St. Croix East End Marine Park

Conceptual Plan for Interpretation January 2015







Prepared by: Wilderness Graphics, Inc. Tallahassee, Florida





REDISCOVER YOUR ISLAND!

Extensive collaboration between government agencies and the public gave rise in 2003 to the U.S. Virgin Islands' first territorial multiple-use marine park—the St. Croix East End Marine Park (STXEEMP). Encircling the eastern end of the island, the park extends along 17 miles of coastline from the high-water mark out to three miles offshore. Approximately 60-square-miles protected, including salt ponds, mangroves, beaches, seagrass beds, algal plains, coral reefs, and open ocean. The wealth of natural resources within the park includes species critical to island fisheries as well as many rare and endangered species. Park waters are also an important recreational resource for swimming, fishing, boating, and more. In recent years, eco-tourism has increased, bringing visitors to the East End for bird watching, kayaking, and the like. The park headquarters are housed on a prime piece of property that includes plantation-era ruins as well as pre-Columbian artifacts.

The mission of the STXEEMP is to manage these precious natural and cultural resources within the boundaries of the park for current and future generations of both residents and visitors. Following an initial charrette, Wilderness Graphics offers the following interpretive concept plan as a guide to the design and development of exhibits at the STXEEMP Visitor Center to help further this mission. State-of-the-art technology and design were incorporated to engage, inform, and inspire.

"In the end, we conserve only what we love. We will love only what we understand. We will understand only what we are taught."

—Baba Dioum



EXISTING CONDITIONS

Roadside and entrance signage is minimal, making wayfinding and identification of the site difficult. Upon entry, however, the site grounds are beautiful and welcoming. They include a large green space, a historic distillery building, ruins of a Great House, picnic tables, and outdoor amenities for camp and school group use. Trees presently obstruct the view to the ocean; however, plans have been made for removal/trimming. STXEEMP shares the property with the Department of Sports, Parks and Recreation.

The visitor center is housed in the downstairs floor of the historic distillery. The upstairs of the building serves as park offices. The front wall and two side walls are solid concrete. The interior of the space was recently renovated and is climate controlled; however, it is necessary to pressure treat all wood products to protect against termites. Vandalism and theft can be a problem, but a motion-sensor alarm system is installed. Windows are set into three of the four walls but may be covered to accommodate exhibits. A large folding door system presently divides the space in two. It is Wilderness Graphics' recommendation that the folding doors and accompanying soffit be removed. Though there are existing electrical wall outlets, it is understood that underfloor electric could be installed to accommodate a central exhibit. The park has plans to modify the back stoop to allow visitors to exit the visitor center and step out onto the park grounds. Designs have already been created to enhance the visitor's outdoor experience with walkways, seating, and more.



VISITOR PROFILE

It is anticipated that the new visitor center will attract tourists, possibly small groups brought directly from cruise ships on their way to Point Udall. Their stopovers may be limited in time. At least initially, the bulk of visitors will be locals and will include school groups and summer camps as well as individual local families. Dual use of the space may occur, but this plan assumes full use of the room for exhibits.

THEME

Themes express the principal messages of interpretive elements. They guide the design and content development process of exhibits and interpretive signage. The guiding theme for interpretation at the St. Croix East End Marine Park Visitor Center — Rediscover Your Island!

OBJECTIVE

The objective of the interpretive process is to foster a familiarity and emotional connection with the STXEEMP and the habitats and life it protects. This is turn will stimulate a sense of ownership, leading to the desire to conserve and protect these wondrous resources.



GOALS

Following the Visitor Center experience, visitors will:

- understand that STXEEMP is a public entity, which works together with many island groups.
- have a greater appreciation for the park's management and goals and the goals of island conservation, in general.
- be able to identify other St. Croix protected areas that they can visit and support.
- realize that STXEEMP provides opportunities for recreation, which they can enjoy.
- have a respect for the historic significance of the site and the island's unique history.
- know that STXEEMP supports a variety of life, including not only marine species but also birds and shoreline vegetation, and that many species are endangered.
- understand the importance of the health of marine systems to the island's ecology and economy, particularly fisheries.
- be aware of the delicate balance that the park works to maintain.
- feel a personal connection to the island and the STXEEMP and understand that their own actions can have a positive or negative impact.
- believe that they can contribute to the betterment of the park, island, and world and that their ideas are important.
- have enjoyed the exhibits and leave with a positive feeling about STXEEMP and its mission.

3

St. Croix East End Marine Park

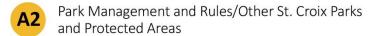


Conceptual Exhibit Plan

January 2015

Zone A - Welcome/About the Park





A3 Interactive Model of East End with Habitat Zones

Zone B - Living Things/What We Protect

B1 Electrical Screen and Donor Recognition

Floor-to-Ceiling Wall Graphics with Integrated Video Screen and Touch Screen

B3 3-Dimensional Shore Species Exhibit (includes nesting shorebirds and turtles)

Immersive "Underwater" Walk-Through, highlighting Park Marine Life

Zone C - People and the Park

Interactive Cause-and-Effect Magnetic Wall, highlighting Watershed Awareness

C2 Climate Change Panel

3-Dimensional Display of Recreational Opportunities in the Park

C4 Cultural History of the Park and Estate Great Pond

C5 Interactive Stewardship Solution Wall & Donation Box

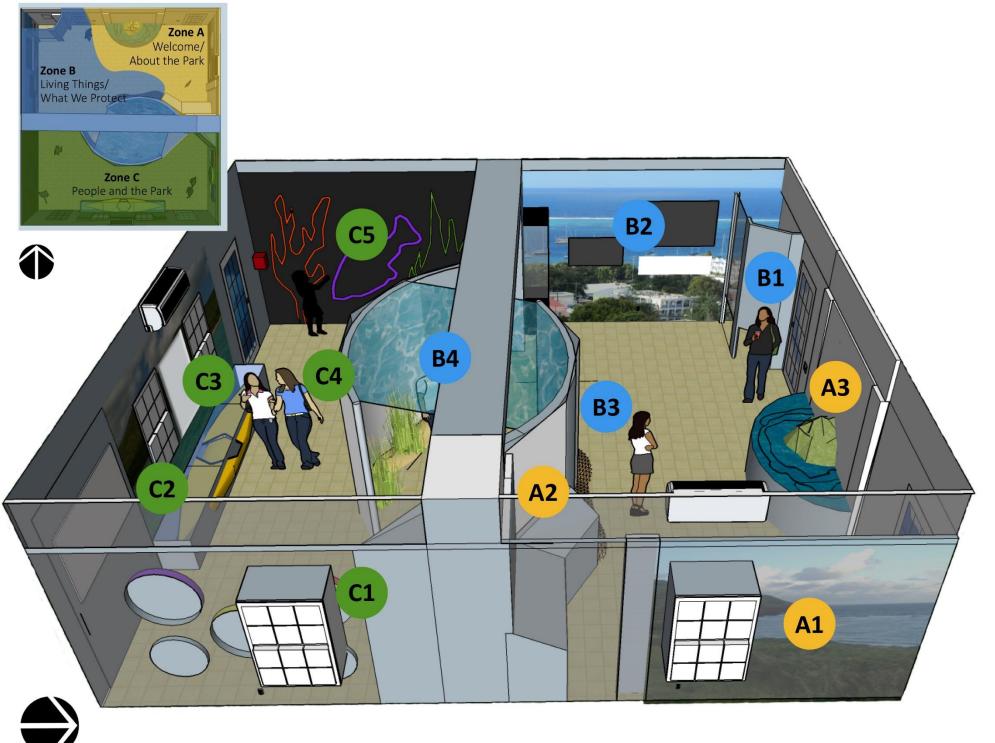


EXHIBIT DESCRIPTIONS

The following pages outline the approach for exhibits at the St. Croix East End Marine Park. These are general descriptions and layouts that will modified and refined as the project progresses. Images shown are placeholders only, as final images will be chosen during final designs. Similarly, content ideas are also fluid; interpretation will be finalized during the project design stage.

Note: An option to have one wall of the central exhibit movable to provide more space in the room for gatherings was discussed and is possible. However, this may compromise the design and content of the central exhibit somewhat. It is our recommendation that the room be a dedicated visitor center, with gatherings planned to accommodate the fully functioning displays in their established locations.

A1

Welcome to STXEEMP

Visible upon entry into the gallery, colorful wall graphics will welcome visitors to the park and visitor center. Three-dimensional logos of the park and its partners will add relief.

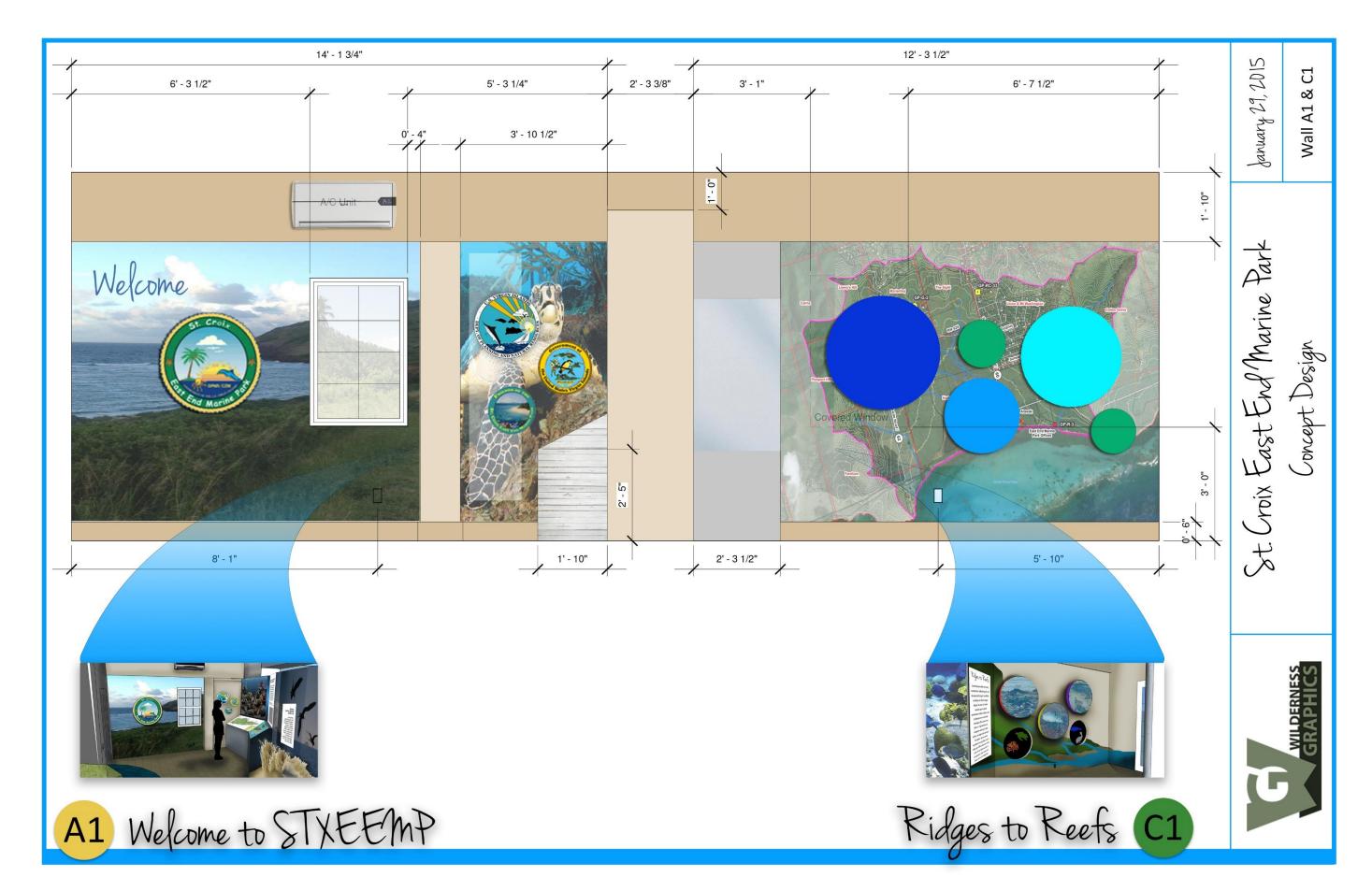
C1

Ridges to Reefs

This interactive wall will provide a hands-on opportunity for visitors to understand how human actions can negatively affect the environment. An adjacent graphic interpretive panel will introduce protecting our watersheds as well as instruct visitors on how to use the interactive.

A series of 3-dimensional magnetic wall panels will illustrate a variety of scenarios. Dramatic backlighting will enhance the display. Magnets of different species can be moved between the scenes. Upon opening each hinged panel, backlit printed acrylic will illuminate to reveal the correct impacted species and the devastating effects.

- Erosion/Runoff dredge and fill, vegetation removal, dirt roads, man-made shorelines
- Pollution dumping, litter, overwatering, agricultural, septic, oil
- Careless Recreation anchoring, grounding, speeding, propellers, discarding line, inexperienced divers
- Illegal Fishing Practices overfishing, out of season, gill netting, taking shorts, coral collection, turtle egg collection
- Magnets seagrass, coral, conch, lobster, grouper, parrotfish, sea turtle, pelican, ole wife



A2

Partnering to Protect

A video screen will display colorful looping underwater footage, drawing visitors to the introductory display. A welcome message from the governor/commissioner could be included. Interpretation will present St. Croix conservation in general and STXEEMP park management in particular. The timeline of how the park came into existence could also be discussed. An angled console will provide space for further interpretation, including a St. Croix map indicating protected areas.

Content Ideas:

- St. Croix parks and protected areas
- Establishment of the park
- STXEEMP management

B3

Sharing Our Shores

Dramatic wall graphics and 3-dimensional low relief will simulate shoreline habitats, drawing visitors around the faceted wall and into the walk-through exhibit. Images and interpretation will introduce shore species, including sea turtles and endangered species.

- Salt ponds
- Beach habitat
- Mangrove habitat
- Nesting sea turtles green, hawksbill, leatherback
- Nesting seabirds shearwaters, tropicbirds, boobies, pelicans, frigatebirds, gulls, terns, "Hope" the whimbrel
- Endangered Species

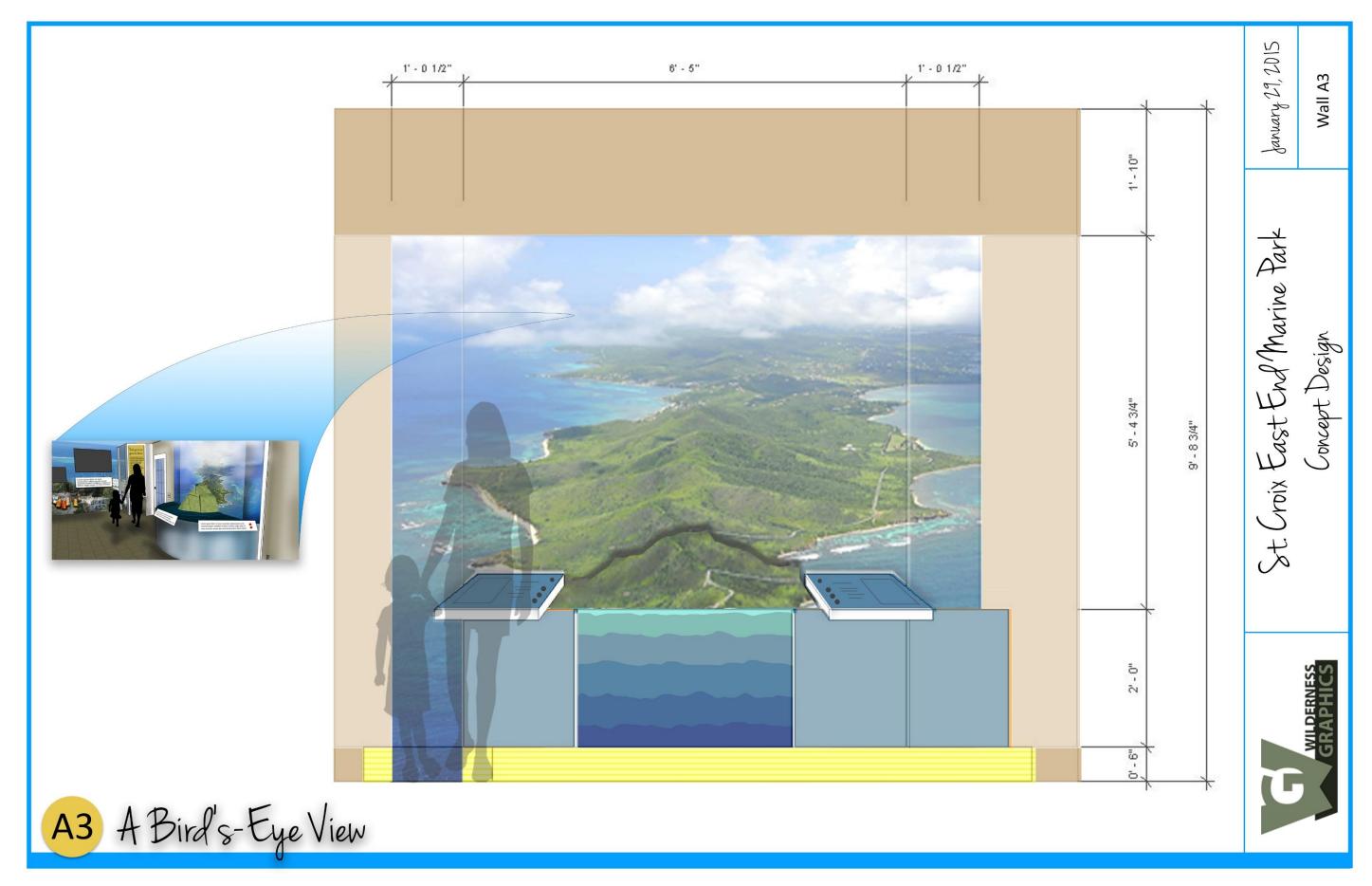


A3

A Bird's-Eye View

A 3-dimensional, topographic/bathymetric map model will give visitors a visual overview of the park and the depths of the waters it protects. Dramatic wall graphics will add to the scene. Associated push-button consoles will provide interpretation and allow visitors to highlight park zones and habitats with LED lights.

- Habitats
 - Beach
 - Mangrove/Salt ponds
 - Seagrass
 - Algal plains
 - Patch Reef
 - Colonized Bedrock/Sand
 - Coral reef
 - Open ocean
- Park Zones
 - No Take
 - Recreation
 - o Turtle Wildlife
 - Open Fishing
- Rules and regulations



B1

Electrical Screen and Donor Recognition

A faceted structure will cover the existing electrical panel. Angled slightly away from the door, one surface could display a "Thank You Donors" panel. A retractable printed scrim will cover the adjacent side, allowing access to the electrical box.

Content Ideas:

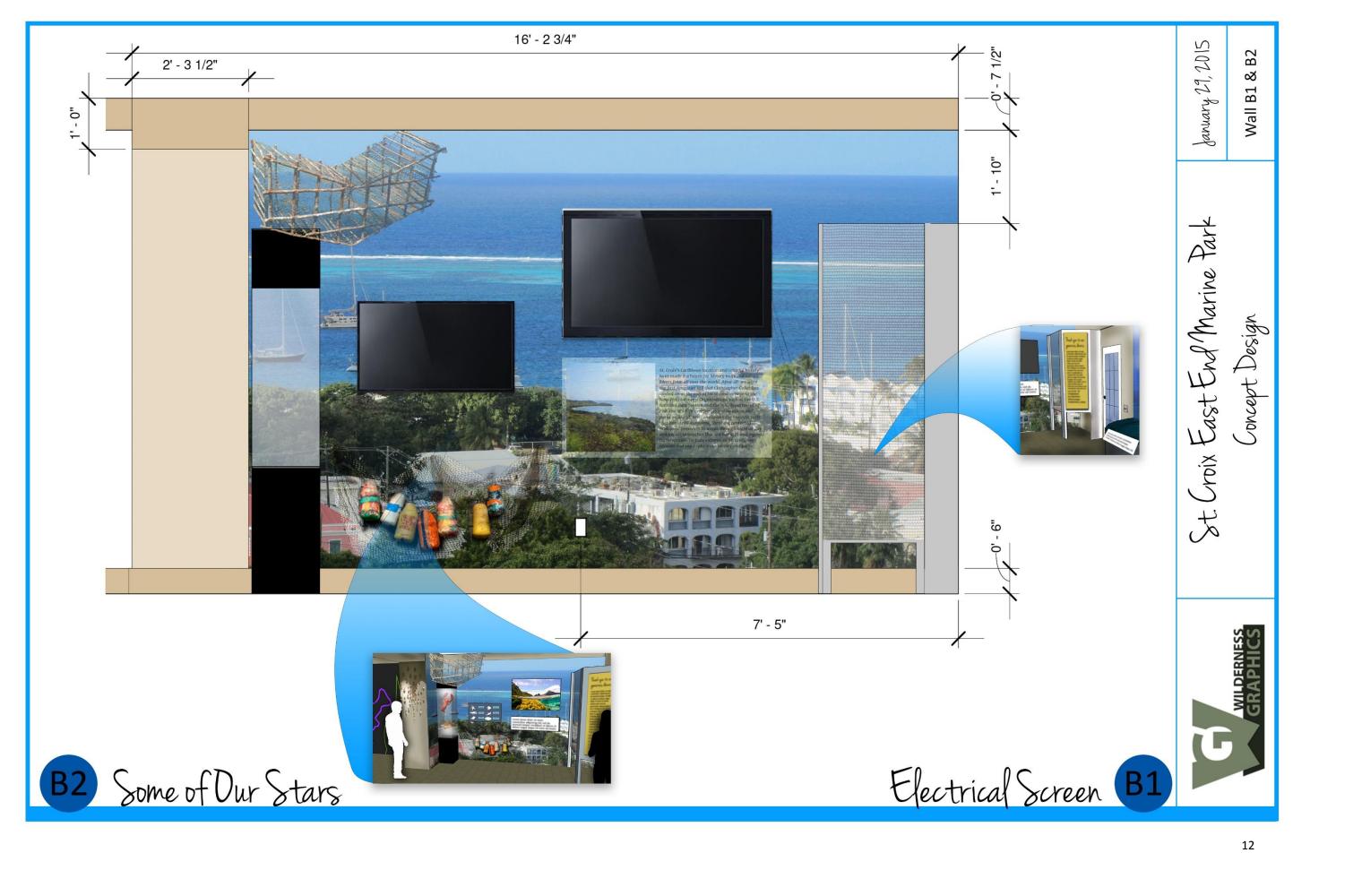
Donor list

B2

Some of Our Stars

Floor-to-ceiling wall graphics with an integrated video screen and touchscreen will highlight St. Croix fisheries, Lang Bank, and some of the more important fisheries species. Digital media players would allow content to be easily changed or updated with new or existing productions. A corner glass case could display existing lobster and conch shells, emphasizing the legal size limits. An existing fish trap model and other fishery-related objects could also be displayed here.

- Grouper
- Snapper
- Parrotfish
- Lobster
- Conch
- Triggerfish



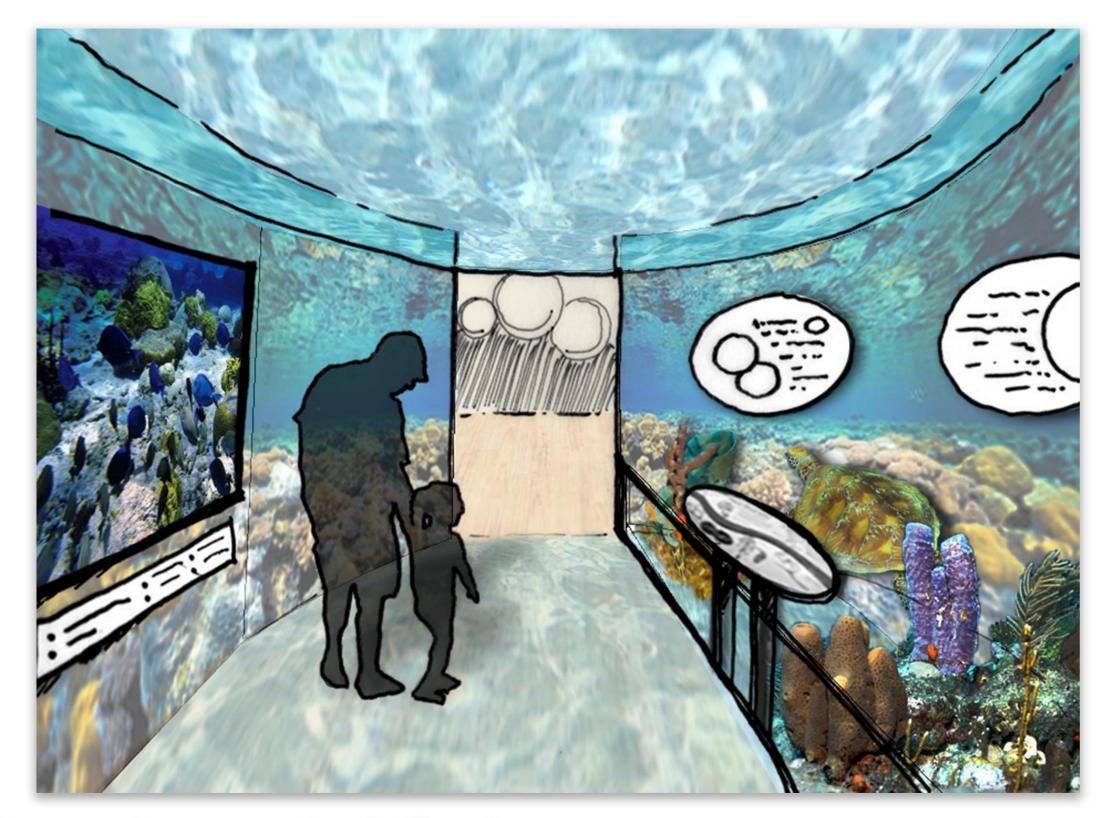
B4

Immersive "Underwater" Walk-Through

Central to the exhibit space, a pair of faceted walls will be capped with a thin layer of acrylic made to resemble the surface of the sea. Refracted light through the acrylic, as well as a water light projector, will create the illusion of being submerged in the protected waters of the marine park. Curved graphic backdrops, 3-dimensional models, and depthscapes will complete the scene, taking visitors from the shore through the park's marine habitats. Emphasis will be placed on fish habitats in particular. Ambient music/sounds of the ocean will immerse the visitor in the scene. Wall graphics, changeable panels, and video (possibly with a live feed) will provide interpretation on the habitats and protected and endangered species.

- Seagrass Beds
- Algal Plains/Patch Reef
- Coral Reef
- Open Ocean
- Plankton
- Acropora program
- Endangered Species

St. Croix East End Marine Park



Immersive "Underwater" Walk-Through

C2 Climate Change

The left-hand door on the back wall will be covered to direct visitors to a single exit door and the donation box. An informative panel will present climate change. Interpretation will discuss the devastating effects on our marine systems and the park in particular. Connecting to the adjacent display on human impacts, ideas on what we can all do to help will be included.

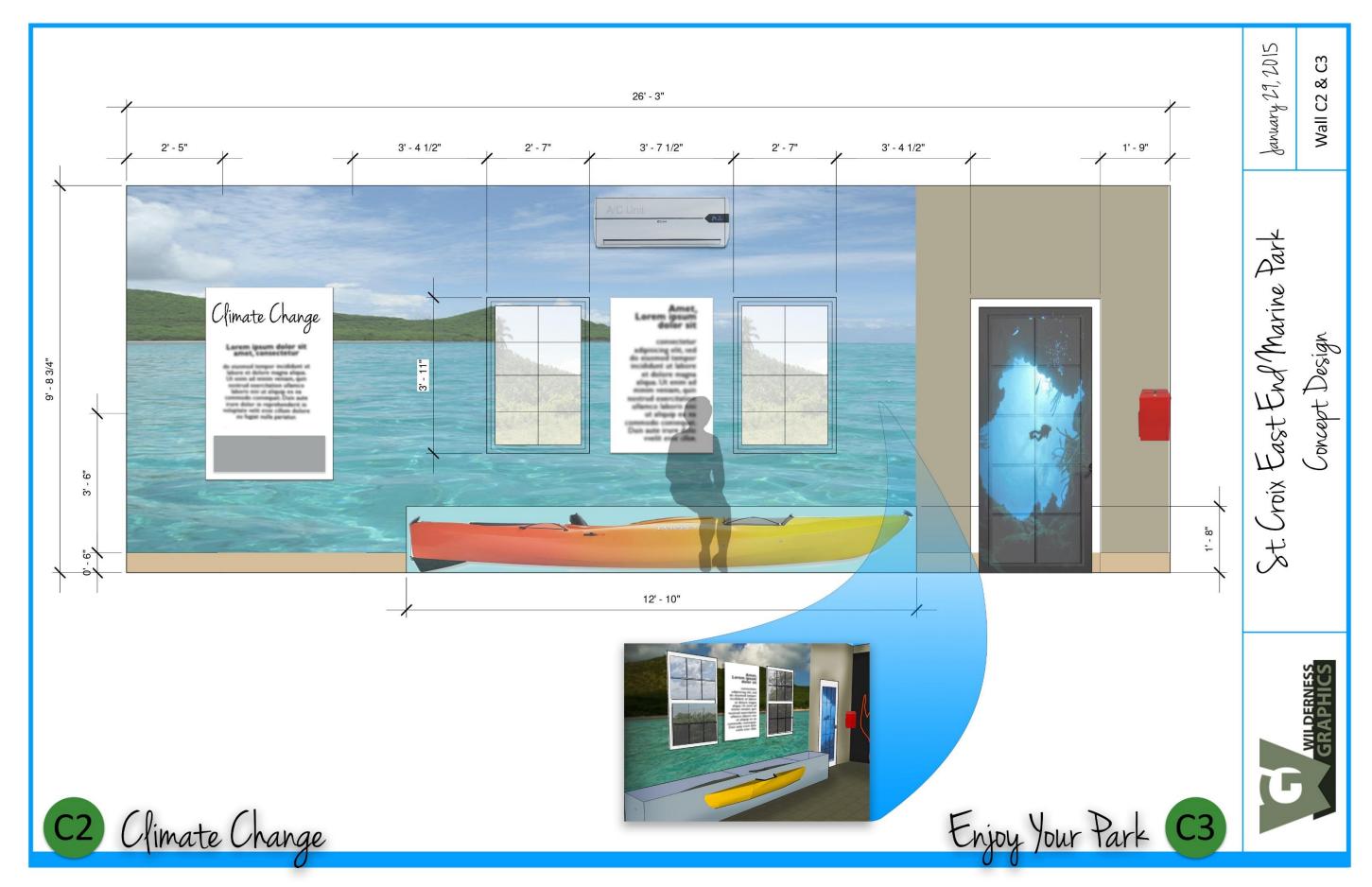
Content Ideas:

- Climate Change
- Effects on STXEEMP
- You Can Help

C3 Enjoy Your Park!

Colorful floor-to-ceiling graphics surrounding the back wall windows will present the wealth of recreational opportunities enjoyed within the park—right outside! Graphics will continue across the exit door with a colorful scrim. The importance of keeping the waters and shoreline healthy for all to enjoy will be included. Three-dimensional objects will bring the interpretation to life. A long "kayak" bench, featuring a section of an actual boat, will provide a resting spot as well as staff storage.

- Fishing line and diving
- Scuba Diving/Snorkeling/Swimming
- Kayaking/Canoeing/Paddle Boarding
- Motor Boating/Sailing
- Wind Surfing/Kite Boarding/Parasailing
- Jet Skiing
- Camping

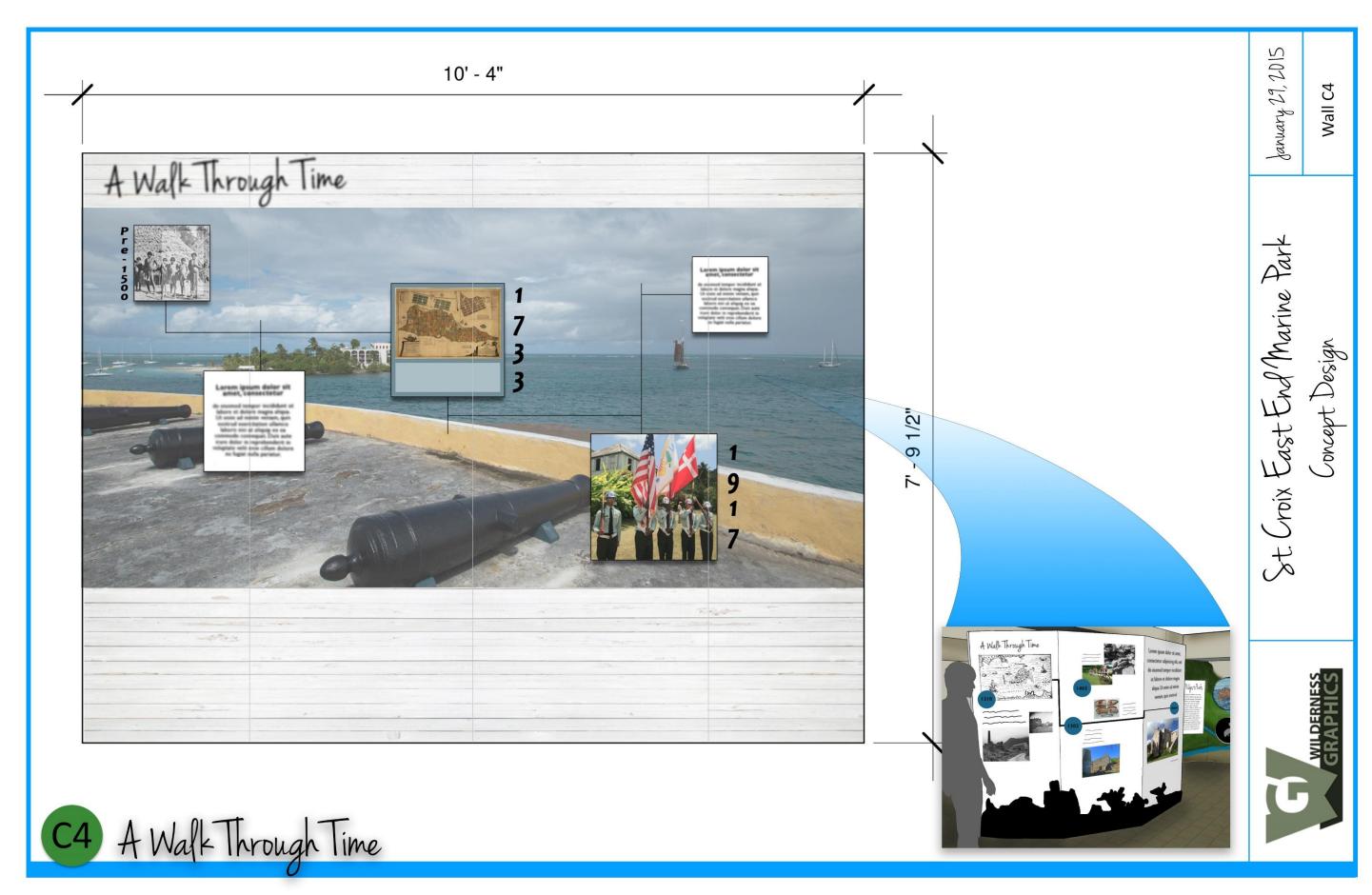


C4

A Walk Through Time

Wall graphics, historic images, and interpretation will illustrate the important history of the site, detailing demographic changes over time, showing how the park came into existence and changes in park use. Visitors will take a walk through time as they follow the engaging timeline spanning this faceted wall. This "timely" display will also be viewable from the kayak bench.

- Pre-Columbian history and archaeology
- Danish Great Pond plantations
 - o 1770s cotton
 - o 1800s sugar
- 1900s U.S. cattle
- Camp Arawak
- Public recreation and education
- Creation of the STXEEMP



C5

Interactive Stewardship Solution Wall and Donation Box

Near the gallery exit, a magnetic chalkboard wall will allow visitors to offer ideas on how they can contribute to the conservation of resources and protection of the park. A few ideas could be provided and occasionally changed to prompt interest and thought. In addition to chalk, chalk markers, removable with water, could be used to avoid chalk dust as well as accidental erasures. Periodically, visitors' ideas could be collected and shared via website or outreach. The board could also be used for postings and artwork display held with magnets.

An adjacent donation box near the exit door will allow visitors to help directly by making a monetary contribution to the park.

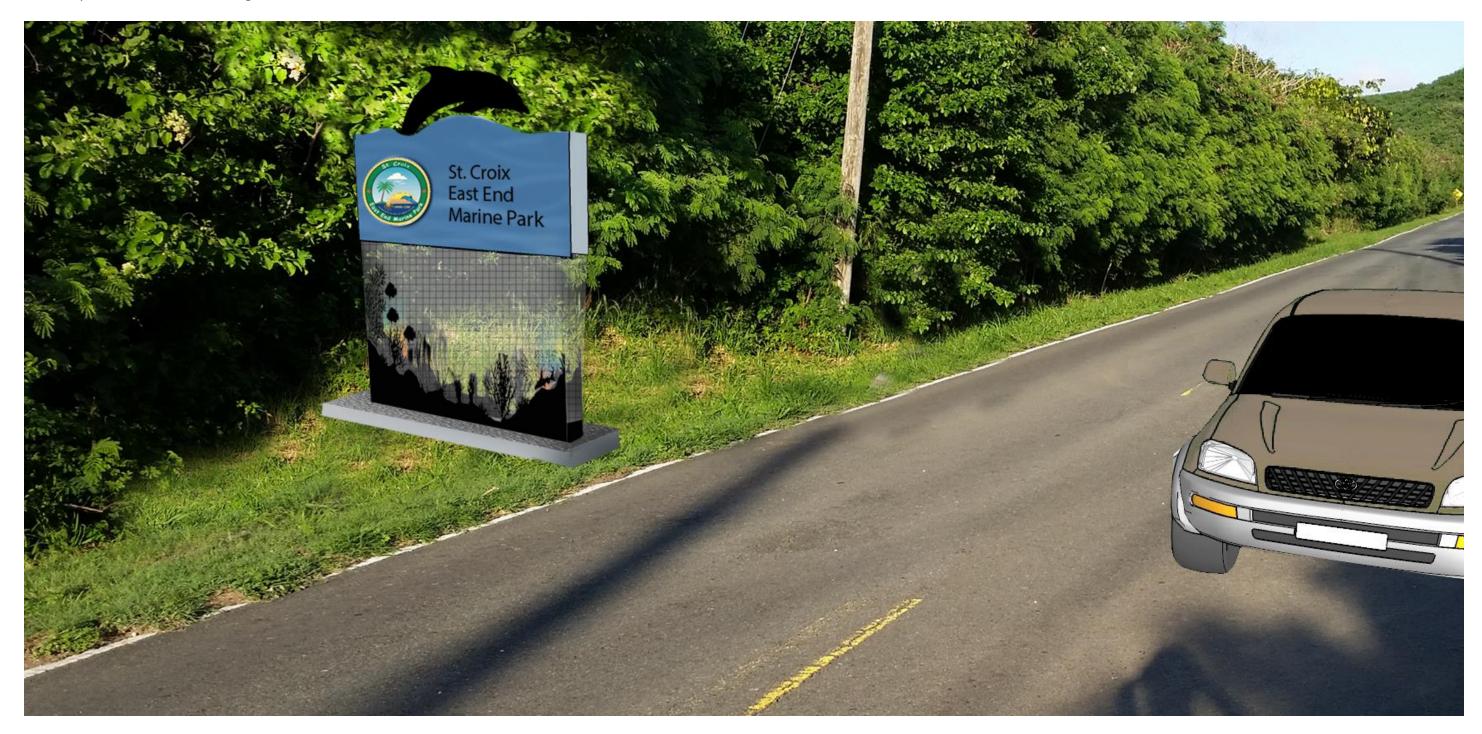


WELCOME SIGNAGE

Though not within the scope of this plan, additional outdoor signage is recommended for the future, including a visitor center entrance sign and outdoor interpretive signage.

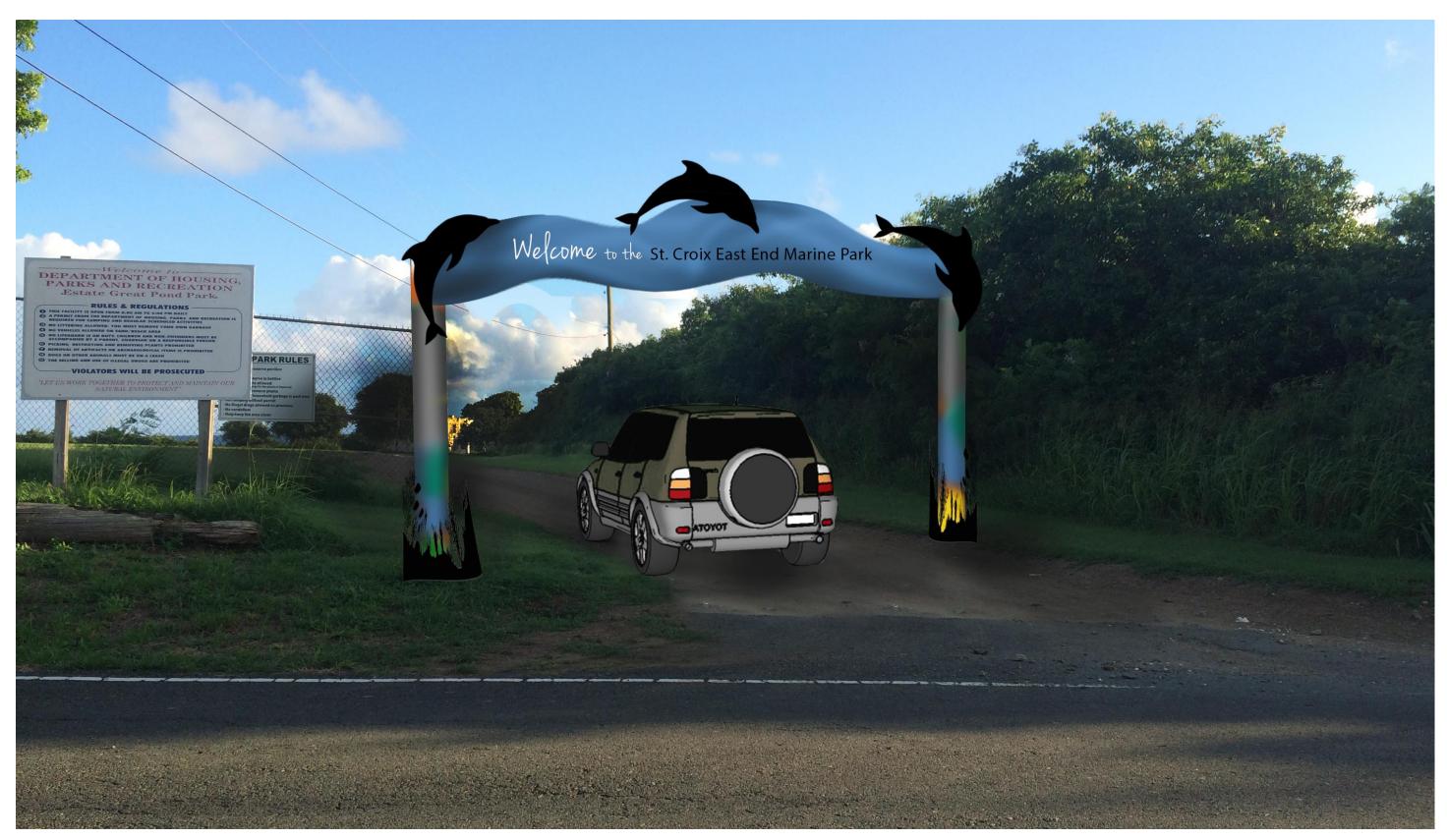
Street Marquee

A two-sided metal mesh frame structure on a concrete slab will be visible by oncoming traffic from both directions. A two-sided printed panel will identify the site as the St. Croix East End Marine Park. Metal powder-coated silhouettes of local marine species will enhance the sign.



Main Entry Arch

Two metal colorfully powder-coated posts will support a two-sided, overhead panel welcoming visitors to the park. Metal, powder-coated silhouettes of local species will decorate both the posts and panel.



BUDGET

Following please find our proposed budget to provide exhibits as described in this plan. As designs are conceptual at this stage, this is a flexible outline; amounts may be moved between units to achieve the optimum visitor experience.

Phased implementation is also an option. Until available funds are determined, it is difficult to effectively plan, however. Economies of scale should be considered. Shipping is perhaps the biggest factor, as it is most cost effective to send a full container. Each phase also requires a separate installation, adding to the overall cost. Video production is one of the easier elements to incorporate at a later date. It is easily uploaded onto previously installed equipment, which could display existing footage until such time. With phasing in mind, we have detailed pricing for each component of each display. This will allow STXEEMP to pick and choose what displays and/or components of displays can be initially funded. As more support becomes available, a second phase could add remaining displays and/or components.

A1	<u>Description</u>	<u>Qty</u>	Sub	<u>total</u>	<u>Unit Estimate</u> \$3,500.00
Welcome to STXEEMP					
Visible upon entry into the gallery, colorful wall graphics will welcome visitors to the park and visitor center. Three-dimensional logos of the park and its partners will add relief.					
	Background Image	1	\$	1,800.00	
	Background Image	1	\$	900.00	
	Printed Logos	4	\$	800.00	

A2 \$102,566.25

Partnering to Protect

A video screen will display colorful looping underwater footage, drawing visitors to the introductory display. A welcome message from the governor/commissioner could be included. Interpretation will present St. Croix conservation in general and STXEEMP park management in particular. The timeline of how the park came into existence could also be discussed. An angled console will provide space for further interpretation, including a St. Croix map indicating protected areas.

		Background Image	1	\$ 625.00
Con	tent Ideas:	Video Player	1	\$ 650.00
•	St. Croix parks and protected areas	Video Screen	1	\$ 2,500.00
•	Establishment of the park	Video production	1	\$ 6,500.00
•	STXEEMP management	MM Panel	2	\$ 2,000.00
		Consoles	2	\$ 5,000.00

A3 \$36,570.00

A Bird's-Eye View

A 3-dimensional, topographic/bathymetric map model will give visitors a visual overview of the park and the depths of the waters it protects. Dramatic wall graphics will add to the scene. Associated push-button consoles will provide interpretation and allow visitors to highlight park zones and habitats with LED lights.

Content Ideas:

- Habitats
- Beach
- Mangrove/Salt ponds
- Seagrass
- Algal plains
- Patch Reef
- o Colonized Bedrock/Sand
- Coral reef
- Open ocean
- Park Zones
- No Take
- Recreation
- Turtle Wildlife
- Open Fishing
- Rules and regulations

1	\$	2,520.00
1	\$	650.00
2	\$	1,500.00
400	\$	3,400.00
1	\$	6,500.00
2	\$	7,000.00
1	\$	3,500.00
1	\$	11,500.00
	1 2 400 1 2	1 \$ 2 \$ 400 \$ 1 \$ 2 \$ 1 \$

B1

Electrial Screen and Donor Recognition

A faceted structure will cover the existing electrical panel. Angled slightly away from the door, one surface could display a "Thank You Donors" panel. A retractable printed scrim will cover the adjacent side, allowing access to the electrical box.

Content Ideas: Donor List

Agam frame 1 \$ 2,500.00 MM Panel 2 \$ 3,000.00

\$5,500.00

B2 \$28,630.00

Some of Our Stars

Floor-to-ceiling wall graphics with an integrated video screen and touchscreen will highlight St. Croix fisheries, Lang Bank, and some of the more important fisheries species. Digital media players would allow content to be easily changed or updated with new or existing productions. A corner glass case could display existing lobster and conch shells, emphasizing the legal size limits. An existing fish trap model and other fishery-related objects could also be displayed here. Owner provided fish trap.

	Background Image	1	\$ 4,480.00
Content Ideas:	LCD TV	1	\$ 2,500.00
• Grouper	Player	1	\$ 650.00
 Snapper 	Video Production	1	\$ 8,500.00
Parrotfish	Touchscreen	1	\$ 3,500.00
Lobster	Programming	1	\$ 2,500.00
• Conch	MM Panel	2	\$ 2,000.00
 Triggerfish 	Case W/Vitrine	1	\$ 4,500.00

B3 \$15,591.25

Sharing Our Shores

Dramatic wall graphics and 3-dimensional low relief will simulate shoreline habitats, drawing visitors around the faceted wall and into the walk-through exhibit. Images and interpretation will introduce shore species, including sea turtles and endangered species.

Content Ideas:

Salt ponds

Beach habitat

- Mangrove habitat
- Nesting sea turtles green, hawksbill, leatherback
- Nesting seabirds shearwaters, tropicbirds, boobies, pelicans,

frigatebirds, gulls, terns, "Hope" the whimbrel

Endangered Species

Background Image	1	\$	1,800.00
Silhouettes	4	\$	4,500.00
Depthscape	1	\$	8,291.25
MM Panel	1	ς	1 000 00

\$94,490.00

Immersive "Underwater" Walk-Through

Central to the exhibit space, a pair of faceted walls will be capped with a thin layer of acrylic made to resemble the surface of the sea. Refracted light through the acrylic, as well as a water light projector, will create the illusion of being submerged in the protected waters of the marine park. Curved graphic backdrops, 3-dimensional models, and depthscapes will complete the scene, taking visitors from the shore through the park's marine habitats. Emphasis will be placed on fish habitats in particular. Ambient music/sounds of the ocean will immerse the visitor in the scene. Wall graphics, changeable panels, and video (possibly with a live feed) will provide interpretation on the habitats and protected and endangered species.

- Seagrass Beds
- Algal Plains/Patch Reef
- Coral Reef
- Open Ocean
- Plankton
- Acropora program
- Endangered Species

Background Image	2	\$ 14,080.00
Curved LCD TV	1	\$ 6,500.00
Player	1	\$ 650.00
Video Production	1	\$ 8,500.00
Sound System	1	\$ 2,500.00
Touchscreen	1	\$ 3,500.00
Programming	1	\$ 2,500.00
Audio Production	1	\$ 2,500.00
MM Panel	2	\$ 2,000.00
Wall structures	2	\$ 13,000.00
Ceiling Structure w/film	1	\$ 5,500.00
Short Throw Projector	1	\$ 2,500.00
Player	1	\$ 650.00
Video Production	1	\$ 2,500.00
Depthscape	1	\$ 12,060.00
Angled Panel	1	\$ 3,250.00
Rail System	1	\$ 1,500.00
Printed Flooring	1	\$ 10,800.00

C1 \$6,088.75

Ridges to Reefs

This interactive wall will provide a hands-on opportunity for visitors to understand how human actions can negatively affect the environment. An adjacent graphic interpretive panel will introduce protecting our watersheds as well as instruct visitors on how to use the interactive.

A series of 3-dimensional magnetic wall panels will illustrate a variety of scenarios. Dramatic backlighting will enhance the display. Magnets of different species can be moved between the scenes. Upon opening each hinged panel, backlit printed acrylic will illuminate to reveal the correct impacted species and the devastating effects.

- Erosion/Runoff dredge and fill, vegetation removal, dirt roads, man-made shorelines
- Pollution dumping, litter, overwatering, agricultural, septic, oil
- Careless Recreation anchoring, grounding, speeding, propellers, discarding line, inexperienced divers
- Illegal Fishing Practices overfishing, out of season, gill netting, taking shorts, coral collection, turtle egg collection
- Magnets seagrass, coral, conch, lobster, grouper, parrotfish, sea turtle, pelican, ole wife

Background Image MM Panel		\$ \$	1,800.00 1,000.00
Lighting	1	\$	1,500.00
Large Bubbles	3	\$	1,395.00
Small Bubbles	2	\$	393.75

C2 \$7,600.00

Climate Change

The left-hand door on the back wall will be covered to direct visitors to a single exit door and the donation box. An informative panel will present climate change. Interpretation will discuss the devastating effects on our marine systems and the park in particular. Connecting to the adjacent display on human impacts, ideas on what we can all do to help will be included.

- Climate Change
- Effects on STXEEMP
- You Can Help

Background Image	1	\$ 5,600.00
MM Panel	2	\$ 2,000.00

C3 \$10,620.00

Enjoy Your Park!

Colorful floor-to-ceiling graphics surrounding the back wall windows will present the wealth of recreational opportunities enjoyed within the park—right outside! Graphics will continue across the exit door with a colorful scrim. The importance of keeping the waters and shoreline healthy for all to enjoy will be included. Three-dimensional objects will bring the interpretation to life. A long "kayak" bench, featuring a section of an actual boat, will provide a resting spot as well as staff storage.

Content Ideas:

- Fishing line and diving
- Scuba Diving/Snorkeling/Swimming
- Kayaking/Canoeing/Paddle Boarding
- Motor Boating/Sailing/Jet Skiing
- Wind Surfing/Kite Boarding/Parasailing
- Camping

Case Seat W/Boat	1	\$ 8,500.00
Door Image	1	\$ 1,120.00
MM Panel	1	\$ 1.000.00

C4 \$8,740.00

A Walk Through Time

Wall graphics, historic images, and interpretation will illustrate the important history of the site, detailing demographic changes over time, showing how the park came into existence and changes in park use. Visitors will take a walk through time as they follow the engaging timeline spanning this faceted wall. This "timely" display will also be viewable from the kayak bench.

Content Ideas:

- Pre-Columbian history and archaeology
- Danish Great Pond plantations
- o 1770s cotton
- o 1800s sugar
- 1900s U.S. cattle
- Camp Arawak
- Public recreation and education/Creation of the STXEEMP

Background Image 1 \$ 6,240.00 MM Panel 5 \$ 2,500.00 C5 \$5,530.00

Interactive Stewardship Solution Wall and Donation Box

Near the gallery exit, a magnetic chalkboard wall will allow visitors to offer ideas on how they can contribute to the conservation of resources and protection of the park. A few ideas could be provided and occasionally changed to prompt interest and thought. In addition to chalk, chalk markers, removable with water, could be used to avoid chalk dust as well as accidental erasures. Periodically, visitors' ideas could be collected and shared via website or outreach. The board could also be used for postings and artwork display held with magnets.

An adjacent donation box near the exit door will allow visitors to help directly by making a monetary contribution to the park.

 Magnetic Image
 1
 \$ 5,280.00

 Magnetic Tools
 1
 \$ 125.00

 Donation Box
 1
 \$ 125.00

WELCOME SIGNAGE

Street Marquee \$12,500.00

A two-sided metal mesh frame structure on a concrete slab will be visible by oncoming traffic from both directions. A two-sided printed panel will identify the site as the St. Croix East End Marine Park. Metal powder-coated silhouettes of local marine species will enhance the sign.

Main Entry Arch \$17,500.00

Two metal colorfully powder-coated posts will support a two-sided, overhead panel welcoming visitors to the park. Metal, powder-coated silhouettes of local species will decorate both the posts and panel.

Total Exhibit Budget \$355,426.25
One Time shipping fee \$10,500.00
One time installation \$17,500.00
Grand Total \$383,426.25