MAJOR LAND PERMIT MODIFICATION

Environmental Assessment Report

RANDALL "DOC" JAMES RACETRACK RECONSTRUCTION

AIRPORT ROAD, ST. CROIX, U.S.V.I.

Modification to Existing Permit No. CZX-11-18(L)

Originally Submitted: April 12, 2023

Revised: May 12, 2023

Prepared for:

VIGL OPERATIONS, LLC
1044 Queen Cross Street
Christiansted, VI 00820

Prepared by:

Tysam Tech, LLC
9139 Castle Coakley
Bay 7 Suite 1
Christiansted, VI 00820

Tysam Tech, LLC

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1.00 NAME AND ADDRESS OF APPLICANT

VIGL OPERATIONS, LLC

Mailing Address:
1044 Queen Cross Street
Christiansted, VI 00820

Physical Address:
Section 5, Alexander Hamilton Field
Estate Mannings Bay, Prince Quarter
St. Croix, USVI

2.00 LOCATION OF PROJECT

The project is located at the following physical address:

Section 5, Alexander Hamilton Field
Estate Mannings Bay, Prince Quarter
St. Croix, USVI

The project is located at the estate of Mannings Bay in Frederiksted, St. Croix. The project site is located at 17°41'51.2"N 64°47'26.9"W along the South Shore due South of the Henry E. Rohlsen Airport. The Location and Agency Review Map in Figure 2.00.1 below and the Vicinity Map in Figure 2.00.2 below establish the areas of Coastal Zone Management (CZM) first tier jurisdiction.

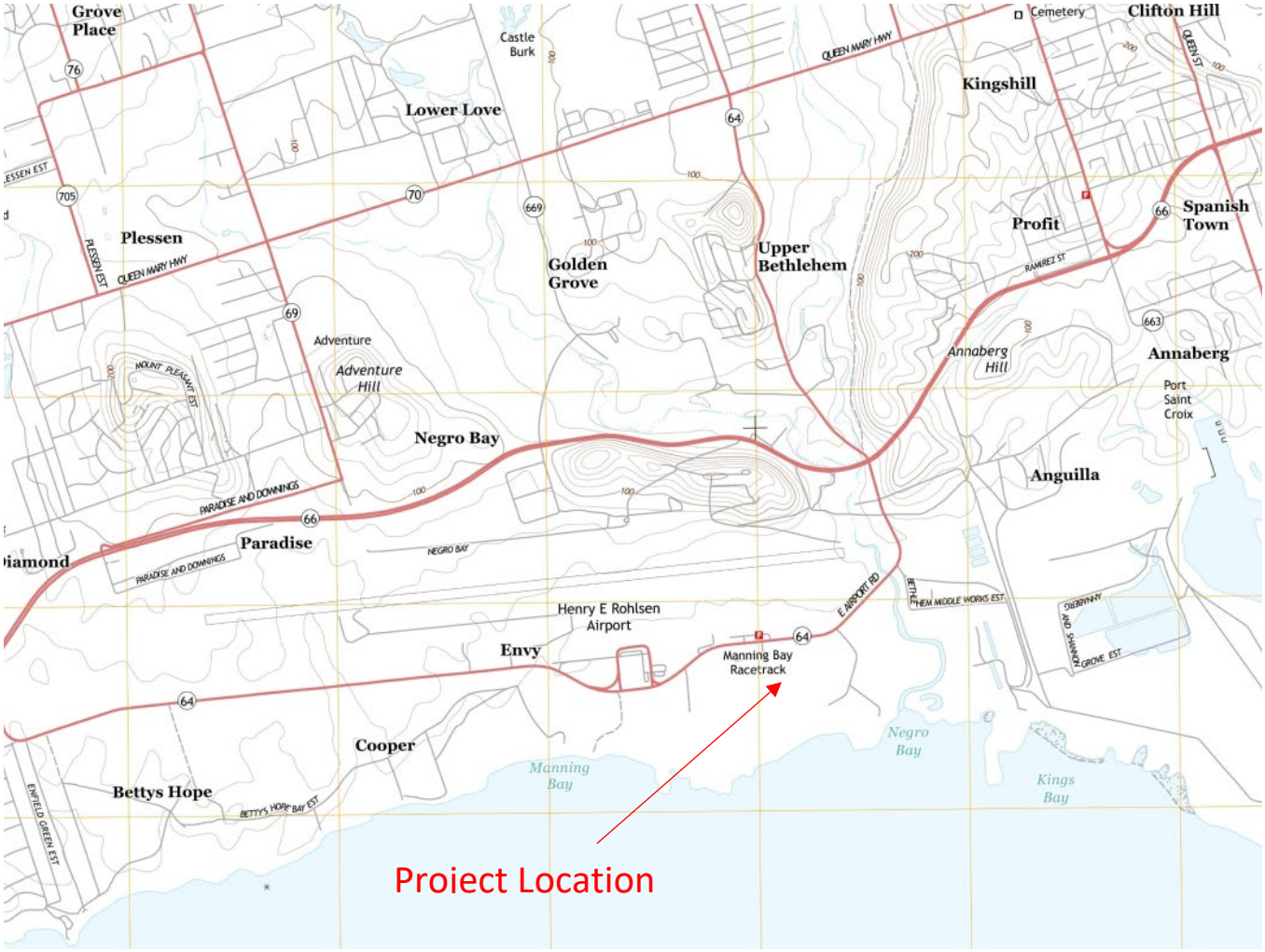


Figure 2.00.1 – Location and Agency Review Map (USGS Quadrangle Map - TopoView)

Figure 2.00.2 – Vicinity Map Showing Location of Facility in relation to Tier 1 Territory (Google Earth).

3.00 ABSTRACT

VIGL Operations, LLC (VIGL) intends to modify the existing project scope to renovate and rehabilitate the Randall "Doc" James (RDJ) Racetrack, permitted under Coastal Zone Management (CZM) Permit No. CZX-11-18(L).

The RDJ Racetrack is located at Section 5, Alexander Hamilton Field, Estate Manning Bay, on the Southshore of St. Croix, and was a focal point of the island's racing and entertainment services for decades. The original application submitted in 2018 proposed to transform this racetrack into a world class racing and entertainment hub, providing a one-mile track allowing for a full horse racing experience and associated casino for additional gambling entertainment. Under the issued permit, the existing infrastructure was demolished to make way for a new and much improved horse track and casino facility and the existing track was extended to meet international regulations.

In keeping with this goal of providing the services and features expected from a comprehensive racetrack and casino operation, VIGL proposes a revised design that is smaller in scale to provide all the amenities while ensuring a design that meets all environmental and building code requirements.

The 65.15-acre main parcel, along with an adjacent 19.48-acre plot, make up the full 84.63-acre property slated for improvements. The project design and proposed construction has been developed to minimize environmental impact, particularly as it relates to the anticipated protection needs that are associated with this type of animal management operation on a shoreline property. To attenuate the potential negative effects of this site improvements, the project design also includes a series of effective structural and vegetative stormwater and erosion and sediment control measures, to include swales, sediment basins, and less impervious materials for more effective groundwater recharge.

VIGL has also accounted for effective utility management, both for services to patrons as well as to the track and facility needs. As the facility will have over 600 parking spaces and may see upwards of 8,000 patrons at it's peak, the design and sizing of these utility service systems as well as collection and disposal of common waste streams has been carefully considered to ensure both proper operation of the facility as well as prevention of overloading of the municipal services.

The project proposes to reconstruct a racetrack that will bring back to life a long-term use of this property for the past 75 years and provide St. Croix with a facility that meets all environmental and building code requirements while providing the services and features expected from a comprehensive racetrack and casino operation.

The construction of this facility will be a continued long-term use of the area which, through careful design, conservative safety factors, and protective management measures, will maintain and protect the shoreline, wetlands and other natural resources while providing incredible social, cultural and entertainment value to the community and economy of St. Croix.

4.00 STATEMENT OF OBJECTIVES SOUGHT BY THE PROPOSED PROJECT

The overall project approach is to develop a world class racing facility, casino and entertainment center to revitalize the racing industry on St. Croix. The redevelopment of the RDJ Racetrack will take place within the current footprint of the existing racetrack at Section 5, Alexander Hamilton Field, Estate Manning Bay, as well as a 19.48-acre plot of land east of the racetrack. The current track, under CZX-11-18(L), was extended to an eight-furlong oval with the expansion occurring on the eastern section of the track and property.

This revised scope will rebuild the previous racetrack further to include a casino, quarantine barn, veterinary clinic, improved paddocks, grandstand stadium, concessions, bar, and party pavilions. VIGL will improve and protect stormwater discharges from the site through carefully designed erosion and sediment control structures and horse operations wastewater collection system that achieve several important objectives necessary to protect and preserve adjacent stormwater drainage routes and receiving water quality.

5.00 DESCRIPTION OF PROJECT

5.01 SUMMARY OF PROPOSED ACTIVITY

a) Purpose of Project

The overall project approach is to develop a world class racing facility, casino and entertainment center to revitalize the racing industry on St. Croix. The renovation of the RDJ Racetrack Stadium and Casino development project at Estate Manning Bay includes development of a racing entertainment center, a casino, concession stands, stadium renovation and construction of vendor units, veterinarian clinic, new bathrooms and parking areas.

b) Presence and Location of any Critical Areas and Possible Trouble Spots

The project area is within plots abutting the Southshore and includes wetland areas to the Southwest of the racetrack portion. Careful management of construction will be essential to ensure sediment loss is controlled during the construction phase. Site slope is minimal at less than 5%, so flows will be controlled through the sizing and management of the stormwater collection system, including the designed catchment basins, culvert system and grassy swales installed throughout the project area.

Long-term management of the site will be critical to ensuring stormwater discharges are free of pollutants typically associated with large animal operations, to include pathogens/bacteria, nutrients and sediment. This will include management of the stormwater controls themselves, as well as general site maintenance and housekeeping, in particular for the horse barns which are located within Flood Zone AE and close to the discharge point of the facility to the existing wetland area adjacent to the Southshore.

A comprehensive survey of the flora and fauna in the area indicates there are no endangered species within the proposed project site. Both downstream of the site and to the East are existing wetlands with different classifications. These areas include mixed swamps, mangrove forest, salt flats and salt pond.

c) Proposed Method of Land Clearing

Capital improvements will occur in primarily two sections of the site. The larger of the two is along the northern perimeter of the site where the terrain is flat and the 2-story grandstand, promenade, casino and two parking lots will be located. A small parking lot and access road will be installed on the west side of the racetrack, to support the existing barns. Less land clearing is required in this section than along the northern border. Site preparation work includes grading operations and foundation preparatory work.

d) Plans for Topsoil and Site Disturbance Provisions

Topsoil and site disturbance will be minimized to the extent practicable during the construction timeline. Operations at the project site will be managed so as to contain all topsoil material in stockpiles for reuse on the site. No topsoil will leave the site or be left for longer than two weeks without stabilization. As the earth movement will cover a large area, steps will be taken to minimize fugitive dust emissions from winds and heavy machinery, and to block off-site migration of dust.

In addition to these mitigation measures, a stringent Storm Water Pollution Prevention Plan (SWPPP) will be implemented during project activities to ensure minimization of site disturbance and effective sediment management where soil is exposed.

e) Erosion and Sediment Control Devices to be Implemented

The following Best Management Practices (BMPs) will be implemented on the site to control runoff and protect natural resources:

Construction Entrance – A stabilized and riprap-ed construction entrance will be provided both on the north entrance as well as south, where earth change activity will occur. These entrances will be kept clean and accumulated dirt removed to ensure continued effectiveness.

Silt Fence – Extensive silt fences will be installed following a basic standard operating procedure encasing the entire area of construction as a major form of perimeter control to prevent sediment from leaving the site as outlined in the Stormwater Pollution and Erosion Control Details of the site drawings.

Containment Berms – A containment berm will be constructed if needed to support the silt fencing in containing stormwater and retaining sediment.

Concrete Washout – A concrete washout will be installed when required for concrete work to install fence poles, spillway features, or sprayer unit anchors, to prevent concrete washout from being spilled on the ground.

Staging Area – A staging area for materials, equipment and tools will be set up with silt fencing, to control high traffic areas, protect materials and chemicals from both traffic and weather, and provide an organized area to prevent trash buildup.

f) Schedule for Earth Changing Activities & Implementation of Erosion/Sediment Control Measures

No earth change activities will take place until the BMPs are installed at the site. Erosion and sediment control for the Site Project construction include:

1. Ensure silt fencing, staging area and other BMPs are set up before work begins.
2. Minimize earth work around the site and conduct clearing in stages.
3. Ensure all areas with exposed soil that have been compacted and set to final grade are stabilized within 2 weeks, before removing any temporary BMPs in the area.

g) *Maintenance of Erosion and Sediment Control*

Sediment control devices, including dikes swales, and outlets, will be inspected every 14 calendar days and after any heavy rainfall of 0.25 inches or more. If defects or damage are noted in the measures, the defect or damage will be immediately reported and repaired. If the measures prove to be inadequate to control erosion, changes will be made to the design and additional measures will be added as necessary.

Accumulated sediment will be removed in accordance with the approved SWPPP requirements.

Accumulated sediment will be removed before it reaches 40% of the height of the silt fencing. Worn, torn or otherwise damaged silt fencing will be fixed or replaced.

The site will be cleaned on a daily basis of litter, debris and materials such as paper, wood, concrete, etc.

h) *Stormwater Management*

A detailed hydrologic and hydraulic (H&H) study was performed for the site, estimating a total volume needed to be retained in proposed permanent ponds. All drainage basins, culverts and swales have been designed to carry the flows expected for each drainage area.

Management of stormwater for the duration of the project will be limited to ensuring no discharge of contaminated stormwater from the site boundaries during construction and grading activities, and prevention of erosion of project areas through controlled release from site discharge points.

i) *Maintenance Schedule of Stormwater Facilities*

Sediment control devices, including dikes swales, and outlets, will be inspected every 14 calendar days and after any heavy rainfall of 0.25 inches or more. If defects or damage are noted in the measures, the defect or damage will be immediately reported and repaired. Changes will be made to erosion control mitigations if they prove to be inadequate. These changes include design optimization and the addition of measures as necessary.

Accumulated sediment will be removed before it reaches 40% of the height of the silt fencing, and in accordance with the approved SWPPP requirements. Worn, torn or otherwise damaged silt fencing will be fixed or replaced. The site will be cleaned on a daily basis of litter, debris and materials such as paper, wood, concrete, etc.

j) *Sewage Disposal*

Project sewage management will be limited to maintaining portable restrooms on site, and ensuring they are emptied by a qualified waste management company at an appropriate frequency to minimize spills or discharges from the site.

For long term management of sewage, VIGL will connect to the existing municipal sewer lines running to the Publicly Owned Treatment Works (POTW) to ensure sewage disposal services will be provided for the life of the facility.

All water used in horse washdowns, cleaning or other horse care activities will be done so in areas that will drain to collection points and be discharged to sewer. No discharge of waste or process water will occur to land, surface water or shoreline areas.

Additionally, solid waste produced by the horses and stable operations will be collected, contained and covered, and given to the public as fertilizer or disposed of at the landfill to ensure no solid waste material reaches the adjacent land, water or shoreline.

5.02 SITE PLANS (See Attached Drawings)

5.02.01 Lot Layout (See Attached: Engineer/Surveyor drawings)

5.02.02 Road Layouts (See Attached: Engineer/Surveyor drawings)

5.02.03 Position of Structures (See Attached: Engineer/Surveyor drawings)

5.02.04 Septic System/Wastewater Treatment (See Attached: Detail Sheets)

5.02.05 Stormwater Drainage (See Attached: Engineer/Surveyor drawings)

5.02.06 Stormwater Facilities (See Attached: Engineer/Surveyor drawings)

5.02.07 Erosion and Sediment Control Plan (See Attached: Detail Sheets)

5.02.08 Landscaping Plan (See Attached: Detail Sheets)

5.02.09 Other Required Drawings (See Attached: Engineer/Surveyor drawings)

5.02.10 Required Maps (See Attached: Official Zoning Map, Parcel Map, FIRM)

5.03 PROJECT WORKPLAN

Anticipated start date for the project is July 2023, and completion date is estimated for end of February 2025. A construction schedule is provided as part of this modification package.

Pre-Construction Phase

A period of approximately 7-10 days will be required for initial mobilization of equipment due to the scale of the site and project components.

Before any construction work is done on the site, all stormwater BMPs will be installed at designated areas in the provided maps. Silt fencing, berms and catchment areas will be installed according to the minimum standards of the 2002 VI Environmental Protection Handbook (VIEPH). Additional control areas, to include dumpsters, staging and storage areas, fueling station and portable toilets will be established early to maintain a controlled and clean site.

During preparation for construction, a detailed walkthrough and delineation of all sensitive areas, wells and other equipment on the Group B units will be performed, and orange construction fencing will be installed around each area for the duration of the project, to ensure these critical areas are not touched or impacted in any way.

The use of staging and laydown areas will be required for the construction of the pond. The staging and laydown areas for caliche soil, mulched vegetation, and construction equipment and materials will be carefully managed, and these staging and laydown areas will be established using Silt fencing, installed around all staging area borders.

Construction Phase

The construction phase will begin with several concurrent tasks, including mass grading of areas, and digging of foundations. Stormwater basins will be constructed immediately to retain sediment during the construction phase.

The various building structures will be constructed concurrently, followed by utilities, pipelines and support structures such as potable water tank/cisterns and sewer connections. As final grading is achieved for each section, stabilization will go down in the form of permanent cover, such as vegetation, gravel, riprap or pavement.

Vegetation will be carefully observed until growth of a full vegetated layer has taken hold. Inspections will be performed every fourteen (14) days or after any rain event of 0.25" or more within 24 hours to observe for any erosion or sediment loss. Any evidence of rilling or gullying will be addressed within seven (7) days to ensure final stabilization of the entire pond area is achieved.

Post-Construction Phase

The post-construction phase will entail evaluation and testing of utilities, confirmation of grade, slope and structure heights. Vegetation will be evaluated to verify it has stabilized all exposed soils, and stormwater BMPs will be verified to have been installed and sized correctly for long-term use.

Upon successful completion of all testing, equipment operations and evaluations, final performance reports will be generated. As-built drawings will be created and submitted to VIDPNR for final approval.

Upon receipt of approval of the as-built drawings, VIGL will then demobilize and ensure the project area is completely stabilized for long-term use and operation.

6.00 SETTING AND PROBABLE PROJECT IMPACT ON THE NATURAL ENVIRONMENT

6.01 CLIMATE AND WEATHER

Prevailing Winds

The Virgin Islands lie in the "Easterlies" or "Trade Winds" that traverse the southern part of the "Bermuda High" pressure area, and the predominant winds are usually from the east-northeast and east (IRF, 1977). These trade winds vary seasonally and are broadly divided into 4 seasonal modes: 1) December to February; 2) March to May; 3) June to August; and 4) September to November. Below are the characteristics of these modes as taken from Marine Environments of the Virgin Islands Technical Supplement No. 1 (IRF, 1977), and based on U.S. Naval Oceanographic Office data.

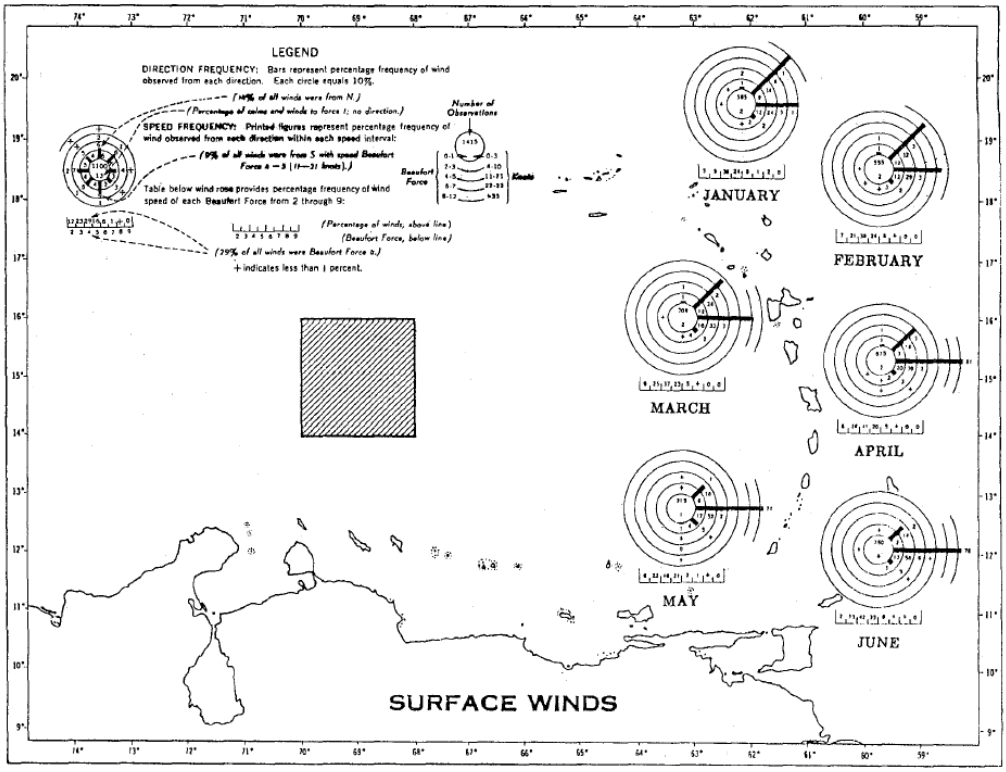


Figure 6.01.1 –Wind Direction and Speed Frequency, Central Caribbean, January - June.

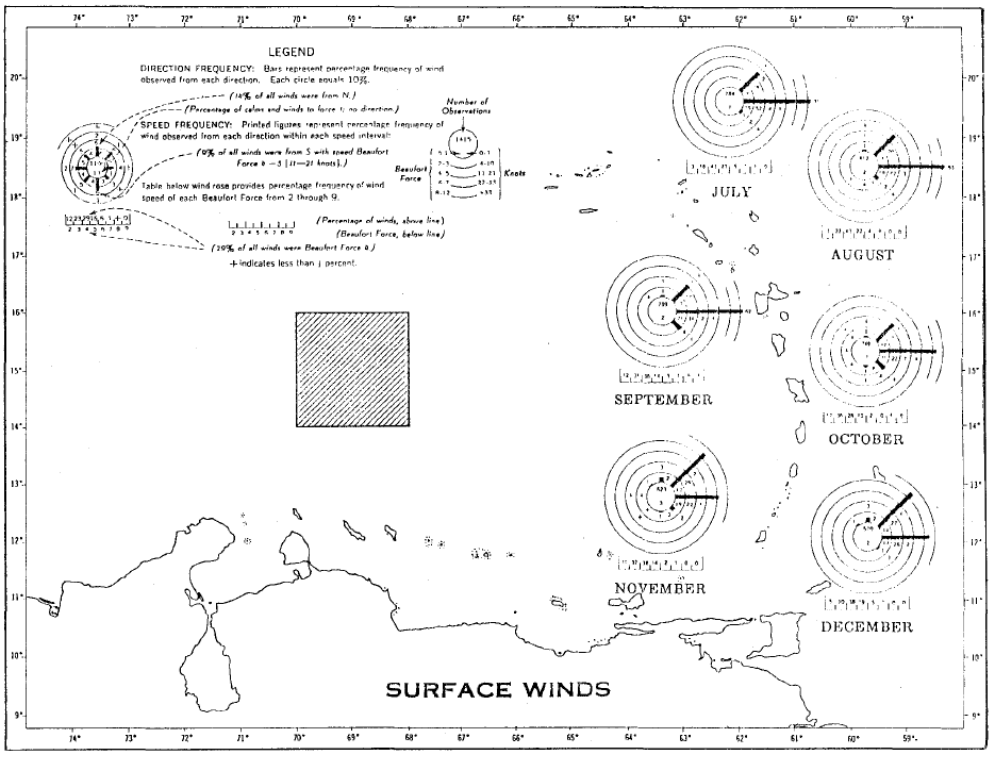


Figure 6.01.2 –Wind Direction and Speed Frequency, Central Caribbean, July - December.

December – February

During the winter, the trade winds reach a maximum and blow with great regularity from the east-northeast. Wind speeds range from eleven to twenty-one knots about sixty percent of the time in January. This is a period when the Bermuda High is intensified with only nominal compensation pressure changes in the Equatorial Trough. The trade winds during this period are interrupted by "Northerners" or "Christmas Winds," which blow more than twenty knots from a northerly direction in gusts from one to three days. Such outbreaks average about thirty each year. They are created by strengthening of high-pressure cells over the North American continent, which, in turn, allow weak cold fronts to move southeastward over the entire Caribbean region. These storms are accompanied by intermittent rains, clouds and low visibility.

March – May

During the spring, the trade winds are reduced in speed and blow mainly from the east. Winds exceed twenty knots only thirteen percent of the time in April. The change in speed and direction is the result of a decrease of the Equatorial Trough.

June – August

Trade winds reach a secondary maximum during this period and blow predominantly from the east to east-southeast. Speeds exceed twenty knots twenty-three percent of the time during July. The trend for increasing winds results from the strengthening of the Bermuda

High and a concurrent lowering of the pressure in the Equatorial Trough. Trade winds during this period are interrupted by occasional hurricanes.

September – November

During the fall, winds blow mainly from the east or southeast and speeds reach an annual minimum. Only seven percent of the winds exceed twenty knots in October. The low speeds result from a decrease in the Equatorial Trough. During this period, especially during late August through mid-October, the normal trade wind regime is often broken down by easterly waves, tropical storms and hurricanes.

Storms and Hurricanes

There are numerous storm events each year, from squalls and thunderstorms to hurricanes. Standard rain events occur most frequently during the summer, lasting only a few hours and causing no pronounced change in the trade winds.

A tropical cyclone whose winds exceed 74 miles per hour is termed a hurricane in the northern hemisphere and can range in strength from causing little to no damage, to causing extensive destruction. These hurricanes occur most frequently between August and mid-October with their peak activity occurring in September. Figure 6.01.3 depicts NOAA data on historic Hurricanes and Tropical Storms in the vicinity of St. Croix.

Figure 6.01.3 – Historic Tracks of Hurricanes and Tropical Storms for St. Croix

Climate

The climate of St. Croix, as well as that of the Territory, is characterized by generally fair, tropical weather, with usually consistent wind speed and direction. Temperature swings are narrow, both seasonally and diurnally.

The closest weather station to the facility is at the Henry E. Rohlsen Airport; climate data from this station is found below in Table 6.01.1.

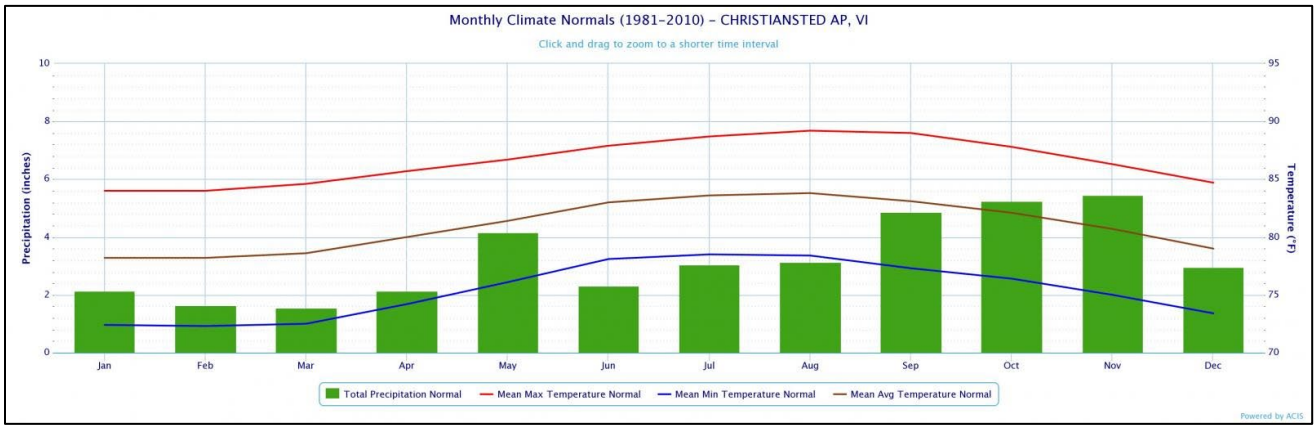


Table 6.01.1 –Average Temperatures at St. Croix Airport, St. Croix

The nearest NOAA National Ocean Service Weather Station is located in Ocean Point Terminals, St. Croix (Station LTBV3 – 9751401; www.ndbc.noaa.gov/station_page.php?station=ltbv3). Climate data from this station is found below in Tables 6.01.2 and 6.01.3 below.

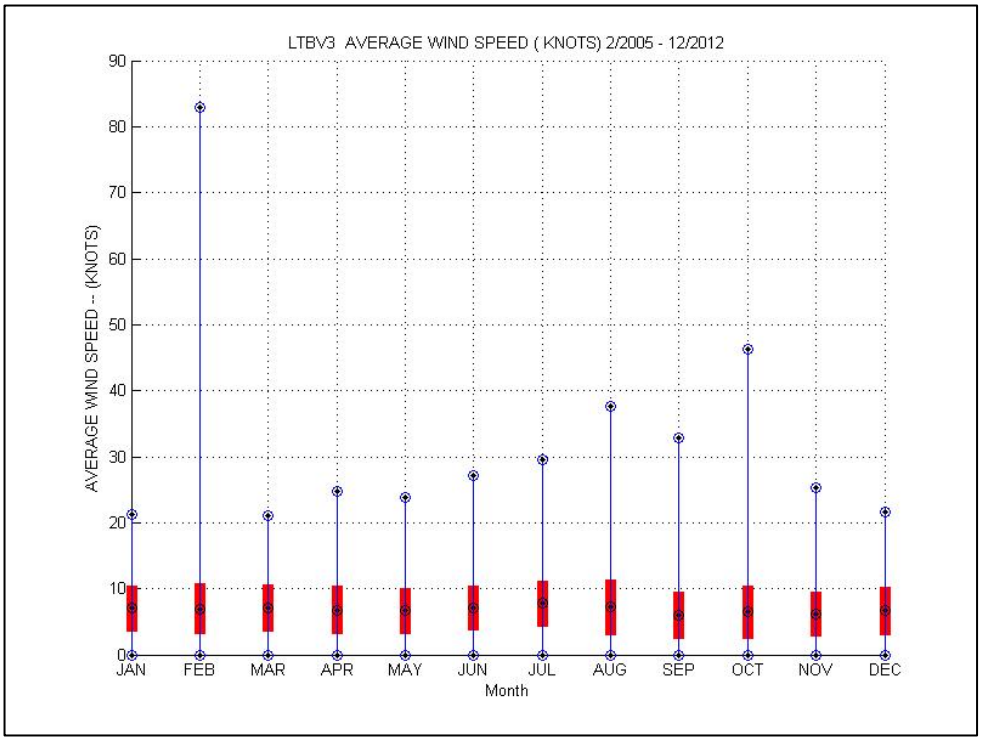


Table 6.01.2 – Average Wind Speed, St. Croix

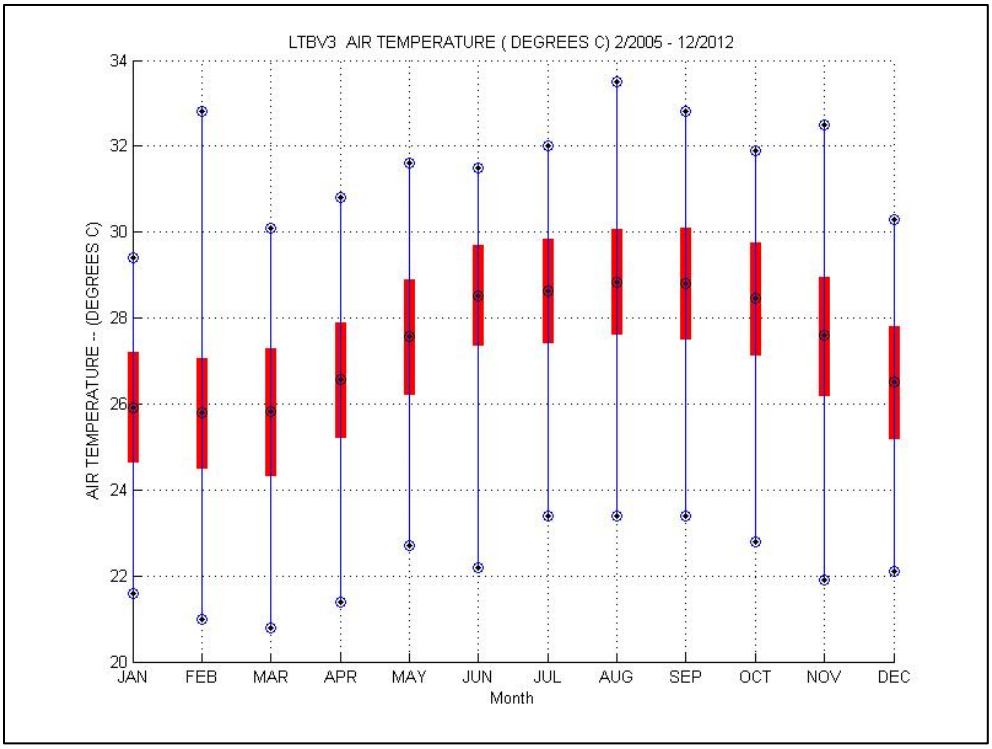


Table 6.01.3 – Average Air Temperature, St. Croix

The average annual rainfall on St. Croix is about 40 inches, ranging from about 30 inches in the east to more than 50 inches in the mountains of the northwest. Average annual temperature is a moderate 79°F, with an average low in winter of 76°F and an average high in summer of 84°F; temperatures are 2 to 3 degrees lower at altitudes of 800 to 1,000 feet. Occasionally maximum daily temperatures will exceed 90°F and minimum temperatures will be less than 70°F. Prevailing wind direction is from the east or northeast.

Rain generally occurs in brief, intense showers of less than a few tenths of an inch. Rains exceeding 1 inch in 48 hours occur about 7 or 8 times a year in the central part of the island; they are slightly more frequent in the mountains of the northwest and less frequent in the eastern part. February and March are the driest months and September is the wettest. Nearly half the average annual rain falls from August through November. Large storms can occur in any month although more likely during July to November, the hurricane season. (Jordan, 1975).

Impact on the Proposed Project

The applicant has carefully analyzed both climate and weather. The proposed racetrack and casino structures have been designed for extreme weather and routine storms alike, and stormwater BMPs have been designed to capture and release the increased stormwater flows anticipated from the project site. Structure heights and sizes have been reduced from the previous design and will be wind resistant for the winds expected from a shoreline property on the Southshore.

6.02 LANDFORM, GEOLOGY, SOILS AND HISTORIC LAND USE

Geology of St. Croix

St. Croix is the southernmost island of the U.S. Virgin Islands, lying 40 miles south of St. Thomas and separated from it by an ocean trench 3,600 meters deep. It lies about 95 miles southeast of San Juan, Puerto Rico. St. Croix is the largest island in the USVI, with a total area of 82 square miles. The island is approximately 22 miles long, east to west and is about 7 miles in width, north to south. St. Croix is geographically located in the Lesser Antilles and lies completely within the Caribbean Sea.

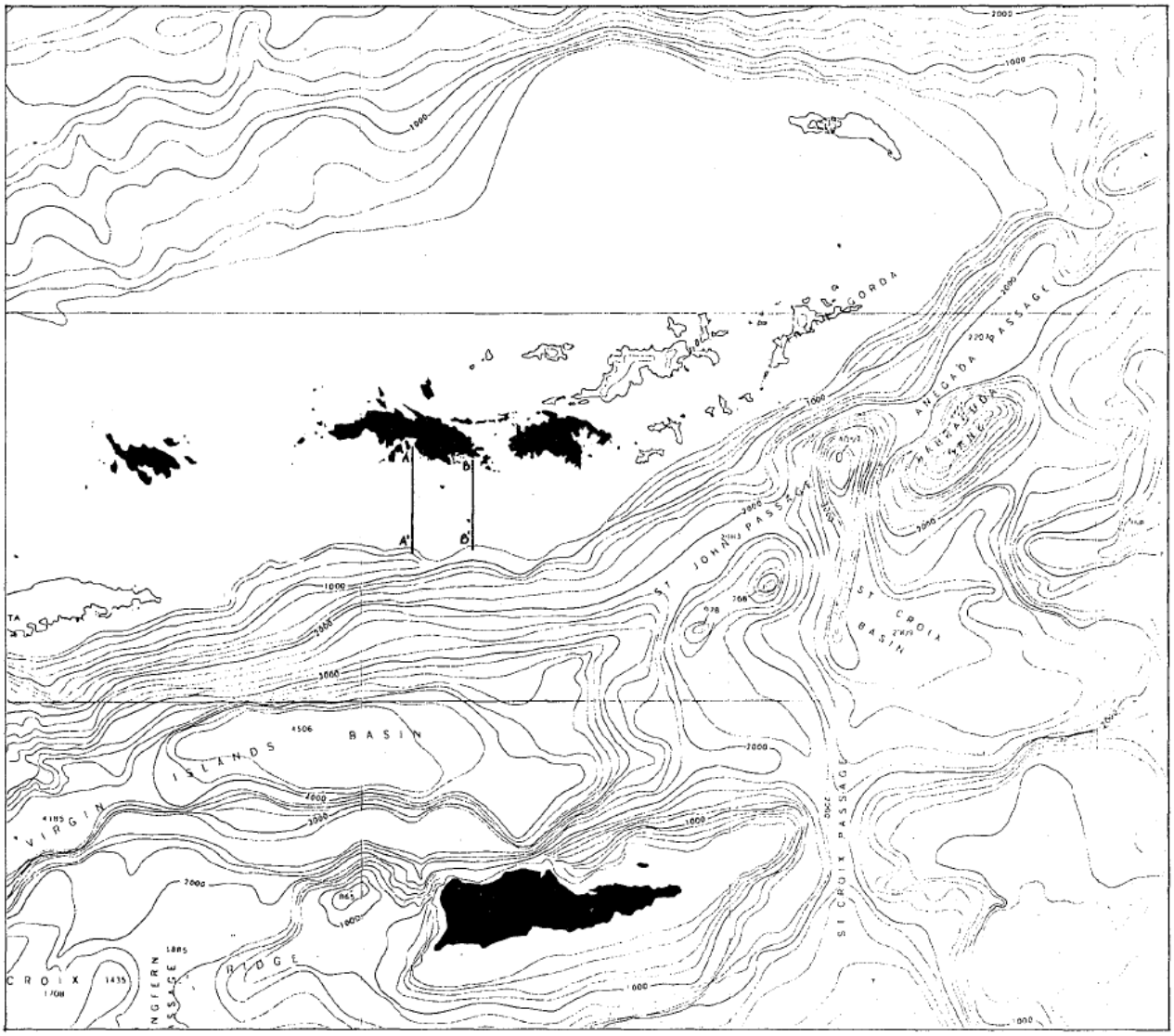


Figure 6.02.1 – Bathymetry of USVI basins and plateaus. From van Eepoel, et al, 1971.

The Virgin Islands are near the northeastern corner of the present Caribbean Plate, a relatively small trapezoidal-shaped plate which is moving eastward relative to the North and South American continents carried on the American Plate. The arc of the Lesser Antilles is an active volcanic arc above a subduction zone in which Atlantic oceanic crust of the American Plate is carried downward under the Caribbean Plate. The Caribbean Plate is sliding past the North and South American plates along east-west trending northern and southern boundaries. The western boundary is a subduction zone in which the Cocos Plate is being driven northeastward and down under the edge of the Caribbean Plate west of Central America (Rogers, 1988).

St. Croix lies on a somewhat isolated, submerged ridge separated from the Puerto Rico Bank by the Virgin Islands Basin. Geologically it is related to the islands of the Puerto Rico Bank. If St. Croix was ever connected to the northern Virgins, it may have been separated from that group by either block (Meyerhoff 1927, Whetten 1966) or shear faulting (Adey 1977, Turner 1971).

The oldest rocks exposed on St. Croix are epiclastic volcanic sandstone and mudstone of the Caledonia Formation (Whetten 1966). These weakly metamorphosed, uplifted, folded and faulted rocks were derived from volcanic and other narrow-trench sediments originally deposited by turbidity currents on the deep ocean floor about 70 to 80 million years ago (Adey 1977). Buck Island is an emergent part of the St. Croix shelf.

Somewhat later in the Cretaceous, one or more volcanoes formed on the sea floor to the south or southeast of St. Croix. Volcanic debris was shed northward to form the Judith Fancy formation, composed of tuffaceous sedimentary rocks, which occur on St. Croix but not on Buck Island.

St. Croix was uplifted above sea level in the Oligocene (Whetten 1974), originally as two islands. The East End Range (including proto-Buck Island) and the Northside Range were separated by a trough several miles wide. The trough was subsequently filled in by the deposition of the Kingshill marl formation. There then followed a period of mild deformation, post-Miocene uplift, and erosion to form the present-day topographic features (Rogers and Teytaud, 1988). Therefore, the island of St. Croix consists geologically of two predominant mountainous areas (the North side and the East End ranges), with a central sediment filled valley in between.

The limestone and marls that overlay the Jealousy formation are known as the Kingshill formation. After these formations were deposited, the area underwent another period of uplifting, the two islands became connected by the newly emergent filled-in area, and the island of St. Croix was formed. Since that time, geologic activity has been limited primarily to the erosion of sediments and the formation of ponds, beaches, reefs, and beach rock coast.

Two large basins, the Virgin Islands Basin and the St. Croix Basin, separate St. Croix from the other Virgin Islands. Within the distance between St. Croix and St. Thomas, about 40 nautical miles, hydrographic charts show that the ascent from the sea floor north of St. Croix is as much as 70º. Frasetto and Northrop (1057) indicate that this northern topographic

slope extends downward to the Virgin Islands Basin at a gradient up to 43º. There is an ascent of 13,656 feet within a horizontal distance of 25,800 feet, terminating with the steep north coast in the vicinity of Hams Bluff. The area has been described as the south side of the Anegada Trough and its related fault scarp (Taber 1922). Meyerhoff (1927) suggested that this block faulting took place during the late Pliocene or early Pleistocene, prior to which St. Croix was physically attached to the northern Virgin Islands.

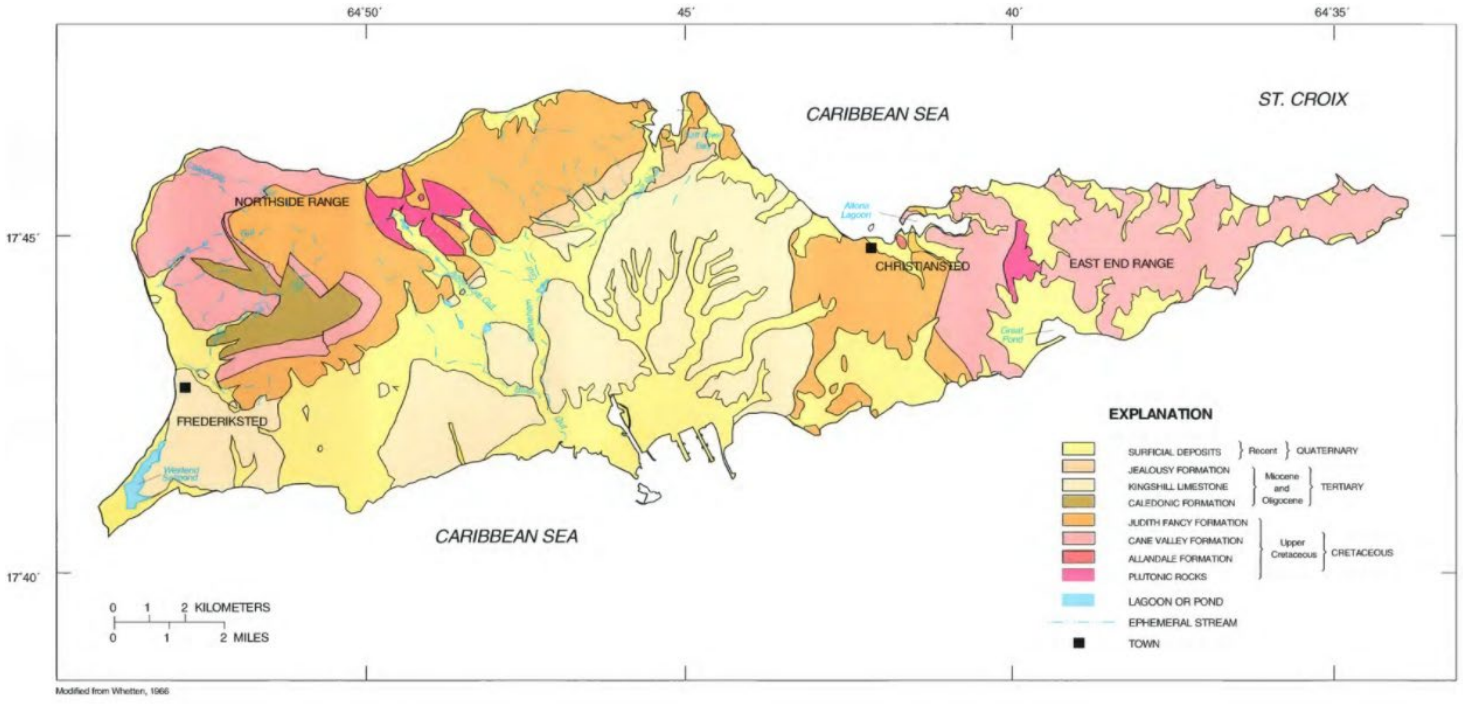
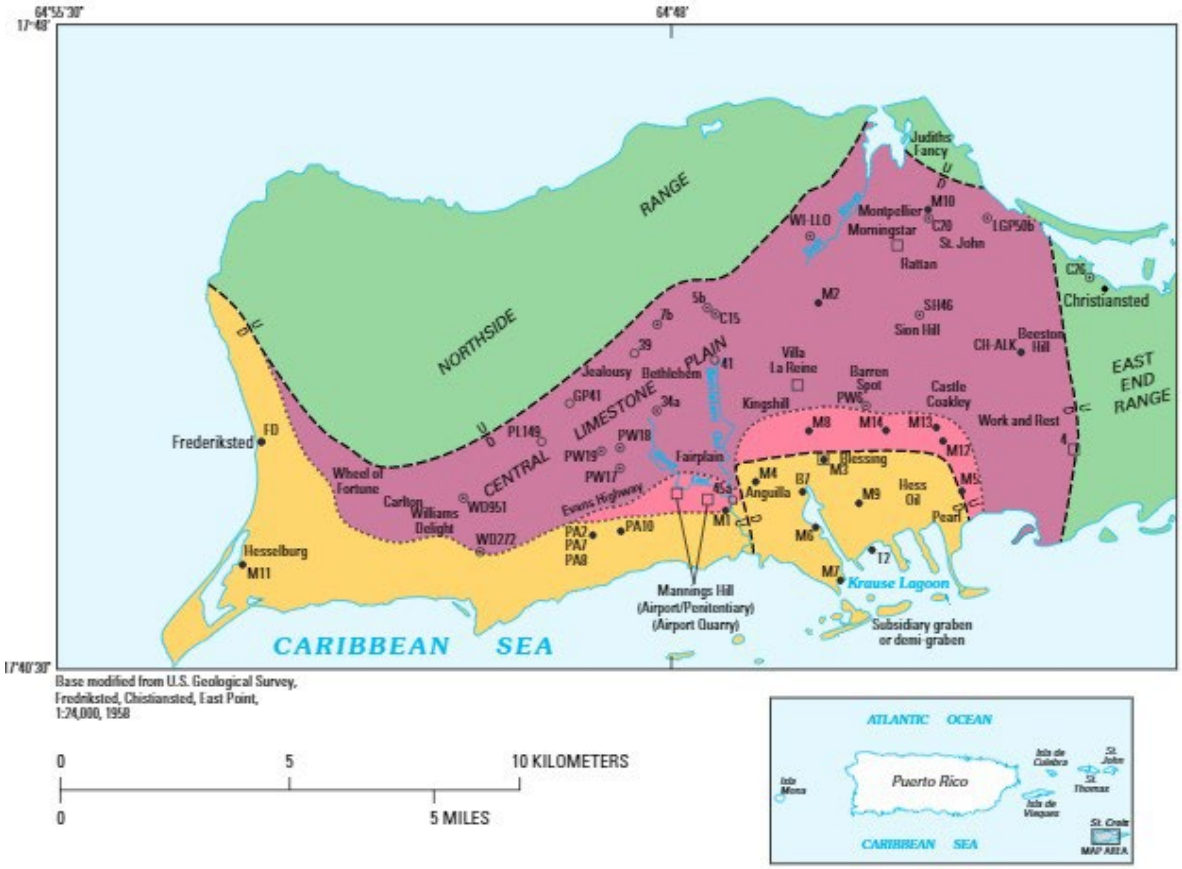


Figure 6.02.2 – General Geological formations of St. Croix (Atlas of Ground-Water Resources in Puerto Rico and the U.S. Virgin Islands)



EXPLANATION

Blessing Formation

Kingshill Limestone

Mannings Bay Member

La Reine Member

Mt. Eagle Group

Inferred fault—U, upthrown; D, downthrown

Contact—Dashed where approximately located

Control points

Test hole—Core and cutting samples

Well—Cutting samples

Well— Driller's log information

Outcrop

FD	Fredericksted
WD	Williams Delight
SH	Sion Hill
WI-LLO	Windsor
PA	Paradise
LGP	La Grande Princesse
PL	Plessen
CH-ALK	Constitution Hill
GP	Grove Place
C	Civilian Conservation Corps
M	Gill-Hubbard drilling project
PW	Public Works
T	Tibbits, Abbott, McCarthy, and Stratton, (TAMS) Inc.
B	Martin Marietta Alumna—Caribbean Drilling Services

Figure 6.02.3 –Generalized Geology of St. Croix, U.S. Virgin Islands, and location of control points – Renken, 1989

Geology of the Facility/Site

The project site is located at 17°41'51.2"N 64°47'26.9"W in the South Shore due South of the Henry E. Rohlsen Airport. The Custom Soil Survey by the National Resource Conservation Service (NRCS) identifies the soil types for the project area as Ustorthents (Us) with Glynn gravelly loam (GyB) to the east of the main parcel.

It is not prone to flooding or ponding, and this area has very little slope (<2%) in its current state. Elevation at the project site ranges between 5-20 feet above sea level.

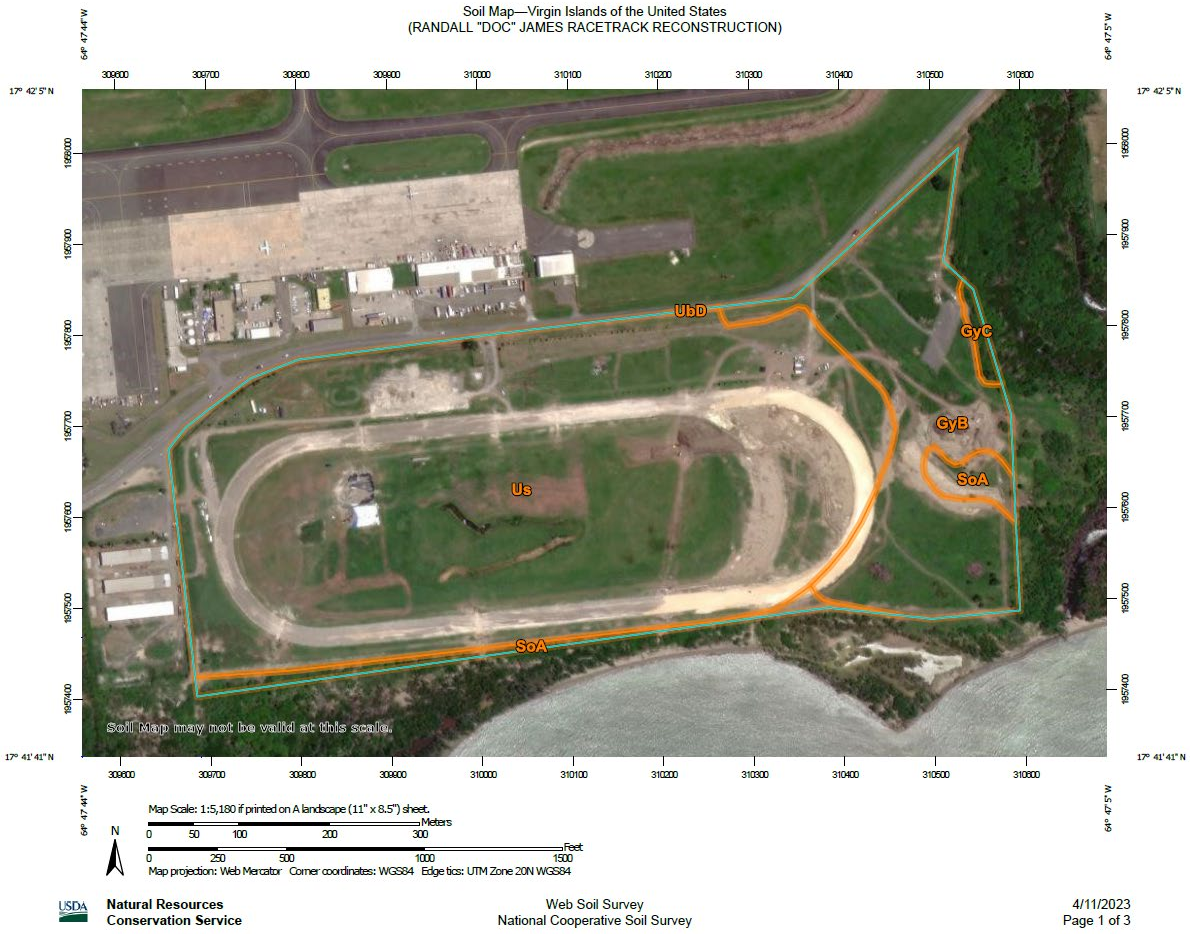


Figure 6.02.4 – Natural Resource Conservation Service Soil Type Map

Historic Use

The SCRG and south shore industrial complex has a long and well documented timeline of historical uses, significance and structures onsite or in adjacent properties.

Recent Historical Uses

The land within the project footprint has been used as racetrack for over 75 years, as can be seen in Figures 6.02.5 and 6.02.6 below.

A Phase1 A&B Archaeological Study was performed on 15 of the 19.48 acres expansion east of the current racetrack during November of 2013 following the Department of Planning and Natural Resources Division of Historic Preservation "Guidelines for Cultural Resources Investigations" to comply with Title 29, Chapter 17, Section 959 of the Virgin Islands Code. Comprehensive review of the archaeological files was performed to identify cultural resources of record. Additionally, field tests involving surface inspection of the subject property were conducted followed by the excavation of shovel tests established at 30-meter intervals. According to the official study report "The walls of drainage features were visually inspected for cultural materials but not tested. The shovel tests measured approximately 30 centimeters in diameter and were excavated to depths that were no longer considered to have the potential of containing non-random artifact bearing matrices".

Subsequently, a more recent Phase 1 Archaeological Survey was performed for the RDJ Racetrack on March 29, 2018. Again, a literature review and records search were conducted of readily available followed by implementation of a design driven by systematic and purposive sampling via shovel tests throughout the site. According to the reports provided "No potentially significant cultural resources were identified during the course of our Survey". The existing developed property was found to have been extensively modified by grading during various episodes of development.

The additional areas to be developed to the east of the racetrack were also found to be disturbed. The 15-acre tract to the East of the project site was surveyed in 2011 by Soltec International Inc. and resulted in similar findings of no potential significant cultural resources present on that particular 15-acre tract of land. However, in the course of the site development if any such resources are encountered work will stop immediately and the Virgin Islands State Historical Preservation Office (SHPO) will be contacted. See the complete details of both Archaeological Studies provided as part of the CZM major application package.

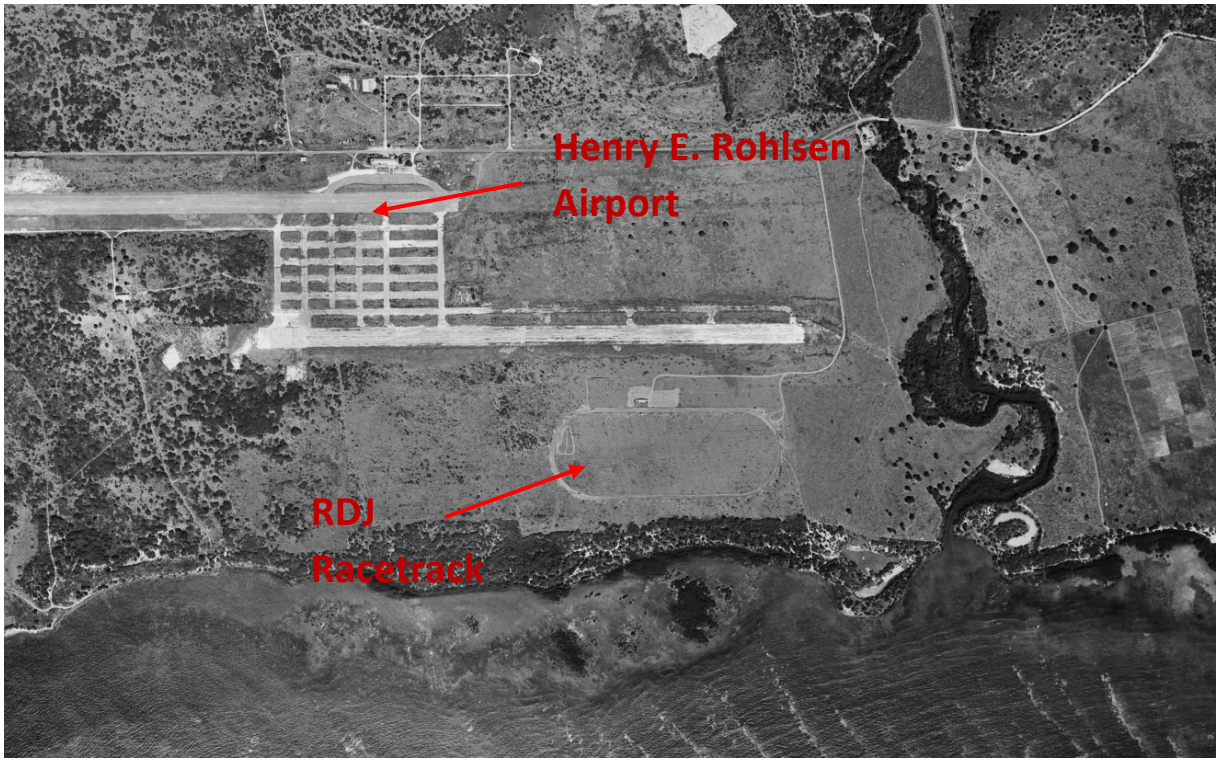


Figure 6.02.5 – 1954 Historical Photo, South Shore, Source: USGS Earth Explorer Aerial Viewer.

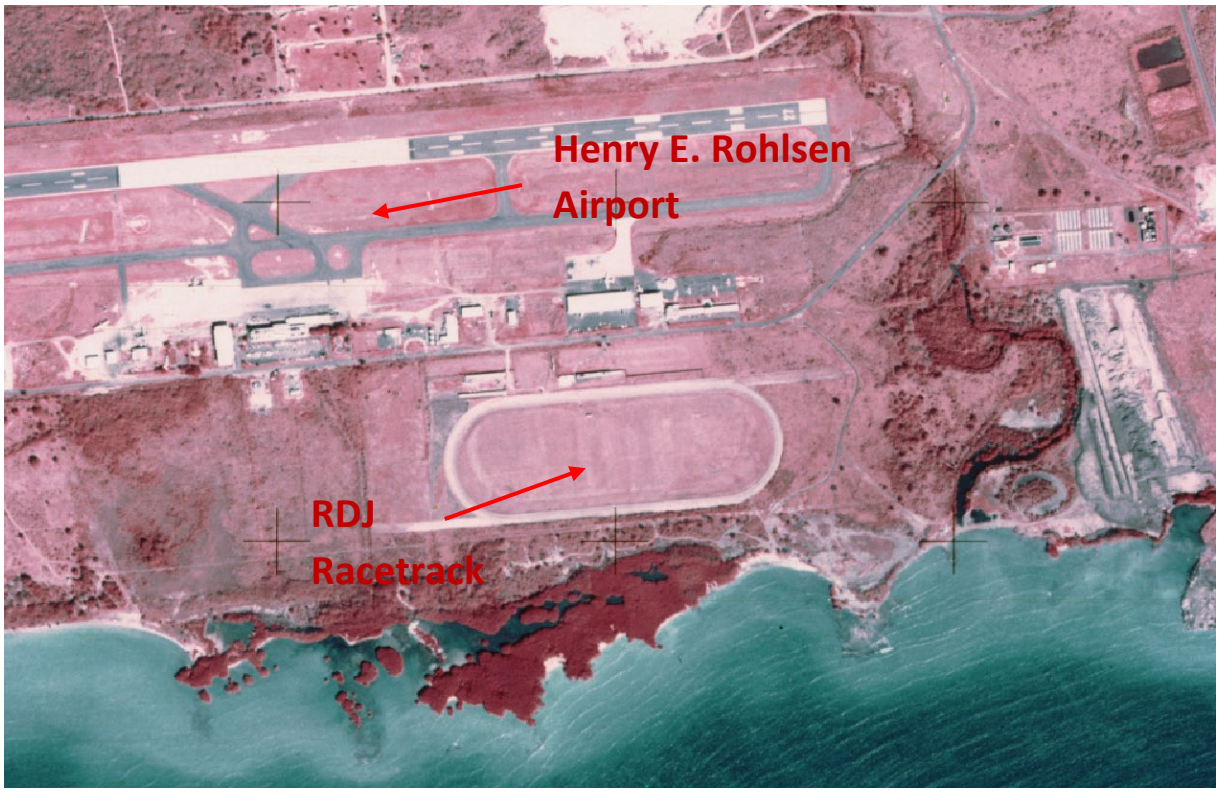


Figure 6.02.6 – 1974 Historical Photo, South Shore, Source: USGS Earth Explorer Aerial Viewer.

Seismic Activity

The Puerto Rico/Virgin Islands region is located at the northeastern corner of the Caribbean plate where motions are complex. The westward-moving North American plate is being driven under the Antilles Arc where volcanism is active. On the north side of the plate corner, the North American plate slides past the Caribbean but irregularities in the plate boundaries cause stresses that result in a complicated under thrusting of plate fragments. The interaction of plates causes the volcanism of the Antilles Arc on the eastern boundary of the Caribbean plate and creates major stresses all along the northern boundary (Nealon & Dillon, 2001).

Since the 1867 quake, there has been continuous low intensity activity all below 6.0 Richter. Over the last several years, numerous minor tremors have been felt on the island. This increased activity is associated with the volcanic eruptions that have been occurring to the southeast on the island of Montserrat.

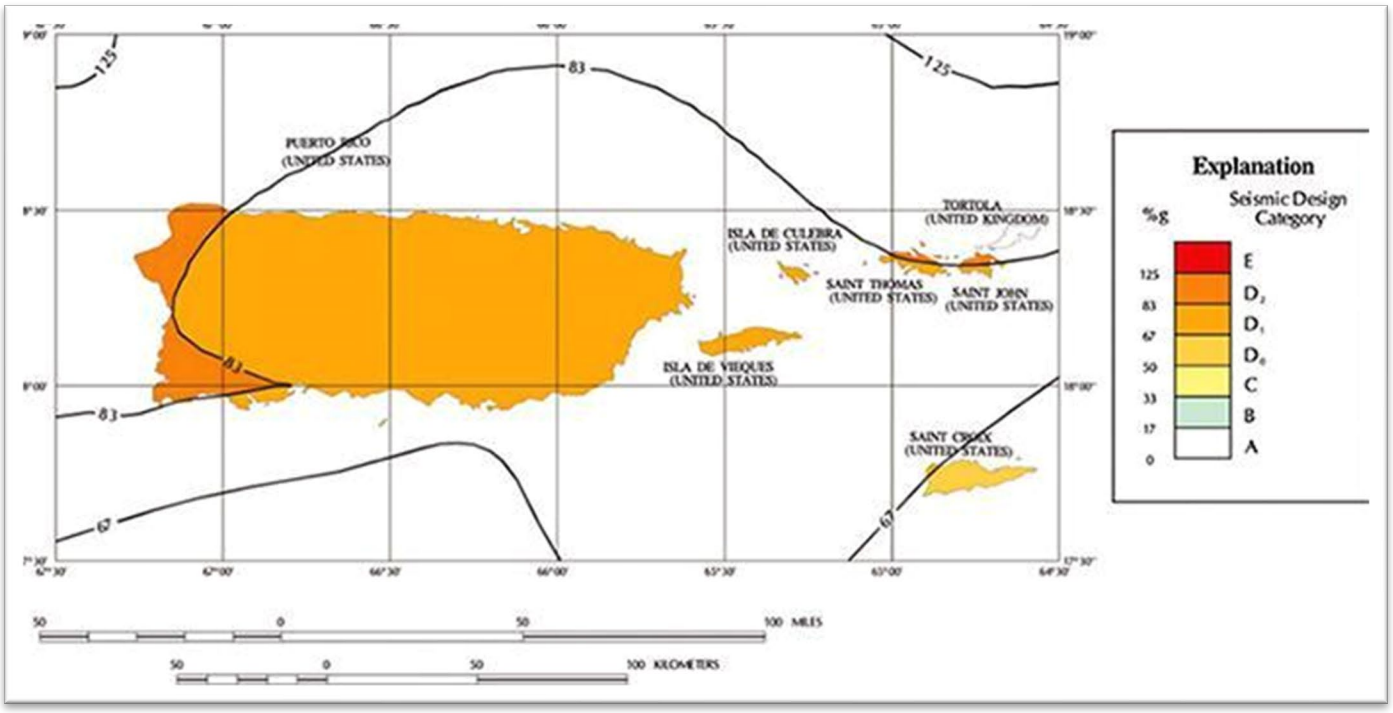


Figure 6.02.8 – FEMA Seismic Design Category Map

Impact of Geology on Proposed Project

The applicant has carefully considered landform, geology, soils and historic land use. The project has been designed to be consistent with these conditions, to improve the landform as it exists now and to cause minimal to no impact on the surrounding area and geology.

6.03 DRAINAGE, FLOODING, AND EROSION CONTROL

a) Drainage Patterns

The RDJ Racetrack property sits within a small St. Croix watershed, the Airport watershed (HUC_14: 21020002020030). This small watershed drains approximately 1290 acres However, it sits directly adjacent to the Fair plains Gut (also called the Bethlehem Gut), which drains over 6500 acres of watershed from as far North as Carambola in Estate River.

Water flow onto the site from upstream sources in this watershed is minimal, as the Airport property drains to large culverts that discharge to the Bethlehem Gut. Stormwater runoff east of the existing entrance typically flows toward the Bethlehem Gut channeled by swales on the northern and southern sides of Route 64. Route 64 itself has a rise that causes the flow of stormwater in opposite directions towards the east on one side of the rise and the west on the other side of the rise toward the swales, culverts, drainage path and guts described above.

To ensure that the project design performs properly a hydrology study was performed to evaluate the stormwater management system and pathways. The stormwater flow, made up primarily of rainfall that lands on the site, is proposed to sheet flow to properly designed catchment basins and culvert systems that then direct the water to two primary stormwater retention ponds on site. From these ponds, retention will allow for holding time to settle any potential sediments, and water will sheet flow to existing drainage culverts at the South end of the track and property. Discharge would be through these culverts to the shoreline.

b) Proposed Alterations to Drainage Patterns

There are minimal changes to the proposed drainage patterns of the site. The property is very flat (<5% slope) and water sheet flows for the majority of its travel across the site, in a general Northeast to South-Southwest direction. The proposed project will introduce impervious surfaces, though these areas will work with the natural grading to direct flow to catchment basins, culvert systems and eventually to stormwater retention ponds, where water would then flow in current existing patterns to the south of the property and be discharged through existing culverts.

c) Relationship of Project to Coastal Floodplain

Review of Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for U.S. Virgin Islands Index shows the site area on Panel No. 780000091G dated 2018 to be within Flood Zone AE.

The vast majority of the proposed construction will fall outside of the Flood Zone area, with only parking and stormwater protection features to be installed along the west side of the project site within this flood zone designation, in support of the existing horse barns and facilities.

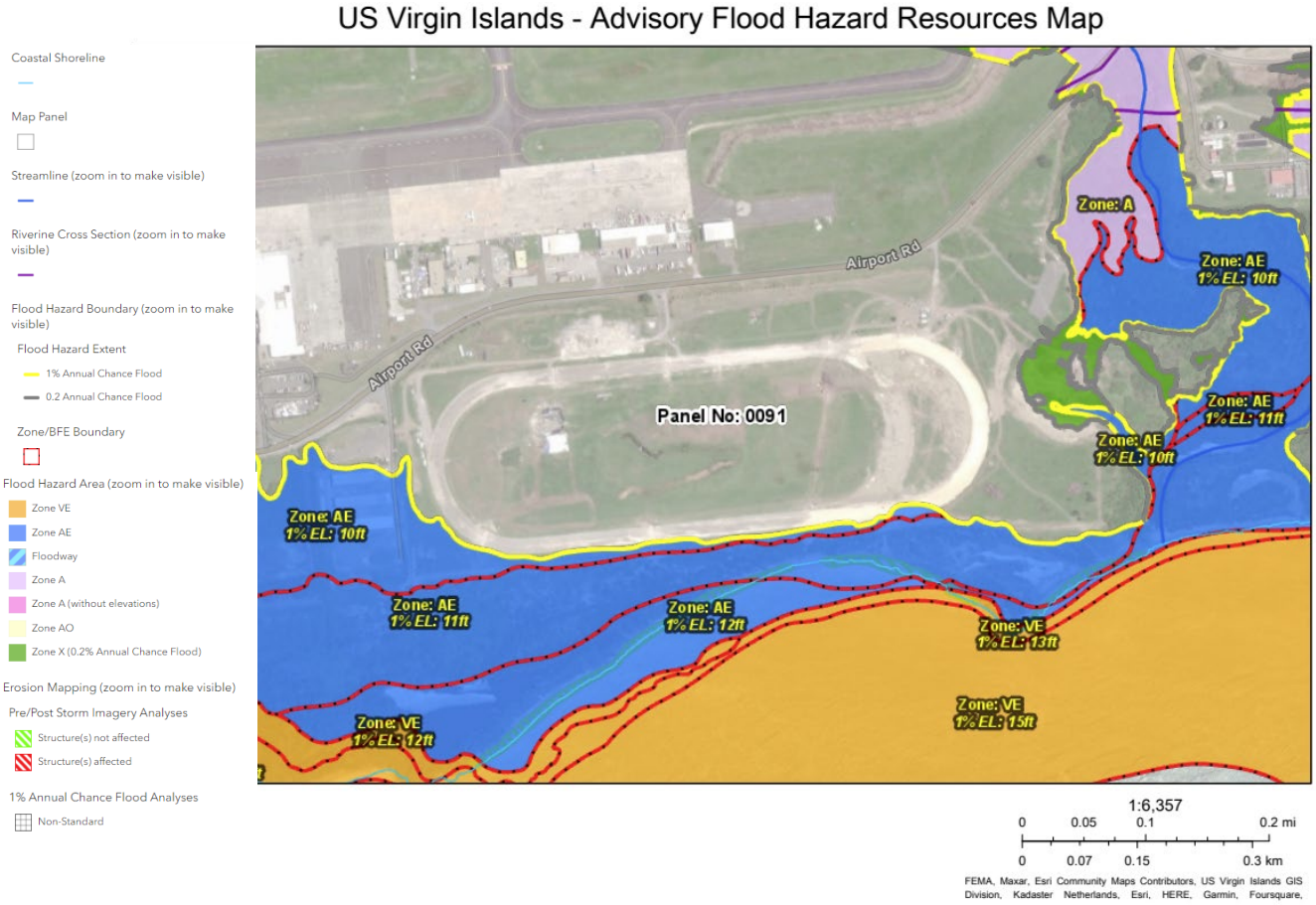


Figure 6.03.1 – Flood Information for Project Area. Based on FIRM 780000091G, 2018

d) *Peak Stormwater Flow Calculations*

As no upstream run-on enters the project area, the H&H study assessed the project site and evaluated pre- vs. post- construction flows. Based on the analysis, the two stormwater retention ponds have been sized to capture in full a one-inch rainfall on the project site, to attenuate the increase in water volume and discharge rates caused by the project development. More details to these calculations are provided in the H&H study included with the CZM modification application package.

e) *Existing Stormwater Disposal Structures*

The existing stormwater disposal structures for the facility include large concrete culverts along Route 64 that collect and route all upstream watershed flow to the shoreline, situated to the north border of the project site.

On the racetrack property, existing corrugated steel culvert pipes direct sheet flow to the center of the racetrack, and grassy swales assist in routing fringing flows around the track to the east and west. Any sheet flow directed to the center of the track flows to existing stormwater retention ponds, which, after filling, overtop and sheet flow stormwater to

additional culverts installed along the South stretch of the racetrack. These culverts discharge to the south and to the Estate Manning Bay shoreline.

f) Proposed Stormwater Control Facilities

Water flow onto the site from upstream sources in this watershed is minimal, as the Airport property drains to large culverts that discharge to the Bethlehem Gut. Stormwater runoff east of the existing entrance typically flows toward the Bethlehem Gut channeled by swales on the northern and southern sides of Route 64. Route 64 itself has a rise that causes the flow of stormwater in opposite directions towards the east on one side of the rise and the west on the other side of the rise toward the swales, culverts, drainage path and guts described above.

To ensure that the project design performs properly a hydrology study was performed to evaluate the stormwater management system and pathways. The stormwater flow, made up primarily of rainfall that lands on the site, is proposed to sheet flow to properly designed catchment basins and culvert systems that then direct the water to two primary stormwater retention ponds on site. From these ponds, retention will allow for holding time to settle any potential sediments, and water will sheet flow to existing drainage culverts at the South end of the track and property. Discharge would be through these culverts to the shoreline.

g) Maintenance Schedule for Stormwater Facilities

Sediment control devices, including dikes swales, and outlets, will be inspected every 14 calendar days and after any heavy rainfall of 0.25 inches or more. If defects or damage are noted in the measures, the defect or damage will be immediately reported and repaired. If the measures prove to be inadequate to control erosion, changes will be made to the design and additional measures will be added as necessary.

Accumulated sediment will be removed before it reaches 40% of the height of the silt fencing, and in accordance with the approved SWPPP requirements. Worn, torn or otherwise damaged silt fencing will be fixed or replaced. The site will be cleaned on a daily basis of litter, debris and materials such as paper, wood, concrete, etc.

Proposed permanent maintenance schedules include regular inspections of the pond structures, culvert catchment systems and grassed areas. Any erosion, sediment collection or other signs of wear will be addressed within an assigned maintenance and repair period as part of a site maintenance plan.

After extreme weather or large storms, additional inspections of the stormwater system will be performed to ensure protection of the existing structures, racetrack integrity and shoreline stability.

h) *Proposed Method of Land Clearing*

The existing area proposed for construction consists of very flat grassy areas. After stormwater BMPs to include construction entrances and silt fencing are installed, site grading will be performed as needed to begin excavation for structure foundation. Topsoil will be preserved for use in re-vegetating the grassy areas, and stockpiles will be stabilized that sit for longer than 2 weeks undisturbed.

i) *Provisions to Preserve Topsoil and Limit Site Disturbance*

Topsoil and site disturbance will be minimized to the extent practicable during the construction timeline. Operations at the project site will be managed so as to contain all topsoil material in stockpiles for reuse on the site. No topsoil will leave the site or be left for longer than two weeks without stabilization. As the earth movement will cover a large area, steps will be taken to minimize fugitive dust emissions from winds and heavy machinery, and to block off-site migration of dust.

In addition to these mitigation measures, a stringent Storm Water Pollution Prevention Plan (SWPPP) will be implemented during project activities to ensure minimization of site disturbance and effective sediment management where soil is exposed.

j) *Critical Areas and Possible Trouble Spots*

The project area is within plots abutting the Southshore and includes wetland areas to the Southwest of the racetrack portion. Careful management of construction will be essential to ensure sediment loss is controlled during the construction phase. Site slope is minimal at less than 5%, so flows will be controlled through the sizing and management of the stormwater collection system, including the designed catchment basins, culvert system and grassy swales installed throughout the project area.

Long-term management of the site will be critical to ensuring stormwater discharges are free of pollutants typically associated with large animal operations, to include pathogens/bacteria, nutrients and sediment. This will include management of the stormwater controls themselves, as well as general site maintenance and housekeeping, in particular for the horse barns which are located within Flood Zone AE and close to the discharge point of the facility to the existing wetland area adjacent to the Southshore.

A comprehensive survey of the flora and fauna in the area indicates there are no endangered species within the proposed project site. Both downstream of the site and to the East are existing wetlands with different classifications. These areas include mixed swamps, Mangrove forest, salt flats and salt pond.

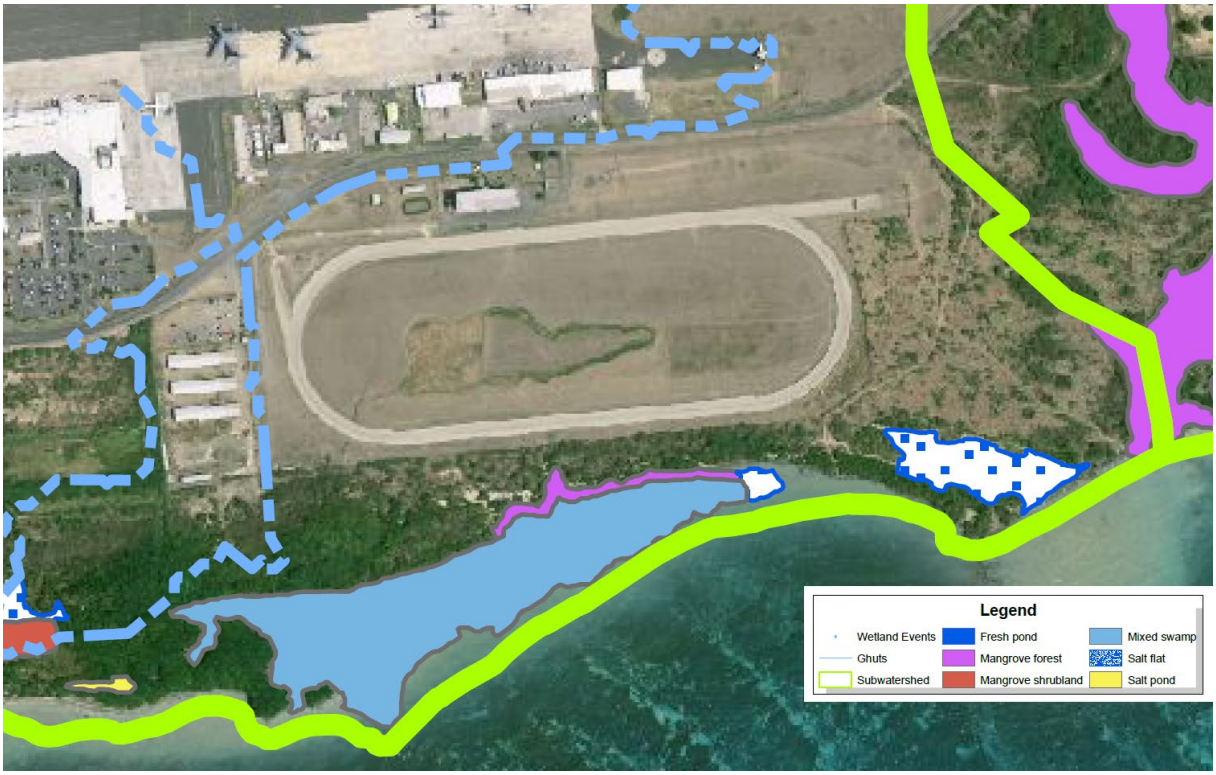


Figure 6.03.2 – Wetland Inventory. U.V.I. - Eastern Caribbean Center/Conservation Data Center, 2000.

These wetland areas have been found to be fringed by a riparian forest dominated by mangroves. White mangrove is the species most abundant along most of the length of Bethlehem Gut, though red mangroves dominate the area closest to the sea. The riparian vegetation varies in width of approximately 10-20 feet on both sides, with tree height approximating 25 feet. There is a large amount of mangrove and seaside mahoe seedlings along the edges of the lagoon and on the sand bar. Birds observed in these areas include Black-crowned Night Heron, Great Egret, Laughing Gull, Little Blue Heron, Magnificent Frigatebird, Yellow-crowned Night Heron (Conservation Data Center. 2010).

Stormwater controls, as well as long term management for the site will be designed to ensure stormwater runoff from the RDJ racetrack facilities does not contain pollutants in amounts that will negatively affect these critical habitats.

A review of the 2020 VIDPNR Integrated Report and draft 2022 303(d) list indicates that the closest receiving water bodies associated with this project are Assessment Unit VI-STC-64 (Manning Bay/Estate Anguilla Beach) and VI-STC-70 (Airport, nearshore), both Class B waters as defined by 12 VIRR §186. VI-STC-64 has a single ambient sampling location, sampled quarterly by VIDPNR, sample station STC-23. The waterbody is currently considered impaired for Dissolved Oxygen and pH. VI-STC-70 has no routine water quality monitoring stations and its status as impaired vs. unimpaired is Unknown.

VIGL does not expect to cause any negative impact to these waterbodies, as the site operations will be carefully managed throughout all race operations, and the proposed stormwater ponds have been designed to capture 1 inch of rainfall over the entire site, and the ponds will provide retention and allow for settling of sediments picked up by the stormwater.

There exists a potential for sedimentation and erosion during project activities. However, appropriate protective Best Management Practices (BMPs) will be employed through the entire project timeline, and as the project footprint is essentially identical to the existing infrastructure, there are no anticipated impacts to stormwater or air quality.

Erosion and Sediment Control Devices to be Implemented

The following Best Management Practices (BMPs) will be implemented on the site to control runoff and protect natural resources:

- **Construction Entrance** – A stabilized and riprap-ed construction entrance will be provided both on the north entrance as well as south, where earth change activity will occur. These entrances will be kept clean and accumulated dirt removed to ensure continued effectiveness.
- **Silt Fence** – Extensive silt fences will be installed following a basic standard operating procedure encasing the entire area of construction as a major form of perimeter control to prevent sediment from leaving the site as outlined in the Stormwater Pollution and Erosion Control Details of the site drawings.
- **Containment Berms** – A containment berm will be constructed if needed to support the silt fencing in containing stormwater and retaining sediment.
- **Concrete Washout** – A concrete washout will be installed when required for concrete work to install fence poles, spillway features, or sprayer unit anchors, to prevent concrete washout from being spilled on the ground.
- **Staging Area** – A staging area for materials, equipment and tools will be set up with silt fencing, to control high traffic areas, protect materials and chemicals from both traffic and weather, and provide an organized area to prevent trash buildup.

k) Maintenance of Erosion and Sediment Control Devices

Sediment control devices, including dikes swales, and outlets, will be inspected every 14 calendar days and after any heavy rainfall of 0.25 inches or more. If defects or damage are noted in the measures, the defect or damage will be immediately reported and repaired. If the measures prove to be inadequate to control erosion, changes will be made to the design and additional measures will be added as necessary.

Accumulated sediment will be removed in accordance with the approved SWPPP requirements.

Accumulated sediment will be removed before it reaches 40% of the height of the silt fencing. Worn, torn or otherwise damaged silt fencing will be fixed or replaced.

The site will be cleaned on a daily basis of litter, debris and materials such as paper, wood, concrete, etc.

l) Impacts to Terrestrial and Shoreline Erosion

The proposed development will not significantly alter the existing drainage patterns of the site, and attenuation for the increase in flow volume of stormwater discharging from the site will be provided by onsite stormwater retention ponds.

To ensure that the project design performs properly a hydrology study was performed to evaluate the stormwater management system and pathways. The stormwater flow, made up primarily of rainfall that lands on the site, is proposed to sheet flow to properly designed catchment basins and culvert systems that then direct the water to two primary stormwater retention ponds on site. From these ponds, retention will allow for holding time to settle any potential sediments, and water will sheet flow to existing drainage culverts at the South end of the track and property. Discharge would be through these culverts to the shoreline and existing wetlands.

All standard sediment and erosion control devices and Best Management Practices (BMPs) will be implemented when performing any site work and will be maintained throughout the life of the project.

Sediment and erosion controls will be implemented to effectively control drainage patterns, diverting runoff to existing outfalls that are protected by silt fencing.

These erosion control devices, combined with the receipt of a VI CGP storm water coverage and routine inspections, maintenance and repairs, will ensure no impact to either terrestrial or shoreline erosion, either during construction or in long-term maintenance of the project site.

6.04 FRESH WATER RESOURCES

Aside from rainwater, St. Croix, USVI is limited in the number of freshwater resources to only a select number of drinking water wells located around the island and mostly intermittent and ephemeral streams and ponds which dry up during periods of limited rainfall. Two wells are existing on the project area. One well sits adjacent to Route 64, north of the previous grandstand location, and another to the west of the project site, adjacent to the existing horse barns.

A water wells survey noted the western well as “Port Authority 4”, and indicated it was 60 feet in depth with ground water at 18 feet. No yield is indicated. The other well is not noted on this survey, but is designated as the “North Well” and underwent a yield test to determine depth, water height and yield.

This well was determined to be 48.1 feet deep, with a Standing Water Level (SWL) of 10.9 feet. The yield test estimated the well could produce up to 10.6 gpm.

Figure 6.03.3 – Location of existing Groudwater Wells on Racetrack Facility.

This well water is brackish, and VIGL has no current plans to treat and use this water as potable water. However, VIGL intends to use this water for maintenance and conditioning of the track area, both as routine and during race days. During a normal track week, daily practice and general operations will require an average of three (3) wettings per day consuming a total minimum daily turnover of 10,500 gallons. The highest non-potable water demand for track operations will come on race day. Based on historic consumption records, the track requires a minimum of 3,500 gallons of wetting between races. With a maximum of 10 races, this brings the race day total consumption to 35,000 gallons minimum.

VIGL intends to collect rainwater off the casino, grandstand, paddock/test barn, party pavilion and restroom structures only, and that water will feed to the 50,000-gallon cistern to be used as the primary non-potable water source that will be supplemented with well water for track wetting and other daily operations.

Based on recent historical rainfall data recorded at the Henry E. Rohlsen Airport, during peak rainy season, the collection of rainwater into the cistern is estimated to be over 96,000 gallons per week, which would be sufficient for the minimum weekly track operations and the once per month race day, requiring little to no groundwater to act as a secondary source. However, during the dry season, the monthly supply of rainwater to the cistern can be almost zero, requiring the secondary source of groundwater to provide almost 100% of needed non-potable water.

Considering such, VIGL will apply for an appropriation permit in advance of using this well, with the intention of using up to 50,000 gallons per day. Based on the draw down test as well as minimal number of other known active wells in the area, the well will be able to provide this amount without taxing the aquifer.

No impact to onsite wells, or the groundwater in the area is expected as part of the construction or the operation of this reconstructed racetrack facility and will have no negative impact on the availability of freshwater resources.

6.05 OCEANOGRAPHY

a) Seabed Alteration

No alteration or impact to the existing seabed is anticipated as part of this project and operation.

b) Tides and Currents

The surface currents throughout the Caribbean are driven by the North Equatorial Current that runs through the islands west-northwest and then joins the Gulf Stream (Figure 6.05.a-F.2). These currents change very little from season to season with the currents coming more from the south during the summer months. Because of the shallowness of the Caribbean basin, less than 3200 feet, mainly surface water from the Atlantic flows through the islands (Figure 6.05.1). Currents have been observed at Christiansted Harbor ranging between 1 and 3 knots, depending on weather conditions.

St. Croix's tides typically exhibit two (bi-modal) 'peaks' during the diurnal period (24-hour day), with the second (lesser) 'peak' with relatively small ebbs and flows. The mean tides range from 0.8 feet to 1.0 feet and the spring tidal ranges reach up to 1.3 feet (IRF 1977).

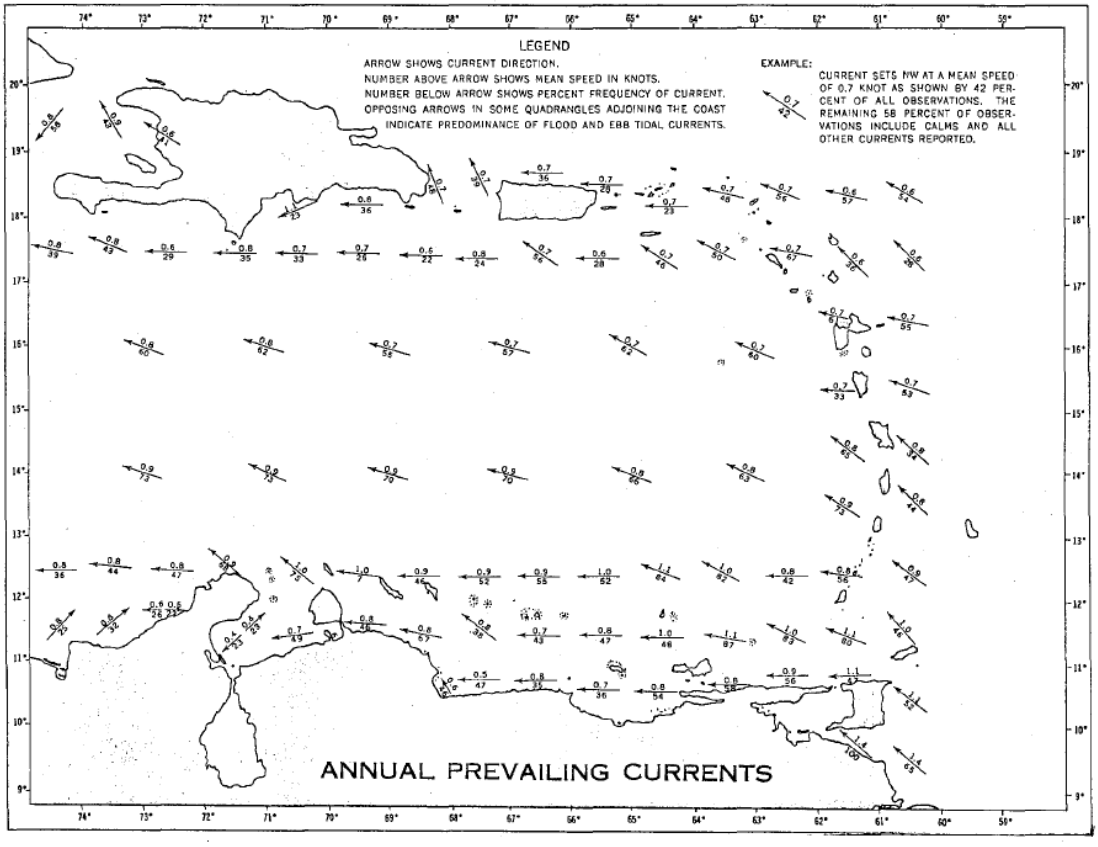


Figure 6.05.1 – Annual prevailing currents in the Caribbean. US Naval Oceanographic Office (1963)

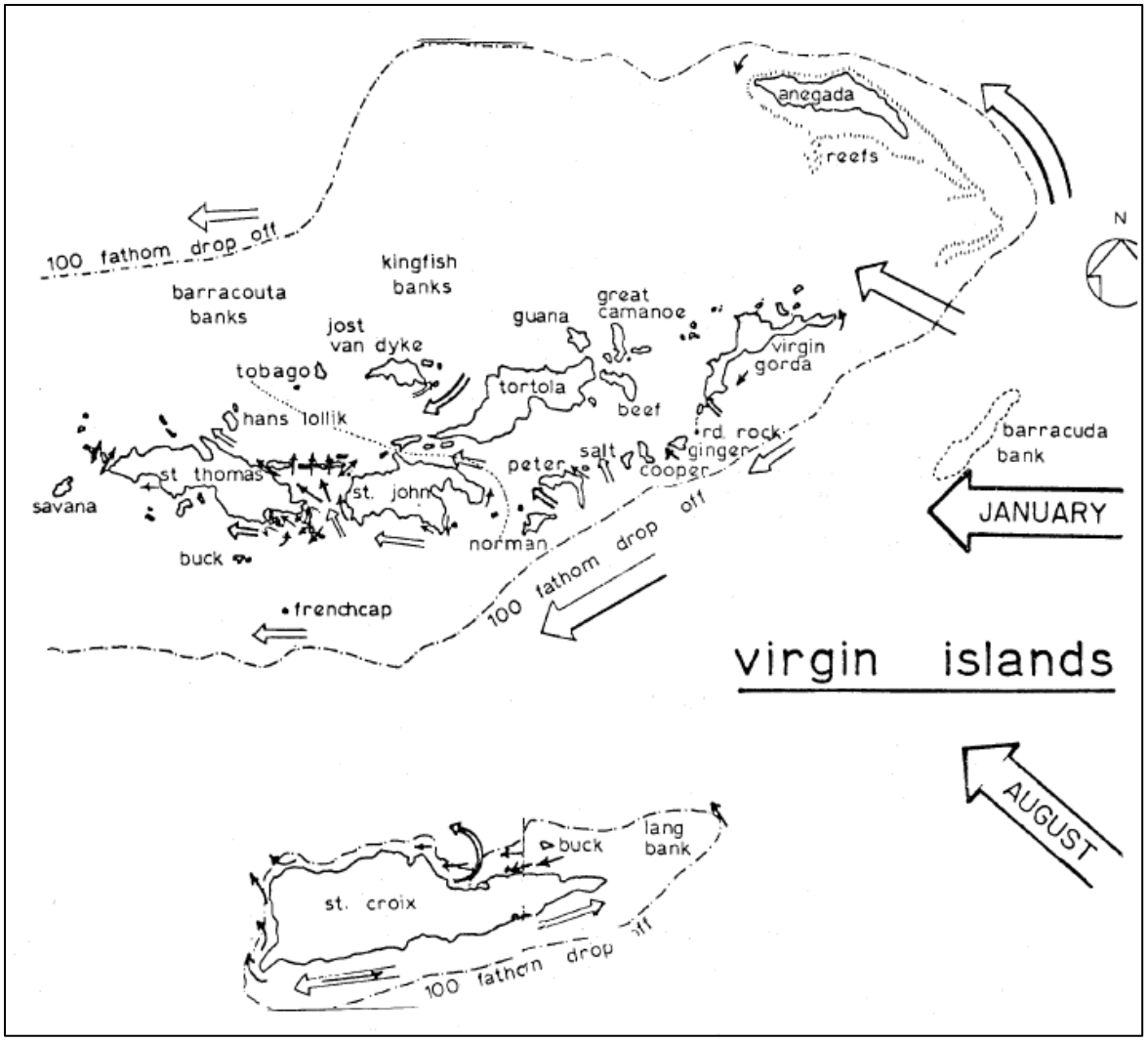


Figure 6.05.2 – General current patterns on the island platforms. From Dammann, et al (1969)

In the Virgin Islands, tidal ranges are not great, and tidal currents, except in some inshore localities, are not significant. The small islands, lacking complex shoreline physiography, do not restrict changes in water level. The sea flows around the islands relatively unimpeded, resulting in tidal fluctuations of only a few inches to a foot. Further, the steep slopes of the islands rising out of the water means that the intertidal zone – the part of the shoreline regularly covered and uncovered by the tides - is very narrow. We therefore do not have large areas of tidal flats uncovered at low tides as in other places in the world, especially along continental coastal zones.

One of the consequences of this small tidal action is that water exchange in bays due to tidal action is usually very small. For example, it is estimated that 24 to 40 tidal cycles alone would be necessary to exchange all the water in the main part of St. Thomas harbor (Percious, et al, 1972). Fortunately, waves, swells and oceanic currents usually do a good job of flushing most

bays. However, these forces are considerably reduced by the time they reach the heads of deep embayments.

As a result, circulation may be poor in the inner reaches of some of our larger embayments. The innermost portions of the mangrove lagoon on St. Thomas, of Salt River, St. Croix and of Coral Bay, St. John are like this. To a lesser extent, similar conditions have been observed at the head of Vessup Bay (Redhook), St. Thomas and Cruz Bay, St. John, and probably occur in other similar locations (IRF, 1977).

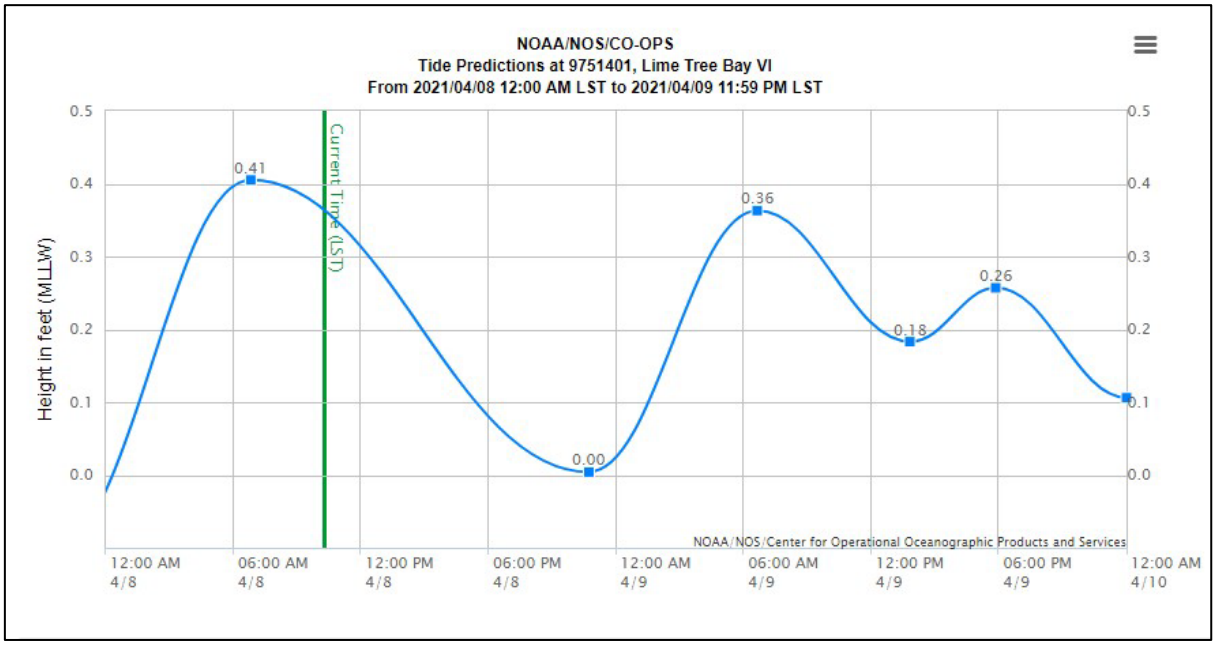


Figure 6.05.3 – Variations in the character of the tide displayed in time-height curves, from predicted tables and from observed tides at the Limetree, VI NOAA station., April 8 – April 10, 2021.

The closest NOAA tidal station is **Limetree Bay, VI - Station ID: 9751401.** This NOAA tidal station is located at Latitude: 17° 44.9' N and Longitude: 64° 41.9' W. The mean range is 0.69 ft. and the diurnal range is 0.71 ft. Tidal data from the station is shown below.

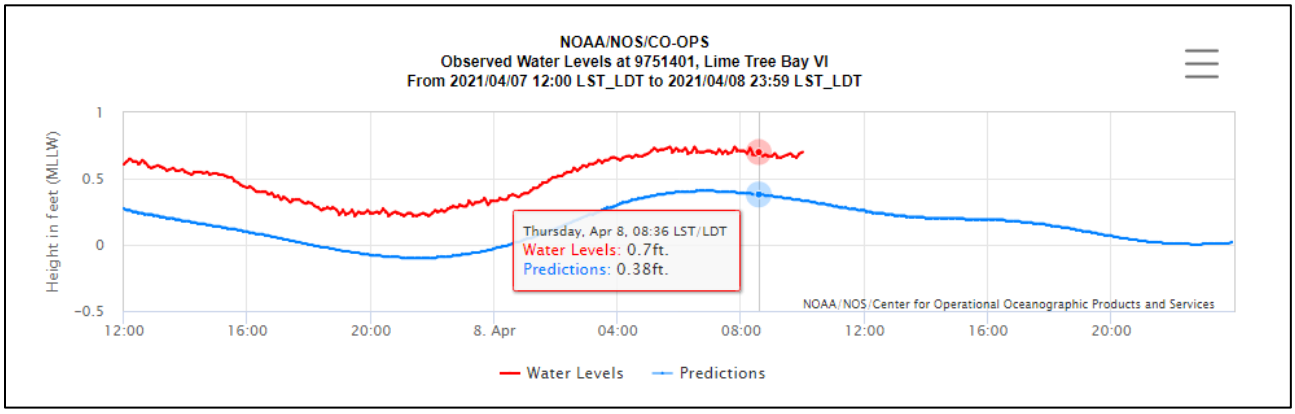


Figure 6.05.4 – Observed Water Levels in Limetree, St. Croix

c) *Wave and Wind Impacts*

Due to the location and elevation, there are no anticipated wave or wind impacts for this project or operation.

d) *Marine Water Quality*

The water surrounding the site is classified as Class B which is designated for maintenance and propagation of desirable species of wildlife and aquatic life, primary contact recreation, industrial water supplies, shipping, navigations and for use as potable water sources for those waters being used currently or that could be used in the future as potable water sources.

Figure 6.05.5 – Designated Class B waters around South Shore of St. Croix, USVI

The waterbodies to the south of the project site are Assessment Unit VI-STC-64 (Manning Bay/Estate Anguilla Beach) and VI-STC-70 (Airport, nearshore), both Class B waters as defined by 12 VIRR §186. Water quality criteria include:

- Dissolved oxygen not less than 5.0 mg/l from other than natural conditions.
- The pH must not vary by more than 0.1 pH unit from ambient, and at no time may the pH be less than 6.7 or greater than 8.5.
- Bacteria (enterococci) cannot exceed 30 CFU/100ml (30-day geometric mean).
- Clarity may not exceed a level where a secchi disc cannot be visible at a minimum depth of one meter.

Note: These waterbodies are exempt from any Class B Turbidity and color criteria, based on 12 VIRR §186-11.

VIDPNR performs routine water quality measurements at the following Water Quality Monitoring Stations:

Waterbody	Location	Sample Station Number(s)
VI-STC-64	Manning Bay/Estate Anguilla Beach	STC-23
VI-STC-70	Airport, nearshore	None

In VIDPNR's 2020 Integrated Report (IR), which entails the CWA Section 305(b) water status report and the CWA 303(d) list, the subject waterbody is classified as Impaired for Dissolved Oxygen.

The status is also the same for VIDPNR's DRAFT 2022 CWA 303(d) list.

Impact of the Proposed Project

The applicant has carefully considered operations onsite and how they would affect water quality. Operations will be set up carefully to control stormwater runoff from the site, and direct all of it to regulated and controlled discharge points.

A stringent sedimentation and erosion control plan will be implemented and monitored during the life of the construction. Proposed permanent maintenance schedules include regular inspections of the pond structures, culvert catchment systems and grassed areas. Any erosion, sediment collection or other signs of wear will be addressed within an assigned maintenance and repair period as part of a site maintenance plan.

6.06 MARINE RESOURCES AND HABITAT ASSESSMENT

Existing shoreline near the site is mostly composed of industrial operations to the East, including the Anguilla Landfill and POTW, shipping and port facilities with large areas of impervious land cover and the refinery and oil terminal farther East. To the west is mostly undeveloped land which turns into residential subdivisions such as Estate Enfield Green. The project site is located on the south-southwest quadrant of the island of St. Croix. The area is primarily commercial, with most of the northern area dedicated as Port land for the Henry E. Rohlsen Airport.

The area was designated as the Southshore Area of Particular Concern (APC) and designated for management intervention in the 2014 United States Virgin Islands' Coral Reef Management Priorities document. The Southshore Industrial APC was established to reduce the negative impact that industrial pollution has on the marine environment. Figure 6.06.1 below indicates the locations of the APCs on St. Croix.

According to the most recent USVI Coral Reef Management Priorities document for 2020-2025, the Sourthshore Industrial APC has fallen to a lower ranking for management intervention needs, though does remain a part of the priority list. This project is anticipated

to create no negative effects of soil erosion and sedimentation with the proposed improvements to the site and the applicant anticipates no negative effect from the project activities or long-term design.

During construction, VIGL will mitigate the effects of soil erosion, sedimentation and trash by following a strict SWPPP addressing those issues and will ensure no negative effect during the work schedule.

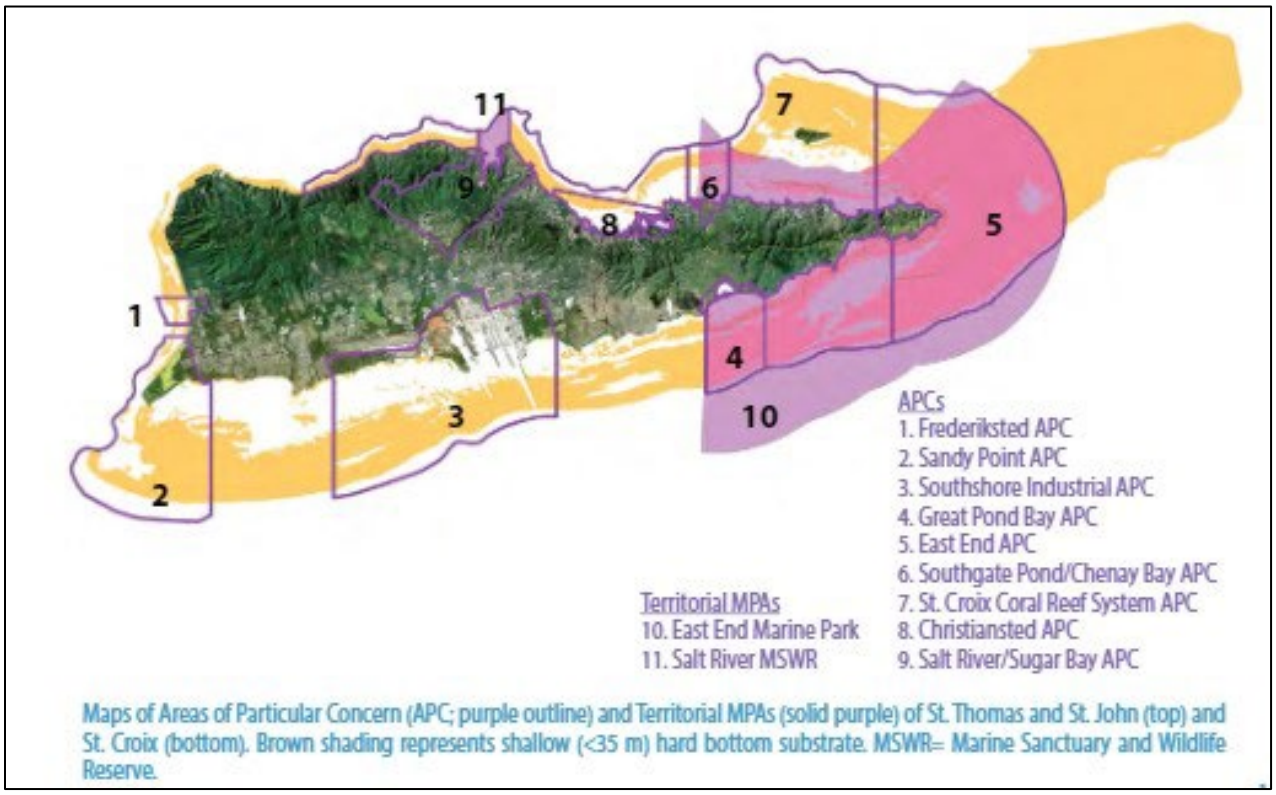


Figure 6.06.1 Map of Areas of Particular Concern – Marine Protected Areas of the United States Virgin Islands, 2014

A review of the 2002 NOAA Benthic Habitat Maps shows the majority of the surrounding habitat is a majority of seagrass (70-90% coverage) and a sliver of Reef/Colonized Bedrock. No negative impact to either of these types of marine habitat are anticipated as part of this project.

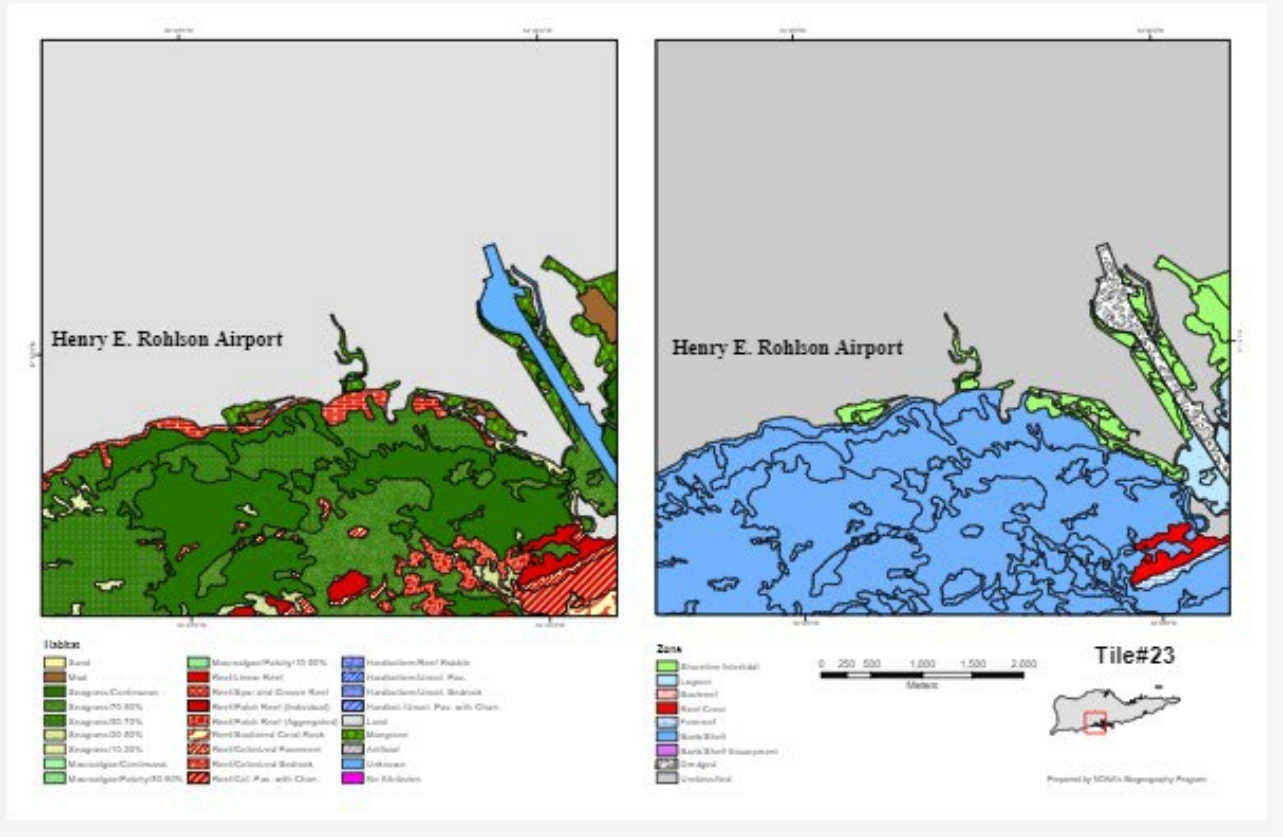


Figure 6.06.2 – 2002 NOAA Benthic Habitat Maps, South Shore St. Croix, USVI.

A review of Endangered Species in the area, through the IPaC Tool, indicates there are no endangered marine species within the immediate proposed project site but identifies two federal endangered sea turtle species that are known to swim in the offshore waters - the Hawksbill Sea Turtle (*Eretmochelys imbricata*) and Leatherback Sea Turtle (*Dermochelys coriacea*). Three threatened species of turtle are also present - the Green Sea Turtle (*Chelonia mydas*), Loggerhead Sea Turtle (*Caretta caretta*), and the Olive Ridley Sea Turtle (*Lepidochelys olivacea*). In addition, the West Indian Manatee (*Trichechus manatus*) has also been found in the offshore waters and are a threatened species.

No negative impacts to these noted threatened or endangered species or to the marine environment in which they can be found is anticipated as a result of the proposed project.

6.07 TERRESTRIAL RESOURCES

A terrestrial vegetation and wildlife survey was previously performed on March 24, 2018. The survey included the current visitor parking and grandstand, as well as the Northern, Eastern and Southeastern boundaries of the property and proposed project site. A second inventory was conducted at the current stable entrance on March 31, 2018 but no rare or endangered species were found. One Lignum Vitae tree (*Guiacum officinale*) was found about forty feet east of an existing asphalt pad in the proposed project site. The site is adjacent to the outlet of the Bethlehem Watershed (Kraal. VIGL EAR, 2018).

Any discovery of the presence of species during the project that may be threatened, endangered or native will be brought to the attention of VIDPNR Fish & Wildlife Division as well as USFWS.

The Environmental Sensitivity Index (ESI) Map for St. Croix Island notes no specific habitat of sensitivity within the specific project area. However, it indicates that freshwater marshes to the west of the project site and the existing Bethlehem Gut and wetlands are used as habitat for certain bird species that include gulls, shorebirds, terns, wading birds and neotropical migrant birds, as show in Figure 6.07.1 below.

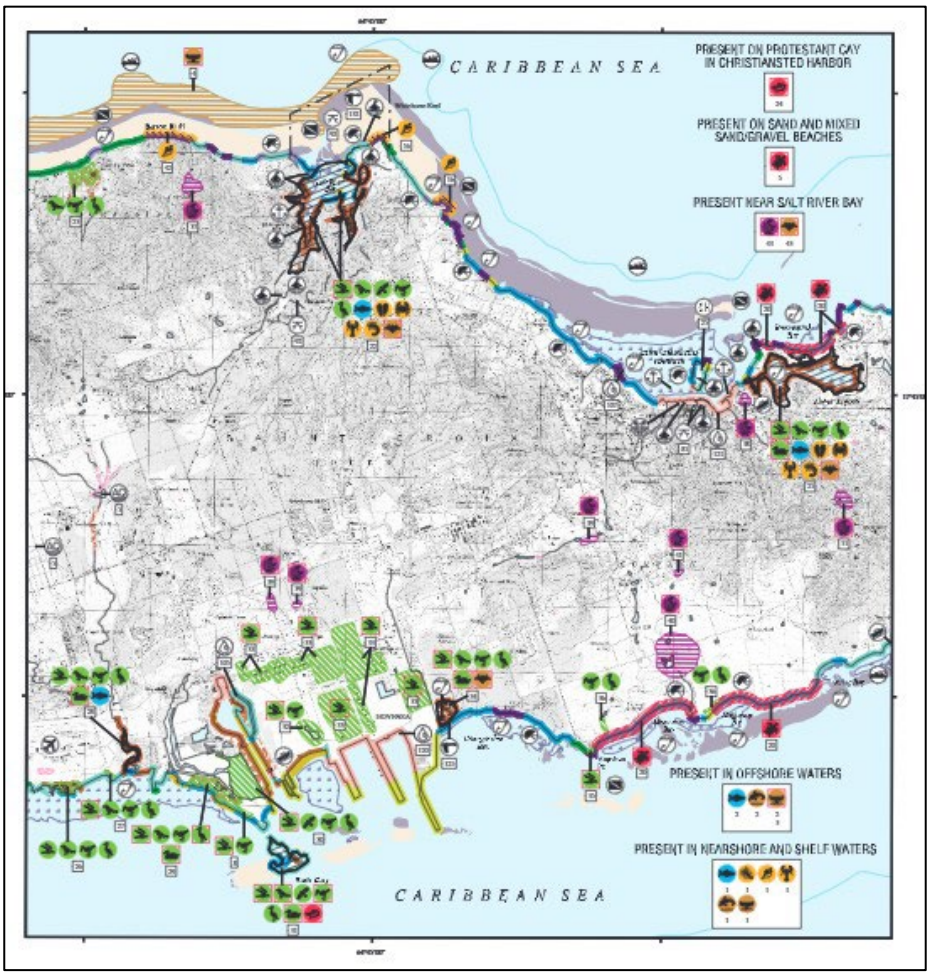


Figure 6.07.1 – Environmental Sensitivity Index Map, St. Croix, USVI.

Impact of the Proposed Project

Through the project scope, long term design and use, and perpetual site maintenance, VIGL will reduce the likelihood of impact to these wetlands and habitat for birds.

As compliance with both stormwater and air pollution permits will be ensured throughout the life of the project, there are no anticipated negative impacts to these species or their habitat, neither in the nearshore waters nor on land.

6.08 WETLANDS

The U.S. Army Corps of Engineers defines wetlands as "those areas that are periodically inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, bogs, marshes and similar areas." (U.S. Army Corps of Engineers, 1986).

From the terrestrial surveys performed in 2018, as well as site walkthrough confirmations in 2023, there are no terrestrial wetlands within the project area, though there are wetland areas in and around Bethlehem Gut and to the south of the project area.

No impacts are anticipated to any wetlands. The applicant has carefully considered operations onsite and how they would affect these sensitive areas. Operations will be setup carefully to control stormwater runoff from the site, and direct all of it to regulated and controlled discharge points.

A stringent sedimentation and erosion control plan will be implemented and monitored during the life of the construction. Proposed permanent maintenance schedules include regular inspections of the pond structures, culvert catchment systems and grassed areas. Any erosion, sediment collection or other signs of wear will be addressed within an assigned maintenance and repair period as part of a site maintenance plan.

6.09 RARE AND ENDANGERED SPECIES

There are no rare or endangered species noted directly on the site, and the site is not critical habitat. During 2018 surveys, one Lignum Vitae tree (*Guiacum officinale*) was found about forty feet east of an existing asphalt pad in the proposed project site. The site is adjacent to the outlet of the Bethlehem Watershed (Kraal. VIGL EAR, 2018).

A review of Endangered Species in the area, through the IPaC Tool, indicates there are no endangered marine species within the immediate proposed project site but identifies two federal endangered sea turtle species that are known to swim in the offshore waters - the

Hawksbill Sea Turtle (*Eretmochelys imbricata*) and Leatherback Sea Turtle (*Dermochelys coriacea*). Three threatened species of turtle are also present - the Green Sea Turtle (*Chelonia mydas*), Loggerhead Sea Turtle (*Caretta caretta*), and the Olive Ridley Sea Turtle (*Lepidochelys olivacea*). In addition, the West Indian Manatee (*Trichechus manatus*) has also been found in the offshore waters and are a threatened species.

The construction will have no anticipated impact on these identified rare or endangered species. The project is not anticipated to impact these adjacent properties, wetlands or shoreline waters. As such, the permitting of this project will not displace any rare, endangered, or threatened species from any critical habitat.

6.10 AIR QUALITY

No air quality issues are anticipated for this project. Any and all excavation of soil or fill material shall be done in a way to prevent fugitive dust from leaving the project area.

An emergency generator will be installed as backup power only, in the event that municipal power fails. An authority to construct and permit to operate application will be submitted to ensure emissions meet Clean Air Act emissions standards.

7.00 IMPACT OF THE PROPOSED PROJECT ON THE HUMAN ENVIRONMENT

7.01 LAND AND WATER USE PLANS

The project site where the existing racetrack is located is zoned Public. The portion of the site that was formerly used as a racetrack retains its land use applicability since most of the development occurs in areas that have already been developed or altered (Kraal. VIGL EAR, 2018).

For over 75 years the site has been used as a racetrack, and these improvements will result in a facility that meets all environmental and building code requirements while providing the services and features expected from a comprehensive racetrack and casino operation.

These improvements align with the historical land use for this area. The flat, low lying area is conducive to the racing, training and exercising of horses, and the location provides for an area that is away from residential subdivisions, commercial activity or schools that may be impacted by the racing or entertainment activities.

Additionally, water in the aquifer is brackish and close enough to the Anguilla landfill that very few wells in the area draw enough water to tax the groundwater or increase saltwater intrusion.

7.02 VISUAL IMPACTS

There will be no negative visual impacts from the construction of a new state of the art racetrack and casino. The previous racetrack facilities, including the grandstand, was old, damaged and inadequate for its intended activities. This new facility will be expanded to allow for increased attendance during major race days, while also minimizing structure height and size.

While providing for parking for up to 625 cars whose passengers will enter and participate in casino, racing, culinary and other entertainment services, the site will still retain grassy cover on over 76% of its area and exude a reserved and simple layout to maximize viewer visibility of the main feature, the racetrack.

VIGL considers the visual impact of these building structures to have little to no negative effect on the landscape or expectations from the community for the project site's use.

7.03 IMPACTS ON PUBLIC SERVICES AND UTILITIES

Water

As noted in Part 6.04, the project will not use ground water as potable water and instead for non-potable services such as track wetting and other operational activities. VIGL will collect water from roof catchments into the proposed 50,000 gallon cistern as the primary source of non-potable water and use the well water as a secondary source only when required during periods of low rainfall.

Water and Power Authority municipal water will be the only source of potable water for routine and special event activities.

While major event days will see a significant attendance at the facilities, the vast majority of the time this site will be minimally staffed and is not anticipated to have negative impacts on public water systems.

Water resources will be prepared in advance of major events with significant expected attendance to ensure maximized reserves of water are available and to minimize the demand for water at peak times.

Sewage Treatment and Disposal

VIGL proposes to connect to the existing municipal sewer system to handle all sewerage disposal requirements. As noted above, while major event days will see a significant attendance at the facilities, the vast majority of the time this site will be minimally staffed and is not anticipated to have negative impacts on the municipal sewer system.

During times of peak traffic and public attendance, the POTW will see an influx of sewage over the course of any planned major event. However, the POTW's typical influent volume of less than 4 MGD is significantly less as compared to its design capacity of up to 8 MGD. Due to the proximity of the POTW to the proposed project site, any sewer line to which the facility is connected will be a large diameter pipe that was sized to handle large volumes coming into the existing plant.

Considering this design and build criteria of this large POTW, these intermittent spikes in flow can be managed by the POTW with negligible impact to both the pipeline infrastructure, plant and quality of its effluent.

Solid Waste Disposal

During construction of the project, domestic solid waste will be managed with onsite waste bins. It will be trucked out by a licensed waste hauler as necessary and disposed of in accordance with solid waste requirements.

Per the USVI 2019 Residential Waste Characterization Report, the average Virgin Islander produces approximately 9 lbs. of trash per day - almost 40% above the U.S. average.

Currently, anecdotal information collected reveal that attendance at racing activities can be divided into three categories: low attendance between 700-800 people, medium attendance between 1,500-1,800 people and high attendance on major holidays between 2,500 to 3,500 people (Kraal. VIGL EAR, 2018).

Assuming 18 racing events per year and an overall and maximum attendance, the new facility will only generate less than 0.5% additional solid waste per year which will be collected in bins at the site and is expected to be disposed of at the VI Waste Management Authority (VIWMA) transfer station facility adjacent to the racetrack.

Additionally, solid waste produced by the horses and stable operations will be collected, contained and covered, and given to the public as fertilizer or disposed of at the landfill to ensure no solid waste material reaches the adjacent land, water or shoreline.

Roads, Traffic and Parking

Route 64 (Airport Road) is a two-lane paved road that is on the northern perimeter of the site. All types of motorists use Rt. 64 since it is the main access road to the airport for persons traveling from the East. It's expected that use of the road will increase dramatically from late morning to around 8pm on the days when racing events are held with the heaviest around midday to early afternoon. Since much of the bush has been cut approximately thirty (30) feet away from Route 64, there will be clearer lines of vision when leaving the racetrack complex which will help mitigate safety concerns (Kraal. VIGL EAR, 2018).

Parking has been provided across almost 4 acres of the property, providing 625 standard parking spaces. Parking layout was kept simple for ease of ingress and egress, and combined with high visibility, should maintain a steady flow of traffic in and out of the facility, even during peak hours during major events.

Electricity

The new racetrack will use municipal infrastructure as it's main source of power. As noted with water, while major event days will see a significant attendance at the facilities, the vast majority of the time this site will be minimally staffed and is not anticipated to have negative impacts on public electrical system.

Power draw is expected to increase during major events, though those times will be infrequent.

Schools

There are no anticipated adverse effects on the local educational system.

Fire and Police Protection

As this project will be manned by 24-hour security during operations, and have an 8-foot surrounding chain-link fence, no expected police protection is anticipated for either the construction or operation of the racetrack facility.

Anticipated fire protection needs are low. The facility will be state of the art, will be designed and constructed according to strict NEC standards, with sufficient safety factors incorporated to minimize risk of fire, and have a required sprinkler system and other fire protection features and requirements (e.g. fire extinguishers, fire alarm system, smoke detectors).

The existing potable water tank, sized at 127,000 gallons, will be fed by the WAPA municipal system and is designed to provide the required water flow and total quantity for fire control under NFPA and VI Fire Code. It will feed an NFPA 13 compliant sprinkler system as well as 3 onsite fire hydrants.

Wide access routes will be provided to ensure fire truck access to the site in the unlikely event a fire occurs at the site.

Health

The property will not have any adverse effects on the public health, nor increase the use of public health facilities.

7.04 SOCIAL IMPACTS

The proposed project will have a very positive social impact because it is expected that it will attract tourists, race enthusiasts and other visitors to our shores and experience the features and resources the US Virgin Islands has to offer, beyond just horse racing and casino entertainment.

This development will stimulate greater interest and community participation in equestrianism, heighten awareness of the importance of horseracing best management practices and thereby result in an improved and wholesome modern racing facility and industry on the island of St. Croix. It will also provide a venue for social events outside of racing which will Virgin Islanders and visitors to mingle and share cultural experiences. On race day weekends, the volume of people traveling from Tortola, St. Thomas and Puerto Rico and St. John to St. Croix will increase (Kraal. VIGL EAR, 2018).

7.05 ECONOMIC IMPACTS

The current gaming industry metric for incremental spin-off economic activity attributed to a new casino is 70% for every Full-Time Equivalent Employee (FTE) and 71% for every dollar in casino revenue. For the project, VIGL anticipates hiring up to 230 FTE's. Therefore, following the formula above, (230FTEs) (.7) = 161 new FTEs in the Territory (Kraal. VIGL EAR, 2018).

Based on projections generated from a Gaming Market Study performed in 2017, the racino portion of the Randall N. "Doc" James Stadium and Casino complex would stand to create an additional average $18.2M in spin-off economic activity over the first five years of operation (Kraal. VIGL EAR, 2018).

Both large and small local vendors conducting businesses from their homes will also benefit. Overall, this project will increase the circulation of currency in the territory and throughout businesses beyond horseracing and thereby stimulate the VI economy from construction to startup and long-term operations (Kraal. VIGL EAR, 2018).

7.06 IMPACTS ON HISTORICAL AND ARCHAEOLOGICAL RESOURCES

A Phase1A&B Archaeological Study was performed on 15 of the 19.48 acres expansion east of the current racetrack during November of 2013 following the Department of Planning and Natural Resources Division of Historic Preservation "Guidelines for Cultural Resources Investigations" to comply with Title 29, Chapter 17, Section 959 of the Virgin Islands Code. Comprehensive review of the archaeological files was performed to identify cultural resources of record. Additionally, field tests involving surface inspection of the subject property were conducted followed by the excavation of shovel tests established at 30-meter intervals. According to the official study report "The walls of drainage features were visually inspected for cultural materials but not tested. The shovel tests measured approximately 30 centimeters in diameter and were excavated to depths that were no longer considered to have the potential of containing non-random artifact bearing matrices" (Kraal. VIGL EAR, 2018).

Subsequently, a more recent Phase 1 Archaeological Survey was performed for the Dr. Randall N. "Doc" James Racetrack on March 29, 2018. Again, a literature review and records search were conducted of readily available followed by implementation of a design driven by systematic and purposive sampling via shovel tests throughout the site. According to the reports provided "No potentially significant cultural resources were identified during the course of our Survey". The existing developed property was found to have been extensively modified by grading during various episodes of development (Kraal. VIGL EAR, 2018).

The additional areas to be developed to the east of the racetrack were also found to be disturbed. The 15-acre tract identified at the time as the "Tibbar parcel" but now part of the proposed racetrack property was surveyed in 2011 by Soltec International Inc., and resulted in similar findings of no significant cultural resources present on that particular 15-acre tract of land. No impacts to these resources are anticipated as part of this project, as the location for the facility reconstruction is in areas with no historic resources (Kraal. VIGL EAR, 2018).

VIGL will halt work in the area immediately should construction activity result in any encounter with suspected historic artifacts, resources or material, and contact with SHPO will be made to report any such discovery.

7.07 RECREATIONAL USE

This project will increase the participation of Virgin Island residents in horseracing which has been a fairly significant activity and part of Virgin Island culture for many years. There are Virgin Islanders who can trace their family involvement in horseracing for many generations. Additionally, the site will include facilities conducive to people of all ages and will become and entertainment center on the island capable of hosting a variety of activities beyond horseracing. It will also include areas that are suitable for children so that families can enjoy the facility together.

7.08 WASTE DISPOSAL

During construction of the project, domestic solid waste will be managed with onsite waste bins. It will be trucked out by a licensed waste hauler as necessary and disposed of in accordance with solid waste requirements.

Any unused or contaminated chemicals or materials, including oily rags, will be disposed of in accordance with waste handing regulations.

During operation of the racetrack, casino and other entertainment facilities, waste will be managed in accordance with all federal and local regulations and requirements for handling the various waste streams expected both during normal operations as well as during major events or races.

All water used in horse washdowns, cleaning or other horse care activities will be done so in areas that will drain to collection points and be discharged to sewer. No discharge of waste or process water will occur to land, surface water or shoreline areas.

Additionally, solid waste produced by the horses and stable operations will be collected, contained and covered, and given to the public as fertilizer or disposed of at the landfill to ensure no solid waste material reaches the adjacent land, water or shoreline.

The project will have no significant impact on solid waste disposal.

7.09 ACCIDENTAL SPILLS

There will be a 250-gallon fuel storage tank onsite. Installation and operation of the tank will comply with all applicable, relevant and appropriate requirements including spill prevention, leak detection and spill containment requirements. The management of an accidental release or spill of any substance that exhibits characteristic hazardous waste properties such as, ignitability, corrosivity, reactivity or toxicity, if it occurs, will be fully addressed in the

Stormwater Pollution Prevention Plan prepared for the construction phase. In general, releases will be contained immediately, collected and stored in an appropriate container. Used oil or unused oils that may become contaminated from coming in contact with soil or other foreign materials will be managed according to 40 Code of Federal Regulations Part 279 "Standards for the Management of Used Oil" (Kraal. VIGL EAR, 2018).

Construction crews will be trained on the project's SWPPP, and procedures for spill response, as required by the VI CGP.

Any spills will be immediately cleaned up, and contaminated soil will be put into approved containers for eventual disposal by a licensed waste handler.

7.10 POTENTIAL ADVERSE EFFECTS WHICH CANNOT BE AVOIDED

The project does not involve any potential adverse effects that will not be avoided. The project has been designed to avoid sensitive areas to the greatest extent possible.

Potential impacts due to construction have been minimized through the development of detailed cut and fill specifications as well as a stringent sedimentation and erosion control plan which will be implemented during construction and during the life of the project build.

Through careful design and implementation of a number of safety features and systems, VIGL will also ensure the project will avoid any adverse effects during the life of the racetrack operations and meet all environmental and operational requirements set forth by USVI regulations.

8.00 MITIGATION PLANS

No mitigation plans are needed for this project and operation. No encounters with endangered or native species were encountered in the project area, or in any areas with potential to be impacted by the project.

If during construction activities, any sensitive species, habitat or resources are encountered, VIGL will cease work and contact VIDPNR to address the findings and develop a mitigation plan if required.

9.00 ALTERNATIVES TO PROPOSED ACTION

There are several alternatives to the proposed racetrack facility as proposed in this modification. However, each alternative has been evaluated and been determined to be either more expensive, present higher risk to the environment and USVI territorial resources or neglect a potential benefit to the St. Croix economy.

Alternative 1 – Build the Racetrack as Currently Permitted

The primary alternative evaluated was to construct the racetrack as currently permitted under CZX-11-18(L). However, due to the change of landscape since the permit issuance in relation to construction costs and COVID-related slowdowns to the gaming industry, VIGL determined that the current design would not present the same economical return expected as with this revised, reduced and more efficient design prepared in response to the changes in market potential and social impact.

After evaluation of this option, VIGL determined the existing construction scope would be disproportionately costly to expected services provided, and this modified design will prove a much more economical facility that would be more resilient to market changes and long lasting.

Alternative 2 – Abandon the site as a Racetrack

Another alternative evaluated was to abandon the site and repurpose the site. This route would eliminate a proven business operation that will not only bring in revenue for the island and its local vendors, but also bring visitors, tourists and racing enthusiasts that will experience St. Croix in more than just horse racing and bring business to more than just the racetrack businesses.

The site may be repurposed for something else, but due to the established barns, jockeys and racetrack users, would not be suited as well to stimulating the economy or social network that has existed for this location for the past 75 years.

Alternative 3 – Build the Racetrack at a Different Location

A third alternative evaluated was to construct a new racetrack facility elsewhere, in a place that is farther from the shoreline, wetlands or other environmental resources, as well as a place that may have better utilities or roads suited to the expected traffic.

After evaluation of this option, VIGL determined that there are few locations better suited than this area that also are significant distances from critical environmental resources and habitats.

Additionally, there will be a significant additional cost to build a brand new 8-furlong track elsewhere, and include new barns, wells, chain-link fencing, and other support documents.

Alternative 4 – Do not Reconstruct Racetrack Facilities – Operate As Is

A fourth alternative evaluated was to maintain current conditions at the site, which entails no construction of grandstand, casino, entertainment structures or supporting buildings. This leaves the existing track and horse barns. This is infeasible for long-term operations as the existing facilities are inadequate for hosting even minor races, and the site cannot function as a racetrack in its current state.

In consideration of these 3 alternatives, VIGL has determined that the current proposed racetrack design and scope of work would be the best balance of economically and socially benefits for the capital investment and environmental resource protection.

10.00 RELATIONSHIP BETWEEN SHORT & LONG TERM USES OF MAN'S ENVIRONMENT

The project proposes to reconstruct a racetrack that will bring back to life a long-term use of this property for the past 75 years and provide St. Croix with a facility that meets all environmental and building code requirements while providing the services and features expected from a comprehensive racetrack and casino operation.

The construction of this facility will be a continued long-term use of the area which, through careful design, conservative safety factors, and protective management measures, will maintain and protect the shoreline, wetlands and other natural resources while providing incredible social, cultural and entertainment value to the community and economy of St. Croix.

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