

Virgin Islands Department of Education
Coastal Consistency Determination Request

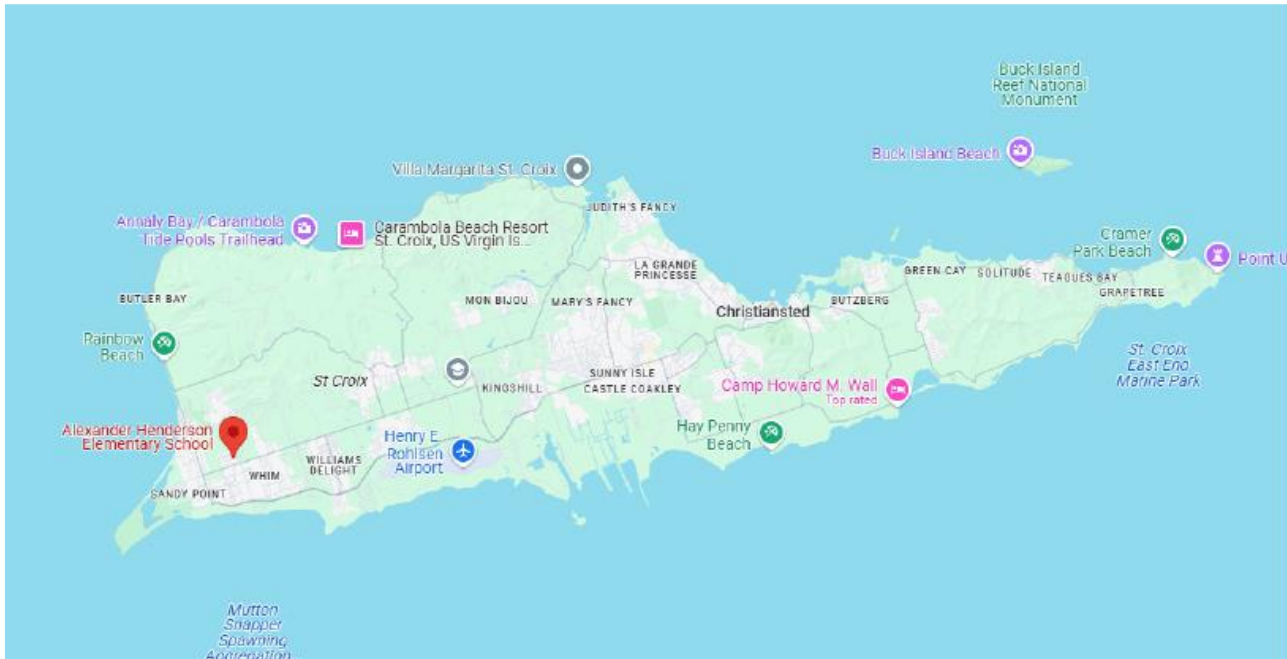
Alexander Henderson PreK-8th Project – New Build,
St. Croix, U.S. Virgin Islands

Grant Manager: #86891
FEMA Applicant Id: #000-U6P8U-01
June 1, 2022

The Virgin Islands Department of Education (VIDE) hereby requests your permission to undertake the FEMA funded project – Alexander Henderson PreK-8th School Project – New Build. The address is as follows:

★ **Alexander Henderson PreK-8th School**

**No. 31 Estate Concordia Fredricksted, St. Croix V.I. 00820
17.70256,-64.867046**



DESCRIPTION OF PROJECT

The Alexander Henderson Elementary School was damaged during Hurricane Maria in September 2017. These Hurricanes required new conversations around resiliency and student and community needs. Coupled with new funding opportunities such as the Federal Emergency Management Agency (FEMA) Public Assistance (PA) program utilizing the flexibility afforded by the Bipartisan Budget Act (BBA). The VIDE was in a position to plan for the replacement of infrastructure. Hence, the demolition and new construction of a new school campus New Alexander Henderson PreK to 8th School.

The purpose of the project is to demolish the existing Alexander Henderson School and design and construct a completely new school, including classrooms, administrative offices, a library, a cafeteria, a kitchen, bathrooms, stairways, balconies, hallways, and all fixtures, equipment, and contents to replace the campus with a new campus to fulfill the VIDE vision outlined in the Bridging Documents.

The general scope is primarily the safe demolition, removal, and legal disposal of concrete roofs, slabs, stairs, and foundations, C.M.U. walls, windows, doors, finishes, fixtures, and with the safe identification, testing, and abatement of any and all hazardous materials (including but not limited to asbestos and lead paint) and design, construct, equip, and furnish the New Alexander Henderson PreK-8th School.



I. List all of the federal and territorial permits:

VIDE Response: the project will obtain the required permits if needed and will seek and comply with Division of Fish and Wildlife recommendations.

I. Detailed analysis that the project and its effects are consistent with the goals and policies of the VI Coastal Zone Management Program (VICZMP):

VIDE Response:

The Alexander Henderson Elem. School was damaged during the 2017 Hurricane Irma and Maria events and was deemed unsafe for students and faculty.

The VIDE kindly seeks your review and approval for the required Consistency Determination certification process in accordance with the Virgin Islands Coastal Zone Management Program (CZMP as required under the VI Code Section 1, VIR and Regs. Title 12, Subchapter 904, section 904-8. This project may include the security fencing, traffic control, dust control, demolition and construction of new buildings.

ENVIRONMENTAL IMPACTS

Climate/Weather

The proposed project will not be affected by climate or weather.

Prevailing Winds

The Virgin Islands lie in the "Easterlies" or "Trade Winds" which traverse the southern part of the "Bermuda High" pressure area, thus the predominant winds are usually from the east-northeast and east.

Precipitation

The average annual precipitation on St. Croix is approximately 36.14 inches. Rainfall usually occurs in brief, intense showers of less than a few tenths of an inch, and major rainfall events are associated with weather systems. The Virgin Islands has no sharply defined wet seasons. The wettest period generally is from August to November, and the driest period is from January to June.

Landform Geology, Soils and Historic Land Use

The existing 8.8-acre Alexander Henderson Elementary School site is located at the intersection of Alexander Henderson Drive and Concordia Rd in Frederiksted, St Croix, USVI. The 80,000-SF single story building is planned to be completely demolished and replaced with an entirely new modern campus.

The overall topography of the existing site ranges from approximately 126-ft at the southeast corner at Concordia Rd down to elevation of 90-ft along the western property line. The existing school building has a finished floor elevation of 96-ft.

Given the existing topography of the site, rainfall runoff flows from south to the north and discharges at two different locations. There are no existing stormwater facilities to attenuate the peak runoff nor store rainfall.

The soil composition of the area of the Alexander Henderson Demolition/Reconstruction Project site is Glynn gravelly loam GyB – 2 to 5 percent slope, and Hesselberg clay 5-12 percent slopes. All work is being done in areas that have already been disturbed.

| Map Unit Symbol | Map Unit Name | Acres in A.O.I | Percent of A.O.I |
|-----------------------------|--|----------------|------------------|
| GyB | Glynn gravelly loam, 2 to 5 percent slopes | 18.6 | 71.5% |
| HeC | Hesselberg clay, 5 to 12 percent slopes | 7.4 | 28.5% |
| Totals for Area of Interest | | 26.1 | 100.0% |



Drainage, Erosion Control, and Maintenance

The primary goal of the proposed grading is to minimize the amount of cut or fill earthwork on the site. The finished floor elevations for the garden and first floor of the buildings were studied and selected to minimize the need for retaining walls and work with the perimeter grades. By placing the buildings on the hillside it will increase the natural views and take advantage of the prevailing westerly trade winds. There is very little existing vegetation on the site. The proposed landscape plan will increase the coverage with native and sustainable species

Onsite drainage will be handled with inlets and pipes that will convey the runoff from the design storm to a water management facility such as a dry pond for percolation and evaporation. If pervious space is not available and underground exfiltration chamber system will be implemented. Erosion control will be managed by reducing steep slopes that could lead to concentrated flows. In addition vegetation will be planted in open areas to prevent sediment from being exposed.

Drainage Patterns

The hydrology and hydraulics design has two primary objectives: to effectively convey water off of paved surfaces and away from buildings such that their use is not impacted during heavy rains, and to attempt to minimize site runoff to no more than the volume generated by the existing site conditions. To support this, we will prepare a drainage layout identifying major features of buried and surface drainage, such as pipes, inlets, manholes, swales, and culverts. The drainage layout will be used to create a site hydraulic model which will allow us to verify rough sizing for drainage features, as well as estimate the increased volume of runoff for the design storm due to increased impervious surfaces. Because the site has a limited amount of space available for retention features, we will size an exfiltration retention system which can be installed either underneath the proposed parking lot or sports field. The TR-55 method will be used for estimating the design storm runoff volumes and flow rates, per the requirements in the TPDES and SWPPP.

Existing drainage patterns will not be changed from the existing to proposed school site. The site slopes from a high point of 128-ft at the southeast down to 90-ft at the northwest.

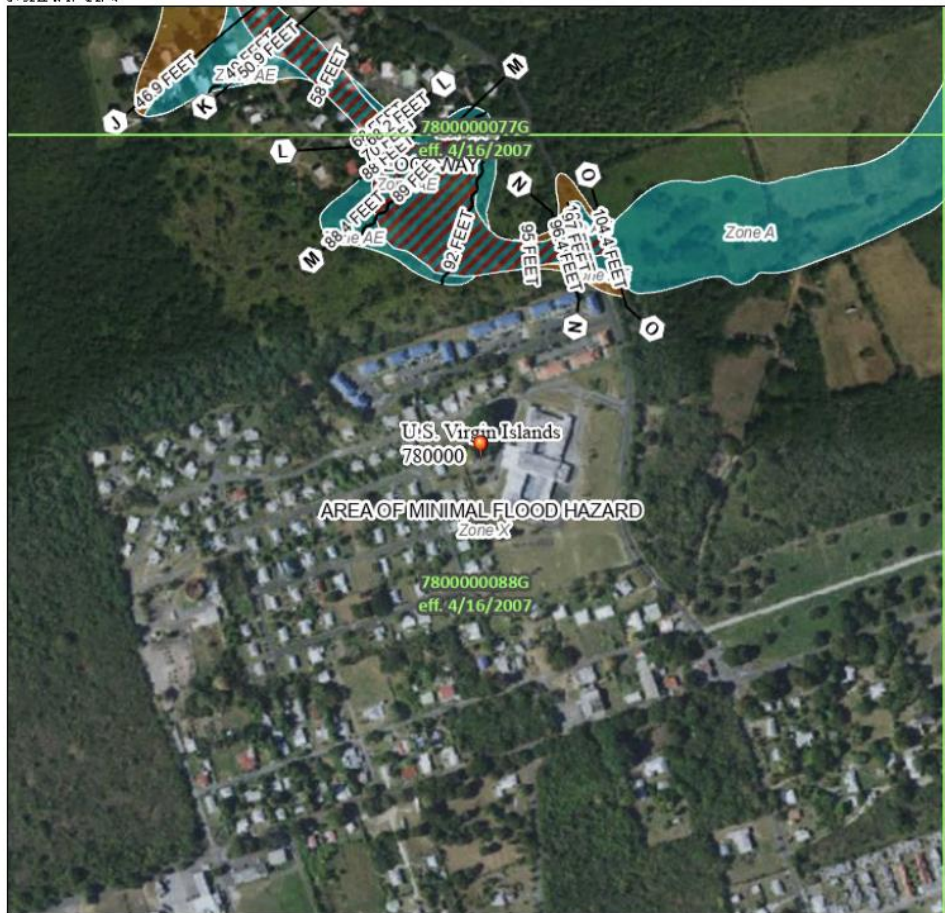
Coastal Floodplain

The project is not located in a coastal flood plain. Sediment and erosion controls will be implemented in this area and any materials that need to be be stockpiled overnight will be properly stored so as not to be susceptible to run off.

National Flood Hazard Layer FIRMette



64°52'22"W 17°42'27"N



Legend

SEE FIRM REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

| | | |
|-----------------------------|--|---|
| SPECIAL FLOOD HAZARD AREAS | | Without Base Flood Elevation (BFE) Zone A, V, A99 |
| | | With BFE or Depth Zone AE, AO, AH, VE, AR |
| | | Regulatory Floodway |
| OTHER AREAS OF FLOOD HAZARD | | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X |
| | | Future Conditions 1% Annual Chance Flood Hazard Zone X |
| | | Area with Reduced Flood Risk due to Levee. See Notes. Zone X |
| | | Area with Flood Risk due to Levee Zone D |
| OTHER AREAS | | Area of Minimal Flood Hazard Zone X |
| | | Effective LOMRs |
| GENERAL STRUCTURES | | Area of Undetermined Flood Hazard Zone D |
| | | Channel, Culvert, or Storm Sewer |
| OTHER FEATURES | | Levee, Dike, or Floodwall |
| | | Cross Sections with 1% Annual Chance Water Surface Elevation |
| | | Coastal Transect |
| | | Base Flood Elevation Line (BFE) |
| | | Limit of Study |
| | | Jurisdiction Boundary |
| | | Coastal Transect Baseline |
| | Profile Baseline | |
| MAP PANELS | | Digital Data Available |
| | | No Digital Data Available |
| | | Unmapped |
| | The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location. | |

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/10/2025 at 2:53 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Fresh Water Resources

The proposed demolition and reconstruction will have no impact on freshwater resources. No freshwater ponds or streams occur within the project footprint and groundwater resources within the area are deeper than 80 inches; meaning below the depth of the proposed project.

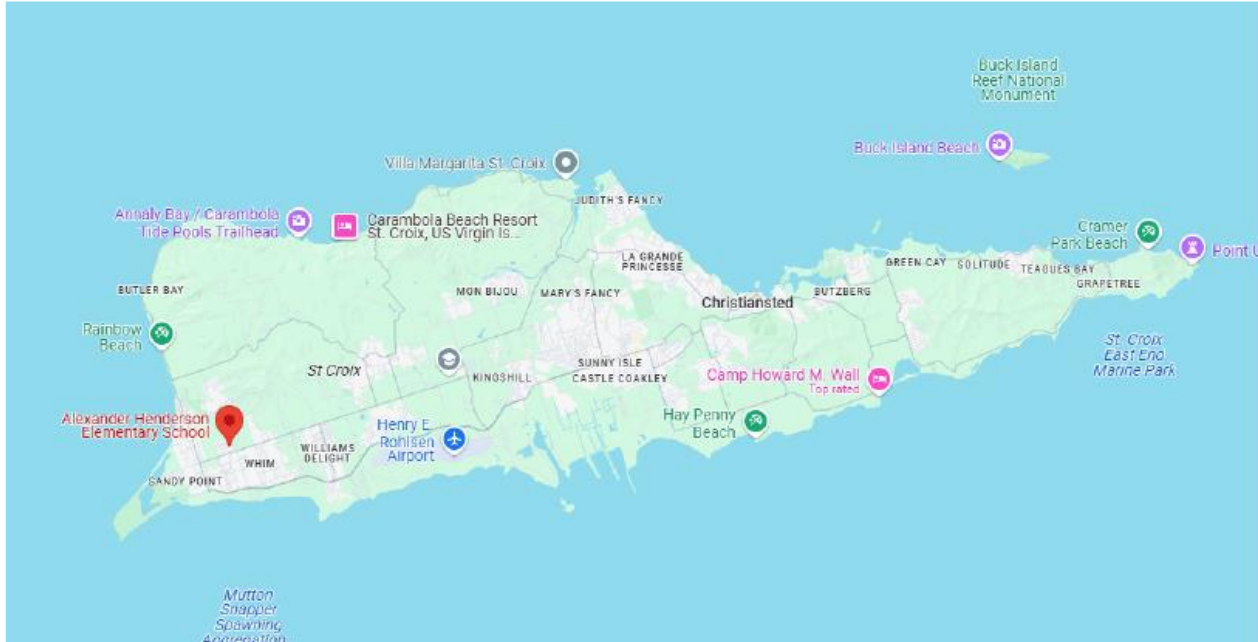
Oceanography

The proposed project occurs well inland and will not be affected by sea storm events.

Marine Resources

The property is located inland and will have no direct impact on the marine environment.

Location



Terrestrial Resources

The proposed project will occur within existing previously developed areas. No natural terrestrial resources or any native flora or fauna will be impacted.

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). The project will have no impact on wetlands, as there are no wetlands in, or adjacent to, the proposed project site.



March 10, 2025

Wetlands

- Estuarine and Marine Deepwater
- Freshwater Emergent Wetland
- Lake
- Freshwater Forested/Shrub Wetland
- Other
- Estuarine and Marine Wetland
- Freshwater Pond
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands-related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Rare and Endangered Species

No endangered or threatened species or endangered species habitat exist within proposed project site. According to the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) project tool, no endangered species, critical habitat, or migratory birds are expected to be found within the proposed project site area.

There is an endangered ground lizard (*Ameiva polops*) found on the island of St. Croix, but this lizard is only found on Buck Island, Green Cay, Ruth Cay and Protestant Cay, locations outside of the proposed project site.

There are also three endangered plant species located on St. Croix (*Agave eggersiana*, *Buxus vahlii* and *Catesbaea melanocarpa*), but these are primarily located in exposed, dry areas

- Five (5) known populations of *Agave Eggersianai* on St. Croix, all are well removed from the proposed project site.
- Three (3) known populations of *Buxus VahlIIi* on St. Croix and all are well removed from the proposed project site.
- One (1) known population of *Catesbaea Melanocarpa* on St. Croix and it is also located outside the proposed project site.

Neither the endangered ground lizard nor any of the endangered plants species are found within the proposed project footprint.

Air Quality

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

IMPACT ON MAN'S ENVIRONMENT

Land and Water Use Plans

The project site is zoned B2 Business—Secondary/neighborhood which complies with the Coastal Land and Water Use Plan, published 2004. Impacts on the existing site: Not Applicable

Visual Impacts

The proposed Demolition/Reconstruction project will demolish the existing buildings and construction of a new facility will begin. The replacement buildings will thereby improve the visual appearance of the area and more. As a result, this project will have a positive impact on the existing landscape.

Historical and Archaeological Resources

The proposed demolition is intended to be the initial phase of construction prior to the facility replacement structure. The project only involves impact areas that have already been developed and will have no impact on any known historical or archeological resources. No undisturbed area will be affected.

Waste Disposal and Accidental Spills

The Virgin Islands Waste Management Authority has specific guidelines and criteria for accepting construction debris. Any excess excavated material spoils and construction debris will be collected, taken off-site, and disposed of in accordance with all governing laws and regulations. Equipment will be kept in good operational condition during the proposed project timeline and will not be fueled on site. The selected demolition contractor shall be certified in the procedural requirements for the handling, containment, and disposal of any hazardous materials identified resulting from the demolition project. The handling and disposal of any hazardous materials shall be in strict accordance with all governing laws and regulations.

The following policies are set forth in the U.S. Virgin Islands Code Title 12. Conservation Chapter 21, Virgin Islands Coastal Zone Management [V.I. Code tit. 12 § 903(b)]. The Alexander Henderson Elementary School PreK-8th School Project meets each of the basic goals of the USVI for its coastal zone 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 visitors of the United States Virgin Islands.**

Comment: - The project site is not located in the Tier 1 coastal zone. However, the proposed construction work will be conducted within the regulatory framework of all required, applicable permits. Once constructed, site operations will be carried out with minimal impact to the environment and in conformance with best management practices especially with respect to storm water runoff, water reuse, and renewable energy.

- 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.**

Comment: The proposed project will have no impact on the economic development and growth in the coastal zone.

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

Comment: This project is located outside the coastal area and is therefore consistent with this policy.

- 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.**

Comment: The proposed demolition and reconstruction project will affect only previously disturbed areas associated with the removal of the existing buildings, including the existing foundations. The vacant lot will not negatively affect USVI residents' social and economic needs for the immediate area, because a new campus will be constructed to enhance the social and economic needs of the USVI students, school staff and residents of the area.

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

Comment: The proposed project will not affect trust lands or other submerged or filled lands of the U. S. Virgin Islands. The project is not located within or near trust lands

- 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.**

Comment: 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.**

Comment: 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.**

Comment: - The proposed demolition and reconstruction project will impact only previously disturbed areas associated with the removal of the existing buildings, including the existing foundations and the reconstruction of the new campus. 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.**

Comment: The proposed demolition and reconstruction project will have no long-term change on sedimentation or erosion. Storm water will be directed to a gravel/ rock soak-away for percolation before any overflow into the existing drainage ways. The former building footprints will become permeable.

II. An assessment relating to the probable effects of the proposed activity and its associated facilities on the VICZMP.

Comment: The proposed demolition and reconstruction project will have No adverse effect. Best practices and measures for erosion control will be taken in compliance with all requirements approved by DPNR in the demolition permit process. After the buildings are removed, water will percolate where before water would have collected on the roofs of the buildings and been channeled to drains and overflowed onto impervious surfaces. The impact on the school storm water drainage system of this project will be less than the existing conditions.

The proposed activity is consistent to the maximum extent practicable with the Virgin Islands Coastal Zone Management Program and will be conducted in a manner consistent with such program

Thank you for your careful consideration of this request for Consistency Determination.

