

FEDERAL CONSISTENCY REPORT

**PROJECT SITE:
V.I. DEPARTMENT OF PUBLIC WORKS (DPW)
PLOT 73-B
ESTATE CONCORDIA
FREDERIKSTED, ST. CROIX, USVI 00840**



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November 12th, 2022

A handwritten signature in blue ink, appearing to read 'Damian Cartwright'.

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INTRODUCTION

The Virgin Islands Department of Public Works (DPW) intends to demolish their existing office building and adjoining equipment bays that were severely damaged in Hurricanes Irma and Maria in 2017 and rendered uninhabitable. Included with the demolition of the main structure will be three small utility buildings that do not meet the programmatic needs of the new facility moving forward. A storage structure at the rear of the site will remain but will be renovated to current building code standards. The site is located at Plot 73-B Estate Concordia, Frederiksted, St. Croix 00840.

The main building to be demolished measures approximately 3,944 SF, and the three smaller utility structures measure a combined approximately 491.5 SF. The existing storage building to remain and renovated measures approximately 916 SF.

PROJECT LOCATION

The project site is located on Plot 73-B Estate Concordia. It is bordered to the north by a local residential street, to the East by plot 73-G, to the west by Alexander Henderson Drive, and to the south by the Waste Management Dump Site. Access to the project site is from the west, specifically Alexander Henderson Drive.

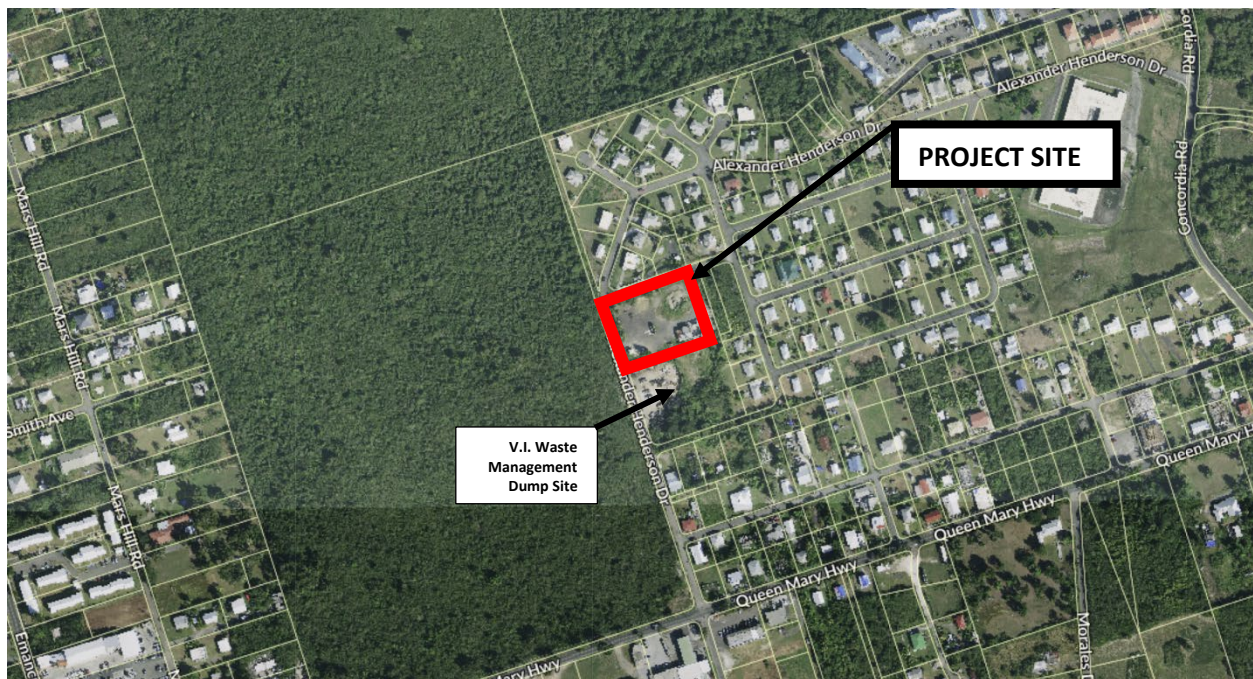


Exhibit 1 – Location Map

PROJECT DESCRIPTION

This project site measures approximately 1.68 acres and is zoned Public (P) and owned by the Government of the Virgin Islands.

The project site generally slopes from east to west with the topography ranging from +124 ft. MSL to +114 ft. MSL.

The office building and adjoining equipment bays appear to be constructed of concrete masonry units (cmu), wood framed roof with plywood sheathing, and a metal waterproofing roof membrane. The three utility structures appear to be of similar construction. The storage building to remain is also consistent with this construction type.

The office building and adjoining equipment bay measures approximately 43' x 91.5'. The three utility buildings measure 12'x12', 5'x12', and 11.5'x25'.

The storage building to the rear that is slated to remain measures approximately 11'x83'.

The exact date of construction of these buildings onsite is unknown but research of historical photographs suggests that they were constructed sometime prior to 1985. Building codes were significantly less stringent in the early 1980s having been drastically modified with increased design requirements due to the passing of major hurricanes such as Hugo in 1989, and Irma and Maria in 2017. These structures sustained significant damage during both storms in 2017 which rendered them uninhabitable. Operations at these facilities ceased immediately after the storm. However, this site is essential to the back of house operations for DPW and the need to restore these functions to meet current and future demands is paramount.

Given the current and future programmatic requirements of DPW, coupled with the age and storm damage sustained to the existing office structure, a new 4,150 SF facility is being proposed. In addition, a separate standalone 1780 SF heavy equipment storage building is being constructed toward the rear/east side of the site. The existing storage building at the east side of the site will be renovated to meet International Building Code (IBC) 2021 standards as opposed to a full replacement.



Exhibit 2 – Front of Main Office –Building West View (To be Demolished)



Exhibit 3 – Side of Main Office – Building North View (To be Demolished)



Exhibit 4 – Front of Equipment Storage Bays – Building North View (To be Demolished)



Exhibit 5 – Back Wall of Equipment Storage Bays – Building East View (To be Demolished)



Exhibit 6 – Storage Building (to Remain)



Exhibit 7 – Utility Building No. 1 (To be Demolished)



Exhibit 8 – Utility Building No. 2 (To be Demolished)



Exhibit 9 – Utility Building No. 3 (To be Demolished)

The new office building measures approximately 43'x96', roughly 4,150 SF. This represents an increase of approximately 2,463 SF which is necessary to fulfill the current programmatic needs of DPW compared to almost 40 years ago when the existing facility was built. As a part of the Hazard Mitigation Efforts to alleviate any flooding issues, this new structure will be elevated, and an engineered stormwater management system will be implemented across the site. Other Hazard Mitigation measures include reinforced cmu construction, structural steel, impact resistant glass and hurricane shutters. The mechanical systems proposed are as energy efficient as possible to reduce power consumption and operational cost.

Necessary programmatic functions addressed in the new facility are as follows:

- Office Spaces
- Conference Rooms
- Rest Rooms
- ADA Accessibility

The Storage Building at the rear (east) of the site will be completely renovated to meet current IBC 2021 building codes with new sidewalks meeting ADA accessibility requirements, something that is currently missing. Construction Plans prepared by the Jaredian Design Group – Architects, Engineers and Construction Managers; detail all of the building design elements to include architectural, structural, mechanical, electrical, plumbing, life safety. In addition to the building improvements, major site improvements are also detailed on the construction documents such as new Portland concrete parking areas and drive isles, new stormwater management system, new fire protection, potable water and sanitary sewer connections.

ENVIRONMENTAL IMPACTS

1.0 Climate & Weather

Best Management Practices (BMPs) implementing sediment and erosion control measures will be utilized to ensure that rainfall runoff is properly managed. These measures will include a combination of silt fences, gravel construction entrance and egress points with wash down areas, and hay bales. All new structures will be designed to current IBC 2021 building code requirements meeting the regions high velocity hurricane force wind load requirements and earthquake zone seismic requirements. The new construction will incorporate many hazard mitigation measures to account for climate and weather.

2.0 Landform Geology, Soils, and Historic Land Use

The soil type across the project site consists of Arawak Gravelly Loam (5-12% slope) (ArC). The Arawak Series consist of shallow well drained slowly permeable soils formed in materials weathered from soft limestone bedrock.

The proposed office building will be constructed near the entrance to the site in a previously disturbed area consisting of a gravel paved surface and a small utility structure. The new heavy equipment storage building will be constructed within the exact footprint of the current main building structure slated for demolition. All improvements being constructed are on previously disturbed land.

3.0 Drainage, Flooding, and Erosion Control

The project site is located in FEMA Flood Zone X, an area of minimal flood hazard. To further minimize any chance of potential flooding, an engineered stormwater management system is proposed for the site that provides a total of two new retention pond storage areas.

Best Management Practices (BMP's) will be implemented from the onset of construction to manage sediment and erosion control.

4.0 Drainage Patterns

The proposed project will provide a significant improvement over existing drainage patterns by collecting runoff at the northwest and southeast that currently sheet flows offsite by collecting into catch basins and routing through a series of stormwater pipes to newly created onsite retention areas. With the additional onsite storage created runoff from the site will be reduced post-development when compared to the pre-development condition.

5.0 Coastal Floodplain

The project site is located inland away from the coastal waters of St. Croix. All site stormwater runoff is being collected and piped to retention areas which are designed to filter the runoff through a series of riprap and green ground cover, and percolate into the soil strata below. As such, most sediments and pollutants will remain trapped in these retention areas/bio swales thereby eliminating any single point pollution source.

6.0 Fresh Water Resources

Best Management Practices (BMP's) will be implemented to manage sediment and erosion control and ensure no adverse impacts to any fresh water resources. All site stormwater runoff will be collected and piped to retention areas which are designed to filter the runoff through a series of riprap and green ground cover, and percolate into the soil strata below prior to entering the water table.

7.0 Oceanography

This project is located inland and will not be affected by sea storm surge events.

8.0 Marine Resources

This project is located inland and will not have an impact on marine resources.

9.0 Terrestrial Resources

The project will occur within the footprint of existing buildings, paved roadways, paved and gravel parking lots, concrete sidewalks etc. There will be no significant impacts to existing terrestrial resources or native vegetation.

10.0 Wetlands

The project will have no impact on any wetlands as no wetlands exist within the project footprint or are adjacent to the project site.

11.0 Rare and Endangered Species

There are no inhabitants present onsite for any rare and/or endangered species and as such, no federal, local or threatened endangered species will be impacted by this project.

12.0 Air Quality

All of St. Croix is designated Class II by the Environmental Protection Agency (EPA) in compliance with the 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). Heavy equipment such as excavators, backhoes, dump trucks etc. will be used during construction that will create engine exhaust fumes that will go away upon completion of construction when air quality will be returned to ambient pre-construction conditions. Upon completion of construction, the site will also be used to store such similar heavy equipment but operations at the site will be limited to entering and leaving which is extremely minimal and thus not anticipated to impact air quality.

The project will also have a standby generator for which the appropriate air quality permits will be applied for.

IMPACT ON MAN'S ENVIRONMENT

13.0 Land and Water Use plans

The project site is located on Plot 73-B Estate Concordia. The parcel is approximately 1.68 acres and is zoned Public "P". The proposed development land use is consistent with the current zoning.

14.0 Visual Impacts

The new office facility will be a beautiful state-of-the-art modern building that will be aesthetically pleasing. A privacy wall will be constructed to mask the back of house storage and heavy equipment parking from view.

15.0 Social and Economic Impacts

The new office building and heavy equipment storage will have a significant social and economic impact to the surrounding community. It is the western headquarters for the Department of Public Works on St. Croix and is the main center for deployment of its heavy equipment fleet for various maintenance of public infrastructure across the island. The new state of the art facility will provide a sense of community pride and uplift to the surrounding areas. In addition, the new facility will better serve DPW's programmatic needs allowing it to be more efficient and effective in administering maintenance projects thereby stimulating economic growth in the local economy.

16.0 Historical and Archeological Resources

The project site is previously disturbed land. As such, there is no known historical and archeological resources in the project footprint.

17.0 Water Disposal and Accidental Spills

All stormwater runoff will be collected and piped to an onsite storage retention system.

Equipment and company vehicles will be kept in good operational condition to mitigate any potential leaking of fluids.

COASTAL CONSISTENCY

The proposed St. Croix DPW Concordia West Complex Project will have a negligible impact on environmental resources and ambient water quality during construction. Best Management Practices (BMPs) involving sediment and erosion control devices such as silt fences, hay bales, and gravel construction access driveways will be implemented during construction to negate the potential of adverse environmental impacts. The proposed project will only occur within the footprint of previously disturbed/improved areas and as such there is no anticipated impact on any historical and/or cultural resources.

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 St. Croix DPW Concordia West Complex Project 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 within the Estate Concordia Community. As proposed, it will be undertaken in a manner consistent to the maximum extent practicable with the enforceable policies of the U.S. Virgin Islands' CZM Program. This Federal Consistency Determination demonstrates this 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 St. Croix DPW Concordia West Project 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 within the Estate Concordia Community.

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.

This proposed project promotes the economic development and growth in the coastal zone by fulfilling the required expanded programmatic needs for DPW. With the larger and enhanced footprint, DPW can hire much needed staff to accelerate and improve its ability to maintain and repair critical public infrastructure across the island of St. Croix. The new facility will employ new technologies to reduce energy cost related to cooling, and also enhance the use of natural lighting.

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.

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 project 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 within the Estate Concordia Community. The proposed project will provide critical public services and therefore will meet the economic and social needs of the residents of the Estate Concordia Community.

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.

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 proposed project is designed so that it impacts only previously disturbed areas like paved and unpaved roadways and parking lots. 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. Storm water will be directed to retention areas/bio-swales for percolation into the soil strata below.

The proposed project 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 within the

Estate Concordia Community. 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 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 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