

Additional observations:

- Concrete walls and slabs, including underside of slabs, should be fully sounded to detect all areas of spalling and delamination.
- Fully review edge of concrete slabs for damage.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: Turtle Bay Bus Stop (Adjacent to Units 87-98)

Structural Assessment: Structurally Sound

Primary Occupancy: Bus Stop

Number of Stories: 1

Number of Residential Units: 0

Type: Stand Alone

Component	Material	Notes
Roof	Wood Framed / Wood Shingles	Minor deflection. Signs of termite activity.
Posts	Wood	Wood posts supported on stone base.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: Turtle Bay Stone Storage (Adjacent to Units 87-98)

Structural Assessment: Structurally Sound

Primary Occupancy: Storage

Number of Stories: 1

Number of Residential Units: 0

Type: Stand Alone

Component	Material	Notes
Floor	Concrete	
Walls (Structural)	Stone	Minor stones missing.
Roof	Concrete	Minor cracking at roof.

Additional Observations:

- Verify integrity of roof slab from above.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 44 Turtle Bay Estate House Units 101-102

**Structural Assessment: Potentially Repair or
Rebuild**

Primary Occupancy: Dwelling

Number of Stories: 1

Number of Residential Units: 2

Type: Attached

Component	Material	Notes
Floor	Concrete	
Walls (Structural)	Stone/Concrete	Concrete window lintel deteriorated.
Walls (Non-Structural)	Stone parapet, masonry infill	
Roof	Wood framed/ unknown	Roof collapsed. Potential termite damage.
Stairs	Stone	
Deck / Railings	Wood	Decks and railings have failed.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 45 Turtle Bay Children’s Center “Turtle Town”

Structural Assessment: Structurally Sound

Primary Occupancy: Child Care Center

Number of Stories: 1

Number of Residential Units: 0

Type: Attached

Component	Material	Notes
Floor	First Floor: Concrete Second Floor: Wood Framed	
Walls (Structural)	Stone (rear) Concrete	Cracking observed at stone base and stone lintel; repoint. Exposed rebar in capstone near bathroom addition.
Walls (Non-Structural)	Wood framed	Potential termite damage.
Roof	Wood framed/ Metal	Potential termite damage.
Sidewalk	Concrete	

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: Turtle Bay Estate Bus Stop

Structural Assessment: Structurally Sound

Primary Occupancy: Bus Stop

Number of Stories: 1

Number of Residential Units: 0

Type: Stand Alone

Component	Material	Notes
Roof	Wood Framed / Wood Shingles	Signs of termite activity. Missing / damaged roof shingles.
Posts	Wood	

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 95 Turtle Bay Estate House Dining Room

**Structural Assessment: Potentially Repair or
Rebuild**

Primary Occupancy: Restaurant

Number of Stories: 1

Number of Residential Units: 0

Type: Attached

Component	Material	Notes
Floor	Tile on Concrete Slab	
Walls (Structural)	Stone Walls and Concrete Piers	Concrete piers in good condition, aesthetic cracking is superficial. Stone arches need minor repointing.
Walls (Non-Structural)	None	
Roof	Unknown	Roof collapsed.
Sidewalk	Concrete	

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 95 Turtle Bay Estate House Veranda

Structural Assessment: Structurally Sound

Primary Occupancy: Public Assembly

Number of Stories: 1

Number of Residential Units: 0

Type: Attached

Component	Material	Notes
Floor	Concrete	Standing water in restroom/hallway area.
Walls (Structural)	Concrete / Stone	Missing stones in stone walls. Spalling concrete with corroded rebar at south wall. Mortar missing, loose, and cracked at south wall. Rusted lintel at exterior stairs.
Walls (Non-structural)	Wood / Doors	Rotten wood at base of infill walls between doors.
Roof	Wood Framed / Wood Singles	Some missing wood shingles. Signs of water intrusion and moisture damage on interior finishes. Signs of termite activity. Wood shed roof over exterior stairs is missing major support beam and has failed.
Stairs/Railings	Concrete / Wood Railings	

Additional Observations:

- Wood framing at roof was not visible. Given water damage and signs of termite activity, it is likely there is additional wood damage not observed at this time. Future renovations should evaluate the structure further.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 95 Turtle Bay Kitchen & Nail Salon

Structural Assessment: Potentially Repair or Rebuild

Primary Occupancy: Food Service

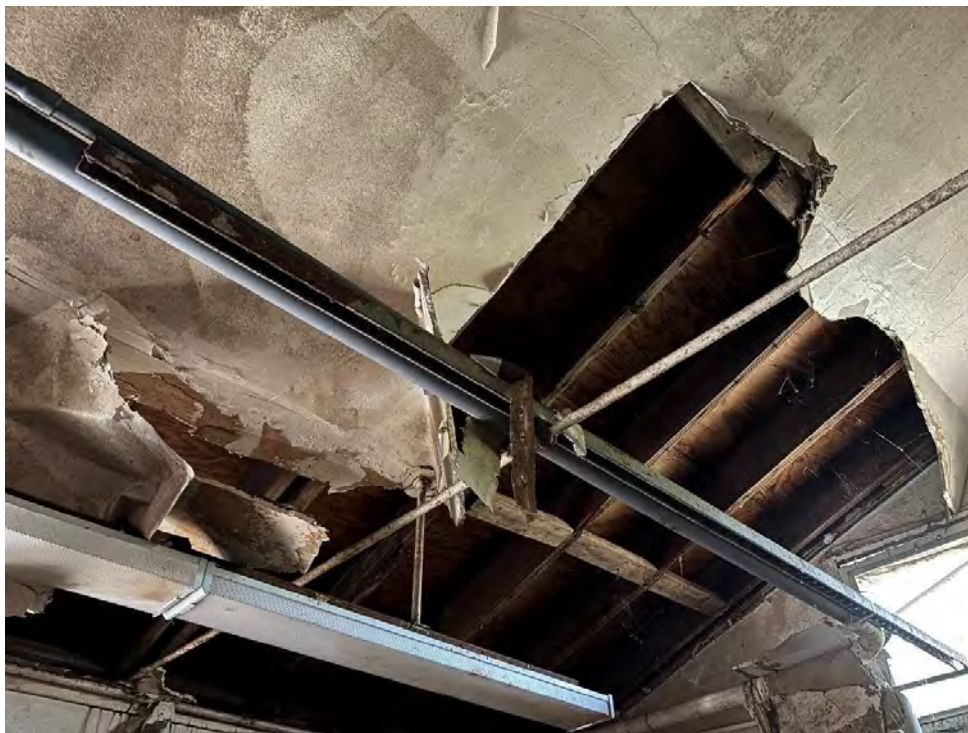
Number of Stories: 1

Number of Residential Units: 0

Type: Attached

Component	Material	Notes
Floor	Concrete	
Walls (Structural)	Concrete	Vertical crack in concrete end wall at Nail Salon. (Nail salon shares roofline and structural walls with kitchen area).
Walls (Non-Structural)	Wood framed	Wood frame infill walls above concrete knee walls. Water and termite damage.
Roof	Wood framed/ Wood shingles	Roof damaged, not watertight. Water and termite damage.
Sidewalk	Concrete	Rear concrete loading area.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 95 Turtle Bay Activity Room

Structural Assessment: Potentially

Repair or Rebuild

Primary Occupancy: Public Assembly

Number of Stories: 1

Number of Residential Units: 0

Type: Attached

Component	Material	Notes
Floor	Concrete	Horizontal cracks in concrete wall may be signs of potential foundation rotation or differential movement.
Walls (Structural)	Concrete / Stone Retaining Walls	Missing stones in retaining walls. Horizontal cracks on north wall.
Walls (Non-structural)	Wood / Doors	Rotten wood at base of infill walls between doors.
Roof	Wood Framed / Wood Singles	Some missing wood shingles. Signs of water intrusion on interior finishes.
Stairs/Railings	Concrete / Aluminum Railings	

Additional Observations:

Wood framing at roof was not visible. Given water damage and signs of termite activity, it is likely there is additional wood damage not observed at this time.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: Turtle Bay Units 99-100 & Multi-Purpose Room

Structural Assessment: Potentially Repair or Rebuild

Primary Occupancy: Dwelling

Number of Stories: 1

Number of Residential Units: 2

Type: Attached

Component	Material	Notes
Floor	Concrete	
Walls (Structural)	Stone/Concrete	Door lintels cracked and displaced in 99. Window lintels cracked in 100. Wall and lintel cracks in Multi Purpose Room.
Walls (Non-Structural)	Wood framed	Demolish partitions due to termite activity. Potential termite damage.
Roof	Wood framed/ unknown	Roof collapsed. Potential termite damage.
Stairs	Stone	
Deck / Railings	Wood	Decks and railings have failed.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 95 Turtle Bay Storage Shed (North)

Structural Assessment: Structurally Sound

Primary Occupancy: Storage

Number of Stories: 1

Number of Residential Units: 0

Type: Attached

Component	Material	Notes
Floor	Concrete	
Walls (Structural)	Concrete	Some moisture staining and cracking in skim coat on front concrete wall.
Walls (Non-Structural)	Concrete	Wood frame infill walls above concrete knee walls on right shed addition.
Roof	Wood framed/ Metal	
Sidewalk	Concrete	

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 95 Turtle Bay Storage Shed (South)

Structural Assessment: Structurally Unsound

Primary Occupancy: Storage

Number of Stories: 1

Number of Residential Units: 0

Type: Attached

Component	Material	Notes
Floor	Wood Framed / Plywood	Floor partially collapsed.
Walls (Structural)	Wood 3 Sides / CMU 1 side	Signs of termite damage.
Roof	Wood Framed / Metal Roof	

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



HAWKSNEST BEACH



Building: 46 Hawksnest Beach Units 106-109, 118-121

Structural Assessment: Potentially Repair or Rebuild

Primary Occupancy: Dwelling

Number of Stories: 2

Number of Residential Units: 8

Type: Attached

Component	Material	Notes
Floor	Concrete	First floor has significant sand blown into the rooms.
Walls (Structural)	Concrete	Spalling on concrete columns with exposed rebar at east side between rooms 107 and 108. Vertical cracks at geometry changes typical east and west side of second floor rooms (118, 119, 120, 121).
Walls (Non-Structural)	Wood and Windows	Windows blown out (106 east, 107 west, 108 east, 109 east, 121 east). Walls collapsed (106 west, 107 east).
2nd Floor	Concrete	Spalling and exposed rebar at edge of concrete slab where railing attached (120 east & west, 121 east). Localized spalling at underside of slab throughout the building. At some locations rusted rebar is visible.
Roof	Concrete & Wood Framed / Membrane	Spalling on underside of slabs with exposed rebar in some locations. Localized spalling at underside of slab throughout the building. At some locations rusted rebar is visible.
Stairs/Railings	Concrete / Wood Railings	Railing connections to slabs have failed.
Sidewalk	Concrete	

Additional Observations:

- Concrete walls and slabs, including underside of slabs, should be fully sounded to detect all areas of spalling and delamination.
- Remove existing railings and fully review edge of concrete slabs for damage.
- Repairs may consist of replacing damaged rebar with new rebar, cleaning and coating rebar with zinc rich paint, and repairing concrete.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 47 Hawksnest Beach Units 110-113, 122-125

Structural Assessment: Potentially Repair or Rebuild

Primary Occupancy: Dwelling

Number of Stories: 2

Number of Residential Units: 8

Type: Attached

Component	Material	Notes
Floor	Concrete	First floor has significant sand blown into the rooms.
Walls (Structural)	Concrete	Spalling on concrete columns with exposed rebar at east side between room 111 and the stairwell. Vertical cracks at geometry changes typical east and west side of second floor rooms (122, 123, 124, 125). Hairline crack in wall at second floor slab elevation between room 125 and stairwell wall. Spalled concrete noted at base of all stairwells.
Walls (Non-Structural)	Wood and Windows	Windows blown out (112 east, 113 east, 123 east). Walls collapsed (110 east).
2nd Floor	Concrete	Spalling and exposed rebar at edge of concrete slab where railing attached (122 east, 123 east, 124 east). Localized spalling at underside of slab throughout the building. At some locations rusted rebar is visible.
Roof	Concrete & Wood Framed / Membrane	Spalling on underside of slabs with exposed rebar in some locations. Localized spalling at underside of slab throughout the building. At some locations rusted rebar is visible.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report

Component	Material	Notes
Stairs/Railings	Concrete / Wood Railings	Railing connections to slabs have failed, predominantly on beach side. Stair walls have vertical crack at geometry change.
Sidewalk	Concrete	

Additional Observations:

- Concrete walls and slabs, including underside of slabs, should be fully sounded to detect all areas of spalling and delamination.
- Remove existing railings and fully review edge of concrete slabs for damage.
- Repairs may consist of replacing damaged rebar with new rebar, cleaning and coating rebar with zinc rich paint, and repairing concrete.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 48 Hawksnest Beach Units 114-117, 126-129

Structural Assessment: Potentially Repair or Rebuild

Primary Occupancy: Dwelling

Number of Stories: 2

Number of Residential Units: 8

Type: Attached

Component	Material	Notes
Floor	Concrete	First floor has significant sand blown into the rooms.
Walls (Structural)	Concrete	Spalling on concrete columns with exposed rebar at east side between rooms 127 and 128. Vertical cracks at geometry changes typical east and west side of concrete balconies.
Walls (Non-Structural)	Wood and Windows	Windows blown out (114 east, 126 east, 127 east, 128 east). Walls collapsed (117 east).
2nd Floor	Concrete	Spalling and exposed rebar at edge of concrete slab where railing attached (126 east, 127 east, 128 east, 129 east). Localized spalling at underside of slab throughout the building. At some locations rusted rebar is visible.
Roof	Concrete & Wood Framed / Membrane	Spalling on underside of slabs with exposed rebar in some locations. Significant spalling at top of middle stairs to second floor, between units 127 and 128.
Stairs/Railings	Concrete / Wood Railings	Railing connections to slabs have failed.
Sidewalk	Concrete	

Recommended Treatments:

- Concrete walls and slabs, including underside of slabs, should be fully sounded to detect all areas of spalling and delamination.
- Remove existing railings and fully review edge of concrete slabs for damage.
- Repairs may consist of replacing damaged rebar with new rebar, cleaning and coating rebar with zinc rich paint, and repairing concrete.



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 100 Hawksnest Beach Restroom

Structural Assessment: Structurally Sound

Primary Occupancy: Restroom

Number of Stories: 1

Number of Residential Units: 0

Type: Attached

NOTE: Unable to access interior due to debris and vegetation.

Component	Material	Notes
Floor	Concrete	
Walls (Structural)	Concrete	
Walls (Non-Structural)	Concrete	
Roof	Wood framed/ Wood shingles	Potential termite damage.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: Hawksnest Beach Bus Stop

Structural Assessment: Structurally Unsound

Primary Occupancy: Bus Stop

Number of Stories: 0

Number of Residential Units: 0

Type: Stand Alone

Component	Material	Notes
Floor	Concrete	
Walls (Structural)	Wood	
Walls (Non-Structural)	N/A	
Roof	Wood framed / Wood shingles	Roof collapsed.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



MAINTENANCE AREA



Building: 8 Metal Quonset Hut

Structural Assessment: Structurally Unsound

Primary Occupancy: Storage

Number of Stories: 1

Number of Residential Units: 0

Type: Stand Alone

Component	Material	Notes
Floor	Concrete	
Walls (Structural)	Corrugated Galvanized Steel	Structure is arched, semi-circular structure forming walls and roof structure. End wall has completely collapsed. On the entrance side and end wall side, portions of the arch have collapsed. The remaining portion of the structure shows signs of buckled flutes and holes.
Walls (Non-Structural)	N/A	
Roof	Corrugated Galvanized Steel	See above.
Stairs/Railings	N/A	
Sidewalk	Concrete	

Additional Observations:

- Quonset huts are lightweight, semi-cylindrical structures typically made of corrugated galvanized steel, originally developed for military use during World War II due to their ease of assembly and transport. Structurally, they rely on a series of closely spaced, curved steel ribs that form the primary load-resisting system, with the arched geometry providing efficient distribution of vertical and lateral loads. These buildings often serve as warehouses, workshops, or agricultural shelters, and may be constructed on a concrete slab or supported on perimeter walls. Their

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report

structural performance depends on the integrity of the curved frame connections, anchorage, and condition of the metal panels.



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 11 Laundry

Structural Assessment: Potentially Repair or Rebuild

Primary Occupancy: Facility Maintenance

Number of Stories: 1

Number of Residential Units: 0

Type: Stand Alone

Component	Material	Notes
Floor	Concrete	
Walls (Structural)	Steel	Corroded bracing and metal framing members.
Roof	Steel Framed / Metal Roof	Vegetation on roof.
Stand Alone Bathroom	Concrete	No roof.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 12 Ice Plant

Structural Assessment: Structurally Unsound

Primary Occupancy: Facility Maintenance

Number of Stories: 0

Number of Residential Units: 0

Type: Stand Alone

Component	Material	Notes
Floor	Concrete	
Walls (Structural)	Masonry (CMU)	Collapsed.
Walls (Non-Structural)	N/A	
Roof	Unknown	Collapsed.
Stairs/Railings	Concrete	
Sidewalk	Concrete	

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report



Building: 13A Electrical Complex

Structural Assessment: Structurally Sound

Primary Occupancy: Facility Maintenance

Number of Stories: 1

Number of Residential Units: 0

Type: Stand Alone

NOTE: Unable to access interior due to being boarded up.

Component	Material	Notes
Floor	Concrete	
Walls (Structural)	Concrete	No cracks were noted from the outside.
Roof	Wood Framed / Metal Roof	Vegetation on roof. Unable to gain access to inspect roof from the interior.

National Park Service
Virgin Islands National Park | Caneel Bay
Structural Assessment Report

