FEDERAL CONSISTENCY REPORT

PROJECT:
ST. CROIX PUBLIC WORKS COMPOUND

PROJECT SITE:
PLOT 8 & MATR 36-A ESTATE ANNA’S HOPE
CHRISTIANSTED, ST. CROIX, USVI 00820

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INTRODUCTION

The Virgin Islands Department of Public Works (DPW) intends to demolish their two (2) existing administrative Office Buildings located at Anna’s Hope, Christiansted, St. Croix, USVI 09820 in addition to an existing metal warehouse building located at the south of the property.

The two administrative office buildings to be demolished measure a combined approximately 9,010 SF, and the metal warehouse at the rear measures approximately 9,025 SF. The two (2) administrative buildings are connected to three (3) “finger” buildings extending to the south and measuring a combined approximately 7,511 SF. These three (3) “fingers” buildings will remain and be incorporated into the new design.

Both the Administrative Office Buildings and the warehouse sustained extensive damage during Category 5 hurricanes Irma and Maria in 2017 and are in a state of disrepair. The warehouse is totally uninhabitable while the Administrative Buildings received a myriad of temporary repairs in order to continue functions as an essential government facility.

PROJECT LOCATION

The project site is located on Parcel 8 & Matr 36-A Estate Anna’s Hope. It is bordered to the north by the Queen Mary Highway, to the East by the new DPW Vitran Facility currently under construction, to the west by the Virgin Islands Department of Human Services, and to the south by a drainage gut. Access to the project site is from Queen Mary Highway via two (2) driveway connections, one immediately east and the other to the west.

Exhibit 1 – Location Map
PROJECT DESCRIPTION

This project site measures approximately 3.30 acres and is a part of a much larger parcel designated as Plot 8 & Matr 36-A measuring 10.06 acres in total, zoned Public (P) and owned by the Government of the Virgin Islands.

The project site generally slopes from north to south toward the drainage gut with the topography ranging from +137 ft. MSL to +122 ft. MSL. There is a heavily wooded buffer measuring in excess of 100 ft. from the disturbed southern limits of the project site and the edge/top of bank of the drainage gut. This buffer will remain as is and will not be disturbed by any construction activities.

The administrative offices at the north of the site consist of two (2) separate buildings that can be referred to as the east wing, and the west wing. The east wing appears to be a metal building with galvalume metal sheathing for both the exterior walls and roof, and the west wing appears to be constructed of concrete masonry units (cmu), wood framed roof with plywood sheathing, and a metal waterproofing roof membrane. The building to the east is shaped like a “U” and measures 40’ x 122’ with two “finger” additions to the south, one measuring 31’x71’ and the other measuring 31’x83’ for a total area of 9,654 SF. These finger additions appear to be of cmu construction.

The building to the west is shaped like a “T” and measures 40’ x 100’ with a “finger” addition to the south measuring 40’x66’ for a total area of 6,640 SF. This finger addition appears to be of cmu construction.

The exact date of construction of these two buildings are unknown but research of historical photographs suggest that they were constructed sometime prior to 1971. As such these buildings have already exceeded the typical design life expectancy of 50 years. Building codes were significantly less stringent in the late sixties and early seventies 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. Both of these structures sustained significant damage during both storms in 2017 and were temporarily repaired to facilitate operations as an essential government facility.

Given the current and future programmatic requirements of DPW, coupled with the age of these structures, a new facility is being proposed to replace the two main administrative structures with the exception of the “finger” additions. The new structure is slated to be constructed within the same footprint as the existing main buildings and integrate the three (3) finger additions. Given the need to maximize square footage and fit within the programmed budget, the three (3) finger additions will be renovated to meet International Building Code (IBC) 2021 standards as oppose to the more desirable full replacement.
Exhibit 2 – Front View Administrative Offices – East Wing Building
Exhibit 3 – Front View Administrative Offices – East and West Wing Building
Exhibit 4 – Rear View Administrative Offices – West “Finger” Building

Exhibit 6 – Dilapidated Warehouse Building at the Rear of Property
The new administrative building will consolidate the current east and west wings into one structure measuring approximately 53’x246’, roughly 13,000 SF. This represents an increase of approximately 4,000 SF which is necessary to fulfill the current programmatic needs of DPW compared to over 50 years ago when the existing facility was built. As a part of the Hazard Mitigation Efforts to alleviate flooding issues of the past, this new structure will be elevated approximately 4 ft. above the current finish floor elevation of the existing structure. In addition, a safe room will also be incorporated with emergency power, telecom and air conditioning to function as an operations center during a natural disaster event similar to the recent major hurricanes of 2017. 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 three existing “finger” buildings will be completely renovated to meet current IBC 2021 building codes and will be fully integrated into this new structure meeting ADA accessibility requirements, something that is currently missing at the moment throughout the existing facility. 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 asphaltic concrete parking areas, 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 does not adversely impact the drainage gut along the southern perimeter of the site. 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, in particular a safe room will be constructed to function as a command center during times of natural disasters.

2.0 Landform Geology, Soils, and Historic Land Use

The soil type across the project site consists of two types, namely Arawak Gravelly Loam (5-12% slope) (ArC) and Sion Clay (2-5% slope) (SiB). The Arawak Series consist of shallow well drained slowly permeable soils formed in materials weathered from soft limestone bedrock. The Sion Series consist of very deep well drained moderately slow permeable soils formed in alkaline marine deposits.

The proposed administrative office building will be constructed in the exact footprint where current building structures exist that are slated for demolition. The warehouse structure is replacing an existing dilapidated structure of the same square footage and will be located in virtually the same footprint, albeit a forty-five-foot shift to the east, into an area currently used for vehicular parking. All improvements being constructed are on previously disturbed land.

3.0 Drainage, Flooding, and Erosion Control

The actual project site is located in FEMA Flood Zone X, an area of minimal flood hazard. However, the drainage gut to the south of the project site is located in FEMA Flood Zone A, with no established base flood elevation. To minimize any potential adverse impacts from this gut overflowing and flooding the site during heavy rainfall events, the entire site has been elevated approximately 2 feet with the proposed grading design.

Best Management Practices (BMP’s) will be implemented from the onset of construction to manage sediment and erosion control and ensure no adverse impacts to the drainage gut to the south.

4.0 Drainage Patterns

The proposed project will provide a significant improvement over existing drainage patterns by collecting runoff at the northwest that currently sheet flows offsite towards DPNR’s office building and diverting through 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. However, there is a drainage ghut to the south that is believed to eventually make its way to the coast. 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 prior to any overflow into the drainage ghut at the south. As such, most sediments and pollutants will remain trapped in these retention areas/bio swales thereby eliminating any single point pollution source into the ghut.

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 the fresh water resources in the drainage ghut to the south. 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 any overflow into the fresh water drainage ghut at the south.

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 impacts on any wetlands as no wetlands exist within the project footprint or are adjacent to the project site. There is a drainage ghut to the south but this ghut will not be impacted by this project.

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. 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 Parcel 8 & Matr 36-A Estate Anna’s Hope. The parcel is approximately 10 acres and is zoned Public “P”. The proposed development land use is consistent with the current zoning.

14.0 Visual Impacts
The new administrative office facility will be a beautiful state of the art modern contemporary facility that will be an aesthetic statement in architecture. The new warehouse building will rectify what is currently an “eye sore” by replacing the dilapidated structure.

15.0 Social and Economic Impacts
The new administrative building and warehouse will have a significant social and economic impact to the surrounding community. It is the headquarters for the Department of Public Works on St. Croix. 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 more 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 prior to any overflow into the drainage ghut at the south.

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 Administrative Compound 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 impacts 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 Administrative Compound 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 Anna’s Hope 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 Administrative Compound 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 Anna’s Hope 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 more staff which will translate into getting more federally funded projects out to bid faster thereby accelerating the recovery efforts and building a stronger economy putting more of the private sector to work through job creation. 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 Anna’s Hope Community. The proposed project will provide critical public services and therefore will meet the economic and social needs of the residents of the Anna’s Hope 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 before any overflow into the existing drainage ghut to the south.
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 Anna’s Hope 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