua, an area with an exceptionally large number of historical and scenic landscapes. At its core is the former 18th century British Naval Dockyard, known to Antiguanians as the Nelson's Dockyard.

The statutory body of government that manages the park is the National Parks Authority (NPA); a non-profit organization that is dedicated to the principles outlined in the above mentioned Development and Management Plans, and in the National Parks Act, its amendments and regulations.

In 1982, Antigua and Barbuda ratified the UNESCO World Heritage Convention. This Convention recognizes sites of "Outstanding Universal Value" (OUV) to all humanity. The Antigua Naval Dockyard and its Associated Archaeological Sites set in an area of exceptional beauty qualified for listing on this prestigious international list. For this reason, in 2012 the Antigua Naval Dockyard was included on the UNESCO Tentative List of World Heritage Sites. The State Party nominated this property in 2014 for its inclusion on the World Heritage List. This inclusion has to be decided during the 40th Session of the World Heritage Committee to be held in Istanbul, Turkey, in July 10-20, 2016.

Due to its transcendental values for the people of Antigua and Barbuda and for the whole Caribbean, the Naval Dockyard and its Associated Archaeological Sites deserve to be preserved for the current and future generations. Even more, if the complex is listed as a World Heritage site.

Aware of this, the National Parks Authority has established a comprehensive Conservation Plan to be implemented from 2016 to 2020. It is responsible under the National Parks Act 1984 for approving and implementing the plan on the advice of the Parks Commissioner. The NPA must then submit the Plan to the Minister Responsible.

2.RELEVANT INFORMATION ABOUT THE SITE

2.1 STATEMENT OF SIGNIFICANCE¹

The Antigua Naval Dockyard and Associated Archaeological Sites consists of a purpose built group of Georgian Naval structures, set within a walled enclosure, on a naturally occurring series of bays surrounded by highlands on which defensive fortifications were constructed. Built at a time when European nations were battling for supremacy of the seas in a bid to control the very lucrative sugar producing Islands of the Eastern Caribbean. Antigua's location as a front line repair, careening and protected year round facility gave Britain's navy a huge strategic advantage over its rivals at a pivotal point in world history. The continued use of the dockyard today by the charter yacht industry as a place of repair, provisioning and protection and of its workforce of highly skilled craftsmen, the descendants of British and enslaved, sailors and artisans make up a continuing cultural landscape.

2.2 STATEMENT OF INTEGRITY²

The boundaries of the nominated site are primarily based on those of the original Naval Dockyard and the military complexes of Shirley Heights and Middle Ground strategically located on the hills surrounding the Dockyard. These military complexes were built entirely to protect this crucial naval facility. At Shirley Heights and Middle Ground the boundaries closely follow the "Kings Lines" which delineated the original site; the Dockyard itself is a walled compound; and the rest of the site primarily follows the coastline, diverging slightly to include the Ordnance structures, thus encapsulating all relevant areas for protecting our Outstanding Universal Value (OUV). All of the structures within the dockyard are in a good state of repair having been restored to varying authentic materials and following the original plans. Despite the military complexes surrounding the dockyard being in various degrees of decay, the fact that there has been no modern construction within the area, allows these structures and their physical setting on top of the ridge and steep cliffs to retain and convey their story and has enormous potential for archaeological research; key to our understanding of past life-ways.

2.3 STATEMENT OF AUTHENTICITY³

The Dockyard and its associated archaeological sites fulfill all the criteria for authenticity as laid out by UNESCO's Operational Guidelines. This historic dockyard and its buildings have a high degree of authenticity. They represent a surviving example of a Georgian period dockyard established by the British navy within the Eastern Caribbean during the 18th and 19th centuries, where the majority of original structures are still represented and are still in use. Much as the military complexes overlooking the dockyard are in various stages of decay, there are sufficient remains and large intact archaeological deposits to convey their story and therefore does not negatively affect the OUV.

¹ The Antigua Naval Dockyard and Related Archaeological Sites, World Heritage Dossier, 2014.

² Idem

³ Idem

2.4 CRITERIA UNDER WHICH THE PROPERTY WAS NOMINATED.⁴

CRITERION (II): The Antigua Naval Dockyard and its Related Archaeological Sites exhibits an important interchange of human values, over a span of time within a cultural area of the world on developments in architecture and technology and landscape design. The enslaved Africans toiling in the service of the British Navy and Army built and worked the facilities that were critical to the development of the British Empire, trade and industrialization. The Georgian Period buildings and archaeological landscape stand in testimony to their efforts and continues to influence the architectural, social and economic development of their descendants.

CRITERION (IV): The Antigua Naval Dockyard and its Related Archaeological sites are an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates a significant stage in human history. The impressive assemblage of Georgian Period British naval structures, enclosed within a walled historic compound and the associated military complexes that surround it, were developed at a time when European powers were rapidly expanding their spheres of influence and thus constantly at war. The natural attributes of the deep waters of English Harbour, surrounded by steep protective hills and a narrow entrance facilitated the development of a naval dockyard, which could be utilized year round, including the hurricane season. Collectively the Antigua Naval Dockyard and its Related Archaeological Sites today represent an outstanding example of a Georgian naval facility within a Caribbean context.

See Annex 1. Structures within the Antigua Naval Dockyard.

See Annex 2. The fortifications and related military sites.

See Photo 1. Aerial view with all components

See Map.1. The Dockyard and its structures

2.5 CORE ZONE AND BUFFER ZONE :

The Core Zone comprises 255 Ha.

The Buffer Zone comprises 3,873 Ha.

Total area is 4,128 Ha.

See Map 2. Core zone and buffer zone.

3. PURPOSE OF THE CONSERVATION PLAN

The Conservation Plan is based on the significance and universal values of the Antigua Naval Dockyard and its Related Archaeological Sites and will be assumed as a basic part of the management of the site. Its purposes are the following:

⁴ Idem

-To provide a framework for the permanent conservation of the site in order for it to retain all the attributes which convey its Outstanding Universal Value.

-To serve as a guidance for the implementation of the best policies and conservation practices, ensuring that the Outstanding Universal Values or Attributes, Authenticity and Integrity of the site are fully incorporated into the continued management and protection of the property.

4.DURATION OF THE CONSERVATION PLAN

The duration of this Plan will be five years (2016-2020).
Every year it will be revised and updated.

5.FACTORS AFFECTING THE SITE

The potential threats and their control as well as currently foreseen solutions are the following:

5.1 Development pressure

Development is always a potential threat, particularly as the land is of high value. In this case, the National Parks Act gives the National Park Authority the mandate for the management of all Crown lands within the Park and rights of approval of all private development projects within its boundaries.

The Development Control Authority must also grant approval, after an NPA permit is issued. To manage and control this process, all lands within the Park were zoned in public consultation and varying restrictions placed according to the zone. An inventory of natural and cultural heritage sites guided this process. Specific areas, such as the archaeological ruins along the Ridge were designated cultural heritage landscapes, while beach/water front areas zoned for tourism development. Environmentally sensitive areas were zoned as conservation areas; which affords restricted development and promotes research, and sustainable tourism. In sum, all lands within the proposed buffer zone of the World Heritage site are fully protected and managed. Development is highly controlled and restricted to specific designed guidelines and standards throughout the entire National Park, the buffer zone and site.

Scientific studies of the vegetation, archaeological sites, conservation areas, communities and their needs, the marine environment, and tourism/development needs must always be active as they serve to inform, monitor and guide decisions in the various zones.

No further sale of Crown lands is to be permitted within the World Heritage site. Development is to be restricted to the specific areas designated at Galleon Beach and at the Inn. In the buffer zone, additional guidelines that further restrict and strongly control development close to the immediate boundaries of the World Heritage site are to be introduced and strictly enforced.

Land within the core area: Most of the land within the demarcated boundaries of the proposed World Heritage site is owned by the government and is therefore fully controlled and managed by the Parks Authority under the National Parks Act. However, there are a few privately owned areas. The largest of these is the Galleon Beach Hotel complex in Freeman's Bay, and the Inn. These lands were originally zoned as mixed-use area with hotels, restaurants and exclusive residential housing plots to stimulate businesses and to generating and support

activities within the site.

In regards to the Inn, the resort was established before the declaration of the National Park, but having been recently upgraded, the existing structures are in keeping with approved designs. The NPA policies and building guidelines and covenants, along with regular monitoring of all construction and development projects within the boundaries is to be conducted on a regular basis.

At Galleon Beach on Freeman's Bay, the situation is quite different. This hotel, which predates the declaration of the National Parks, is old and not in keeping with the quality, spirit and feeling, design guidelines for this heritage site. It has to be rebuilt and demolition of some of the hurricane damaged plywood structures have already been removed. Although they own much of the headland and have long standing plans to expand their development into this area, development must be restricted to the area where the hotel and its cottages now stand. Buildings on the peninsular must be restricted.

All building permits must be followed up with regular site inspections, and building guidelines and regulations must be made clear to all parties involved. In addition, the Development Control Authority (Planning Office) must be updated on the covenants, restrictions and building guidelines and regulations established under the by the management authority, the NPA. Public education programs must also be developed.

In sum, Building Guidelines (as previously mentioned) for developing and building in the National Parks are in effect and planning design advice is freely available prior to development. The guidelines establish minimum standards to ensure that the OUV is protected. They include recommended boundary setbacks, colors of materials, type of materials to be used, size of lots, height and type of roof design, encourages vegetation and bans clear cut of forests for developments. These Guidelines are integrated by the following documents:

- General Development Restrictions for New Development in Conservation Zones Outside the Core Heritage Zone. (2014 National Parks Antigua)
- Handbook for Land and Building Development in Nelson's Dockyard National Park: Guidelines for Architects and Developers. Prepared by Ivor Jackson and Associates, Consultants for the National/ Parks Authority (NPA).
- General Development Restrictions in Conservation Zones. (2013 NPA Document)
- Zones in the National Parks, Antigua.
- Rendezvous Bay Design Control Regulations (Policy document for the Special Development Zone, Rendezvous Bay)
- Windward Bay Development Covenants and Restrictions. (Policy document for Windward Bay Special Development Zone).

For more efficient orientation and control, a World Heritage Department is to be established in 2016 to review, monitor, document and evaluate all proposals, building projects and plans done in and near to the proposed World Heritage Site and its Buffer Zone, as well as all work and interventions carried out in the Site.

5.2 Overgrazing by feral livestock (goats and sheep) leading to erosion and deforestation

There is a long-standing tradition and culture of free ranging goats and sheep on the open hills and forests of the site. This well-entrenched cultural practice has caused erosion and habitat destruction throughout the Park. As the herds are not culled on a regular basis the numbers have at times increased beyond the carrying capacity of the land.

A solution to this issue has been sought through dialogue and consultations with the livestock owners, education and incentives for managing the number and quality of the animals. Before 2017, the NPA will complete its policy in consultation with the Ministry of Agriculture and the Environment Unit for the land used by free grazing livestock within the boundaries of the site and buffer zone. The carrying capacity for ferrel livestock should be finalized and enforced.

5.3 Looting and destruction of sites and structures

Another tradition was the dismantling of the collapsed stone structures for reuse and sale of cut stones and bricks. This activity has been stopped through enforcement, frequent monitoring, and education. To prevent future incidents, the issue is being addressed through policing, public education and by establishing visual deterrents such as CCTV cameras. Similarly, the rich archaeological deposits have been in the past, attractive to many of the persons with social issues (drug users) who are encouraged to dig and collect artefacts of value for knowledgeable persons, who are mostly from North America and Europe. This is still a minor issue and enforcement has increased accordingly, and the regulations strengthened. In addition, the Parks has installed a CCTV system and mobile units of Park Rangers and Police have increased surveillance in all areas, increased public education and awareness and developed a zero tolerance policy.

5.4 Environmental Issues

There are no industries in the site and its buffer that could contaminate the air, and the number of vehicles at peak times are not sufficient to create air pollution. Other threats include water pollution in the event of a marine disaster or earthquake but this is managed through training and having the necessary equipment on hand and kept in good order. We have regular drills and twice a year training in the use of fire fighting equipment and disaster management by experts from the Disaster Services, Fire and Police Associations and others.

On the other hand, potential water contamination from yachts, services and other marine activities, is a threat. This is managed through education, enforcement and regulations. Water quality testing is done on a regular basis and large yachts and service providers must have containment booms, and other spillage control and clean up equipment. Interestingly, as the yachts and business need to have clean water and a healthy marine environment, they have proven to be the best monitors and enforcers.

In addition, all waste is pumped to a central Sewage Treatment Plant that is regularly maintained and serviced and is kept in good order

5.5 Visitors and events

The Dockyard receives over 120,000 walk-in visitors annually. This excludes the business patrons, yachtsmen and persons attending the numerous events. The number of yachtsmen is counted as they must register and clear into Immigration on entry into the dockyard. Cruise ship passengers comprise a significant number of the visitors and create the “highest traffic” issues. They arrive en-mass and depart as suddenly as they appear, spending on average 30 minutes on site. The period of highest cruise visitors is between 10 am and 1 pm. At the same time, the Dockyard is an active community of businesses, including large mega-yachts, restaurants and other services that require deliveries of goods, maintenance, crew and workers.

The number of visitors increases on occasions of special events held in the dockyard that attracts large numbers of participants and supporters. For cruiseship visitors, issues arising are resolved by the Visitors Service Department and advanced planning. With this purpose they maintain an updated schedule of cruise ship arrivals and the expected number of visitors well in advance of their arrival, and schedule sufficient numbers of interpretation officers to meet and coordinate the tours through the property. The tours can be lengthened or shortened accordingly, and start and stop at different points, to ensure a smooth flow of tours and visitors.

In addition, the Dockyard security and the Police monitor the flow of traffic, control parking and organize overflow parking areas as needed. Automotive traffic such as delivery vans and non-essential services are restricted at these peak hours of visitation, and business and yachts are asked to schedule their deliveries for before or after the peak visitor periods of day. Bus tours are planned and diverted to other sites to prevent congestion at any single entry point into the heritage areas and Dockyard. **When there are major events that attract large numbers of visitors, parking lots are established well outside of the area (on the English Harbour football field, for example) and bus shuttle services used to transport visitors to the Dockyard. At times, small golf carts are used to shuttle guests and visitors.**

These current measurements have proved to be efficient and there is significant room for additional visitors. With the additional off-site parking, the establishment of a short term one-way traffic flow, scheduled deliveries, the bus shuttle system, police control and vehicle access restricted to golf carts, there is no traffic congestion and emergency vehicle and rapid response units have easy access to the site.

5.6 Seasonality of Site

The economy of the Caribbean is almost entirely dependent on tourism, particularly so for Antigua. Tourism is a seasonal industry with most visitors arriving in the winter months. For the Dockyard and the National Parks, the primary income is generated from the yachting sector. During the winter tourist season, November to April, about 4,000 yachts visit Antigua and spend significant time in English Harbour and nearby Falmouth Harbour. These yachts spend considerable funds on mooring, anchorage, goods and services that trickle through the economy and contribute more than cruise ship visitation (ECLAC Report 2004). In contrast, during the summer months, the numbers of visitors and yachts decline dramatically. However, it is not necessarily a negative situation for although the income is reduced, the “slow season” is used by the NPA to implement projects, restoration and stabilization works, site improvements, staff training, and field research. Other activities, such as fishing tournaments and weddings

are held during the summer months.

5.7 Natural Hazards

Antigua is located in the Eastern Caribbean archipelago of islands in the heart of the Atlantic hurricane belt. It receives **tropical storms and hurricanes** on an annual basis, yet damage is generally minimal. This is due to the high standards of the building codes and good planning and preparation policies, and public education. The sheltered position of the dockyard ensures only minimal damage; however, there have been exceptions as the storms are unpredictable in strength and frequency. Regardless, the site has never been impacted beyond the means of the staff and insurance coverage to manage repair within a short period of time.

Earthquakes are a major concern. The Eastern Caribbean Islands form the eastern edge of the Caribbean Plate which over rides the Atlantic seabed subduction zone. Earthquakes and tremors are infrequent and usually low in strength, causing only minor damage. However, there have been major catastrophic events but these occur approximately once every 150 years.

Fire is a potential hazard and very rare. Prevention and response training is provided annually and regular inspections and monitoring exercises are done routinely by the Security, Heritage, Maintenance and Restoration Departments every year. Major improvements were implemented within the past five years which include, increasing the water pipe line from two inch to 4"; placing additional fire hydrants; placing mobile fire pumps and large capacity hydrants in strategic locations. In addition, the dockyard is fortunate as all yachtsmen must qualify in firefighting and first response. During the winter season there is an abundance of qualified persons and equipment on hand to assist and manage any potential disaster.

The solution to disaster management is preventive planning, sound policies, best practices and rapid response. The NPA has a Disaster Preparedness and Response Manual that is reviewed and upgraded annually. All management and most staff are experienced with the disasters listed above and are competent to manage the situations as they arise.

Regardless, the policy of annual reviews, inspection of structures and equipment, planning of response, ensuring that necessary equipment is easily available, that staff is trained for its emergencies, have served well. There is ample assistance from government and private organizations located nearby, including rapid response paramedics, firefighters, police and coast guard, medical services and search and rescue. These services, the policies and contact information of key individuals are outlined in the NPA Disaster Preparedness and Response Manual. (See Annex 3. NPA Disaster Preparedness and Response Manual).

5.8 Age of Structures

The historical Naval Dockyard was first established in the 1720s. However, the current buildings within the dockyard and on the Ridge at Shirley's Heights were built in the 1780s shortly after the American Revolution and the increasing threat of Revolutionary France. They are Georgian Period in style and are in a varying range of condition of preservation, from archaeological ruin to habitable. These structures were built with lime mortar, cut stone, brick and wood. They are costly to maintain and many have suffered the ravages of time, termites, tropical storms and more.

In spite of these facts, the current state of conservation is in general good, but regular

maintenance on a systematic basis is permanently required. When needed, stabilization must be performed.

5.9 Other Affecting Factors

One serious and frequent problem is the infestation of wood by termites. This requires a constant inspection of wooden structures and elements. When fumigation and other chemical treatments are not sufficient it has been necessary to replace the infested damaged parts. In case of replacement of damaged timbers, it is essential to always use wood with the highest resistance to termites, moisture and other pests.

6.INTERVENTIONS PLANNED ON BUILDINGS, SITES AND OTHER COMPONENTS OF THE PROPERTY (2016-2017)

Building, site or component and current use	State of conservation	Priority	Interventions to be done	Dates to perform interventions	Monitoring
The Engineers House / Admiral's Inn Hotel	Good to Medium	High	Maintenance (termite control)	Summer 2016	Monthly
Blacksmith's Shop/ Storage for Maintenance	Good	High	Maintenance (termite control)	Summer 2016	Every 6 months
Sick House/ Hotel	Good	Mid-High	Maintenance (stabilization exterior bricks)	Summer 2017	Every 6 months
Boathouse/ Hotel	Very Good	Mid-High	Maintenance(termite treatment)	Summer 2017	Every 6 months
Joiner's Loft/ Hotel	Very Good	High	Maintenance (termite treatment)	Continued monitoring	Every 6 months
Mast Shed /Workspace, Retail	Very Good	High (restored 2014)	Maintenance (termite treatment)	Continued Monitoring	Every 6 months
Canvas and Cordage Building/Offices, Storerooms	Good-Fair	High	Maintenance (general)	Continued monitoring	Every 6 months
Copper and Lumber Storage Building/Hotel, Pub	Good	Very High	Maintenance (termite treatment and replacement of damaged infected timber, if needed)	Summer 2016	Every 6 months
Clerks or Senior Officer's House / Museum	Very Good	Very High	Maintenance (museum exhibits upgrade)	Summer 2016	Heavy traffic building: checked every 6 months
The Bakery / Bakery	Good	Mid to High	Maintenance (general)	Summer 2017	Every 6 months
The Pay Office/ Office,	Very Good	High	Maintenance(general)	Summer 2017	Every 6 months

Cafe, Shop					
The Galley /Restaurant / Gift shop	Good	High	Maintenance(regular repairs)	Continued monitoring (high use building)	Monthly
Officers Quarters /Offices, Restaurant	Fair	High	Maintenance(termite treatment and repairs)	Summer 2016, and 2017	Monthly
Sawpit Shed/ Sail Loft	Very Good	High	Maintenance (general)	Monitoring only	Each 6 months
Blacksmith's Shop Master Shipwrights Cabin/ Gift shop, Office	Good	High	Maintenance (general)	Summer 2016	Each 6 months
Marina	Good	Very High	Test quality of water	Ongoing	Three times per year
Sun Dial	Good	Very High	Maintenance (of iron rail/paint)	Monitoring only	Each 6 months
Clarence House/	Ongoing restoration	High	Complete restoration in progress	Pending on 2016 definition	Monthly
Shirley Height's	Ruins/vary Poor to Good	Medium to High	Maintenance and stabilization if and when needed	Depending on monitoring	Monthly
Sail Loft Columns and canal	Good	Medium	Monitoring	Summer 2017	Each 6 months
Brick and stone wall of compound	Good	Medium to High	Stabilization (replace badly eroded stone at ground level)	Summer 2017/18	Each 6 months
Stone Wharf walls and Heave-down blocks	Good	Very High	Stabilization	Depending on monitoring	Each 6 months
St Helena	Good	Medium	Stabilization if needed	Depending on monitoring	Each 6 months
The Capstan House	Good	Medium	Stabilization if needed	Depending on monitoring	Each 6 months
Navy Ordnance Powder Magazine	Good	Medium to High	Maintenance (general)	Depending on monitoring	Each 6 months
Fort Charlotte	Poor	Medium	Stabilization (if needed)	Depending on monitoring	Every 6 months
Fort Berkerley	Good	High	Stabilization (plug hole in southwall)	Summer 2017	Every 6 months or after storm events
Interpretation Center	Good	High	Maintenance (termite treatment and repairs)	Every summer	Weekly
Blockhouse complex with Cistern, Gun Platforms and Powder Magazine	Good	Medium	-----	Depending on monitoring	Monthly
Lookout Guard House/restaurant	Good	Medium	Stabilization (if needed)	Every summer	Each 6 months
Cemeteries	Good	Medium	Stabilization and vegetation control	October/November	Each 6 months
Streets	Good	High	Maintenance of street within site	Daily cleaning	Daily
Parking spaces	Good	Medium to High	Maintenance (washing and cleaning).Painting, when needed..	Daily	Each 3 months or as needed
Gardens and Grounds	Good	High	Maintenance	Daily	Daily
Signage and urban furniture	Good	Medium to High	Maintenance and repair. Replacement if needed	Depending on monitoring	Each 6 months or as needed
Underwater Cultural Heritage (out of Museum)	Under investigation	Medium	Continue research program	Continue research program	Every summer
The Pillars of Hercules natural site and beach	Good	Medium to High	Cleanup beach	Weekly	Monthly

7. MONITORING OF THE STATE OF CONSERVATION AND THE EFFECTS OF THE CONSERVATION PLAN

Monitoring, and careful planning for all interventions is essential.

A methodology and indicators for a Systematic Monitoring of the Plan must be completed at the end of 2016.

8. BIBLIORAPHY FOR THE IMPLEMENTATION OF THIS CONSERVATION PLAN.

- The Antigua Naval Dockyard and related Archaeological Sites.NPA. 2014
- The National Parks Act. Antigua and Barbuda.1984
- General Development Restrictions for New Development in Conservation Zones Outside the Core Heritage Zone.NPA, 2014.
- Handbook for Land and Building Development in Nelson's Dockyard National Park: Guidelines for Architects and Developers. Prepared by Ivor Jackson and Associates, Consultants for the National/ Parks Authority. NPA.2014.
- General Development Restrictions in Conservation Zones. NPA, 2013.
- Management Plan. The Antigua Naval Dockyard and its Buffer Zone; The Nelson's Dockyard National Park.
- Policies and Guidelines for Marinas and Slipways in the National Parks, Antigua. Rendezvous Bay Design Control Regulations (Policy document for the Special Development Zone, Rendezvous Bay Zones in the National Parks, Antigua,2012.
- Windward Bay Development Covenants and Restrictions. (Policy document for Windward Bay Special Development Zone).

8.1 Recommended Reading

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- Climate Change and World Heritage.Series n°22- May 2007. At <http://whc.unesco.org/en/series/22/>
- Climate Change Adaptation for Natural World Heritage Sites. A Practical Guide. Series n°37 - May 2014. At <http://whc.unesco.org/en/series/37/>
- Cultural Landscapes. Series n°26 - March 2010.At [http://whc.unesco.org/en/series/26/Cultural Landscapes](http://whc.unesco.org/en/series/26/Cultural%20Landscapes)
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- Engaging Local Communities in Stewardship of World Heritage.Series n°40 - November 2014.
At <http://whc.unesco.org/en/series/40/>
- List of factors affecting the properties. At <http://whc.unesco.org/en/factors/>
- Managing Disaster Risks for World Heritage. At <http://whc.unesco.org/en/managing-disaster-risks/>
- Managing Cultural World Heritage. At <http://whc.unesco.org/en/managing-cultural-world-heritage/>
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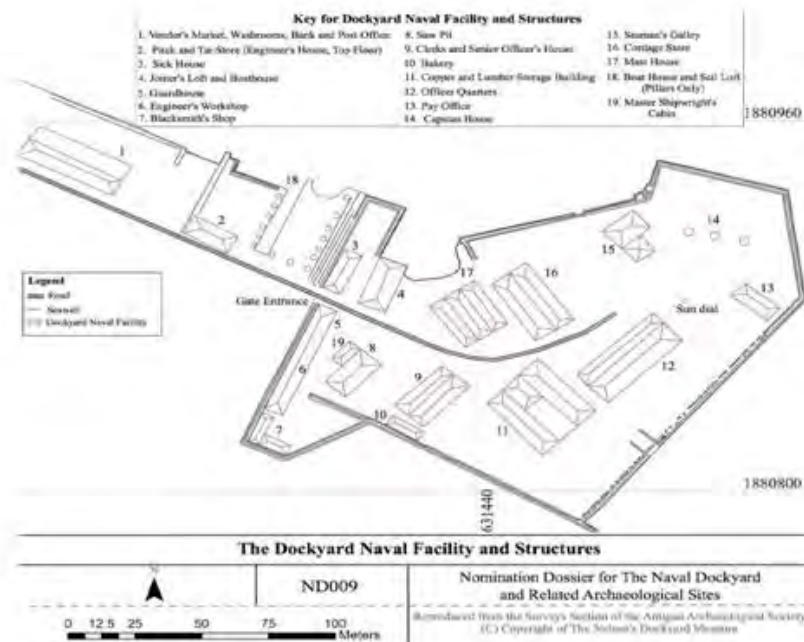
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- Reactive monitoring process .<http://whc.unesco.org/en/soc/#monitoring>
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- The Operational Guidelines for the Implementation of the World Heritage Convention.
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- World Heritage and Buffer Zones. Series n°25 - April 2009. At <http://whc.unesco.org/en/series/25/>
- World Heritage Cultural Landscapes 1992-2002 Series n°6 - July 2003.
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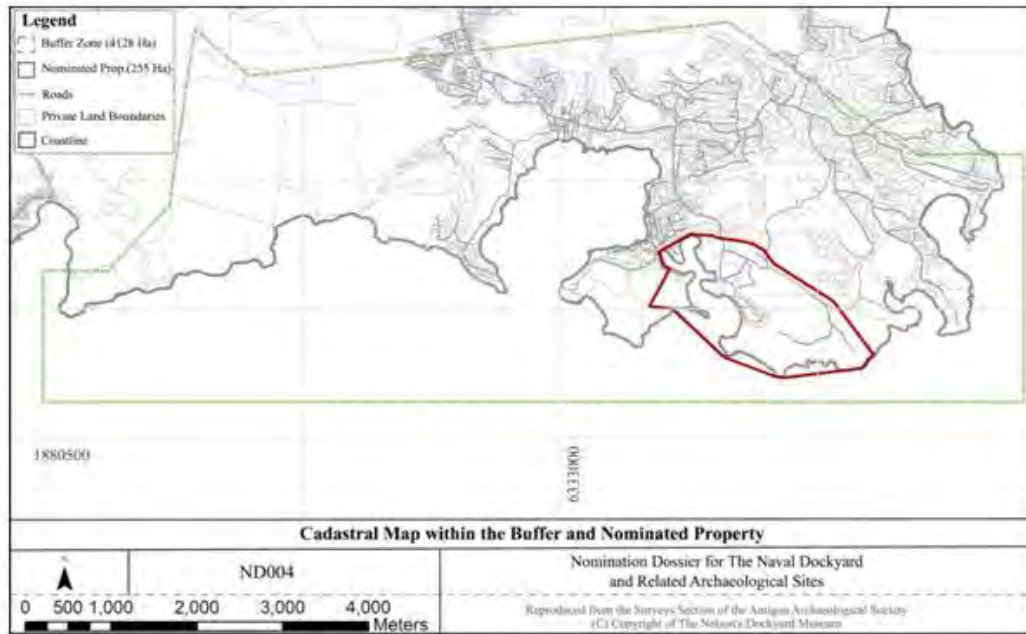
RESPONSIBLE FOR THE PLAN



Photo 1. Aerial view with all components



Map.1 The Dockyard and its structures



Map 2 Core zone and buffer zone.

ANNEXES

1. **ANNEX 1. Structures within the Antigua Naval Dockyard**
2. **ANNEX 2. The Fortifications and Related Military Sites (see Annex 4, World Heritage Dossier)**
3. **National Parks Authority, Disaster Preparedness and Response Manual, ANNEX 7, World Heritage Dossier**

Action Plan.

Activity	Current Status	Time for Completion
Completion of Heritage Legislation	Draft completed and being formatted for Antigua Legislative style for presentation to the Attorney General for Parliament Approval	End of March 2016
Revised Management Plan	Now being modified	End of March
Conservation Plan	Draft completed. Plan now presented for approval by the National Parks Authority	Mid-March 2016
Carrying capacity study	Data collection now in progress	August 2016
Cultural Impact Assessment of Freeman's Bay (First survey done in 2009)	Archaeological research continues; field surveys on-going, and further archaeological research planned for summer 2015	Assessment: May 2016
Final Zoning Map of Site and Buffer Zone	Discussions and review of final draft in progress	28 th February 2016 for adoption by NPA Board March 2016
Building Guidelines Update	Draft completed for approval and adoption by NPA	28 th February 2016
Policy and procedures manual for stabilization and conservation	Agreement with conservation architect Isabel Rigol established to assist with this program	June 2017
Capacity Building	Discussions are underway with Isabel to establish an annual training program in the Dockyard for building capacity in managing a World Heritage Site, conservation and stabilization.	Expected start of a three to five year program June 2017

ANTIGUA AND BARBUDA



THE CULTURAL HERITAGE (PROTECTION) ACT, 2016

No. of 2016

THE CULTURAL HERITAGE (PROTECTION) ACT, 2016

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ANTIGUA AND BARBUDA
THE CULTURAL HERITAGE (PROTECTION) ACT, 2016
No. of 2016

AN ACT for the protection of Cultural Heritage in Antigua and Barbuda and for incidental and connected purposes.

ENACTED by the Parliament of Antigua and Barbuda as follows:

1. Short title

This Act may be cited as the Cultural Heritage (Protection) Act 2016.

2. Definitions

“Cultural heritage” means

(a) all traces of human existence having a cultural, historical or archaeological character, which are older than [50__ years¹] such as, together with their archaeological and natural context—

(i) sites;

(ii) structures, and buildings;

(iii) vessels, aircraft, other vehicles or any part thereof, their cargo or other contents; and artefacts, human remains, and objects of prehistoric character.

b. objects and sites, together with their context, having a paleontological or scientific significance, which are older than [_50__years].

c. It includes “underwater cultural heritage”, which is cultural heritage, which is or was partially or totally, periodically or continuously, located under water.

¹ This could be the benchmark of 100 years as in the 2001 Convention, but also be a more recent benchmark as for instance 50 years.

e. “Cultural heritage of an archaeological character” means undiscovered and discovered cultural heritage which is located in the soil or under water.

[“Written and filmed heritage” encompasses books, documents, pictures or films older than 50 years]

“Rules” means the “Rules concerning Activities directed at Cultural Heritage” contained in the Annex.

“State Vessels and Aircraft” means warships, and other vessels or aircraft that were owned or operated by another State and used, at the time of sinking, only for government non-commercial purposes, that are identified as such and that meet the definition of underwater cultural heritage.

“Verifiable Link” to underwater cultural heritage is a relationship between a State and cultural heritage, in particular of a cultural, historical or archaeological character.

“UNESCO” means the United Nations Educational, Scientific and Cultural Organization.

“International Seabed Authority” means the Authority established under Article 156 of the United Nations Convention on the Law of the Sea.

3. Competent National Authority

(1) The Competent National Authority for the protection of cultural heritage is the National Parks Authority. It shall operate under the direct supervision of the Ministry of Culture.

[The Competent Authority shall be advised by a regularly meeting National Advisory Committee, consisting of appropriate national stakeholders.

The opinion of the Advisory Committee shall be sought in any matter of national/particular importance.]

[Include regulations on other authorities]

4. Designation

The Competent National Authority may declare as cultural heritage any trace of human existence having a cultural, historical or archaeological character, which is less than [50 years] old.

5. Tasks of the Competent National Authority

(1) The Competent National Authority has the task, in particular, to—

- (a) ensure the effective control, protection, conservation, presentation and management of cultural heritage and issue permissions in that regard;
- (b) encourage and foster research, public awareness, appreciation and education in cultural heritage, support NGO establishment and cooperation and foster the establishment of museums.

(2) The Competent National Authority shall establish, entertain and maintain an inventory of cultural heritage located on land or under water which includes also—

- (a) a list of important public and private cultural heritage whose export would constitute an appreciable impoverishment of the national cultural heritage;
- (b) a list of underwater cultural heritage, that is located beyond the limits of national jurisdiction if that underwater cultural heritage has a verifiable link with the State.

(3) The inventory shall be regularly updated. It shall be open to limited public access. No information shall be disclosed if this would endanger the protection of the heritage concerned.

(4) The Competent National Authority may conduct any necessary research on cultural heritage.

(5) The authority shall act as the Competent National Authority according to the UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage. The Director-General of UNESCO shall be notified of its name and address.

III. DISCOVERY, REPORT AND DISPLACEMENT OF CULTURAL HERITAGE

6. Report of Discoveries and intended Activities

(1) No person shall search for, explore, investigate, interfere with, displace or remove cultural heritage of an archaeological character, including underwater cultural heritage, without a permit issued by the Competent National Authority.

(2) Any person, who discovers cultural heritage of an archaeological character, including underwater cultural heritage, should leave it undisturbed, unless disturbance or recovery is authorized by the Competent National Authority or if it—

- (a) is under actual and immediate danger of serious damage or destruction; or
- (b) poses a concrete and immediate danger to human life.

(3) Any person, who displaces cultural heritage of an archaeological character, including underwater cultural heritage, has to declare this to the Competent National Authority and has to deposit the object with it or hold it at its disposal in conditions ensuring conservation.

(4) Any person, who discovers cultural heritage of an archaeological character, including underwater cultural heritage, shall report this within [three days²] of discovery or, in case of underwater cultural heritage, on reaching the first national port, to the Competent National Authority.

(5) Any person who is aware of any activity by any unauthorised person that poses an actual and immediate danger of serious damage or destruction to cultural heritage shall report that activity to the Competent National Authority.

² Time limit to be set according to national situation and need.

(6) Any person wishing to apply for permission to undertake an activity directed at cultural heritage, including underwater cultural heritage, must submit an application to the Competent National Authority at least [six months³] prior to the intended activity commencing. In case of immediate danger of destruction or damage to such cultural heritage a shorter application time may be admitted. In the case of underwater cultural heritage, such an application must be submitted irrespective of whether the underwater cultural heritage is situated within, or beyond, national jurisdiction.

(7) Nationals and the masters of the vessels flying the State flag shall report any discovery of or an intended activity directed at underwater cultural heritage even if located beyond the limits of national jurisdiction.

(8) No person shall engage in any activity directed at underwater cultural heritage that is not in accordance with the Rules in the Annex.

(9) Warships, government ships and military aircraft, operated for non-commercial purposes, undertaking their normal mode of operations, and not engaged in activities directed at cultural heritage [should/are not obliged to] report discoveries. They shall, however, make reports if this is reasonable and practicable.]

(10) In case of discoveries or activities concerning underwater cultural heritage located in the Exclusive Economic Zone or on the Continental Shelf of another State, nationals and vessels flying the State flag shall also report to the authorities of the concerned State.

7. Activities directed at Structures and Buildings

Activities directed at structures and buildings falling under the definition of cultural heritage need a permit by the Competent National Authority.

IV. PERMISSION OF ACTIVITIES AND PERMITS

8. Permission of Activities

(1) A permit for an activity directed at cultural heritage including for example, search, intervention, recovery, displacement or excavation, as well as renovation and alteration may only be granted by the Competent National Authority.

(2) The permit shall only be granted in the best interest of protection and if the concerned activity—

- (a) significantly contributes to the protection of, enhancement or knowledge about, the concerned cultural heritage;
- (b) is in full conformity with this Act and the Rules in the Annex; and

³ Ibid.

- (c) ensures in the case of III.5.1 a proper scientific study and, in case of recovery, maximum protection and conservation of recovered objects.

(3) A permit shall only be granted based on a Project Design in accordance with the Rules [of the Annex].

(4) No permit shall be issued for any commercial exploitation of cultural heritage of an archaeological character, including underwater cultural heritage.

(5) A permit—

- (a) shall contain conditions to ensure the proper conduct of the activity, documentation and conservation as well as its control and the access to the site by the Competent National Authority;
- (b) shall be issued for a limited time period not exceeding [1 year] and may be renewed after revision of the project by the [Competent National Authority];
- (c) may be revoked in case of non-compliance with the conditions mentioned in the permit, the Rules, the project design deposited with the [Competent National Authority] or in the interest of the proper protection of the concerned heritage;
- (d) may contain any other condition deemed necessary by the [Competent National Authority].

(6) Permits are non-transferable. A public register of all permits issued shall be kept by the Competent National Authority.

(7) Permitted activities shall only be executed—

- (a) under the effective supervision of the person authorized;
- (b) respecting proper safety measures and the protection of the environment.

(8) A permit for activities directed at underwater cultural heritage located beyond the limits of national jurisdiction may only be issued, if—

- (a) [the enacting State] is the Coordinating State; or
- (b) an immediate danger threatens the concerned heritage; or
- (c) the concerned heritage is located in the Exclusive Economic Zone or on the Continental Shelf and the permit is granted in order to prevent interference with sovereign rights or jurisdiction.

(9) This Section does not prejudice State action to protect cultural heritage in case of immediate danger.

9. Activities directed at the Remains of State Vessels and Aircraft

(1) If any underwater cultural heritage is identified as a State Vessel or Aircraft of another State the national authorities should inform the Flag State and States with a Verifiable Link to such cultural heritage.

(2) No activity shall be permitted or directed at such heritage if it is located in the Exclusive Economic Zone or on the Continental Shelf without the agreement of the Flag State and, if applicable, the collaboration of the States which have assumed the obligation to coordinate protection measures under international law other than to prevent immediate danger.

(3) If the concerned heritage is located beyond the limits of national jurisdiction, no activity shall be directed at such heritage without the consent of the Flag State other than to prevent immediate danger.

10. Export Certificate

(1) An export certificate for cultural heritage may be issued to a person by the [Competent National Authority] if the heritage concerned—

- (a) is not of national importance;
- (b) its export would not constitute a significant impoverishment of the national heritage or is not inscribed in the inventory of cultural heritage located on land or under water; and
- (c) has been recovered in compliance with the law.

(2) A temporary export certificate may be granted if—

- (a) the export occurs for reasons of research, conservation, exhibitions or similar reasons;
- (b) and if a return of the objects is ensured within [_5_] years. The Competent Authority can set conditions ensuring the return of the object and the information or research result connected to it, if deemed necessary.

(3) No person shall export cultural heritage without an export certificate in the form attached in the Annex.

(4) Any person, wishing to apply for an export certificate shall do so by using the form annexed to this Act.

(5) The export certificate is non-transferable and shall be used as indicated in the Annex. A copy of this certificate has to accompany any exported cultural heritage.

(6) State institutions shall verify the provenance of any cultural heritage they acquire and shall not acquire any unlawfully recovered or unlawfully exported or imported cultural heritage.

(7) The [Competent National Authority] shall publicise this Act by appropriate means, particularly among persons likely to export or import cultural property.

V. UNDERWATER CULTURAL HERITAGE BEYOND THE LIMITS OF NATIONAL JURISDICTION

11. Information and Notification to other States

(1) The Competent National Authority shall notify the Director-General of UNESCO of discoveries of or intended activities directed at underwater cultural heritage located beyond the limits of national jurisdiction. Any discovery or intended activity concerning underwater cultural heritage located in the Area shall also be notified by the [Competent National Authority] to the Secretary-General of the International Seabed Authority.

(2) In case of discoveries or intended activities directed at underwater cultural heritage located in the Exclusive Economic Zone or on the Continental Shelf of another State [Party to the UNESCO 2001 Convention] [that State shall be informed by the relevant national or vessel flying the State flag]/[all States Parties to the Convention shall be informed [by the Competent National Authority]].

12. Receipt of Information and Declaration of Interest

(1) Any declaration or invitation for consultation from other States and/or the Director-General of UNESCO regarding underwater cultural heritage shall be lodged with the [Competent National Authority].

(2) Where the [Competent National Authority] determines that the State has a Verifiable Link with certain underwater cultural heritage it shall declare the interest of the State, where it is located in—

- (a) the Exclusive Economic Zone or on the Continental Shelf of another State to that State, if that State is a State Party to the UNESCO 2001 Convention;
- (b) the Area, to the Director-General of UNESCO and any State who coordinates, controls, authorizes or undertakes a search of or activities directed at such heritage.

13. Consultation and Coordination

(1) In case of discoveries of or intended activities directed at underwater cultural heritage located in the national Exclusive Economic Zone or on the Continental Shelf, the [Competent National Authority/Foreign Office] shall—

- (a) consult all States Parties to the UNESCO 2001 Convention, which have declared their interest on how to best protect such heritage, if this declaration is based on a Verifiable Link as “Coordinating State”; or
- (b) make a declaration that it does not wish act as Coordinating State if a reasonable motive exists that makes it desirable for the State not to act as such.

(2) Where the relevant underwater cultural heritage is located in the Area and [the Competent National Authority] has declared the interest of the State to be consulted and is invited by the Director-General of UNESCO it shall—

- (a) declare how this underwater cultural heritage should be best protected;
- (b) declare which State should be appointed as Coordinating State; and
- (c) conduct and coordinate consultations as Coordinating State if [the State who enacts the Act] was appointed to this function.

14. Coordination of Measures

(1) If the State acts as Coordinating State [according to the UNESCO 2001 Convention] the Competent National Authority shall implement the measures of protection for the underwater cultural heritage which have been agreed in consultation with all other States consulted and issue all necessary permits for such measures in conformity with the Rules⁴, unless it has been agreed that another State Party shall do so.

(2) In coordinating or authorizing activities and in implementing measures the [Competent National Authority] shall act on behalf of all concerned States and for the benefit of humanity.

(3) Particular regard shall be paid to the preferential rights of States of cultural, historical or archaeological origin in respect of the underwater cultural heritage concerned.

15. Immediate Danger

(1) The [Competent National Authority] shall take all practicable measures, and/or issue any necessary permits, if necessary prior to any consultations, to prevent immediate danger to any cultural heritage. In taking such measures, the Competent National Authority may seek assistance from other States.

(2) The [Competent National Authority] shall, as far as practicable and, provided it is not contrary to national interests, when requested by another State or States, take all necessary measures to assist the other State or States in taking measures preventing immediate danger to cultural heritage]

VI. ACTIVITIES INCIDENTALLY AFFECTING CULTURAL HERITAGE

16. Activities incidentally affecting Cultural Heritage

(1) Any person or corporation, intending to undertake an activity in an area that contains cultural heritage; or where there is a reasonable expectation that an area may contain cultural heritage such as—

- (a) known cultural heritage sites or settlements;

⁴ In the present model Act, the annexed Rules are based on the Rules annexed to the UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage. If changes are made to them in the case of the present section consideration would need to be given to the Rules annexed to the 2001 Convention.

- (b) ports or former ports;
- (c) shipping or trade routes; or
- (d) terrestrial or marine battlefields;

has to notify the Competent National Authority of its intended activity at least [60 days] prior to the commencement of that activity. The intended activity shall be prohibited if it endangers or damages such heritage more than appears to be reasonable in comparison to the achieved public benefit.

(2) Industrial activities impacting areas, where cultural heritage is or may possibly be present, have to undertake an impact assessment study as part of their application for the authorization of the concerned development or other project.

(3) The competent national authority has to be consulted mandatorily in the authorization of development and resource extraction projects that concern areas where cultural heritage is or may possibly be present.

(4) The public and private developers of such projects shall provide the funds and be responsible for—

- (a) the assessment of the project area and the identification of cultural heritage therein;
- (b) the prevention, to the extent possible, of impact to cultural heritage caused by the project in the project area and its surrounding environment;
- (c) the mitigation of negative effects caused by the project in the project area and its surrounding environment;
- (d) the conservation of the affected cultural heritage; and the promotion of affected cultural heritage and the dissemination of knowledge about it.

VII. OWNERSHIP OF CULTURAL HERITAGE

17. Ownership of Cultural Heritage

(1) Cultural heritage of an archaeological character, including underwater cultural heritage, is owned by the State, provided there is no existing ownership immediately prior to its discovery.

(2) The law of finds does not apply to cultural heritage. The law of salvage does not apply to underwater cultural heritage.

(3) A person who discovers cultural heritage of an archaeological character, including underwater cultural heritage, may be rewarded at the discretion of the Competent National Authority.

18. Public Acquisition

(1) The [Competent National Authority/ parliament / ministry of culture] may decide upon the public utility of an acquisition by the State of any cultural heritage, and if applicable, its context or the site where it is located. If such utility is given, it may negotiate acquisition for the State.

(2) If negotiations are not successful, the [Competent National Authority] may in the case of objects, upon approval by the [Ministry of Culture] declare compulsory transfer of ownership against indemnification in the amount of the value of the object to its owner, and publish this decision in the [Public Gazette]. Upon publication, the concerned object vests immediately in the [State/Crown].

(3) If no agreement can be reached about the amount of indemnification or if there is an objection to the declaration of compulsory transfer of ownership, a proceeding may be brought to [the Competent Court].

(4) No person shall dispose of or acquire an object while it is under consideration for public acquisition or when compulsory transfer has been declared.

(5) For sites, buildings and structures the applicable national laws apply.

VIII. CONTROL, SANCTIONS AND SEIZURE

19. Seizure and Disposition of Cultural Heritage

(1) Cultural heritage is subject to seizure if—

- (a) it has been recovered without a valid permit;
- (b) was stolen or illicitly imported, exported or the transfer of ownership was illegal.

(2) Seized cultural heritage shall be immediately recorded, protected and stabilized, as far as needed and practicable. The disposition shall be for the public benefit, taking into account the need for conservation and research, the reassembly of a dispersed collection, the need for public access, exhibition and education; and the interests of any State with a verifiable link, especially a cultural, historical or archaeological link, in respect of the cultural heritage concerned.

(3) If underwater cultural heritage is seized which had been recovered from a site outside of the national territorial waters, [the Competent National Authority] shall notify the Director-General of UNESCO and any other State with a verifiable link, especially a cultural, historical or archaeological link, to the heritage concerned of this seizure.

(4) The authorities authorized to seize are the [police authorities, frontier control, the coast guards and the national competent authority].

20 Access to Premises

(1) The [Competent National Authority/ Police/...] shall have the right of access to any private or public property, aircraft or vessel, with the exception of property in the use of the military, and conduct any inspection if this is reasonably necessary to fulfil its tasks, in particular regarding an object, which appears to be cultural heritage. To do so it needs a judicial warrant to be delivered by [*applicable magistrate*].

(2) It may remove or seize any such object for further inspection and safekeeping.

21. Prohibition of Use and Entry into State Territory, Dealing, Possession

(1) The entry into national territory, the dealing in, or the possession of cultural heritage unlawfully exported and/or recovered from another State or recovered in a manner not in conformity with the UNESCO Convention on the Protection of the Underwater Cultural Heritage is prohibited.

(2) The use of State territory under national jurisdiction and control, including maritime ports, artificial islands, installations and structures, in support of any illegal or damaging activity directed at cultural heritage is prohibited.

22. Infringements and Sanctions

(1) A person or corporation, who—

- (a) undertakes any research, activity or recovery directed at cultural heritage of an archaeological character, including underwater cultural heritage, without a valid permit;
- (b) damages or destroys cultural heritage;
- (c) exports any cultural heritage without a valid export certificate;
- (d) alienates cultural heritage, which is under consideration for public acquisition or has been publicly acquired;

is guilty of an offence and is liable to a fine up to [EC\$ 100,000.00] or, in the case of a person, to imprisonment of up to [5] years or to both a fine and imprisonment [or community service].

(2) A person or corporation, who by hiding, falsifying or refusing factual information or by violent action steals, damages, destroys, exports or unlawfully recovers cultural heritage or opposes any actions of the [Competent National Authority] in an unlawful manner is guilty of an offence and is liable to a fine of up to [EC\$ 100,000.00] or in the case of a person, to imprisonment of up to [5] years or to both a fine and imprisonment.

IX. RETURN**23. Return of Illegally Trafficked Cultural Heritage**

(1) Any cultural heritage, which has been brought into the State, be it—

- (a) without an export certificate, if this is mandatory due to the regulations of the State of origin;
- (b) has been stolen from a public institution or museum, in whose register it had been inscribed;
- (c) was lost against the will of the owner;
- (d) was illegally excavated or legally excavated but unlawfully retained; or
- (e) was declared inalienable by the national authorities of the State of origin,

shall be returned [if reciprocity is ensured by the demanding State]. All expenses incident to the return and delivery of the cultural heritage shall be borne by the requesting State and this State has to furnish at its expense the evidence necessary to establish its claim.

(2) As soon as the [Competent National Authority] learns of a case falling under subsection 1 it shall inform the embassy of the concerned State or of the State likely to be concerned.

(3) The claim for return shall be brought through diplomatic offices to the attention of the [Ministry of Culture] within a period of [3] years from the moment when the requesting State learns of the location of the cultural heritage and the identity of its possessor, and in any case within a period of [one hundred years] from the time of the theft or of the export, otherwise it loses its claim.

(4) A claim for return of cultural heritage forming an integral part of a classified site, or belonging to a public collection, shall not be subject to time limitations other than a period of [one years] from when the claimant knew the location of the object and the identity of its possessor.

X. FURTHER REGULATIONS

24. Judicial Review

1.) [*Give further details*]

25. Regulations

1.) [*give details*]

ANNEX 1 EXPORT CERTIFICATE FOR CULTURAL OBJECTS

(TO BE ATTACHED)

No. of 2016

The Cultural Heritage(Protection) Act, 20156

Passed by the House of Representatives on
the , 2016.

Passed by the Senate on the , 2016.

Speaker.

President.

Clerk to the House of Representatives.

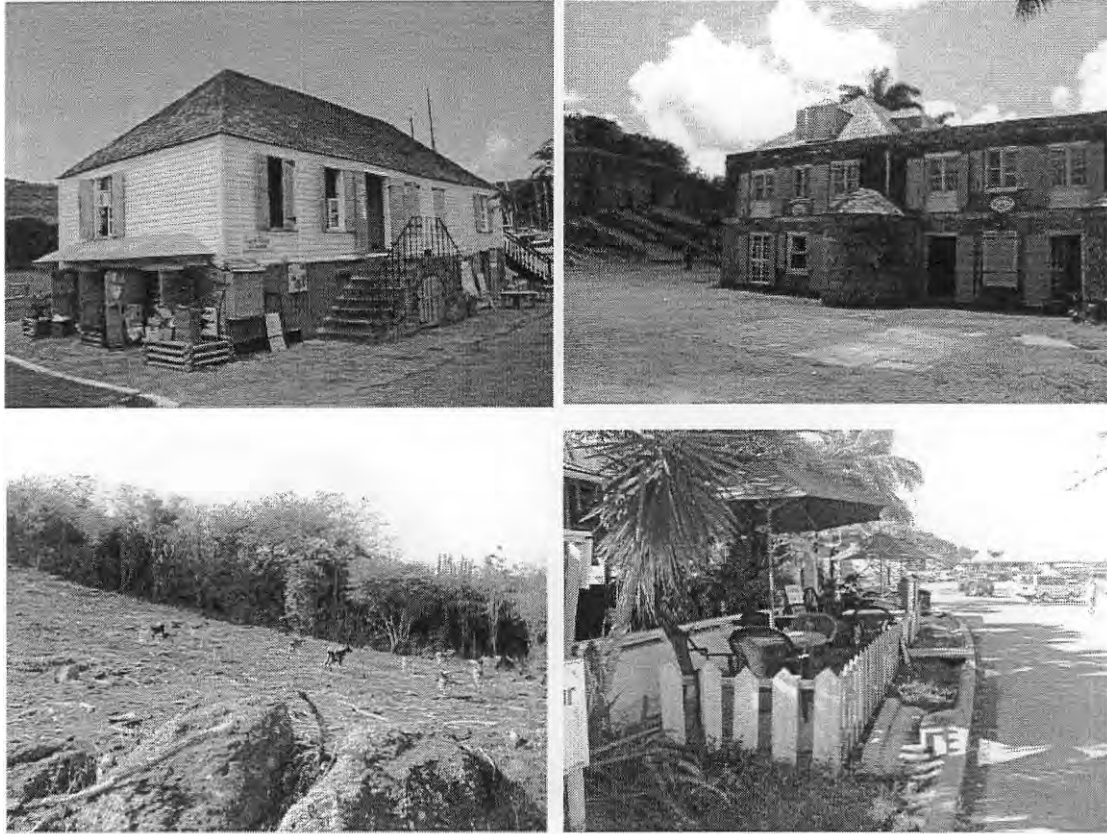
Clerk to the Senate.

EXPLANATORY MEMORANDUM

*E. Paul Chet Greene
Minister with responsibility
for Culture*

LAND DEVELOPMENT AND BUILDING GUIDELINES

NELSON'S DOCKYARD NATIONAL PARK



Prepared for the National Parks Authority (NPA)

March, 2010

Ivor Jackson & Associates, Landscape Architecture & Planning

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A General Summary of Building Guidelines and Restrictive Covenants

Nelson's Dockyard National Park

1.0 These covenants and guidelines will apply to all buildings within the **core historical area** and for developments within **conservation areas** of the Nelson's Dockyard National Park. Some of these areas lie within the boundaries established for the Antigua Naval Dockyard World Heritage Site, but most are within the Buffer Zone.

1.1 It is the Policy of the National Parks Authority, that all new buildings, renovations and modifications reflect and respect the historical values and characteristics of the historical origins of the Park. Therefore, in recognition of the Georgian naval and military heritage of the area, and its characteristic architectural styles and vernacular, all efforts must be made to retain the aesthetic and historic nature and outstanding universal values of the site established by the National Parks Authority and UNESCO World Heritage.

1.2 As a general rule, the closer the location of proposed works are to the World Heritage Site, the stronger the requirements and expectations in historic designs and standards.

1.3 In addition, each established Zone will vary in regulations and Special Development Areas will have guidelines specifically for its development.

2.0 Policies and Covenants

2.1 All works, including new buildings, structures, renovations, additions, and activities that will alter or impact the visual landscape must be presented for approval prior to the commencement of work, including, land clearing and terracing.

2.2 An archaeological clearance permit and an environmental impact permit will be required of all new works.

2.3 In special development areas or conservation zones, owners and developers are:

1. Not to subdivide established lots smaller than the planned permitted size as negotiated with the Parks Authority, nor
2. To erect any building other than a private dwelling house.
2. Structures are to be of single storey except where the slope of land permits a second floor or split-level.

3. Structures are to have roof designs compatible with the Nelson's Dockyard or historical Georgian and colonial Caribbean vernacular.
4. Roof covering should be of wood shingles or slate, or modern materials that replicate wood or slate but are more durable and storm resistant.
5. Roof slopes should be no less than 28 degrees and no lean to shed style roofs are permitted.
6. Dormer windows and exterior wooden shutters are encouraged.
7. The use of stone for exterior walls is encouraged.
8. The finished colour of the structure should be consistent with the surrounding rock and forest in an effort to blend the structures into the natural setting. No bright or colourful painting will be permitted on exterior walls without permission.
9. Topsoil should be removed prior to construction, stored on site where it will not wash away, and replaced around the structure after construction. This will prevent the introduction of invasive species, such as African land snails into the area.
10. Building on the ridge lines of hills is strongly discouraged and if it cannot be avoided then the structure will be restricted to one storey.
11. The planting of trees and shrubs to "hide" or blend the structures into the landscape is strongly recommended.
12. The clear-cutting or removal of the natural vegetation beyond the area for the placement of the structure is prohibited.
13. On large lots, remove only the vegetation required for the structure and its outer facilities (driveways, garage, landscaping features, security concerns and air flow); however slopes and open areas must be stabilized as soon as possible with vegetation that retains soil or terraces.
14. Natural vegetation is preferred to grassy lawns and plants that are suited to the dry environment of the area are recommended.
15. A professional architect must be employed by the owner and approved by the NPA.
16. All designs must be presented to the NPA for approval in principal prior to submission of final construction drawing.

17. No buildings are to be erected within thirty feet of any boundary of the adjoining property.
18. To comply with every requirement, by-law, regulation, obligation or duty imposed on him by the National Parks Authority (NPA) and or the Development Control Authority (DCA) or any other competent body, statutory or governmental in respect to and construction, or the instillation of services on any of the parcels of land.
19. Not to make any construction alterations, additions or “improvements” in or to the private dwelling house or any other authorized structure without the written consent of the NPA.
20. Not to erect any colourful awnings or shades over the outside of the windows of any building which would be incongruous to the style and historical setting and values of the visual landscape.
21. Not to erect or place on any part of the property outbuildings or sheds without approval in writing from the NPA.
22. Not to carry out or establish in any building or on the said property, or any part thereof any trade or business whatsoever and to use any building authorized to be constructed on the property solely as a private dwelling house or rental property.
23. Not to keep or breed any animal livestock or feathered stock on the property save and except domestic pets but no such pets shall be kept or continued to be kept where in the reasonable interference with the use and enjoyment by occupiers of the adjoining parcels of land and in particular no pit bull terriers or other banned breeds of dogs shall be kept on the property and no dog shall be allowed to run free on the roads or adjoining properties and all dogs shall be kept indoors at night and during the day whenever the occupiers are absent from the property and any dog that barks unreasonably or any other pet that is noisy and disturbs the peace and tranquility of the area shall be restrained.
24. Not to hand place laundry or washing so that it is visible from the outside of the property.
25. Not to erect or install any antennae, solar panels, satellite dishes or communication systems on the exterior of the building or on the property without it beings screened from view as far as possible and only after prior approval is granted in writing by the NPA.
26. Not to place any billboards, banners, notices of advertisements of any kind on any part of the property without written approval.

27. Not to deposit garbage or other refuse on the property or on any part of adjoining properties, except in areas designated for such by the authorities.
28. Not to store or to permit storage on the property any combustible, flammable or other hazardous materials, other than LPG (cooking propane) as required for domestic purposes.
29. Not to use electrical appliances or equipment on the property except as shall comply with common safety standards and to ensure that all such appliances are fully suppressed, in particular radios, television, hi-fi systems, must be played at a reasonable decibel level at reasonable times with consideration for the neighbours.
30. Not to use any parking space for any purpose except for the parking of private automobiles and visiting services vehicles. Small boats on trailers may be kept on the property if located so as not to be a visual annoyance; the location to be agreed with the property management and the NPA. No derelict vehicles, backhoes, tractors, earth movers, large commercial vehicles or portions of vehicles are to be kept on the property.
31. Not to obstruct any portion of any roadway or footpath by the deposit of building material or otherwise disturb the surface of any such roadway or footpath except for the purpose of making connections to drains, water supply or other services thereunder and to make good any disturbance with all due dispatch.
32. Not to remove, disturb or destroy any of the natural vegetation on adjacent lots without written permission from the NPA.
33. Not to cut or remove trees without prior written approval from the NPA regardless of their location.
34. To repair and maintain the private dwelling house and property in good and sufficient repair.
35. Not to erect any structure, ornament, recreational device, slide swing or anything else that is unsightly from the land and sea.
36. To maintain the grounds within the property and along the road abutting the property in good order.
- 37. Special Development Area at Galleon Beach and Windward Bay as follows:**

General Development Restrictions for New Developments in Conservation Zones outside of the Core Heritage Zone.

It is the Policy of the National Parks Authority that all new buildings, renovations and modifications reflect and respect the historical values and characteristics of the historical origins of the Park. Therefore, in recognition of the Georgian naval and military heritage of the area, and its characteristic architectural styles and vernacular, all efforts must be made to retain the aesthetic and historic nature and outstanding universal values of the site established by the National Parks Authority and UNESCO World Heritage.

1. All developers and their clients shall comply with every requirement, by-law, regulation, obligation or duty *imposed on them by* the Development Control Authority, or any other regulatory agency, statutory or government, whether local or *central*, in respect of any construction of the parcels of land under their control. In addition to these requirements, the NPA is authorized to apply additional measures to protect the integrity of the park and to accommodate any special requirements of the particular area under development. These requirements will be graded according to the sensitivity of the Land Use Zone (LUZ) in which the development is proposed.

For sites accommodating private dwelling houses or villas, permission will not be given for sub-division of the site nor to erect any building other *than a private dwelling house of one-storey* (or two-storeys where the topography can reasonably allow) with or without a guest cottage and / or a boathouse, garage and necessary outbuildings (such that the total built area shall not cover in *excess of 25% of the plot size*) and with It is the Policy of the National Parks Authority that all new buildings, renovations and modifications reflect and respect the historical values and characteristics of the historical origins of the Park. Therefore, in recognition of the Georgian naval and military heritage of the area, and its characteristic architectural styles and vernacular, all efforts must be made to retain the aesthetic and historic nature and outstanding universal values of the site established by the National Parks Authority and UNESCO World Heritage.

2. adequate water catchments and storage provided.
3. For sites involving hotel construction, main buildings, service units plus accommodation units if provided separately (as in cottages) and access paths, roads and other paved areas, shall not occupy more than 50% of the total site area. Building heights shall not exceed two stories and shall be sited such that roof lines do not protrude above the natural vegetation line on ridges. These restrictions will not apply to open areas such as tennis courts, swimming pools or other recreational areas.
4. Permission for any external alterations to existing buildings must be obtained from the NPA before commencing any alterations or new construction. This

is in addition to any requirements of the developer or the DCA. (See Section (6) below)

5. A professionally qualified architect, approved by the NPA, must be employed by the owner for the design and for producing all concept and construction drawings for the site project.
6. In any of the special development areas (See Land Use Zones) a boundary of thirty (30) feet must be provided between the structure and any boundary of the neighbour's adjoining property. The NPA shall, however, reserve the right to allow construction of non-obtrusive structures such as drains or other service structures of no more than fence height closer than the above limit, where boundaries are not contiguous and space has been provided for such structures. In other areas, boundary requirements shall be such as required by the DCA.
7. External appearance of new structures shall in general follow the guidelines for building detail provided in National Parks Building Regulations Sections and take into account the environment in which the building will exist and the requirements of the World Heritage Convention and the Outstanding Universal Values of the site. Other special requirements may be applied in certain of the Land Use Zones as determined by the NPA.
8. No trade or business whatsoever out shall be carried out or allowed to be carried out on any plot or part thereof designated as a private dwelling house or rental property, except in LUZ's designated as commercial zones.
9. No animal or feathered livestock shall be kept or bred any on any property save and except domestic pets as described in Section 11.
10. No domestic pets shall be kept or continued to be kept where unreasonable interference with the use and enjoyment by the occupiers of adjoining parcels of land is being caused. All dogs shall be licensed according to the law and kept under control by their owners and within their property boundary, except when being exercised when they shall be kept on a leash. Any dog that barks unreasonably or any other pet that is noisy and disturbs the peace and tranquility of the area shall be restrained.
11. Laundry shall not be hung where it is visible from outside the borders of the property.
12. The erection or installation of radio or television antennae including satellite dishes, on the exterior of any building or any part of the property shall be restricted in certain LUZs as indicated. Likewise, solar panels, shall be screened or placed so as to provide minimal disturbance to neighbours or to the general look of the building and should be agreed on in advance with the NPA in writing.
13. No sign, billboard, notice or advertisement of any kind shall be placed on any building or in any part of any property without the prior written consent of the NPA.

14. All garbage and waste (both household and from the property), shall be handled in a responsible manner and where appropriate, recycled, where such facilities exist.
15. No tree, shrub or bush shall be planted on the property in such a location that said tree, shrub or bush may reasonably be deemed to cause damage to any neighbouring building or to grow so as to significantly obscure the view from any neighbouring property. Where any such risk is deemed to apply, the property owner may be required to remove same if instructed to do so in writing by the NPA.
16. Further, Property owners are required:
 - a) Not to store, or allow to be stored, on the property any explosive, flammable or other hazardous material save small quantities of gasoline in legal containers and commercial LPG gas, as required for domestic purposes.
 - b) To ensure that all electrical appliances or equipment on the property shall comply with legal safety and nuisance standards, including interference. Noise making appliances such as, radios, televisions and hi-fi's etc. must be played at a reasonable decibel level with due consideration for neighbours.
 - c) Not to use any parking space for any purpose except for the parking of private automobiles and visiting service vehicles. Small boats on trailers may be kept on the property if located so as not to be an eyesore and the location to be agreed with the NPA. No backhoes, or other large movable equipment, to be kept on the property.
 - d) Not to obstruct any portion of any roadway or footpath by the deposit of building material or otherwise disturb the surface of any such roadway or footpath except for the purpose of making connections to drains, water supply or other services thereunder and to make good any disturbance with all due dispatch.
 - e) Not to operate any sea bikes or jet skis from the property and not to engage in water skiing activities exceeding a speed limit of five knots within 300 yards of the shore included in the property.
 - f) Not to cause any damage to any mangroves except with prior approval from the NPA for such trimming as may be required for access to a facility, such as a private dock. If any minimal removal should be permitted, such removal of mangroves must be compensated for by *planting additional* mangrove "slips" in the area. The NPA will assist in such replanting.
 - g) Not to cause any spillage of fuel or chemicals, cleaning liquids or any other pollutants into the sea from any boat operated by the property owner.
 - h) Not to erect any seawall or jetty or lay any permanent mooring or install any boat storage facility without the prior written approval of the relevant authorities – including DCA, Port Authority as well as the NPA..
 - i) To repair and maintain the private dwelling house and the property in good and sufficient repair.
 - j) Not to erect any structure, ornament, recreational device, slide swing or anything else that is unsightly from the land and sea.
 - k) Not to light bonfires or bum garden or household rubbish on property and to ensure (, that the use of barbeques is in manner that is not offensive in terms of smoke emissions.

- l) To maintain the grounds within the property boundaries and alongside the road abutting the property in good order,
17. Persons renting or visiting the property must be familiarized with these requirements and are required to comply therewith.

Special Development Area at Rendezvous Bay:

Rendezvous Bay Design Control Rules (Drafted December 2012)

PREFACE

The Rendezvous Bay design ethos is to draw upon site's natural environment to create a plan in harmony with the land and to maximize the intrinsic beauty of Rendezvous Bay.

This ethos is exceptionally important since the development of a complete and balanced community in Rendezvous Bay will optimize the ensuing significant cultural, environmental and economic benefits for Antigua.

The Rendezvous Bay design is accentuated by the 1000-foot hills that envelope it, juxtaposed with the tropical flat land at the base of the valley and the expansive south-facing beaches. The entire community will have a mix of natural areas such as the two beachfronts, numerous varying hillsides and tropical forest. The multiple landforms offer diverse individual home sites that should take advantage of spectacular views and island breezes.

The primary purpose of the **Rendezvous Bay Design Control Rules** is to ensure designs are compatible with the site, the environment and the design objectives of the project. Architectural traditions, aesthetic directions, and recommended sustainability measures are addressed herein for new buildings, improvement, site work, and landscaping.

These rules may be modified, amended and or supplemented from time to time by the rendezvous Bay Board of Directors.

The illustrations and/or photographs herein are to convey concepts, not portray specific plans.

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1.0 THE VISION FOR RENDEZVOUS BAY

Rendezvous Bay Antigua is envisioned as a low-density international residential community with a luxury boutique hotel.

With home sites planned to average over 2.5 acres in size, sensitive design guidelines, and strict rules that dictate at least 70% of each residential property remains in a natural state. The philosophy of the plan for Barter's Estate in Rendezvous Bay is park-like preservation of this private land holding.

A fifty-acre reserve behind Rendezvous Beach will ensure that no development reaches this pristine feature, and an organic farm and nursery, walking and hiking trails, and a family park planned in this area.

By starting a conservation program for both beaches and extending hiking trails through the reserve area and into the surrounding land, **Rendezvous Bay Real Estate Corporation (RBREC)** wishes to augment the sites natural features and protect its greatest asset – the environmental beauty of the Rendezvous Bay. With its own nursery on site, the Rendezvous Bay community will be very conscious of the vegetative screening of all structures to ensure a pre-dominance of the land's features and natural foliage.

Much more than a collection of homes and a hotel, Rendezvous Bay will be a community of international people with a deep appreciation of the natural wonders of the site and the responsibility to preserve such. The property owners will have specific design and build guidelines ("Rendezvous Bay Design Control Rules"), and have an association created to be an active participant in the project development and the continued growth of the local area.

The Rendezvous Bay community has a goal in its development plan – true self - sustainability. With upfront investment into organic farming and on site water supply, and planned future investment into renewable power sources, Rendezvous Bay is one of the best suited sites in the world to make this statement very realistic and an achievable goal for its residents.

2.0 DESIGN OBJECTIVES

The general design objective for Rendezvous Bay is to maintain the integrity of the natural environment, its organic beauty and tranquility, the **National Park** feel and hence the exclusive quality and property values; and to maintain architectural style, scale and

building standards in keeping with a world-class sustainable development and the guidelines and regulations of the National Parks Authority.

The **Rendezvous Bay Community Agreement (“RBCA”)** directs the **Design Review Panel (“DRP”)** under the supervision and direction of the **Rendezvous Bay Community Board of Directors (“RBCBOD”)** to “develop and maintain a carefully designed, attractive and harmonious environment that preserves and enhances the Rendezvous Bay vegetation and landscape; and furthermore establishes a healthy, varied and sustainable tropical forest that dominate the development.”

Primarily the Design Review Panel should ensure that no residence of other building or improvement should dominate so as to detract from the natural environment of Rendezvous Bay, which is designated national Park land. Buildings and improvements are to be “set into” natural environment so that the landscape continues to dominate.

The following general objectives must be observed:

A. SETTING

Home designs should draw upon Caribbean traditions including European influences such as classic colonial architecture, as well as indigenous patterns and materials. Contemporary interpretations of the indigenous aesthetic are welcome and should reflect the island culture, and subtly connect with the landscape of the Bay while suiting the needs of the owner.

B. SENSITIVITY

The landforms, vegetation and views provide the underlying influence in the design, and homes and landscapes should be sensitively woven into the natural vistas and wildlife.

C. SUSTAINABILITY

A long-term commitment to sensitive design to preserve, restore and protect the site’s resources.

D. CONNECTION

Walkways and paths will encourage a pedestrian neighborhood with a relaxed way-of life in harmony with the surrounding nature. The Nature Park is to be a gathering place for residents and visitors alike so that the Rendezvous Bay community is connected to the wider English Harbour community.

E. COMMUNITY

Outdoor gathering spaces especially in the area of the nature Park will reinforce the outdoor lifestyle and sense of place. Private indoor spaces that blend seamlessly with the outdoors are a preferred lifestyle design element for individual homes that also suit today’s lifestyle and the climate.

F. INDIVIDUALITY

The guidelines encouraged opportunities for individuality in design so that the Rendezvous Bay community will embody distinct interests and personalities

2.1 Objectives for Site and Landscape Design

Rendezvous Bay is envisioned as an informal tropical forest community. Simple treatments rather than ornamental and formal approach are to be favored in order to create buildings and landscapes that recede and blend into the natural environment.

The ideal composition would be a low-density sprinkling of buildings enveloped and complimented with abundant added vegetation and built with the use of traditional and unrefined materials.

In order to protect and enhance the Rendezvous Bay setting and simultaneously accommodate the new community, a relaxed, island-style way-of-living is reflected in the design principles as follows:

- i. Landscape
Buildings, colours and materials are to be subordinate to the landscape. The existing and added vegetation will be used to obscure buildings and maximize privacy.
- ii. Indigenous materials and plants
Drawing in the main from the material and aesthetic of the Caribbean islands: plants should be chosen for their suitability to the climate.
- iii. Capture and preserve vistas
Reinforce and maintain views to the sea, beach, valley and hillsides.
- iv. Outdoor living
Indoor and outdoor spaces should blend so that together they constitute the home.

2.2 Objectives for Architectural Design

The architecture should help create a relaxed, outdoor lifestyle and reflect the goal of respecting the natural Rendezvous Bay environment by:

- i. Designing buildings that help preserve the environment, have lower energy costs and improve overall quality of life
- ii. Focusing on outdoor living and creating a connection of indoor and outdoor rooms that together are one home

- iii. Preserving the views from the key community amenities such as the hotel, beach, park and other open space areas by nesting the residential neighborhoods in the Rendezvous bay environment.
- iv. Drawing upon the hybrid of historic design sensibilities and interpreting these to the needs of the owner and today's lifestyles
- v. Simple designs, low in height (one to two stories) that maximize the feeling of space and accommodate wide vistas from the inside to the outside, and between the buildings.
- vi. Pavilion-style designs linked by walkways, trellises and garden spaces
- vii. Roofs with minimal vertical expression
- viii. Designs that provide protection from the climate such as wrap around verandas, overhangs and porches
- ix. Emphasizing the use of natural materials using wood and stone

The **Design Control Rules** have been created to ensure that all Buildings and Improvements conform to these Design Objectives and the Master Plan. The design Control rules apply to all owners, consultants and contractors including architects and landscape architects and all of whom should work together to ensure the community embraces the design objectives.

3.0 DESIGN REVIEW PANEL (“DRP”)

The Rendezvous Bay Community Board of Directors shall appoint the members and the Chairman of the DRP. The DRP shall consist of three members of the Home Owners, one Architect and one representative of the Rendezvous Bay Real Estate Corporation.

Members of the DRP may be terminated and/or replaced by the RBCBOD with or without cause.

The DRP shall act by simple majority vote, and shall have the authority to delegate its duties or to retain the services of a professional engineer, architect, designer, inspector or other person to assist in the performance of its duties.

The DRP shall have the authority, where it deems appropriate, to waive or modify submittal requirements, criteria and/or procedures contained in these Rules when it determines that the same will not negatively impact Rendezvous Bay consistent with the nature of improvement at issue. Such determination shall be within the DRP's sole and complete discretion subject to RBCBOD approval.

4.0 ACTIONS REQUIRING DRP APPROVAL

Any construction, demolition or any action in Rendezvous Bay, which affects the aesthetic beauty or environmentally impacts the Rendezvous Bay Development, must be approved by the DRP. This includes but is not limited to all new construction, alterations to existing footprints and/or renovations, and demolition including landscaping and trees on a Home Site, Common Areas or rendezvous Bay area.

Applications for preliminary determination and final approval must be submitted to the DRP for approval pursuant to the process set forth in Section 11 and 12.

No person may commence improvement unless such Person has first obtained the prior approval of the DRP as set forth in these Rules.

No person may make any excavation or fill, make any material change in the natural or existing surface drainage; install, remove, alter or replace any material landscaping, or install a well, cistern or utility line without first securing the approval of the DRP and the RBCBOD.

Entry structures and signs for the Residential Areas, Common Areas, the Resort Area, including construction and real estate, must be approved by the DRP

All names of any Residential Area, Common Areas and Buildings within the Resort Area shall be submitted for approval by the DRP.

5.0 IMPROVEMENT STANDARDS

The location and design or change of location and design or demolition of any improvement in Rendezvous Bay and landscaping must be approved in advance by the DRP.

5.1 Landscape plans should be submitted as follows:

- a) Preliminary Landscape Plans showing a proposed Site Work Plan including initial landscape screening to conceal the construction

site during construction and major grade work including any perimeter work necessary to prep the site for construction must be submitted as part of a Final Application. The initial landscaping screening should preferably be the installation of permanent landscaping berms but other screening may be utilized.

- b) Final landscape Plans defining the global look of the project so as to preserve the character and style of the rest of the island showing a conceptual landscape design, which outlines the major landscaping layout including the perimeter areas of the property, must be presented to the DRP or approval prior to commencing installation of the landscaping. This includes all new landscaping and re-landscaping of Residential Area, Common areas and Resort Area. All new Residential Property landscaping must be presented within ninety (90) days of occupancy of the Residential Property.

- 5.2 All improvement on Home Sites and Common Areas must be set back a minimum of twenty-five (25) feet from all property lines.
- 5.3 Each Home Site may have only one access drive connected to the Roadways. Private roads from Roadways to Home Sites may be no wider than twelve (12) feet. Each Residential Property must be provided with a readily accessible and properly screened Trash Collection Point built in accordance with the Rendezvous Bay standard.
- 5.4 Tennis court fencing, lighting, and location must be approved by the DRP. Lighting may not shine on adjacent properties.

6.0 TOTAL MAXIMUM BUILDING (TMB) AND TOTAL MAXIMUM IMPROVEMENT (TMI) STANDARDS

In general, all Residential Homes are to be broken up into several buildings (or masses) rather than one big “box.” The composition of structures should be organized in a hierarchy of structures with a clearly dominant volume, the Main Structure, with complimentary “secondary” volumes such as wings, pavilions, accessory structures, and/or garages or Ancillary Structures. The placement of individual masses and volumes should create “negative” spaces that become outdoor rooms.

The Residential Home shall be placed in an approved position known as the Approved Residential Home Position to be determined by RBREC. This can be viewed and changed by the DRP if the Home Owner requests an alternative position.

The TMB square footage which includes the square footage on all floors, not just the building footprint and TMI on a Home Site shall not exceed the following formulas:

- 6.1 TMB square footage for the Residential Home shall not exceed 15% of the Home Site Area.
- 6.2 TMI, excluding landscaping and footpaths, shall not exceed two (2) times the TMB.
- 6.3 Buildings shall be limited to two (2) stories designed to follow the grade of the Approved Residential Home Position, not to exceed a 34 feet height limit, including cupolas, excluding chimneys in the Approved Residential Home Position
- 6.4 There shall only be one primary structure for each Home Site that has one, or two stories where acceptable, with a roof above.
- 6.5 To minimize the potential adverse impact of oversized structures within a neighborhood, it is encouraged and strongly recommended the second floor area of the primary structure be integrated within the roof as much as possible. All other secondary structures shall be limited to one (1) story.
- 6.6 Building Height is defined as height measured from the mean grade between the highest and lowest grade at the base of the building to the uppermost point of the roof or parapet wall.
- 6.7 Buildings are to be in scale with the size of the Home Site, and articulated with generous verandas, balconies, breezeways, overhangs, and large openings for windows and doors.

7.0 APPROVED RESIDENTIAL HOME POSITION

The residential Home consisting of the Main Structure and Ancillary Structures will be placed to be responsive to the context of the site. Every Site has particular attributes not necessarily shared by adjoining Home Sites or those in other areas. This means that building arrangements respond existing landforms and vegetation, available views, offsite views from community spaces (such as the Nature Park, trails and/or beaches), and any other climatic conditions such as prevailing breezes and sunlight. Designing the building

to promote effective and energy efficient use of shade, shadow, breezes and daylight will also decrease long-term energy costs and/or resource usage.

8.0 DESIGN AND BUILDING STANDARDS

8.1 The architectural style can be a more contemporary interpretation of the traditional, indigenous design aesthetic and including the following basic elements:

- Informal compositions, low in height (one to two story)
- Groups of rooms or masses, including indoor and outdoor spaces
- Broad, enveloping roofs that have minimal vertical expression
- Building projections that add texture and provide deep shade such as verandas, overhangs and porches
- A reliance on regionally derived materials that are close to their natural state (stained wood, rustic stone, hammered metal etc.)
- A void large, obtrusive building forms

8.2 Roof materials are limited to wood shingles or shakes, or slate (TBC). Roofing design shall meet Class Four Hurricane Standards. Colors of roofs may be weathered grays and browns selected and textured to blend the building into the island landscape. Colors of metal roofs should be limited to the naturally weathering patina of the base material and not impregnated color. Gable, Single or Multiple Hip, Double Pitched, or Shed Roofs are approved and a dominant “primary” roof plane with ‘secondary’ roof planes is preferred.

8.3 Exterior Walls and Finishes should utilize wood and stone treatments to engender a more organic island aesthetic. Stone surfaces are to have a structural, dry-laid or understated mortar appearance. Stucco should have a smooth to lightly textured sand finish and is to be combined with wood components so that it is not the only material on a building facade (i.e. adjacent wood window frames and shutters or wood siding or stone work)

8.4 Out buildings, Guesthouses and Ancillary Structures are to utilize the same or similar treatments to the main structure.

8.5 Appropriate wood wall treatments include:

- Shakes and shingles
- Board and batten
- Vertical or horizontal siding

Stain finishes (weathering, semi-transparent, semi-solid and solids with solids least preferred) are to be selected so that the natural grain and texture of the wood is reflective of the colors in the surrounding environment.

8.6 Generally, colour palettes should reflect colours from the surrounding setting. Mid-tone and darker, more “natural” colours should be used on higher lands and surfaces that can be seen from other areas of Rendezvous Bay so that the Residential Homes blends into the hillsides. Finishes with low levels of Volatile Organic Compounds (VOCs) should be utilized.

8.7 Painted or stained wood fence colors are to be dark browns and warm grays. Semi-transparent, semi-solid or solid stains or paints are to be used to protect wood and, where appropriate, allow for natural weathering to accentuate wood grain.

8.8 Skylights, satellite dishes, laundry lines and antennas are to be integrally designed into the roof structure and located on the back of the structures so as not to be visible from the roads, common areas or adjoining Home Sites.

8.9 Solar power generating equipment is encouraged but should be integrated into the architectural design of the roof structure and in areas less visible from the road or neighboring Home Sites. Solar Water Heater panels are required.

8.10 No Improvement or vegetation shall be added or removed in such a manner or location as would materially affect the view or prevailing wind, or infringe on the privacy of any Residential Home without prior DRP approval.

8.11 All buildings must be equipped with smoke detectors and fire extinguishers.

9.0 SITE AND LANDSCAPES STANDARDS

9.1 Home Site Types

There are two Home Site Types described below.

1. Waterfront

Located on the eastern beach at Rendezvous Bay and limited in number, these sites have expansive views to the Caribbean Sea and may be composed of several informal living pavilions and gardens set back from the waterfront.

2. Hillside

Each hillside home site offers birds-eye views of Rendezvous Bay beach, valley and/or tropical forest. Each site will be organized and selected based on its unique property condition including topography, vegetation, and primary views.

9.2 Planning Considerations

In order to preserve views, respond to the unique landscape of a site and optimize the relationship of the home to the overall community and landscaping setting, the planning concepts for Rendezvous Bay emphasize the preservation of the tropical forest environment, orient buildings to take advantage of day lighting, and provide solar access and natural ventilation, blending improvements into the site.

Each site will be studied and accompanied by its own development criteria including a Home site matrix (showing existing conditions and design criteria such as building envelopes, building height, maximum sq. ft. and suggested driveway access). Each residential site will retain a minimum of 70% of the natural vegetation of the plot and present a Residential Home footprint no larger than 15% of the area of each plot.

Home sites will also be studied to optimize their relationship to the overall forest presentation, adjacent homes, and views from public areas. The plan will preserve the ecological habitats, steep slopes and site features such as significant drainage features, rock outcroppings and tree stands which are intrinsic to Rendezvous Bay.

The natural Area is to remain essentially in a natural state for screening building improvements. Hardscape elements such as terraces and/or buildings may not be located in the Natural area. Plantings in this area should be indigenous or well-adapted native species from the surrounding regions.

9.3 Landscape Standards

In accordance with the Master Plan's directive to preserve the natural environment, the National Park "feel" and hence the exclusive quality of Rendezvous Bay, the following landscape Standards have been adopted:

- a. Certain areas of Rendezvous Bay will be designated "Protected Common Vistas." These Vistas are designated in order to retain unobstructed views to the sea and Rendezvous Bay from Roadways and Common Areas. In order to facilitate these Sea and Land Vistas, all common Vistas shall not be blocked by any obstruction. All Home Owners, Resorts Operators and RBCBOD are encouraged to retain and/or reclaim Vistas.
- b. Common Areas shall be maintained in keeping with the guidelines.
- c. Vegetation Screening must be installed within sixty (60) days after completion of the improvement (e.g. a tennis court)
- d. Landscaping must be set back far enough or sized effectively at intersections and bends in roads, so as not to obscure traffic movements.
- e. Storm water collection is to work with natural drainage systems to the extent possible. Natural depressions and native vegetation cover are to be used to naturally absorb and filter runoff and promote infiltration while directing water to the community drainage system.

- f. Cut and fill slopes are to be re-vegetated with approved re-vegetation planting solutions and blended into the surrounding environment.

- g. Retaining walls may be used when it is necessary to preserve unique site attributes such as existing vegetation or where they are designed as extensions of the architecture. Slopes may not exceed 3:1 unless it can be demonstrated that a steeper slope will not erode. Retaining wall height can be considered on a case-by-case basis provided that they are not obtrusively visible from off site and they provide a solution to reduce the overall impact to the site. In that case, substantial landscape screens are required. Locally sourced lava rock or regional stone is preferred for all retaining walls.

- h. Impervious surfaces are to be minimized to the fullest extent feasible to encourage water percolation.

- i. Driveways, garages and parking areas are to be sited so that their visibility from adjoining properties or public viewpoints is eliminated or near eliminated. The selection of pervious or porous paving materials versus impervious paving is encouraged with the exception of some Hillside Home Sites where step gradients limit the use of pervious materials. Where impervious materials are used, they are to be combined with pervious paving where feasible, such as tire strips and/or open-cell pavers, to maximize water infiltration. Driveways should generally not exceed twelve (12) feet width except at the driveway apron, guest parking, garage entrances and auto court areas. Straight driveway alignments are to be avoided so that they follow the natural contour of the land. Outdoor parking areas are to be screened from adjacent roads and neighboring Home Sites.

- j. Planting design is to respond to and preserve the existing island environment to emphasize the connection to the land and its setting. The landscape should be a sequence of layers with a mature overstory and lush understory. Buildings and

improvements are to be “set into” this landscape framework so that the island landscape continues to dominate.

- k. The existing island landscape and associated plant communities are to be maintained, extended, and enhanced on each Home Site so that all improvements are set into and viewed through this landscape. Tree and shrub plantings should be clustered in naturalistic groupings rather than locating single trees in formal, rigid patterns. Where possible, extend and add onto existing clusters of plantings to create work of “natural” outdoor rooms that create shade, shadow and texture.
- l. Existing trees and native vegetation communities are to be preserved to the extent feasible and should lend form to and “drive” the placement of buildings and related improvements.
- m. Landscaping should complement the informal, natural surrounding setting with relaxed, informal, and “untamed” designs to reflect off the casual island lifestyle - rather than highly controlled or manicured.
- n. Landscaping is to be pervasive and intertwined with built elements wherever possible: spilling over site walls, paving, steps, and fences to blend the built environment with the natural. Vines may be used to fill between structural components of walls and/or stairs.
- o. Plantings, particularly along house foundation, are to appear informal and loose rather than formal and patterned.
- p. Plant materials may be combined with wire fencing to create a “living” fence. Planting of trees must take into consideration views from adjoining Home Sites. The use of large-scale palm trees or large canopy trees where views from adjoining Home Sites would be impacted are not permitted.
- q. Planting and/or re-vegetation efforts within the Natural Areas are to be limited to native and/or well-adapted plant species. Non-

native plants are to be kept in courtyards, gardens and other outdoor areas close to the home. A gradual transition to all native species should occur as one move away from the house towards the Natural Area.

- r. All areas disturbed by construction shall be re-vegetated with an approved native seed and shrub mixes.

- s. Site Walls, Fences and Gates in general may not exceed 6 feet in height. Approved fence, gate and site wall materials and types include lava rock and/or indigenous or regional stones combined with wood treatments above, Handcrafted wood that utilizes a dark or opaque stain, may be combined with lattice work or similar tropical vernacular.
 - Handcrafted simple wrought iron designs that draw upon island motifs may be combined with stone at the base.
 - Bamboo
 - Wire Mesh fence with wood frame
 - Wire fencing combined with vines to create a “Living Fence”. Inappropriate fence, gate and wall types include:
 - Unfaced concrete block
 - Chain link
 - Woven wood slat, solid board fence or solid gate designs.

Fences are to be located within the Building Envelope and are not permitted along the entire length of property lines. Designs are to be simple, rustic, unadorned, and should recede into the landscape. Driveway entry gates and associated monuments are permitted but are to be located within the Improvement Envelope. Gates and monuments should transition to a planted screen or vegetated border.

- t. The design intent within the community is to utilize low intensity, indirect light sources to the extent required for safety, security and subtlety. When designing exterior lighting, the light source

should be directed down and the quantity of light limited in order to preserve the night sky and the quality of darkness.

Lighting design should: maintain the dark nighttime sky: establish a warm, inviting character that provides the minimum amount of light required for safety: restrict light spill to within the Improvement Envelope and directly adjacent to the home: and encourage the use of alternative power technologies to reduce energy consumption.

Waterfront Sites must be equipped with lighting that does not disturb the nesting turtle populations.

10.0 DESIGN REVIEW APPLICATION PROCESS

Home Owners, Hotel Owners or Operators, the RBCBOD, (“Applicants”) desiring to perform any tasks requiring approval from the DRP shall follow the procedures of these Rules. Prior to Preliminary Determination [pursuant to Section 11, Applications should be submitted as follows:

- 10.1 The Applicant should submit the Application by email directly to the Rendezvous Bay Executive Office, who will confirm receipt via email to the Applicant and will then distribute the information to all DRP members for preliminary determination.
- 10.2 Hotel Applications must first be submitted and approved by the RBCBOD
- 10.3 It is strongly recommended that Applicants share plans for improvements with their neighbors to make them aware of the proposed improvements and resolve any potential concerns prior to submitting any Application. The DRP will notify neighbors on all Applications prior to commencing the review of the Application. Concerns of neighbors will be considered by the DRP prior to any approvals.

11.0 PRELIMINARY DETERMINATION SUBMISSIONS

Applicants applying to the DRP for preliminary determination are required to complete the following steps:

- 11.1 The Applicant must submit via email to the RBCBOD Executive Offices the following: (i) an Application, (ii) one set of preliminary design plans in PDF format, and architectural blue prints via mail to the DRP Chairman, if requested, and (iii) approval confirmations from the RBCBOD pursuant to Section 9, where applicable. Receipt of the material will be confirmed by the DRP Chairman or designated DRP Members for review and approval.
- 11.2 The preliminary plans should include a site plan showing the location of all improvement on the property, setbacks from the property lines, Roadways, beaches and Foreshore. They should also show any changes to topography and landscaping of the site, elevations (front, rear and side views of Buildings), existing grade, and Building height.
- 11.3 A preliminary determination will be made as to whether the design conforms to these Rules and the Master Plan. Design change suggestions and/or request for additional information may be made to the Applicant by the DRP Chairman or a designated DRP Member in order to adequately evaluate the proposed design.
- 11.4 The DRP may require the Applicant to pay a reasonable fee for its design services or as a condition to any subsequent design review in an amount not in excess of that amount required to cover the DRP's expenses for professional services.

Please note a preliminary determination is not the Final Approval of an Application. Plans must also be submitted to the National Parks Authority for Approval in Principle.

12.0 FINAL APPROVAL SUBMISSION

The Applicant should submit a final Application after receiving a preliminary determination from the DRP and the NPA. The purpose of the final approval review is to examine and approve final construction drawings to ensure conformance with the preliminary determination, these Rules and the Master Plan.

The review will focus on whether there are any material differences from the preliminary determination, confirming the satisfaction of conditions, if any, imposed as a part of the

preliminary determination. The DRP Chairman or a designated Member will determine in the Application is complete. Plans must then be submitted to the NPA for approval. Successful approvals must then be submitted to the Development Control Authority (DCA) for its approval.

The process for final approval does not begin until all documentation is complete.

- 12.1 The DRP will begin review of a **complete** Application and notify the Applicant of the date review will commence via email within fifteen (15) days after receipt of a **complete** Application.
- 12.2 A complete Application requires a brief description of the project and PDF files showing:
 - a) A registered survey of property owned with a site plan showing the location of all improvement on the property, set backs from the property lines, roadways, beaches and foreshore. They should also show any changes to topography of the site, elevations (front, rear and side views of Buildings) existing grade, Building Height.
 - b) Floor Plans
 - c) Elevations showing proposed grade, retaining walls and other man made features. Front, rear and side views of the Buildings with descriptions of any color scheme used.
 - d) Plans showing proposed Site Work Plan including initial landscape screening to conceal the construction site during construction and major grade work including any perimeter work necessary to prep the site for construction. The landscaping screening should preferably be the installation of permanent landscaping berms but other screening may be utilized.
 - e) A complete landscape plan must be provided.
- 12.3 All questions from Applicants should be addressed to the DRP Chairman or the designated DRP Member to allow for clarification from Applicant to DRP to deem the application **complete**.

- 12.4 Upon review, design change suggestions may be made to the Applicant and additional information may be requested by the DRP to adequately evaluate the proposed design.
- 12.5 Upon approval, the DRP Chairman will email a copy of the approved Application with copies of the supporting material required by paragraph 11.2 to the Applicant. Notification by email will also be forwarded to the RBREC Executive Offices to facilitate oversight and enforcement.

13.0 DESIGN REVIEW PROCEDURES

These design review procedures for Rendezvous Bay rely on the critique of the DRP and design professionals that have been involved with the development of Rendezvous Bay. The intent is to creative expression and individuality consistent with the Design Standards and the Rules with the described design objectives.

- 13.1 It is the Architect's and the Applicant's responsibility to make the proper submissions and to obtain the proper approvals as defined by Antigua and Barbudian Law and other governing bodies of Antigua and Barbuda.
- 13.2 The DRP shall render its written decision with respect to any Application for preliminary determination or final approval within sixty (60) days after confirmed receipt of the complete Application, and shall provide specific reasons for any denial or approval.
- 13.3 The DRP may, in its sole and complete discretion, withhold approval of any application if the DRP finds that the application would be inappropriate or incompatible with the Design Standards, these Rules, or the Master Plan. Considerations such as the site location, external lighting, shape, size, colour, design, height, impairment of the view, disturbance of existing terrain and vegetation, and any other factors which the DRP reasonably believes to be relevant, may be taken into account in determining whether or not to approve any proposed work.
- 13.4 Before the Applicant begins construction, a **completed** approved Final application must be received by email from the DRP Chairman confirming the majority approval of the DRP Members.

- 13.5 Any material design changes after the DRP has given final approval shall be resubmitted to the DRP for approval, pursuant to Section 12.
- 13.6 The approval by the DRP of any plans, drawings, or specifications for any work done or proposed shall not be deemed to constitute a waiver of any right to withhold approval of any similar plan, drawing or specification subsequently or additionally submitted for approval. Failure to enforce any of the design guidelines shall not constitute a waiver of same.

14.0 FAILURE TO ACT

In the event the DRP fails to render its decision with respect to any Application within the sixty (60) day limit set forth above in Section 13.2, the DRP shall conclusively be deemed to have approved the application as submitted, so long as such Application does not violate these Rules or local building laws as defined by Antiguan and Barbudian Law and other governing bodies of Antigua and Barbuda. Commencing with these Rules, which are effective on the date as a stated on page 1, if the DRP did not receive an Application for a completed improvement then no period of time will deem that the improvement has been approved.

15.0 APPEALS

Appeals from any decision of the DRP will be referred to RBCBOD for final resolution, subject to the payment of a reasonable review fee and such procedures as RBCBOD may prescribe from time to time. RBCBOD shall have no obligation to hear any appeal and any decisions made by RBCBOD shall be final. In the event that RBCBOD refuses to hear an appeal, then the decision of the DRP with respect to that matter shall be final.

16.0 EFFECTIVE PERIODS OF APPROVALS; TIMING OF CONSTRUCTION

- 16.1 Approvals of any Application shall automatically be revoked one (1) year after issuance thereof, unless construction of the work has commenced and has continued without unnecessary interruption or the Applicant has applied for and received a written extension of time from the DRP. In the event the time limit is exceeded, the project must be resubmitted to the current DRP and re-approved under the current Rules before the proposed

work may proceed. Should construction of the Home exceed the Construction Time Period as described in the Purchase and Sale Agreement, then the construction falls under the Rendezvous Bay Residential Construction Rules as found in the Rendezvous Bay Community agreement.

- 16.2 Unless the DRP's written approval has first been obtained, approved construction work must be completed within a period of twenty-four (24) months from the date upon which it was approved.

17.0 INSPECTION OF AUTHORISED WORK

- 17.1 The DRP reserves the right to make periodic inspections during construction by appointment to assure conformity with the approved plans. Absence of such inspection does not constitute an approval by the DRP of work in progress.
- 17.2 A notice of project completion from the Applicant must be provided to the RBREC Executive Offices upon occupancy of the Improvement.
- 17.3 Within fifteen (15) days after receipt by the RBREC Executive Offices, of notice of project completion from the Applicant, the DRP Chairman or the designated representative of the DRP inspect the completed work and give written notice to the Applicant and the DRP Chairman of any work, that failed to conform to the plans and specifications previously approved. The designated representative of the DRP shall specify in such notice a reasonable period, not less than forty-five (45) days, in which the Applicant must remedy the nonconformance. In the event a notice of nonconformance and requirement of cure is not given within sixty (60) days, the DRP shall conclusively be deemed to have approved the work as satisfactorily completed.

18.0 ENFORCEMENT

18.1 Finality of Decisions

In the event of any disagreement as to the Design Control Rules, or as to any issue regarding enforcement of the foregoing, the decision of the Rendezvous Bay Board of Directors shall be final and binding.

18.2 Enforcement of Master Plan Rules

It is intended that the Rendezvous Bay Design Control Rules and decisions of the Rendezvous Bay Community Board of Directors shall be enforced in as impartial, uniform and fair a manner as practicable. It is desirable in most cases to avoid having to resort to public authorities for enforcement purposes. After thirty (30) days written notice to the applicable party and a right to correct any violation within such period, the Board of Directors or its agent shall have all or any of the following rights in addition to any other cause of the violation, or alter, repair or change the item which is in violation, in such manner as to make it conform thereto; (b) to charge the Home Owner of the affected property for the entire cost of the work performed by or for the Board of Directors pursuant to this Section 17.2; and/or (c) to impose and collect a fine either from any Home Owner or other person who has violated (or whose guest, employee or agent has violated), any provision of the Rendezvous Bay Design Control Rules, in an amount not to exceed the sum of US\$5,000 for any one violation.

18.3 Payments

After notice to the applicable party [pursuant to Section 17.2 and a decision by the RBCBOD to take action authorized by Section 17.2, the Board shall send notice of its action to the applicable party. A demand for payment made by the Board of Directors delivered with or after such notice shall be due and payable thirty (30) days after delivery by the Board of Directors of such demand. Each demand for payment shall refer to the rule, regulation or provision, which has been violated and set forth a statement of the conduct or condition which the Board of Directors has determined to be in violation of such rule, regulation or restriction. All payments shall be delivered to thy Community Principles and Goals.

19.0 DEFINITIONS

Unless the context otherwise specifies or requires, the following words or phrases when capitalized in these Design Control Rules shall have the following meanings.

19.1 Individuals and Groups

Design Review Panel (“DRP”)

The Design and Review Panel as provided in the Rendezvous Bay Community Agreement to review and either approve or disapprove

proposals and/or plans and specifications for the construction, exterior additions, landscaping, or changes and alterations within Rendezvous Bay.

Home Owner

The legal owner of a property in Rendezvous Bay

Hotel Bungalow Owner’s Association (“HBOA”)

The group of owners on the bungalows that make up the accommodation of the hotel. The Association is represented by a Chairman who is appointed by the Hotel Bungalow Owners annually.

Hotel Bungalow Owner

The legal owner of an individual bungalow unit in the hotel

Hotel Owner

The legal owner of the hotel in Rendezvous Bay, excluding the bungalow accommodations.

Rendezvous Bay Community

The Community includes Home Owners, Hotel Owners and Hotel Bungalow Owners.

Rendezvous Bay Community Board of Directors (“RBCBOD”)

A Board that includes one representative for every twelve homeowners, a representative of the hotel owner, and a representative of the hotel owners association. The Board is given authority to enforce the Rendezvous Design Control Rules and the Community Principles and Goals including covenants, conditions and restrictions and managing the common amenities of the development.

Rendezvous Bay Real Estate Corporation (“RBREC”)

The Corporate entity responsible for and controlling the Rendezvous Bay Community Principles and Goals and the Rendezvous Bay Design Control Rules until the 36th sale of a Home Site.

18.2 Legal Documents

Purchase and Sale Agreement

Rendezvous Bay Community Principles and Goals

These are the general rules that the Community and all visitors to Rendezvous Bay must abide by. The contents include, but are not limited to, the rules and regulations for signs, security, staff, children, construction, watercraft, noise, nudity vehicles, security, watercraft approvals, lighting, offensive activities, payment of dues and other fees and charges, appearance etc.

Rendezvous Bay Community Agreement

An agreement outlining the responsibilities of the Rendezvous Bay Community Members

Rendezvous Bay Design Control Rules

The architectural, design and construction regulations and restrictions adopted and enforced by the Design Review Panel as set forth herein as may be modified, amended, and/or supplemented from time to time.

Rendezvous Bay Residential Construction Rules

These are the rules outlining the construction and the road use requirements during the construction of any Home or Improvement in Rendezvous Bay.

18.3 General Definitions

Ancillary Structures

Small enclosed or semi-enclosed structures, such as pool houses, pavilions, storage sheds, potting sheds, art studios, and/or cabanas, which do not include sleeping/living quarters.

Applicant

An Owner and/or Owner's consultant that is applying for approval on the new construction, renovation, alteration, addition, and/or any other improvement to any building site, and/or sign

Approved Residential Home Position

The location of the Residential Home on a Home Site which has to be approved by the DRP

Architect

A person licensed to practice architecture or landscape architecture.

Building Envelope

The area where all vertical, enclosed building volumes may occur, including all buildings, Ancillary Structures, and/or enclosed garages, excluding carports and unenclosed landscape structures (such as arbors and /or trellises). This will be specified in the Home Site Matrix provided by RBREC upon the initial sale of a Home Site.

Building

A structure that has a water resistant roof or walls higher than four (4) feet above the ground creating enclosed space.

Building Height

Building Height (exclusive of chimneys and minor roof projections) is the height measured from the mean grade between highest and lowest grade at the base of the building to the upper most point of the roof or parapet wall.

Construction Time Period

This is the time period as described in the Purchase in Sale Agreement for a Home Site within which Residential Construction Rules do not apply.

Consultant

A person retained by an Owner to provide professional advice or services.

Contractor

A person or entity engaged by an Owner for the purpose of constructing any improvement within Rendezvous Bay.

Improvement

Broadly defined to include but not limited to new buildings, changes and/or renovations to existing buildings, walls, fences, patios, private roads, outbuildings, walls, retaining walls, hedges, mailboxes, sports and play equipment, tennis courts, satellite dishes, antennas, decks, solar panels, croquet lawns, trash enclosures, nursery areas and/or laundry lines, and any other structures of any type or kind.

Owners are not allowed to make improvements outside their Private Lot property lines.

Front Setback

The minimum distance between the front property line and any landscape Improvements (exclusive of driveways and related site retaining walls, and paths).

Front Vertical Setback

The Front Vertical Setback line establishes the minimum distance between the front property line and any vertical, enclosed, Improvements including all buildings, garages, and Ancillary Structures.

Home Site

Private residential properties within Rendezvous Bay.

Home Site Matrix

The chart that quantifies the design criteria, including but not limited to , Home Site Type, Maximum Gross Square Footage, Maximum coverage Area, Building Envelope, Improvement Envelope and Home Site Area.

Improvement Envelope

That portion of a Home Site, wherein all horizontal Improvements may take place, including, but not limited to, unenclosed landscape structures, pools and/or landscaping with the exception of utilities, driveways, paths, some site retaining walls, gates and associated Improvements. The area of the Improvement Envelope is established by the Front, Side and Rear setbacks.

Main structure

The dominant structure within a Home Site.

Mass or Massing

The overall size, volume, spread, expression, and articulation of building forms, including the Main and secondary Structures, outbuildings, covered terraces, and other roofed area, as they relate to the topography and landscape of each particular property. A building's compliance with the maximum Building Square Footage requirement is necessary but may not be sufficient to demonstrate a building has complied with Massing requirements as described in these Guidelines.

Maximum Coverage Area

The maximum percentage of the total Home Site area that maybe covered with building(s) and/or impervious surfaces, including but not limited to building footprint, impervious terraces, driveways, walkways, and excluding raised decks, roof overhang areas and pervious paved areas.

Maximum Gross Square Footage

The Square Footage maximum of the gross conditioned space within the Home Site.

Maximum Individual Building Square Footage

The Square Footage maximum of any individual enclosed building mass (excluding unimproved spaces such as garages, attics, mechanical rooms, and/or basements).

Maximum Ridgeline Height

The maximum, above sea level (“A.S.L”), elevation that any ridgeline within the Home Site may be.

Natural Area

The area of a Home Site that lies outside the Improvement Envelope. The Natural area is to remain essentially in a natural, undisturbed state to create screens that obscure built Improvements from off-site views and restore the land to a vegetated condition. With the exception of driveways, the Natural area may not contain any hardscape elements, such as buildings, terraces, pools, spas, auto courts, and/or landscape structures.

NPA

The National Parks Authority

Rear Setback

The minimum distance between the rear property line and any landscape Improvements (exclusive of driveways and related site retaining walls, and paths).

Rear Vertical Setback

The minimum distance between the rear property line and any vertical, enclosed improvements

Rendezvous Bay Development

The area known as “Barter’s Estate” comprised of 330 acres as described in the Rendezvous Bay Community Agreement.

Residential Home

The structures including the main structure and ancillary Structures within a Home Site that together comprise the living and sleeping areas,

Second Story Setbacks

The minimum distance between each front, rear, and/or side property lines (as noted on Home Site Diagram) and any second story building forms.

Secondary Structures

Structures which are subordinate to the Main Structure within a Home Site.

Side Setback

The minimum distance between each side property line and any landscape Improvements. Left and Right Side Setbacks (when noted) have been established as viewed from the street facing the front property line.

Side Vertical Setbacks

The minimum distance between each side property line and any vertical enclosed Improvements. Left and Right Side Vertical Setbacks have been established as viewed from the street facing the front property line.

Square Footage

The conditioned spaces of all floors of buildings on a Home Site as measured from the exterior face of walls, including but not limited to lofts, stairways, fireplaces, halls, habitable attics, above grade basements, bathrooms, closets.

Story

That portion of any building (including garage) included between the surface of any floor and the surface of the floor above it, or if there is no floor above, then the space between the floor and the ceiling next above it. Any portion of a Story exceeding 18 feet in height shall be considered as an additional Story for each 18 feet or fraction thereof. If the finished floor level directly above a basement or cellar is more than six feet above grade shall basement shall be considered a story.

Sustainable Design (“Sustainable” or “Sustainability”)

The implementation of environmentally sensitive and resource conserving techniques into the design of a building and associated landscape. Sustainable Design is intended to create buildings that are integrated with the local landscape and climate to create a healthier living environment for the building’s inhabitants and neighbors.

Volatile Organic Compound (“VOCs”)

Chemicals that contain carbon molecules and have a high enough vapor pressure to vaporize from material surfaces into indoor air at normal room temperatures.

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Background

Introduction

These guidelines are intended to assist architects, draught-persons and home builders in meeting visual and historic qualities for buildings in different parts of the Nelson's Dockyard National Park (NDNP). And will be used to help the NPA carry out its mandate for the preservation and management of the natural and historic heritage of the National Park.

Under The National Parks Act, 1984, Part IV, Section 21 (1) "...no permission approval, authority, subdivision, lease or permission relating to any land or property whether Crown land or otherwise within the Park shall be granted or made...." without the prior written approval of the NPA. Part VI Section 26 of the Act, allows the responsible Minister to make regulations for the preservation, management and development of the Park.

This document updates and expands an initial report on roof design guidelines that was prepared by IJA and submitted to the NPA in 2006. The additional work done was agreed in separate meetings with some members of the NPA Board and the Parks Commissioner.

Report Presentation

The guidelines are presented in six chapters:

- Chapter One: Roof Design and Colour
- Chapter Two: Building Height and Elevation
- Chapter Three: Streets, Sidewalks and Building Setback
- Chapter Four: Vegetation and Soil Protection
- Chapter Five: Building next to Headlands, Ridges and Water courses
- Chapter Six: Landscape Treatment

Each chapter begins with an explanation of the aims and objectives to be achieved in the administration and enforcement of the guidelines. This is followed with details on the guidelines, supported by photographs or illustrations as appropriate. Where necessary, references are made of other relevant documents that should be considered by persons or their agents making applications for development approval. A proposed Land Clearance Permit and a Drainage Basin Map are included in this report on the Land Development and Building Guidelines. The map will be prepared subsequently at a larger scale and as a stand-alone product.

Application and Relevance

The term guidelines differ from standards, in that they are intended as steps the NPA wants developers to follow and which it has discretionary powers to enforce. Standards are mandatory requirements

which must be followed and are enforced by law. Sections of these guidelines could eventually become standards through passage into law if NPA and Government decide to pursue this course.

These Guidelines do not replace the Antigua and Barbuda Building Guidelines administered by the Development Control Authority (DCA) but rather compliment them by addressing specific heritage resources management requirements of the National Park. In effect, the guidelines seek to encourage the adoption of historic design and building practices in appropriate areas of the National Park and to protect, preserve or conserve scenic landscapes, soil and water. Developers should therefore make reference to other relevant documents that provide the legal and administrative mandate for development occurring within the National Park, namely: (i) Antigua and Barbuda Building Code, (ii) Land Development Regulations, (iii) Physical Planning Act 2003, and (iv) National Parks Act, 1984.

Relevance of Georgian and Vernacular Architecture to the Guidelines

A significant reason for the creation of Nelson's Dockyard National Park is the area's historical significance as a naval base and military fortification in the 17th to 19th centuries. The NPA has as a matter of policy to honor the architecture of historic buildings in Nelson's Dockyard, which are distinctly Georgian in design and style. Developers and homeowners are asked to capture the essence of Georgian architecture and its Antiguan Vernacular derivative in relevant design elements of new structures planned for some sections of the National Park.

Vernacular architecture is evidenced in historic buildings in St. John's and old estate houses around the island. Specific reference is made to relevant design elements of both architectural forms that should or can be considered in buildings construction. However, respect for Georgian and Vernacular architecture does not mean denial of modern and other forms of architecture.

Georgian architecture is associated with a period between 1720 and 1840, during the reign (in continuous succession from 1714 to 1830) of the first four British Monarchs, George I, George II, George III and George IV. Buildings designed in Nelson's Dockyard and other parts of Antigua during and after this period captured this architectural style and to a large extent exist in a stature of historical significance. Such structures are characterized by proportion and balance in the building and symmetry in the positioning of windows and doors, use of decorative features from ancient Rome and Greece, brick or stone construction, and use of red, tan or white colours. The latter two are specific to the UK but Georgian architecture of Antigua and other parts of the region have been influenced by climate, availability of materials, and construction methods, and evolved in response to environmental, cultural and historical circumstances. For example, houses in Antigua were constructed with wood in many instances.

Buildings were normally 1-2 storey, two rooms deep. Cornices (horizontal moldings used over doors, windows and eaves (edge of roofs) are common. Another common feature was the double sash windows (generally 3 panes across x 2 panes up for each sash) appearing symmetrically across the front of the building and placed in proportion or balance with the door (s).

1.0 Chapter One: Roof Design and Colour

1.1 Objectives

This chapter of the guidelines addresses roof design and use of materials and is intended to promote relevant aspects of design principles inherent in the historic architecture and building practices associated with Nelson's Dockyard and other parts of the country. The specific objectives sought are to:

- Promote distinct gable, hip and other historically relevant roof forms
- Achieve greater hurricane resistance through minimum standards in roof pitch and eaves overhand and use of hurricane clips
- Achieve conformity with roof material and colour used on historic buildings in the Park

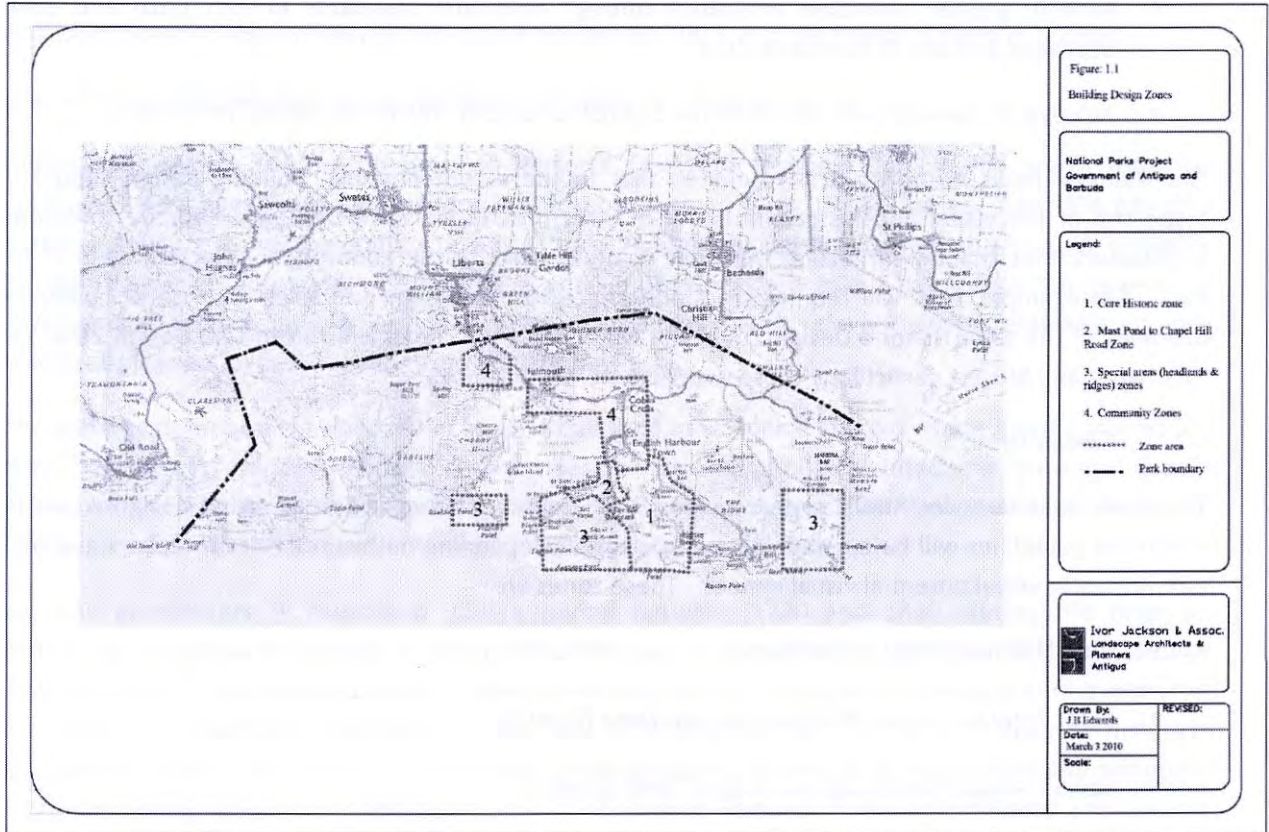
The National Parks Authority (NPA) believes that to the extent possible, building design should be respectful of the visual and historic integrity of structures in Nelson's Dockyard and the traditional architecture that shaped vernacular buildings in other parts of the country for selected areas of the Park. For example, NPA will require strict adherence to the design principles and use of colour for buildings in the Core Historic Design Zone, the Mast Pond to Chapel Hill Mixed Use Design Zone and Headlands and Ridges, particularly those with historic significance.

1.2 Design Zones

The Draft Guidelines for Roofs, prepared May 2006, identified four (4) areas called design zones for which the guidelines will be applied, in varying degrees depending on historic relevance, topographical differences or visual potential visual impact. These zones are:

- Core Historic Design Zone (Zone 1)
- Mast Pond to Chapel Hill Mixed Design Zone (Zone 2)
- Special Areas (Headlands and Ridges) Zone (Zone 3)
- Community Design Zones (Zone 4)

These zones are mapped and presented as Figure 1.1, which also shows the approximate boundary of the National Park.



1.5 Relevant Areas of Roof Guidelines

Design guidelines for roofs cover the following areas:

- Style (gable, hip or other types of roof) and pitch
- Material
- Colour
- Details (dormers, roof overhang, fascia board)
- Gutters and downspouts

1.6 Guidelines for Design Zones

The Guidelines vary from one design zone to the next.

1.6.1 Core Historic Design Zone

This design zone includes Nelson's Dockyard and adjoining areas that together constitute a visual envelope, that is, areas close enough to Nelson's Dockyard to create visual interest. These include the Ordnance area and Galleon Bay. Design standards for the zone will be strictly applied to protect visual and historic integrity.

The guidelines for the zone are informed by the historic design and building practices in Nelson's Dockyard. For example, roof steepness in Nelson's Dockyard range from a low of 28° to a high of 42°.

a) Roof Style and Pitch

- The styles of roof to be allowed are hip and gable with or without parapet wall (stone or wood), or a version of the hip roof called the bonnet-type roof
- Roof slope should be no less than 28° and can be up to 45°
- No lean-to or flat roofs will be allowed, except where a lean-to is combined with a hip or gable roof of desirable pitch

b) Roof Material

- Wood shingles are encouraged
- Roof material can include other shingles and asphalt tiles as long as colour guidelines are respected

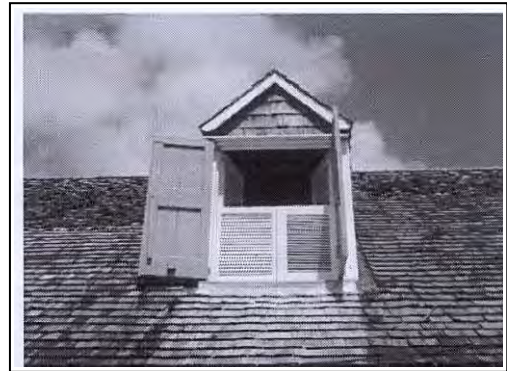
c) Roof Colour

- Roof color should to the extent possible be close to weathered wood shingle, that is, dark grey, grey or gray-black

- Grey, as in the case of grey asphalt tiles, is allowed
- Bright colours not in keeping with the visual value or practices evident in buildings of the historic period will not be allowed in the zone

d) Details

- Dormers are encouraged and can be used on both the short and long ends of the hip roof
- Shutters, louvered or class windows used historically with dormers, where an attic is part of the structure, can be constructed
- Roof overhang should be less than 1 ft
- Fascia boards can be used to allow hanging of guttering for water catchment although this is not a feature of most buildings in Nelson's Dockyard



- Multiple hip or gable roofs covering one building are allowed

e) Gutters and Downspouts

- Gutters and downspouts are to be constructed in accordance with planning and building requirements of the Development Control Authority (DCA)

1.6.2 Mast Pond to Chapel Hill Road Mixed Use Design Zone

Mast Pond is believed to have been the first part of the Village of English Harbour and settled by poor whites. The area is evolving as a mixed used zone in which design must be relevant to demands for commercial space, including restaurant and bars. Architectural styles between Mast Pond and Chapel Hill Road include a mix of the vernacular and modern. Design guidelines encourage diversity in roof styles, material use and colour.

a) Roof Style & Pitch

- Hip and gable roofs of Georgian or vernacular styles are encouraged
- Parapet walls (stone or wood) can be used



- Bonnet-type roofs and lean-to configurations associated with other roof types of desirable pitch are allowed
- Roof slope should be no less than 28°

b) *Roof Material*

- Wood shingles are encouraged
- No restrictions are placed on roof material, so that other shingles, asphalt tiles and corrugated galvanize can be used as long as colour guidelines are respected

c) *Roof Colour*

- Dark grey, grey or gray-black and other sober colours are preferred
- Other colours in keeping with historical traditional building practices are allowed
- Excessively bright colours are not allowed

d) *Details*

- Dormers are encouraged and can be used on both the short and long ends of the hip roof
- Shutters and louvered windows used historically with dormers, where an attic is part of the structure can be constructed
- Roof overhang should be less than 1 ft
- Facia boards can be used to allow hanging of guttering for water catchment although this is not a feature of most buildings in Nelson's Dockyard
- Multiple hip or gable roofs covering one building are allowed

e) *Gutters and Downspouts*

- Gutters and downspouts are to be constructed in accordance with planning and building requirements of the Development Control Authority (DCA)

1.6.3 *Special Areas (Headlands and Ridges) Design Zone*

NPA has identified a number of ridges and headlands that qualify for the application of design guidelines for roofs and other parts of buildings. These have been selected for their historical significance and/or visual landscape value and include ridges and headlands.

For such areas, design guidelines are expected to achieve harmony between the built and natural environment and to reduce the visual impact of buildings on the natural landscape. Where there is historical significance to a subject area, another design objective is to pay respect to the period of history in consideration.

In addition to roofs, building height and the use of material and colour for the rest of the structure would be subject to design guidance. An example of structures that achieves the desired harmony with the environment and landscape is the buildings that comprise the home of Eric Clapton at Isaac Hill Point.

a) Roof Style & Pitch

- There are no restrictions on the styles of roofs, except where the subject area is of historical significance that requires relevant design gesture
- Where this is the case, the NPA encourages the developer to consult with the Authority for further guidance
- So as to reduce the visual impact from buildings on the landscapes of ridges and headlands, the maximum allowed roof pitch is 35°

b) Roof Material

- Wood shingles are encouraged
- Roof material can include other shingles and asphalt tiles as long as colour guidelines are respected
- No plain corrugated galvanize sheeting should be used since this may reflect light causing unnecessary attention to structures or otherwise a visual nuisance

c) Roof Colour

- Roof color should to the extent possible be close to weathered wood shingle, that is, dark grey, grey or gray-black, or otherwise earth tones reflective of the colours in the subject landscape
- Bright colours not in keeping with the visual value of rocks, earth or vegetation in the area are not allowed
- Vegetation green in likeness to the colour of foliage in the subject area can be considered

d) Details

- Dormers and other roof details are left to the discretion of the developer, except that visual harmony between the structure and landscape should be achieved
- Shutters and louvered windows can be used with dormers, where an attic is part of the structure can be constructed
- Roof overhang should be less than 1 ft
- Facia boards should be used to allow hanging of guttering for water catchment and mitigation of storm water impacts
- Multiple hip or gable roofs covering one building are allowed

e) Gutters and Downspouts

- Gutters and downspouts are to be constructed in accordance with planning and building requirements of the Development Control Authority (DCA)

1.6.4 Community Design Zones

Community areas for the purpose of these guidelines are defined as villages or related residential areas within the Park not covered in the other zones. The guidelines allow more flexibility in the use of roof styles, material and colour. However, the NPA reserves the right to apply stricter standards for areas within communities considered to be of historical, landscape or visual significance.

a) Roof Style & Pitch

- Hip and gable roofs of Georgian or vernacular styles are encouraged
- There are no restrictions on roof styles
- There are no restrictions on the pitch of roofs

b) Roof Material

- Wood shingles are encouraged
- No restrictions are placed on roof material, so that other shingles, asphalt tiles and corrugated galvanize can be used as long as colour guidelines are respected

c) **Roof Colour**

- Dark grey, grey or gray-black and other sober colours are preferred for areas close to the Core Historic Design Zone
- Other colours are allowed in keeping with traditional building practices

d) **Details**

- Dormers are encouraged and can be used on both the short and long ends of the hip roof
- Shutters and louvered windows used historically with dormers, where an attic is part of the structure can be constructed
- Roof overhang should be less than 1 ft
- Facia boards should be used to allow hanging of guttering for water catchment
- Multiple hip or gable roofs covering one building are allowed

e) **Gutters and Downspouts**

- Gutters and downspouts are to be constructed in accordance with planning and building requirements of the Development Control Authority (DCA)

1.7 Conclusion and References

Roof shape is one of the visible elements of structures within Nelson's Dockyard. High pitched hip and gable roofs some with parapet walls are therefore part of the design signature of the Park. Steep roofs were however influenced by their value to effective air flow, ventilation and comfort and their hurricane resistance qualities.

United Insurance Company Limited publishes a **Guide to Making your Home Hurricane Resistant** and gives generous rebates on premiums to homeowners complying with resistant measures for roofs, shutters, and for using straps and plates to tie various structural and non-structural elements of buildings together. The typical historical roof type of the Park is without significant overhang; a factor that also helps with hurricane resistance.

Hurricane resistant measures included in the United Insurance booklet are also repeated in the Pan American Health Organization (PAHO) publication, *Disaster Mitigation for Health Facilities, Guidelines for Vulnerability Appraisal and Reduction in the Caribbean*.

Other references include:

- Antigua and Barbuda Building Guidelines
- OECS Building Code (refer to Section 18, Small Buildings and Section 19, Development Standards for design, structural and planning codes)
- The Land Development and Control; Regulations 1996, Antigua and Barbuda Statutory Instruments No 20, 1996
- Antigua and Barbuda Physical Planning Act, 2003 No. 6 of 2003

- Where permission is given to build on ridges, the single storey building should be constructed with a maximum height from floor to apex or building ridge of 16 ft

b) Building Material

- Developers, architects and builders should recognize that the original Georgian buildings were constructed mainly from stones and/or bricks but such buildings in the US and Caribbean were constructed from local and imported materials; vernacular dwellings were most often constructed of wood
- Buildings in the relevant zones can therefore be constructed of concrete blocks, poured concrete, wood or other material as long as the finished colours are consistent with those recommended
- Thatched roofs may be considered for some buildings, particularly tourism facilities wanting to present a tropical ambiance and feel; bars, wedding and information kiosks are suited for this purpose

c) Windows

- Sash windows of glass framed with wood are allowed in accordance with historical practice; a typical window is made of two (2) sash, each with 3 panes of glass on the horizontal x 2 panes on the vertical; sash windows of a more contemporary type framed with metal are also allowed
- Louvered wooden jalousie windows are typical of Caribbean Georgian buildings and are encouraged as a way of capitalizing on cooling winds for natural ventilation and to avoid dependence on air conditioning
- The number of windows used for the front or any other elevation of the house should be determined by the size of the structure, proportion, balance or symmetry sought in design and use of the building or floor
- Sash windows are not effective for displaying merchandise, so that businesses may want to use other window types, on ground floors in particular for display purposes
- Hurricane shutters are a feature introduced to Georgian structures in the Caribbean for resistance to hurricane force winds and flying objects associated with storms; shutters are strongly recommended, particularly for sash and other glass windows, for historic relevance but more so as mitigation against hurricane damage
- Louvered wooden jalousie windows are better suited for natural ventilation and hurricane resistance than sash windows and are the preferred choice for homes and hotels where they can help in avoiding or lowering the cost of AC

- Sash windows of wood or metal frame are less effective in natural cooling, particularly where they must be fully closed when it rains; full closure is usually needed for windows on the windward side of buildings
- Louvered wooden jalousie windows should be fitted with screens against mosquitoes where possible

d) Disaster Risk Reduction

- Raising the floor levels of buildings off grade, a practice credited to European influences is encouraged to reduce flood risks
- For buildings that must be located in flood prone areas and close to low lying coastlines, the practice of building on stilts, done historically in other parts of the region, should be considered as mitigation against storm surge and flash floods
- Strict adherence to building codes is advised to reduce risk to earthquakes
- Hurricane resistant building practices are required and must be applied in accordance with the Building Codes, as appropriate

e) Detailing and Ornamentation

Details and ornamentation was prevalent in Georgian architecture and adopted by the Caribbean in both Georgian styled and vernacular structures. A summary of such features pulled from a review of literature on the subject is supplied below in Box 2.1.

For comparison, detailing and ornamentation on the front of historical buildings of St. John's in a case study reviewed from an OAS document (The Conservation of Buildings of Historic and Architectural Interest in Downtown St. John's: Antigua and Barbuda, OAS, 1989) are provided in Box 2.2). Some of these features are illustrated Figure 2.1. Such details or features are historically relevant and functional and are encouraged where appropriate for buildings in the National Park.



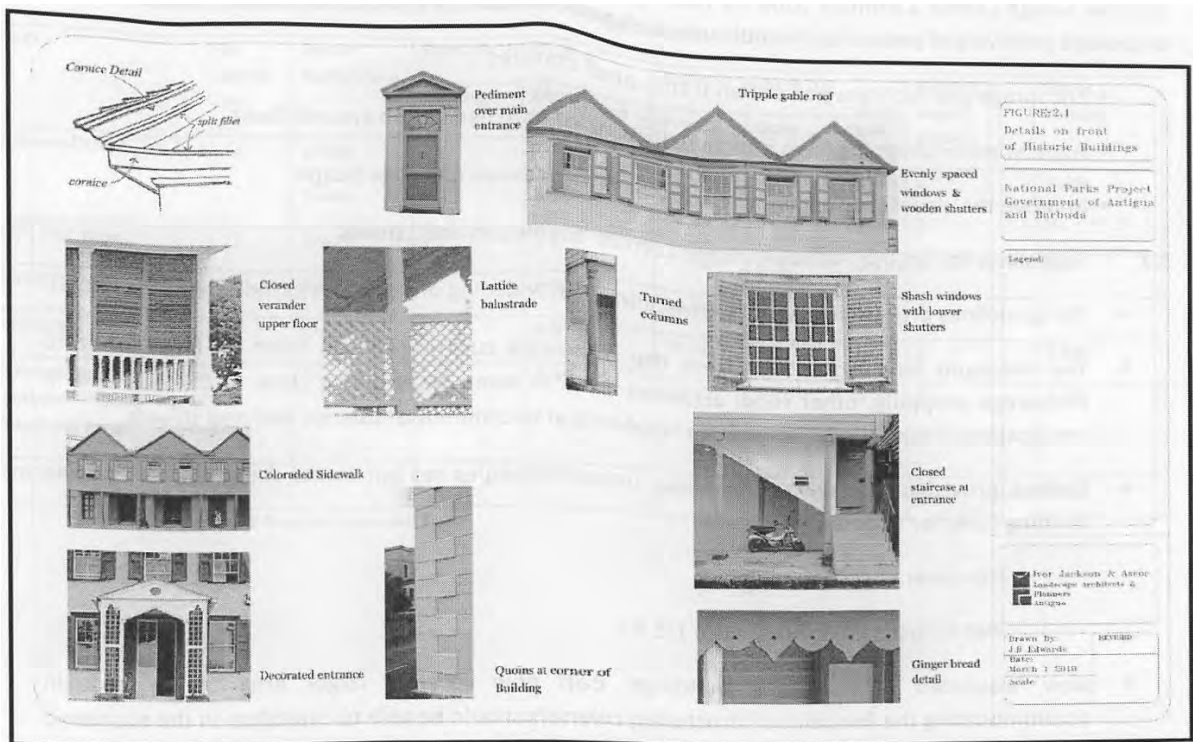
Box 2.1: Features of Georgian Architecture

- Door centered on Front Elevation of the building, sometimes with a decorated crown
- Rectangular windows (called "transom lights") above front door, historically common to more upscale versions of the Style; windows above doors can be used with good effect on 2 storey single and multi family residences and common buildings in hotels
- Roof balustrade (like a "window walk"); (image needed)
- Portico (small front porch) with wooden arched crown; more evident in the Colonial Revival Period (18766 —1910) in the USA
- Decorative *cornice* (dentil moldings that look like teeth)
- Unpainted shingle siding and painted or unpainted Lapside of pine or other wood using a variety of colours
- Decorative *quoins* (blocking) at side of building
- Pilasters (flattened columns) on decorative doorways or corner of buildings
- Hip roof with dormers at front elevation
- Buildings with gables at the side elevations.
- Buildings with gables at front elevations

(source: www.historichomesmarketplace.com/index.php?option); see architecture guide



Figure 2.1



3.0 Chapter Three: Streets, Sidewalks and Building Setback

3.1 Aims and Objectives

This chapter of the guidelines addresses the relationship between streets, sidewalks and the setback

requirements for buildings. The relationship changes depending on traffic volume (vehicle and pedestrian), location and width of the street. The guidelines recognize the evolution of the English Harbour Village Center a primary zone for retail, commerce and services. They anticipate and seek to encourage positive and pedestrian friendly urban characteristics in the area. Objectives are to:

- Encourage and facilitate pedestrian traffic and comfort
- Allow window shopping from effective display of merchandise on ground floors
- Improve the visual and functional quality of the sidewalk and streetscape

3.2 Guidelines for English Harbour Village Center Sidewalks and Streets

- The guidelines provide for the future installment/widening of sidewalks as indicated in Table 3.1
- The minimum building setback from the sidewalk curb is reduced from 20 ft to 10 ft to encourage shopping, other retail activities and in some cases dining close to the sidewalk in anticipation of continued change from residential to commercial uses on selected streets
- Setback provisions are devised to allow urban densities set out in the Antigua and Barbuda Building Code for selected standards:
 - Site coverage: 75%-100%
 - Plot to Gross Floor Area ratio: 1:1.5
- New, expanded or renovated buildings can now cover a larger area of the plot in accommodating the footprint of structures; owners should be able to capitalize on the economic opportunities that this provides
- NPA will work with Public Works and the Transport Board to improve the quality of sidewalks by installing pedestrian lighting and street trees on selected streets as illustrated in Figure 3.1

Table 3.1: Building Guidelines for Streets in English Harbour Village Center

Street	St. Width (ft)	Future Traffic Flow	Sidewalk Width (ft)		Building Setback (ft)			Building Height (floors)	Street Parking
			Existing	Preferred	Front	Sides	Rear		
Dockyard Drive*	22	1-way	4	8-10	10-20	6-10	10-15	3	1 side
		2-way	4	8-10	10-20	6-10	10-15	3	No
Yacht Club Road	21	2-way	--	6-8	10-20	6-10	10-15	3	No
Chapel Hill Road	16	1-way	--	6-8	10-20	10	10-15	2	1 side
Back Street	15	1-way	--	6-8	10-20	10	10-15	2	1 side
Look-out Road (Between Dockyard Drive and Chapel Hill Road)		2-way	---?	8-10	10-20	6-10	10-15	3	1 side
Veronica Michael Road	14	2-way		6-8	10-20	10	10-15	3	No

- Junction of Chapel Hill Road and Look-out Road

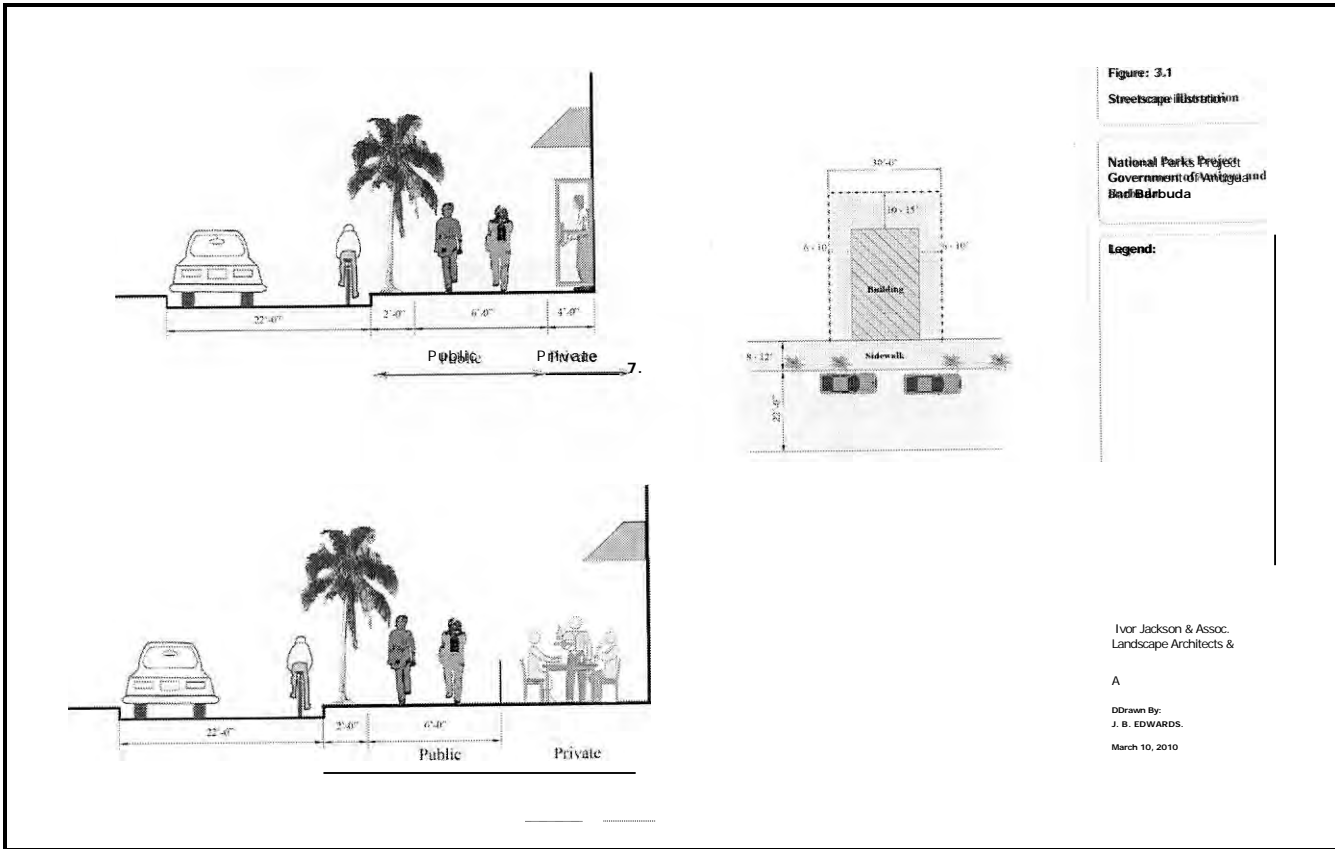


Figure 3.1: Streetscape Illustrations



- Wider sidewalks should benefit businesses in the area and property owners are expected to respond by seizing opportunities to improve the interface between retail/business spaces (generally privately owned) and sidewalks (publicly owned) as pedestrian traffic grows on the streets (See Figure 3.1)
- Introduction of 1- way vehicular traffic is contemplated for some streets (or sections thereof) to allow curbside parking in certain areas; this will help property owners and business
- Measures to limit vehicular traffic in areas of heavy pedestrian traffic are also being contemplated for sections of Dockyard Drive and for Yacht Club Road; one such measure will be to encourage the use of bicycles in such areas
- Building height of 3 floors are allowed for streets shown and takes into account topography and visibility; for example height is limited to 2 floors on Chapel Hill to reduce undesirable visual impacts from the sea
- Larger side and rear setbacks for streets shown are intended to reduce plot coverage on building lots in areas where topography may require additional room for wastewater treatment
- NPA reserves the right to impose stricter density limits on plots in the Village Center where soil conditions could be problematic for wastewater treatment using traditional treatment methods (example, septic tank and soak-ways or drain-fields)
- Soil percolation tests will be required to confirm the suitability of such areas to accommodate and "treat" wastewater to be generated; the procedure for conducting such tests is provided in Appendix 2.
- One-way traffic on streets, as shown, will allow for curbside parking and reduce the demand for off-street parking, allowing property owners to optimize the use of their property for retail or rental purposes
- 2 storey buildings are encouraged in preference to 1 storey buildings on Dockyard Drive, Yacht Club Road, Look-out Road (between the junctions with Dockyard Drive and Chapel Hill Road) to allow the option of having commercial use on the ground floor and residential use in the upper floor
- As pedestrian traffic increases on these streets, provisions should be made to ensure the privacy of ground floor residents in buildings with shorter setback distances from the road
- Where room allows, sidewalks will be developed with a pedestrian light and street tree strip to improve the visual quality (day and night time) and ambiance of the streetscape
- Property owners are encouraged to build in a manner that achieves a uniformed building line favorable to displays of merchandise and pedestrian traffic and pedestrian safety



- As an option to building to maintain a uniformed building line, property owners may choose to use the space between an existing or new building and the sidewalk for café type dining; this is

encouraged in areas with heavy pedestrian traffic, such as Dockyard Drive between the junction with Yacht Club Road and the Police Station

- NPA will consider granting approval for buildings with second floors cantilevered over the sidewalk on rounded wood or concrete columns, as done in many historic buildings in St. Johns

3.3 Other Areas of the National Park

- a) The older section of Falmouth (Falmouth Village Center), was laid out as a town and the grid system of streets lends itself well to commercial and mixed use; Sidewalk, building setback, building height, plot and side coverage arrangements are devised to achieve a mixed use zone for the convenience of residential dwellings north of the main road.
- b) The Cobbs Cross junction, with the Primary School, Health Center, Computer Center, disused Hotel, Barber Shop, Ital shop and weekend vendor outlet, shall be treated as a Village Center and allowed density appropriate for mixed use
- c) Standards set out in the Building Codes will apply for other areas of the National Park

3.4 Fences

- Corrugated galvanize fences are not allowed for safety or aesthetic purposes within all settlements in the NDNP
- Concrete, wooden or wrought iron fences can be constructed to a maximum height of four ft
- Fences constructed up to existing sidewalks or to the reserved sidewalk line should where possible be installed on a uniformed line and uniformed height

3.5 Signs

Guidelines for signs are of particular interest within the Village Centers but are also critical for other areas of the National Park. Signs vary in their purpose and function and may include (i) directional or traffic signs, place (building) signs, information or interpretive signs, street signs.

- Directional or traffic signs within the National Park is the responsibility of the Transport Board
- Street signs in areas close to Nelson's Dockyard (English Harbour Village Center) will be the responsibility of the NPA and will have a colour scheme approved by the NPA and will also feature the NPA logo
- Building signs erected by businesses must be done in accordance with rules set out by the NPA

4.0 Chapter Four: Vegetation and Sale Protection

4.1 Aims and Objectives

This chapter of the guidelines seeks to promote vegetation and soil conservation practices. Guidance is provided for the clearing of building sites, including what trees should be protected, methods to be used in excavation, stockpiling of soil and aggregates on construction sites, use of clearing and excavation equipment, measures to avoid soil compaction, containment of newly created

embankments, stabilization of newly cut areas, trapping soil, use of soil for soak-ways and drain-fields, etc.



Plate # 3.1: Indiscriminate clearing of vegetation leading to habitat loss and accelerated erosion

The objectives are to:

- Protect vegetation
- Reduce water runoff, floods and manage storm water
- Protect soil, manage sediment and stabilize slopes
- Protect and preserve historic ruins, significant geological features

4.2 Submissions

The Applicant is required as part of the submissions for development approval to provide:



- A completed Land Clearance Permit (See Appendix 1). The form forces developers to become fully knowledgeable about the site, by requiring information on types of plants, topographical characteristics, special features such as boulders, outcropped rocks, water courses, historic ruins etc.
- An aerial photograph of the site, obtained from the Lands and Survey Department, showing the parcel boundary of the site, vegetation, other physically discernable features of the site sufficient to provide useful information on topographical characteristics, including surface drainage where possible
- A contour plan with contour intervals of 10 ft or less. For small developments, such as residential buildings of no more than 2,000 sq ft, a DOS map can be used to show contours but must be overlaid by the boundary shown on the land survey plan of the site. Larger developments on steep slopes should at the discretion of the NPA and DCA provide a topographical survey (with contours) of the site prepared by a qualified Land Surveyor
- On sites with dry woodland or cactus scrub vegetation, the topographical survey should show the location of all trees with diameter \geq to 20 cm at breast height, indicate the actual tree size, define the outside edge of tree canopy, and identify the tree species
- For sites containing watercourses, the topographical plan (large developments) should delineate the centerline of the watercourse and top of the banks of the watercourse; a DOS contour map (small developments) should identify the watercourse
- For sites with wetlands, the topographical plan should define the boundaries of the wetland, provide spot elevations of height above sea level
- For sites with freshwater wells, topographical plan should identify the well's location and the extent of the well field should be approximated where hydrological information allows
- For sites containing steep slopes or cliffs, where major cut and fill activities are contemplated:
 - A topographical survey should show existing contours
 - Cut and fill areas should be identified by being overlaid on the plan; the aim being to reduce or limit earthworks as much as possible
 - Existing direction of surface drainage should be identified
 - A sediment control plan should be outlined, with the aim of limiting sediment transport and avoiding deposit into watercourses or wetlands
 - Location, height and thickness of retaining walls contemplated should be provided
- Copy of the Site Plan of the project



- Indicate any water courses, including the discharge point of surface water leaving the site to be developed
- Location of buildings on lots down-slope of the area proposed for development
- A description of the vegetation of the site, a list of large trees (trunk size 1 ft diameter or more)
- Description of soil types. For large developments, a soil survey may be required to provide a soil profile and description of soil characteristics, enough to understand load bearing capacities and percolation rates
- For steep areas or land considered to pose a problem for subsurface drainage in the use of septic tanks and drain fields, a percolation test should be undertaken and the results submitted; the method for undertaking the test are described in Appendix 3.2.
- Large outcrop rocks or other geological features should be delineated on the topographical survey or DOS contour maps for sites on which they exist
- Historic sites and known sites of archaeological interest or significance should be delineated; where there is doubt about the historical or archaeological significance of a site, developers should consult the NPA and seek advice from its archaeologist

4.3 Vegetation

4.3.1 Value and functions

Vegetation provides important habitat for birds and other wildlife, protects soil from accelerated erosion, helps to conserve water, stores carbon and when cut or destroyed will release CO₂ into the atmosphere, promotes scenic value and scenic qualities of the landscape within the national park, provides shade and influences climatic conditions in ways that benefit humans, reduces the impact of rainfall on soils hence reducing the quantities of soil that get displaced by raindrops.

NPA recognizes and wish to create awareness of the diversity of plants that comprise the endemic and introduced vegetation heritage of the National Park.

4.3.2 Vegetation Types and Measures to be Considered

Development activity will affect various vegetation types, depending on location, existing land use, topography and soil conditions. Such vegetation may include established native plants of existing forests (mainly woodland and scrub forests) in areas identified or zoned for development, various other trees, shrubs and vines, emerging or re-colonizing plants, and ornamentals. The guidelines cover various areas where mitigation is required, namely:

- a) protection and preservation,
- b) salvaging of plants that cannot be protected or preserved in their located habitats,
- c) reducing the risk from plants that are considered a hazard to life and property, and replacement of vegetation that has to be removed or destroyed in the course of development.

4.3.2.1 Vegetation Protection and Preservation

- Priority attention should be given to endemic species, plants that together constitute habitat for endemic species of birds and other wildlife, large trees, old and /or slow growing trees, plants providing a source of food or nutrients to birds and animals active in the pollination of fruit trees, etc.
- Vegetation protection and preservation is not only saving plants from total destruction but also maintaining the health of the plant by protecting its root structure and areas of known water infiltration
- Specific actions to be taken:
 - The construction area(s) of the site should be delineated and marked off; such areas should include building pads, driveways, walkways, all areas to be paved or rendered impervious from development; in delineating such areas, reasonable allowance should be made for the maneuvering of heavy equipment commissioned for use in land clearance and site preparation
 - Areas to be landscaped, meaning sections of the site in which existing vegetation is to be cleared or cleaned to install introduced plants should be designated
 - All large trees >1 ft in diameter to be saved should be tagged or otherwise marked
 - All other areas of the site should be made non-accessible to heavy equipment to avoid damage to plants and compacting of soils

4.3.2.2 Salvaging of Plants that cannot be Protected in their Location

- Where there are no other alternative than to clear or remove plants of the size or status that would not normally be allowed, a request must be made to the NPA giving the reasons
- NPA will then decide with the help of an experienced landscaper if such plants can be transplanted
- If yes, a transplanting plan must be devised and approved by the NPA for excavating, stabilizing the root and associated soil and transporting the plant for replanting on the affected site or at another site to be agreed
- An experienced landscaper should be engaged to provide the technical advice needed to ensure the plant survive the salvaging procedure, which may involve protection of the root by rapping, pruning of roots, foliage and branches, sizing the new hole in which the plant will be installed and initial supply of water (moisture)



4.3.2.3 Reducing Risks from Plants to Life and Property

- Homeowners should be aware that certain plants can constitute a risk to life and property, particularly as the result of natural disasters
- A prime example is the Ficus commonly used as a hedge. This plant when grown as a tree, is weak and susceptible to strong winds. Being a softwood, it breaks easily and can damage roofs, spouting, doors and windows
- This species or variety of Ficus should not be planted near the buildings because its root system will penetrate cracks in concrete and will enter and clog water or sewage pipes
- White Cedar and neem should not be planted close to houses because they will drop their leaves in dry and drought conditions on roofs, resulting in clogged spouting
- Agave plants that produce "daggers" should not be planted close to the house, where the dried dagger may fall and damage the property
- Similarly, the Spanish Bayonet if allowed to grow into thick trunks can become dangerous in storm conditions by breaking and damaging property; Spanish Bayonet also harbors termites in the trunks, which can then lead to termite attacks on untreated wood in houses
- The Flamboyant also attracts termites and should be planted away from homes and other wooden structures susceptible to termite attacks

4.3.2.4 Replacement of Vegetation that must be removed in the Course of Development

- Where no other practical option is available to removing trees that should be kept, the first course of action should be for the developer to transplant the plant (s) to another part of the property as indicated previously
- Secondly, plants that cannot be saved should in principle be replaced by similar species, or by other species preferably serving similar functions
- It is critical that plants that function to slow the rate of erosion, stabilize slopes and attenuate runoff are used as replacement species on steep slopes
- Similarly, plants that attract birds, provide fruits, or help to maintain the diversity of species should be considered for replacement by plants that provide these functions

4.3.3 Land Clearing and Excavation Equipment

Land clearing and excavation should be done with the aim to protect and preserve as much of the site vegetation as possible, reduce soil loss and protect the stability of slopes where they exist. In this case, developers or home builders and their contractors are expected to act in accordance with the following guidelines:



Equipment used

- A Backhoe is the preferred earth moving equipment to be used on construction sites
- Excavators and bulldozers should be used only when necessary and in such cases prior approval should be sought from the NPA
- When excavating for building pads, foundations of buildings, retaining walls, roads, driveways, etc., the equipment should be operated and managed to confine vegetation clearing and earth movement to targeted areas and their immediate surroundings, enough to achieve the purpose of the excavation intended
- The backhoe or backhoes should be used for selective removal of trees, such as acacia, neem and other plants that have been approved by NPA for removal
- The indiscriminate clearing of plants, particularly on slopes is not allowed **4.3.4**

Soil Removal, Storage and Reuse

- The topsoil layer of the site, often 1 ft or less from the surface, should be skimmed off and stockpiled separately for storage and reuse in landscaping; This section of the soil profile is rich in organic materials and nutrients beneficial to growing plants; sediment below the topsoil layer should be stored separately
- All excavated soil (top and subsoil layers) should be stockpiled for storage in areas where it would not be affected by runoff and excessive winds; if storage must be done on sloping areas or in places where runoff could be a problem, appropriate containment devices, concrete blocks, wood, or metal sheets should be temporarily installed at the foot of the stockpiled slope to prevent soil loss
- Soil should be stored in areas that are not overly exposed to winds; under no circumstances should soil be stored in watercourses or drainage swales
- Soil brought onto the site for landscaping should be similarly protected from runoff and wind
- Placing introduced soil on steep slopes with shallow and stoney soils and/or exposed bedrock could result in accelerated erosion unless some form of terracing is done to help with its containment; in some cases, money can be saved by terracing or soil containment without introducing new soil; this works in particular when drought tolerant species of plants, particularly natives of the area, are used
- For steep sites, it is best to store soil intended for landscaping offsite until it is to be used
- If soil is to be brought onto the site to grow plants and not grass, it should not be taken from areas where grass seeds are prevalent in the soil



4.3.5 Water Management and Control

Water management and water control, particularly critical for sloping lands, during the construction and use phases should be applied to:

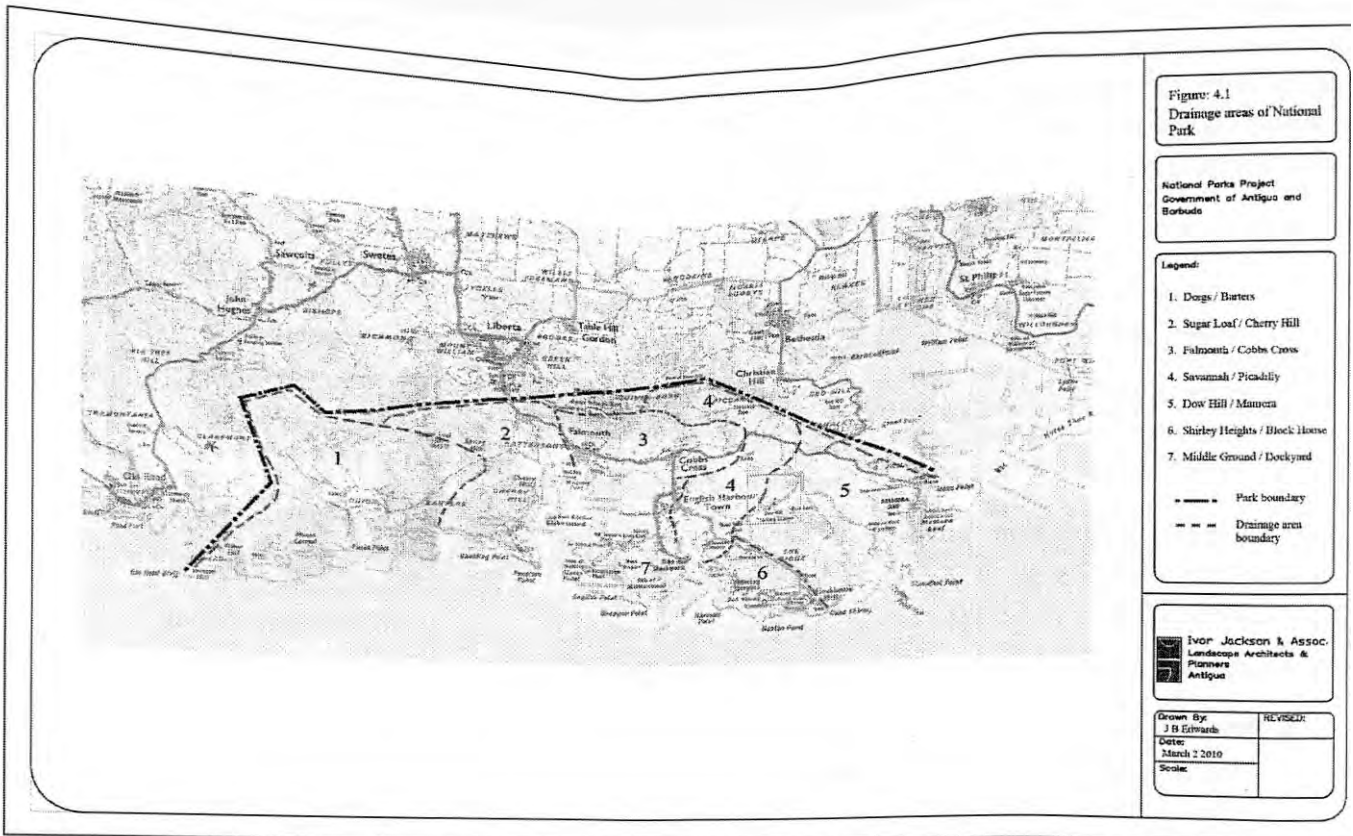
- Prevent excess water leaving the site and affecting other properties
- Prevent or reduce soil erosion from surface water wash

Developers and their agents should recognize the major drainage basins of the National Park (which are shown on Figure 4.1), their watercourses and discharge points into various bays. NPA will not allow natural water courses to be altered normally. Where this must be done, relevant justification must be produced by the developer and approval sought from NPA. Any such alteration must be based on a study and design recommendations of an experienced engineer.

Control measures can be exercised by:

- Directing runoff from facilities under construction to existing vegetated areas, natural drains, temporary retention ponds, ditches and away from cut, cleared or excavated areas
- As much of the natural vegetation as possible down-slope of water discharge sources should remain untouched during the construction phase (until the implementation of the landscaping plan) and used to intercept and slow surface water movement
- Temporary retention ponds can be used to collect water, catch sediment during the construction phase; such devices can be integrated into the landscape plan for the property to serve the same functions
- Catching water from the roofs of buildings for storage in cisterns
- Directing water from finished roads, driveways and other areas of low-permeability to natural drains, preferable and storm drains/sewers where necessary; for large properties and /or difficult sites developers may be required to have a storm water drainage plan prepared by a qualified professional
- New cut slopes and cleared areas should be vegetated as soon as possible. Aloes when planted and bunched in rows along the contours of steep slopes work to check soil movement down-slope
- Residences and other properties built on slopes on lots over $\frac{1}{4}$ acre should separate water from bathroom and kitchens and have it flow into landscaped areas; bananas have been used traditionally to absorb household grey water





5.0 Chapter Six: Building Next to Headlands and Ridges and Watercourses

5.1 Aims

This chapter will focus on how to protect the visual values of scenic headlands and ridges and the capacity of watercourses to carry storm water. With respect to headlands and ridges, guidelines focus on scale, massing, height and elevation (including number of floors) of buildings, vegetation clearance and landscaping. Of necessity, there is some degree of overlapping with other chapters.

5.2 Objectives

- Maintain as much of the vegetation, rock forms and other natural and or scenic qualities of ridges and headlands, particularly in highly visible areas of the National Park
- Protect water courses and maintain their natural functions in runoff and sediment transport
- Protect vegetation along watercourse banks and within the bed of water courses

5.3 Building on or next to Ridges

- NPA will strictly prohibit any development on ridges on government owned lands within the National Park
- Publicly owned ridges currently designated as sections of conservation areas will remain in conservation status even if rezoning of other lands occurs
- Strict measures will be taken to maintain the scenic qualities on ridgelines in private ownership; namely:
 - Buildings sited on ridgelines should be no more than 1 storey in height
 - The dimension (height) of the structure from eave to ridge should be a maximum of 6 ft
 - The material and colour of the roof and outer walls of structures should be such as to produce a visually harmonious relationship with the building and surrounding environment
 - Structures built on upper slopes below ridgeline of an area that has been determined to have scenic and visual values worth preserving should have a maximum height of 2 floors; with the basement floor allowed to accord with the practice of having basement level space on a sloping terrain
 - The visual impact of 2 storey structures below the ridgeline should be mitigated with landscaping using trees preferably native to the site



5.4 Building Next to Headlands

- NPA will strictly prohibit any development within 100 ft from the edge of headlands on government owned lands within the National Park
- Publicly owned headlands currently designated as sections of conservation areas will remain in conservation status even if rezoning of surrounding lands occurs
- Strict measures will be taken to maintain the scenic qualities at the headlands in private ownership; namely:
 - The material and colour of the roof and outer walls of structures should be such as to produce a visually harmonious relationship with the building and surrounding environment
 - A setback limit of structures from the edge of headlands should be enough to prevent breaking the visual line of the edge of the headland; so that a setback distance of 100 ft could be applied as a rule of thumb

5.4 Building Next to Watercourses

NPA will take the necessary measures to protect the major water courses within the National Park.

- Developers or applicants are required to show on their Site Plan the alignment of any water course that traverses over the site for which development is being sought
- A watercourse located on the boundary of a development site, or receives surface water from said site should also be shown on the Site Plan submitted with the development application
- Natural watercourses are not to be altered, or modified in anyway without prior approval of the NPA or DCA; this is to ensure that changes resulting will not adversely affect properties adjacent to or down-slope from the site
- Removal of vegetation, defacing of the slope between the bank and bed of the watercourse is to be avoided unless permission is granted for alteration
- NPA in collaboration with the DCA have decided that a minimum setback of 40ft from the edge of the watercourse bank will be required for all permanent structures; anyone requiring a variation from this rule must seek approval by providing the necessary justification

5.6 Use of Covenants

- NPA encourages developers of subdivisions to use covenants that commit home owners to build in accordance with these guidelines



6.1 Aims and Objectives

The aim of landscaping guidelines is to ensure that landscape plans are designed and installed to reduce negative impact on the natural environment. The objectives are to:

- Limit the removal or clearing of existing natural vegetation of the site
- Avoid the use of invasive species that could crowd out native plants
- Encourage diversity in the use of native and naturalized species of plants attractive to birds
- Maximize the use of plants that help to conserve soil and water and that can withstand appreciable moisture stress

6.2 Landscaping Plan

Landscaping requirements should vary from one site to the next and in relation to densities prescribed for the areas in which developments occur. Larger low density lots will normally require more attention than smaller lots with higher density. In any case, plant selection in landscape planning should be done in consideration of functions they serve:

- a) **Examples of plants that are considered important to bio-diversity (see list of plants provided in Appendix 3)**
- b) **Examples of plants that can be used to stabilize slopes and reduce soil erosion:** Aloes when planted in rows on the contour of the land, yucca, loblolly, various ground covers
- c) **Examples of plants that attract birds:** Pride of Barbados, Antiguan Heath, Oleander
- d) **Examples of plants that bear fruit and have reasonable canopy cover:** Mango, Soursop, Sugar Apple, Gunip, Avacado
- e) **Examples of ornamental and other plants that can withstand moisture stress:** Bougainvilla, Oleanda, Spanish Bayonnet, Yucca (several species), Aloes, Date Palm

6.3 Lot Related Guidelines

Guidelines should mainly be viewed in relation to lot size and lot location. Obviously, lots in emerging urban areas of the National Park would require, because of smaller areas and topography, less landscape planning, installation and maintenance than lots in other parts of settlements and rural areas:



- On all lots, one of the primary focus should be to use plants to avoid grey water from the development site affecting other properties and to help reduce the amount of surface water leaving the site
- Wherever there is sufficient space, plants should also be used for other functional and beneficial purposes such as food, fragrance, birds, erosion control, aesthetics, shade, and spiritual reasons
- On large lots, measures can be undertaken with varying degrees of commitment depending on topography and soil conditions (drainage, rocky and stony characteristics). Generally, property owners, builders or landscapers should:
 - Remove only enough of the natural vegetation of the site to accommodate the building, driveway, garage, storage areas and enough of the area surrounding the building(s) for landscaping, air flow, light, and security concerns
 - Use colorful ground covers in preference to grass to achieve diversity, aesthetic effect and reduce maintenance costs
 - Stabilize cut slopes as soon as possible by planting ground covers and other species known for their soil holding qualities
 - Terrance slopes using various available retainers to conserve soil and water
 - Use various mulch for moisture retention
 - Plant species that can withstand moisture stress and hence require less water for survival
 - Use plants like bananas to catch and absorb grey water moisture from kitchens and bathrooms
- On all lots, care should be exercised in avoiding excess moisture around building foundations resulting from excessive watering of "foundation" plants; seepage of moisture through foundation walls is often a problem with basement units of buildings
- Suitable foundation plants can however be useful in screening foundation walls
- On lots of highly visible slopes, headlands and ridges, plants can be used to mitigate negative visual impacts, namely:
 - Mature trees can be transplanted to afford immediate screening of 2 storey structures
 - Running or climbing vines or other vegetation can be used to cover unattractive retaining walls

Appendix 1: Land Clearance Permit Form

The Applicant is required to fill out the attached Land Clearance Form to demonstrate sufficient knowledge of site characteristics that would allow for mitigation (reduction or avoidance) of impacts resulting from clearing or developing the site for the purposes stated in the development application.

Land Clearance Permit Form

Name of Applicant _____

Parcel and Section and Number: _____

Size of Parcel to be developed: _____

Area of site to be covered by buildings, roads, driveways, parking spaces and other hard cover:
(Attach a copy of the Site Plan for the development) _____

What is the plan landscaping the site; describe type of plants to be introduced, how much of the site material will be retained, if top soil will be brought onto the site for planting purposes

Describe vegetation of the site by type, name, height and size: _____

Describe topographical features of the site, such as boulders, outcrop rocks, water course, steep slopes, stoney or rocky soils, etc: _____

Site Development and Mitigation

Describe machines and methods to be used in clearing of the site: _____

9. Describe how site clearance is to be managed; by whom, etc.:

Appendix 2: Conducting a Percolation Test

Steps in the Test Procedure		
Step 1	Dig 3 holes 1 ft x 1ft to depth of approx 2 ¹ / ₂ ft in area of proposed drain field or soakaway	
Step 2	Remove all loose material	
Step 3	Add 6 inches of fine gravel to protect the bottom from scouring or from sediment	
Step 4	Fill with clean water and saturate overnight	
Step 5	Fill holes with clean water the next day and time how long it takes in minutes for the water level to drop 1 inch	
Step 6	Determine size of tile drain field using the information below	
Step 7	Use the average time for the water to fall for the 3 holes; fall rates of longer than 60 minutes per inch are not suitable for drain fields; fall rates of longer than 30 minutes per inch are not suitable for soakaways	
Applying Fall Rates to Tile Fields		
Time to fall 1 inch (in minutes)	Required Square ft of trench per bedroom	
< 2 minutes	75	
3	85	
4	95	
5	105	
6-10	135	
11-15	160	
16-30	205	
31-45	245	
46-60	275	
Applying Fall Rates to Soakaways		
Time to fall 1 inch (in minutes)	Required area of pit walls per bedroom (sq ft)	

<2 minutes	40	
3	50	
4	55	
5	60	
10	75	
15	90	
30	150	
(Source: OECS, Grenada Building Guidelines)		

Appendix 3: Plants for Landscaping, NDNP

Plant		Type			Landscape Benefit						Method of Propagation		
Common name	Botanical Name	Tree	Shrub	Vine	Shade	Erosion Control	Birds / Wildlife	Colour	Aroma	Fruits	Seeds	Cuttings	Suckers
Cinnamon	<i>Canella winterana</i>	✓			✓				✓				
Soursop	<i>Annona muricata</i>	✓								✓	✓		
Sugar Apple	<i>Annona squamosa</i>	✓					✓			✓	✓		
Dancing Lady Orchid	<i>Tolumnia urophylla</i>						✓	✓					✓
Aloes	<i>Aloe vera</i>		✓			✓	✓						✓
Snake Dagger	<i>Sansevieria sp.</i>		✓			✓	✓						✓
Dagger	<i>Agave karatto</i>	✓				✓	✓	✓					✓
Giant Air Plant	<i>Tillandsia utriculata</i>							✓					✓
Love Bush	<i>Bryophyllum pinnatum</i>		✓									✓	✓
Lathberry	<i>Eugenia cordata var. sintenisii</i>	✓					✓				✓	✓	
Lignum Vitae	<i>Guaiacum officinale</i>	✓					✓	✓			✓		

Appendix 3 Ctd: Plants for Landscaping, NDNP

Plant		Type			Landscape Benefit						Method of Propagation		
Common name	Botanical Name	Tree	Shrub	Vine	Shade	Erosion Control	Birds / Wildlife	Colour	Aroma	Fruits	Seeds	Cuttings	Suckers
Warri Bush	<i>Caesalpinia bonduc, C. ciliate</i>		✓								✓		
Black Dog	<i>Senna atomaria</i>	✓					✓	✓			✓		
Tamarind	<i>Tamarindus indica</i>	✓			✓	✓				✓	✓	✓	
Bread and Cheese	<i>Pithecellobium unguis-cati</i>		✓					✓			✓		
Jumbie Bead	<i>Abrus precatorius</i>			✓							✓		
Indigo	<i>Indigofera suffruticosa</i>		✓				✓	✓					
Dogwood	<i>Piscidia carthagenensis</i>	✓					✓	✓			✓	✓	
Ironwood	<i>Krugiodendron</i>	✓					✓	✓					
Dumps	<i>Ziziphus</i>	✓					✓	✓		✓	✓		
White go Holler	<i>Erythroxylum areolatum</i>	✓					✓	✓			✓		
Balsam	<i>Croton flavens</i>		✓										

Plant		Type			Landscape Benefit						Method of Propagation		
Common name	Botanical Name	Tree	Shrub	Vine	Shade	Erosion Control	Birds / Wildlife	Colour	Aroma	Fruits	Seeds	Cuttings	Suckers
Mutton Porridge	<i>Phyllanthus epiphyllanthus</i>		✓				✓	✓					
Cabrita (Elsie Bush)	<i>Bunchosia glandulosa</i>		✓						✓				
Clam Cherry	<i>Byrsonima lucida</i>	✓			✓		✓	✓			✓		
West Indian Cherry	<i>Malpighia emarginata</i>		✓				✓	✓		✓	✓		
	<i>stigmaphyllon floribundum</i>	✓		✓			✓						
Black Willow	<i>Capparis Cynophallophora</i>	✓					✓	✓			✓		
Bottle Brush (Jamaican Dogwood?)	<i>Capparis flexuosa</i>		✓				✓						
	<i>Capparis hastata</i>	✓	✓				✓						✓
Willow (close to Black Willow)	<i>Capparis indica</i>	✓					✓	✓			✓		✓
Turpentine Tree	<i>Bursera simaruba</i>	✓				✓		✓					



Appendix 3 (cont'd): Plants for Landscaping, NDNP

Plant		Type			Landscape Benefit							Method of Propagation		
Common name	Botanical Name	Tree	Shrub	Vine	Shade	Erosion Control	Birds / Wildlife	Colour	Aroma	Fruits	Seeds	Cuttings	Suckers	
Guinep	<i>Melicoccus bijugatus</i>	✓	✓							✓	✓			
West Indian Mahogany	<i>Swietenia mahagonii</i>	✓			✓						✓			
Myrtle Lime	<i>Triphasia trifolia</i>		✓						✓		✓			
White Greenheart	<i>Zanthoxylum spinifex</i>		✓						✓					
Seaside Mahoe	<i>Thespesia populnea</i>	✓						✓						
Pigeon Plum (Wild Grape)	<i>Coccoloba sp.</i>	✓	✓							✓	✓			
Sugar Grape	<i>Coccoloba venosa</i>	✓	✓				✓			✓				
Turks Head Cactus	<i>Melocactus intortus</i>							✓						
Dul Dul	<i>Pilosocereus royenii</i>		✓									✓		
Black Loblolly	<i>Guapira fragrans</i>	✓			✓	✓								
Loblolly	<i>Pisonia subcordata</i>	✓			✓	✓								
Pie Crust	<i>Jacquinia</i>	✓	✓				✓	✓			✓			

Appendix 3 (cont'd): Plants for Landscaping, NDNP

Plant		Type			Landscape Benefit							Method of Propagation		
Common name	Botanical Name	Tree	Shrub	Vine	Shade	Erosion Control	Birds / Wildlife	Colour	Aroma	Fruits	Seeds	Cuttings	Suckers	
Wild Coffee	<i>Psychotria nervosa</i>		✓				✓				✓			
Ironwood	<i>Exostema caribaeum</i>	✓					✓	✓						
Black Chink	<i>Guettarda scabra</i>	✓												
Purple Allamanda	<i>Cryptostegia grandiflora</i>		✓											
Wild Frangipani	<i>Plumeria alba</i>	✓						✓						
Chinkwood	<i>Bourreria succulents</i>	✓					✓	✓		✓	✓			
Calabash	<i>Crescentia cujete</i>	✓												
Cats Claw	<i>Macfadyena unguis-cati</i>	✓						✓						
White Cedar	<i>Tabebuia heterophylla</i>	✓			✓		✓	✓					✓	
Golden Seal	<i>Tecoma stans</i>		✓					✓						
Fiddlewood	<i>Citharexylum fruticosum</i>	✓					✓	✓						
Privy	<i>Cherodendrum aculeatum</i>		✓					✓						



Activity	Current Status	Time for Completion
Completion of Heritage Legislation	Draft completed and being formatted for Antigua Legislative style for presentation to the Attorney General for Parliament Approval	End of March 2016
Revised Management Plan	Now being modified	End of June 2016
Conservation Plan	Draft completed. Plan now presented for approval by the National Parks Authority	Mid-March 2016
Carrying capacity study: Visitors to the site	Data collection now in progress	August 2016
Cultural Impact Assessment of Freeman's Bay (First survey done in 2009)	Archaeological research continues; field surveys on-going, and further archaeological research planned for summer 2015	Assessment: May 2016
Final Zoning Map of Site and Buffer Zone	Discussions and review of final draft in progress	28 th February 2016 for adoption by NPA Board March 2016
Building Guidelines Update	Draft completed for approval and adoption by NPA	28 th February 2016
Policy and procedures manual for stabilization and conservation	Agreement with conservation architect Isabel Rigol established to assist with this program	June 2017
Capacity Building	Discussions are underway with Isabel to establish an annual training program in the Dockyard for building capacity in managing a World Heritage Site, conservation, stabilization, monitoring and reporting, interpretation. Review past data collected	Expected start of a three to five year program June 2017

Policy Regulations and Development Control

Galleon Beach and Other Development Issues: The Act gives the NPA the mandate for the management of all crown lands within the Park (buffer zone) and rights of approval of all private development projects within its boundaries. The Development Control Authority can only grant approval, after the NPA permit is issued. To manage and control this process, all lands within the Park (buffer zone) were zoned in public consultation and varying restrictions placed according to the zone. An inventory of natural and cultural heritage sites guided this process. Specific areas, such as the archaeological ruins along the Ridge was designated a historical cultural landscape and a no building zone, while beach/water front areas were zoned for tourism development. Environmentally sensitive areas were zoned as conservation areas; which affords highly restricted and regulated development and promotes research, and sustainable heritage and nature tourism. In sum, all lands within the proposed buffer zone of the World Heritage site is fully protected and managed.

Changes in zones and the controlling regulations are done by the Parks Commissioner in consultation with experts. The Commissioner then presents the findings, proposed modifications and new regulations to the Board of Directors of the National Parks Authority for review and adaptation. This is followed by a public consultation and information distribution to the necessary stakeholders. Ministerial consent is not required as they are involved in the public consultation process and act on advise of their established Board (NPA). This process is outlined in the National Parks Act 1984. The modification of the zones at Freeman's Bay/Charlotte Fort Peninsular is now following this process. Changes will include,

- Enlarging the no building zone on the peninsular
- No structures are to be built that protrude above the ridgeline or are visible from the sea
- Additional regulations will be drafted for all private lands in that area including the area of the old Galleon Beach Hotel on completion of the 2016 re-survey and cultural impact assessment.
- A 30.0 ft. public access right of way will be established for the Charlotte Point – Carpenter Rock Trail to Lookout Hill.

As there are no current development plans for the Galleon Beach Resort refurbishment as the ownership is in bankruptcy litigation and plans are all cancelled. However, these changes will be made regardless and be in place in anticipation of a new request for development on the private lands.

It should be remembered that the NPA has the legal right under the NP Act 1984 to compulsory acquire lands if needed.