

FEDERAL CONSISTENCY DETERMINATION REQUEST

LINDBERGH BAY HEAD START Lot #27A, Lindberg Bay Southside QTR, St. Thomas U.S. Virgin Islands

USVI DEPARTMENT OF HUMAN SERVICES
HEAD START & EARLY HEAD START PROGRAM
ST. THOMAS, US VIRGIN ISLANDS



Prepared by:
CPH, Inc.
950 Ponce de Leon Avenue
San Juan, PR 00907

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INTRODUCTION

The US Virgin Islands Department of Human Services is proposing the demolition of an existing one-story structure to construct a new head start facility. The existing structure is approximately 50 feet long by 25 feet wide and have an extended galvalume roof that measures approximately 50 feet long by 16 feet wide. The approximate structure area is 1,243 square feet. The existing structure was severely damaged by Hurricane Irma in September 2017. The storm produced strong destructive winds, power outages, down power lines, structure and property damage and fallen trees.

The existing building was constructed 50+ years prior to the major hurricanes in the late 80's from Hurricane Hugo to the more recent hurricanes, Irma and Maria. Since the time of Hurricane Hugo in 1989, the Virgin Islands has adopted, first the Uniform Building Code for structures, and more recently, the International Building Code (IBC). The existing building will be rebuilt per IBC code requirements to accommodate the program requirements for a functional facility.

PROJECT LOCATION

This project area comprises 0.10 acres track of land owned by the USVI Government and located at Lot #27A, Lindberg Bay, Southern Quarter, St. Thomas, U.S. Virgin Islands.



Figure 1: USVI GIS online MapGeo

The property is limited: to the North by Lot 27C Southside Quarter with Property ID# 105201034500 owned by Hodge, Calvin E & Leonille B; to the South by a paved road; to the East by 20 Entrance Road; and to the West by Lot 60-26 Southern Square. The project GPS coordinates are: latitude 18.343938 / longitude -64.965804.

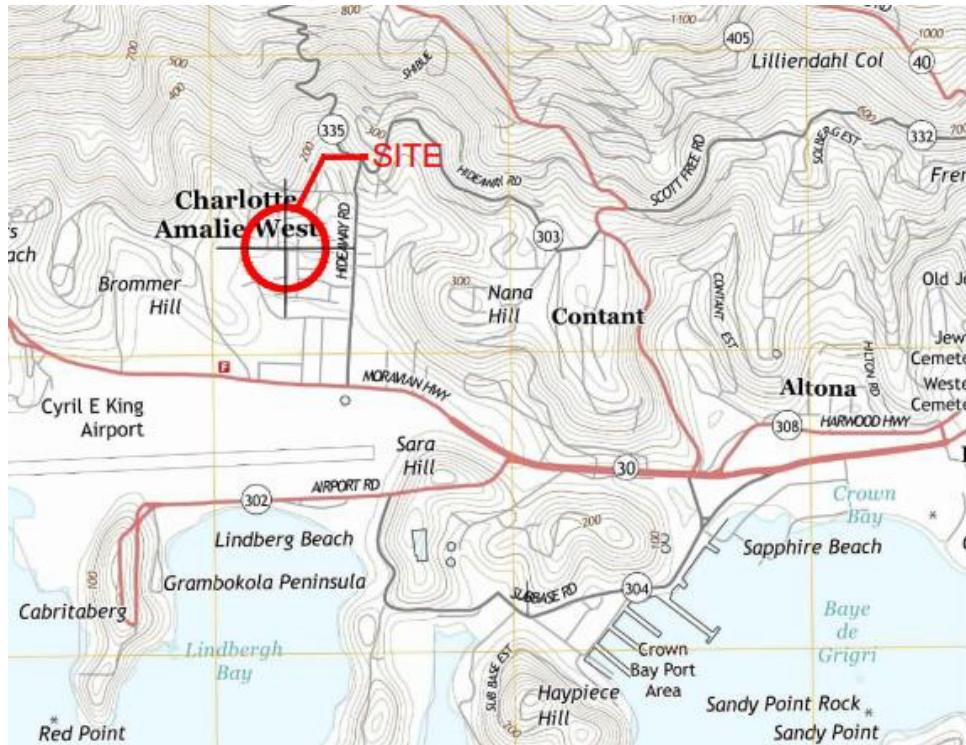


Figure 2: Site Location – USGS Charlotte Amalie VI Quadrangle - Topo Map

SITE DESCRIPTION

GENERAL

The site is completely developed and occupied by the one single story structure previously described, concrete floor outside pads and playground area. The site has no parking spaces. The property has a connection to public sewer system. This building is constructed of 8" concrete masonry unit (CMU) walls with corrugated galvanized roofs. The property is currently abandoned.

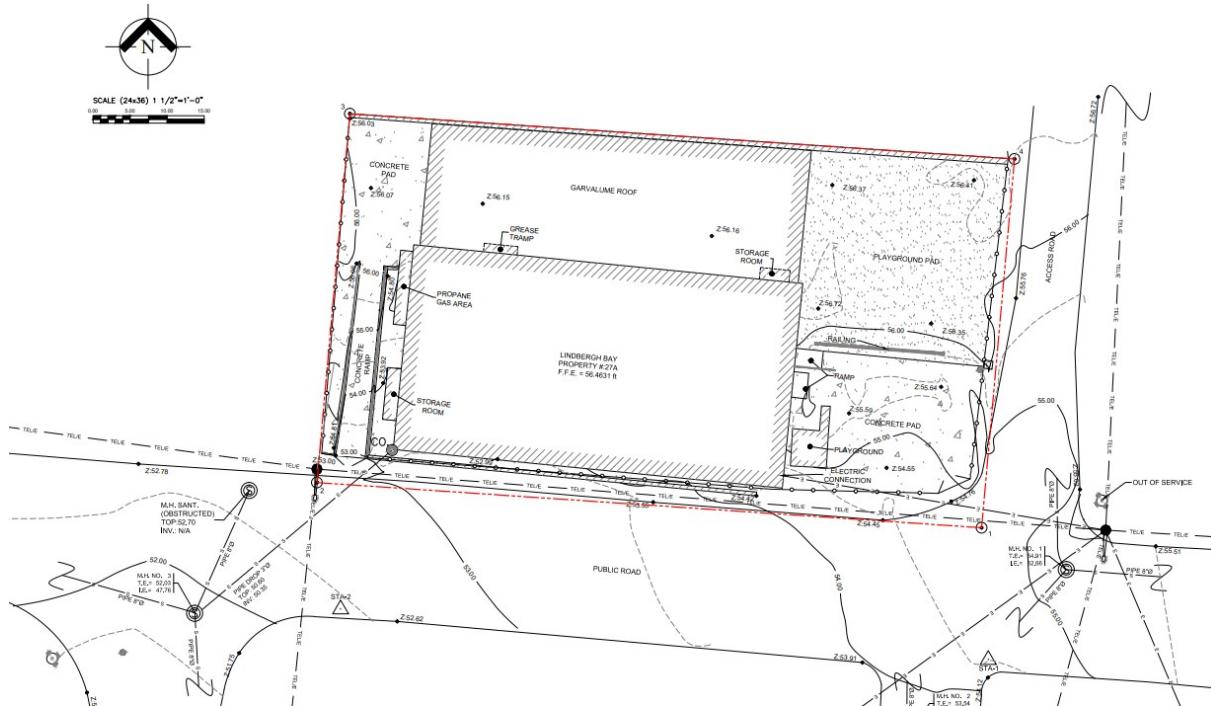


Figure 3: Existing Conditions Survey of Site

PHOTOS



Photo 1: Front View (from East to West)



Photo 2: Front View (West to East)

ENVIRONMENTAL IMPACTS

TOPOGRAPHY AND DRAINAGE PATTERNS

The existing ground surface is nearly level at about 55 feet MSL. Roughly, the property drains topographically from the north-western corner toward the east and south into 20 Entrance Road and eventually into the paved road (which drains toward the West) South of the property through sheet flow condition.

There is no public storm sewer system available in the area.

SOILS

According to the USDA online Soil Survey, soils within the project area are classified as Cinnamon Bay gravelly loam, 5 to 12 percent slopes, occasionally flooded (CgC). The Cinnamon Bay consists of non-stony, well drained, moderately permeable soils on alluvial fans and terraces adjacent to volcanic uplands.

According to the USDA – Natural Resources Conservation Service, these soils are not considered as hydric, nor has hydric inclusions.



Figure 4: USDA Soil Survey Map

FLOOD ZONES

According to Panel 0025 of the US Virgin Islands Advisory Base Flood Elevation Maps, the project area is within flood zone AO with a defined 1% depth of 2 feet.

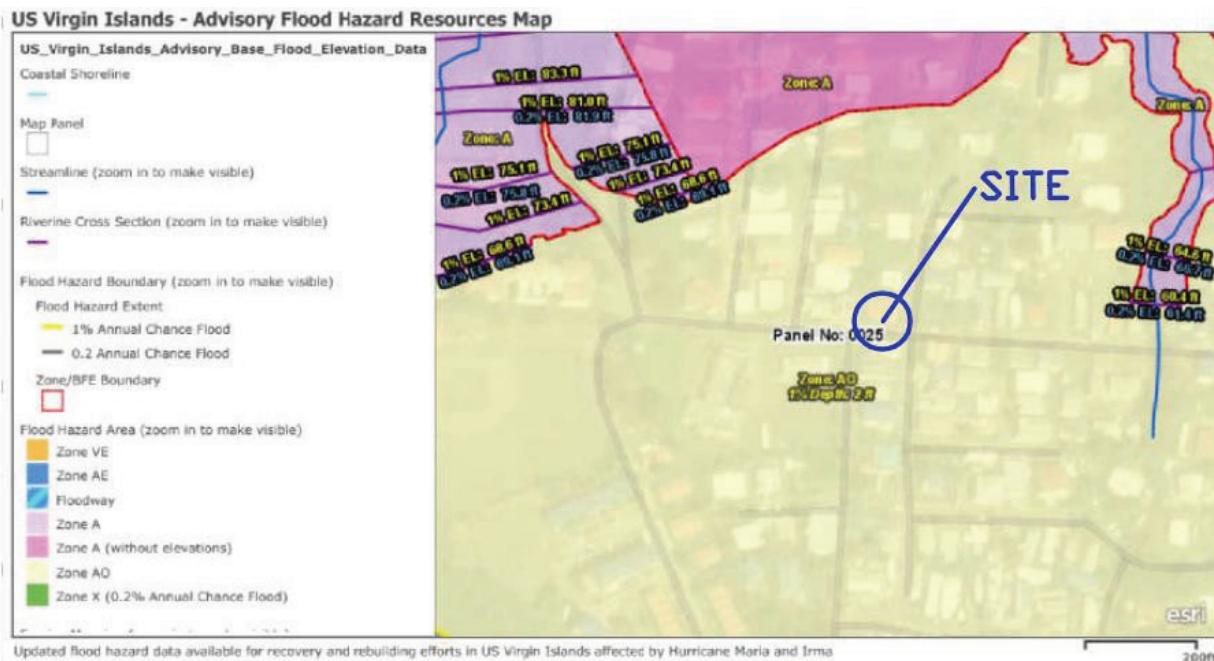


Figure 5. FEMA Flood Advisory Map

COASTAL FLOODPLAIN, OCEANOGRAPHY AND MARINE RESOURCES

The project is located approximately 1-mile (5,280 feet) North inland away from Lindbergh Bay and approximately 1.5 miles (7,920 feet) East inland away from Brewers Bay. No impacts are anticipated to the marine environment or from sea storm events.

COASTAL BARRIERS

According to the USFWS IPaC (Information for Planning and Consultation) webtool, there are no coastal barriers at this location

FRESH WATER RESOURCES

There are no freshwater resources in or in the vicinity of this property.

TERRESTRIAL RESOURCES

The project area comprises a complete developed track of land, which vegetation is basically limited to opportunistic species that have wildly grown at the property site since it was abandoned.

WETLANDS

According to the National Wetlands Inventory Maps, published by the US Fish and Wildlife Service, the project area is not affected by Wetlands.



Figure 6: National Wetlands Inventory Maps

RARE AND ENDANGERED SPECIES

According to IPaC the project area is located within the endangered Virgin Islands Tree Boa (*Chilabothrus granti*) range. According to the USFWS General Project Design Guidelines for this species, the following conservation measures are to be follow;

Conservation Measures for the USVI:

1. Contact Government of the Virgin Islands, Department of Planning and Natural Resources, Division of Fish and Wildlife (DFW) at (340) 775-6762, for consultation.
2. DFW will come out for an on-site discussion. They will need a copy of your building plans or a narrative of your intended project. DFW will coordinate via email so that all developers, owners, contractors, and other agencies, can follow along and provide input.
3. DFW will conduct a short VI boa training session for all individuals conducting hand clearing. This will involve discussions on what to do if a boa is encountered as well as boa identification. This can be done any time prior to hand clearing but is often preformed the first day on site. Photographs of the VI boa are to be prominently displayed at the site.
4. At least 5 days prior to the use of heavy equipment on the site, the site vegetation may be cut by hand. Any stone walls or naturally occurring rock piles must be carefully dismantled by hand as these are refuges for the snake. This will allow any boas present to vacate the site without injury.

5. Only hand clearing of vegetation is to be performed. This allows the use of chainsaws cutting vegetation down to less than 36 inches off the ground.
6. If a VI boa is found within any of the working or construction areas, activities should stop at the area where the VI boa is found. If boas need to be captured immediately to continue work and avoid harming the boa during the project activities, designated personnel shall immediately contact the DFW for safe capture and relocation
7. DFW should be notified of any snakes observed.
8. Another site visit will be performed by DFW to confirm that hand clearing has been completed to our standards. The waiting period clock starts after inspection.
9. The site is to be left undisturbed for 5 days prior to the use of heavy machinery. However manual work may continue to be performed during this time and any vegetation may be moved by hand.
10. Use of heavy equipment is only permitted to start after the agreed upon date

The project site is not affected by natural wildlife refuge lands or fish hatcheries at this location. There are no migratory birds of special concern expected to occur at this location.

AIR QUALITY

All of the U.S. Virgin Islands is designated Class II by the Environmental Protection Agency, in compliance with National Ambient Air Quality Standards. In Class II air quality regions, the following air pollutants are regulated: open burning, visible air contaminants, particulate matter emissions, volatile petroleum products, sulfur compounds, and internal combustion engine exhaust (Virgin Islands Code Rules and Regulations).

It is expected that excavation equipment will be used during project construction and will create combustion engine exhaust during on site use. Air quality will return to pre-construction conditions upon the completion of the construction process

An emergency stand-by generator that meets EPA clean air standards is proposed for this project. All permit applications will be filled for this equipment at the appropriate time prior to installation.

PROPOSED PROJECT DESCRIPTION

The proposed project comprises the demolition of the existing structure and the construction of the new facilities. The proposed design includes, one building approximately 61 feet long by 36 feet wide for an approximate 1,938 square feet area. The site will have a playground, a rubber pad play area, and a design area for an emergency generator and a cistern. There will be no parking spaces on site, HS Program will be coordinating USVI Government to use an external facility for parking use.

The new facility's structure is designed to be resistant as required by updated design criteria for hurricanes and other seismic activity. The structure will consist of poured concrete walls and roofs. The entire project is designed to resist up to 180 mph wind forces per current code requirements which is equivalent to a Category 5 hurricane and higher.

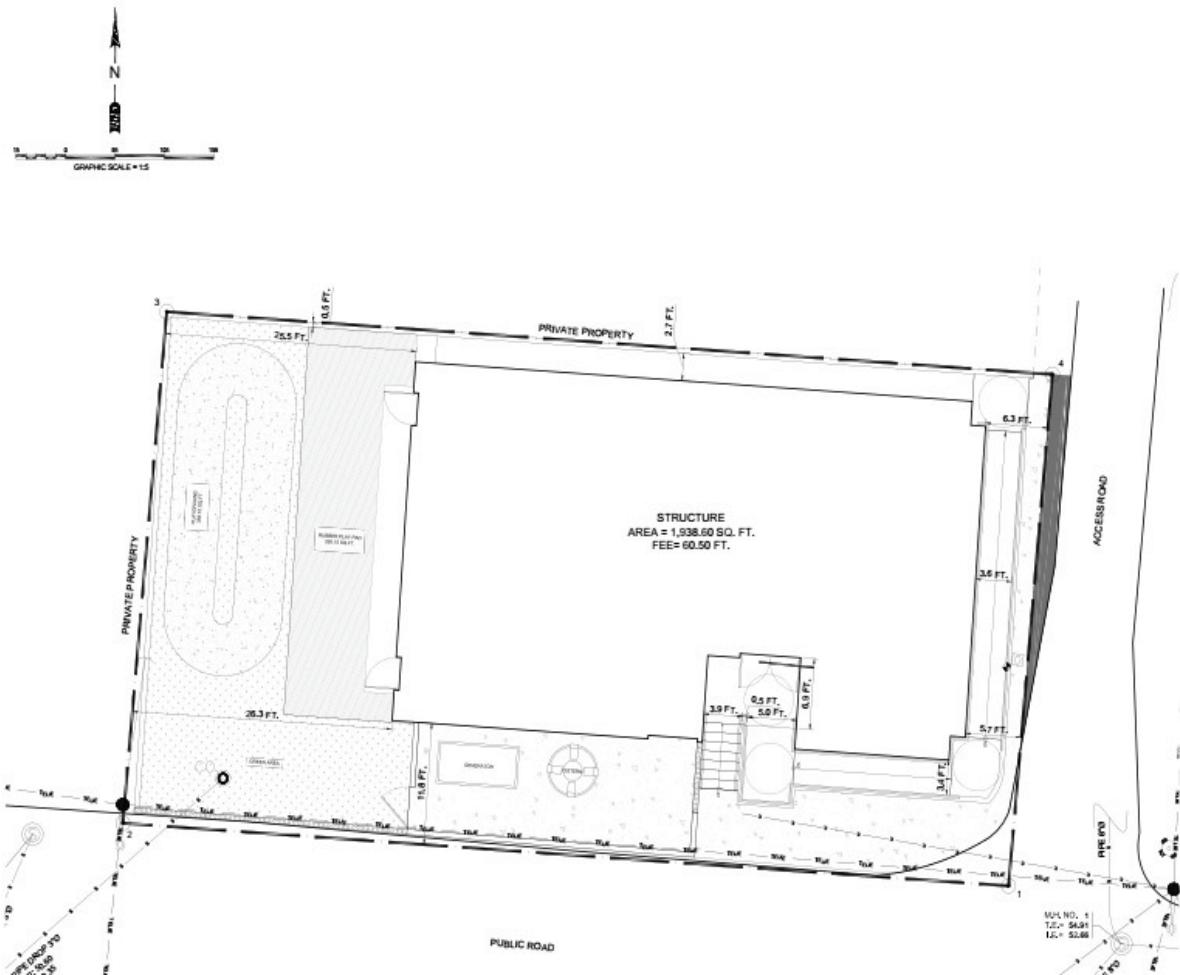


Figure 7: Proposed Master Site Plan

IMPACT ON MAN'S ENVIRONMENT

VISUAL IMPACTS

The proposed Head Start Facility will be a visual improvement over the existing severely damaged and abandoned facility it is replacing. The new design considered the V.I. Architecture and includes sloped concrete roofs and walls, impact resistant windows and doors for resisting hurricane and seismic forces. The buildings will be insulated per the new building code standards at the roof and walls. The metal roofs will provide long lasting weather protection. The high efficiency plumbing, HVAC and light fixtures will provide savings in water and electricity consumption. The interior finishes will include recycled and low VOC materials. Thus, the buildings will be less burden to environment meanwhile providing better setting for its occupants.



Figure 8: Aerial View Rendering



Figure 9: Eye level View Rendering

LAND AND WATER USE PLANS

The project parcel is zoned Public (R-4) which complies with current Coastal Land and Water Use Plan and meets all use requirements for the zoning district as set forth in Title 29 of the Virgin Islands Code.

HISTORICAL AND ARCHAEOLOGICAL RESOURCES

The proposed project comprises a completely developed track of land with no known archaeological relevance. The property is not within any declared historical zones. There is also no documentation in regards to historical ruins found at or near the site. Standard procedures will be used if any items of Archaeological relevance are observed during the excavation activities on the site.

WASTE DISPOSAL AND ACCIDENTAL SPILLS

The Virgin Islands Waste Management Authority has specific guidelines and criteria for accepting construction debris. Demolition waste will be disposed of in accordance with all governing laws and regulations. Any excess excavated material will be collected, taken off- site and properly disposed of.

An assessment was conducted by GEC Corp. and all Asbestos and Lead testing results will be submitted to DPNR.

An abatement plan will be submitted to the Virgin Islands Waste Management Authority (VIWMA) prior to the commencement of demolition work.

The handling and disposal of any hazardous materials, such as the used oil from the motor pool area, and the fuel from existing generator fuel storage will be done in strict accordance with all governing laws and regulations. The equipment will be kept in good operational condition during the proposed project timeline and refueling on site will be kept to a minimum.

EROSION AND SEDIMENTATION CONTROL PLANS

Sedimentation and erosion controls will be implemented to ensure rainfall will not impact the adjacent properties and streets during construction. This will include silt fencing, gravel entrances, at the entry gate, and check dams.

GRADING AND STORMWATER MANAGEMENT

Proposed site will be improved by means of earthwork, that includes deposit of fill material and grading activities. Pre and post drainage condition will be evaluated and an internal storm sewer system will be designed. Internal drainage system will be connected to an underground detention structure which will be included as part of final design, detention structure has an outfall that will allow storm water sheet flow into the lowest point of the site. In the project area there is no public storm sewer system available to connect the project.

The existing ground surface elevations on the property is basically flat with topographic contours that varies from about 56.0 feet MSL along the East limit of the property to about 53.0 feet along the South limit. The predominant terrain elevation on the existing road to the East is 56.0 feet and to the South is 53.0 feet.

Considering flood zone AO flood elevation of 2.0 feet of water above existing terrain, regulatory flood zone elevation will vary along the site from 55.0 feet to 58.0 feet in elevation. Existing structure FFE is at 56.46 feet.

Proposed Finished Floor Elevation (FFE) for the new building is designed at 59.0 feet or 1.00 feet above the Advisory Base Flood Elevation Maps.

Existing site conditions has approximately 0% pervious areas or green space while the proposed design increases the pervious areas to 12%. Project design also proposes an underground mitigation structure that allows for an outfall structure with a weir that provides a means for sheet flow to adjacent road, following current conditions.

UTILITIES

ELECTRIC POWER

The project site has a connection to WAPA system with a 120/240V at 100A electrical meter. The project required electrical load has been determined in 60kva. An electrical emergency generator with a capacity of 50 kw is also being proposed.

A consultation with Virgin Islands Water and Power Authority (WAPA) will be conducted, to determine requirements to connect the project to existing electrical system.

WATER

The project site has a 3/4-inch diameter SCH 40 PVC water supply line connection to WAPA system (city water) and a $\frac{3}{4}$ " water supply meter. A connection to the existing WAPA potable water system, is being proposed.

A consultation with Virgin Islands Water and Power Authority (WAPA) will be conducted, to determine requirements to connect the project to existing potable water system.

A 1,200 gallons potable water cistern and pump system is also being proposed.

WASTE WATER - SEWAGE

Public Sewer is available and in use at the site.

Project site have a connection to the exiting public sanitary sewer system by means of a 4" SCH 40 PVC waste pipe.

The proposed project considers using the existing connection to the sewer system. The sewer water discharge has been determined 960 gallons per day.

A consultation with Virgin Islands Water and Power Authority (WAPA) will be conducted, to determine requirements to re-connect the project to existing sewer system.

FEDERAL CONSISTENCY DETERMINATION

The proposed project consists of two main phases; Demolition of the existing structures and facilities and construction of the new head start facilities. The project site is approximately 1-mile (5,280 feet) to 1.5 miles (7,920 feet) inland from coastal waters.

It is expected that both, the demolition of the existing building and the new construction might have the potential of impacting environmental resources, air and water quality during both demolition and construction activities. Preventive and mitigation measures, such as sedimentation and erosion control plans, will be implemented to minimize the risks for these potential environmental impacts to occur.

The proposed project occurs only within previously disturbed areas and excavation of historical or cultural resources is not anticipated. Project activities will stop if historic remains or resources are encountered, and SHPO will be contacted to determine the best course of action.

The Coastal Zone Management Act of 1972 requires that federal actions, within and outside the coastal zone, which have reasonably foreseeable effects on any coastal use (land or water), or natural resources of the Coastal Zone be consistent with the enforceable policies of a state's federally approved Coastal Management Program. The proposed facility at Lot #27A, Lindberg Bay, Southside Quarter, St. Thomas, U.S. Virgin Islands is designed to fall within existing roadways and previously disturbed areas. The project will not impact any natural resources and will improve the visual landscape in the area. As proposed, it will be undertaken in a manner consistent with the enforceable policies of the U.S. Virgin Islands' CZM Program. This Federal Consistency Determination demonstrates the proposed project's compliance with the U.S. Virgin Islands' CZM Program.

The project meets each of the basic goals of the USVI for its coastal zone as set forth in the Virgin Islands Code Title 12, Conservation Chapter 21, Virgin Islands Coastal Zone Management [V.I. Code tit. 12, § 903(b)]. Additional details are as follows:

USVI Code Title Twelve Conservation, Chapter 21 § 903 (b)

1. Protect, maintain, preserve and, where feasible, enhance and restore, the overall quality of the environment in the coastal zone, the natural and man-made resources therein, and the scenic and historic resources of the coastal zone for the benefit of residents of and visitors of the United States Virgin Islands.

The proposed facility at Lot #27A, Lindberg Bay, Southside Quarter, St. Thomas, U.S. Virgin Islands is designed to be within existing roadways and previously disturbed areas. The project will not impact any natural resources and will improve the visual landscape in the Area. The new design considers the V.I. Architecture such as sloped roofs and walls, impact resistant windows and doors for resisting hurricane and seismic forces. The new buildings will be less burden to the environment while providing a better setting for its occupants.

2. Promote economic development and growth in the coastal zone and consider the need for development of greater than territorial concern by managing: (1) the impacts of

human activity and (2) the use and development of renewable and nonrenewable resources so as to maintain and enhance the long-term productivity of the coastal environment.

The proposed project promotes the economic development and growth in the area by providing a necessary public service on the island through the development of a facility that meets the early childhood needs of the children and their parents within the greater community. The development will be within a previously developed parcel avoiding new impacts on undeveloped areas.

3. Assure priority for coastal-dependent development over other development in the coastal zone by reserving areas suitable for commercial uses including hotels and related facilities, industrial uses including port and marine facilities, and recreation uses.

The proposed project does not impact coastal dependent development within the coastal zone area. The project site is approximately 1-mile (5,280 feet) to 1.5 miles (7,920 feet) inland from coastal waters.

4. Assure the orderly, balanced utilization and conservation of the resources of the coastal zone, taking into account the social and economic needs of the residents of the United States Virgin Islands.

The proposed Head Start Facility is designed to be within existing roadways and previously disturbed areas. The project will not impact any natural resources and will improve the visual landscape in the area. The proposed project will provide critical public services and therefore will meet the economic and social needs of the residents of the area and the community of Lindbergh and St. Thomas on a whole.

5. Preserve, protect and maintain the trust lands and other submerged and filled lands of the United States Virgin Islands so as to promote the general welfare of the people of the United States Virgin Islands.

The proposed project will not impact trust lands or other submerged or filled lands of the U.S. Virgin Islands.

6. Preserve what has been a tradition and protect what has become a right of the public by ensuring that the public, individually and collectively, has and shall continue to have the right to use and enjoy the shorelines and to maximize public access to and along the shorelines consistent with constitutionally-protected rights of private property owners.

The proposed project will in no way affect public access to, or use of, the shoreline. The project is located well inland.

7. Promote and provide affordable and diverse public recreational opportunities in the coastal zone for all residents of the United States Virgin Islands through acquisition, development and restoration of areas consistent with sound resource conservation principles.

The proposed project will not affect public recreational opportunities in the coastal zone. The project will serve a public need of child care and development within the area served.

8. Conserve ecologically significant resource areas for their contribution to marine productivity and value as wildlife habitats, and preserve the function and integrity of reefs,

marine meadows, salt ponds, mangroves and other significant natural areas.

The project will have no impact on natural resources and will utilize best management practices (BMPs) to minimize areas of disturbance, thereby protecting adjacent habitats.

9. Maintain or increase coastal water quality through control of erosion, sedimentation, runoff, siltation and sewage discharge.

The proposed project will have no long-term change on sedimentation or erosion.

The proposed Head Start Facility at Lot #27A, Lindberg Bay, Southside Quarter, St. Thomas, U.S. Virgin Islands is designed to be within existing roadways and previously disturbed areas. The project will not impact any natural resources and will improve the visual landscape in the Lindberg area. It will maintain coastal water quality through control of erosion, sedimentation, runoff, and siltation. As designed, it protects, maintains, preserves, and enhances the overall quality of the environment in the zone, the natural and man-made resources therein, and the scenic and historic resources of the coastal zone for the benefit of residents of and visitors of the USVI. It is therefore consistent with the policy set forth in the Virgin Islands Code Title 12, Conservation Chapter 21, Virgin Islands Coastal Zone Management [V.I. Code tit. 12, § 903 (b)].

END COASTAL CONSISTENCY DETERMINATION REQUEST

Document prepared by: Eng. Carlos J. Sanchez, PE (PE 0-43295-1B)

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Carlos J. Sanchez
Gonzalez
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author of this
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**Carlos J.
Sanchez
Gonzalez**