

# CONNECTING TO THE CONTEXT

On Monday August 23, 2010, we woke early to catch a 7:25 flight from Philadelphia International to San Juan, Puerto Rico. While aboard the flight, I couldn't help but notice the many military personnel that were also on the flight. As I found my row, across the aisle from Holly, where one of the Army soldiers had already been seated near the window; he had his headphones on and looked like he was ready for a nap. I took my seat and the flight began. The flight was an easy one, not much turbulence, I think I fell asleep for about an hour. As we were preparing for arrival, both Holly and I started to talk to some of the soldiers on the flight, it turns out that they were given a four day pass, and were spending it in Puerto Rico, before shipping out to Iraq for a one year tour. I had previously thought that they were returning to a base in Puerto Rico, but when I found out they were going to Iraq, my heart rose in my chest with a sadness that I cannot put to words, I know that soldier saw it in my eyes, and when I finally spoke I thanked him for being an American soldier and choosing to protect our great nation and shook his hand, I still had that hollow feeling and it grew as I looked

around the airplane at 40, maybe more soldiers, full knowing that some of these men and women would not return from Iraq. All this, as our class was headed for St Croix on a working vacation.

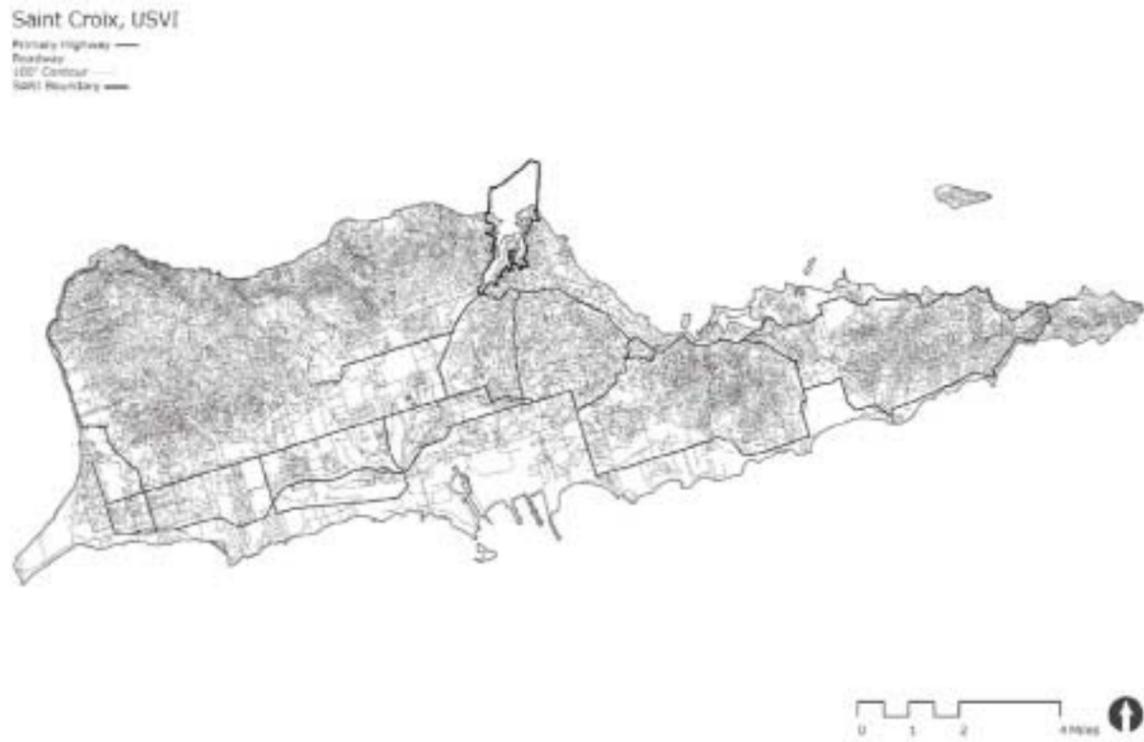
After a brief stopover in San Juan; we boarded a smaller plane and headed for St. Croix. Upon landing in St Croix we discovered some of our luggage did not make the flight. We were met by Joseph Ames, our driver (a calm, collected, intelligent man). He assured us that this happens quite often and not to worry. He seemed to know the lady in the office where Jason, Ben, Nick and I had to go to fill out form for our baggage claim. She told us that our bags would be delivered to the hotel. So off we went with Joseph, in his taxi, headed for the Pueblo grocery store to pick up necessities for our stay. While we were walking down an aisle I met up with Holly at a big stack of what turned out to be desalinated gallons of water, I can't remember seeing this in the States, so it just reinforced that fresh water supplies are limited on the island. After completing our shopping, Joseph drove us to Jennifer and Lionel's hotel, Arawak Bay Inn. It was a quaint

little place, set back off the road, colored in pastels with a large mural with a sea turtle painted on the wall, the first thing you see when driving up. After a brief stop we were out and walking toward our meeting with Zandy Hillis-Starr, Meredith Hardy of the NPS (National Park Service), Karen Koltes from the Department of the Interior, and Michael Bayer the planner at the new SARI(Salt River Bay) Visitor center. They provided an overview about the site and the visitor's center, along with the natural, historical and cultural resources of the site. After the meeting was over Zandy, Meredith, Karen and Michael gave us a lift back to the hotel in a three vehicle caravan of white vans with US government tags.

On Tuesday, August 24, 2010 we woke to the first of many great breakfasts, Hany was still fasting, but not me, eggs, bacon, sausage, fresh fruit different juices jellies and jams, Jennifer and Lionel really treated us well. After breakfast we met with Zandy, Meredith, Karen and Michael, and then we drove caravan style to the SARI site for a historical perspective from the west to the east. Some of the cultural and archeological resources are the 1642 earthen

fort, (one of very few in the western hemisphere), the old ball court (which turned out to be the center of the village, and also part of the road in which the people drive right over). This road was filled with conch shells and broken pieces of pottery which dates back thousands of years. The NPS wants is a museum facility on this site, but the VI (Virgin Island) government owns this part of the site, so it will take some team work to develop. This is a contested site because it was the Columbus landing site, and the only spot in the US where his landing party set foot ashore in 1493. The Bay remains an ecological preserve and home to the Virgin Islands largest remaining red, white, black and buttonwood mangrove forests which provide a protected breeding ground and sanctuary for countless species of birds, fish, and sea turtles. The areas blend of sea and land holds not only the mangrove forests but coral reefs and a submarine canyon, where Zandy talked about scientists doing saturation diving, in which they would live in an underwater facility, conducting studies. By living submerged this would allow the nitrogen levels in their blood to saturate and they could do deeper

Columbus landing site at SARI



and longer dives, without suffering from nitrogen narcosis, commonly referred to as the bends.

**Brief History**

Before the arrival of Columbus, the archeology record shows that the people who lived there were the tribes of the Arawak and Caribs. The last of the Native Indian people to inhabit St. Croix were the Carib. Originally from the Guiana region of South America, the Carib people were not the first Indians on St. Croix. The Tainos or Arawaks were present on the island as early as the 1400's. It was however the Carib that greeted Columbus on his second voyage through the islands.

Christopher Columbus visited St. Croix on November 14th, 1493 on his second voyage to the New World. Columbus named the island Santa Cruz (Holy Cross). The explorers anchored off a natural bay west of Christiansted, known today as Salt River. Some two-dozen armed men from Columbus' fleet went ashore to explore. These men were met by a hail of defensive arrows and they retreated. The Salt River site is the first and only positively documented site associated with Columbus' exploration of the

New World on what is today a U.S. territory. The Caribs continued their existence on St. Croix for about a decade following Columbus' visit. During this period, they had established an understanding of mutual coexistence with the Spanish on Puerto Rico. This understanding was concluded when a Spanish adventurer raided St. Croix for Carib slaves. The Caribs joined in an effort with the Tainos of Puerto Rico against the Spanish. For their uprising they were condemned to be destroyed by the Spanish Crown. With 'legalized' extermination and military action imminent the Caribs permanently abandoned St. Croix. Although Columbus landed on St. Croix in the name of Spain, the first to establish themselves on St. Croix were the Dutch and English with a small number of French Protestants. In 1625 both countries, Britain and the Netherlands, co-existed on the island. This mutually beneficial relationship of sharing St. Croix ended without question when the islands Dutch governor killed the English counterpart. The English retaliated, leaving the Dutch governor dead. Many years of battles over possession of the island followed between the two powers.

Dutch and French settlers slowly retreated leaving the English in power of St. Croix. The colony grew under British rule. The Spanish, on nearby Puerto Rico, were concerned by the growth. In a surprise attack the Spanish landed on St. Croix and killed many settlers and forced the others to leave. The French heard of the overthrow of the English and took the opportunity to move in themselves and take over St. Croix from the Spanish. This was around 1650. Philippe de Poincy, an official of the Knights of Malta, sent 160 of his best troops to capture St. Croix. He succeeded and then quickly sent some three hundred planters from St. Kitts to establish settlements on the newly captured colony.

Seeking to establish a stronger hold on St. Croix, Louis XIV decided that the French Crown should take over. In 1665, the French West India Company was formed and sent to St. Croix. The Company rule did not do very well and lasted only seven years. The King dissolved the Company and replaced it with Crown rule. The French Crown continued to claim ownership of St. Croix although they had basically abandoned the island. Most of the French

settlers had left the island by 1695.

On June 13, 1733 the Danish West Indies Company bought the island from France. The Danish West Indian Company wasted no time in sending settlers to St. Croix to form their new colony. Under the leadership of Frederik Moth, a new town at Christiansted was planned within the first year.

In 1747, St. Croix was given its own government, separate from St. Thomas and St. John. Under strict regulations, the planters soon became frustrated with company rule. In 1753, the planters of the three islands petitioned the King to buy out the company. In 1754, the islands became a royal colony. With the crown directly involved a long period of growth followed. The Crown designated the most lucrative of the islands - St. Croix - as the new capital for all three islands. Thus, the capital of St. Thomas and St. John was moved from Charlotte Amalie on St. Thomas to Christiansted where it remained until 1871 when it was returned to Charlotte Amalie.

For some time St. Croix was one of the wealthiest islands in the West Indies. The prosperity was due greatly to sug-

SARI site from the west



Conch shell at SARI site



Mangroves at SARI site



ar cultivation, rum production and slave labor. St. Croix’s economy existed through trade. The island exported five commodities; sugar, rum, cotton, molasses and hard woods and imported almost everything it needed. The price of sugar in the world market was stable for the first decades of the 19th century and St. Croix’s plantation owners were doing well. In 1803 the population of the island was 30,000 with 26,500 being slaves engaged in planting and processing sugar cane. Prosperity however came to a halt with the closure of Denmark’s role in the slave trade. St. Croix had played an important role in the triangular trade route that connected Europe, Africa and the Caribbean in a trade of human cargo, sugar and rum. Around this same time competing beet sugar prices caused a sharp decline in the profitability of cultivating sugarcane. An increasing number of slave revolts motivated governor general of 21 years Peter von Scholten to abolish slavery in the Danish colonies on July 3rd, 1848. The late 1800’s were periods filled with changes, rebellions and progress. Some of the most famous leaders were Queen Mary, Bodhoe and David Hamilton Jackson. Their

efforts and those of other residents were extolled for the good of the local population on issues like improvement of living conditions, freedom of press, education and labor laws. In 1917, St. Croix, along with the islands of St. John and St. Thomas, were purchased by the United States of America from the Danish government for military reasons. In the late 1930’s, St. Croix’s agriculturally based economy was not improving. Economic insecurity continued until the fifties, when tourism became a leading industry in the United States Virgin Islands. Today, St. Croix is U.S. territory with the main industries that include, tourism, agriculture and oil refining. One of the most renowned attractions in the U.S.V.I., the Buck Island National Park is located a short distance from the St. Croix shore. Recently the first casino in the U.S.V.I. was built on St. Croix. The information contained in this brief history was compiled from “Fateful Encounters Salt River 1493-1525, a National Park Publication dated November 14, 1993.” and “Christiansted, National Historic Site published by the National Park Service, US Department of the Interior.”

After a hike through the bush to an old sugar mill site, surrounded by crab traps (the crabs live in burrows in the ground) stinging wasps and other pitfalls, we headed for lunch at the Chicken Shack. While waiting in line I was stung by a Jack Spaniard bee, that eventually caused my hand to swell. Other than that the food was great, I had the spare ribs with a side of cassava, a sweet starchy plant root. I have had it before in Bermuda as bread, in St Croix they serve it as a vegetable, a side dish. During our lunch Joel Tutein the Superintendent of the NPS showed up but was never introduced to the group. After lunch, we drove out to the west side of the park, Past Zandy’s mother’s old house, we walked to the top of the hill where Zandy went over what she would like for the MREC:

- Hurricane resistant structure,
- UV resistant materials,
- Structures above the 20 foot contour,
- Place to study endangered species,
- Green technology,

- Platinum LEEDS certified,
- Use of recycled materials,
- Earthquake and tsunami resistant,
- Underground utilities,
- Generators to make the facility self-contained,
- Desalinization program,
- Removal of the invasive guinea grass.

The group then took off on a hike down along the shore line and back up to the hill top where I was taking pictures and doing sketch work. Next, the group met students from Central High Schools Environmental Club, NERM. We kayaked in the bay to get a different perspective and help to understand the scale. I tried to kayak, but my leg hurt from hiking during the day, so I decided to go back to shore where I met Keith and Wayne, the two guys that work for Brian at Virgin Kayaks. We talked about many things. They liked to camp, drink, and hang out and watch the full moon come up. They are very laid back and friendly, like most everyone I met on the island. They did say that they don’t want the NPS to get the west side site where we launched

View from east side of SARI site



Cactus on east side of SARI site



Old sugar mill



Indian hut at Nate Olives farm



(Columbus landing) because they feel that it would change how they would be able to use the site if at all. I guess that is a hidden fear in Cruzan society that I picked up on and rightly so because the way that this island has been bought and sold through the years, and the people told what to do by the new owners. The slavery memories still run deep.

As the group started to return to shore from the kayak trip everyone was talking about the bio-luminesce, which was hard to see in the full moonlight, but it definitely is one of the issues of design, because the lights from the facility could affect the natural phenomenon in a negative way.

August 25, 2010 started with another great breakfast, with more food than anyone could eat. This got us ready for our Certified Organic farm visit with Nate Olive. Nate spoke of how when the Latitude gets lower the plant diversity increases. He also passed around a conga root, which has a very pungent odor and has the tendency to wake you up, kind of like a smelling salt. Nate stated that a mixed agro-forested system sequesters the most carbon, which is the Permaculture farming he is currently doing. Salt tolerant plants are also a must in this system. He explained

how bananas can be used much in the same way as a tree gator bag (to slowly release water) because their roots hold a great amount of water. He mentioned what to do with water: slow it, spread it, sink it. He uses a system of swales to accomplish this.

He mentioned the need to work organic matter into the soil, which would definitely need to be done on the east side of the SARI site as the topsoil is thin or non-existent. There is a lot of rock in the soil close to the surface, and I think it would be hard to get anything to grow there without soil remediation.

The eastern trade winds are also a design factor as they come across the island. He mentioned a book titled Native trees for Community Forests, by Kenneth D Jones (Native Trees of St Croix and The US Virgin Islands). He has organized a website for the local growers, called [vi.locallygrown.net](http://vi.locallygrown.net). This site allows people to order different locally-grown and manufactured products, all in one spot.

Nate said that there is a plant for everything and a plant that counteracts that, so curiously I asked if there was

something for bee stings, Nate asked Shelly (Nate's friend from St. Thomas) to show me where the Noni plant was and to pick a leaf. She then passed it over an open flame in order to break down the cells in the leaf, then apply it to my hand comfortably with tape. We did the same thing for Vicki's arm. It is called the painkiller tree. Through the course of the day it seemed to pull some of the heat out of my hand and reduce the swelling.

Shelly took Steve, Nick, Z and I on a tour picking arugula and other greens for salads. Then we processed and bagged the final product for delivery to the consumer. She then took us through an area with an Indian camp and thatched hut. We heard and saw the horses that a farmer drops off on the property, and took a cross country route through the bush over barbed wire fence to meet up with the rest of the group to move on to our next location.

From here, we moved on to Whim plantation to meet with Sonia Dow. She gave us a history lesson on St Croix. For instance, in 1733 the slaves took over the island for six months. She also told of the 1848 revolts. The Bambula (which means secret meeting) and is the dance that seals

the meeting which can also be sealed with a blood oath. She told us how Maroon Ridge is a sacred site and how the slaves used it as a place to hide. She spoke of Peter von Scholten (emancipation), Ana Heguard (von Scholten mistress) and Carl Sorrow, a judge who took meticulous notes on genealogy. In 1927, citizenship was granted to St Croix residents, but they could not vote for the president. After we left the Whim plantation, we headed out to meet Olasee Davis by way of the Beast, a mountainous road which is used for Ironman triathlons on the island; it is marked by colorful drawings in the form of a dragon. Olasee, said that we would be taking our two hour hike along "the Bitch", "because that's what you're going to call it before you're done", he said. I decided it best not to go on this one, so Joseph and I walked down to the hotel, where locals can use the facilities and beaches without any hassle, kind of an agreement the hotels have with the local population. We found a great spot on the beach, right by the water, under a small roofed structure, to stay out of the sun. We began as small talk, about things like fishing, and how he would never go out on a boat with someone

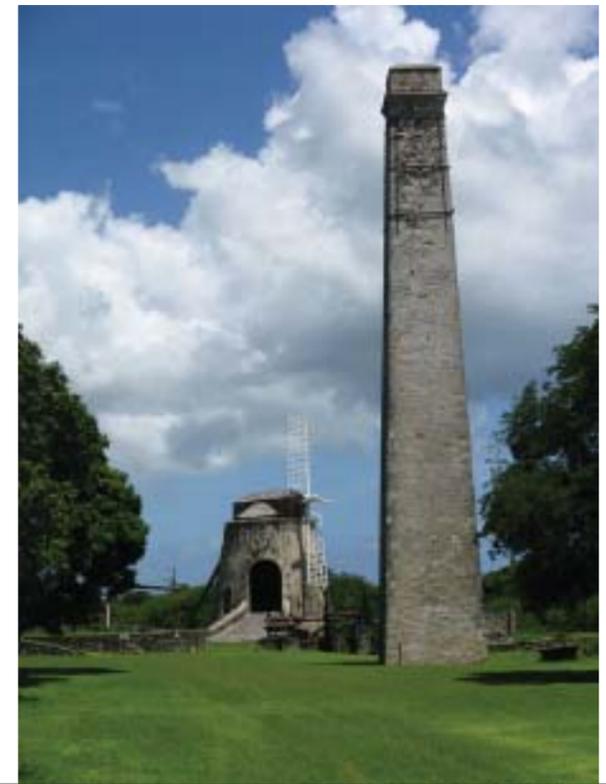
Nate Olive and classmates on his farm



Organic compost on Nate Olive's farm



Whim plantation



he really did not know. When I asked why, he replied the water around the island gets very deep very quickly and people can disappear. We talked politics, how McCain could not remember how many houses he owned, the war in Iraq and Afghanistan, and as we hit this topic it led into how the people from St Croix could go to war for the country, but are denied the right to vote for the president. I got the feeling that this made him feel like a second class citizen, even after living there for 30 years. But the look in his eyes revealed his toughness of character. He told me a story about how the NPS seized the parking lot in Christiansted, and how many of the local businesses suffered some by closing down, because of lost revenue due to the lack of parking in the area, Joseph told how Joel would have to take this decision to his grave, This is a major rift between the NPS and the local population, and I think the major issue that still lingers on the island.

After waiting nearly four hours for the group to return, we jumped into Joseph's van and headed back to the hotel for what turned out to be a fireworks display. Edgar Lake,

Sonia Dow at Whim Plantation

spoke about how history is not just a thousand years ago, its five minutes ago also. You cannot just randomly pick a place in time and call it history. This is another design question, as the NPS stated that one solution would be to restore the site to a certain time period. He also, in a roundabout way, told our group that we are now part of the history of the Cruzan people. Then Lionel brought up the story of how the NPS got the parking lot in Christiansted. Edgar added that the original deed was lost by the VI government, so it looked like they printed a new one and gave it to the NPS. This did not go over well with the locals. As the meeting ended I talked with Lionel, and told him how Joseph had just told me identical story just hours before. Lionel has a planning degree and works on the planning board on the island, so I think he really knows what is going on.

Thursday August 26, 2010, again another fabulous breakfast, this time with the addition of a local beef patty, kind of like a Jamaican patty, I liked them, plus all the other foods which became regular on our menu. We put together

Olasse Davis

a presentation for later in the day. After breakfast we traveled by van with Joseph, to the SARI site where the national guard was doing demolition work. We had a walking tour of the site and met some of the soldiers working on the site. From here we jumped back in the van and headed for Point Udall, the most eastern point of the island. Here they installed a monument for the year 2000, a kind of sundial made of stone. We had time to do sketches and take pictures. Some of the hills around us dropped over 700 or 800 feet down to the ocean below. Before and after Point Udall, we had a descriptive driving tour of the east end of the island. The visuals reveal how the vegetation was much lower to the ground, partially due to the fact that the entire area was cleared for sugar cane production and in part because of the winds that hit that end of the island. The next stop was the public meeting for the proposed Castle Nugent National Park on St. Croix. Upon entering the meeting, Joel referred to the meeting the night before, saying that he took responsibility for the parking lot incident, and stood behind his decision. As we were sitting

there Brian, from Virgin Kayaks came over and sat next to me. We started to talk, and he told me that he had been there for 17 years and that in then beginning he backed the NPS, but after seeing the way things were done he seemed to support the local government more now. As we were talking, Pedro "Pei" Cruz a candidate for Senate, entered the conversation, and he was impressed with Brian's knowledge of the SARI site and these two guys made a connection which could greatly help the development of the site. I hope that these two men have the chance to work on this project, as this Senator elect seems to be the local favorite.

We then presented to the JICMS our observations and findings so far. We asked the Deans to help us to collect data about the outreach programs. As the meeting came to a close, we gathered our things and hopped into the van and headed for Rumrunners on the waterfront in Christiansted. Here they had a spot where nightly tarpon feeding took place and great food in a mellow relaxed environment. After dinner, I walked over to an area to

(2nd from left) Michael, Karen and Zandy



sketch and just relax and listen to the water. While there I started talking to one of locals. Just as we began Z showed up, and asked if she could ask him some questions about the Salt River Site. He seemed to think that it was a good idea for a MREC center at the SARI site. He would like to see an aquarium built also, and he felt that this would bring in the locals as well as the tourists. I think that there is a great opportunity, to involve the local population in the development of the park, by even providing jobs, education, and perhaps an intervention at a young age could help to provide an identity for the local population. I feel that it is obviously our responsibility to work these factors into a community-wide program that blends with the NPS if we are to be successful in our design. He told me that he would be interested in jobs with the environment, and I think it's just that no one ever took the time to set up a program, I think if we do and the NPS follows through with it we have a great chance to change the lives of many locals (the children especially), for the better. I then thanked him for his time and for the interview, we shook hands and

Point Udall



went our separate ways. Friday August 27, 2010, again another great breakfast! Then we had a meeting with Frandelle Gerard from CHANT (Crucian Heritage and Nature Tourism), Frandelle told us of CHANT's goal of establishing heritage and nature as both the lead tourism product for St. Croix, and as the vehicle for sustainable community development. This was important to give Cruzan's an identity, which it seems many struggle with, as the island still flies seven different flags in many places. She hoped that we could help, and we will by incorporating this goal into our design. The locals don't often come right out and say things, possibly because we are outsiders, but I think it is also because the island has had so many different nations in charge. On our way to the airport, we followed Zandy down the new entrance drive for the park. Then we watched Hurricane planes landing and taking off until we boarded our plane to return to New Jersey. Now the challenge is to think about how we can integrate all we have learned into a cohesive park design for the NPS as well as the people of

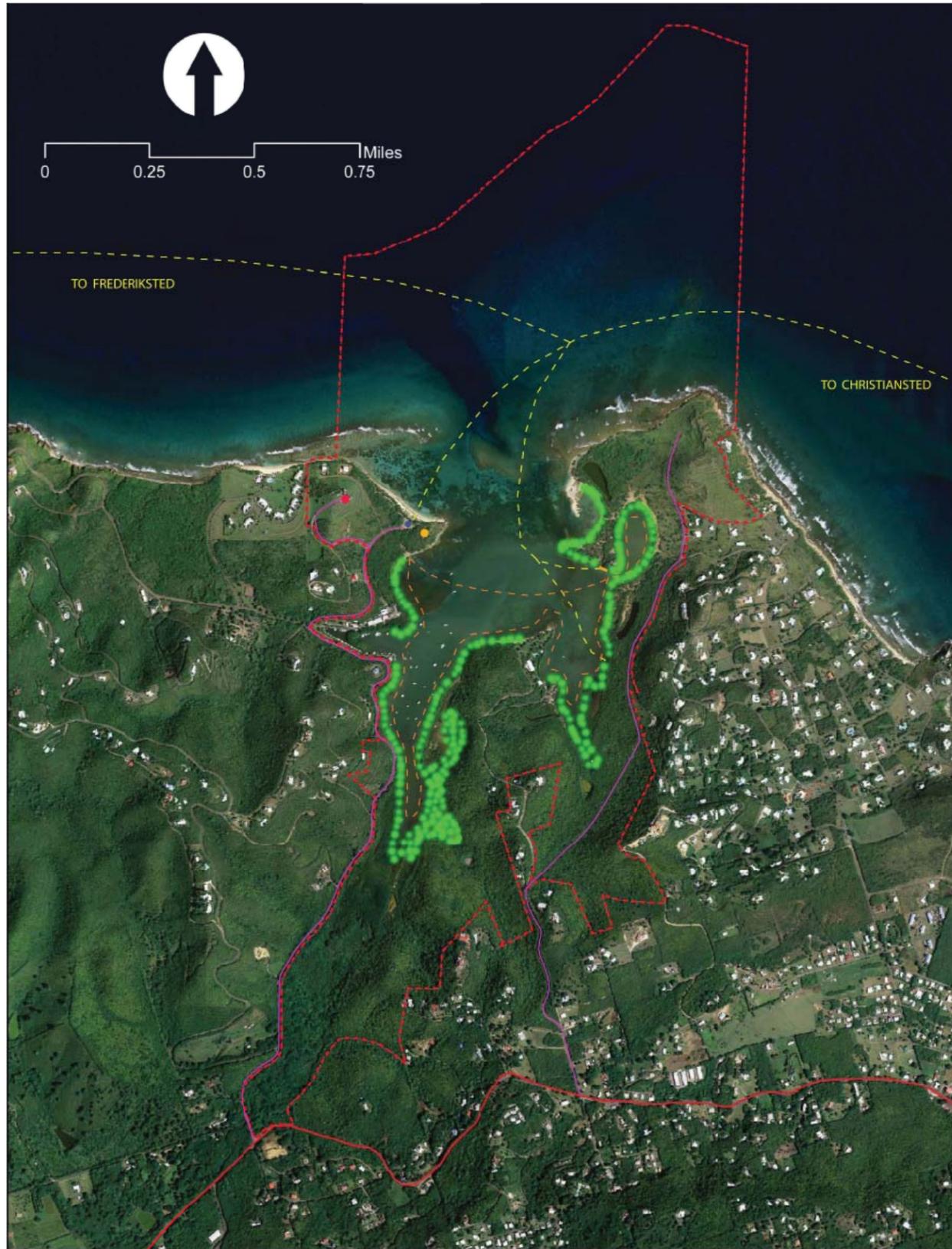
Buck Island (view from Point Udall)



St. Croix.

Christiansted at night





The western side of the site is home to the visitors center, a reconstructed Taino Ballcourt and village with the Triangular Dutch earthen fort called Fort Flamandor, along with a camping area, where kayaks can be launched. The Eastern side of the site will have a dormitory, main education building, cafe, archology field office, ferry landing, maintenance building, marine research labs, public boat launch, and camp grounds.

- |                      |  |               |  |
|----------------------|--|---------------|--|
| Park Road Access     |  | Boundary      |  |
| Mangrove Restoration |  | Ferry Routes  |  |
| Kayak Routes         |  | Route 75      |  |
| Fort Sale'           |  | Taino Village |  |
| Visitors Center      |  |               |  |



After development of the Eastern side of the Salt River Bay site, an intensive restoration of native plants in disturbed areas are designated by the plant restoration zones.

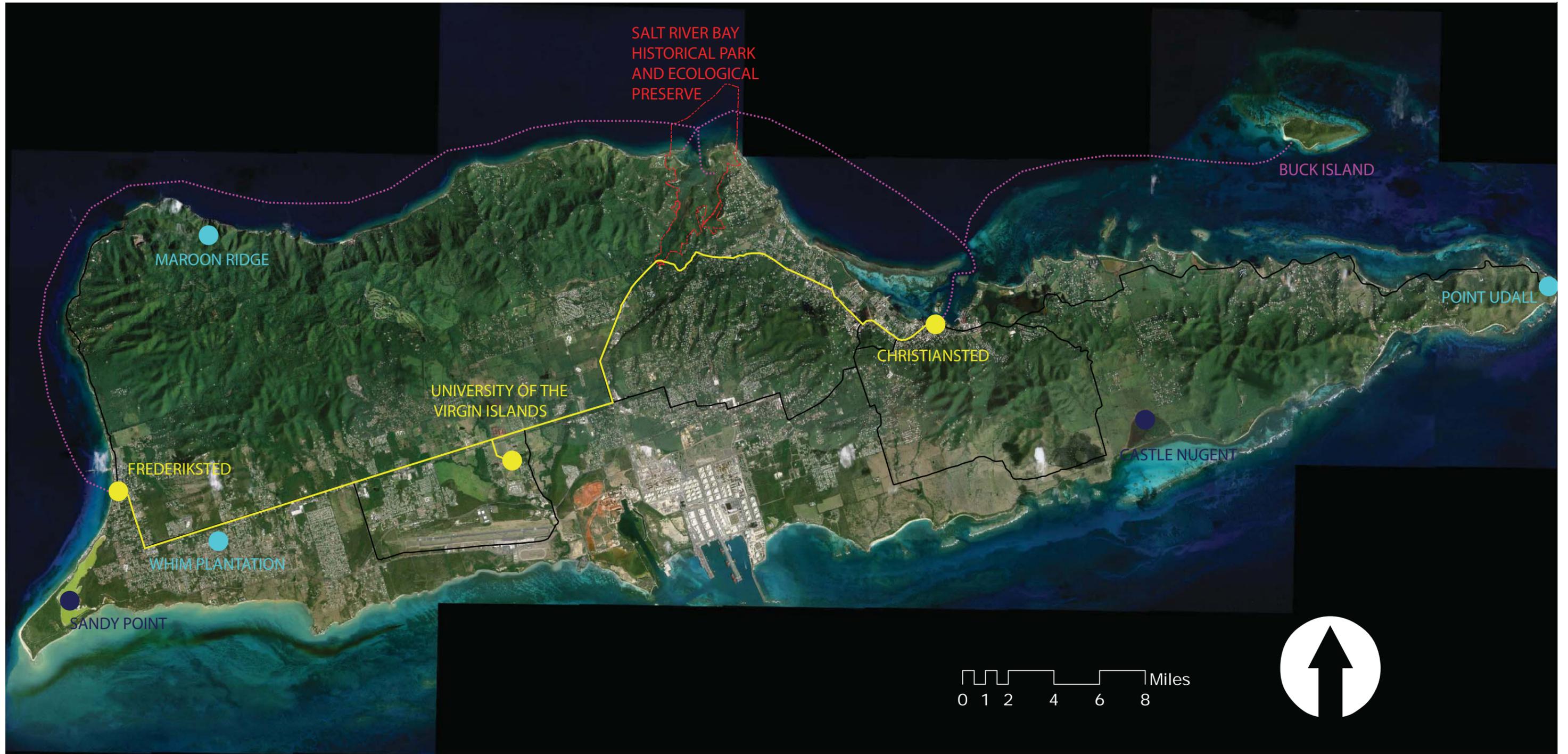
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|--|----------------------|--|----------------------|
|  | MANGROVE RESTORATION |  | SMALL TREES / SHRUBS |
|  | GROUND COVER         |  | TREES                |



This view to the north shows a sectional perspective of the proposed Marine Research facility on the left and the proposed maintenance building on the right. The Marine Research facility is placed directly on the water's edge with a concrete boat dock connected to the building. The building is fitted with cradle lifts to allow the research vessels to be piloted and stored inside the building in the case of extreme weather events, for ease of loading and unloading as well as addressing security concerns. Surrounding the facilities are mangroves, and other native plant communities, which is part of the ecological restoration plan. The maintenance facility has been placed above the twenty-two foot contour. This area was regraded, where cut from the building site to the north was brought in to adjust the grade to acceptable programmatic levels as well as allow the maintenance building to be placed in close proximity to the marine research facility.



This view to the west shows a sectional perspective of the main campus area. From left to right, not pictured is the archeology field office and lab, as this facility is set back slightly from the other buildings, as this is not meant for public use. Next in line is the Café where restrooms, food and drink complemented with fantastic views are available for public enjoyment. This building also forms a connection to hiking trails on site. Moving north, the Main building, where on the east side visitors information center, as well as labs, classrooms, office space and site security are centered. Moving further north, the last proposed building is the on-site dormitories for visiting students and scientist and possibly accommodations for visitors are found. This facility's location has a dynamic quality in its ability to become either public or a private area, depending on park needs. Native restorative plantings surround all of these structures to blend the new development while minimizing the impact on existing views. All of these buildings have dramatic views of the western side of the site, which include the new visitor's center and the Columbus landing site, which can be seen in this picture directly across from the dormitories.



The context map of the island shows how the existing highway system as well as a water taxi service can help to connect The Salt River Bay Historical Park and Ecological Preserve to the towns of Christiansted and Frederiksted as well as The University of The Virgin Islands. A separate dormitory would be located on the University campus to allow for students to do research at the Salt River Bay site while taking classes on campus. A Slavery / Archeology museum and collection would be placed on National Park Service land in the town of Christiansted where a parking area was removed and is currently a NPS owned park. This museum would be the prominent public façade of The Salt River Bay Historical Park and Ecological Preserve while promoting the revitalization of the town using the rich historical history of the site as well as the island as a tool of integration. These connections also allow for other parks and historical sites to be incorporated into the parks program. A proposed program of “Smart Green Streets” is also proposed, using native plant materials as a visual and physical connection throughout the island, as the proverbial fingers of The Salt River Bay Historical Park and Ecological Preserve hand.



As first look, at this map reveals an island adrift in a vast ocean, which helps us to perceive just how small the island of St. Croix is. But maybe the island is not just another island, maybe it is the shadow of history, of the people who have lived here, which dates date back thousands of years. Notice the chains of bondage, which from our visit, are still metaphorically very apparent as the local population still struggles with the dilemma of identity, as through the ages many cultures were forced upon the inhabitants. The flags of seven different nations that forced an identity on the islands inhabitants are represented by the shark silhouettes, a predator, which represents how the island was bought and sold without the population having a say in the matter. In the top left hand corner, a boat filled with the invasive guinea grass sneaks in behind the figure, altering the ecosystem negatively, another invading force effecting life on the island. Some significant sites, as well as historical sites are denoted, Whim Plantation which finds its place near the knee of the figure, The Cruzan Rum Distillery, located by the left foot, the airport, in front of the left foot, the HOVENSA oil refinery, east of the airport, The Columbus landing site, North of the oil refinery, Point Udall, the easternmost point of the United States. Route 70 is represented by a backbone, because it is the main road which connects the towns of Frederiksted and Christiansted. The prevailing winds are shown as a wind god blowing on the Columbus landing site, and the turtle symbols mark nesting areas for turtle populations. The remarkable thing to me is that it seems during the development of the island, many of the natural treasures such as turtle nesting sites, archeology sites, and historical sites have been protected and preserved, but again with limited local input. I see the people and the island as the same, so my emphasis in design is to celebrate the local tradition and culture, a design a place that is a blending of past history and culture as well as present day activities and culture, with education, connection and a sense of local ownership.