FEDERAL CONSISTENCY DETERMINATION REQUEST

BOLONGO HEAD START
NO. 9 Bolongo,
Frenchman’s Bay 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

JUNE 2022
INTRODUCTION

The US Virgin Islands Department of Human Services is proposing the demolition of an existing structure to construct a new head start facility. The existing structure is approximately 6,300 square feet.

The existing structure was severely damaged by Hurricanes Irma and lately Maria on September 20, 2017 and is currently abandoned. The storm produced strong destructive winds, power outages, down power lines, structure and property damage and fallen trees.

The existing building was constructed 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. Besides the existing poor condition of the buildings on site. Caused by damages from past hurricanes, their old construction cannot meet the structural requirements of the 2018 International Building Code. Furthermore, the existing structure cannot accommodate the program requirements for a functional facility.

PROJECT LOCATION

This project area comprises a track of land of approximately 0.9758 acres, owned by the Government of the US Virgin Islands and is located at No. 9 Bolongo, Frenchman’s Bay QTR, St. Thomas, U.S. Virgin Islands. Property ID# is 107503011900.

Figure 1: USVI GIS online MapGeo and Property ID
The property is limited: to the North by 8 Bolongo Frenchman owned by The Mount Zion Church of God, Inc. with Property ID# 107503011700; to the South by Bolongo Estate 10 No. 3 owned by Harborside with Property ID# 109401010100; to the East by Bolongo 12A (Property ID# 107503011800) owned by Francisco Matthias and by 13A remainder & 13-1 Bolongo Frenchman (Property ID# 107503012000) owned by Mark and Patricia – Borden Family Trust; and to the West by Bolongo Bay Road. Project GPS coordinates are: latitude 18.316020 / longitude -64.897413.

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, and a pool. The property was abandoned and is currently in ruins and mostly covered by opportunistic vegetation. There is also a septic tank on the property. This building is constructed of 8” concrete masonry unit (CMU) walls with wood roof structure.

Figure 3: Existing Conditions Survey of Site
PHOTOS

Photo 1: Aerial View

Photo 2: Front View from street
ENVIRONMENTAL IMPACTS

TOPOGRAPHY AND DRAINAGE PATTERNS

The existing ground surface elevations on the property varies from about 70-75 feet MSL along the east limit of the property to about 25-26 feet along the west limit. The developed area is within the centre of the property in a plain with topographic contours between 40 to 45 feet. Roughly, the property drains topographically from east to west into Bolongo Bay Street 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 Southern-Rock complex, 40-60 percent slopes (SrF) with a strip of Cinnamon Bay gravelly loam, 5 to 12 percent slopes, occasionally flooded (CgC) along Bolongo Bay Street. The Southern-Rock complex consists of extremely stony, well drained, moderately permeable soils on summits and side slopes of volcanic hills and mountains. 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, none of these soils are considered as hydric, nor has hydric inclusions.

Figure 4: USDA Soil Survey Map
FLOOD ZONES

According to Panel 0028 of the US Virgin Islands Advisory Base Flood Elevation Maps, the western limit of the project area is within flood zone A with a defined 1% Elevation of 25.3 feet and a defined 2% elevation of 26.5 feet. This flood zone strip corresponds to the lower portion of the property along Bolongo Bay Street.

Accordingly, the finished floor elevation for the proposed structure will be approximately 35 feet which is more than the minimum 2 feet over known flood elevation required by the Government of the USVI.

![FEMA Flood Advisory Map](image)

Figure 12. FEMA Flood Advisory Map

COASTAL FLOODPLAIN, OCEANOGRAPHY AND MARINE RESOURCES

The project is located approximately 0.5 miles (2,640 feet) inland uphill from the Bolongo Bay in St. Thomas. No direct impacts are anticipated to the marine environment or from sea storm events. However, the project design took into consideration the relatively closeness of the property to coastal areas.

COASTAL BARRIERS

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

The closest freshwater resource is an unnamed creek approximately 40 meters (132 feet) to the West of the property across Bolongo Road.

TERRESTRIAL RESOURCES

The project area comprises a developed track of land mostly covered by opportunistic vegetation and the remains of former landscape species.

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 performed 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 head start new facilities. The proposed design incorporates the construction of a two-story building with approximately 5,856 square feet. There will be a playground, a generator area, a WWTP, a generator and 10 parking spaces, including 2 handicap spots.

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 facility it will be 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.
LAND AND WATER USE PLANS

The project parcel is zoned Public (R-1) 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 open detention area which will be included as part of final design. Preliminarily, this open detention area will be located, along the western boundary green area. stabilized with rock with 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.

To reduce site runoff due to reduction in pervious areas, an open retention pond is proposed to manage the increase with a proposed open retention pond. Additionally, all parking areas will be designed with pervious concrete to mitigate the increase of runoff, the difference will be managed through the proposed open pond and green areas.

No stormwater runoff from the road is expected as the site is above the roadway elevation. As such, the proposed design will allow for the existing flow to follow its existing drainage path.
UTILITIES

ELECTRIC POWER

There are WAPA electric poles in the vicinity of the project site. The project required electrical load has been determined in 175kva. An electrical emergency generator with a capacity of 150 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

There is no public water supply available at the project site. Proposed project design makes use of water harvesting by means of collecting roof runoff into a cistern. Cistern will have a pump system and UV system to treat water for human consumption. A water demand of 2,400 gallons per day have been determined for the specific use. Potable water cistern will be provided with additional storage capacity, to be determined in coordination with the Head Start Program. A water cistern of 60,000+ gallons with a UV-Light, filtration and pumps system for potable use has been estimated since the project is for non-residential use.

WASTE WATER - SEWAGE

Project site does not have public sewer availability. The sewer water discharge has been determined 1,920 gallons per day and will be managed by the installation of a small waste water treatment (WWTP) plant on site. The treated effluent will then be utilized to irrigate the project’s vegetated areas due to the area’s dry nature. An approved maintenance plan will be provided as specified by the WWTP’s manufacturer to ensure it is run within the required parameters when in operation.
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 0.5 miles (2,640 feet) inland from southern Bolongo Bay.

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 No. 9 Bolongo, Frenchman's Bay QTR, 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 No. 9 Bolongo, Frenchman Bay QTR, 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 considered 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 environment meanwhile providing 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 0.5 miles (2,640 feet) inland, uphill from southern Bolongo Bay.

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 Bolongo 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 0.5 miles inland on higher grounds.

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 No. 9 Bolongo, Frenchman Bay QTR, 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. 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)].