

Archaeological Report & VISPHO Clearance Letter



GOVERNMENT OF THE UNITED STATES VIRGIN ISLANDS

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**DEPARTMENT OF PLANNING AND NATURAL RESOURCES
Virgin Islands State Historic Preservation Office**

Dronningens Gade 71 & 72A, Kongens Quarter
Charlotte Amalie
St. Thomas, Virgin Islands 00802

Telephone: (340) 776-8605

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Reference No: Construction of a Yacht Club & Marina
Applicant: The Yacht Club at Summer's End, LLC
Address: 5000 Estate Enighed PMB 63
Location: Plot No. 13 Estate Carolina, Coral Bay, St. John, U.S Virgin Islands

February 22, 2013

Mr. Jean-Pierre Oriol, Director
Department of Planning and Natural Resources
Division of Coastal Zone Management
8100 Lindberg Bay, STE #61
Cyril E. King Airport Terminal Building, 2nd Floor
St. Thomas, VI 00802

Dear Director Oriol,

This letter is to inform you that the Virgin Islands State Historic Preservation Office (VISHPO), a division of the Department of Planning and Natural Resources, is in receipt of Panamerican Consultants, Inc. Submerged Cultural Resources Investigations for the proposed Marina by the Yacht Club at Summer's End, LLC in Coral Bay, St. John, United States Virgin Islands. VISHPO had previously required a Phase I Underwater Survey for the project site, because the previous Phase I Archaeological Underwater Survey conducted for the site's previous Marina development did not extend into the present project boundaries. Further, the potential area of impact for the proposed Summer's End Marina has not been previously disturbed and it is not known if archaeological resources could be present in the area.

The Phase I Archaeological Underwater Survey included diver transects, metal detecting, and probing in concert with differential global positioning system of the subject project area. No cultural resources were observed or recovered in the course of the survey. As a result, it was determined that there were no onsite archaeological/cultural resources that would be impacted by future development of the site.

Based on the results of the Phase I Archaeological Underwater Survey, the VISHPO concurs that no significant cultural resources were discovered onsite. Therefore, the VISHPO has no objection to this development and no additional studies will be required

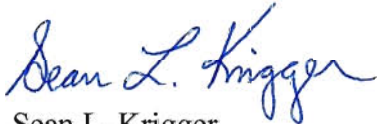
VISHPO Review of Phase I Archaeological Underwater Survey
for the Proposed Summer's End Marina
Coral Bay, St. John, USVI
February 22, 2013

for development within the offshore area of Plot No. 13 Estate Carolina, Coral Bay, St. John, U.S. Virgin Islands.

However, we do note that although the property has been cleared for development, that in accordance with the Virgin Islands Code Title 29, Chapter 17, Section 959(a), of the Antiquities and Cultural Properties Act, concerning notification and permit requirements on private land, "upon discovery of any archaeological or historical site, or human burial site or remains upon private lands, the owner or his representative shall immediately notify the Virgin Islands State Historic Preservation Office verbally and in writing" of such a discovery. Therefore, please be advised that failure to notify the VISHPO in the event of such a discovery, and/or the purposeful concealment or destruction of archaeological or historic remains will result in civil and/or criminal penalties.

Thank you for the opportunity to consult with the Division of Coastal Zone Management regarding compliance for this project. Please contact our office if there are any questions or concerns.

Sincerely,



Sean L. Krigger
Acting Director
And Deputy State Historic Preservation Officer

cc: Roy Pemberton, Director, Division of Fish and Wildlife
David Simon, Director, Division of Environmental Protection
Phillip Smith, Director, Division of Building Permits
T. Stuart Smith, Director, Division of Comprehensive and Coastal Zone Planning
Chaliese Summer, The Yacht Club at Summer's End, LLC
Stephen R. James, Jr., Panamerican Consultants, Inc.

SUBMERGED CULTURAL RESOURCES INVESTIGATIONS OF A PROPOSED MARINA, CORAL BAY, ST. JOHN, U.S. VIRGIN ISLANDS



PREPARED FOR:

**The Yacht Club at Summer's End, LLC
5000 Estate Enighed PMB 63
St. John, U.S. Virgin Islands 00830**

PREPARED BY:

**Panamerican Consultants, Inc.
91 Tillman Street
Memphis, Tennessee 38111**

DRAFT REPORT ♦ JANUARY 2013

DRAFT REPORT OF FINDINGS

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OF A PROPOSED MARINA,
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**Panamerican Consultants, Inc.
91 Tillman Street
Memphis, Tennessee 38111**

AUTHORED BY:

Andrew D.W. Lydecker, MA, RPA, and Stephen R. James, Jr., MA, RPA



**Andrew D.W. Lydecker, MA, RPA
Principal Investigator**

JANUARY 2013

ABSTRACT

In January 2013, maritime archaeologists from Panamerican Consultants, Inc. of Memphis, Tennessee conducted a Cultural Resources Investigation of a proposed marina development on St. John, U.S. Virgin Islands under contract to The Yacht Club at Summer's End of St. John, U.S. Virgin Islands. The proposed Project Area is located on the eastern end of St. John in Coral Bay. Specifically, the proposed project includes an area approximately 1,000 feet north/south by 1,200 feet east/west located adjacent to the western shore of Coral Harbor in the northwestern portion of Coral Bay.

The investigation utilized diver transects, metal detecting, and probing in concert with differential global positioning system, and was designed and implemented to identify the presence or absence of submerged historic remains within the Project Area. Results of the investigation documented no potentially significant archaeological sites within the Project Area. It is the opinion of the Principal Investigator that no potentially significant submerged cultural resources will be impacted by the proposed project activities, therefore the Project Area should be given clearance relative to submerged cultural resources permit issues.

ACKNOWLEDGEMENTS

As with all undertakings of this nature, the successful completion is the result of the combined efforts of numerous individuals. First, the author wishes to offer his appreciation to Ms. Chaliene Summers and Mr. Rick Barksdale of The Yacht Club at Summer's End, LLC for affording this research opportunity. Ms. Brooke Persons, Senior Archaeologist with the U.S. Virgin Island Department of Archaeology and Historic Preservation, Department of Planning and Natural Resources, must be thanked for her help with methodological approach.

In-house Panamerican Consultants, Inc. personnel, who must be thanked for their assistance with logistics and report production, include Kate Gilow, Office Manager, and Anna Hinnenkamp-Faulk, Editor.

Lastly, the fine people of the Virgin Islands are thanked for their island hospitality.

TABLE OF CONTENTS

ABSTRACT	i
ACKNOWLEDGEMENTS	ii
LIST OF FIGURES	iv
I. INTRODUCTION	1
II. CULTURAL BACKGROUND.....	4
HISTORICAL OVERVIEW	4
<i>General Maritime History of the Virgin Islands and St. John</i>	4
PREVIOUS INVESTIGATIONS	5
III. METHODS.....	9
PROJECT AREA ENVIRONMENT	9
SURVEY METHODS.....	12
<i>Personnel</i>	12
<i>Survey Vessel</i>	12
SURVEY PROCEDURES.....	12
IV. RESULTS.....	13
FINDINGS AND CONCLUSIONS	15
V. REFERENCES CITED	17

LIST OF FIGURES

Figure 1. Aerial photograph showing St. John and the general Project Area location	1
Figure 2. Project Area location map	2
Figure 3. Current schematic of the proposed marina development	3
Figure 4. 1975 magnetometer survey areas	5
Figure 5. Location of HMS <i>Santa Monica</i> in relation to the Project Area	6
Figure 6. Current project area footprint with previous 1995 survey area in red.....	7
Figure 7. 1995 study area with probe locations	7
Figure 8. Aerial overview photograph of the Project Area.....	9
Figure 9. Project Area looking west towards the shoreline.	10
Figure 10. Project Area looking east.....	10
Figure 11. Project area view to the south.....	11
Figure 12. View of the rocky promontory that forms the western boundary of the bay.....	11
Figure 13. Diver Transect Map coverage.....	14
Figure 14. Northern end of survey area looking north.....	14
Figure 15. Location of sunken vessel.....	15

I. INTRODUCTION

In January 2013, maritime archaeologists from Panamerican Consultants, Inc. of Memphis, Tennessee (Panamerican) conducted a comprehensive submerged cultural resources investigation of a proposed marina development on St. John, U.S. Virgin Islands under contract to The Yacht Club at Summer's End, LLC, (YCSE). The proposed Project Area is located on the eastern end of St. John in Coral Bay (Figure 1). Specifically, the proposed project includes an area approximately 1,000 feet north/south by 1,200 feet east/west located adjacent to the western shore of Coral Harbor in the northwestern portion of Coral Bay (Figures 2 and 3).

Under regulations created by the Federal Water Pollution Control Act (FWPCA) Amendments of 1972 and the attendant Clean Water Act of 1977, the client is required to provide information on the effects of the proposed expansion project activities relative to potentially submerged cultural resources within the Project Area. To comply with these federal regulations, the current investigation, which utilized diver transects, metal detecting, and probing in concert with differential global positioning system (DGPS), was designed and implemented to identify the presence or absence of submerged historic remains within the Project Area. To this effect, results of the investigation documented no potentially significant archaeological sites within the Project Area. It is the opinion of the Principal Investigator that no potentially significant submerged cultural resources will be impacted by the proposed project activities, therefore the Project Area should be given clearance relative to submerged cultural resources permit issues. These conclusions are supported in the following report's chapters on the island's maritime history, and the conduct and results of the field investigation.



Figure 1. Aerial photograph showing St. John and the general Project Area location (courtesy of Google Earth).



Figure 2. Project Area location map (Courtesy of YCSE).



Figure 3. Current schematic of the proposed marina development (courtesy of YCSE).

II. CULTURAL BACKGROUND

The investigation was prefaced by limited archival research and an archaeological site file check. The archival research and site file check covered this broad area in general in order to identify sites that would need to be addressed, if present, if they fell within the actual Project Area. However, no submerged cultural resources sites are recorded in or near the Project Area and no previous investigations have been conducted in the general vicinity. With that said, the land portion of the Project Area has been subject to an intensive Phase 1A and 1B investigation.

The following historical overview presents a general overview of maritime history of the Virgin Islands and specifically the island of St. John, as well as previous submerged cultural resources investigations for the area.

HISTORICAL OVERVIEW

St. John was among the Caribbean Islands that Christopher Columbus encountered and claimed for Spain during his second voyage to the New World in 1493. Preoccupied with the mineral wealth of the Greater Antilles and Latin America, the Spanish made no effort to colonize this small, mountainous island. In the mid- to late 1600s, small parties of woodcutters and agriculturalists periodically inhabited St. John (Larsen 1986).

Attracted by the lucrative prospects of cultivating sugar cane, the Danes took formal possession in 1694. In March 1718, settlers from neighboring St. Thomas established the first permanent European settlement on St. John at Estate Carolina in Coral Bay. The Danish began to parcel the land for plantation development, with the intention of supplying Europe with sugar, cotton, and tobacco.

GENERAL MARITIME HISTORY OF THE VIRGIN ISLANDS AND ST. JOHN

Beginning in the late seventeenth century the Virgin Islands, with the main focus St. Thomas, was the scene of considerable maritime activity. Besides Denmark, trade with the British American colonies in the 1700s was extremely important to the efficient operation of the island plantations. Maritime activity also included trade with British, Dutch, French, and Spanish colonies in the West Indies (Dookhan 1974; Tyson 1986a, 1986b).

Most seaborne commerce, as indicated by several eighteenth- and nineteenth-century charts (i.e., Bellin 1771; Jeffreys 1775; Rohde 1822), approached the island's main harbor, Charlotte Amalie from the south. When the Virgin Islands plantation system was flourishing during the seventeenth and eighteenth centuries, some transoceanic ships sailed along the coasts in order to put into protected bays, where they took on cargoes of sugar, rum, molasses, and cotton and/or engaged in illegal trade from nearby estates. Additionally, small interisland coasters regularly transported plantation produce between the bays and St. Thomas Harbor (Olsen 1988).

St. Thomas' proximity to regular trade routes used by sailing ships entering or leaving the West Indies made it an ideal site for the practice of piracy during the seventeenth and eighteenth centuries. Additionally, the attitudes of the island's earlier governments allowed piracy and smuggling to exist and even flourish. While the Virgin Islands never acquired the fame of notorious pirate havens of some islands like Jamaica, they were visited by well-known practitioners of the trade such as Le Paine, Captain Kidd, and Bartholomew Sharp (Dookhan 1974).

The Virgin Islands made the transition from an agricultural to a trade-based economy during the second half of the eighteenth century. The port of St. Thomas was opened to free trade with other European colonies in 1764, a step that was reversed about ten years later. Free trade returned in 1782, when Danish ships trading through St. Thomas were allowed free trade with European ports. All restrictions on trade were lifted in 1815, and St. Thomas has remained a free port ever since (Westergaard 1917:250). An average of 2,809 ships called on St. Thomas during 1821 to 1830, with an increase to 21,769 from 1841 to 1850. The amount of tonnage represented by those ships increased until 1850, when the increased number of steamships plying the Caribbean decreased the role of St. Thomas in the Caribbean trade (Westergaard 1917:252). St. Thomas' role in Caribbean shipping and trade was reduced to that of a coaling station by the second half of the nineteenth century, as the rise of steamships made possible the direct shipment of goods to markets throughout the region. A total of 682 ships larger than 25 tons visited St. Thomas in 1908, with an increase to 749 ships in 1910. The mixture of ship types that entered the port in 1910 underscores the nature of change in Caribbean trade by that time, with a total of "...38 war-ships, 446 merchant steamers, and 265 sailing ships" (Westergaard 1917:253).

PREVIOUS INVESTIGATIONS

Due to the extensive maritime history of the Virgin Islands, there is a possibility for submerged cultural remains (i.e., shipwrecks) to be located within the Project Area. A number of submerged cultural resources studies have been undertaken in the Virgin Islands and the general vicinity of the Project Area, and all have relevance to the current investigation. In 1975, Alan R. Albright conducted a magnetometer survey of portions of Coral Bay (and portions of the other surrounding islands). The survey specifically focused on the wreck of the HMS *Santa Monica* and Figures 4 and 5 illustrate the location of the survey areas as well as the wreck site in relation to the current Project Area (Albright 1975).

Originally a Spanish ship seized by the British in 1779, the HMS *Santa Monica* tore her hull open in 1782 on what is now named Santa Monica Rock (located to the southeast of her resting place). Rapidly filling with water, the vessel was beached and subsequently salvaged. The wreck site has been the recent focus of a maritime doctoral dissertation from East Carolina University, but little archaeology has been conducted at the site (David Brewer, personal communication 2007).

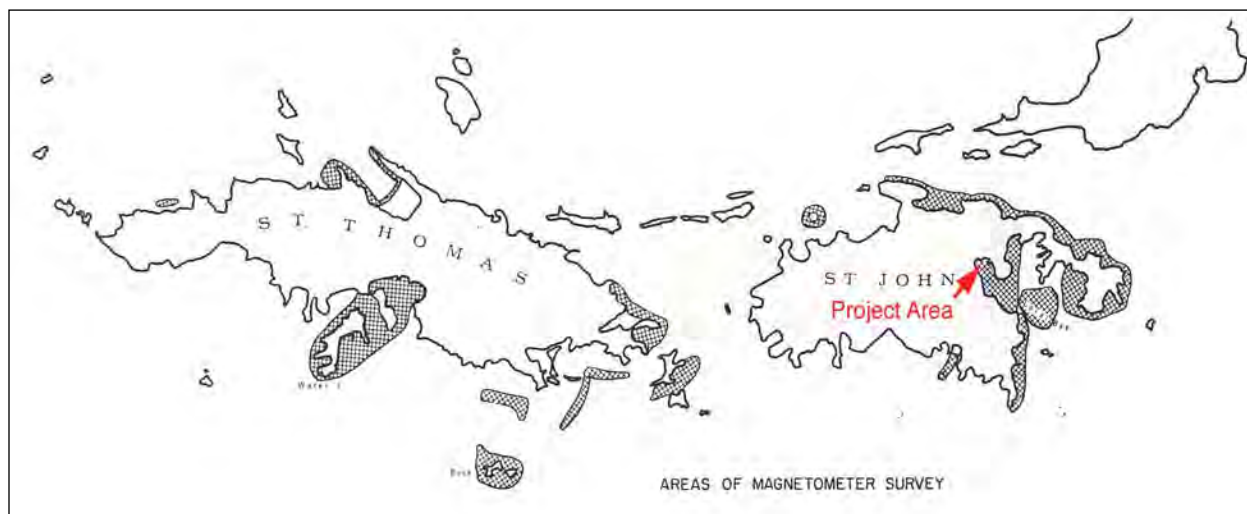


Figure 4. 1975 magnetometer survey areas (as presented in Albright 1975).



Figure 5. Location of HMS *Santa Monica* in relation to the Project Area (after Albright 1975).

In 1976, an inventory of shipwrecks in the Virgin Islands (1523 to 1825) was compiled by Edward L. Towle, Robert F. Marx, and Alan B. Albright. In addition to the HMS *Santa Monica*, review of this inventory mentions two other wrecks for St. John, the earliest being a bark burned by Spaniards “in one of St. John’s harbors” (Towle et al. 1976).

To determine if any shipwrecks have been recorded as occurring in Coral Bay, the *Register of Virgin Islands Shipwrecks (1523–1917)*, prepared by George Tyson (1983) for the Virgin Island Planning Office was consulted. This register, which is based on extensive archival research in a variety of primary and secondary sources, identifies over 650 shipwrecks reported in the waters surrounding the U.S. and British Virgin Islands. It is the most comprehensive, up-to-date listing of Virgin Islands shipwrecks, subsuming information found in earlier inventories, such as that prepared by Towle et al. (1976). Specific to St. John, Tyson states that:

Neither St. John, nor the British Virgin Islands, with their limited agricultural outputs, attracted much shipping. However, as they stood athwart the sea lanes linking St. Thomas and St. Croix with Europe and North American, most of the ships trading with the archipelago passed through their waters, and they engaged in a considerable interisland commerce with St. Thomas [Tyson 1983:2-3].

Tyson's shipwreck inventory indicates that over 23 vessels were lost on St. John. However, sources queried (i.e., Marx 1987; Towle et al. 1976; Automated Wreck and Obstruction Information System [AWOIS] 2007) were unaware of any submerged cultural resources within the general Project Area.

A survey within the current Project Area was conducted in 1995 by Panamerican. Consisting of a planned dock structure, this proposed development was located very closely to the current proposed main dock (Figure 6). This investigation consisted of nine transects of 16 probes covering the proposed construction area (Figure 7). Nothing was located during the survey, but a feature described as an “insignificant ballast pile” was observed in the vicinity of the current Project Area.



Figure 6. Current project area footprint with previous 1995 survey area in red (see Figure 7).

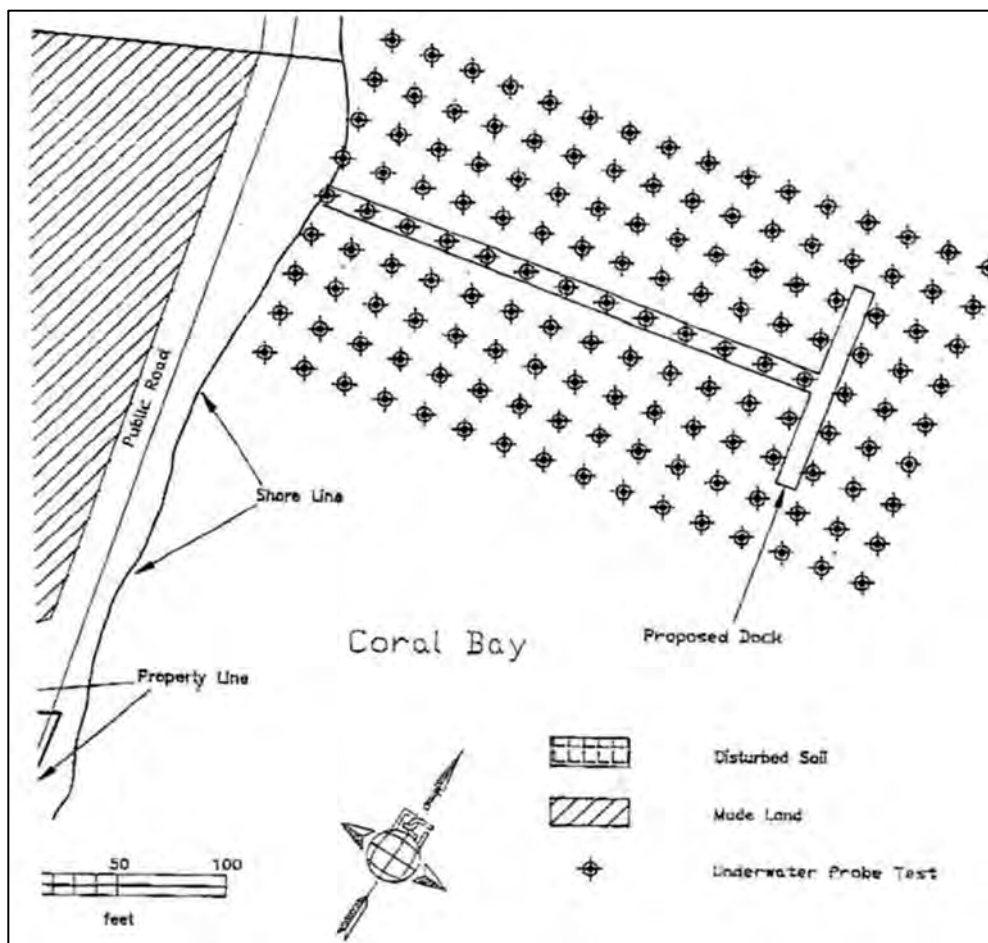


Figure 7. 1995 study area with probe locations. This area equals the red area in Figure 6 above (as presented in Panamerican 1995).

In 2007, Panamerican conducted a marine magnetometer survey in the immediate vicinity of the current Project Area (James and Faught 2007). The project included an area approximately 320 feet by 250 feet located adjacent to the northern-central shore of Coral Harbor, which forms the northwestern portion of Coral Bay (on the side of Coral Harbor opposite the current survey area). The magnetometer survey was conducted to determine the presence or absence of submerged anomalies or targets within that project area that might represent the remains of historic shipwrecks. Results recorded several small magnetic anomalies, all were visually confirmed as associated with modern moorings, vessels, or other objects related to the intensive modern use of the area. No potentially historic targets were located.

III. METHODS

PROJECT AREA ENVIRONMENT

Located in the northwestern portion of Coral Bay and along the western shore of Coral Harbor, the Project Area environment had a direct impact on the survey methods and subsequent data analysis. A navigation channel marks the survey area's eastern boundary and the eastern shore marks the eastern boundary. In a location well protected from open ocean swells and lacking a large wind fetch, making for calm waters, the Project Area is currently employed as a boat anchorage (Figure 8). Out from the shore, bay waters are host to numerous permanently and temporarily moored vessels, the majority being sailboats of various types and sizes. Several, possibly storm victims, lay mostly submerged outside of the survey area (Figures 9 through 12).



Figure 8. Aerial overview photograph of the Project Area; note the numerous moored vessels (map courtesy of YCSE).



Figure 9. Project Area looking west towards the shoreline.



Figure 10. Project Area looking east.



Figure 11. Project area view to the south.



Figure 12. View of the rocky promontory that forms the western boundary of the bay.

SURVEY METHODS

PERSONNEL

The personnel involved with this remote-sensing survey had the requisite experience to effectively and safely complete the project as proposed. Andrew D.W. Lydecker served as the Principal Investigator with Matt Gifford and Steve James serving as divers.

SURVEY VESSEL

The vessel utilized for the remote-sensing survey was a 20-foot, shallow-draft, center-console, modified catamaran, fiberglass Grady-White with two 150 horsepower Suzuki outboards. Provided by Awesome Boat Rentals, the Grady-White had a stand-up center console and ample deck area for the placement and operation of the necessary remote-sensing equipment.

The vessel conformed to all U.S. Coast Guard specifications according to class, and had a full complement of safety equipment. The vessel carried appropriate emergency supplies including lifejackets, spare parts kit, tool kit, first-aid materials, flare gun, air horns, and potable water.

SURVEY PROCEDURES

As indicated by the above figures, the current proposed marina area contains numerous moored vessels. There are approximately 28 within the current footprint area, not counting the zodiac/runabouts immediately next to shore. The numerous moorings are comprised of either large anchors or in many cases other large iron objects (i.e., engine blocks, etc.), thereby negating the findings from a magnetometer survey. Since the moorings would effectively mask any magnetic signature of a shipwreck, it was felt that the most efficient way to survey for the presence or absence of historic watercraft remains was to forgo the use of a magnetometer. Therefore, it was recommended that a series of transects spaced at 30-foot intervals be surveyed by diver(s). This methodology was confirmed and accepted in discussions with Ms. Brooke Persons, Senior Archaeologist with the Virgin Islands State Historic Preservation Office. The transect locations were set and marked with a sub-meter global positioning system (GPS) on board the surface support vessel.

The investigation utilized a series of transects spaced at 30-foot intervals and survey by two divers spaced 20 feet apart. Transect locations, both beginning and end, were set with a sub-meter DGPS system on board the survey vessel. It was estimated that a total of 30 transects would be required to adequately cover the area.

Divers swam the preset transects and visually inspected the bottom along each transect. At the same time, the divers swept the area with an underwater metal detector. Metal contacts were uncovered by hand fanning the bottom to determine the source of the contact. A hand-held 5-foot probe was inserted into the bottom every 20 feet, both to determine the depth of the silt cover and also to detect possible cultural resources not exhibiting characteristics that would result in a return on the metal detector.

IV. RESULTS

The investigation of the proposed Coral Bay marina project at St. John intended to locate and identify any potentially significant submerged cultural resources, and if present, that may be impacted by the placement of marina construction. The survey was also completed in an effort to locate sites that may be eligible for inclusion into the National Register of Historic Places (NRHP).

Forty transects were covered during the investigation (Figure 13) utilizing the tools and procedures discussed in the previous chapter. A number of objects relating to the use of the area as a mooring field and anchorage were located during the survey. Objects included numerous abandoned, modern anchors of varying types (including Danforth and plow-type) along with mooring anchors likely relating to lost or orphaned vessel mooring locations. Also located was an engine block, which was probably used as a mooring anchor. Other types of marine related debris were encountered including wire and fiber rope, pieces of wood, and small bits of metal debris. None of these items are considered historically significant.

Numerous sunken or wrecked modern vessels were observed along the banks in the vicinity of the survey area, and in the water just outside the survey area (Figure 14). None of these are considered historic in nature.

One sunken vessel was encountered in the survey area (Figure 15). This vessel was inspected and determined to be the remains of a wooden-hulled sailing vessel that would have originally been approximately 25 to 30 feet in length. It was heavily deteriorated, with only the lower hull remaining of the vessel structure. The inner hull planking was largely deteriorated to the point where the lower hull frames were exposed. Various modern fittings, shackles, cables, and other vessel-related debris were found within and on the remains of the hull. The age of the vessel is undetermined, and given its wood construction the vessel itself may date from the mid-twentieth century or possibly a little earlier. Given the deteriorated condition of the wreck site, it has likely been on the bottom for at least 20 to 30 years. The vessel appears to be modern and is not to be considered historic in nature is not recommended for any further investigation or documentation.

The “insignificant ballast pile” as described in Panamerican’s (1995) report was not relocated during the current investigation.



Figure 13. Diver Transect Map coverage.



Figure 14. Northern end of survey area looking north (note sunken and beached modern vessels).



Figure 15. Location of sunken vessel.

FINDINGS AND CONCLUSIONS

Under regulations created by the FWPCA Amendments of 1972 and the attendant Clean Water Act of 1977, the client is required to provide information on the effects of the proposed expansion project activities relative to potentially submerged cultural resources within the Project Area. To comply with these federal regulations, the current investigation, which utilized a comprehensive visual and metal detector search, in concert with DGPS, was designed and implemented to identify the presence or absence of submerged historic remains within the Project Area. To this effect, results of the investigation documented no potentially significant cultural resources within the Project Area.

The present findings are similar to other areas where modern usage of a water body is heavy. Comparable to the present study, the results from other surveys in the U.S. Virgin Islands where waterborne traffic is fairly high, especially in the form of mooring fields, is similar to our findings (James and Faught 2007; James and Tyson 1990; James and Tyson 2006; Krivor and Tyson 1997; Krivor 2000; Krivor 2001). Submerged cultural resources investigations conducted in these areas found that non-significant modern debris constituted all of the magnetic signatures located. Perhaps the most germane of these earlier field investigations to the current study was the 1995 diver visual survey of a portion of the Project Area. Findings for that investigation were negative for cultural resources (Panamerican Consultants, Inc. 1995). Another applicable study was the 2007 investigation of the proposed Coral Bay Marina to the northeast of the current Project Area. Covering a similar use area and of similar size, results of the investigation recorded numerous anomalies that were all attributable to moored vessels and observable moorings (i.e., buoys), as well as abandoned moorings in the form of engine blocks; all were not

representative of potentially significant submerged cultural resources (James and Faught 2007). These findings are identical to the current investigation.

In closing, the investigation of the Project Area was negative for submerged cultural resources sites. It is the opinion of the Principal Investigator that no potentially significant submerged cultural resources will be impacted by the proposed project activities, and the Project Area should be given clearance relative to submerged cultural resources permit issues.

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