SECTION 01005 - MISCELLANEOUS REQUIREMENTS

1. GENERAL

The contractor shall conform to all miscellaneous requirements as herein specified.

2. INTERFERENCE WITH EXISTING WORKS

The Contractor shall at all times conduct their operations so as to interfere as little as possible with existing works. The Contractor shall develop a program, in cooperation with the Project Manager and interested officials, which shall provide for the construction and putting into service of the new works in the most orderly manner possible. This program shall be adhered to except as deviations there from are expressly permitted. All work of connecting with, cutting into, and reconstructing existing ducts or structures shall be planned to interfere with the operation of the existing facilities for the shortest possible time when the demands on the facilities best permit such interference, even though it may be necessary to work outside of normal working hours to meet these requirements. Before starting work, which will interfere with the operation of existing facilities, the Contractor shall perform all possible preparatory work and shall see that all tools, materials, and equipment are made ready and at hand. The Contractor shall make such minor modifications in the work relating to existing structures as may be necessary, without additional compensation.

The Contractor shall have no claim for additional compensation by reason of delay or inconvenience in adapting their operations to meet the above requirements.

3. ARCHAEOLOGY CONSULTANT

A. Prior to commencement of any work, the contractor shall retain the services of a consultant to provide workplans, completed by a qualified Archaeologist that meets the Secretary of the Interior Professional Qualification Standards for Archaeology and Historic Preservation (SOI), for FEMA approval through SHPO consultation.

B. In the case of any known, probable, or potential human burials or excavated human remains, work is to cease in the immediate area and FEMA will be contacted immediately to determine the path forward. Should human remains be verified, alternate routes will be considered; whereas FEMA and the VISHPO may decide to have the human remains removed and work may proceed apace.

C. Certain locations may require archaeological testing: these areas are outside of the linear trenching, where excavations will occur for manholes or underground transformers, et al. For these types of locations, archaeological testing will be undertaken in consultation with FEMA/VISHPO for approval. Such testing may include, but not be limited to auger, trowel or shovel tests. Reporting of test results will include a locational map of the-project area; and a clear, concise project description with legible map, drawn to scale, which depicts proposed

development and other activities that may affect cultural resources. In the event of observed significant archaeological features or artifact concentrations are encountered, FEMA/VISHPO will be consulted immediately, and proposed alternate locations shall be surveyed for consideration.

4. ARCHAEOLOGY MONITORING

A. Prior to commencement of any work, the archaeology consultant shall provide workplans, completed by a qualified Archaeologist that meets the Secretary of the Interior Professional Qualification Standards for Archaeology and Historic Preservation (SOI), for FEMA approval through SHPO consultation.

B. Conduct archaeological monitoring for:

   a. All ground disturbing activities for the entire APE of the Estate Hannah's Rest, Phase 1 work. Refer to FEMA Record of Environmental Considerations, dated 10/27/2023.

C. Monitoring must be done under the direction of, or by, an SOI qualified Archaeologist.

D. Monitoring shall include photography and reporting of any discerned archaeological features, either historic or prehistoric. Samples of significant retrieved diagnostic artifacts, as per the Project Specific Programmatic Agreement, will be mapped onto a site, bagged and labeled with the archaeological monitor's name, date, precise location, etc. (e.g. size, length, depth of deposit). All recovered materials will be washed, bags labeled and turned over to the VISHPO as per the Project Specific Programmatic Agreement.

E. Certain locations may require archaeological testing: these areas are outside of the linear trenching, where excavations will occur for manholes, switchgear or pad mounted transformers, et al. For these types of locations, archaeological testing will be undertaken in consultation with FEMA/VISHPO for approval. Such testing may include, but no be limited to, shovel testing, backhoe monitoring, posthole auguring, etc. with all documentation completed in a letter memo for each testing area which will then be combined into an overall monitoring/testing report for that portion of the project. In the event of observed significant archaeological features or artifact concentrations are encountered, FEMA/VISHPO will be consulted immediately, and proposed alternate locations surveyed for consideration.

F. In the case of any known, probable, or potential human burials or excavated human remains, work is to cease in the immediate area and FEMA shall be contacted immediately to determine the path forward. Should human remains be verified, alternate routes will be considered; whereas FEMA and the VISHPO may decide to have the human remains removed and work may proceed apace.

G. Construction activities will avoid disturbance:
   a. Refer to EHP/FEMA Record of Environmental Consideration (REC) document covering specific requirements of the National Historic Preservation Act (NHPA).

H. Conduct archaeological monitoring for all trenching related excavation within one-hundred feet of any property listed or potentially eligible for listing in the National Register of Historic Places.

I. Monitoring must be done under the direction of, or by, an SOI-qualified Archaeologist as approved by the VISHPO.

J. Monitoring will include photography and recording of any discerning archaeological features, either historic or prehistoric. Samples of significant retrieved diagnostic artifacts will be mapped to the site, bagged and labeled with the archaeological monitor's name, date, precise location, etc. (e.g. size, length, depth of deposit). All recovered materials will be washed and boxed in laboratory-grade plastic boxes, with labels, and accompanied by a $200 curatorial processing fee for each and turned over to the VISHPO.

K. In the case of any known, probable, or potential human burials or excavated human remains, work is to cease in the vicinity of discovery, notify FEMA and the local law enforcement office and coroner/medical examiner in accordance with applicable Virgin Islands Territorial statue(s), and protect the remains from any harm.

5. ARBORISTS CONSULTANT

A. Contractor shall obtain the services of an arborist to identify specific trees that will require protection. An Arborists is required for monitoring, (Refer to Specification 015639, Temporary Tree & Plant Protection) for information on Arborist.

6. SUBSURFACE UTILITY ENGINEERING (SUE) REQUIRMENTS

A. Representations of existing utilities, facilities, and structures in the Contract Documents are based upon the best available information. The Owner and/or Project Manager will not be responsible for the completeness or accuracy thereof nor for any deductions, interpretations, or conclusions drawn there from. Verification of the location of the existing underground utilities, along the entire path of proposed newly installed duct banks, is the responsibility of the Contractor.

B. The Contractor shall retain the services of a licensed Professional Engineer or Land Surveyor to perform Subsurface Utility Engineering (SUE) services to determine and document the actual location of existing underground utilities prior to the start of any excavation work.

SUE Firm Responsibilities

1. The Professional shall perform the SUE Services in accordance with ASCE Standard 38-22 'Standard Guideline for Investigating and Documenting Existing Utilities' and as follows:

a. All documents shall be prepared by, and signed & sealed by, a Professional Civil Engineer, or Professional Land Surveyor, licensed in the United States Virgin Islands, with substantial experience and expertise in Subsurface Utility Engineering (SUE).

b. The SUE Professional shall determine the precise horizontal and vertical position, size, condition (where practical), material, utility owners name, and other relevant characteristics of existing underground utilities along the entire pathway of the proposed underground construction.

c. All existing utility features, and segments, shall be determined to a Utility Quality Level B (QLB), except as follows:

    1. Existing utility features, and segments, shall be determined to a Utility Quality Level A (QLA) in 'Areas of Caution', or 'Areas of Congestion' as identified on the Contract Drawings.

    2. Existing utility features, and segments, shall be determined to a Utility Quality Level A (QLA) in locations where test boreholes are identified on the Contract Drawings.

    3. For projects locations within the Town limits of Frederiksted, Christiansted, Charlotte Amalie, or Cruz Bay, existing utility features, and segments, shall be determined to a Utility Quality Level A (QLA).

d. The Subsurface Utility Engineering Firm shall possess, and utilize where applicable as identified above, all equipment, instruments and components necessary to provide Utility Quality Level A (QLA) documentation.

e. The SUE professional shall provide the following deliverables:

    Drawings: Signed & sealed Utility Plan & Profile Drawings that indicate the results of the SUE investigation with each applicable Utility Feature or Utility Segment documented with its achieved Utility Quality Level and other Attributes. Attribute documentation shall conform to ASCE 38-22, Chapter 5. In addition to the signed & sealed hard copy, the drawings shall be provided in electronic format, and within a Database.

    Report: A signed & sealed Utility Report that contains information about the Utility investigation that (1) complements the Utility Drawings, (2) assists all appropriate end users in better understanding the subsurface utility landscape and risks, and (3) provides Metadata (refer to ASCE 38-22 for Metadata requirements). In addition to the signed & sealed hard copy, the report shall be provided in electronic format, and within a Database.

f. The Subsurface Utility Engineering Firm shall possess or have access to, and utilize, all of the necessary components, devices & instruments that are required to identify, and document existing utility features to Utility Quality Level A (QLA) and Utility Quality Level B (QLB). This may include, but may not be limited to Ground Penetrating Radar, Multichannel Ground Penetrating Radar, Inductive Electromagnetics, Passive Radio frequency, 60HZ Power Detection components, Pipe and Cable Locators (PCL's), Radio Frequency Identification (RFID), Resistivity Measuring devices, Time Domain Electromagnetic devices (TDEM), metal detectors, optical devices, Infrared devices, X-Ray devices, test boring equipment and vacuum excavation equipment.

g. The SUE Firm shall furnish and install permanent above ground marker and color code for each of the utilities (steel pin, peg, P.K. nail, or hub) directly above the centerline of the structure and record the elevation of the marker, along with all the characteristics of the utility.

Contractor Responsibilities

1. Call before you Dig: At this time, the USVI does not yet have a formal "Call before you dig" process in place. As such, it is the Contractor's responsibility to formally notify all utility companies (Department of Public Works, Viwapa Power Department, Viwapa Water Department, Waste Management Services, VINGN, Liberty, AT&T, and VIYA) of the project scope. The Contractor shall provide a letter to the owners Project Manager, stating that they have contacted each Utility company, have shared the contract documents, and the SUE drawings and report with them, have provided them with a copy of the construction schedule and have requested any, and all, available information regarding known utilities within the boundaries of the project, that are not indicated on the Contract Drawings or in the SUE prepared drawings and report.

2. Should the Contractor, in the course of excavation or other operations, encounter any underground utilities the presence of which was not previously known, or a different type or location than shown on the Contract Drawings or on the approved SUE report, they shall immediately notify the owner appointed Project Manager and take all necessary precautions to protect the utility and maintain continuance of service until said utilities can be adjusted by the appropriate owners.

Damage caused to utilities either directly or indirectly by the Contractor shall be repaired and the facilities restored to their original condition to the satisfaction of the Project Manager and the utility owner, at no additional cost, irrespective whether utilities were shown on the Contract Drawings or on the SUE prepared drawings.

END OF SECTION 01005